MAHARASHTRA STATE GAZETTEERS



Covernment of Maharashtra

VOLUME I: 1986

VOLUME II: 1987

VOLUME III: 1986

PREFACE

I am very glad to bring out the E-book edition (CD version) of the Greater Bombay District Gazetteer published by the Gazetteers Department This CD version is a part: of a scheme of preparing compact discs of earlier published District Gazetteers.

Greater Bombay District Gazetteer was published in 1986-1987 in three volumes. It contains authentic and useful information on several aspects of the district and is considered to be of great value to administrators, scholars and general readers. The copies of this edition are now out of stock. Considering its utility, therefore, need was felt to preserve this treasure of knowledge, In this age of modernization Information and Technology have become key words. To keep pace with the changing need of hour, I have decided to bring out CD version of this edition that comprises of all the three volumes, with little statistical supplementary and some photographs, I am sure, scholars and studious persons across the world will find this CD immensely beneficial.

I are thankful to the Honorable Minister, Shri. Ashokrao Chavan (Industries and Mines, Cultural Affairs and Protocol), and the Minister of State, Shri. Rana Jagjitsinh Patil (Agriculture, Industries;-and Cultural Affairs), Shri. Bhaushan Gagrani, (Secretary, Cultural Affairs) and Government of Maharashtra for being constant source of inspiration.

Place, Mumbai

Dr. Arunchandra S. Pathak

January 2007

Executive Editor and Secretary

PREFACE VOLUME - I

I consider it my proud privilege and a matter of great delight to publish this volume of the veritable cyclopaedic *Greater Bombay District Gazetteer*, which is being brought out in three volumes in the revised edition of Gazetteers. Although a Gazetteer literally means only a geographical index or a geographical dictionary, the scope of this revised edition is much wider and deeper. It is well-nigh a monumental work, contain as it does the most authentic and exhaustive narration of several aspects of life in a historical perspective. It can truthfully be said that the major portion in the present volume has the impress of profound scholarship. I can also veritably say that the scholarly narration of the history of Modern Bombay furnished in the part on Modern Period (Chapter-2) is a valuable contribution to learning. Bombay has been a subject of interest of many research scholars from India and abroad. Many of them have conducted research on a few aspects of the history of Bombay. Many of those studies are really meritorious. But hardly any one of the historians has published a book covering the period from the dawn of the Gandhian Era, which is probably the Golden Era in the history of India. The portion on History—Modern Period in this volume has filled up this gap in the knowledge on Bombay by furnishing a connected account from the eighteen thirties to the dawn of Independence.

The Bombay Island, or rather the cluster of islands, is supposed to have been the 'Heptanesia' of the Greek cosmographer Ptolemy. It is a `City of Gold' of Gillian Tindall, but more truthfully it is a 'World City'. Bombay is originally a 'half-caste offspring of London', but most of it is a real Indian town with an oriental opulence. Bombay, the *urb prima indis*, contains not just many different social worlds but whole solar systems of different societies moving separately and intricately over the same territory. The city, through the last 300 years, attracted people of so many races and languages from different parts of India and abroad.

Bombay, the capital of Maharashtra but the commercial capital of India, accounts for over 40 per cent of India's maritime trade passing through its docks. It developed as a manufacturing city like Manchester, Bradford and London in the nineteenth century. But unlike these cities, the unrestricted growth of Bombay continues and continues. The population of London has been slightly falling for decades. But the population of Bombay has nearly quadrupled in the last about four decades, and the density, at over one lakh per square mile, is one of the highest in the world. Thousands come here for seeking means of livelihood, life itself in an escape from the near-static poverty of India's rural heartlands.

The physical history of Bombay is the history of what one commentator (in *The Times*) called in the nineteen thirties "the great epic of reclamation which has been in process for two-and-a-half centuries, and of which the end is not yet in sight ". Even today it is still merrily continuing. The seven original islands, the rocky skeleton of the one island into which they have been fused, accounted for well under half the present land surface. The city is further engulfing older villages and suburban settlements, driving back the palm trees, smothering the old pleasant bungalows with the fumes from chemical factories, scattering the shores of creeks with shanty-towns and polluting the entire environment with human existence at its poorest.

Although many believe that Bombay has no early history apart from the history of the surrounding region, the cluster of seven islands was inhabited as early as the Stone Age. The antiquity of Kanheri, a great Buddhist centre with a rich cultural heritage, takes us to Bombay's rich past. The Aryans, the ancestors of the Maharattas, held sway in this part of India from the third to the thirteenth century, and power passed into the hands of Muslim invaders from Gujarat. The Muslim rule lasted from 1348 to 1534, after which Bahadur Shah, Sultan of Gujarat, ceded to the Portuguese the areas around Bassein and Bombay. By the marriage treaty between Charles II of Great Britain and Catherine Braganza of Portugal, the port and islands of Bombay were gifted to the British Crown, and they came into British possession in 1665. This was the first landmark in the history of this city.

The Modern Period in the history of Bombay may be said to have dawned in the eighteen thirties. Several momentous developments caused the emergence of a prosperous, modern and progressive city. The dawn of this most significant epoch was closely related to the rise of the intelligentsia and spread of Western education in the city. Establishment of the Bombay Association, and later, the Bombay Presidency Association gave birth to an upsurge in political and social awakening. The metamorphosis of the vibrantly progressive modern Bombay could undoubtedly be attributed to the collaborated efforts of the enlightened citizens, the intelligentsia and the dedicated Governors which Bombay was fortunate to have. Men of rare political sagacity and social reformers of great vision, like Jagannath Shankarshet, Bhau Daji Lad, Balshastri Jambhekar, John Wilson, Jamshetji Jijibhai, Dadabhai Naoroji, Cowasji Jehangir Readymoney, Naoroji Furdunji, Framji Cowasji, Mangaldas Nathubhai, Premchand Raichand, Goculdas Tejpal, Muhammad Ibrahim Mukba, Mahomed Ali Roghay, Mountstuart Elphinstone, Viscount Falkland, Lord Elphinstone, Bartle Frere, Alexander Grant and Erskine Perry, were the principal makers of Bombay. The next generation of great luminaries and leaders of Bombay comprised Pherozeshah Mehta, K. T. Telang, BadruddinTyabji,R. M. Sayani, V. N. Mandlik and Dinshaw Edulji Wacha.

The Bombay and Pune politicians provided a nucleus of national leadership right upto the emergence of Mahatma Gandhi. The embryo of nationalism developed from these cities. Bombay was rightly honoured by the first Congress session, and six sons of the city were elevated to the Congress Presidentship at eight Congress sessions. Gandhiji found in Bombay a congenial home for his satyagraha movements. It was here that he inaugurated his Non-Co-operation Movement, and offered a powerful form of peaceful resistance against the mighty power on Earth.

Bombay wrote patriotic poetry with its blood during the Civil Disobedience Movement. Her illustrious role in the salt satyagraha and boycott movement was a model for the rest of India. Bombay's enthusiasm was unique, and not bettered in any other part of India or at any other time, except perhaps in 1942-44. It is remarkable that throughout the Gandhian movement the Bombay industrialists were overwhelmingly in favour of economic nationalism, while the businessmen were quite consistently nationalists of the first

order.

It was again Bombay which gave birth to "Quit India", and played its role as the nerve centre of the movement all over India. The very last British troops to leave India in 1947 marched through the Gateway of India to their ships home. They bade farewell from where they had entered. The British made history in Bombay. They gave her birth, nurtured her to bloom into a World City and left her when she no longer needed them.

The history of Bombay—Modern Period is based on exhaustive documentation work and the most authentic primary and reputed secondary sources. It was a proud privilege of the author of this portion to draw profusely from innumerable secret Government and Police files which are otherwise inaccessible to other historians. Needless to say that it involved an enormous task and perseverance, but it ensured a high standard of precision, reliability, objectivity and thoroughness.

The portions on geography, urban landscape, relief and morphology, customs, rituals and the account of the various castes and communities bear an impress of great scholarship. Stupendous efforts, involving laborious and time-consuming processes were needed for the production of this work which has necessarily to maintain a high standard. The history of the city during the Muhammadan, the Portuguese and the British Periods is based on the narrative furnished in Volume II of the celebrated *Gazetteer of Bombay City and Island* edited by S. M. Edwardes (1909). The obvious reason is that the worth of that scholarly work has not diminished by the mere passage of time.

The above paragraphs would give a fairly clear idea about the contents of the present volume. The subjects dealt with in this volume were included in Volume I and Volume II of the *Gazetteer of Bombay City and Island*(1909) edited by Mr. S. M. Edwardes, and the *Thana District Gazetteer of* 1882 edited by Mr. James M. Campbell. The present revised volume follows an entirely different scheme of treatment and emphasis, which is probably more systematic and objective than the corresponding old Gazetteers of 1909 and 1882. The history of freedom movement, covered in the portion on Modern Period, is totally a new addition.

The entire write-up of the present volume, except a few pages in Chapter 1, has been contributed by esteemed research scholars in the field, as mentioned below. They have perseveringly strived for attaining a high standard, although we are quite aware of the shortcomings and constraints imposed by circumstances.

The revised *Greater Bombay District Gazetteer*, as said earlier, is being published in three volumes which together would contain about 2,375 pages in 19 Chapters. Volume I (the present one) contains Chapters 1 to 3, Volume II contains Chapters 4 to 9, while Volume III covers Chapters 10 to 19. The chapter headings are given on the pattern prescribed by the Government of India. There are, however, immense and farreaching deviations from the Central Pattern, both as regards the comprehensiveness and depth of treatment given to each subject. The deviations are inevitable due to the importance of Bombay as the nerve centre and the commercial capital of India, and her pre-eminence in the history of India's struggle for freedom. The *Gazetteer of Bombay* has to be worthy of this Great City. It has, therefore, been incumbent upon us to deviate from the scheme of the Government of India which envisaged publication of each District Gazetteer in a single volume. The entire write-up of about 2,375 pages would have been too bulky for a single volume, and hence its division into three handy volumes.

I must avail myself of this opportunity to state that a good deal of information pertaining to some of the subjects in this volume has been furnished more at length in Volume II and also in Volume III of this revised Gazetteer. A comprehensive history of Industrialisation, Trade and Commerce, Communications, Economic Development and Agriculture is furnished in Volume II, while Volume III includes the account of public administration, education, public life, journalism, voluntary social service organisations, theatre, and archaeology and objects of interest in Bombay. The readers would certainly be benefited by referring to these sections in the respective volumes.

I owe a great debt of gratitude to the scholar contributors of the present volume, namely, Prof. B. Arunachalam (Geography), the late Dr. V. V. Mirashi (History—Ancient Period), Dr. B. G. Kunte (History—Mediaeval Period, Muhammadan Period, Portuguese Period and British Period), Shri K. K. Chaudhari, myself (History—Modern Period), and Shri T. V. Parvate(The People). This monumental work on Bombay would not have been possible but for their contributions.

My study of History—Modern Period would have been rather impossible for me if that copious documentation was not available in the Gazetteers Department, the Maharashtra State Archives, Bombay Police Commissioner's Office and the Asiatic Society Library. My foremost thanks are due to Dr. L. B. Keny for his generous academic advice and for undertaking the laborious task of scrutiny of my manuscript of History—Modern Period, which work was entrusted to him by the Government of Maharashtra due to the absence of the Maharashtra Gazetteers Editorial Board at that time. I also owe my gratitude to Shri B. N. Phatak, son of the illustrious Prof. N. R. Phatak, for his incidental help, generous advice and keen interest throughout my work.

Several scholars in Bombay have been generous to me with their advice and help. It may be tedious to mention their names here. But it is literally true that my work would have been difficult without the generosity of Prof. Anil C. Tikekar and Prof. P. G. Raje of the Library Department of the University of Bombay, Dr. P. M. Joshi, Shri D. B. Karnik, Prof. Jim Masselos and the late Dr. V. G. Hatalkar.

I also owe my thanks to the members of the former Maharashtra District Gazetteers Editorial Board for scrutiny of the first draft of some portion in this volume. These members comprised the following distinguished men:—

- a. Additional Chief Secretary to the Government of Maharashtra (Chairman).
- b. Shri P. Setu Madhav Rao.

- c. Dr. V. B. Kolte.
- d. Dr. C. D. Deshpande.
- e. Dr. B. R. Rairikar.
- f. Dr. (Smt.) Sarojini Babar.
- g. Dr. V. T. Gune.
- h. Dr. P. N. Chopra.
- i. Executive Editor and Secretary (Dr. B. G. Kunte).

The present members of the Editorial Board, reconstituted while the volume was under printing, have very kindly encouraged me in this work. To all these men of distinction, mentioned below, I am highly indebted:-

- a. Additional Chief Secretary to the Government of Maharashtra (Chairman).
- b. Shri P. Setu Madhav Rao.
- c. Dr. C. D. Deshpande. d. Dr. U. M. Pathan.
- e. Shri D. B. Karnik.
- f. Prof. Y. S. Mahajan.
- g. Dr. B. L. Bhole.
- h. Shri S. G. Suradkar.
- i. Dr. A. P. Jamkhedkar.
- j. Dr. P. N. Chopra.
- k. Executive Editor and Secretary.

I shall be failing in my duty if I do not express my gratitude to Dr. P. N. Chopra, former Editor, Gazetteers Unit, Ministry of Education, Government of India, New Delhi, who has always been my guide and friend, for his prized advice and scrutiny of a part of the write-up. The Government of India have kindly paid an ad hoc grant for the compilation and printing of the Greater Bombay Gazetteer.

Several Government Offices, the Bombay Municipal Corporation, various Government Undertakings, the Vice-Chancellors of the University of Bombay and the S.N.D.T. University, the Librarians of the University of Bombay Library, the Vidhan Bhavan Library and many other libraries, numerous organisations, and scores of enlightened citizens of Bombay, have readily and unhesitatingly helped me in this work. To all of them whose names cannot be mentioned here, my thanks are due. I must also thank Dr. A. P. Jamkhedkar, Director of Archaeology, and the Director General of Information and Public Relations, Maharashtra State, for providing photographs for the volume.

I am thankful to Shri R. B. Alva, Director of Government Printing and Stationery, Shri G. D. Dhond, Deputy Director and Shri P. S. More, Manager, Government Central Press, Bombay as also other officers, not only for the fine printing of this volume but also for patiently bearing with us while we made many additions to the matter even at the proof stage. My thanks are also due to Dr. V. N. Gurav, Deputy Editor, Sarvashri M. H. Ranade (Retd.), S. K. Khilare, P. N. Narkhede, B. M. Kausal (Research Officers) and Smt. M. S. Modikhane (Research Officer then), for their assistance in the work. I am also thankful to Smt. N. S. Alwani, Sarvashri N. R. Patil, K. Z. Raut, D. J. Nawadkar, V. B. Sangrulkar, R. R. Hanwatkar and V. J. Desai (Assistant Research Officers) for their assistance in the publication of this volume. I must also thank Shri P. S. Khobrekar, Administrative Officer and other members of the staff for their association with this work.

A separate select Bibliography for History—Modern Period has been added at the end of Chapter 2, while the Bibliography for the entire volume is furnished at the end of the Volume. An interesting addition to the Volume is a Note on Inscriptions furnished in the form of an Addendum.

I hope this cyclopaedic volume will be appreciated and found highly useful by all those historians, scholars and administrators who are interested not merely in the study of History, Geography and People and Their Culture in this colourful Great City of India, but also desiring to study the biography of Bombay.

Bombay: Balipratipada 3 November 1986

K. K. CHAUDHARI **Executive Editor and Secretary**

PREFACE VOLUME -II

It is with great delight that I am presenting this second volume of the veritable cyclopaedic Greater Bombay District Gazetteer, which is being brought out in three volumes in the revised edition of Gazetteers. It is a monumental work, contain as it does the most authentic and exhaustive narration of the Economy of Bombay in a historical perspective. It can verily be said that the major portion in the present volume has the impress of profound scholarship. I can also say that the scholarly narration of the history of industrial growth and economic development of Bombay furnished in this Volume is a valuable contribution to learning. Bombay has been a subject of interest of many research scholars from India and abroad. But hardly anyone of them has published any work on the industrial development at the microeconomic level. This volume has, probably, filled up this gap in the knowledge on Bombay by furnishing the history of industrial growth over a period of nearly 300 years.

Undoubtedly, Bombay is the commercial capital of India. More than 40 per cent of India's maritime trade passes through the Bombay Harbour. This city owed its initial development as a centre of trade partially to its quality as a natural harbour, and partially to the men of great enterprise. The mid-nineteenth century was a period of rapid economic advance. By this time, British sovereignty had been imposed on large areas of Western India, and communications by road and sea had greatly improved. The merchants of Bombay made great fortunes from the exports of cotton and opium. The railway heralded a new industrial age with the opening of the rail line from Bombay to Thane in 1853. The extension of railways up the Ghats, only ten years later, added to the growth potential of the city. More significant than this, the businessmen of Bombay began to turn from trade to manufacture and lay the foundations of the textile industry that made Bombay the Manchester of the East and one of the cotton capitals of the world. But most significant of all, the fortunes of Bombay were revolutionised by the Cotton Boom or Share Mania caused by the American Civil War of 1861-65. Enormous profits earned during the boom were invested in cotton mills, banking, reclamation and embellishment of the city. These forces gave birth to 'Modern' Bombay as a 'World City'.

The first factory in Bombay, the mint of the East India Company, opened in 1676, while the first cotton textile mill was opened in 1854. Others followed soon afterwards, encouraged by the industry's early success; and in 1875 there were 27 mills. Expansion continued until the turn of the century. The Bombay Port Trust was started in 1873, while the Bombay Chamber of Commerce, established in 1836, gave impetus to the growth of industry and commerce. The Chapter on "Industries" in this revised Volume throws a searchlight on the History of Industrial Development during a period of 300 years. This is by itself an unparalleled work. The Sassoons, Petits, Khataus, Morarji Goculdas, Wadias, Tata, Currimboy, Godrej and Thackersey families emerged as enterprising promoters. In the course of time Bombay's cotton business exceeded that even in Liverpool. Bombay developed as a manufacturing city like London, Manchester, Bradford, Liverpool, Birmingham, Leeds, Halifax and Southampton. London and Manchester were the models for Bombay. But today the chimneys of London and Manchester are going or have already gone, and many mills stand empty and destroyed. Bombay, however, continues and continues to grow organically. The mills and factories in Bombay work on round the clock. Multitudes from India's heartlands come here for seeking employment, money and life itself. To them all, it is a city of gold. But truthfully, prosperity and squalor seem to increase in direct proportion to one another in this city.

The above paragraphs would give a fairly clear idea about the contents of the present volume. The subjects dealt with in this volume were included in Volume I, Volume II and Volume III of the Gazetteer of Bombay City and Island (1909-1910) edited by Mr. S. M. Edwardes, and the Thana District Gazetteer of 1882, edited by Mr. James M. Campbell. The present revised volume follows an entirely different scheme of treatment and emphasis, which is probably more systematic and objective than the above corresponding old Gazetteers. Mr. Edwardes' *Gazetteer of Bombay City and Island* dealt with these subjects under such headings as, The Harbour, Capital, Communications and Trade (Volume I), Land Administration, Revenue and Finance (Volume II), and Markets, City Improvement Trust, etc. (Volume III). All these subjects and many more have been presented, in this revised edition, under appropriate chapter headings. The information regarding South Salsette, which now constitutes Bombay Suburbs, has been culled from the Thana District Gazetteer of Mr. Campbell. The present Volume contains six chapters, viz., 4 to 9. The chapter headings are given on the pattern prescribed by the Government of India. There are, however, immense and far-reaching deviations from the Central Pattern, both as regards the comprehensiveness and depth of treatment given to each subject. The deviations are inevitable due to the importance of Bombay as the industrial nerve centre and the commercial capital of India. The Gazetteer of Bombay has to be worthy of this Great City. It has, therefore, been incumbent upon us to deviate from the scheme of the Government of India which envisaged publication of each District Gazetteer in a single volume.

I must avail myself of this opportunity to state that a good deal of information pertaining to some of the subjects, in this volume has been furnished more at length in Volume I of this revised Gazetteer. A comprehensive history of the industrialists and businessmen, and their role in the nationalist movement as well as in the making of this city has been given in History—Modern Period in Volume I. The readers would certainly be benefited by referring to Volume I.

Enormous efforts, involving laborious and time-consuming processes from the commencement to completion, were needed for the production of this work which has necessarily to maintain a high standard of precision, reliability, objectivity and thoroughness. We have perseveringly strived for achieving such a standard, although we are aware of our shortcomings. No effort has been spared to incorporate as up-to-date information as possible. However, in a monumental work like this a time-lag between the date of collection of information and its publication is inevitable.

The first draft of some chapters was prepared during the tenure of my painstaking predecessor, Dr. B. G. Kunte. I owe my sincere thanks to him. That write-up has been thoroughly revised, voluminous additions have been made and two chapters were newly written. Naturally this was a stupendous task.

I owe a great debt of gratitude to the scholar contributors of the present volume, namely, Dr. B. R. Rairikar and Shri K. K. Chaudhari (myself). This monumental work on Bombay would not have been possible but for their contributions.

I also owe my thanks to the members of the former Maharashtra District Gazetteers Editorial Board for scrutiny of the first draft of some portion in this volume. These members comprised the following distinguished men:—

- a. Additional Chief Secretary to the Government of Maharashtra (Chairman).
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- c. Dr. V. B. Kolte.
- d. Dr. C. D. Deshpande.
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- g. Dr.V.T. Gune.
- h. Dr. P. N. Chopra.
- i. Executive Editor and Secretary (Dr. B. G. Kunte).

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- g. Dr. B. L. Bhole.
- h. Shri S. G. Suradkar.
- i. Dr. A. P. Jamkhedkar.
- j. Dr. P. N. Chopra.
- k. Executive Editor and Secretary.

I shall be failing in my duty if I do not express my gratitude to Dr. P. N- Chopra, former Editor, Gazetteers Unit, Ministry of Education, Government of India, New Delhi, who has always been my friend, for his prized advice and scrutiny of a part of the write-up. The Government of India have kindly paid an ad hoc grant for the compilation and printing of the Greater Bombay Gazetteer.

Several Government Offices, particularly the Director of Economics and Statistics, and the Centre for Monitoring Indian Economy, the Bombay Municipal Corporation, various Government Undertakings, the Librarians of the University of Bombay Library, the Vidhan Bhavan Library and many other libraries, the Bombay Chamber of Commerce, the Indian Merchants' Chamber, the Maharashtra Chamber of Commerce and all other Chambers of Commerce, as well as the Bombay Millowners' Association and the Associations of various industries and trade, and numerous other organisations, and scores of enlightened citizens of Bombay, have readily and unhesitatingly helped me in this work. To all of them, whose names cannot be mentioned here, my thanks are due. I must also thank Dr. A. P. Jamkhedkar, Director of Archaeology, Maharashtra State, for providing photographs for the volume.

I am thankful to Shri R. B. Alva, Director of Government Printing and Stationery; Shri G. D. Dhond, Deputy Director; Shri P. S. More, Manager; and Shri A. C. Sayyad, Deputy Manager and Shri A. K. Rao, Assistant Manager, Government Central Press, Bombay, as also other officers, not only for the fine printing of this volume but also for patiently bearing with us while we made many additions to the matter even at the proof stage. My thanks are also due to Dr. V. N. Gurav, Deputy Editor, Sarvashri M. H. Ranade (Retd.), S. K. Khilare, P. N. Narkhede, B. M. Kausal (Research Officers) and Smt. M. S. Modikhane (Research Officer then), for their assistance in the work. I am also thankful to Smt. N. S. Alwani, Sarvashri N. R. Patil, K. Z Raut, D. J. Nawadkar, V. B. Sangrulkar, R. R. Hanwatkar, and V. J. Desai (Assistant Research Officers) for their assistance in the publication of this volume. I must also thank Shri P. S. Khobrekar, Administrative Officer and other members of the staff for their association with this work.

I hope this cyclopaedic Volume will be appreciated and found highly useful by all those historians, scholars and administrators who are interested not merely in the study of the Economy and History of this colourful Great City of I&dia, but also desiring to study the biography of Bombay.

Bombay: 1 January 1987

K. K. CHAUDHARI **Executive Editor and Secretary**

PREFACE VOLUME III

It is with great delight that I present this third volume of the veritable cyclopaedic Greater Bombay District Gazetteer, which is brought out in three volumes in the series of revised Gazetteers. The present volume deals with such diverse subjects as public administration, public life, journalism, voluntary social service organisations, theatre, archaeology and objects of interest in this urbs prima in indis. This volume, like the previous two, follows an entirely different scheme of treatment, which is probably more systematic and precise than the corresponding volumes of the Gazetteer of Bombay City and Island, published in 1909 and 1910.

The subjects dealt with in the present volume were included in Volumes II and III of the Gazetteer of Bombay City and Island edited by Mr. S. M. Edwardes, and the Thana District Gazetteer of 1882 edited by Mr. James M. Campbell. There were, besides others, six chapters in the two volumes edited by Mr. Edwardes on such topics as, Justice and Protection; Revenue and Finance; the Bombay Municipality, Port Trust, and Improvement Trust; Education; Health; and Places and Objects of Interest. All these subjects and many more have now been presented under appropriate chapter headings. The account regarding South Salsette, which now constitutes Bombay Suburbs, has also been culled from the Thana District Gazetteer of Mr. Campbell. This revised volume contains ten chapters covering diverse topics, the most important addition being the exhaustive account of Public Life, Voluntary Social Service Organisations, Journalism and 'Theatre' in this cosmopolitan metropolis. The chapter headings are given on the pattern prescribed by the Government of India. There are, however, immense deviations from the Central Pattern, both as regards the comprehensiveness and depth of treatment given to each subject. The deviation is inevitable not merely because Bombay City is the capital of Maharashtra State and the commercial metropolis of India, but also due to the fact that she is the Gateway to India, and an Indian City with a Western facade.

The Gazetteer of Greater Bombay has to be worthy of this Great City of India. It has, therefore, been incumbent upon us to deviate from the scheme of the Government of India which envisaged publication of each District Gazetteer in a single volume. The entire write-up would have been too bulky for a single volume and there was no alternative but to divide it into three handy volumes, as we have done.

I must avail myself of this opportunity to state that a good deal of information pertaining to some of the

subjects in this volume has been furnished more at length and depth in Volume I and also in Volume II of this revised Gazetteer. The comprehensive history of modern Bombay furnished in " History—Modern Period " in Volume I includes detailed accounts on several topics covered in Volume III. For instance, exceedingly thorough accounts of Educational Awakening, Political Consciousness, University Education. Public Life, Growth of Municipal Government, Civic Politics, Bombay City Improvement Trust, Judiciary, Journalism, Medical Services, Bombay's Relics and Archaeology, to mention only a few, have been presented in a historical perspective in " History—Modern Period " in Chapter 2. Some particulars about objects of interest and institutions with a historical role can also be found in the same. The readers would certainly be benefited by refering to these portions which have the impress of profound^ scholarship and learning.

There are certainly portions in the old Gazetteers of Bombay City and Thane District the worth of which has not diminished by the mere passage of time. Although some of them have been reproduced without hesitation, every attempt has been made to avoid repetition in this revised edition because the previous editions of three volumes of the *Gazetteer of Bombay City and Island* and that of the *Thana Gazetteer*—Part I, have been made available by this Department in the form of Reprints in 1977, 1978 and 1984.

Enormous efforts, involving laborious and time-consuming processes from the commencement to completion, were needed for the production of this work which has necessarily to maintain a high standard of precision, reliability, objectivity and thoroughness. We have perseveringly strived for achieving such a standard, although we are aware of our shortcomings. No effort has been spared to incorporate as up-to-date information as possible. However, in a monumental work like this a time-lag between the date of collection of information and its publication is inevitable.

The first draft of many chapters was prepared during the tenure of my predecessor, Dr. B. G. Kunte, who has contributed to many Gazetteers. I owe my sincere thanks to him. That write-up has been thoroughly revised, voluminous additions have been made and the material has been updated. Naturally this was a stupendous and time-consuming task.

I owe my gratitude to the members of the former Maharashtra District Gazetteers Editorial Board for scrutiny of the first draft and useful suggestions. These members comprised the following distinguished men of erudition:

- a. Additional Chief Secretary to the Government of Maharashtra (Chairman).
- b. Shri P. Setu Madhav Rao.
- c. Dr. V. B. Kolte.
- d. Dr. C. D. Deshpande.
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- i. Executive Editor and Secretary.

The present members of the Editorial Board, reconstituted while the volume was under printing, have very kindly and generously encouraged me in this work. To all these men of distinction, mentioned below, I am highly indebted:

- a. Additional Chief Secretary to the Government of Maharashtra (Chairman).
- b. Shri P. Setu Madhav Rao.
- c. Dr. C. D. Deshpande.
- d. Dr. U. M. Pathan.
- e. Shri D. B. Karnik. f. Prof. Y. S. Mahajan.
- g. Dr. B. L. Bhole.
- h. Shri S. G. Suradkar.
- i. Dr. A. P. Jamkhedkar
- j. Dr. P. N. Chopra.
- k. Executive Editor and Secretary.

I shall be failing in my duty if I do not express my gratitude to Dr. P. N. Chopra, Editor, Gazetteers Unit, Ministry of Education, Government of India, New Delhi, who has always been my guide and friend, for his prized advice and scrutiny of the write-up. The Government of India have kindly paid an *ad hoc* grant for the compilation and printing of the *Greater Bombay Gazetteer*.

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I am thankful to Shri R. B. Alva Director of Government Printing and Stationery, Shri G. D. Dhond, Deputy Director, and Shri P. S. More, Manager, Government Central Press, Bombay, as also other officers, not only for fine printing of this volume but also for patiently bearing with us while we made many additions to the matter even at the proof stage. My thanks are also due to Dr. V. N. Gurav, Deputv Editor; Shri M. H. Ranade (Retd.), Shri S. K. Khilare, Shri P. N. Narkhede, Shri B. M. Kausal (Research Officers) and Smt. M. S. Modikhane (Research Officer then), for their valuable assistance throughout the work. I am also thankful to Smt. N. S. Alwani, Sarvashri N. R. Patil, K. Z. Raut, D. J. Nawadkar, V. B. Sangrulkar, R. R. Hanwatkar and V. J. Desai (Assistant Research Officers) for their assistance in the publication of this volume. I must also

thank Shri P. S. Khobarekar, Administrative Officer and other members of the staff for their association with this work.

I hope this cyclopaedic volume will be appreciated and found highly useful to all those scholars and administrators who are interested in the study of public administration, public life, journalism and objects of interest in this colourful Great City of India.

Bombay: 1986

K. K. CHAUDHARI Executive Editor and Secretary



Maharashtra State Gazetteers

Dr. A. S. Pathak Executive Editor and Secretary

Gazetteers Department

Govt of Maharashtra 27, Burjorjee Bharucha Road Fort, Mumbai- 400 023 Tel. 22678779 / 22691124

GAZETTEERS DEPARTMENT, GOVT. OF MAHARASHTRA

Gazetteer literally means only a geographical index or Geographical dictionary. It not only includes a comprehensive description of physical and natural features of a region but also a broad narrative of the social, political, economic and cultural life of the people living in a district. The topics on physical features, material resources, history customs and manners of the people, trade, agriculture industries, communication, administrative departments, voluntary social organisations and places of interest in a district are covered.

GAZETTEERS DEPARTMENT:

Gazetteers Department is a separate Directorate of Government Maharashtra under the administrative control of the Cultural Affairs Department of the Govt. of Maharashtra. This department publishes District and State Gazetteers in Marathi and English Languages.

Working of the Department:

Information and documents required for the Gazetteer volumes is collected from the relevant departments of Govt. from non-official agencies as also from responsible citizens by correspondence and conducting surveys. It is also collected from various secondary and primary sources, archives, publications, correspondence and individual visits. The collected information is collated and scrutinized for the drafts of the Gazetteers. Important topics like history, archaeology and geography are get written by the scholars. The Edited drafts are scrutinized by the Editorial Board Members and then corrected drafts are sent for final printing.

English Gazetteers:

a) District Gazetteers: Compilation and publication of the revised District Gazetteers edition was started in 1949. Accordingly 2 District Gazetteer volumes of the 26 district of the published. For these volumes grants from Central Govt. were obtained.

Maharashtra State Gazetteers

DISTRICT GAZETTEERS (ENGLISH)

Sr No.	Name of the District Gazetteer	Year of Publication	Price (Rs.)
1	2	3	4
1	Poona	1954	11.37
2	Kolhapur	1960	16.50
3	Jalgaon	1962	15.00
4	Ratnagiri	1962	16.94
5	Satara	1963	14.10
6	Kolaba	1964	18.50
7	Nagpur	1966	20.00
8	Parbhani	1967	17.00
9	Amaravati	1968	19.50
10	Beed	1969	18.00
11	Sangli	1969	20.00
12	Nanded	1971	20.00
13	Osmanabad	1972	32.50
14	Chandrapur	1972	28.00
15	Dhule	1974	20.00
16	Wardha	1974	15.00
17	Yavatmal	1974	26.50
18	Nashik	1975	37.00
19	Buldhana	1976	25.50
20	Ahmednagar	1976	30.50
21	Solapur	1977	32.50
22	Akola	1977	27.50
23	Aurangabad	1977	36.15
24	Bhandara	1979	21.75
25	Thana	1982	70.00
26	Greater Bombay part-	1987	
27	Greater Bombay part-	1987	200.00
28	Greater Bombay part-	1987	e Gazett

C. Ds. Of Gazetteers

This department has now undertaken the scheme of preparing C.Ds. of published District Gazetteers. Accordingly the C.Ds. of the Pune (1954) , Aurangabad (1977), Nashik (1975) & Nanded (1971) District Gazetteers have been prepared and are made available on demand.

Web site: www.maharashtra.gov.in

Email: stategazetteers_maharashtra@yahoo.co.in

b) Supplements to the District Gazetteers: As per the instructions of the Central Govt. and for updating the statistical data contained in the parent District Gazetteer volumes, the work of compilation and publication of the Supplements to the revised District Gazetteers had been undertaken and every attempt had been made to bring the statistical data as uptodate as possible.

SUPPLEMENTARY DISTRICT GAZETTEERS

Sr No.	Name of the Supplementary District Gazetteer	Year of Publication	Price (Rs.)
1	Napur	1978	3.80
2	Ratagiri	1978	3.90
3	Amaravati	1978	2.60
4	Kolhapur	1980	4.50
5	Kolaba	1981	4.50
6	Sangli	1983	10.40
7	Pune	1984	9.00
8	Beed	1988	20.00
9	Satara	1989	21.00
10	Parbhani	1989	13.50

c) Maharashtra State Gazetteers (English): The State Gazetteers series cover subject can best be treated for the State as a whole and not for the smaller area of a district. In this series the following State Gazetteers are published.

Sr No.	Name of the State Gazetteer	Year of Publication	Price (Rs.)
1	Botany Part-I Medicinal Plants	1953	9.60
2	Botany Part-II Timbers	1957	4.19
3	Botany Part-III Miscellaneous Plants	1961	5.23
4	History Part-I Ancient Period	1967	9.00
5	History Part-II Maratha Period	1968	4.96
6	Maharashtra: Land and its People	1968	8.00
7	Language and Literature	1970	9.75
8	History Part-II, Mediaeval Period	1972	23.50
9	Fauna	1974	14.00
10	Botany and Flora of Maharashtra	1987	75.00
11	History of Bombay: Modern Period	1987	45.00
12	Maharashtra Itihas Prachin Kal Volume I-Part -II Art & Architecture (Marathi)	2002	275.00
13	Maharashtra Itihas Prachin Kal Volume I-Part-I (Marathi)	2003	350.00
14	Bhoomi Ani Lok (Marathi)	1996	175.00
15	Aushadhi Vanaspati (Marathi)	2004	175.00

d) Reprinting of Old Gazetteers: The old Gazetteers published in the British regime (1874 to 1913) contained some valuable information which was not reproduced in the revised Gazetteers. These Gazetteers had gone out of stock. There fore, Govt. had decided to reprint these volumes. The Gazetteers reprinted so far are as under.

BOMBAY PRESIDENCY VOLUMES

Sr No.	Name of the Reprinted Gazetteer	Year of Publication	Price (Rs.)
1	Gazetteer of Bombay City and Island (1909) Part-I	1977	25.00
2	Gazetteer of Bombay City and Island (1909) Part-II	1978	25.00
3	Gazetteer of Bombay City and Island (1909) Part-III	1978	25.00
4	Ratnagiri and Swantwadi District Gazetteer (1880)	1996	175.00
5	Khandesh District Gazetteer (1880)	1985	54.00
6	Thana District Gazetteer Part-I (1882)	1984	73.00
7	Thana District Gazetteer Part-II (1882)	1987	30.00
8	Nasik District Gazetteer (1883)	1994	125.00
9	Kolaba District Gazetteer (1883)	1989	63.00
10	Satara District Gazetteer (1884)	1989	97.00
11	Solapur District Gazetteer (1884)	1997	275.00
12	Poona District Gazetteer Part-I (1885)	1989	50.00
13	Poona District Gazetteer Part-II (1885)	1992	45.00
14	Poona District Gazetteer Part-III (1885)	1992	45.00
15	Kolhapur District Gazetteer (1886)	1999	250.00
16	Thane District Gazetteer Vol.XIV (1882)	2000	275.00
17	Ahmednagar District Gazetteer Vol.XVII (1884)	2003	340.00

C.P. AND BERAR VOLUMES

Sr No.	Name of the Reprinted Gazetteer	Year of Publication	Price (Rs.)
1	Wardha District Gazetteer (1906)	1988	30.00
2	Yavatmal District Gazetteer (1908)	1979	15.00
3	Buldhana District Gazetteer (1910)	1979	37.00
4	Akola District Gazetteer (1910)	1998	195.00
5	Amaravati District Gazetteer (1911)	1983	50.00
6	Nagpur District Gazetteer (1908)	1999	215.00
7	Bhandara District Gazetteer Vol-A (1908)	2003	135.00
8	Chanda District Gazetteer Vol-A (1909)	2005	250.00

GAZETTEER OF THE NIZAM'S DOMINIONS (MARATHWADA REGION)

Sr	Name of the Reprinted Gazetteer	Year of	Price
No.		Publication	(Rs.)
1	Aurangabad District Gazetteer (1884)	2006	295.00

MARATHI GAZETTEERS:

1) District Gazetteers (Marathi): Taking into consideration the language of the State, this department proposed to bring out the Gazetteers in Marathi of about 500 to 600 printed pages for every district of the State giving as up-to-date information as possible in respect of the social, economic and political life of each district.

PUBLISHED MARATHI DISTRICT GAZETTEERS

Sr No.	Name of the District Gazetteer	Year of Publication	Price (Rs.)
1	Parbhani	1988	35.00
2	Kolhapur	1989	200.00
3	Wardha	1992	91.00
4	Rayagad	1993	275.00
5	Jalgaon	1994	225.00
6	Satara	1999	195.00
7	Nagpur Part 1	2005	500.00
8	Nagpur Part 2	2005	350.00

2. State Gazetteers (Marathi): Besides District Gazetteers it also proposed to bring out State Gazetteers Volumes in Maharashtra Land and Its people (Maharashtra: Bhoomi Va Lok) has been published in 1996. Its cost is Rs.175/-

SOURCE MATERIAL FOR A HISTORY OF THE FREEDOM MOMENT IN INDIA

Sr No.	PUBLICATION	Year of Publication	Price (Rs.)
1)	Vol. I-Source Material for a History of the Freedom Movement in India (1885-1920)	1957	3.20
2)	Vol. II-Source Material for a History of the Freedom Movement in India (1985-1920)	1958	10.63
3)	Vol. III-Source Material for a History of the Freedom Movement in India Mahatma Gandhi		
	a) Mahatma Gandhi Part-I (1915-1922)	1965	13.30
	b) Mahatma Gandhi Part-II (1922-1929)	1968	6.25
	c) Mahatma Gandhi Part-III (1929-1931)	1969	8.25
	d) Mahatma Gandhi Part-IV (1931-1931)	1973	12.00
	e) Mahatma Gandhi Part-V (1932)	1975	11.00
	f) Mahatma Gandhi Part-VI (1932-1933)	1975	19.50
	g) Mahatma Gandhi Part-VII (1934-1943)	1975	16.75
4)	Vol. IV-Congress activities (1942-1946)	1977	3.00
5)	Vol. V-History of Non-Co-operation Movement in Sind (1919-1924)	1977	4.60
6)	Vol. VI-Non Co-operation Movement in Bombay City (1920-1924)	1978	6.60
7)	Vol. VII-Correspondence and-Diary of G.S.Khaparde.	1977	12.00
8)	Vol. VIII Part-I-Goa Freedom Struggle Vis-A Vis Maharashtra (1946-1961)	1978	8.00
	Vol. VIII Part-II_Goa Freedom Struggle Vis A Vis Mharashtra (1946-1961)	1978	4.30
9)	Vol. IX-Mahatma Gandhi in Maharashtra (1915-1946).	1980	10.50
10)	Vol. X Khilafat Movement (1920-1921)	1982	20.00
11)	Vol. XI-Civil Disobedience Movement (April-September 1930)	1991	118.00
12)	Vol. XII Civil Disobedience Movement (October 1930- December 1941)	1995	85.0085.00

Who's Who of Freedom Fighters: The Who's of Freedom Fighters in Maharashtra State was planned to published in six volumes in Marathi. These volumes contained bio-data of Freedom Fighters and the valuable role they played in the freedom struggle. As per the plan this department has published the following volumes and completed the scheme.

Sr No.	Volume	Year of Publication	Price (Rs.)
1)	Who's who of Vidarbha Region Part-I	1970	2.00
2)	Who's who of Vidarbha Region Part-II	1976	3.00
3)	Who's who of Marathwada	1976	3.00
4)	Who's who of Western Maharashtra Part-I	1979	8.00
5)	Who's who of Western Maharashtra Part-II	1978	8.00
6)	Who's who of Western Maharashtra Part-III	1980	8.00

Collected works of Mahatma Gandhi: Translation into Marathi language. This department has so far published 61 volumes.

MAHARASHTRA STATE GAZETTEERS



Sobernment of Maharashtra GREATER BOMBAY DISTRICT

VOLUME I: 1986

PREFACE

I am very glad to bring out the E-book edition (CD version) of the Greater Bombay District Gazetteer published by the Gazetteers Department This CD version is a part: of a scheme of preparing compact discs of earlier published District Gazetteers.

Greater Bombay District Gazetteer was published in 1986-1987 in three volumes. It contains authentic and useful information on several aspects of the district and is considered to be of great value to administrators, scholars and general readers. The copies of this edition are now out of stock. Considering its utility, therefore, need was felt to preserve this treasure of knowledge, In this age of modernization Information and Technology have become key words. To keep pace with the changing need of hour, I have decided to bring out CD version of this edition that comprises of all the three volumes, with little statistical supplementary and some photographs, I am sure, scholars and studious persons across the world will find this CD immensely beneficial.

I are thankful to the Honorable Minister, Shri. Ashokrao Chavan (Industries and Mines, Cultural Affairs and Protocol), and the Minister of State, Shri. Rana Jagjitsinh Patil (Agriculture, Industries;-and Cultural Affairs), Shri. Bhaushan Gagrani, (Secretary, Cultural Affairs) and Government of Maharashtra for being constant source of inspiration.

Place, Mumbai

Dr. Arunchandra S. Pathak

Executive Editor and Secretary

January 2007

GENERAL



Maharashtra State Gazetteers

GEOGRAPHY

(The section on Geography is contributed by Prof. B. Arunachalam, Geography Department, University of Bombay, Bombay)

THE URBAN AGGLOMERATION OF GREATER BOMBAY is a unique entity in the physical and cultural setting of not only Maharashtra but also the whole of India. Located on the western sea-board, overlooking the Arabian Sea and commanding the Suez Route on the world shipping ways, and backed by a productive hinterland, linked through routeways on it through the Thai and Bhor *ghats* across the Sahyadri, this giant gateway to India is the economic nucleus of Maharashtra. It is a cloister of commerce and industry, business and administration.

Bombay in India and Maharashtra: Ranked eighth in the world, Greater Bombay had a population of 5.96 millions in 1971; the population figures hover around 8.2 millions at present (1981). As the administrative capital of the State of Maharashtra, it dominates the regional scene, accounting for 11.5 per cent of its total population, 39 per cent of its urban population, nearly 75 per cent of its industrial activity and nearly two-thirds of its industrial workers. As the leading port of the country, handling slightly less than a third of the external maritime trade of India, its port functions permeate and dominate the national economy. Easily the largest industrial node, with a concentration of textiles, engineering, chemicals and drugs industries, it contributes nearly 15 per cent of the industrial income of the nation. It is also the leading banking and financial centre of the nation and accounts for about 42 per cent of its total revenue from air-borne and sea-borne trade of India and 34 per cent of the national income, accruing through income tax revenues. The rapidly fusing amalgam of the Bombay city region has turned out to be one of the biggest urban complexes of the nation. Yet this great city of Western India has risen from humble ranks, of that of a group of fishing hamlets to that of an industrial giant over the span of a few hundred years; its history of spectacular growth is not paralleled by other cities in the country.

Location, Size and Area: Greater Bombay, the smallest of the districts of Maharashtra is entirely an urban district, that has submerged in itself the former villages in the peri-urban fringe. The district, extends between 18°53'N. and 19°20'N. and between 72°45'E. and 73°00'E. It has an easi to west extent of about 12 km. where it is broadest, and a north-south extent of about 40 km. The district covers an area of 437.71 sq. km. that constitutes 0.14 per cent of the total area of the State of Maharashtra. The importance of the district is also apparent from the fact that the district supports a population of about 8 millions, sharing 11.5 per cent of the population of the State, which is enormously out of proportion to the size of the district.

Geographically speaking, the district entirely lies outside the mainland of Konkan in Maharashtra in a group of islands separated from the mainland by the narrow Thane creek and a somewhat wider Harbour Bay. The district at present occupies the original island group of Bombay— now practically a southward protruding peninsula of the larger Salsette—and most of the island of Salsette, with the former Trombay island appended to it in its south-east. A small part in the north of the Salsette island, however, lies in Thane district. The Salsette-Bombay island complex lies off the mouth of the Ulhas river; the estuary in the Vasai creek and the Thane creek together separate it from the mainland. Thus, the district of Greater Bombay is surrounded on three sides by the seas—by the open Arabian sea to the west and the south and the Harbour Bay and the Thane creek in the east—but, in the north, the district of Thane stretches along its boundary across the northern parts of Salsette.

Administrative Evolution: Initially the district of Bombay included only the city isiand. In 1920, when the Salsette taluka was divided into North Salsette and South Salsette; South Salsette consisting of 86 villages was separated from the Tbane district, to constitute the newly created Bombay Suburban district. This district was made up of two talukas: Borivali with 33 villages, and Andheri with 53 villages. Thirty-three villages from the Bombay Suburban district were transferred to the Thane district in 1945; 14 of these 33 villages, required for the development of Aarey Milk Colony, were returned to Bombay Suburban district in 1946.

On the 15th April, 1950, the municipal limits of Bombay were extended to include the Andheri taluka of the Bombay Suburban district as suburban Bombay. The Borivali taluka, together with a village transferred from Thane district was also appended to Bombay when the municipal corporation limits were further extended on 1st February 1957. Thus, the Greater Bombay district, comprising the city proper and suburban areas came into being since 1957.

Present set-up: For administrative purposes, the district is at present divided into 15 wards. The area, population and density of population in the different wards are given below:—

Ward	Area (Sq. km.)	Population in 1971	Density per hectare
City A	11.41	1,84,104	161
В	2.46	1,75,131	712
С	1.78	3,12,472	1,756
D	6.63	3,82,742	577
E	7.41	5,28,736	714
F	21.17	6,62,516	313
G	17.85	8,24,677	463
Total	68.71	30,70,378	447
Western H	21.05	5,23,633	249
К	47.46	5,73,693	121
Р	64.27	3,72,335	58
R	77.56	2,35,833	30
Eastern L	13.46	2,73,507	203
М	54.92	3,16,371	57
N	55.44	4,79,660	86
Т	34.84	1,25,165	36
Total	369.00	29,00,197	78
Greater Bombay	437.71*	59,70,575*	137

(As per the Surveyor General of India, the area of Greater Bombay Municipal Corporation is 603 km2, comprising Bombay City 157 km2 and Suburbs 446 km2. Figures or 1981 are given in Chapter 3.)

Boundaries: The district is bounded to its north by the Thane taluka of the district of the same name. Commencing from the Arabian Seashore, to the north of Gorai, a fishing village, the boundary runs eastwards reaching Manori creek, a tidal outlet, and on crossing it the boundary runs north, along the eastern shores of the creek till almost the head of the creek where it turns in a general south-easterly direction to pass north of Culvem, and then along the northern limits of the Krishnagiri National Park over the Kanheri hills, whereafter the boundary turns further southwards keeping Tulsi, Mulund and Gavanpada to its south, till the boundary meets the tidal marshes adjoining the Thane creek.

Heptanesia (The entire description of ancient and mediaeval Bombay is based on the old Gazetteer of Bombay City and Island, Vol. I (1909) and Sir S. M. Edwardes' Rise of Bombay: A Retrospect (Bombay, 1902).: The land on which the present Greater Bombay has been built lies on what formed formerly two groups of islands, stretching southward of the Ulhas estuary. These land masses made up of a succession of volcanic Java effusions, and possibly subject to

local tilting of the earth crust and sea-level changes, were an archipelago of islands lust with coconut palms and other tropical green whose presence has been recorded in history almost since the beginning of the Christian era. Known to Ptolemy in A.D. 150 as Heptanesia on the Aparanta (North Konkan) coast of India, the Bombay city group originally consisted of seven separate islands, that remained practically unaltered in configuration until the eighteenth century. The northern island group—known as the Salsette group on which the present Suburban Bombay is situated—also consisted of a similar group of seven islands, the main and the largest island lending its name to the entire group. These islands remained separate till the beginning of the nineteenth century.

Seven Islands of Bombay: The cluster of Heptanesia, the configuration of which has been fairly well reproduced in an old map of 1843, had on its southern most tip a narrow tongue of rocky land, called today Lower Colaba, that extends further south in the form of a few submerged reefs beyond the Colaba Point. Northward of this island, and m close proximity to it was a small, almost triangular island, known in later Portuguese days as the Al Omanis, or in its anglicised corruption as the Old Woman's island. To the north of the Old Woman's island, and separated from it by a fairly wide strait of considerable width at high tide was the south-eastern part of the third island, which resembles to an extent the English alphabet H. This island, the largest in the group, later came to be known as Bombaim. The western part of this island was dominated by a single ridge running roughly north-south along the length of the island in its western prong and covered by rough tropical jungles. This ridge rims down to a point—the modern Malabar Point—into the sea. The central part and the eastern part consisted of a low-lying ground, bearing tamarinds and other shrubs at intervals and menaced from the north by a rocky ridge, subsequently named as the Dongri or the hill tract. To the south of this island, adjoining the lowlands was the Back-bay, a stretch of reef guarded waters. Northward again, beyond a very narrow creek lay a smaller island, part hill, part dale whereon the *Cassia fistula* and the brab were found to flourish. This island practically uninhabited till late in history was known as Mazagaon island.

Three islands compose the northern part of this island group. The middle one, shaped like a parallelogram was a sandy desert; it was flanked on the west by a narrow and tapering stretch of rock and on the east by a straggling island, trifurcated in its northern extremity, and possessed of a broken coast line. The last mentioned island known as Parel was mostly covered by tamarinds in the south and prickly pears in the north-west; extensive stretches of it were entirely covered by tidal marshes. It is from the northern tip of this island that voyages crossed the arm of the sea to enter Salsette. The parallelogram shaped, middle island, known initially as *Baradbet* (Desert island) and Nevale, and later as Mahim, was perhaps the only low, flat plain possibly an emergent sand bar on the northwestern flanks, and at the entrance to a wide bay known as the Mahim Bay. This island was full of coconut groves. The seventh island lying to the south of Nevale, in between the northern prong of Bombaim and Nevale was a rocky ledge separated from Bombaim by a wide stretch of sea, that was the last to be filled up in the process of amalgamation of the seven islands into one.

In between the seven islands was a fairly wide, shallow creek, into which the seas around poured during the high tides, and flooded the low-lying stretches of all islands.

Salsette group of islands: Separating this group of island from the Salsette group was a wide bay, the Mahim Bay. Salsette, or Sashti as it is known locally in Marathi and the largest of this group, lying centrally is dominated by a central mass of hills surrounded by tidal flats. To the south-east of this island, also chaiacterissd by a central hill mass, was the Trombay island. The rest of the islands, much smaller, all lay on the western flanks of Salsette. These included Bandra, Juhu, an old linear sand bar rising just above sea level by a metre or two, Vesava, Marve, Dharavi and Rai Murdhe, all with a knoll core and fringing wave—cut platforms and sandy beaches. These islands seem to have remained separate till as late as 1808. In 1825? Col. Jervis's map shows the west coast of Salsette broken into eight large and four small islands. At the time of writing of the old Gazetteer of Thana (1882), these islands could be reached during low tides by walking across the tidal inlets in between, barring the island of Dharavi that had to be reached by a boat.

Of the fact that these two island groups were known to early coastal travellers along the western coast of India, there seems little doubt from the references in Ptolemy, Pliny and others, but it is doubtful and not clear whether any regular landing point existed on these islands, though some scholars have attempted to identify the port of Seymul or Cheul with modern Chembur, though not very convincingly. But the fact that ports like Sopara, Kalyan and Cheul around these islands were well known in those early dates makes it obvious that these island groups must have been known. A dynasty of the Satakarnis or Satavahanas seems to have ruled over the islands of Heptanesta and Sashti during the early Christian era (about A.D. 133 to A.D. 154), according to Dr. Bhandarkar. Later, the Rashtrakutas who held sway over Aparanta must have also held control of these islands.

Early Inhabitants of Bombay: When these islands were first inhabited is not clear and the facts are masked in history. Perhaps at the beginning of the Christian era, or even possibly earlier, these islands came to be occupied by a dark race of people, the Kolis, who journeyed from the nearby mainland mass of Aparanta. The antiquarian interprets the Kolis as the husbandmen; some even identify them as Kulis or members of the Kul tribe. Successive waves of Koli settlers seem to have invaded and occupied the different islands of these archipelagoes, and in spite of subsequent occupation by many other settlers in later days, the Kolis have survived in these islands till today. In what localities they precisely built their scattered groups of huts is difficult to say. They undoubtedly existed in two of the southernmost islands is apparent from the fact they acquired the name of Kolabhat or Kolaba, the Koli estates. (Dr. Da Cunha: Origin of Bombay (p. 64). Immigrants of a later period gave the smaller of the two islands the name, the island of Al Omanis or deep sea fishermen. 'Koliwadi' hamlets exist in almost all of the islands of both the groups, as can be seen from Mandvi Koliwadi, Dongri Koliwadi, Sion Koliwadi, Mahim Koliwadi and Mori Koiiwadi (Worli), Kole Kalyan in Salsette and others. The situation of these hamleis today is comparatively remote from the seashore, but originally they all appear to have been close to the shores, as most Kolis in these areas were engaged in fishing. (Interesting facts of detail regarding Koli hamlets are given in Edwardes' 'Rise of Bombay. Also Sheppard, Samuel T., Bombay Place Names and Street Names, gives meaningful details.) Further evidence of their presence is afforded by the name Cavel (in the present Dhobi Talao area), which the antiquarian derives from Kol-war or Koli hamlet. Mungabhat or Mugbhat lane on the road from Cavel to Girgaum and Khotachiwadi approximately marks the sice of old Koli possessions. The Koli occupation of the fourth islet of Bombay group is witnessed by the place name Mazagaon or Machchagaon (a fishing hamlet), and the presence of a temple of Ghorupdeo or Khadadev(Da Cunha interprets Ghorupdeo as a stone deity; Kolis are mainly Nature and tree worshippers.) where a Koliwadi even today survives.

Place Name of Bombay: The origin of place names in the Bombay -Salsette island groups is a fascinating, though speculative study. The name Bombay itself has been of much controversy. The Englishmen of the seventeen century believed it to be a corruption of the Portuguese Buon-Bahia (good bay) and to be proof of the attachment of the Portuguese to the island's excellent harbour. Fryer, for example, spoke in 1673 of the "Convincing denomination Bombaim quasi Boon Bay". Ovington remarked in 1689 that the island was originally called Boon Bay in the Portuguese, while Grose in 1750 refers to "Buon-Bahia, now commonly Bombaim" Dom Joao de Castro writing two centuries earlier in 1538 says the island was called Boa-Vida (good life), because of its beautiful groves, its game and abundance of food.

The name Bombaim is much earlier than the Portuguese period. 6 BoaVida' and 'Buon-Bahia' are merely corruptions of an earlier Hindu name Manbal Mambai or Mumbai. According co Gujarat histories, a Hindu chief held the islands of Mahim, Mambai and Thane in 1430. Manbai or Mambe is mentioned in the *Mirat-i-Ahnadi* under the dates A.D. 1507, 1517, 1578 and 1583. Even early Europeans like Gaspar Correa and Barbosa spoke of Bombaim (1508) and Thana—Mayambu (1516). Balti speaks of Bombaim in 1583, the Dutch traveller Baldoeus of Bombaim in 1666, andTaverniei of the famous port of Bombay in 1676.

Some have derived the name from Mubarak (lucky), an Arab origin, on the ground that the island was the first to be sighted by seamen arriving from Arabia and the Persian Gulf to Sopara, Cheul, Kalyan aad others. Colonel Yule believes tht name to be a corruption of Mumba, while others form the name by the juxtaposition of Munga and Ai, Munga being the Koli who built the original temple of Mumbadevi Yet others derive the name ftom Mumba *rakshasa*, a. corruption of the tyrant Muslim chieftain Mubarak Shah who ruled over the islands and destroyed many temples. Of these derivations, Mumba appears the most probable, and must have been borrowed from the shrine of Mumbadevi, which is known to have stood near the Phansi Talao oi Gallows Pond, a site now included in the enclosure of the Victoria Terminus station of the Central Railway and which was removed by about 1700 to its present site, in order to admit the completion of the Esplanade and the erection of fresh fortifications. Even today the shrine of Mumbadevi in the heart of the city is accorded greater reverence than any other shrine in the city island. Mumbadevi is the patron deity of the Kolis, and the name is believed to be a corruption of Maha Mai or Maha Amma.

Early Place Names in Bombay: The earliest place names in the Bombay island group appear to be of Koli origin; they were koliwadis identified in their locations by tree name or some native element, as the Kolis were essentially nature and tree worshippers. Dr. Da Cunha, reports Edwardes in his *Rise of Bombay*, den\es the name Parel to the existence of ' Bignonia suaveolens' or tree—trumpet flower known locally as Padel. Apollo in the third island of Mumbaim is similarly derived by him as a corruption of the name 'Pallav', the harbour of clustering shoots adjoining a rude landing place in this island, where fishermen used to land fish. Some derive it as a corruption of the padav meaning boat. More striking names occur all over Bombay. It was one of those tamarinds which used to abound in this main island, and which survived till the British days and the erection of the Cathedral of St. Thomas that gave the title of Amliagal (in front of the Tamarind) to the Elphinstone Circle, and even today a Tamarind lane survives in the Esplanade. South of Dongri, on low ground were groups of brab (tad) palms that seem to have given the names Sattad (satar) or Seven-Brab Street, Dontad or Twin-Brab Row. Here, also close to the seashore, were tamarind trees (chinch-Tamarindus indica) that gave the name Chinch Bundar in later days. To the north-west of Dongri, there existed a plantation of thespesia Populnea or bhendi, which has given its name to the Bhendi Bazar. A little westward of this location adjoining the khadi (creek) along its banks were a couple of Ficus glomerata, or umbar, that has given the name Umbarkhadi or Omarkhadi. Adjoining it was boundary hamlet, the foot-wash or Pydhonie. The comparatively narrow belt of land to the last of the hills was thickly grown with plantations of various kinds like the jack (Artocarpus integrifolia) groves or Phanaswadi, the plantain grove or Kelewadi, and the cluster of brabs or Tadvadi, and the bor (Zizyphus jujubd) orchard or Borbhat. Borbhat was close to the low lying fields or Khetwadi, and nearby was the shrine of the village deity (Gav-devi). Close by was Kol-war (Cavel) adjoining Phanaswadi. The probable existence of four channels of inlets of the sea near Girgaum (hill village) seems to explain Chaupatty. From the hill village, one reached the patch of the ladder or shidi which went up the hill. On the left of the ladder was a plantation of acacia arabica or babul, closeby was built later a shrine, the Babulnath shrine. To the north of it was a hill ridge covered with a grove of Kambal (or *kamal* or *Odina wodier*) which seems to have given the name Cumballa hill. At the northern end of the hill carrying the Kambal grove and adjoining the sea stood three shrines, those of Mahakali, Mahasaraswati and Mahalaxmi. The Worli creek, to the north of this island was called the Kshirasagara and the khind in the hills before it continued in the Worli island further north later got twisted as Breach Candy. There were *tad* palms flourishing below the hill of the Kambalas and was a special haunt of the *dev*; hence the name Taddeo (Tardeo).

The name Byculla also is believed to be of early Hindu origin by some scholars. It is opined that the name Cassia fistula, i.e., Bhava or Bhaya may have combined with the word Khala or level ground to give the name Bhaykhala. An alternative derivation is from khala (threshing floor) of Bhaya. Further north, in the extreme south the Parel island was a tamarind covered valley, Chinchpokli. North of Parel lay the boat hamlet Naigaon, or Nyaya-gram (court house) of the days of Bhimadev, north of which were large banian rows, vad-ala. The Baradbet (Nevale) island carried some coconut palms in the area called Madmala (palm avenue). The name of the seventh island also seems to be derived from banian rows, Vad-ali or Varali or Worli.

Just like the Bombay island group, the Salsette islands lying in between the mainland and the Bombay group must have also been occupied by Koli fishermen and husbandmen, though possibly some of the islands on the western seaward front, were unoccupied. There again hamlet names like Kole Kalyan (Kalina) and Kolivari bear witness. But, between the second and sixth centuries A.D., that the main island of Salsette— a group of 66 villages as the Maratha equivalence of Sahasette, i.e. Sashti, supported a flourishing Buddhist monastery, visited by pilgrims on the mainland, and located in the neighbourhood of Kanheri is definite. Associated with them, possible groups of people other than Kolis, must have come and settled in these islands initially and later on spread to the Bombay islands as well.

Period of Hindu Colonisation: It is almost certain that during the period of the Shilaharas, *viz.*, between ninth and eleventh centuries when Puri or Gharapuri (*i.e.*, the Elephanta island) was the capital, a more rapid colonisation of these islands took place, and other people started settling. *Shrigundi*, the lucky stone at the extreme edge of the promontory of Malabar Hill, 'a fancied *yoni*, of not easy access in the stormy season, incessantly surf-beaten', that was later on sanctified with a shrine by the shaivaites is believed by archaeologists to belong to this period. Some years later, the original name *Shrigundi* got transformed as *Valuka-Ishvara* (the sand lord) or Walkeshwar. Agripada and Nagpada also seem to be hamlets of this period, though when the Agris came into the island exactly is not clear and some do believe that they entered these islands later than the Shilahara period. Kayastha Prabhus also seem to have colonised the islands during the period.

The next significant wave of colonisation seems to have hit the islands during the close of the Hindu period about the end of thirteenth century when the Hindu king Bhimadev or Bimb Raja moved with a large retinue from the mainland, settled in the northern sandy island of Baradbet and built a city, the city of Mahikavati, later corrupted as Mahi or Mahim. According to old Marathi and Persian records he seized North Konkan, made Mahikavati his capital and divided his country into 15 mahals comprising 1,624 villages. Baradbet—a sand desert—sparsely peopled with Koli fishermen, overgrown with babuls, a. fine temple of Valkeshwar, and a shrine of Kalikadevi was transformed into a city of temples and palaces. Brahmins, traders and others came with Bimb Raja and developed colonies in these islands. The Prabhus or the lords, a noblesse of commerce and politics built a temple for the family deity, Prabhadevi and lived closeby. Pakhikar Brahmins, Thakurs, Bhandaris (the toddy-tappers), Bhois, Agris, Vadvals or Malis and Somavanshi Kshatriyas (Pathare Prabhus) also seem to have settled in these islands during this period. The Brahman Ali or Baman Ali or Bamanoli, between Vadala and Parel, and close to Bimb Raja's wadi was a flourishing Brahmin settlement of the period. Place names like Thakurwadi, Bhoivada, Gavandi all belong to this period. The name Parel itself according to many is not a corruption of Padel, but is the site of the Brahmin settlement with a temple of Parali Vaijnath Mahadev. Parel is one of the early Brahmin settlements on these islands.

Of the other early and mediaeval place names, Mandvi appears to be the local Marathi name for a custom house.

Bhuleshwar earns its name from the shrine of Shiva in his form Bhola. Sion seems to be the corruption of the Marathi seema (limit) or shiv. Dharavi seems to have got its name from its site at the doors of the island. Dadar, meaning step or bridge, however, appears to be of recent origin; its earlier name in Portuguese period appears to be Salvesong. Matunga appears to have been the elephant stable of the Mahim kings. Sewri is held to derive its name from Sivawadi.

Pratap Bimb, the son of the king Bhimadev is believed to have built another city in Salsette, at the present site of Marol, and named Pratappur. The name of this city still survives as Pardapur or Parjapur, an unhabited hamlet. Thus, towards the end of the Hindu period (i.e., thirteenth century) the island groups of the Bombay and Salsette had a sizable population of fishermen, farming and gardening communities and others living in groups of hamlets scattered all over the islands in the midst of luxuriant natural vegetal cover, groves and woods, and accompanied by shrines and temples.

Muslim Period Colonisation: The succeeding Muslim period, extending till mid-sixteenth century is practically devoid of any significant imprints on the soils of the islands. Sultan Kutb-ud-din, or Mubarak Shah I, with whose suzerainty the Muslim period commences in the area, is remembered for his tyrannical rule, and demolition of shrines and temples, and won for himself immortality as the demon Mumba Rakshasa. In a subsequent period (in A.D. 1347), the Gujarat Muslim, Malik Niku appears to have invaded these islands, destroyed the cities of Pratappur and others in Salsette and Mahikavati and fought a pitched battle at Byculla with the local chieftain Nagardev in which the invaders proved victorious.

The islands seemed to have evoked little interest among the Muslim rulers who came in successive waves from Gujarat and Deccan. The period of Muslim supremacy has left behind little by way of enduring monuments. The first home of the Muslims in the area appears to be Mahim, but they seem to have subsequently migrated to the Bombay island and founded a colony on land subsequently included under the British fort. They were mainly shipmasters, <code>nakhodas</code> and sailors, and rapidly became the most influential class of Muslims in Bombay. After the great fire of 1803, many of them were settled in old Nagpada and other areas to the north-west of the Crawford (Mahatma Phule) Market, and again they were shifted to new streets, north of Pydhonie in present Mandvi, Bhendi Bazar areas, when the British infantry lines were constructed.

The most significant monument of the period, still surviving, is the shrine of saint Makhdum Fakih Ali Paru, to the east of the old town of Mahim. The Sat-Tar mosque in Masjid, the Zakariah mosque at Khadak near Mandvi, the Ismail Habib mosque near Pydhonie are the other significant mosques of the later Muslim period.

Portuguese Period : The Portuguese paid their first visit to the Bombay islands on 21st January 1509 when they landed at Mahim after capturing a Gujarat barge in the river of Bombay; in the next two decades they seem to have prowled near the islands often and captured Muslim vessels loaded with merchandise. It was in 1528-29 when the Portuguese Governor of Goa laid siege on Mahim, belonging to the King of Cambay, that the Portuguese realised the value of the harbouring facilities of the islands during the foul monsoon weather, and gave the name 'a ilha da boa vida ' (the island of the good life) to these islands 'as they had abundant food, refreshment and enjoyment which they needed'. In 1530-31 Nuno da Cunha, the Governor of Goa, collected a large fleet of 400 vessels, held a grand naval display in the harbour of Bombay, and a general parade of all his forces upon the plain (known later as the Esplanade, and now covered by the *maidans* in the Fort area). In 1532, he finally took the City of Bassein together with Thane, Bandra, Malim and Bombay. In 1534, under the treaty of Bassein, Sultan Bahadur Shah of Gujarat be queathed to the king of Portugal,' the city of Bassein, and its territories, islands and seas with all its revenues'. This was later confirmed by a treaty of peace and commerce on 25th October 1535.

The Portuguese inherited from Sultan Bahadur Shah a feudal system of tenure, that prevailed throughout the Portuguese period. Under this system, the land of these islands was divided into manors, the land being granted to deserving persons at a nominal rent of 4 per cent to 10 per cent and the leases being renewable annually, triennially or even over a generation. For distinguished services the Jesuits (churches) were given lands in perpetuity. In return, they were called upon to render military service at hours of need.

In the general distribution of estates, that occurred after A.D. 1534, a third of Heptanesia, the island of Bombaim was let to one Mestre Diego as tenant for an annual quit-rent of 1,432 1/2 pesodos (about £ 85 sterling); similarly the kasba of Mahim, and Mandvi or custom house of Mahim, the island of Mazagaon and the four villages of Parel, Vadala, Sion and Worli were all rented. The rent value of these islands increased considerably year to year, subsequent to this acquisition by the Portuguese. Under the English in early eighteenth century, the total revenue of the seven islands of Bombay alone amounted to about 26,000 pesodos.

According to the early accounts of the Portuguese period like those of Sir James Campbell, and Antonio Bocarro, a 'Quinta' or Manor House was built by the Portuguese sometime between A.D. 1528 and A.D. 1626 on the spot, where the arsenal used to stand (now Naval offices) behind the present Town Hall. This nucleus of Portuguese administration was set in a park with pleasure grounds, at the *kasba* of Bombaim, the principal seat of the island, near the little fort. In 1626, this manor house was described by a English navigator David Davies 'as a combined warehouse, priory and fort'. The islands produced a variety of tropical fruits like mango apart from cocoanuts and rice, especially in the northern island of Mahim. Mazagaon and Sion were noted for their salt-pans and the numerous Koli settlements were responsible for a large supply of fish.

During this period, Bombay was composed of several villages subordinate to two *kasbas* at which customs duties were levied. These villages were Mahim, Parel, Vadala and Sion under the *kasba* of Mahim and Mazagaon, Bombaim and Worli under the *kasba* of Bombaim. In addition, there were smaller settlements like Cavel, Kolbhat, Naigaon, Dongri and others. The *kasba* of Bombaim was not very populous, having a few Portuguese settlers, Kolis and Bhandaris and very small community of Moors who were sea traders. Some Kunbis and Agris who cultivated the fields and the Malis who tended the orchards were also living in the islands. The northern islands had more of the Prabhus, the Brahmins, the Banias and the Parsis, apart from the Kolis and Bhandaris.

This was also the period during which the religious order expanded their activities rapidly. Besides converting some ten thousands of natives in Vasai, Thane, Mandapeshwar and neighbouring localities, the Franciscans built the well-known church of St. Michael between 1510 and 1535 at the north end of the present Lady Jamshedji Road in Mahim, adjacent to the Collector's bungalow at that time. By about 1570, the building of the church of St. Andrew at Bandora had started. Both Franciscans and Jesuits vied with each other in converting the local communities to Christianity and building churches. Thus a chapel dedicated to ' Nossa Senhora de Bom Conselho' at Sion and the church of Lady of Salvation at Dadar were built in 1596. Three chapels affiliated to the Dadar church were built at Parel, Worli and Matunga. It was the Parel chapel that later in the British days served as the old Government House, and was finally transformed into the Haffkine Institute. By 1585, the Franciscans were in charge of Mandapeshwar, Mahim, Bombay, Karanja, Mount Calvary and Agashi. The church of Our Lady of Hope was also built in the Esplanade area to serve the Cavel parishioners. These ecclesiastics earned large revenues, founded a college at Bandra and lived in great comforts. Yet, one island, Mazagaon, escaped absorption by both the Jesuits and Franciscans, being in possession of the De Souza family and its descendants by a royal patent of the king of Portugal. Apart from this island everywhere

else, the landed property had fallen by the end of the sixteenth century into the hands of religious orders. The Jesuits owned the largest number of shrines and lease of land almost entirely the northern islands and as far south as Byculla. They wielded considerable influence, but their ill-advised actions not only precluded the growth of population and trade, but were a source of danger to the Portuguese. They persistently destroyed Hindu temples and Muslim mosques and were the cause of unrest and flight of people, who were thus alienated and provoked to reprisals, like the event of December, 1570 at Thane when Malabar pirates plundered the town and stole the great bell of the cathedral. The old temple of Walkeshwar had been cast down; the shrines of Mahalaxmi and her sisters had for the time being disappeared, the goddesses waiting in concealment. The Archbishop of Goa in A.D. 1629 reported to the King of Portugal that the greatest enemies to the State in India were her own people; and among the enemies of Portugal from within, none probably did greater harm to the State of India than the Jesuits. The local Jesuits had gone that far as to usurp from the state the royal jurisdiction and revenues. They openly neglected the king's mandates and thus paved the way for an advance of European rival powers. The obvious results were the declining trade, a fall in revenues and taxes; the population hovered around ten thousands at this period.

Beginning of the British Period: In spite of their poverty, the innate natural advantages of the island group aroused the interests of the British who recognised their value as a naval base, south of Surat. It was for this reason that they fought the battle of Swally in 1614-15, landed in Bombaim and burnt the Manor House in 1626. In 1652 the Surat Council urged the purchase of Bombay islands from the Portuguese. However, it was on the 23rd of June 1661, when the marriage treaty between Charles II and the Infanta Catherine of Portugal was signed that the port and island of Bombay with all the rights, profits, territories and appendages whatsoever thereunto belonging were handed over to the king of Great Britain, his heirs and successors for ever. This memorable event was the prelude to the emergence of Heptanesia from negligence and poverty to its state of opulence and splendour as the queen city of Western India. In order to take possession of the fishing villages, Charles II despatched to Bombay in 1662 a fleet of five men of war under the command of the Earl of Marlborough, but on the latter's arrival he found that the Portuguese authorities though willing to transfer the island of Bombay were by no means disposed to part with Salsette, Karanja and other dependencies. It was only on 18th February 1665 that Humphrey Cooke, the first British Governor, took actual possession of the island without any of its dependencies, that were added to the English only subsequently by the commission appointed to resolve the Anglo-Portuguese differences. However, it is worth observing that Antonio de Mello de Castro, the Viceroy of Goa, at the time did remark that in the cession of the island he foresaw 'the great troubles that from this neighbourhood will result to the Portuguese; and that India will be lost on the same day in which the English nation is settled in Bombay '. He fully recognised the possibilities of greatness that 'the inconsiderableness of the place of Bombaim' offered in the days to come; his appeals to the Portuguese king were of little avail.

Bombay in 1664: Dr. John Fryer's account of *Bombay in 1664* published in 1698 at London gives a realistic account of the island during the early years of the British occupation. To quote the words of Fryer,' the chief feature of the island proper was a pretty well-seated, but ill-fortified house ', situated within the present site of the Town Hall. About the house was a delicate garden and to the south-west of the house and the garden was an open ground, the Esplanade of the later days merging into plantations of coconut trees stretching in an unbroken line upto the Malabar hills on top of which was a Parsi tomb. Scattered among the palms were the small villages of Cavel, Kalikadevi or might be seen a few better class dwellings, tiled and glazed with oyster shells. Southward of the house lay the parish of Polo-Apollo of the later days, with a few huts overlooking the islet of little Colaba. To the north of the house were a few dwellings, a Mandovim or custom house (later corrupted into Mandvi), the present area to which the custom house was later shifted. Further north was Dongri, with the fishermen's hamlets adjoining the Umarkhadi.

The most important of the dependencies of the island was Mazagaon, a fishing town, that formed part of a larger and rich Manor. The Manekji Naoroji Hill of Dongri and Worli were part of this estate. The Franciscans possessed a church and a monastery here; the Portuguese also owned houses. Hamlets of Bhandaris and Kolis with the shrine Ghorupdeo (to the north of Byculla) were also seated in this island.

North of Mazagaon lay the lands and village of Parel, with a large Jesuit church, that in later days became the old Government House The island of Worli does not find much mention in Fryer's account except. for a reference to a small fort and fishing hamlets in it.

These islands supported a few Portuguese families, the 'landed gentry' of Bombay, Indo-Portuguese, native converts to Christianity living mainly in Cavel, Mazagaon and Parel, the Brahmins of Bandra, Par sis, Kunbis and Agris of Parel and Sion, the Kolis and the Bhandaris scattered all over, and the Prabhus of Mahim.

The period till 1675 saw a rapid rise of the population of the islands as ceded to Bombay, *i.e.*, Mahim to Colaba, from 10,000 to 60,000. After a rapid succession of three Governors between 1665 and 1668 and a heavy increase in financial burden in the administration of Bombay by Letters of Patent issued on 27th March 1668, Charles II handed over the island to the East India Company for an annual rental of £ 10 in gold, payable on 30th September of every year.

When Cooke was Governor, he had built a fort, with 100 guns mounted thereon, around the old Manor House. In 1668, the court of directors ordered that the castle be enlarged and strengthened. These defensive precautions were of great utility to the Government when a Dutch fleet arrived off Bombay in 1673 with the intention of taking it by surprise. Yet, this was a period of steady growth and increase in population, for a number of reasons; the attraction to the island of merchants, so as to be free from the harassment of the Portuguese in the adjoining Vasai; the taking over of Mahim from the Portuguese together with Sion, Dharavi and Wadala; the strengthening of the garrison; and the encouragement given to the native settlers from the mainland and the declaration by Gerald Aungier, the governor who took over in 1669, that most of the lands were the property of private -individuals and could not therefore, be considered as the property of the Crown or the Company.

Period of Gerald Aungier: It was General Aungier who took measures against the foes of his own household, established English law annulling all Portuguese rites and customs of law, created a court of judicature, marked out streets and erected buildings, warehouses, and a hospital all within the fortifications to make the island the most pleasant spot in India. He established a mint, and founded a system of caste representation by which delegates of different groups of people and interests could meet him. Thus, in less than a decade, he transformed the island of fishermen and *toddy* tappers into a thriving town of craftsmen, merchants and industrialists.

The islet of Colaba was annexed in Aungier's period to Bombay for reasons of security and defence, and the whole island group was divided into two precincts—Bombay and Mahim—for administration of law and justice. Arrangements were made for constant and secure supply of provisions, for strict supervision of shops and for a system of set prices. The utmost latitude of trade was permitted to weavers of cotton and silk, and freedom was granted for practice of all religions.

1675 to 1718: The next period from 1675 to 1718 was one which saw a rapid decline in the prosperity, and the

population of Bombay dwindled from 60,000 to 16,000. The death of Aungier in 1675 was the prelude to a period of gloom and depression. It was a period that witnessed ,sedition and strife, immorality, unhealthiness, and anarchy at home, and invasion, piracy and arrogance abroad. The climatic conditions of the island were so deadly that by 1689 it seemed no more than a parish graveyard. The visitations of plague between 1686 and 1696 took a heavy toll in life, Malaria was rampant, thanks to the extensive tidal marshes, that were getting rapidly silted, to the accompaniment of a putrid smell of dying fish. The careless life led by the Europeans was no mean reason to add to this situation. Luxury, immodesty and a prostitute dissolution of manners contributed to the Europeans dying like flies under the tropical humid climate'. Trade rivalries and dissensions brought considerable strife to living in the island. Added to the disorder, were external troubles due to repeated raids and acts of violence from the Siddis operating from Janjira near Murud, till they evacuated in 1690, under the promulgation of an order from Aurangzeb, the continued harassment to the island traders by the Portuguese at Thane and Karanja, piracy in the open sea by the Arabs and Malabaris and the hostility of Shivaji and his successors in the mainland. There were fresh French alarms as well.

1718 to 1744: The period 1718 to 1744 is characterised by quiet and steady progress and by the gradual restitution of the population which the troubles of preceding years had driven away from the island, Niebuhr states that the population of Bombay in 1744 numbered 70,000. This restoration took place in spite of the continued threat of external aggression by the Portuguese and the Siddis (who of course were on the decline). Angres and the Maratha power were at the very zenith. This was partly due to the policy of the East India Company during the period to hold aloof from hostilities, and to keep good terms with the Marathas on the issue of Salsette, especially after the fall of the Portuguese power from Vasai in 1739. Slowly, but surely, the company was exchanging the role of a purely mercantile communis for that of a great political power, as it directed the affairs of the warehouse and guided the path to conquest and omnipotence. The internal security was also improved. A commodious lodge was built for the troops at Sion, the fortifications were strengthened and a ditch was formed round the town wall through donations from the business community, and a powder mill was constructed on the Old Woman's island. The dockyard was extended, and marine troops established. Internal administration too improved with the creation of a Mayor's Court, and construction of the country goal in Dongri fort. Trade was encouraged with the establishment of a bank in 1720, and new trade contracts with China were developing on the distant horizon. Reclamation of land that indirectly caused the death of many in the immediate past, was taken up in earnest. A causeway was built from Sion to Mahim on the salt ground, and Captain Bate's scheme for stopping the Great (Mahalakshmi-Love Grove) Breach was approved and measures initiated to fill the breach as soon as possible; the work however, was stopped in 1727. By the year 1730, the population began to outgrow the limits of the Fort, and the value of breach stopping and

By the year 1730, the population began to outgrow the limits of the Fort, and the value of breach stopping and reclamation fully realised. The Mahim to Salsette ferry boat service was re-established in 1739 and brought in a large number of people from Salsette to settle in these islands. An important land measure was effected to stop the use of fish manure on grounds of health.

The greatly improved living conditions in the island and the vastly increased population are reflected in the following description of 1742, as reported in S. M. Edwardes' *Rise of Bombay:*—

To the extreme south lies the point called Koleo (Kolaba) with a few scattered houses, and next to it Old Woman's island, upon which some houses and a gunpowder mill have been erected. Across the strait, lies the old Apollo parish and the Esplanade; the latter not greatly altered save that its palms have been trimmed, the former still remarkable for its burial ground, Mendham's Point. From the burial ground, the traveller reaches the Ditch and the Appollo Gate entering the latter and plodding northward, he marks on his right hand the Royal Bastion and beyond them, the Marine yard and Docks; on his left; lies a jumbled mass of dwellings and shops, stretching from the road, westward to the Town Hall; he leaves on his right hand, the Hospital and Doctor's house, the House of the Superintendent of the Marine, the marine storehouse and the Company's warehouses, and pauses not till he stands in the midst of a large tree-dotted space, the old Bombay Green. Immediately to the westward, he sees the church, St. Thomas Cathedral, and letting the eye wander past it, catches a glimpse of the great Churchgate situated where the modern Flora Fountain (the Hutatma Chowk), stands at present and the bridge over the Town Ditch. On his right, at the most easterly point, stands the Fort proper, with its Flag Staff Bastions, Tank Bastion and the house of the Governor. Northward, he passes across the Green, leaving on his right the Mint, the Tank House, the Town Barracks, and the Custom House, the latter two buildings being directly on the water's edge, and sees directly in his path a foundry and smith's shops. These form the southern limit of the Bazar Gate Street, up which he wanders, past " Mapla Por ", past shops, godowns and the dwellings of natives, past all the cross lanes and side alleys, which intersect the native town on either side of Bazar Gate street from Town hall to Town wall, and finally arrives at the Bazar Gate, which is the most northerly entrance of the Town.

Two modern sections of Fort North and Fort South practically comprise the ground included within the old Town wall, though the total area has been increased by reclamation on the sea-ward side. From the Castle one looked across to the Island of Patecas (the Butcher's island), also well fortified.

North of the Bazar Gate were more native houses, oarts, and the Dongri Fort, erstwhile a prison, and transformed into a fortress once again in 1739. Thence, one looked across a wide expanse of low-lying ground to Malabar Hill. On the Back Bay side of the intervening ground are the great palm groves, oarts and villages, which were noticed in earlier years; and northward of them is new land, reclaimed from the sea by the Love Grove Dam. The latter had not entirely sufficed to shut out the ocean; that benefit was effected later by the building of the Vellard, but there was a larger area available now for cultivation. The higher portions of the ground, thus reclaimed must have shown signs of habitation by the year 1744. The people were beginning to build houses in areas now comprised in Chakala, Oomarkhadi, Mandvi and Bhuleshwar sections. The works at Mahalakshmi had by 1744 left the Oomarkhadi and Pydhonie high and dry. It was not a long walk from Mazagaon to the village of Parel, with its hamlets Bhoiwada, Pomalla and Salgado, and thence one wandered to Wadala, divided into Aivadi and Govadi and formerly owned by the Jesuits of Agra. In Sewri and Wadala, there were salt pans belonging to the Company, as also at Raoli; while the village of Matunga or Matuquem was entirely devoted to rice cultivation. The Kasba of Mahim contained 70,000 cocoa palms.

To protect the island there were in existence at the end of this period the Great Fort with bastions and town wall, the Mazagaon and Dongri forts, the fort of Sewri on the shore, in front of the Salsette village of Maula, the small tower at Sion facing Kurla, the triple-bastioned fortress of Mahim on the shore in front of Bandra and the fort of Worli, on the high point, facing the Chapel of Our Lady of the Mount.

1744 to 1764: The period 1744 to 1764 saw a further rise in population to about 80 to 85 thousands, though some estimates put it much higher. The political events of the period, the hostility of France, Holland and Spain, the insolence and final overthrow of Angria, and the close proximity of the Marathas resulted directly in the strengthening of fortifications and an increase of sea-power. In 1746, the dock pier-head was enlarged. The cavalier bastion of the castle was raised 16 ft. and more guns mounted. The parapets of the face and flank towards the sea on the Flag Staff Bastion were fixed with brick and masonry. The dock walls were extended, and the Dongri fort partially dismantled on the ground that it was in dangerous proximity to the town. Additions were made to the fleet in 1752. Three new docks were completed, replacing the old mud basins.

The growing defence and security of the island, and orderly progress of affairs added an incentive to immigration, afforded by a prospect of protection to trade. Proper spaces of ground to such of the inhabitants as may be included to build in the town were allotted. In 1750, Grose refers to the houses of black merchants, situated in the town, which was about a mile in circuit. Most of these merchant's houses were ill-built, with small window-lights and ill-arranged rooms. Several of the inhabitants had made encroachments on high roads by erecting buildings and sheds without licence. In 1754, the Governing Council thought it proper to pull down all palm leafed-sheds and pent-houses, and issued directives that no houses, wall compounds, sheds be erected within the town wall without a certificate from the Council. So numerous were the houses in the native town that many of them had eventually to be removed and rebuilt outside the town walls. The Apollo Gate area was cleared and the town was slowly improved by distributing the population over a wider area, rendered habitable by reclamation. Thus, a new town was growing northwards of the town wall, flanked by the partly demolished Dongri fort and the village of Girgaum and houses set in gardens along the BackBay. New roads and burial grounds were also opened up. A road from Parel to Sion and from Churchgate to the Black Town, with a branch leading to the new burial ground for Europeans at Sonapur, set in a cocoanut garden, were built. Even Europeans started moving outside the fortified town. Mr. Whitehill had his Villa Nova in Mahim and the Governor his country house in Parel.

Even at the end of this period, Colaba and Old Woman's island remained separate. The other islands could be reached from each other during the low tides.

1765 to 1780: The next few years saw the emergence of the Company as a political power and no more a mercantile community with limited trade ambitions. Population had further increased by 1780 to 1,13,726. At this stage Bombay Government offered to assist Raghunathrao Peshwa in securing throne provided that he would cede to the British. Broach, Jambusar and Olpad, Vasai and its dependencies, the whole island of Salsette and the island of Karanja, Khanderi, Elephanta, and Hog island. This was with the obvious intent of securing the principal trading inlet to the Maratha country for the English woollens and other commodities. When in 1774, the Portuguese intentions of recovering the dominions that they formerly possessed north of Bombay, became clear, the Company came out in the open to sign a treaty of alliance with Raghoba and commenced the first Maratha war by invading Salsette and laying siege to Thane. Thane was taken by storm, Salsette and the smaller islands were occupied. Although this treaty with Raghoba was annulled by the Governor General Warren Hastings, Salsette, Elephanta, Hog island and Karanja continued to remain British possessions; in fact a further treaty with Raghoba in 1778 by Bombay's Governor, Hornby, brought in further additions of Vasai, Khanderi and other islands. A little after, Salsette and some islands were lost to the Marathas but were restored to them in 1780 by the Treaty of Salbye. All this military activity brought in its wake further strengthening of the island's defences. The garrison was strengthened, a marine battalion established, and troops posted on Salsette to garrison Thane. The fort and castle were again surveyed and faces raised. The outforts at Sion and Raoli were also made impregnable. Dongri fort was finally blown up in 1769, and a new fortress, the Fort St. George, was commenced in the following year. A new dock was also built in 1769 at Mazagaon.

The new political prestige that the Company acquired helped in further promotion of trade and influx of the trade community from the Maratha land. Internal administration showed further progress. Communications were improved between Thane and Bombay by a ferry service in 1776. In 1772, an accurate survey of the whole island was initiated. The year 1770 marks also the commencement of cotton trade with China.

The aspect of the town within the Fort started undergoing a gradual alteration. As there was a great want of room within the Town walls for Europeans to build, and as the Church street was found to be the most proper, the shops to the south of Church street were removed to the Bazar and small houses between the Church and Bazar Gate demolished. A new town began to rise to the north of the Bazar Gate. The Esplanade underwent considerable alteration being levelled and cleared of all buildings. Barracks for the Europeans were built on the Old Woman's island and the old powder house on it removed and replaced by the new powder works at Mazagaon. Perhaps the most remarkable alteration in the aspect of the island was the construction of the Hornby Vellard (Vellard in Portuguese means a fence) betwen Breach Candy or the beach beside the *khind* or the pass and Worli.

Parsons who visited the island in 1775 speak of the town being nearly a mile in length from Apollo Gate to that of the Bazar and about a quarter of a mile broad in the broadest part from the Bundar across the Green to Churchgate. The streets were well laid out and the buildings so numerous and handsome as to make it an elegant town. The Esplanade was very extensive and as smooth and even as bowling green. Forbes in 1778 speaks of the principal town of Bombay and of a smaller town called Mahim. He remarks that " the island of Bombay should no longer be considered a settlement or a separate colony but as the metropolis surrounded indeed by a large moat of an extensive domain."

1781 to 1814: By 1782 the outposts of Bombay had advanced as far as Thane, and the Bombay Government could claim the sovereignty of all the islands in the Ulhas estuary from Vasai to Colaba. Justice and internal administration tremendously improved and endeavour was afoot to preserve the health and growth of the town. Vaccination for the first time was introduced and was responsible for the abatement of smallpox. Regular postal communication with Madras was established by 1788.

By the turn of the century, encroachments within the walls of the town had become so numerous that the Black town was as fully congested as the native town and the streets, lanes and gullies were in a hopeless state of disrepair. The whole area was so filthy and nasty that the Government was seriously concerned and contemplated imposing penalties on the households for not keeping their street frontages clean. Expansion and improvement was a dire necessity. An opportunity of introducing wider and more regular streets and of removing congested localities presented itself almost unexpected, when a great fire broke out in the north of the town during the day on 17th February 1803. Jonathan Duncan said," So great and violent was the conflagration, that at sunset, the destruction of every house in the Fort was apprehended. The flames directed their course in a south-easterly direction from that part of the bazar opposite to the Cumberland Ravelin quite down to the King's barracks. During the whole of the day, every effort was used to oppose its progress, but the fierceness of the fire driven rapidly on by the wind baffled all attempts; nor did it visibly abate till nearly a third part of the town within the walls had been consumed." Altogether 471 houses were destroyed, 5 of Europeans, 231 of Hindus, 141 of Parsis, 83 of Muslims, and 6 places of worship and 5 barracks. Many more houses had to be dismantled, having been rendered dangerous. The real importance of the fire lay not so much in the improvement of the town within the Fort walls as in the inducement it offered to the construction of a new town outside. New sites were selected, Custom House was closed and pressure was built on the old residents of the Fort to shift to the new sites so that the accommodation within the Fort was restricted to respectable and wealthy merchants. Milburn, in his *Oriental Commerce* describes the old town as it appeared between 1803 and 1808 as follows:—

 The construction of the Sion causeway connecting the Bombay island with Salsette was completed in 1803, and must have proved to be of incalculable benefit. In 1799, a new gaol was built at Umarkhadi and the old prison within the Fort locality in the Marine yard was shifted. Mr. Hornby's house in the Marine street used as the Admiralty House was, in 1800, reserved for the newly established Recorder's Court.

Trading communities were continuously pouring in and were settling in localities outside the fortifications and as near the docks as possible. From 1803 onwards houses, god owns, shops and markets began to rise and form the nucleus of areas now known as Mandvi, Chakla and Umarkhadi. In 1800, there were 7 to 8 families living in what we now know as the Dongri Street. In a year's time, there were fresh arrivals from Cutch who built houses in the area and laid the foundations of one of the most prosperous of our commercial classes. The Parsis followed, and were holding the frigates for the Indian Marine. The Jan-i-Bambai (i.e., the soul of Bombay) and a Persian pamphlet written in 1818 by an anonymous Moghal scribe talks of the Mentions as sellers of fuel, and the Khojas as sellers of parched rice. The Bohoras living within the Fort, and the Moors living close to the four bundars of the island—the Bori bundar, the Koli (or Gowli) bundar, the Masjid bundar and the Chinch bundar—were spreading to live in the areas now developed as Umarkhadi, Khetwadi, Tarvadi, Mahim, Bhendi Bazar and Dongri.

It is hence not surprising that, by 1814, the population of Bombay recorded had gone up to 2,35,000 of whom 70,000 were famine refugees from the nearby Konkan. Of this population, 10,801 (i.e. 250 English, 5,464 Parsis, 4,061 Hindus, 775 Moors, 146 Portuguese, 105 Armenians), were living within the Fort, an estimated 30,000 in the Mahim area and the rest residents between the Bazar Gate in the south and Parel and Mahalakshmi in the north.

1814 to 1838: By 1814, Bombay was set on the road to commercial prosperity. Military and political prestige had been acquired, trade was expanding, and internal security of living was tremendously improved. These, in contrast to the inherent weaknesses of the Maratha dominions on the mainland, provided the. necessary thrust for a spurt to the island's population. In 1830, Lagrange had estimated the population of Bombay islandat 2,29,000; another estimate m 1836 placed the figure at 2,36,000.

Two important events in the political history of the period are contributory to this growth in importance of Bombay. Piracy on the west coast of India, that was taking a heavy toll in the seas between Goa and Kathiawad, was finally and once for all brought to an extinction. The dynasty of Peshwas on the mainland, whose growing hostilities under Baji Rao Peshwa was a continuing thorn, was ultimately brought down and major portions of their dominions were annexed to the Company's territory in 1818. Free and uninterrupted flow of trade between Bombay and the mainland, that had suffered greatly in the past from the irksome restrictions of the Peshwa rule, was assured; the burden of trade taxation was made considerably lighter. With the fear of attack from the mainland by the native powers and from the seas by the pirate overlords having disappeared completely, the trade gates were literally opened wide. Mountstuart Elphinstone, a man of genius and prudent statecraft, who became the Governor in 1819 fostered vigorously the expansion of trade, moderate and uniform settlement of revenues and education of the people. A good carriage road was undertaken upto the Bhor ghat as early as 1803, but was completed and opened for traffic only by 1830. Better communication by sea was also established. By 1830, regular communication with England to carry mails was established by steamer services, navigating the Red Sea and the Mediterranean and this helped in a relatively quicker delivery of mail in about 45 days.

Expansion of trade followed the quiet and peace that ruled in the interior mainland. About 1825, exports from Bombay became considerable. From 1832, a rise in the price of American cotton resulted in increased imports of Indian cotton and these imports touched a new high mark of almost a million bales. Bombay Chamber of Commerce came into existence in 1836

The flourishing prosperity in trade and political strength brought in its wake internal structural changes and improvements in the city island. Colaba and Old Woman's island, which till now remained separate, became one with the city island, with the construction of the Colaba Causeway. These two islands rented to one Mr. Broughton ever since 1743 for a paltry sum of Rs. 200 per annum, had several houses built on them, including the Roman Catholic Church of St. Joseph. These islands formed a pretty retired spot, with healthy breezes. A good road ran along their length terminating at its extreme southern end on the light house and the lunatic asylum. The Queen's 6th Regiment was also stationed here. The construction of the Colaba Causeway was followed by commercial speculation in reclaiming ground for building factories, wharfs and mercantile operations. Land costs almost shot up 500 per cent in value; land was purchased wherever procurable and houses raised in every possibly locality.

Changes were on the way in and around the Fort area as well. The Wellington Pier or the Apollo Bundar was extended and brought into use for passenger traffic in 1819. The Elphinstone High School was established in 1822 under its original name of the Native Education Society's School. The Elphinstone College came into existence few years later as the most appropriate tribute to Hon. Elphinstone who resigned the same year from the Government of Bombay. The proposal to build a Town Hall, though mooted in 1811, started taking shape in 1821, and the building itself was completed only in 1833 with the help of Government funds and two batteries raised for this specific purpose. A new mint was also created and started coin-minting in 1830. The old church in the Fort was consecrated in 1816 in honour of St. Thomas and was gazetted as the cathedral in 1838, soon after the raising of the island to the status of a bishopric. A new presbyterian church of St. Andrew was constructed in 1835. The St. Mary's Church meant for the spiritual welfare of the soldiers in Colaba was erected in 1825. The Christ Church at Byculla was built in 1835.

A new hospital in the Hornby Row was also built in 1825. The town was gradually creeping over the reclaimed higher grounds, westward along the Back Bay and northward to Byculla. It became absolutely necessary to build new roads, especially in the newly built up areas. The first and the most noteworthy of these roads, named after Governor Grant and constructed during his term of office, runs west to east from the head of the Chaupaty Bay to Byculla. Many old roads were improved, watered and lighted.

Of the striking additions of built up areas outside the Fort, mention may be made of the country houses at Mazagaon, four bungalows at Malabar Hill, newer housing structures at Market, Mandvi, Umarkhadi and Bhuleshwar, some new handsome houses built at Girgaum, Byculla, Chinchpokli, the *Panjrapol* for the aged and diseased animals and the hot weather residence of the Governor at Malabar Hill. There were two large bazars in the Fort; the China Bazar, and the Chor Bazar, crowded with warehouses. There were three bazars in the native town, the most profitable trade in them being the sale of toddy.

The native town at the period roughly comprised a part of the present 'C' ward, most of the 'B 'ward, Byculla,

Mazagaon and Kamathipura. Kamathipura was initially settled by the Kamathis who progressively started settling westward into the adjoining Dhobi Talao, Girgaum, Chaupaty and Khetwadi, Parel was still a semi-isolated suburb, though fairly populated. Sion and Sewri and Mahim continued as in the earlier years as fishing and farming villages, and Mahim maintained its status as a town. Matunga, once a pretty artillery station, was almost deserted, and was in a state of ruins due to the ravage of diseases.

An anonymous account of Bombay published in the Asiatic Journal of May-August 1838 describes the island thus—

"The island of Bombay does not exceed twenty miles in circumference and communicates with that of Salsette by a causeway built across a channel of the sea which surrounds it. It is composed of two unequal ranges of whinstone rock, with an intervening valley about three miles in breadth, and in remoter times was entirely covered with a wood of cocos. The Fort is built on the south—eastern extremity of the island and occupies a very considerable portion of the ground, the outworks comprehending a circuit of two miles, being, indeed, so widely extended as to require a very numerous garrison. The town or city of Bombay is built within the fortifications and is nearly a mile long extending from the Apollo Gate to that of the bazar, its breadth in places being a quarter of a mile; the houses are picturesque, in consequence of the quantity of handsomely carved woodwork employed in the pillars and the verandahs; but they are inconveniently crowded together, and the high conical roofs of red tiles are very offensive to the eye, especially if accustomed to the flat turreted and balustraded palaces of Calcutta. The Government House, which is only employed for the transaction of business, holding durbars—a large, convenient, but ugly looking building, somewhat in the Dutch taste—occupies one side of an open space in the centre of the town, called the Green. The best houses, and a very respectable church are situated in this part of the town, and to the right stands a long and crowded bazar, amply stocked with every kind of merchandise. Many of the rich natives have their habitations in this bazar, residing in large mansions built after the Asiatic manner, but so huddled together as to be exceedingly hot and disagreeable to strangers unaccustomed to breathe so confined an atmosphere. One of the principal boasts of Bombay is its docks and dockyards; they are capacious, built of fine hard stone, and are the work of Parsi artisans, many of whom, from their talents and industry, have risen from common labourers to wealthy ship-builders."

"The island of Bombay, from an unwholesome swamp has been converted into a very salubrious residence; though enough of shade still remains, the super abundant trees have been cut down, the marshes filled up, and the seabreeze, which sets in everyday, blows with refreshing coolness, tempering the solar heat. The native population, which is very large, has cumbered the ground in the neighbourhood of the fortifications with closely built suburbs, which must be passed before the visitor can reach the open country beyond, at the further extremity of the island. The Black Town, as it is called, spreads its innumerable habitations, amidst a wood of cocoanut trees—a curious busy, bustling but dirty quarter, swarming with men and the inferior animals, and presenting every variety of character that the whole of Asia can produce. The cocoanut gardens, beyond this populous scene, are studded with villas of various descriptions, the buildings within the fortifications being too much crowded together to be desirable; those belonging to European residents are, for the most part, merely retained as offices, the families seeking a more agreeable situation in the outskirts. Comfort, rather than elegance, has been consulted in the construction of the major portion of these villas Those persons, who are compelled, by business or duty, to live in the immediate vicinity of Government House, only occupy the houses inside the fortifications during the rainy season; at the other periods of the year they live ina sort of al fresco manner peculiar to this part of the world. A wide Esplanade, stretching between the walls of the fort and the sea, and of considerable length affords the place of retreat. At the extreme verge a fine, hard sand forms a delightful ride or drive, meeting a strip of grass or meadow land, which with the exception of a portion marked off as the parade ground of the troops in garrison, is covered with temporary buildings: some of these are exceedingly fantastic. Bungalows, constructed of poles and planks, and roofed with palm leaves, rise in every direction, many being surrounded by beautiful parterres of flowers, blooming from innumerable pots

"The greater portion of the wealth of the place is in the hands of Parsi merchants The houses of these persons will be found filled with European furniture, and they have adopted many customs and habits which remain still unthought of by the Musalmans and Hindus The Jews are numerous and of a higher degree of respectability in Bombay than in any other part of India: they make good soldiers The Portuguese inhabitants rear large quantities of poultry; but game is not plentiful on the island, in consequence of its limited extent Great quantities of the productions (of fruits and vegetables) sold in the markets are brought from the neighbouring island of Salsette, which is united to that of Bombay by a causeway ..This communication, which has a drawbridge in the centre, is a convenience both to the cultivators and to the residents of Bombay, who are thus enabled to extend and diversify their drives, by crossing over to Salsette. A great portion of Salsette is now under cultivation, the Parsis and other wealthy natives possessing large estates on the island....."

"The large Portuguese village or town of Mazagaon which is dirty and swarming, with pigs is however finely situated occupying the shore, between two hills, and is moreover celebrated as being the place at which, the fine variety of mango was originally grown"

"A great number of the poor inhabitants of Salsette, Elephanta and other islands of Bombay subsist by fishing : cultivation is, however, extending in the interior..... "

The influx of population on one hand, and the changing character of the city functions on the other brought in further

improvements in the island. The idea of demolishing the fort walls was mooted as early as 1841 and reclamation of areas from under sea was also on the way. The maintenance of the Fort of Bombay was not only considered a costly, useless waste of public money, but it had become a downright filthy nuisance in the inhabitants. By 1855, "the Apollo Gate is now all but dismantled, the last portion of the arch tottering to its fall...... A large portion of the wall betwixt the gate and the southern entrance to the dock has been dismantled. The Fort had indeed become superannuated. Overcrowding had assumed serious proportions and heightened the chances of conflagrations within the fort, entry and exit to which was being regulated through a few gates. 'The fire which occurred lately ', says a writer of 1844' attracted me to a part of the town which I never before visited, namely, a street running along the ramparts between the town barracks and Fort St. George. Its name is Mody Street. The first object which attracted my attention was a vast building in which were built enormous fires for cooking for some six to eight hundred natives. The ghee or oil employed in cooking, occasionally falls into the fire and causes the flame, to mount to rafters. The danger is very great and is by no means lessened by the situation, exactly in the rear, of the Powder Magazine. The building is, as I stated before, large, but not sufficient to enable from six to eight hundred persons to sit down to dinner, and the consequence is that they sit in the street to their meal and completely block up the thoroughfare. The warehouse, as I found on enquiry, is employed for housing cotton during the rains.' ".

Sanitary conditions within and outside the Fort were also awfully poor. "The roads are macadamised with rotten fish and the dead carcases of household vermin." The first step towards adequate supervision of the town was taken up in 1858. It was about this time that the Vihar water works was undertaken under the administration of Lord Elphinstone to provide the city with the supply of sufficient good water. Tramways in the Colaba causeway were laid in 1860. Slightly before, the Bellasis Road in the north of the City, and the Mahim causeway (1845), providing a second link between the city island and Salsette were built. After 1857, the city expanded so fast, that further improvements became a dire necessity. Malabar Hill, Breach Candy and Mahalakshmi were eagerly invaded by the Europeans and well-to-do natives for dwellings. Between the sea and the Girgaum Back Road, building operations were in continuous active progress, houses rising in all directions. In fact, Cavel and Sonapur became so overcrowded with houses, that practically there were no thoroughfares in them. As the occupied area expanded with the coming of industrial enterprises, new schemes, such as Elphinstone Reclamation Scheme, were provided in the central parts of ths island to house the industrial families, but drainage remained awfully poor. As late as 1850, uncovered, open drains poisoned the health in Byculla, Fort and Esplanade.

In 1861, the Municipal authorities prepared the plans for a new system of drainage. Though between 1838 and 1860, many new roads were opened, temples and churches built, the Grant Medical College founded, mills and water-works developed, yet a lot remained to be accomplished to improve the living. In 1860, the *Bombay Times* warned the public against the rapid erection of new cotton mills. In the years that followed, Sir Bartle Frere set his heart on improving the city to make it worthy of living.

The most remarkable of these improvements was the excellent linkage by railways of Bombay with the interior. On 22nd April 1863, the Bhor *Ghat* incline was opened for traffic. The first section of the Bombay, Baroda and Central India Railway was opened in 1860; the Broach and Baroda sections in 1861; and the Ahmedabad section in 1863. The cotton country developed a direct access to the merchants of Bombay, who exported the produce across the seas. In 1866, the Government made arrangements with the Bombay Coast and River Steam Navigation Company for running steam ferries between Bombay and Mandva, Karanja, Rewas, Dharamtar and Uran. The opening of the Suez Canal in 1869 effected a complete revolution in the trade of Bombay as it speeded up transport by reduction of the distance to England to almost half. A direct submarine cable was laid down from Suez to Bombay, a year later, in connection with the cable from Falmouth to Gibraltar. Truly, Bombay gained the status and proud position as the Gateway of Western India.

The improvement in the trade channels of Bombay led to an enormous increase in cotton trade and subsequent share mania. The outbreak of the civil war in America gave the necessary impetus for the unprecedented increase in cotton exports. So sudden was the demand, so high the range of price, so vast the profit that an economic disturbance set in. Dealers were indifferent to the quality, in spite of repeated warnings by the Press. Bombay fell a victim to speculation, and financial associations of dubious character sprang up like mushrooms. By 1864, the whole community, right from the English official down to the native broker became completely demoralised and were dependent on the fortunes of the stock exchange. New projects, not well thought out were put up, such as the Back Bay Scheme and the shares were sold by public auction. The value of land quadrupled; population was going up day by day. By the end of 1864, there were as many as 31 banks, 16 financial associations, 8 land companies, 16 press companies and 20 insurance companies, as against 10 in all in 1855. By 1865, the American Civil War ended, American cotton entered the English markets, the price of Bombay cotton fell fast and Bombay was in a state of economic ruin. Came the crash of the commercial bank, the Agra and Masterman's Bank and the Bank of Bombay. Influential cotton exporters were being declared insolvent. By 1868, the panic subsided, and a new Bank of Bombay was floated to form an impregenable centre of commercial stability'.Out of these adversities, came the blessings of Bombay.

The gold that poured into Bombay during the heydays in the sixties brought wholesome improvements in the city. By 1862, the final order for the demolition of the Fort walls was given and reclamations were afoot on a large scale. About 6 millions pounds sterling were utilised in regulating and advancing into the sea below low water marks the whole of the island foreshore. Handsome works were effected on either side of the Apollo Bundar, extending south to Colaba Church and stretching from the Custom House to Sewri along the Mody Bay, Elphinstone, Mazagaon, Tank Bundar and Frere Reclamations. On the other side of the island was initiated, in spite of considerable opposition the Back Bay Reclamation from Colaba to the foot of the Malabar Hill to fill up the filthy tidal flats that were a foul pestilential swamp. According to Dr. Hewlett's report, by 1872, nearly 898.5 acres of land had been reclaimed and the area of the island had gone up from 18.62 sq.m. to 22.24 sq.m.

Many new roads were built. The Colaba causeway was widened and rebuilt in 1862-63. The Esplanade main road, Rampart Row, Hornby Row, Bori Bundar Road, Market Road and the road from Church Gate street to the Esplanade main road were all completed in the next 15 years. Cruick Shank road and the Esplanade cross road were widened in 1865-66. The Nowroji Hill Road was built in 1865. Bellasis, Clare, Falkland, Foras and Grant roads were completed by 1872. The Carnac, Masjid and Elphinstone overbridges were built by 1867, jointly by the municipality and the G. I. P. railway. Rampart Row east was built, connecting the Mint to Fort George Gate.

This was also the period when many new buildings started adorning the city. Mr. Premchand Raichand donated four lakhs of rupees for an university library building and a tower to be named after his mother, the Rajabai Tower. The J. J. School of Arts and 40 drinking fountains in different parts of the island, donated by Cawasji Jehangir, the Opthalmic Hospital, the Parsi Hospital at Colaba, the Hospital for incurables at Byculla, the Sassoon Mechanics Institute, and the Victoria Museum were the enduring creations of this period. New rail workshops were laid at Parel, and the Bombay Gas Company was also set up. The first street lights were put up in the Bhendi Bazar area and gas lighting on the streets was initiated by 1866. Work at the dockyard at Mazagaon was started in 1863. The Elphinstone circle at the site of the Old Bombay Green was also laid out in 1862.

The Government too joined in the game and brought in new architectural styles to add to the splendour of Bombay. The Government Secretariat, the University Library, the Convocation Hall, the High Court, the Telegraph Department and the Port offices were all built in one grand Hnefacirigthe area along the Esplanade; other buildings in a similar style were built elsewhere. They included the Elphinstone College, the Victoria Museum, the Elphinstone High School; the School of Arts, and the Gokuldas Hospital. New police courts in Byculla and Fort, new light houses on Kennery and the Prongs Islands, more harbour defences and batteries at Oyster Rock, Gross island and Middle ground were also set up.

The municipal government of the city also undertook many civic services that included the city water supply, the efficient drainage of the city island and the reclamation of the tidal flats. An efficient health department was also organised, new cemeteries and burial grounds were opened at Sewri and Dharavi, and the old ones at Church Street, Maza-gaon, Lima Street, Mangalwadi, Girgaum, Grant Road and Mahim were all closed. The indigo dyers of Suparibagh and salt fish store dealers of Mandvi-Koliwadi were removed. Tanners were all shifted to Mahim and Bandra in Salsette to the east of the railway. By 1870, sewage works of Kamathipura, Fort and Portuguese Church street were completed. New markets were opened by the Bombay Municipality. The Bull Bazar market and the Bandra slaughter house were erected in 1867, and a year later other public and private markets came up at Sheikh Ali Janjikar Street, Rampart Row and Tank Bundar. The Crawford Market was built in 1869, and by the end of that year 9 public and 17 private markets started serving the public needs.

Water supply at Vihar was further improved, and the Tulsi works were begun. The Oval and the Rotten Row Playgrounds were laid out. During these years, a considerable growth of handicrafts also took place. There were silk looms near Babula Tank and in Jail road, a copper bazar opposite the Mumbadevi Tank; ivory and sandal wood carving, reed-matting and jewellery works around Bhuleshwar and Kalbadevi.

By 1864, according to the *Times of India*^ the Governor prescribed the limits of Bombay to be ' the island of Bombay and Colaba and Old Woman's island,' sub-divided into the areas of Colaba, Fort, Mandvi and Bundars, Bhuleshwar, Breach Candy, Malabar Hill, Kamathipura, Mazagaon Mount, Chinchpokli, Worli and Mahim Woods and Matunga areas. A year later, the city was formed into 10 wards: (1) The Colaba ward, comprising upper, middle and lower Colaba; (2) Fort ward embracing the Fort, Esplanade and Dliobi Talao; (3) Mandvi including Chakla and the Market; (4) Bhuleshwar including Phanaswadi; (5) Umarkhadi and Dongri; (6) Girgaum including Chaupaty and Khetwadi; (7) Kamathipura including Kumbharwada, Khara Talao and parts of Byculla; (8) Malabar Hill including Walkeshwar, Mahalakshmi; (9) Mazagaon including Tadwadi; and (10) Mahim and Parel extending upto and including Sewri, Sion and Worli.

By 1872, a further redistribution of wards became necessary, following the rapid changes and newly built-up areas. With a changed nomenclature the city was split into 6 divisions: A—Colaba, Fort and Esplanade; B—Market, Mandvi, Chakla, Umarkhadi and Dongri; C—Dhobi Talao, Phanaswadi, Bhuleshwar, Khara Talao, Kumbharwada, Girgaum and Khetwadi; D- Chaupaty, Walkeshwar and Mahalakshmi; E—Mazagaon, Tadwadi, Kamathipura, Parel and Sewri; and F—Sion, Mahim and Worli.

By 1872, the influx of population into the city was so great, attracted by prospect of employment in the public works that housing became one of the major problems. Overcrowding and unhygienic living cast dark shadows on the otherwise pleasant appearance of the city. As a Municipal health report of the year says that there was 'a thickly crowded and insanitary village of Hamalwadi in Lower Colaba'. Death-rate was high in the Market section, arising from the condition of the individual houses in the locality. Land in Mandvi was so valuable that the streets were narrow and the people overcrowded and the imperfect drains of the area were often choked. Chakla was no better and was full of ill-ventilated milch-cattle stables. In the heart of Dhobi Talao was the dirty irregular, labyrinth of Cavel, in which vehicles could not even pass through. Fanas-wadi was honeycombed with sewers. Bhuleshwar was an indescribably filthy quarter of milk sellers. Khetwadi, once a large field, during the monsoons became a large pool collecting the monsoon rains. Chaupaty and Girgaum were full of cess-pools. Tardeo with its mills, became a place of mill employees. The villages of Sindulpada; Agripada and Julaipada as well as Parel with open drains was almost impossible to traverse through. Sewri was somewhat better off, mainly due to the Frere reclamation improvements. Mahim was still a huge coconut plantation.

1872 to 1881: The population of the city had shot up to 6,44,405 in 1872 with an abnormal sex ratio of 612 females to a thousand males, residing in about 30,000 dwellings. By 1891, this population had increased to 8,21,764 due to a steady growth in trade, public works and a growing attention being paid to the general convenience and comforts of the people. Communications were tremendously improved, both in terms of linkage with the interior and more regular and frequent sea voyages. The mill industry also expanded. By about 1880 there were 32 mills employing over 30,000 workers.

Building activity and reclamations made further progress. New markets were built at Mazagaon; the *dhobi* lines on the Esplanade were acquired for building railway quarters; many old damp buildings in Kamathipura were replaced by well-built chawls. Police stations, churches, temples and mosques sprang into existence in quite a number. The Tulsi works were completed in 1881. The Prince's Dock, designed by Thomas Ormiston as part of a scheme, to improve the whole foreshore of the harbour was opened in 1880 and soon after, a harbour trust was established. The earth excavated from the docks over an area of 12 hectares was used for further reclamation of the Mody Bay area. Elsewhere land reclamation of about 50 acres of land in Sion and Kurla and of the mud flats near Tardeo and area near Arthur Road were effected.

The Bombay tramways commenced working about 1874 from Colaba area and the line was extended upto Byculla bridge by 1875; in 1876 they crept from the Wellington Fountain to the Bazar Gate street and a year later to the Sassoon Dock. Two years later, the trams travelled up the Girgaum road from the Esplanade to the Portuguese Church street, and also a line was laid from Pydhonie to the Grant Road bridge.

Quite a few roads were widened and new roads in the Cumbala-Malabar hills, Wodehouse and Mayo roads, Hope street, Masjid Bundar road, Napier road, Kazi Syed street, Chinch bunder 2nd road and the Prabhadevi road were built and opened for traffic.

The year 1876 saw the outbreak of small-pox in the city and a huge influx of 36,000 famine refugees pouring in from the stricken areas of the province and gravitating into unhealthy localities that gave rise to rapid spread of the epidemic in 1881. This was a blessing in disguise. A great advance in sanitary administration took place; many cattle stables from Bhuleshwar were removed and, for the rest, regular supervision was introduced with penalties for infringement of sanitary needs. In 1878 Municipality resolved to sanction a new main sewer from Carnac Bundar to Love Grove and a pumping station at Love Grove.

Other measures of improvement included street lighting and maintenance of public gardens like the Victoria gardens (1873), the Elphinstone circle garden and the Northbrook garden near Grant Road.

1881-1891: The next decade witnessed the municipality being engaged in rendering the city island better suited to

its growing population. Ground was purchased from time to time to widen roads; further road building was continued all over. The Fergusson road, the Ripon road, part of the Charni road, the Jacob Circle and Sankli street were all built. Kamathipura congested with industrial labour, was literally given a face-lift. Further drainage improvements were carried out in Queen's Road, Crawford Market, Mint and Agripada area. The whole Fort area by 1889 had a complete drainage system.

Water supply to the city was further improved; the Bhandarwada water works and the Malabar Hills filter beds were completed in 1884. The Pawai works were commenced in 1889 and the Tansa works were opened in 1892.

In the field of education, too, came further improvements during the decade. Primary education all over the city was taken over by the Municipality from the hands of private management; a deaf and mute school and the Victoria Jubilee Technical Institute came into being.

The services of the tramways were further extended; a smallpox hospital was built along the Arthur Road. A hospital for women and children as an extension of the J. J. Hospital was donated by Sir Dinshaw Petit. The Cama and Albless Hospital and an animal hospital at Parel were among the munificent donations to the city from citizens.

Among the landmarks that came into being during this period, the most significant are the Victoria Terminus building of the G.I.P. railway, situated on the original site of the Mumbadevi temple near the Phansi *talao* or Gibbet pond, the European St. George's hospital on the ruins of the Fort St. George, the new building of the Elphinstone college (to which it was shifted, in the year 1889), the Municipal offices, and the Wilson college. The Prince's Docks were supplemented by the addition of the Victoria Docks and a new light house was erected at the entrance to the harbour.

Trade was having a boom, and the prosperity of Bombay ' is one of the most remarkable events of the Victorian reign'. Its internal appearance was rapidly undergoing a change. Numerous new buildings were erected in outlying localities like Tardeo, Byculla and Parel. In the older areas of Umarkhadi, Dongri, Chakla, DhobiTalao and similar sections, where every available inch of land was in use, piling of storeys upon old houses steadily continued, followed by house collapses during heavy monsoons. The Jains, a merchant community, who had expanded enormously in order to get as near to the business centre as possible settled in the ill-built old houses of these overcrowded sections. In fact, most of the city proper by the close of this period was in a position to become the plague centre, being choked with population living under insanitary conditions.

The mill industry which had further expanded to a status of 83 mills by 1890 was mainly responsible for further colonisation of the areas north of the city. Complaints of smoke nuisance were first heard of in the municipal reports in 1885. A marked change came over the localities such as Byculla, Parel, Tardeo, Tarwadi and Sewri. Innumerable chawls sprang up north of the Bellasis road housing the immigrant mill-labour from Ratnagiri, Kolaba and Satara districts. All the open land in Tardeo was built up; Nagpada was densely peopled. By 1890, Tardeo, Parel, Byculla, Tarwadi, Nagpada and Chinchpokali had expanded into one vast industrial labour dwelling quarters. Sir Edwin Arnold, in 1886, wrote: "Bombay of today is hardly recognisable to one who knew the place in the time of the Mutiny and in those years which followed it. Augustus said of Rome, "I found it mud; I leave it marble"; and the visitor to India after so long an absence as mine might justly exclaim, 'I left Bombay a town of warehouses and offices; I find here a city of parks and palaces."".

1891-1901: The decade at the close of the nineteenth century saw a marked fall in population of the City by 45,758 mainly due to the presence in the city for 5 years an extraordinary, virulent disease. Bubonic plague made its appearance in the city in 1896 in a part of the Port Trust estate and iiterally ravaged the city for quite some time. People died like sheep; a large exodus of population that could not be checked followed. In one single week, in 1897, as many as 10,000 people fled from the city. Business was paralysed and trade disorganised. The mill industry suffered severely both from plague and bad management; yet the number of mills increased to 136 by 1898. In 1899, the position of the industry was most critical; by the end of the year, all mills closed for three days in a week and some were wholly idle. The year 1898 also witnessed plague riots and a strike of dock and railway workers as well as cartmen. The nineteenth century ended on a note of gloom and depression for the city.

1909: A vivid description of Bombay as it appeared in *Gazetteer of Bombay City,* Vol. I, 1909, pp. 14-19, is given below:—

The north and north-east of the city island was still an area of rice and salt lands strewn with palm groves and fishing villages; most of the fiat land was still waste except for the land used for factories. To the west, the Worli-Malabar ridge was the home of the rich, while the extreme south in the promontory of Colaba was set apart for the military use. The city area both in the Fort and the native city to its north was packed with near about 10 lakh residents of the island.

"The high flat ledge to the east of the reservoir plateau on Bhandar-wada hill commands one of the most complete and central views of Bombay and its surroundings. Beyond the Tank Bundar foreshore and the busy portions of Frere Bundar stand the quarried face of one of the smaller eminences fringing the eastern side of the island and several mills clustered at the foot of the woody slopes of Golangi hill. To the right the bare sides of Rauli and Antop look out over the fishing village, the gunpowder magazine and the ruined fort of Sewri. In the distance behind Sewri hill looms the dim table-land of Tungar. Closer at hand and stretching eastward are the jungle-covered slopes and waving outline of Salsette, its central hills gathering in three main points above Vehar, Tulsi and Yeur. Further east across the north bay and mud flats of the harbour, behind the green swamps and gray salt lands of Mahul or north-west Trombay, rise the knolls of Parshik; and over them, thirty miles inland, seen only in the clearest air, the lofty deep-cleft crest of Mahuli, the guardian of the Tansa lake. At the east foot of Bhandarwada hill, the half mile belt which stretehes eastward to the harbour with fair wealth of plantains, coco-palms, tamarinds, mangoes and pipals is thick with russet-roofed yellow faced dwellings from which stand out the picturesque pale gray facades of two Portuguese churches. Fringing the foreshore are the Peninsular and Oriental Company's Dockyard, the Mazagaon landing pier, the Clerk and Frere basins, the Malet basin and the British India Company's dockyard. Further south, close to the hill foot are the net work of siding and the long lines of low gray sheds that form the Wadi Bundar terminus. On the left out of acres of shed roofs rises the Port Trust clock-tower, beyond which the bulk oil installations stand out like fortresses dominating the foreshore; and between the tower and the harbour are the rectangular pit of the Merewether dry dock, the broad basins of the Prince's and Victoria wet docks and the u

storeyed dwellings, their white and yellow walls and facades crowned with peaked gables and brown-tiled hummocky roofs, surmounted here and there by a flat view terrace.

" Beyond these miles of densely crowded dwellings, on the left at the edge of the harbour, stand the tower of the Port Trust Offices (Mody Bay), the Ballard Pier, the Mint, the Town Hall, the ancient Arsenal and the Custom House, Southward again, the spire of the Scotch church leaps skyward, and beyond it are dim outlines of the Sailors' Home, and the vast mass of four and five storeyed buildings, overshadowed by the dome of the Taj Mahal Hotel, which have sprung up of late years on the Apollo reclamation to meet the increased demand for European accommodation. To the right, there rises from the rough sea of roofs a notable cluster of public buildings—the light pinnacles of the Cathedral, the lofty crocket-ribbed dome of the Victoria Terminus, the peak-roofed finials of the Elphinstone College and Secretariat, the rounded summit and tiny minarets of the huge Municipal buildings, the tall square shaft, statued drum and plumed pinnacle of the Rajabai Clock tower (280') overtopping a welter of lofty roofs, the steep rail-tipped roof of the short High Court tower (180'), the domes of the Bombay, Baroda and Central India Railway Offices and the turrets of the Public Works Secretariat, the General Post Office and the Telegraph Office which gaze down upon the handsome buildings of the Chartered Bank of India and of the Bombay City Improvement Trust. South of the Rajabai tower appears the line of lofty dwellings which occupy a portion of the old Cooperage and end in the new Admiralty House; while to the right out of the distant low green line of Colaba rise the spire of the Afghan Memorial Church and the farseen column of the Prongs Lighthouse. In the middle distance to the right of the High Court the high pitched roof of the Esplanade Police Court, the clock tower of the Crawford Market, the finial of the Gokuldas Tejpal Hospital and the lantern of St. Xavier's College show like islands in the sea of roofs and tree tops. To the west, close at hand, are the reservoir, filter-beds and gardens of the lower western top of Bhandarwada hill.

"Beyond Bhandarwada hill to the south-west, behind the line of the Great Indian Peninsula Railway, stretches the scarped cliff of Naoroji hill (192'), its top and western slopes thick with houses. Further west, from the broken congeries of roofs that spread to the palms of Girgaum, stand out the wide enclosure and the lofty turrets and pinnacles of the J. J. and Motlibai hospitals. Still more to the right, among the brown roofs that lead to the factories of Tardeo and the foot of the Cumballa Hill, rise the cupola of the Synagogue, the obelisk of Byculla Church, and the twin slender spires of St. Mary's Church. To the north-west between the Bhandarwada reservoir and the gray of the flats, the crowd of brown roofs is partly hidden by the gardens and mango orchards of Mazagaon, while over all gleam the white golden-spiked dome and minarets of His Highness the Aga Khan's tomb and the peak-roofed tower of the Technical Institute. Further to the right across the middle distance, as far as the green belt of the Mahim palm-groves, stretch the flats bristling with many a lofty chimney-stack and dark with masses of huge steam-factories, the most distant being the Kohinoor mill at Dadar and the Jacob mill, and northward of these lie the lately built villas of Matunga and the sinuous line of the new Port Trust Railway.

"Round this great city, to the north-east, east and south, stretch the broad waters of the harbour. . . Among the shipping opposite the Carnac Bundar lies the bare rocky mound of Cross island, and about two miles south off the Apollo Bundar the small flat circle of the Middle Ground Shoal. Across the harbour the north ekst is filled by the long brown back of Trombay, sloping south to the point of Pir Pav. In the east rises the low greenery of Hog island. In mid water lies the flat rocky line of Butcher's island and behind it the woody hills of Elephanta, and to the south-east the separate sharp-cut crests of Little and of Great Karanja."

"From the palm groves of Alibag, past the low line of Underi and the rocky knoll of Khanderi the sea spreads round the points and reefs of Colaba and so across the tree-fringed curve of Back Bay, until it is hidden by the woody bluff of Malabar Point which rises gently northwards to the houses and palmyra-crowned crest of the Malabar (280') and Cumballa (250') ridges. North-west, across the palm-dotted curve of the great Vellard, spreads second vision of open sail-brightened ocean, broken for a space by the woody hillock of Love Grove and again opening on either side of the rock of the Martand, till it is once more lost behind the bushy crest of Varli. The broken line of the latter section leads northward till the circle is completed in the palm-groves of Mahim and the leafy gardens and rice lands of Parel and Matunga, overtopped by the casuarinas of Bandora hill, and the long ridge of the Pali."

The Inter-War Years: The first three to four decades of the current century witnessed a further growth in population, expansion of the built-up-areas, civic improvements and a slow but definite trend of diversification of city functions, but at the same time the pangs of further growth started telling upon the living conditions in the *urbs prima in Indis*. The population of the city island had increased by over 50 per cent from 7.7 lakhs in 1901 to 11.6 lakhs in 1931, and had further shot up to about 15 lakhs in 1941. The growth rate of population that was about 22 per cent in the first decade had sharply fallen to about 2 per cent in 1921-31 mainly on account of epidemic ravages and outflows, but in the succeeding decade once again picked up a vigorous growth as the market conditions started reviving after the depression of the early thirties.

In 1895, there were 69 cotton mills working in the city. The outbreak of plague and its persistence during the following decade, at the turn of the current century, combined with severe financial depression retarded further progress. Japan, that had started building its own mills began competing with Indian yarn in the Chinese Markets. In spite, by 1915, there were 85 mills in the city, many of them having completely switched over to weaving from spinning and most becoming mixed spinning and weaving units. To quote Mr. Rutnagur from his book *Bombay Industries: The Cotton Mills*, "the outbreak of the Great War in 1914, and the stoppage of machinery shipments from Lancashire to India brought on a complete cessation in mill building in Bombay for several years, and even after peace was declared the heavy increase in the cost of land and building prevented the erection of new factories." Only one new mill was added between 1915 and 1925, although many of them were expanded. The Japanese competition made the Bombay mill owners look out for new markets, improve their products through finer counts, diversification of woven products and better bleaching, dyeing and finishing. The Mill-owners' Association that had come into existence a few years back fought for the promotion and protection of trade, commerce and manufactures of India in general and of the cotton trade in particular, and got through its persistent efforts the cotton excise duty suspended by the Viceroy in 1925, and later abolished. It took another six years to obtain protection to the industry from the Japanese competition.

Being literally the Gateway of India, Bombay's trade had acquired great significance. The crisis in cotton trade in the early years was successfully beaten by the city's mill industry, but had its impacts on the growth of the city. In the early days of trade, cotton brought into Bombay was stored and dealt with on the 'Cotton Green' in the Fort, in the area now forming the Horniman Circle. The heavy congestion caused within the narrow limits of the Fort necessitated shifting of the Cotton Green to a new site in Colaba in 1844, where all the cotton from upcountry could be landed and loaded in boats. With the coming in of railways, the building of docks at a distance from the Cotton Green and the multiplication of mills in the north and centre of the city island, the carting of cotton from Colaba right across the city created unprecedented congestion of the bullock cart traffic in the main roads and a change of locality was necessary in the interest of the cotton trade as well as of the city itself. This change was finally effected in 1923, having been made possible by the Sewri and Mazagaon reclamations by the Port Trust authorities. The subsequent removal of the Colaba terminus of the B. B. and C. I. (now Western) Railway and the creation of the long distance terminal at Bombay Central in 1930, made it possible for a large area in the south of the city in Colaba available for residential quarters.

Apart from the shift of the Cotton Green and cotton godowns to the Sewri reclamations, the eastern water front started undergoing remarkable changes. The large areas of Port Trust reclamations were followed by the construction of the Port Trust railway in 1915, which over a length of about 12 kms from Wadala junction to Ballard Pier had a total length of about 175 kms of main lines and sidings. This railway brought overnight a transformation of methods of handling cotton. Huge cotton depots covering nearly 50 hectares of land were erected; to the east of the cotton depots were the grain depots, and farther north the manganese ore and coal depots. Together with the depots large areas were allotted to new industries like Chemical and Dyestuff Corporations, and the Imperial Chemical Industries and the Havero Trading Company.

Bulk oil installations were also set up in the new Port Trust reclamations in three groups; the liquid fuel and lubricating oil depots at Malet Bundar, north of the docks; the kerosene oil installations at Sewri, and the petrol installations farther north at Wadala, all of them connected by pipelines with discharge berths on the harbour walls and at Pir Pav. This establishment encouraged a tremendous growth of oil trade of Bombay and Western India, which over a decade shot up from a mere half a million gallons to 19 million gallons.

The face of the city island had a further face-lift with the introduction of the Tata hydro power schemes in the *ghats* and the construction of overhead transmission lines from them, and a receiving station in 1915. The impure water supply from wells and ponds in insanitary surroundings was effectively stemmed by closing most of the wells and ponds, although with considerable resistence from the resident population. In an effort to improve the health of the people, the Government House at Parel was converted into the Haffkine Institute, and on its park grounds were erected the King Edward VII Memorial Hospital and adjacent to it the Seth Gordhandas Sundardas Medical College. Later additions in the same area included the Naoroji Wadia Maternity Hospital and the Bai Jerbai Wadia Hospital for Children.

A blessing in disguise following the plague ravage in the city was the coming into being of the City Improvement Trust entrusted with the work of making new streets, opening over-crowded localities, doing away with some of its worst slums of unspeakable squalor, reclamation of the land from the sea and constructing sanitary dwellings for the poor and for the police. The early schemes undertaken in this regard were the Nagpada improvement scheme, the construction of Princess street through a veiy overcrowded and ill-ventilated district, the construction of Sandhurst Road, right across the width of the island from Chaupaty to the Elphinstone bridge near the docks, and the opening of Gamdevi.

En bloc clearance was effected at Nagpada, Mandvi, Koliwada, Naoroji Hill, Kolbhatwadi and Bhatwadi, while other congested localities like the Guzari bazar, Memonwada, Tulsirampada, Anantwadi, Pathakwadi and Vithalwadi were improved by providing wide thoroughfares through them, like the Mohamad Ali road, Princess street and others. A broad road extending from Carnac road to Sewri was also constructed. Hughes Road was cut through the Malabar Hill, and areas lying between Malabar Hill and Gowalia Tank Road were made suitable for residential development, and also served as a western artery connecting Peddar road. The old Chunam Kiln lane was widened into the present Lamington Road.

The Trust also conceived the reclamation of low lying northern areas for accommodating poorer sections, and thereby decongesting the central parts of the city. This scheme, however, did not achieve its main purpose, as the costs of reclamation placed the value of the plots of land beyond the reach of the poor. However, it enabled the coming into being of the new residential areas on a more neatly laid out design of wide streets set in a geometrical pattern, with provisions for not only residential blocks but also adequate space for parks and recreation grounds that were badly missing in the older parts. These lay-outs included the areas in Dadar, Matunga, Sewri, Wadala, Sion and Agripada. These schemes initiated in the twenties and thirties, due to financial difficulties, progressed slowly, and barring Dadar, Agripada and to an extent Matunga did not find full expression till much later, almost the sixties.

Single room tenements—chawls—to accommodate the displaced persons and the police staff were built at a number of places in the city like Agripada, Princess Street, Chandanwadi, Mandvi, Koliwada and others. Textile workers' tenements were also constructed by the mills on the Trust reclaimed lands in their respective neighbourhoods, as for example the chawls of Kohinoor mills at Naigaum and the Century mills at Worli.

During the thirties, development activity declined, partly due to the failure of the Back Bay Reclamation schemes, and partly due to the trade depression. The only activity of the decade was the execution of the Mackinson Plan of Mahim development scheme. Under the scheme, the Mahim Station Road, the Nardulla Tank Road, the extension of the DeLisle Road to meet Lady Jamshedji Road as the Gokhale Road, the extension of Mahim Bazar cross road to meet Tulsi Pipe Road, and the road between Dadar and Matunga road stations were all completed. In 1929, the municipality laid out the Shivaji Park.

By the beginning of the twentieth century, the Bombay Back Bay Reclamation scheme had reclaimed strips of land, to the west of the present Queen's Road, and the Cufie Parade foreshore. In 1905, the Bombay Public Works Department considered the possibility of reclaiming the Back Bay and prepared four alternative schemes. After considerable delay due to the tossing forth of the proposals between the provincial and India Government, the scheme was initiated in the early twenties and was confined to the reclamation of two blocks (Nos.1 and 2) in the northern end of the areas and blocks 7 and 8 in the southern Colaba end.

On the eastern harbour front, the war years saw a tremendous strain on the existing harbour facilities, when a large number of troops had to be handled in the quays. In order to provide greatly increased facilities for embarkation, the Alexandra docks were constructed and opened in 1914. The G.I.P. railway management was taken over by the government in 1925, and the same year witnessed the conversion of the entire suburban service to a more efficient and quicker electric traction, and this event was followed shortly by the hauling of goods and passenger traffic by electric locomotives over the main line track upto lgatpuri and Pune. Inland communications were considerably improved through telegraph and telephone linkages of the main cities of the sub-continent with Bombay. The Bombay Telephone Company switched over in 1924 from the manual exchange to the automatic system, and by 1935 had as many as 12,000 exchange lines serving Bombay and its suburbs. In 1933, a direct radio-telephone service was opened to London. Although Bombay's airport at Juhu was opened for inland traffic in 1932, it had connecting services with Karachi, the international airport, to provide links for European air traffic. The first Indian air-mail line was inaugurated in 1932 at Bombay, and shortly after, a weekly combined mail and passenger service came into being connecting Bombay with Goa and Trivandrum. The Bombay roads which hitherto were crowded with the horse-drawn victories, bullock carts and hand carts had the first electric trams by 1907, and two years later came the first taxi service in the city. Electric lighting in the streets were put up in 1918 in the southern parts of the city.

The systematic development of the Bombay suburbs in the Salsette island, to the north of the Mahim and Sion causeways dates from shortly after the First World War, when the Government of Bombay established a Development department for the purpose. The immediate practical results were the drawing up of numerous town planning and suburban development schemes. These schemes conceived an aesthetic lay-out of the most suitable areas to the north of the Mahim Bay, and had provisions for large open spaces, residential and shopping areas and a limited

industrial development in selected localities. The provincial government inaugurated a State-aided co-operative building scheme to help people with small means to own their houses in these newly developing suburbs. Controlled and regulated by the Collector of the Bombay Suburban District in his capacity as the Salsette Development Officer, these buildings had surrounding open spaces within compound walls. Also, unsuitable and unsightly erections of all kinds were prohibited. Khar-Bandra development scheme was pushed ahead as a model suburban development scheme, and was followed by others in Vile Parle, Santacruz, Andheri, Ghatkopar and Chembur. These presented to the European visitor reminiscences of western suburbs of London, with rows of their neat and tidy buildings set on well-laid out roads, lit by electricity and served by a suburban electric train system.

The suburban district as a whole developed rapidly into the playground of Bombay, with a large number of clubs and recreation grounds to provide sports and social amenities. Juhu, Versova, Marve-Manori started attracting holiday crowds and picnikers through their attraction of swimming and bathing beaches, set in a string of coconut groves. Local administration in the suburbs was originally in the hands of a number of local authorities, but in order to promote an orderly development of the suburbs, they were merged to form two major municipalities of Bandra and Vile Parle.

The industrial and commercial prosperity of the city in the second half of the nineteenth century and in the beginning of the current century turned Bombay from the colonial architectural style to a style of its own. Although the stiuctures like the nave of the Cathedral, the Town Hall, the Byculla club, and others of this style were subsequently invaded by the *Gothic* style in mid fifties and later of the nineteenth century, adding to the not unpleasant medley of collection of period specimens. Of later years, the government had become moie aesthetic, and fine edifices have sprung up in the *Gothic*, Italian and Saracenic styles. Sir Edwin Arnold thought it a happy inspiration to blend *Gothic* and Indian schools of architecture, and wrote of the Secretariat, the High Court and other buildings as being very remarkable structures, upon which he looked ' with admiring eyes '.

G. W. Stevens, the great journalist, thought Bombay had the richest and stateliest buildings in India, ' challenging comparison with almost any city in the world .'

Yet, the mixture of styles in the public buildings did not go without some unfavourable remarks from a few. Sir Sydney Low felt that the public buildings were 'designed with a fine official disregard for all local associations'. Samuel Butler talked of ' the present aesthetic reign of terror', and Aldous Huxley condemned the city architecturally as "one of the most appalling cities, of either hemisphere", but he argues that "it had the misfortune to develop during what was perhaps the darkest period of all architectural history", namely the later half of the nineteenth century. Spate sees in the grandiose architecture of the Fort buildings " an Arabian nightmarish medley of styles".

The advent of the professional architect in the earlier decades of the century helped in removing some of the more common grounds of criticism. The Gateway of India erected in memory of the King's visit in 1911, the Museum, additions to the University buildings, the Ballard Estate buildings, all much simpler in style but more utilitarian and in better harmony with the tropical climate, are the creations of this period.

The first cinema appeared in Bombay in 1908 in a tin shed near the municipal offices and in one or two tents in the maidan. A number of theatres, drama houses, musical clubs, symphony orchestras, and learned societies started adorning the city adding a colourful variety to the social ambitions of the people.

Years before Independence: The clouds that hung over the world during the late thirties and early forties when the European powers were plunged in a ghastly war had its impacts on the Indian soils and the social life in the city. The city functions and activities were geared up to meet the war needs, and the port was congested with the troops on the move. The financial stringency of the period did not favour much improvement in the city. By 1933, the City Improvement Trust had been merged with the municipal corporation. The new reclamation area along the Back Bay, hitherto open, was allotted for residential sites, and the Marine Drive from Churchgate Reclamations to Chaupaty started taking shape flanked by uniformly rising, similar looking five storeyed buildings, housing residential flats criticised by some for the monotony of the' pile of matchbox' style. The Back Bay provided a welcome and new relief to the upper strata of the white collared gentry working in the city and government offices, by providing accommodation close to the workspot. Looking backward, the Marine Drive, forming the Queen's Necklace, has added grandeur to the Back Bay face of the city, and presents a memorable spectable when viewed from the crest of the Malabar Hills.

During the Second World War, the Municipal Corporation funds were depleted, and the Government, through the Municipal Act of 1944, empowered the Corporation to postpone the execution of works till after the war. Thus the funds of the Corporation were diverted to other pressing needs.

Fifties to the Seventies: The years immediately after the war brought a tremendous and explosive growth of the city and its suburbs that aggravated the urban problems and necessitated immediate remedial measures. The factors responsible were numerous. The country attained its Independence from the Biitish yoke in August 1947, and as far as Bombay was concerned, this fact alone resulted in a new vigour of growth impetus. With the loss of Karachi as the leading international airport of the sub-continent, Bombay took its place overnight, and this resulted in the feverish activity in the early years of Independence in building a new airport at Santacruz, and equipping it to international standards to permit landing of the larger planes. A considerable volume of port traffic too was added to the already congested harbour area, with the diversion of hitherto Karachi-bound freight to Bombay. The early Five-Year Plans, taking advantage of the already existing well developed urban and commercial infrastructure of Bombay, promoted deliberately the growth of a wide range of industries, especially engineering, chemicals and pharmaceuticals in and around Bombay. The attraction of ready employment opportunities to the skilled as well as the unskilled, and better wages in the existing as well as the developing industries brought a continuous stream of immigrant working population not only from the different parts of the State but all over the country. This migrant stream has been growing in numbers over the years, and is continuing still unabated, resulting in an enormous growth of its population, beyond all expected estimates. Immediately following the declaration of Independence, large influx of refugee population from Sind and Punjab poured into the city, and created an unprecedented problem of rehabilitating the refugees on one hand, and finding quick measuies of decongestion of the city's poorer areas on the other.

To plan the post-war development, the Government appointed a committee headed by the Adviser to the Governor, and this committee stressed the need* for including a large area within the urban limits of Bombay for providing space for expansion and dispersal of Bombay, and also recommended the need for a Master Plan for a controlled development of urban functions. It also suggested ways and means in which the town and the suburbs should be planned on healthy lines. Accordingly, the Albert Meyer-Modak ' Outline of the Master Plan' for Bombay was prepared in 1948. Though not a complete master plan in itself, it provided useful guidelines for detailed planning of areas earmarked for different purposes. It indicated lines along which the further growth of the city was to be regulated, and the suburbs and satellite towns beyond to be planned.

The dock explosions of 1944 destroyed the areas surrounding Mandvi, and made possible the application of the Town

Planning Act to the area, from 1957, in spite of opposition from local residents. Likewise, the town planning scheme was brought to action to clear the Mahim Woods, and so too the Sion hill and marshes. The refugee population was accommodated in improvised structures in recently reclaimed areas in a number of localities, but mainly at Chembur (now known as Chembur Sindhi colony), the Antop hill, Chunabhatti, and Koliwada areas, while the better-off refugees started settling in Sion, Mahim, Bandra, Marine Lines and elsewhere. The influx of refugees was far in excess of the possibilities of rehabilitation within the city, and ultimately the Government in the early fifties set up a large refugee colony in a cleared area near Kalyan, which over the years has grown into a flourishing township, almost a city, with a population of over a lakh, and spreading over Ulhasnagar and Vitthalwadi areas.

The increase in population from about 15 lakhs in 1941 to nearly 24 lakhs in 1951 within the city limits not only created intolerable densities of population in many localities, but also the city was getting rapidly saturated with built up areas. The last left over marshes and salt pans in Sion, Wadala were also invaded by residential areas in the fifties. Open space in the city amounting to a meagre 140 hectares, proved utterly inadequate. The urgency of the situation forced the Government to expand the municipal jurisdiction beyond the Mahim Bay into southern Salsette. Accordingly, in 1950, the Municipal Corporation limits were extended upto Jogeshwari along the Western Railway and upto Bhandup along the Central Railway. This limit was further extended in February 1957 upto Dahisar along the Western Railway and Mulund on the Central Railway. The jurisdictions of the Commissioner of Police, Bombay, and the Collector, Bombay Suburban District were made now coterminous with the extended 'jurisdiction of the Bombay Municipal Corporation. The area of suburban Bombay to the north of the Mahim creek thus amounts to about 446 sq.km.

Meanwhile, the outline of a Master Plan for Greater Bombay, lacking legal validity had gone out of date, and the Bombay Town Planning Act, 1954, needed fuller details than provided in the Master Plan. The Corporation, therefore, declared its intention to prepare a fresh development plan through a series of government notifications between 1958 and 1964, when the report of the development plan became ready. In between, the State Government appointed a study group headed by late Shri S. G. Barve and consisting of five panels to probe into the extent of the existing urban problems of housing, building materials, open space and other community needs, industrial siting and traffic. This group recommended a planned development of the suburbs, planned use of land foi different urban uses, the immediate construction of the two express ways recommended by the earlier Master Plan, apart from feeder routes in the suburbs, creation of satellite townships in the adjoining districts, and a planned programme of public housing.

The 1964 Master Plan had as its main objectives the protection of the existing character of Bombay and reorganisation of its structure gradually by promoting development of its areas on neighbourhood basis with an internal self-sufficiency and a sense of healthy interdependence; the establishment of suitable zones in residential aleas with gross densities of population ranging between 625 and 1,500 per hectare in the city and 375 to 625 in the suburbs; the gradual dispersal of the city population to the suburban areas; the decentralisation of commerce and industry from the city through reservation of areas in the suburbs for industrial and commercial uses; a comprehensive programme of slum clearance and provision of low and middle income housing; adequate provision of sites for schools, recreation, hospitals, markets etc., a regulated and coordinated comprehensive road development; and a phased programme of reclaiming areas with a view to making them available for development.

The fifties onwards witnessed a spectacular development of residential area all over the city and the suburbs. The marshes and salt pans of Sion, Sewri-Wadala were fully cleared, wide roads laid out according to preplanned schemes, and middle income people's apartments in three to five storeyed structures raised on them, with adequate provisions for open space and parks, educational facilities, medical facilities and retail shopping. Chembur-Deonar, hitherto a wilderness, too developed fast as a residential area with a well developed shopping complex; these areas, by their planned neat lay-out and better looking structures present a sharp contrast to the older parts of the city with a haphazard and tardy growth.

Residential development in the suburbs commenced somewhat earlier along the Western Railway; the first development was mostly on the Western side, along the railway and the Ghodbundar (now Swami Vivekanand) road, the extension further west into the reclaimed marshes being much later in the sixties and seventies. The rail-heads with the converging commuting traffic provided invariably the necessary impetus for the shopping along the station roads. The development of the areas east of the railway line, however, was delayed till recently, and the coming into existence of the Western Express Highway. While Bandra-Khar were the earliest planned suburbs to be developed, rapid infilling took place in the sixties mostly in Santacruz, Vile Parle and Andheri, and the wave of feverish building activity continued unabated in the seventies in the outer western suburbs beyond Andheri on one hand, and the shoreside settlements like Juhu, Versova, and Marve on the other.

Along the Central Railway, Kurla is an old industrial and low income workers' area. Ghatkopar to Mulund, on both sides of the railway, but more to the east, is shaping into numerous *nagars* of low income housing colonies, housing mostly industrial workers, unlike the western suburbs that house service-seekers.

Planning of land use and zoning areas prior to development has facilitated industrial development in the suburbs in a somewhat more healthy manner, permitting segregation of industrial land use from others invariably. During the late fifties and sixties, the lake area around Powai, lying at accessible distances from both the railways and in between, flowered into a large industrial complex housing engineering and chemical units; while the old Kurla neighbourhood developed into an automobile industrial zone, with the erection of the Premier Automobiles in this area. All along the Central Railway between the Agra Road (now Lai Bahadur Shastri Marg) and the Railway, there developed in a ribbon-like fashion, numerous small and medium industries, mostly pharmaceuticals and light engineering goods. Chembur-Trombay has the concentration of refineries, petrochemicals and a fertiliser unit. The latest area to develop is along the western outer suburbs, beyond Jogeshwari, and along the Western Express Highway; here many industrial estates and large expansion units of the older city units, like Mahindra's jeep unit are fast changing the landscape.

Together with these industries, slums have been developing fast in the suburbs. Road-work, quarrying on ihe hill sides, and building activity in the suburbs have all promoted the slum development, almost spontaneous and mushroom-like, such spots creating an unhealthy atmosphere in an otherwise pleasant, greener-looking suburban environment.

Individual suburbs, in comparison to the city wards, have more open spaces and playgrounds for children. In addition the lay-out of a large Dairy colony 'in Aarey at the foothills, with neatly and hygienically laid cattle stables, and a Dairy Technology Institute provides a pleasant picnic spot for the weary, week-end holiday seekers. The conversion of a large part of the neglected Kanheri jungles into a beautified National Park with a zoo and a deer park and lion safari is another measure that provides for a large open space and recreation ground for the suburbanite, although its location in the extreme north of the Corporation limits is a limitation which inhibits a fuller use of this facility by the urban people.

While these changes have been gradually creeping over the suburban areas, the older parts of the city also slowly started undergoing internal morphological changes. With the closure of the tramwaysn in 1964, many of the main roads were widened and improved to make way for a more efficient road traffic. Commercial land use steadily started

usurping the main roads in the older residential zones like Fort, Princess Street, Dhobi Talao, Girgaum, Bhendi Bazar and others, pushing the older residents out into the suburbs. Many old residential structures, dilapidated and collapsing during the heavy monsoons, were pulled down and replaced by more modern, sophisticated multi-storeyed skyscrapers, particularly along the main roads. These buildings especially in the Fort, Walkeshwar-Cumballa Hills, Peddar Road, and the main roads of Girgaum and Opera House are fast changing the skyline and making the hitherto significant landmarks look almost dwarfs. This urban renewal, a feature of the seventies, has facilitated on one hand a heavier concentration of commercial, administrative and business functions in the old core and a steady push-out and decongestion of residential population in them. Another area, presenting an almost fairy-land appearance along the shores of the Back Bay is the new skyscraper area that extends south of the Marine Drive upto Colaba along the Foreshore Road and the Cuffe Parade. This area has two skyscraper complexes: a northern administrative-cumbusiness set-up housing the Mantralaya with its State administration, many government and semi-government administrative buildings like those of Air India, Life Insurance Corporation, Shipping Corporation and State Bank, business houses like Hindustan Petroleum Corporation, Express Newspaper group and the like and large five-star hotels like the Oberoi Sheraton. The second one further south houses mainly upper class residential population, like the ministers, business elite, and officers in government services.

A welcome change noticed in the development pattern of Bombay in the last thirty years is that of a slow but gradual dispersal of a number of social and other amenities from the south northwards. Hitherto, the Fort area and its neighbourhood not only concentrated administration, commercial and business functions but also had all the concentration of higher education, better and larger hospitals, cinema houses, clubs and the like. All these facilities have now spread all over the city and the suburbs, so much so that commuting in one way by all the people is getting steadily replaced by a wider dispersed flow of people in all directions, but mainly north-south on account of the topographical lineation of the city and its suburbs as well as the orientation of the main traffic corridors.

With a steady dispersal of development, the population of the urban complex has not only grown to over 82 lakhs (in 1981), but has also spread into the suburbs; in fact, it is the suburbs that are growing faster than the city, and account for almost half the population, although spread over a much wider area than the city.

The city's communications and traffic channels too have substantially increased. About 2,325 BEST buses, private cars and taxis ply in them, the buses accounting for about 40 per cent of the commuting traffic. The railways have expanded their suburban commuting facilities enormously. The six traffic corridors of the suburban railways are working to their saturation capacity limits. Four track facilities on the Western Railway now exist between Churchgate and Borivli. In both reailways, the suburban trains carry now nine coaches, and the platforms have been extended.

The port functions too have been further extended. Apart from improving the Butcher island oil terminal, providing for a large repair work for ships and ship-building yard at Mazagaon, the harbour front along the Alexandra docks (now Indira docks) and Apollo Pier is being expanded considerably to provide new berthing facilities.

The international airport at Santacruz, a creation of the last about 35 years, was continuously expanding and getting improved to cope up with a growing international traffic. A separate international air terminal at Sahar is now established to segregate domestic traffic and to avoid air traffic congestion.

The telephone facility inside the city has been improved through the establishment of numerous exchanges all over, and the introduction of a cross-bar system. Today, the city is connected with the large cities of the country by a direct subscribers trunk dialing system. A television network serving Western India, too, has come into existence.

Thus, the present metropolis of Bombay has grown out of humble origins of a group of fishermen's villages in a short span of three hundred years, and is still growing with considerable vigour.

RELIEF OF BOMBAY

Any one who sees the present day topography of Bombay will hardly be able to visualise the original relief of the area, much less imagine the extent to which the topography and configuration of the area on which Greater Bombay stands has been shaped by human interference and action. A substantial area—possibly a half of the city area, and about a fifth to fourth of the suburban area—has been reclaimed from below sea-level by infilling, and pushing the sea outward through dyke-walls like those of the Back Bay reclamation. Many low hills have been quarried for road and plinth material, subsequently levelled and built up. Thus, most of the low hills around Sion, Raoli, Sewri, and Dongri-Mazagaon in the city, and around Kurla-Ghatkopar, Andheri-Jogeshwaii, and Marol have been reduced to ground level. Much of the initial surface drainage and streams, especially in the suburban Salsette have been so completely modified that there is practically no natural drainage in the area. The original Mahim river draining into the Mahim Bay has been dammed in its upper reaches, while the building of the Airport at Santacruz has blocked it in its mid stretches. The lower stretches, close to the Mahim Bay, have become a stinking, fastly silting up, gutter carrying polluted waters, and industrial wastes, only removed during the flush of the high tides and floods of the monsoon. So also, the westward flowing Dahisar nadi draining the slopes of the Kanheri hills is no more a flowing stream; it is dammed at its upper reaches, while below in the flat terrain, it consists of local pits and depressions, holding pockets of polluted drainage. In fact due to the continuous increase in built up areas, and asphalted and macadamised road surfaces, natural drainage during the heavy monsoon rains has been so adversely affected that vast areas, and local depressions get readily flooded even with moderately heavy rains. Added to this, is the fact that most of Bombay and its suburbs is low-lying reclaimed land, barely a metre or two above sea-level

This brief review readily highlights the fact that much of the topography and its configuration is man-made; the rapidity with which man can bring about changes explains the quick changes in the configuration and surface appearance of the land of Greater Bombay.

The present day Bombay, built on the original cluster of seven islets, is not only a single land mass, but it is not even an island, with the effective filling in of the breach of the Mahim Bay between Sion and Kurla aiid the construction of the Mahim Causeway. Bombay city is situated on a peninsula, protruding south of Salsette. So too, Trombay, originally an island, to the north-east of Bombay island, along the head of the Harbour Bay today, forms a land mass, in continuation with Salsette, as the tidal creek and marshes in between have been reclaimed. Salsette, in which the suburban areas are located is, however, a large island lying off the Konkan mainland, being separated from it by the Vasai creek and the Ulhas estuary in the north and north-east and the wider Thane creek to its east.

The original cluster of seven islands of Bombay, barring Mahim (Baradbet), was built around hill cores. Only Mahim was an old sand bar, on the protected, innerside of the Mahim Bay, behind the Worli head-lands.

With the silting of the lagoons in between, filling of the breaches between the islands, and gradual reclamation of the tidal flats, salt marshes and salt pan areas, present day Bombay consists of a low-lying plain about 40 km. long north

to south, and 5 to 7 km. broad east to west, flanked by two parellel ridges of low hills running along the two shores. The eastern ridge, more discontinuous, and levelled in many parts continues below high-water level beyond Colaba, forming the dangerous reef marked by the Prongs Lighthouse. Point Colaba, the headland formed by the longer of these ridges, protects the harbour, lying on its eastern side and measuring 10 km. in width, from the force of the open sea. The other ridge terminates in Malabar Hill; and between the two lies the shallow expanse of Back Bay. This false harbour is one of the several beautiful bays, accessible only to fishing boats, which indent the western shore for a distance of 13 km from Colaba to Mahim. The western ridgs is of a slightly higher elevation, but both the hills have steeper slopes on the eastern face. The western ridge invariably descends to the open sea, and ends with a foot-hill wave abraded platform, clearly visible during the low tide.

The Bombay peninsula is in the shape of a trapezoid, and is popularly likened to a hand-laid palm upwards, with the fingers stretching southwards into the sea and the thumb representing Malabar Hill, with Back Bay between the thumb and the forefinger. Others discover in it some similarity to a withered leg with a very high heel (Malabar Hill) and pointed toe (Colaba). On a slightly raised strip of land between the head of the Back Bay and the harbour is situated the original site of the Fort, the nucleus of the modern city now chiefly occupied by stately public buildings and mercantile offices; and from this point the land slopes westward to the central plain, which befole the constitution of the embankment, known as the Hornby Vellard, was liable to be submerged at high tide. In the north and east, large schemes of reclamation have similarly shut out the sea and partly redeemed the foreshore for commercial uses.

The eastern water-front, facing the protected waters of the harbour bay is the harbour area, with numerous docks, quays and berths. The dock walls lie adjoining deep waters of the harbour bay, with many navigable channels maintained through the Bay. The western water-front on the other hand is a series of alternating headlands and bays, the largest of them being in the southern and northern extremes, namely the Back Bay and the Mahim Bay. It is in these bays that limited stretches of sandy beaches have been formed, the only other beach being that of Dadar, behind the Worli headlands in the Worli Bay.

The city area has no natural drainage outlet. The central area forming a depression, flanked by hills, and being on reclaimed grounds barely two to three metres above sea level is liable to flooding during the monsoons. Central Bombay extending from Dadar to Grant Road-Byculla, the great heavy rains forms a continuous sheet of water, posing one of the great problems for the city traffic and a major health hazard.

Suburban Bombay is located on Salsette. As late as 1808, Salsette included seven islands, namely Salsette proper, the main and largest of the islands, Trombay in the south-east, also large with a central hilly core, Juhu, Varsova, and Marve, that are sand bars pushed inland by the sea, and resting on knolls, Dharavi and Rai Murdhe. Today they form together a single land mass, off the Ulhas mouth.

In the north centre of the island lies a hill complex that rises to elevations of 467 m. in the conical peak of Kanheri, 463 m. in Shendur, and 417 m. in Avagadh. Two spurs of ridges shoot off southwards from this hill complex from near Kanheri and Avagadh peaks, enclosing in between a horse shoped valley, that opens out southward and slopes in the same direction. The western ridge, of a higher elevation, runs over a distance of about 10 km. and ends near Marol. The eastern spur, though lower, is longer, and gradually descends to the level of the plains around Ghatkopar-Kurla. Further north of Kanheri, this topography forms a tangle of jungle clad hill mass, that at many places practically descends to the level of the Ulhas estuary and is skirted by the Borivli-Ghodbundar-Thane road.

The central horse shoe valley in the hills used to be drained south by the Mahim river in the past. This river has been dammed in its upper reaches, so mruch so this valley today accommodates three small fresh water lakes, the Tulsi, the Vihar and the Powai, one below the other, that supply the city with 3 per cent of its domestic and other needs of water supply. Below Powai, the river today is mostly a storm drain and a gutter of sewerage, blocked off by the construction of the Santacruz airpoit at its Kurla end. The lower reaches is a shallow, fastly silting up drain of industrial wastes emptying into the Mahim Bay.

The Kanheri hill complex has a radial drainage system, with numerous rain torrents washing down its slopes in all directions. The largest of them is the Dahisar river that rises on the southern flanks of the Kanheri hills, and drains west to join the Marve creek; this river, however, has been blocked to form the Dahisar project, to augment the water supply to the city to a small extent.

Surrounding the central hilly region, are extensive lowlying plains, that are reclaimed tidal marshes and flats just above tidal levels. They are widest to the west and south of the central hilly region, and narrowest to the north. In the east, along the Thane creek, sizable stretches of tidal swaps and salt pan areas, especially around Bhandup, still survive

Traversing these low tidal flats, and occasionally rising to higher elevations are protrusions and outcrops of acidic and basic lava flows that in places form low hills, while in others form low dyke ridges like ribs. The low hill ridge of Kalina, the knolls of Marol, the vertically well jointed columnar basalts of Andheri (Gilbert Hill), Ambivli and others further north, are of this category. However, close to the coast on the western side, there runs a chain of low hills, broken and discontinuous, and a continuation of the western hill ridge of the Bombay peninsula that runs from Malabar Hill through Worli northwards. This ridge forms headlands at a number of places like Bandra, Danda, Madh, Manori and Uttan, Dongri, and where breached by the tidal creeks in between forms extensive tidal marshes. It is on this residual hill remnant that sand bars and spits of wave deposition like Juhu and Versova have been transfixed.

Small depressions, forming ponds of fresh water used to dot the low flats especially to the west of the main hill range in the past: as for example, the Padam Talao to the north of the Military Camp Hill, which used to exist within the present airport area. These depressions have been mostly filled up for hygienic reasons and have become built up in most cases.

As in Bombay proper, so too in the suburbs, natural drainage has been visibly affected by urban building activity. All along the shore fringes, extensive areas are flooded during high tides, and during the heavy monsoon rains, many low-lying areas are flooded and do not get readily drained.

To the east of Salsette lies the Thane creek opening into the northern part of the Harbour Bay. It runs for 16 km. north to south from near Thane to Trombay village; it is very narrow, barely 200 m. wide, at its northern, Thane end, and gradually opens out to over 2 km at its southern end, where it is bridged to carry over it a road from Bombay to Panvel. The Panvel creek debouches into it at its southern end, immediately north of the Hog island.

The Harbour Bay is studded from south to north with many islands. The Kansa or Gull islet, lies at the entrance of the Dharamtar creek to its east. The Karanja island, which consists of two hills rising to nearly 300 m, and 200 m. height and an intervening valley; the Cross or Gibbet island, 20 m. high, which is situated nearly opposite the Victoria Dock, on the eastern side of a reef of rocks, with shoals extending north and south of it; the Butcher island, also 20 m. high and a km. long and a km. wide, which is situated 5 km. north-east of Cross island and contains an oil terminal; the

Elephanta island, which lies 1.5 km. east of Butcher island and consists of two hills (the eastern 180 m. and the western 100 m. high); and Hog island which lies a km. east of Elephanta, on the south side of the entrance to the Panvel river, are the other islands in the harbour end. The northern end of the harbour bay is filled by Trombay with the small mosque of Pir Pav on its southern extremity, from which the land rises into a hill 300 m. in height. Outside the harbour, but within port limits, lie the islands of Henery and Kenery.

Among the reefs of the harbour may be noted: the Karanja reef which extends 3 km. west of Karanja island; the Colaba reef, opposite the Victoria bundar; the Cross island reef, which lies immediately north of the south channel beacon, nearly opposite the Victoria Terminus; and the Butcher Big reef which is separated from Butcher island by a narrow channel. The chief shoals are: the Colaba shoal, extending from opposite the Prongs reef for 5 km. along the east side of Colaba; the middle ground shoal, which lies north-east of the Dolphin Rock and 3 km. from the Sunk Rock, and has near its centre a rocky islet, about 10 m. high, surmounted by a battery; the Flag Staff shoal which lies nearly opposite the Custom House and north-west of the middle ground shoal; and the Elephanta spit, a shoal of the mud running in a north easterly direction from the north end of Elephanta island.

The chief rocks are :the Sunk rock on which a lighthouse stands, situated a little to the south-east of Colaba point and divided by a narrow channel from the Colaba shoal; Oyster rock, a flat rock about 23 m. high, surmounted by a battery, lying nearly opposite to Pilot *Bundar* about a km. from the shore; Nigger's head rock, lying south-west of Oyster rock; the Dolphin rock, a small rocky shoal carrying a lighthouse, partly visible at low water and lying 2 km. north-east of the Sunk rock; the Apollo spit or Falkland rock, situated a km. north-west of the middle ground shoal; the North Patch, lying nearly 1.5 km north-west of the middle ground shoal; the Elephanta rock, lying just off the southern extremity of that island; the Barnacle rock, which lies on the west side of the channel dividing Elephanta and Hog islands and is marked by a black pillar 10 m. high; and the Malet Shelf, a rocky patch close to the foreshore on the north of Prince's Dock.

To the west of Salsette, there are no islets at present. The Varsova creek, the Manori-Malad creek and the Gorai creek tidal islets, flush in and out during the tides, and they separate an arm of the mainland in which are located Madh, Manori and Gorai, presenting a false appearance of insularity.

WARDS AND SECTIONS

The modern administrative divisions of Bombay are to a large extent based upon the physical divisions of the earlier days, The municipal wards now number 7 in the city and 8 in the suburbs, sub-divided into 88 sections, and 140 electoral wards. The police divisions almost correspond to the municipal wards.

A Ward: The municipal A ward includes the Colaba, Fort and Back Bay Reclamation areas.

Upper and Lower Colaba: Colaba that extends from Colaba Point in the extreme southern tip or Land's end, northwards upto the Indira Docks and Museum, is divided into an upper and a lower section. Upper Colaba mostly comprises the Defence area and hence the restricted development of residential and other urban uses. It, however, contains the Meteorological and seismic observatories of the Indian Meteorological Department, close to the Land's end, the premier research organisation namely, the Tata Institute of Fundamental Research, and two churches, the R. C. and Afghan Church, whose spires are significant landmarks observable for a distance from the sea. Lower Colaba is a fairly densely peopled residential quarter, where sizable number of dock workers live along the eastern water front. Lower Colaba is a narrow elongated strip, not much wide east to west, connecting Upper Colaba with the Fort area. The main road, Shahid Bhagatsing Marg (formerly Colaba Causeway), running along the length, has a fashionable retail shopping front often visited by foreigners. East of the road, at its southern end, are the Sassoon docks, with its fish-landing bundar, while northwards along the harbour wall, are a number of high class hotels and clubs, of which the Taj Mahal Hotel with its magnificent dome, and the more modern Taj Intercontinental reign supreme. West of the Shahid Bhagatsing Road, running sub-parallel to it are the N. P. Parekh (Wodehouse) Road, and the Cuffe Parade along the foreshore. The Cuffe Parade skirts the new Back Bay Reclamation and has at its two ends two skyscraper complexes. The southern one adjoining Colaba is residential with Embassy and State Government officer's residences, and the northern one a business-cum-administrative complex housing the offices of a large number of Airlines, Shipping Corporation, State Bank and newspaper houses, Life Insurance Corporation, and the prestigious State Government office, the Mantralaya, and New Vidhan Bhavan in an imposing complex.

South Fort: The South Fort section bordered on the north by the Veer Nariman Road (the former Church Gate Street) and the Elphinstone Circle, is a part of the original European town of Bombay founded by the genius of Gerald Aungier and his successors. It has two parts: an eastern section that was part of the original fortifications, and a narrow reclaimed area to its west, the two being roughly separated along the Mayo Road, and the Oval maidan. The eastern part has two main thoroughfares running north-south: one of them, the Mahatma Gandhi Road from the Prince of Wales Museum in the south to the Hutatma Chowk (Flora Fountain) follows the line of the old Fort walls behind the Apollo Bunder and Church Gate, and the other the Shahid Bhagatsingh Road(Chhatrapati Shivaji), that is the land boundary of the docks area. Its principal objects of interest are: the Indira Docks, Gateway of India, the old Yacht Club adjacent to the docks, the Prince of Wales Museum at the south end of the Fort, that houses a marvellous collection of Natural History, the old Legislative Assembly Hall overlooking the Museum, close to the old Apollo Gate of the Fort, the Town Hall, that houses the Central Library and the old Royal Asiatic Society facing the Elphinstone or Horniman Circle, laid on the site of the original Cotton Green, the St. Thomas Cathedral, an old landmark facing the circle, and lying adjoining the old Church Gate of the Fort. This area constituted the European business quarter of the colonial days, and today houses the Stock Exchange-the Dalai Street is to Bombay the Wall Street of New York and the Fleet Street of London, and a number of business houses. Along the Mahatma Gandhi Road, are from south to north, the prestigious Institute of Science, an institution of scholarship in Science disciplines, the Elphinstone College, the mother of the Bombay University, and the Government Archives, the old Secretariat buildings, the administrative offices of the University of Bombay, and its library in the Rajabai Tower buildings,

The old Mayo Road marks the limits of the old seashore of the Back Bay front. The Oval and the Cooperage *maidans* to the west of the Mayo Road are the only vast open spaces and playgrounds in the south Fort area. Skirting the Oval on the western side is the Maharshi Karve Marg (formerly Queen's Road) with a neat row of five storeyed residential houses, and further beyond structures housing offices of business houses, colleges, and few hotels on the newer reclamations. The old railway line of the B. B. and C. I. from Colaba used to run along the western edge of the Oval, and the ruins of the Colaba station close to the Cooperage are still preserved. South fort is the main administrative core of Bombay.

North Fort: Like Fort South, Fort North also comprises two parts: an eastern part, to the east of Dadabhai Naoroji Road (formerly Hornby Road) which is a part of the old fortified town, and a western section that includes all the area to the west of, Dadabhai Naoroji Road upto the Cross and Azad *maidans*, the Maharshi Karve Marg, and Church Gate Reclamations to the south of the Marine Lines station. The Victoria Terminus of the Central Railway lies at the north end of the Fort area.

The North Fort proper, bounded by the Dadabhai Naoroji Road on the west, by the Shahid Bhagatsingh Marg on the east, the Nagar Chowk near Victoria Terminus in the north, and the Veer Nariman Road in the South is traversed north to south by two main roads, the Bohra Bazar street and the Bazar Gate street. These two roads are old thoroughfares on the line of the original streets of the Fort intersecting the town on a steel grid pattern. This is the section in which during the Company days the Parsi and other native communities settled down within the Fort walls and carried on commerce. The area is the only zone of sizable residential population in the 'city-centre', and is marked by narrow streets and by-lanes, old residential buildings, interspersed with modern structures in place of fallen buildings, an old Parsi Fire temple, and other places of worship. The area is undergoing much renovation; the main streets are widened and straightened, and house an old shopping core. The Pheroze-shah Mehta Road, close to the southern boundary and parallel to the VeerNariman Road is a 'banking' street housing the head offices of the leading banks of the country and many financial institutions. At its eastern extremity, adjoining the Town Hall are the Mint buildings in the site of the old Gastle and the Reserve Bank of India.

Further east, beyond the Shahid Bhagatsingh Marg is the Port Trust area on harbour reclamations. Known as the Ballard Estate, it is a neatly laid area on reclaimed ground that houses the offices of the Customs, and numerous business houses, shipping companies and foreign consuls. Here, business is transacted on a bulk handling basis, round the clock. It lies in the core of the central business district of Bombay.

Along the north end of the Fort section are the Central Railway offices and rail terminal at Victoria Terminus, the General Post Office buildings, the Government Dental College and St. George's Hospital in the ruins of original Fort St. George.

The Esplanade area approximates in location to the present day Cross and Azad *maidans*, which, according to Fryer, was the grazing ground for buffaloes and cows and later was reserved as an open space in front of the Fort walls along the *maidans*, and is today an administrative-*cum*-recreation zone with so many offices, cinema houses, and a couple of schools and colleges.

Facing the Victoria Terminus across the Dadabhai Naoroji Road (north) is the Municipal Corporation building. Further north along the road are the 'Times of India' building and the Sir J. J. School of Art and College of Architecture, and the office of the Police Commissioner. In the northern extreme, along the Lokmanya Tilak Road (Carnac Road) are the Mahatma Phule (Crawford) fruit and flower market, the Shivaji Mandai and the Mohatta, Manish cloth markets. On the Mahapalika Marg, connecting the Nagar Chowk with the Dhobi Talao area are the courts of the Presidency Magistrate, Cama and Albless Hospitals, the State Institute of Educational Training, and the Ranga Bhavan.

To the west of the *maidans*, is the M. Karve Marg with its S.N.D.T. Women's University, the Western Railway building and the Government of India offices; parallel to it is the Western Railway suburban rail track, terminating in the imposing Churchgate building complex. Further west are the Churchgate reclamations, mostly of the thirties and forties, with a rectangular pattern of streets terminating in the promenade of the Marine Drive. This section of the reclamations houses many star hotels, colleges, the Brabourne and Wankhede stadiums and playgrounds, while further north the area becomes more residential in character, nearer Marine Lines.

B Ward: The B Ward lies to the east of Abdul Rehman street and Ibrahim Rahimtulla Road right upto the harbour front, and extends from the Lokmanya Tilak Road (Carnac Road) in the south to the J. J. Hospitals and Ramchandra Bhat Marg (old Babula Tank Road) in the north. It comprises Mandvi, Chakala, Dongri and Umarkhadi areas. The area as a whole has a concentration of Muslim population and is the commercial coie of the city, with both wholesaling and retailing functions.

Mandvi: Mandvi lies to the north of Tilak Road and comprises the area around Masjid railway station on the Central Railway. The western half of the area, to the west of the rail track, is intersected by narrow and irregular streets and constitutes a part of the old town outside the Fort walls which developed around a Koliwadi as the nucleus. In spite of considerable improvement and clearance of the area by the City Improvement Trust in the early decades of the century, the area still presents a crowded appearance. The eastern part, to the east of railway, is comparatively modern, being built up on reclaimed land, and contains a regular line of streets, ending on the Victoria docks.

Mandvi as a whole is a mercantile section with the docks on one side and godowns and shops of local merchants on the other. Along the P. DeMello Road (formerly Frere Road) are thegreat warehouses and granaries of the city, while along the Arayal road and the streets taking off from it are the iron (*Lohar*) bazar of the city. Western Mandvi is the seat of the wholesale grains, dry fruits market, and offices of numerous inter-state road transport carriers.

Chakla: Chakla to the west of Mandvi, but to the east of Abdul Rehman Street is also devoted to commerce. Bisected by the Nagdevi Street, which owes its name to the old shrine of Nagdev (serpent god), the nearly rectangular section ends up at its northern end at the Pydhonie Police station, located approximately on the site of the old 'Foot-wash \ Abdul Rehman Street is commercially the most important street of the locality, housing mainly stationery dealers, watch dealers and leather shops. Historically, the most important part of the section is Pydhonie that roughly marks the boundary between the Muslim quarters to it seast and south, and the Hindu residential areas to its west. The Minarmosque, close to the Pydhonie Police station is a two centuries old place of worship.

Umarkhadi: To the north of Mandvi is Umarkhadi, bounded on its west by the Bhendi Bazar along the Ibrahim Rahimtulla Road, and on its east by the Jail Road East. The southern part is a medley of irregular streets and by-lanes, and is occupied by a large number of low-class tenement buildings or chawls, housing Muslims. To the north of Sardar Vallabhbhai Patel Road that splits the area into two, right in the heart of the area is the Muslim cemetery, and to its north-east, the old Jail built in 1804 by the Governor Duncan and now housing a children's home. This is an area where even today the horse drawn victorias can be seen, though declining, and a number of saddlers' shops along the main roads. The shopping front has a large number of Urdu bookstalls.

Dongri: To the east of Umarkhadi is Dongri, that contains an old residential quarter and a more recent harbour front housing the Clerk basin, the Frere basin and the Malet basin, the two parts being separated by the Wadi Bundar goods yard of the Central Railway and the Naoroji hill, adjoining it. This hill is the original Dongri hill, on which a fortlet was built in the early British colonial period, and was subject to attack by the Siddis. Dongri has an old settlement nucleus in its Koliwada. Dongri is a highly congested area with insanitary surroundings.

C Ward: The C ward to the north of Esplanade, and west of the Muslim quarters is the old Hindu core of the native town of Bombay. Though small in area, it is the densest populated area of the city, with areas having densities of 1,500 to 2,000 per hectare. It comprises the areas of Khar a Talao, Kumbharwada, Bhuleshwar, Market, Dhobi Talao and Fanaswadi.

Market area: The Market section derives its name from the great cloth markets (Mulji Jetha and Mangaldas markets) that fringe the Shaikh Memon Street, its main and central thoroughfare. The Kalbadevi road which earns its name from a shrine of Kali or Kalikadevi, that was once located in Mahim but later shifted to this locality during the Muslim period,

is its northern and western limits. Apart from the fact that this section has an old settlement in the present locations of Kantilal Sharma Marg (Lohar Chawl) and Vithalwadi, the section contains the Jama Masjid (1802), the temple and tank of Mumbadevi (1766), the patron deity of the islands. The Shaikh Memon Street is reputed as one of the richest streets of Bombay. The southern half of the street is the business quaitei of rich cloth merchants, while the northern part is the Sona-Chandi (gold-silver) bazar and the bullion market. About halfway up the Kalbadevi road, stands the temple of Laxminaiayan, built in 1875 by Mulji Jetha. The Kalbadevi road has the main copper, aluminium and stainless steel vessels market (Tamba bazar) and the Cotton Exchange, apart from a few Jain temples close to the Pydhonie end. The Samaldas Gandhi Marg (formerly Princess Street), at the south end of the area built on cleared land in 1905, has a wholesale umbrella market at its last end. Tilak road along the southern boundary is a fashionable retail shopping area for a wide range of consumer goods, toys and sports goods.

Dhobi Talao: To the south of Kalbadevi Road is the Dhobi Talao area, bordering the old Esplanade in its north. The section owes its name to an old tank used by washermen. Its north-eastern part lying between Kalbadevi and Jagannath Shankarsheth (old Girgaum) roads is the old Cavel, one of the original Koli settlements of fishermen converted to Christianity by the Portuguese. Cavel is still the lane of a large number of Christians. Across the Shankarshet Road, in the north of the section, is another old area, Sonapur, that lies adjoining the Marine Lines Station. This area contains the old burial and burning grounds of the Hindus and Muslims and has the Chandanwadi crematorium. The wide area now . occupied by the Maharshi Karve Marg, the rail tracks and the Parsi, Hindu and Islam gymkhana clubs is entirely on reclaimed ground of the current century. A newly constructed fly-over leading to Samaldas Gandhi Marg connects the Marine Drive with this area.

The area as a whole has a sizable Parsi population, and Parsi fire temples.

Fanaswadi: Immediately north of the Dhobi Talao lies the Fanaswadi, originally an orchard of jack trees. Outwardly, it resembles Dhobi Talao, and has been transformed over the years from a collection of garden estates to a densely built locality. Though the area is small, it has a comparatively large number of temples, of which the best known is the Vyankatesh Shrine (called Fanaswadi temple).

With its numerous wadis a group of buildings built within walled enclosures in by-lanes, and opening out into the main street through a narrow entrance, that can be shut off at will, the area is predominantly Hindu in composition, with clear caste and sub-caste differentiation of early migrants from Konkan.

Bhuleshwar: Bhuleshwar, to the north of Kalbadevi and Pydhonie is very different in appearance from the surrounding areas. It is so called from the great temple and tank of Bhuleshwar in the south of the area. This is an area predominantly occupied by the Gujarati Jains and the Hindus and has a disproportionately large number of temples. It has a very large number of irregular, narrow and confined streets; at its north-western end is the panjarpol or the home of the diseased and aged animals. To the east of the Kika Street, the area turns steadily Muslim. Over the last two decades, the area is being improved and slowly decongested.

Kumbharwada-Khara Talao: To the north of Bhuleshwar are the Kumbharwada and Khara Talao areas, separated from each other by the Maulana Azad Road. Kumbharwada is occupied largely by the poor people. In the north of the area, adjoining the Maulana Shaukat Ali Road is the Northbrook Garden and the former site of Two Tanks. The Khara Talao area is essentially Muslim quarters and contains nine mosques. In its southern parts between the Sardar Vallabhbhai Patel Road and the Erskine Road is the Null Bazar opened in 1867 and so called from the fact that the main drain of the city flowed past this place on its way to the Worli sluices in the past.

D. Ward : The D ward lies to the west of C and E wards and covers the western prongs of a ridge that juts into the Back Bay as the Malabar Hill. It comprises the Khetwadi, Girgaum, Chaupaty areas lying at low level at the head of the Back Bay and the Walkeshwar-Malabar Hill and Cumballa Hill and Mahalakshmi. It consists of an upper class residential area in the hill slopes and the western shores, facing the open sea and the middle income, old residential areas on lower ground to the east of the hills.

Khetwadi and Chaupaty: These areas constitute essentially a residential Maharashtrian Hindu locality. About 1838, the area commenced to attract population and developed rapidly, after the construction of the Falkland and Sardar Vallabhbhai Patel Roads, and the reclamation at Churchgate. The Chaupaty section contains remnants of the oarts that once covered the whole locality, while the sea-face occupies the site of the old Lakdi Bundar. The Wilson College and the Bharatiya Vidya Bhavan and the old Portuguese Church are the most noteworthy buildings in the area. The Chaupaty section, apart from its attraction to the people of south Bombay through its sandy beach, also is a centre of entertainment, with a large number of cinema houses, around the Opera House area. It has the main automobiles accessories and electrical and electronic goods markets, and is an area crowded by practising medical specialists.

Girgaum: The Girgaum area to the south-east of Chaupaty and south of Khetwadi has developed on old settlement sites: Borbhat, Mugbhat, and the Girgaum village (Khotachi Wadi) are its original nuclei. Along the main road, over the decades, has developed a retail shopping front, like the Chira Bazar.

Walkeshwar-Malabar Hills: To the west of Chaupaty and south of the August Kranti Marg (Gowalia Tank Road) are the areas of Walkeshwar-Malabar Hill. It has long been famous for the village and temple of Walkeshwar and the Governor's residence at the south end, adjoining the Malabar Point. Towards the north end of the hill are situated the Malabar Hill reservoir and the Hanging Gardens over it, the Kamala Nehru Park and the Parsi Tower of Silence. Standing here, one gets a splendid panorama of the Chaupaty beach at its foot, the 'Queen's Necklace' formed by the Marine Drive, and the distant sky-scrapers and spiraling landmarks in the south of the city, as well as a picture mosaic of the nearby Hindu township, the farther harbour bay and the docks. Looking northwards, the towering chimneys over the roofs of buildings bear witness to the industrial character of the central parts of the city.

There were houses on the Malabar Hill occupied by the Englishmen as early as 1788, but its growth as an upper class residential zone dates from the time the Governor shifted his residence from Parel to the Malabar Hill. The occupants are mostly businessmen, and government officials. The Laxmibai Jagmohandas Marg (formerly Nepean Sea Road) to the west of the hill and at its foot, facing the open Arabian Sea, is a still developing posh residential area in this section.

Mahalakshmi: The Mahalakshmi section, to the north of Walkeshwar and west of the Western Railway track comprises the Cumballa Hill area, the foreshore adjoining it to the west, and the Tardeo area on lower ground. It has the double character of a upper class residential and a middle class quarter, the former occpuying the summit and slopes of the Cumballa Hill and the Foreshore, namely the Bhulabhai Desai Road, and the latter the level ground to the east of the hill. The area had a few old mills, but some of them have been replaced by modern shopping complexes. Places of interest in the section include the Mahalakshmi temple at Breach Candy, that occupies the site of the three old temples destroyed by the Muslims, the Haji Ali Tomb in the sea, reached only during low tide, the Mafatlal Park and Breach Candy swimming pool and the Willingdon Sports Club. The area has quite a few hospitals, and specialist clinics around the Kemp's Corner fly-over and many quiet but posh residential localities. The population of the area is quite

mixed in character, though predominantly Maharashtrian. The biggest cluster of Parsi population in the city lies in this section

E Ward: The E ward is south-central Bombay bounded by the Western Railway between Grant Road and Mahalakshmi stations in the west, the Sane Guruji Marg and the Dattaram Lad Marg in the north, the Reay Road and the Mazagaon docks in the east and the Maulana Shaukat Ali Road and Ramchandra Bhat Marg in the south. Most of the E ward excluding Mazagaon, an original island on a low hill, is on reclaimed ground from below sea level in the central lagoons of the original island cluster. The area being barely a metre or two above sea level and sloping westwards to the Hornby Vellard and Love Grove sewerage pumping station is liable to inundations during the heavy monsoon downpours. The area is part of the early reclamations of the eighteenth century and the site of the early mill industry. Even today the area is essentially characterised by the presence of numerous mill blocks and the mill workers' tenement colonies nearby. The sections contained in the ward include Tardeo, Kamathipura, first and second Nagpada, Ghodapdeo, Mazagaon and Byculla.

Mazagaon-Tarwadi: The Mazagaon section extending between Wadi Bundar and Clerk basin in the south, the Kala Chowkie Road and the cotton godowns in the north, and lying east of Shivadas Chapsi (old Mazagaon Road) Marg and Rambhau Bhogale Marg (old Ghodapdeo Road) upto the water front, is in its present form largely the outcome of the extensive harbour reclamations. Around the Bhandarwada hill water reservoir in the south-west still cluster remnants of the original village, which formed a part of the manor of the Tavoras in the seventeenth century. The original Portuguese village in this section was beautifully situated on the slope between two hills, on one of which was the Mazagaon house, a landing mark in the harbour. It had an excellent dock for ships and was adorned with two handsome churches, and the village itself was noted for its quality mango orchard. The remnant of the hill top, lying to the west of the Dockyard Road Station is at present occupied by the Baptista Gardens.

The northern half of the section is cut diagonally by the Reay Road. To the east of it, much of the land belongs to the Port Trust, with its, ship repairs and building yards of the Mazagaon docks, the Port Trust offices, and a number of industrial units like the Mahindra and Mahindra, Pfizer (Dumex), and others. The extreme north of this section, to the east of the harbour railway is occupied by the cotton godowns and grain depots of the Port Trust.

The Tarwadi section that lies to the west of the Reay Road and east of Babasaheb Ambedkar Road is partly an industrial area and partly low income residential quarter. It is full of cotton spinning and weaving mills, specially north of Sant Savta Marg (old Connaught Road). The Veer-mata Jijabai Bhosale Udyan (former Victoria Garden) with its zoo and museum in this area is an important attraction to the tourists. South of the garden, around the Gloria Church is a Christian locality, with pockets of Parsi estates. The area has a few old bungalows within wide compounds, a left over of the bygone colonial days.

First and Second Nagpada Areas: The first and second Nagpada sections are divided by the Jamshetji Jijibhai Road from each other, but are really one area bounded on the south by the Maulana Shaukat Ali and Ramchandra Bhat Margs, on the west by the Maulana Azad Marg, on the north by the Sheppard Road and on the east by the Mazagaon Road. The whole locality approximately represents the limit reached by the inflowing tides before the Hornby Vellard was built and was one of the most insanitary areas of the island until the City Improvement Trust developed it. Even today, during heavy rains, the area is liable to extensive inundations. The First Nagpada section to the east of Jamshetji Jijibhai Road is essentially a complex of the Sir J. J. Group of Hospitals and the Grant Medical College, besides housing the Richardson Cruddas of India Ltd., a structural engineering factory unit.

The Second Nagpada section is mainly resid<mark>ential with a number of industrial</mark> tenements, built along straight running roads by the City Improvement Trust in the earlier decades of this century.

Kamathipura: The Kamathipura section forms an almost perfect rectangle, bounded by the Maulana Shaukat Ali Road, the Maulana Azad Road, Jehangir Boman Behram Marg and the Suklalji Street. Until 1800, the area was liable to periodic tidal flooding by the sea water, and in spite of considerable artificial raising of the ground level by the municipal authorities, is still somewhat low-lying and an endemic area for water-borne diseases. The section earns its name from its being the original settlement of the Kamathis, a labour community who had settled in the area after migrating from the Telangana districts about the end of the eighteenth century. It is a crowded area, occupied mostly by low income group of residential population in old chawls. In its southern part, the area has a few mosques.

Tardeo: The Tardeo section lying between the Western Railway tracks, Suklalji Street, Maulana Shaukat Ali Road and Boman Behram Marg is almost a rhombus cut diagonally by the Falkland Road and the R. S. Nimkar Marg (old Foras Road). It is mostly reclaimed land forming a part of the original Byculla flats much of which were let at a low rental by the Government in earlier times on condition that the lessees reclaimed and improved the ground. The section used to be full of stables and was the former house of the Arab horse dealers. Today, it is essentially a mixed residential area, with Parsi apartments around the Guilder Lane and Boman Behram Marg, industrial chawls and tenements to the east of Bhadkamkar (Lamington) Marg and north of Nimkar Marg. Along the main roads, especially the widened and straightened Bhadkamkar Marg and to a lesser extent the Maulana Shaukat Ali and Boman Behram Marg, considerable urban renewal is taking place, with the older, dilapidated two storeyed structures being replaced by the more modern, multi-storeyed R. C. C. structures. These main roads, over the years, have developed a mixed retail shopping front, catering to the needs of the local resident population.

Byculla: The Byculla section between the two suburban rail tracks, and to the north of Tardeo extends upto Kala Chowkie in the north. As in Tardeo, the original level of the land has been artificially raised, and the disadvantages arising from natural circumstances and from a huge lower class population are minimised by the six thoroughfares cutting through the section and emerging at the Gadge Maharaj Chowk, formerly known as the Jacob's Circle, and known prior to 1880 as the central station. This is essentially a mill area, with a concentration of spinning and weaving mills, and other factories and associated industrial workers' tenements. In the south, there used to be a number of stables in the past. The original Byculla Club was in the south-west of the area in front of the original race course. This area, especially around the Bombay Central Station and the Boman Behram Marg has been undergoing a face lift in the recent years. The Nair Group of Hospitals, the State Transport bus terminal and a number of private clinics and a cinema house are located in the area, part of which was in the past occupied by the Byculla Club. Further north, along the Sane Guruji Path aie located, across the road, the City Jail and the Kasturba Memorial Isolation Hospital.

F Ward: The F ward is a large ward that lies to the east of the Central Railway track, from Chinchpokli Station northwards. It covers the whole of the north-eastern quarter of the city peninsula. It comprises the Parel, Sewri, Naigaum, Matunga and Sion sections. While the southern parts of the ward are older residential area, the northern parts have been occupied only in the recent decades. There is also a more basic distinction between the north and the south of the ward. The southern part is mill area, with low income industrial chawls abounding, and is predominantly Maharashtrian. The north is middle income apartments area.

Parel: The Parel section is bounded by the Central Railway track between Chinchpokli and Parel stations in the west, the Jagannathrao Bhatankar (Elphinstone) Marg and Jerbai Wadia (formerly Bhoiwada) Road in the north, G. D. Ambekar Marg (formerly Parel Tank Road) in the east and the Dattaram Lad Marg in the south. The original nucleus

was a small village that still exists in the north-east of the section. The village, an old shrine or two and areas like Bhoiwada are the only legacies still remaining of the time when Parel was first chosen as a settlement by the followers of Raja Bhimadev. Parel village was the original Brahmin settlement of the mediaeval period. In the early British colonial period, this part of Bombay served as an area of country villas and residences. The old Government House, the Governor's summer resort, now houses the Haffkine Institute, a leading bacteriological research laboratory of the country. Today, Parel is a huge industrial quarter, having the heaviest concentration of the cotton textile mills, apart from the Central Railway workshop. The residential population is mainly mill-workers, housed in mill-owned or City Improvement Trust built industrial one-room tenements, with wooden balustrades overlooking the main street. Most of these two-storeyed buildings are a century old and are in a state of hopeless disrepair.

The Dr. Babasaheb Ambedkar Marg (formerly Vincent Road) running north-south splits the area into two, the western half being essentially industrial. The area to the east of the road is more open, with a number of parks and playgrounds, and further in the quiet interior, houses a huge complex of general hospitals, like the King Edward Memorial Hospital, the Tata Cancer Hospital, the Veterinary Hospital, and the associated medical and veterinary colleges. Notwithstanding modern industrial progress, this area still presents a country aspect.

Sewri: The Sewri section lies adjoining Parel to the east, and extends upto the harbour front. Till recently, most of it was unreclaimed, marsh and salt pan area. Much reclamation has been done since the thirties of the present century in the area, and is mostly built up today. The section falls into two parts, divided roughly by the harbour branch of the Central Railway. To the west of it, the southern part is an old mill area with its attendant chawls. Abhyudayanagar is a recent development block of an old slum area. Further north is the Sewri cemetery, once the garden of the Bombay Agri-horticultural Society.

To the east of the railway, much land is reclaimed and owned by the Port Trust. Immediately adjoining the railway to its east, are the Port Trust railway sidings and yard, the cotton and grain depots. Further east along the shore, are a number of factories like the Tata Oil Mills, motor tyre works, Hindustan Lever factories and the Nautical College. Further northwards, close to the Sewri station is the old Sewri village, and nearby the ruins of the Sewri fortlet on a low quarried hill. Adjoining are the timber pounds, a cement factory, the Port Trust offices, and the Shaparia dock and steel company. Nearby are the last leftover vestiges of salt pans, that are fast disappearing all around Bombay.

Naigaum: The Naigaum area lying roughly between Parel and Dadar stations on the Central Railway side is an old residential area and is at present the home of a number of cotton mills and B. D. D. chawls of mill workers. Infact, Naigaum is practically the northern limit of the mill area on the eastern side. In the east, around the old village of Wadala, are the newer developments of residential flats and the Government grain depots.

Matunga: The Matunga section extends between the Dadar Khodadad Circle in the south and King's Circle station and adjoining railway over-bridge in the north. Matunga, till the beginning of this century, was a wilderness, and is believed to have been the site of the elephant stables of King Bhimadev in the mediaeval period. At the turn of this century, this was a pleasant area with a few country villas and residences set in green surroundings. In the twenties, the Parsi colony and the Five Gardens area were laid out, and shortly after, the Hindu colony adjoining it. The rest of Matunga area was developed mostly in the forties. The relatively recent period of development of this area is reflected in the wider main roads, neatly laid out streets, buildings erected within compound walls, and the lay-out of a number of gardens. Matunga at present has a cluster of educational institutions like the Victoria Jubilee Technical Institute, the University Departments of Chemical and Textile Technology, arts, science and commerce colleges.

Sion: The Sion section includes all the area that lies north of the King's Circle railway station, and east of the main suburban rail track of Central Railway as well as a narrow strip of land on the side of the harbour branch of railway, south of King's Circle upto Wadala station. It includes the present day Sion, Koliwada, Matunga-Wadala estate and the Antop Hill area. The whole of this area in the earlier part of this century was a desolate waste of salt pans guarded by the bare hills of Antop, Raoli and Sion. The original settlement of the Kolis was close to the Sion hill, which carries the ruins of an old fort even now. Barring the Leper Asylum in green surrounding in the south of the area, and the military barracks built during the Second World War, the area had practically no habitations. The City Improvement Trust could plan on a clean slate the development of this area, under planned development schemes, by reclaiming land under salt pans, levelling the rock outcrops and quarrying the hill slopes, and by lay-out of wide main roads and straight streets taking off from them. Though the development was initiated in the forties the pace of growth was rapid mainly in the fifties and sixties, with the aid of Sindhi builders, who had made a large influx in these years. The area is a middle income residential zone with apartments housed in three to four-storeyed buildings. The King's Circle-Sion road culmination at the Rani Laxmibai chowk at its north end splits Sion into a western and an eastern counterpart, the western part housing the Lokmanya Tilak Hospital complex and a few educational institutions. Close to the King's Circle Station is a huge auditorium, the Shanmukhananda Hall.

G Ward: The G ward, to the west of the F ward covers the north of the city peninsula to the west of the Central railway main line. It comprises six sections—Mahim, Prabhadevi, Dadar, Worli, Chinchpokli and Love Grove. The ward is partly mill area, and partly residential, but predominantly Maharashtrian. It is an old settled area, developed over the original islands of Baradbet (Mahim) and Worli, and the reclamations adjoining.

Mahim: The present day Mahim section extends as a narrow ribbon along the Mahim Bay, and includes all areas to the west of the Lady Jamshedji Road from the Mahim Causeway and the N. C. Kelkar Road. It lies on the original island of Mahim, that is an old stabilised sand bar, and was the location of the mediaeval Hindu township of Mahikavati of King Bhimadev. Apart from the ruins of an old fort at the northern tip, overlooking Bandra in Salsette, an old Muslim mosque dating to pre-Portuguese days and a Koli hamlet, the area, till the thirties of this century, was an extensive coconut grove, with a few country villas set in them. The area had quite a few tanks. Development by the City Improvement Trust was in two phases: the layout of the Shivaji Park scheme of 1929 and the Mahim town planning scheme of 1950. The area is essentially occupied by lower middle income residential population. The north, on either side of the Veer Savarkar (old Cadell Road) Marg is quite congested, but the area is more open around the Shivaji Park, which is the main 'meeting' ground of North Bombay for public functions. The swimming pool nearby, and the Mahim beach are the main attractions of the area.

Dadar: The Dadar section, to the east of the Mahim section, and north of Dadar railway station includes all the area lying between the Central and Western rail tracks as well as the area to the east of the Lady Jamshedji Road. Apart from the ruins of the Kala Killa (Rewah fort) on the Mahim creek area, it was originally an extensive low-lying marsh. Between two railway tracks is the Central Railway wagon workshop, while further north is the Matunga labour colony, and Dharavi slum adjoining the Mahim creek. The whole area is undergoing a face-lift in the present times with slum clearance schemes, and a main road traversing the area east-west connecting Mahim and Sion through two overbridges. The area to the west of the Western Railway track developed in the sixties is essentially lower middle income residential, though two mills are found in the area.

Prabhadevi: The Prabhadevi section lying to the west of the rail tracks but east of Veer Savarkar Marg is an old congested area densely populated. It is the site of an old settlement of the Prabhus, who settled during the days of the

King Bhimadev, and built a shrine for their patron-deity, Prabhadevi, in whose name the area is still so called. The Gokhale Road (south) splits the area into a western and an eastern half, the western part having a few mills and chemical industries, and residential area. The Ravindra Natya Mandir is located here. The eastern part holds the main middle income retail shopping area, close to the Dadar station, which attracts people from all over North Bombay and the suburbs. This part has been cleared and developed mainly in the fifties and sixties and houses a few industrial estates

Worli: The Worli section includes an old Koli hamlet, and the fort nearby on a headland jutting into the Mahim Bay. The old Worlihill has been mostly quarried and levelled, and has become built up with a huge Housing Board building complex of the middle income population. The Dr. Annie Besant road splits the area into a residential western half and a huge cotton mill area and a large complex of B.D.D. chawls and Television Centre. A number of pharmaceutical industries are located along the Dr. Annie Besant Road, apart from the Century Bazar at its north end.

Chinchpokli: This section bounded by the Ganpatrao Kadam (old Fergusson Road) Marg in the north, the Dr. E. Moses Road in the west, and the Sane Guruji Path (Arthur Road) in the east is roughly triangular area, that is low-lying and liable to monsoon flooding every year. The central part is railway land, housing the Western Railway wagon and carriage workshop. The rest of the area is a factory zone, and the accompanying lower income tenements in chawls. The area has an old Jewish cemetery, and a municipal Dhobikhana adjoining the Gadge Maharaj Chowk (Jacob Circle),

Love Grove: The Love Grove section extends from the Haji Ali in the south to the Acharya Atre Chowk at the junction of the Annie Besant Road with E. Moses Road. The area in the south is very low-lying and marks the last breach to be filled up in the amalgamation of the original seven islands with the construction of the Hornby Vellard, now known as the Lala Lajpatrai Road. The Bombay Race Course occupies an extensive area in the keel of this depression. Closeby are the Patel Stadium, the National Sports Club of India, and the newly erected Nehru Planetarium. Further north, over the old Worli hill area, now quarried and levelled is sited the Worli milk dairy. The south end of this hillock projecting into the small Worli Bay, and housing old bungalows, has been converted in recent years into the Shivsagar estate, a huge complex of multi-storeyed structures housing commercial firms and banks. Along the sea front has developed the Worli Sea face, an upper class apartment area, somewhat similar to the older Peddar Road complex.

Love Grove section is a curious mixture of residential zone, of the rich and the poor, with a huge slum area around the Love Grove sewerage pumping station right in front of the Worli seaface upper class apartments.

The suburban divisions include 8 municipal wards, namely H, K, P and R on the western side, and L, M, N and T along the eastern. These wards are relatively larger in size compared to the city wards, though they vary in population considerably.

H Ward: The H ward area, itself divided into a western and an eastern part roughly along the Western Railway track, comprises areas lying north of the Mahim Bay and creek, to the west of the Kurla-Mahim creek and south of the city airport and flying club. The built-up area is developed over the old island core of Bandra lying at the head of the Mahim Bay. It comprises low hills in the west, jutting south into the Bay, and low-lying tidal marshes in the east along the creekside, that have been progressively reclaimed in the last few decades.

The original settlement nuclei consist of a few fishing hamlets like Bandra, Chimbai, Danda and Kole-Kalyan as well as others like Pali, Mala, Sharli, Chui and Vakola. Most of these were Koli settlements. These settlements came under the influence of the Portuguese early in the sixteenth century. The Portuguese made Bandra, the headquarters of a Thanedar, who was in charge of 65 villages, they also established a Jesuit college and a couple of churches. The St. Andrew's Church (the present one is built on the same site as the old one) was the earliest to be built in 1575 close to the seashore and was followed by the Church of St. Anne about 1620 on the site of the present Bus Depot. This latter church was built close to the landing point of the Bombay-Mahim ferry. The chapel of Nossa Senhora de Monte, or the Church of Mount Mary, as it is more popularly known, was built on the crest of the Bandra Hill around 1640 for the use of the garrison of the Agoada or blockhouse. It was rebuilt in 1761 after its destruction a few years earlier by the Marathas. Around 1750 was built the Church of Our Lady of Egypt in Kole-Kalyan mainly to cater to the local Christian population.

During the early days of the East India Company, the Bandra Jesuits could not see eye to eye with the Company, and repeatedly conflicts arose between them and the Company authorities as well as the Siddis of the mainland. This resulted in the Bandra settlements being subjected to invasions and the churches to plundering. The Church of St. Anne was completely destroyed. Finally, in 1774, Bandra came into British possession. The St. Joseph's convent and orphanage as well as the St. Peter's Church and its St. Stanislaus orphanage were added during the British period in the nineteenth century.

The opening of the Lady Jamshedji causeway in 1845 across the Mahim Bay brought Bandra much closer to Bombay, and the opening of the Western Railway track and Bandra station in 1864 gave further impetus to the growth of Bandra. A small township slowly emerged during the second half of the nineteeth century at the head of the causeway. With two main roads, one skirting the shores east to west, and another running northwards to the east of the settlement, the township had a municipal market, fishing hamlet and landing point along the shores, and storeyed houses of the native Christians away from the shores and up the slopes. The Bombay municipal slaughter house was built in 1867 on the low ground adjoining the site of the landing place of Bombay ferry, where the chapel of St. Anne stood. A number of tanneries had shifted earlier from the city fringes to the marsh-side to the east of the railway tracks, as the city started spreading north.

The present day H ward comprises the areas of Bandra, Khar-Pali, Danda, Santacruz, Vakola, Kalina and the newer Bandra reclamations on which are built the M.I.G. housing colony and Kalanagar. Bandra still retains much of its original character. The slaughter house has been recently shifted to Deonar and modernised. Khar was developed as a quite cosmopolitan 'model' suburb during the late forties and fifties of the present century under the town planning schemes, and is a cosmopolitan middle income residential area of the commuting salaried blue and white collar workers. Danda continues to be a fishing hamlet, while the heights of the Khar-Pali hill complex is undergoing rapid urban renewal and replacement of the single storeyed and tiled structures as well as villas by the multi-storeyed sky-scrapers housing the city elite like artists and businessmen. Santacruz is essentially a middle class suburb of commuters, while Kalina owes its present day fillip in growth to the location of the airport functions inclusive of its workshops in the area, the housing colonies of the airport workers, and the location of the Bombay University Campus, apart from a limited mixed industrial development along the Vidyanagari Marg.

K Ward: The relatively large K ward extends from the airport area northwards upto the Malad creek and the Oshivare *nala*. The Aarey Milk Colony partly forms its northern limits. The built-up area has developed over the south-western lowlands of the original Salsette island, the sandy shore islands of Juhu and Versova and the tidal marshes in between, that have been subsequently reclaimed. Madh across the Versova creek is also included in this ward.

A number of old fishing hamlets like Tara, Juhu, Veisova and Madh as well as agricultural villages like Irla, Parle,

Bamanwada, Sahar, Marol, Chakala, Oshivare, and Ambivli were the original settlement nuclei around which the present day suburban townships have grown. The present day sections of the ward include Juhu, Vile Parle, Andheri, Jogeshwari, Versova, Madh and Marol. Vile Parle, like Santacruz, is a middle income housing area. Some industrial activity is noticeable along its fringes, like the Parle Products Ltd. and the Golden Tobacco Company. Andheri is more mixed in character. East Andheri, Sahar, Chakala, and Marol are part of the newer industrial areas of Greater Bombay, developed since the fifties. A heavy clustering of small and medium sized engineering units, chemical factories, film studios and consumables production units has taken place along the Andheri-Kurla link road. The erection of the Santacruz Electronic Exports Promotion Zone (SEEPZ), and the Marol industrial estate area, both in Marol, have added considerably to the industrial importance of the area. Andheri West mainly comprises a number of Housing Board and private cooperative middle income housing colonies that are steadily pushing into the marshland. Juhu is the holiday-cum-picnic resort of Bombay with bathing beaches, holiday homes of the elites with private swimming pools set in the midst of cocoanut groves, and better class hotels. Closeby is emerging a posh, sophisticated upper class residential area of the villa type as a planned development over the Juhu reclamations. Jogeshwari is essentially a mixed residential area. A huge squatter's colony has developed on its eastern section in the foothills, nearby the archaeological ruins of Jogeshwari cave. Versova and Madh still retain their fishing hamlet function, though holiday crowds visit these areas in large number.

The ward as a whole is residential, though industrial function is being added to it, especially on the eastern side.

P Ward: The P ward lies north of K ward extending upto the western seashores right from the central hill ridge of Salsette. Like the K ward, it includes the western lowlands and foothills (in the central parts) of Salsette, the old shore islands of Malawani, Madh and Gorai-Uttan, the latter two in parts. The present day sections include Goregaon, Malad, Aarey and Marve-Manori. A large number of the old settlements have now become submerged in the suburban townships of Goregaon and Malad, but their original sites can be readily identified by the quaint appearance of the built-up area. Manori, Erangal, Marve, Daroli and Akse among them were fishing hamlets, and still partly retain this character. Malawani, Valnai, Chincholi, Charkop, Pakhadi, Dindoshi, Maroshi, Aarey and Kurar have become completely urbanised. The eastern parts of the ward lying in the foothills have been transformed into a protected green under the Aarey milk colony, and houses the dairy plant of the city, the Dairy Technology Institute, the Government owned bakery, a cattle-feed processing plant and recreation grounds. On either side of the Western Railway track, and closeby to it have developed a number of middle and low income housing colonies, forming a number of *nagars*: the newer ones are further away from the rail head invariably on low, reclaimed ground. The coastal fishing hamlets maintain a semi-rural character. Though the ward as a whole is residential, a slow invasion by industries is taking place along the Western Express Highway, during the present times.

R Ward: The R ward lies along the northern limits of the Corporation area, to the west of the hills. It includes the modern Kandivli, Borivli and Dahisar areas, apart from the coastal villages of Gorai and Kulvem. The old settlement core still survives, though submerged in the townships, in Kanheri, Magthan, Akurli, Poisar, Shimpoli and Mandapeshwar. The National Park, a green belt on the fringes of the Corporation area, and the archaeological remains of the Buddhist caves on the slopes of the Kanheri hills, attracting large holiday crowds, lie in the east of the ward. The rest is residential in character, although still large open spaces are available for urban building. Along the Express Highway, a number of industries and industrial estates are springing up at the present times.

L Ward: The L ward is a long, narrow strip of an area, elongated north-south, extending from the Mahim creek to Powai lake. It includes Kurla, Chunabhatti, Saki, Chandivli and Asalpe areas. It is a mixed industrial-cum-low income residential area. Two old textile mills in the south of the area, the Premier Automobiles and Kamani Engineering Works in the middle, the Larsen and Toubro Engineering plants near Powai and a large number of small and large sized engineering units, inclusive of automobile accessories, silk mills and glassworks contribute to the industrial importance of the ward.

M Ward: The M ward covers more or less the area of the original Trombay island, now a protruding peninsula 6f Salsette through reclamation of the intervening tidal marshes. The area has a hill core and a number of foot-hill villages like Chembur, Mahul, Anik, Maroli, Deonar, Trombay, Nanole, the population of which in the past used to earn their living through fishing, salt making and paddy farming. The southern and eastern parts lying south of the hill complex forms a protected and restricted area housing the Bhabha Atomic Research Centre, oil refineries, petrochemicals, fertiliser plant, thermal power plant and associated industrial assemblage. Chembur in the last three decades has developed fast to emerge as a large and thriving middle income residential area of service seeking commuters, with its own shopping complex and social amenities. Chembur is growing mainly eastwards along the Trombay road to engulf Deonar, Govandi and Mankhurd into the township. Close to Mankhurd station, at the foot of the Trombay hills, on its northern flanks is developing a neighbourhood colony of Anushaktinagar, housing the staff of the BARC. Chembur-Deonar residential area is the home of prestigious institutions like the Tata Institute of Social Sciences, and the International Institute of Population Studies. The modern abattoir, replacing the old Bandra slaughter house is located near Govandi station.

N Ward: The N ward lies north of M ward and east of L ward, and extends from the central hill ridge eastwards upto the Thane creek. The old village cores are Kirol, Powai, Kanjur, Bhandup and Haryali. Bhandup finds reference as an important settlement during the mediaeval Hindu period. The present day sections included in the ward are Ghatkopar-Rajawadi, Vikhroli and Bhandup. The Central Railway runs along the length of the ward, splitting into a western and an eastern part. The Lai Bahadur Shastri Marg, running parallel to the railway and to the west of it; and the Eastern Express Highway, recently constructed on reclaimed ground to the east of it, more or less demarcate the limits of built up area. To the east of the Eastern Express Highway, it is still tidal marshes mostly, and the last vestiges of the Bhandup salt pans are more or less on the way out. The area to the east of the railway is more residential while a few large factories have come up; here have spring up in the last decade numerous middle and low income housing colonies and nagars on low, reclaimed ground. Of them, Ghatkopar-Rajawadi is better class, while Vikhroli and Bhandup have low income housing and squatter colonies, constituting large slums.

The area lying between the railway and Lal Bahadur Shastri Marg has developed into a ribbon of industrial area, mainly of light engineering, chemicals, pharmaceuticals and cosmetics, and associated low income housing colonies. Heavy congestion of the truck traffic on the main roads, and overcrowded living mark the area.

T Ward: The T Ward lies along the northern fringe of the Corporation area. The western half is mostly in the wooded hills that carry the Tulsi and Vihar lakes. Barring a few villages like Tulsi, Vihar, Sai and Gundgaon, the area is the last left-over of the wilderness not yet ravaged by the urbanite. Along the railway has developed the township of Mulund, on either side of the tracks, and owes its growth partly to its proximity to the adjoining Thane industrial belt.

URBAN MORPHOLOGY AND LAND USE

Certain salient elements stand out in the urban morphology and land use of Greater Bombay. The old pre-British, preindustrial core area stretches over Girgaum, Khetwadi, Bhuleshwar, Thakurdwar, Umarkhadi, Mandvi and Mazagaon. Morphologically, these areas are characterised by narrow main streets, widened to an extent in the recent past, crooked gullies and lanes, interwinning, old buildings with wooden balustrades overlooking the streets, high ceilings, and groupings into *wadis* and localities enclosed within a compound of high wall with a single entrance. The *wadis* are socially homogenous. The built-up areas practically consume the whole area, and there is little space devoted to open grounds, parks and recreation centres.

The city centre located in the Fort area is essentially a zone of administration, business, finance and wholesale trade. Recreation, higher education and hotels also find a strong localisation in this zone. The Fort houses most of the State and Central Government offices, offices of the railways, banks and business houses as well as those of airways, inland and overseas communications. The streets are relatively broad and straight and reveal a grid pattern within the old Fort areas. A small residential core of retail shopkeepers still persists as a pocket within this region, to the south of the railway terminal at Victoria Terminus. The eastern sections of the Fort, adjoining the water front has a cluster of business houses and offices handling port functions, and is skirted by streets dominated by banking. On the western side of the Fort, on newly reclaimed ground, are the only vast open grounds of South Bombay, the Azad, Cross and Oval lined on their edges by administrative offices.

To the south of the Fort, the retail shopping-cum-residential ribbon extends south along the Colaba causeway and ends rather abruptly in the low density residential zone, occupied by the Defence services in South Colaba.

The zone of contact that lies between the Fort, Girgaum, and Mandvi, namely the Dhobi Talao, Princess Street, Market areas, has retained its historical tradition of being the main area of wholesale and retail commerce. This shopping function extends in ribbon like extensions into the old core along the main roads. Street and road-wise differentiation and specialisation in shopping patterns is discernible e.g., hardware in Lohar Chawl, stationery in Abdul Rehman street, jewellery in Zaveri Bazar, leather work around the Phule Market, etc.

The elevations of Malabar, Walkeshwar and Cumballa hills house the upper class residential buildings in rows along different levels. The airy, western aspect with abundant sea breeze, proximity to the city centre and yet an aloofness from the congested old core have been responsible for attracting the upper echelon of society like businessmen, financiers and top level administrators to the area. Much urban renewal in the area is evident; villas set in the midst of a rich green are being fast replaced by skyscraper buildings housing flats. Along the Back Bay, this upper class residential zone descends to a promenade of monotonously uniform multi storeyed apartment structures—the Marine Drive housing upper middle society. The south end of Marine Drive, close to the administrative area, houses the diplomatic enclaves of Cuffe Parade, and further beyond along the Foreshore road adjoining the newer reclamations of Back Bay is another zone of skyscrapers, just emerging and fast changing the skyline. This again is mainly upper class residential. The upper class residential zone of Cumballa Hill descends in the north to the Hornby Vellard and extends beyond along the Worli seaface in a residential zone very similar to the Marine Drive.

The eastern, water-front extending from the Fort, northwards right upto Sewri-Wadala hums with port functions. Docks and wharves, warehouses and godowns and associated auxiliary functions characterise the area. Here, life runs on a clockwork and bulk-handling basis. The roads are congested with a heavy truck traffic.

To the north of the old residential core is a bowl of depression, on ground reclaimed early in the phases of development of Bombay. The lowest levels of this depression adjoining the Hornby Vellard has been converted into the Race-course. Elsewhere, this area extending as far north as the other old nuclei of North Bombay—Dadar, Naigaum is the zone of the textile industry. The skyline is dotted with the smoking chimneys of factories all over. While large areas are enclosed within the compound walls of textile mills, this zone records fairly high population densities, because of the presence of a large number of industrial workers' tenements, ehawls, many of which are housed in dingy old dilapidated structures with limited amenities. This is par excellence the labour area of Bombay.

The northern sections of the city island extending from Prabhadevi in the west to Wadala in the east, Dadar to Mahim and Sion is a middle class residential area, developed during the forties and later, submerging the old village course. The roads are better aligned and wider and the houses are generally three-storeyed. Unlike the older residential zones of South Bombay, North Bombay can boast of more open space, parks and greens.

Beyond the Mahim Creek, along the "Western Railway and the Swami Vivekanand Road lie a succession of residential suburbs that have received and housed the population of middle income, service seekers. In the setting of these residential suburbs, some differentiation is noticeable, better suburbs on high grounds like Bandra, Pali Hill and Khar are the recipients of an upper strata of society, and such areas reveal considerable urban renewal in the suburbs and fast changing skylines. Middle and lower income housing colonies are strung all along the railways and on newly reclaimed grounds. Depressions, low-lying areas and creeksides house hutment dwellers. Though principally residential, these suburbs have been invaded at several points like the CST Road, Kalina, outskirts of Parle and other areas by new industry.

Along the Central Railway, between Kurla and Mulund, new industrial units have developed during the last 30 years. Kurla, however, is an old textile industrial core, an outlier to the main cotton mill zone. North Kurla-Ghatkopar-Vikhroli is an automobile and light engineering zone. Further beyond, upto the municipal limits along the Shastri Marg is a zone of chemicals and drug industries, paints and inks. In these suburban areas one notes some semblance to order of the land use and attempts to segregate types of land use. Thus, in the Central Railway suburbs, lower class hutments lie mostly to the east on reclaimed land.

Between the two railways, along the link roads between the western and eastern suburbs an industrial zone has developed during the fifties and sixties. Unlike the old industrial core, the industries here are mostly small and medium in size and are housed in industrial estates like those of Powai, Marol, Saki and others. It is mainly a light engineering area, though film industry and chemicals are also present.

To the east of Kurla is a fast growing residential suburb of Chembur-Govandi-Deonar. The building of the new bridge across Thane creek to the mainland along this section is leading to a ribbon-like residential area development extending eastwards upto Mankhurd.

Trombay is a 'restricted' industrial area with a cluster of two oil refineries, a petro-chemical complex, a fertiliser plant, a thermal power unit, and the Bhabha Atomic Research Centre.

A green belt is present in the north centre, clothing the hills of the central area. Substantial part of it, in Borivli, is devoted to the National Park, and south of it is a large reserve developed by the government owned Aarey Milk Colony. Where not under such reserves, the hillsides are under demolition by the quarrying industry. Such quarry sides have extensive development of hutments.

From the foregoing review, it is apparent that the suburban electrified railway service, the new highways, alternate arteries and trunk roads, act as powerful factors contributing to the new urban sprawl expansion. The post-war

explosion of the metropolis is well reflected in the changing skylines of the city's landscape. A strong residential renewal is evident in the newer reclamations of the Foreshore zone, as well as in old core areas of urban decay.

Bombay Suburbs: Essentially a creation of the post-war explosive growth of population, sequential to the industrial and commercial expansion, the suburbs of Bombay reveal a still continuing urban sprawl in two ribbons northwards along the two railways. The suburban form broadly reveals the following elements and areal patterns: the original nucleus is a detached social *pada*, that has retained in most cases its anomalous co-existence with modern structures, that .submerge the nucleus. The initial development is somewhat planned, but has often subsequent unrelated, unplanned extensions. Retail shopping and hawking cluster around the railway station, the entry points on which expansion of the entire commuting population daily. Industrial extensions are peripheral, in open sites, but with the expansion of the suburbs get engulfed. Slums and hutments mark their limits along the low ground by and large, the suburban development is lop-sided, lacking in social and civic amenities.

Industrial Landscape: The unchecked and piecemeal growth of the city over last few decades to meet the growing needs of industries, commerce and port functions, and the growing population have resulted in a 'snow-balling' effect of its functions, though some functional zoning is visible. Industries have spread all over the city island, and have penetrated deep into the suburban zone.

The textile mill industry, with a bias towards weaving, has found a suitable localisation in the Parel-Mahalaxmi-Naigaum zone. The old core of oil mills and engineering units including machine building survives along the eastern outer front, particularly between Sewri and Mazagaon-Dongri. Industrial congestion and acute shortage of space have led to the recent expansion of the industrial landscape in ribbons along the main arteries and link roads of the suburban zone. Ready access to the rail yards, a relatively greater freedom of movement in the main roads, cheaper availability of land and nearness to the water and power mains have aided the rapid expansion of the industries in the suburbs. These newer industrial areas show a greater degree of differentiation according to types and their associations of auxiliary industries. North of the old textile core of Kurla, and adjoining the Kurla rail yard, automobile engineering and electrical engineering industries have found a localisation. A zone of light engineering extends further along the Central Railway and Agra road upto Vikhroli, while beyond Vikhroli, right upto the municipal limits in Mulund is an area of light chemicals, drugs and pharmaceuticals and associated industries like cosmetics. Large power and water absorbing industries, mostly medium sized engineering units like machine tools have developed along the Andheri-Kurla link road and Powai lake area, particularly in Marol, Saki and Powai. Film industry has a localisation along the fringe of this zone. Western suburbs, essentially residential, have so far withstood the penetration of industries in them barring a limited development of food processing industries, such as soft drinks and confectionery. It is only during the last decade that some industrial expansion, once again of engineering industries, is taking place along the Western Express Highway, to the east of residential zone of the western outer suburbs. Most of Trombay, away from the railway, is a zone of restricted industries, such as oil refineries, petro-chemicals, fertiliser and thermal power plant. These are industries that mostly need isolation.

Two facts of significance are noteworthy in the suburban industrial development. Quite a few of the suburban industries are post-war expansions of the industrial units already existing in the city island, and their business offices are still in the city centre. Many of these industries are small and medium scale and are housed in State aided and private industrial estates. Auxiliary and associated industries develop together under the same roof in such estates.

Greater Bombay, as a whole, has about 6,048 factories, engaging 6.4 lakh workers. The textile units are the main employers of the industrial labour accounting for 41 per cent, followed by transport equipment industries (9.6 per cent), chemicals (6.6 per cent) and printing (3.5per cent).

Port Functions and Commerce of Bombay:That the growth of Bombay into metropolis is primarily due to its commercial function needs hardly any emphasis. Though the rise of Bombay during the Portuguese and East India Company days was due to its maritime trade function, its commercial prosperity commenced with the opening of the Suez Canal route, its linkage with the agriculturally productive interior by railways and the growth of the cotton mill industry. The growth of port functions is intimately linked with its growth of commerce.

The port area of Bombay extends all along the eastern water front, adjoining the harbour bay, from Pilot Bundar in the south to Wadala in the north. The port area covers about 761 hectares of land, out of which 283 hectares are the docks. The docks mostly built since mid-18th century comprise at present those of wet type—Prince's, Alexandra and Victoria with 51 berths, 3 of the deep water type—Ballard Pier, Bulk Oil and Butcher island with 6 berths, and two of the dry type—Merewether and Hughes, apart from a repair yard at Mazagaon. The port authorities maintain their own railway and road interconnecting the docks to handle cargo.

Though the hinterland of Bombay extends from Kashmir in the north, middle U. P. in the east and Karnatak in the south, deep inroads have been made into hinterland by other fast developing ports, Kandla in the north and Goa in the south. The present territory of Maharashtra will in any case remain its natural and basic hinterland. With the rapid expansion of the agricultural and industrial potentialities of Maharashtra, any dimunition of port traffic resulting from a loss in area of hinterland has been more than compensated, and the port trade in the last few decades has increased enormously. The establishment of the two oil refineries in Trombay has in no mean measure compensated, and the port trade in the last few decades has increased enormously. In 1937-38, the total weight of cargo handled at the Bombay docks amounted to 5.5 lakh tonnes, while in 1958-59, it was 11.8 lakh tonnes, and in 1971-72, it had expanded to 16.1 lakh tonnes. In the last mentioned year, the port receipts amounted to 304 million rupees and expenditure to 252 million rupees. In that year, 5.25 lakh passengers embarked or disembarked. The main items of imports into the port include petroleum, oil and lubricants, grains, cement and bricks, machinery and machine parts and naval and military stores. The exports comprise petroleum, oil and lubricants, oil-cakes, coal, manganese and other ores, hides and skins and spices. Imports far exceed exports. The total trade that passes through Bombay Port constitutes 43 per cent of the maritime trade of the country.

Apart from its port functions, the city's commerce derives its strength of vigour from being the biggest financial centre in the country. It is the seat of the main offices of many Indian banks and the chief centre in India for many scheduled foreign banks, apart from its holding the headquarters of the Reserve Bank of India, the central banking and currency authority. As much as 19 per cent of the bank deposits of the nation, amounting to about Rs. 1,500 crores, are mobilised in this city. The Life Insurance Corpoiation, the stock exchange, the bullion and cotton markets all have their original and national economic circulation emanating from this city centre.

GEOLOGY

(The section on Geology has been contributed by the Geological Survey of India, Pune.)

Greater Bombay comprises the Bombay, South Salsette and Trombay Islands, bounded by 18° 53' and 19° 20' North Latitude and 72° 45' and 73° 00' East Longitude. The area is a-small archipelago scattered along the west coast of

India. The three major islands, Bombay, Trombay and Salsette are separated by tidal flats and creeks.

Many geologists studied the geology of Bombay. Thompson published the earliest geologic sketch of Bombay Island in 1836. A more detailed description was furnished subsequently by Buist in 1851 and by Carter in 1852 which was followed by that of Wynne of the Geological Survey of India in 1866. Hallowes prepared the first geological map of Bombay Island in 1922. In the later part of the first half of this century a host of other workers carried out geological studies on different aspects of the Bombay geology. Prominent among these are Krishnan (1930), Naidu (1932), Kalapesi and Contractor (1935, 1936), Kalapesi and Dalai (1942), L. P. Mathur (1932, 1934) and Sukheswala and Poldervaart (1958).

General: The entire Greater Bombay area is occupied by Deccan basalt flows and their acid and basic varients, poured out between the late Cretaceous and early Eocene times. The basaltic flows are horizontally bedded and are more or less uniform in character over wide areas. Certain extrusive and intrusive mafic types are associated with basalts and are found in the Bombay Islands and it's vicinity. This is in contrast to the monotonous uniformity displayed by the Deccan basalts in general. Furthermore, some fossiliferous sediments, mainly of tufaceous origin and partly of fresh water origin, rich in fauna, are also found in Bombay area. The stratigraphic succession of rocks in Bombay area is given below:—

Recent Alluvium, Sand and recent Conglomerate

Cretaceous to Eocene Laterite

Trap dykes

Volcanic agglomerate and breccia Basalt flows with interbedded

ash beds and fossiliferous fresh water shakes.

The Deccan traps belong to the plateau basalt and are so designated on account of their step-like or terraced appearance and their extensive distribution is up to South India (Deccan). They occupy about 5,18,000 sq. km. in Maharashtra, Gujarat, Madhya Pradesh and parts of the Deccan, and form the most extensive geological formation of the Peninsular India, with the exception of the metamorphic and igneous complex of Archaean age.

The traps in general may be divided into three groups, viz., upper, middle and lower as indicated below :—

Upper Traps (457 m. thick)

Bombay and Kathiawar, with numerous intertrappean beds and

layers of volcanic ash.

Middle Traps (1,220 m.thick)

Madhya Pradesh and Malwa, with numerous ash beds in the upper

portions.

Lower Traps (152 m. thick)

Madhya Pradesh and eastern area, intertrappean beds, but rare

ash beds.

The trap country is generally characterised by flat-topped hills and step-like terraces. In the amygdular flows, the top is usually highly vesicular and the middle failly compact, while the lower portion often shows cylindrical pipes filled with secondary minerals. Vesicular and nonvesicular flows alternate with each other, or the flows may be separated by thin beds of volcanic ash or scoria or by lacustrine sediments known as the "Intertrappean" Beds. The traps attain their maximum thickness of over 2,133 metres near the Bombay coast. As many as 48 flows have been recognised in Western India from borehole data, the individual flows varying in thickness from a few metres to 40 metres (West, 1958).

Besides the common dolerite and basalt, the Deccan traps comprise other types like lamprophyre, limburgite, monchiquite, poiphyrite, andesite, monzonite, nepheline syenite, granophyre, rhyolite, obsidian and pitchstone. Felsitic differentiates such as the andesite, rhyolite, rhyodacite and pitchstone also occur in the Bombay area. Mafic types such as oceanite, ankaramite and monchiquite are also met within this area. Flows of picrite basalt, olivine basalt and oligoclase andesite occur in Deccan basalt terrain, but are not found in the Bombay area. ((These uncommon types are so far reported at Pavagad hill (Gujarat State) about 375 km. NNE of Bombay.)

A typical Deccan trap is essentially composed of plagioclase felspar (An 50-70), augite and interstitial glass. The amount of pyroxene decreases with increase in proportion of interstitial glass. Both pyroxene and plagioclase occur as phenocrysts. Pigeonite has been reported to occur in the ground mass and as phenocrysts in some basalts. The glassy ground mass sometimes alters to palagonite, chlorophaeite, celadonite and delessite. Olivine, when present, is usually altered to iddingsite, delessite and serpentine. Magnetite and ilmenite are found in all types.

Some secondary minerals are often developed in the basalts either as infillings in the amygdular cavities or as products of alteration and replacement. The minerals of late hydrothermal activity are zeolites, calcite, chalcedony etc,

Bombay Islands: Bombay Island has ridges along its western and eastern sides. The city of Bombay is built on the central low-lying part of the island. The western ridge comprises stratified ash beds overlain by hard, massive andesitic lava flows, both formations showing gentle tilt towards the west. The stratified ashes which display variegated colours and variable textures attain a total thickness of about 45 m. The varieties are, from bottom to top: (i) coarse grained acid fuffs of variegated colouis noticed to the east of Worli fort, (ii) Yellowish brown ash exposed near Chowpatty beachy along the embankment of Walkeshwar road, Malabar-Cumballa ridge, Haji Ali tomb and the Worli and Worli fort hills. The exposures at Worli contain fossil tortoise and frogs (Rana Pussilla) and (iii) coarse grained carbonaceous ash covered by yellowish brown tuffaceous ash devoid of fossils.

The ash beds are capped by massive lava flows which attain a thickness of about 16 m. The rocks are aphanitic, have a conchoidal fracture and exhibit conspicuous hexagonal columnar jointing. They are exposed on the Malabar, Cumballa, Worli hills and extend on to the Salsette island. Dark coloured fossiliferous shales attaining a thickness of about 2 m. are exposed at the foot of the Worli hills. Being deposited during a period of quiescence and overlain by a later flow, these beds are known as 'Intertrappean Beds'. They are very significant as the fossils in them are helpful in fixing the possible age of the associated lava flows.

The eastern ridge represents a different suite of rocks. They are, from bottom to top: (i) basalt, greenish amygdaloidal basalt exposed at Bhoiwada, Mazagaon and Koliwada hills, (ii) red ash breccia noticed in the exposures at Sion, (iii) highly chilled basic lavas of Sewri fort and Antop hills, described as Melaphyre in the older literature, (iv) stratified

ashes of Sewri and Cotton Green; the exposures described by earlier students of the geology of Bombay are now covered by buildings, but are exposed in some road cuttings.

The geology of the intervening low lands is more or less obscured by the development of the city of Bombay, but some of the recent excavations near Flora Fountain, Old Custom House and Dadar have revealed the presence of either the greenish-grey basalt or the yellowish brown ash.

Salsette Island : The central portions of Salsette island comprise a range of hills trending north-south merging into the tidal swamps towards the east; while towards the west these hills pass into wide plains with a few isolated hillocks. Basalt is the major rock unit constituting the main ridge extending from Ghatkopar, Vikhroli, east of Jogeshwari, Aarey Milk Colony to Kanberi and beyond. At places, there are ash beds intervening between successive flows; these may be seen in the cuttings of the Western Express Highway passing through Jogeshwari. The isolated hills near Andheri, Jogeshwari railway station, Chincholi and Mandapeshwar are also largely composed of basaltic types. Acid to sub-acid types are associated with the basalts atDongri, Manori, Madh, Karodiwadi, Malad and Kurla. The basalts in the quarries at Gilbert hill, Andheri, exhibit perfect columnar jointing with spectacular pentagonal columns, over 40 m. in height.

Another interesting geological feature is the occurrence of a vast thickness of volcanic agglomerate near Tulsi lake and Kanheri caves, indicating a possible volcanie focus from which much of the pyroclastic rocks in the Bombay and Salsette islands may have extruded. These agglomerates are largely made up of elongated sub-angular vesicular bombs, blocks of brown chert, trachyte, volcanic ejectment and small pieces of yellow to reddish brown limonitic matter, varying in size from a few centimetres to as much as one metre, set in a matrix of dense, dull light grey amorphous material. At places this matrix resembles bauxite. Some of these agglomerates show fine banding and layers with alternate siliceous and tuffaceous matter, at places with beautiful and intricate plications and contortions. Some of the horizons of the agglomerates and breccias, particularly those which are bauxitised, are quite soft. Differential weathering has resulted in the siliceous bands which stand out as fine minute ribs in some places, simulating fossil wood. This feature, may be observed in caves No. 84, 85, 86 and 87 at Kanheri.

The basalts are intersected by sills and dykes of olivine do leiite, tachylyte, etc. The dykes have a general north-south trend and appear to be limited to the eastern margin of the main ridge from west of Mulund, and the eastern banks of the Vihar lake to Vikhroli. Some of these dykes extend further south towards Mankhurd, Chembur and Nanole in the Trombay Island.

Volcanic breccias and ashes interbedded with basalts are noticed at several places near Ghod Bundar, around Tulsi and Vihar lakes, Santacruz, Kurla and Sion. The plains to the west of the main ridge extending from north of Bandra to Borivli and beyond are clothed by marine alluvium represented by saline marine muds, recent shell-limestones, calcareous sand stones, etc. A fair stretch of shore sands with occasional duns extends from Juhu in the south to Varsova, Marve and Manori in the north.

Trombay Island: This island is separated from Bombay and Salsette by extensive tidal flats with a series of low hills extending north-south in the centre. Facies of amygdaloidal olivine basalt dipping gently towards west, with ramified layers and dykes of rock types described variously as oceanite, ankaramite and monchiquite etc., are prevalent in this area.

Laterite: Small plateaus east of Kanheri caves and south-west of Tulsi lake are covered by laterite with bauxite pockets at 500 m. elevation above sea level.

Structure

Faults: A well marked fault is seen near Antop hill. Sukheswala (1958) has given evidence for two north-south running faults in Bombay island, one to the east of western ridge and other running along the western ridge. The faults extend into Salsette island and have maximum throw of 75' and 40', respectively.

Submergence of land in Bombay: Wynne reported in 1860 that the blue clay of the flats containing mangrove roots is said to have been found near Sion and in other parts of the island, undisturbed at places, now beyond the reach of the sea. Above this, at an elevation of 10 feet above sea level, are sea shells, gravel and sand, loose or cemented into a variety of open shell limestone having 8 to 10 ft. thickness. This indicates that the clay containing the roots of mangroves, which grow only within the tide marks, must have been depressed in order to allow the stratified deposit of sea. Shells and gravel are believed to have accumulated, and afterwards both must have been elevated to the height at which they are found now Ormiston (1878, 1881) had discovered a submerged forest during the Prince's Dock excavations. This indicates submergence of at least 30 ft.

Economic Geology: No minerals of economic importance are found in the Bombay area except pockets of bauxite in the laterite plateau, east of Kanheri caves. However, large quantities of building stones required for construction work in Greater Bombay area are mainly supplied from the quarries in the vicinity. The main rock types quarried are basalt, andesite and granophyric trachyte, basalt being the most abundant of all. The famous Gateway of India at Bombay is built out of granophyric trachyte.

Groundwater Conditions: The area coming under Greater Bombay limits is covered by Deccan lava flows, with intertrappean beds occurring at a few places. The yield for well in basaltic terrain depends on the thickness of the weathered zone of the basaltic flows, and the presence of joints and fissures, whereas the yield for well in intertrappean beds is dependent on their lighologic character. The sandy and calcareous intertrappean beds yield a copious supply of water, whereas the beach sands and clayey sands which overlie the basaltic flows along the coast, carry lenses of fresh water supported by a zone of brackish water which has hydraulic contact with the sea. Heavy drawal of water here upsets the equilibrium between the fresh and brackish water interface. The groundwater available to the wells in Greater Bombay region, however is mostly from these formations.

CLIMATE

(The section on climate' is contributed by the Meteorological Department of the Government of India, Pune.)

The climate of Greater Bombay is characterised by an oppressive summer, dampness in the atmosphere nearly throughout the year, and heavy south-west monsoon rainfall. The cold season from December to February is followed by the summer season from March to June. The period from June to about the end of September constitutes the southwest monsoon season, and October and November form the post-monsoon season.

Rainfall: The records of rainfall in Bombay are available for two stations, Kuria and Colaba for 72 and 88 years, respectively. Records of rainfall at a few other locations in Greater Bombay are available for a few years. The details of the rainfall are given in table Nos. 1 and 2. The average annual rainfall is 1917.3 mm (75.48"). Considering the rainy

season as a whole, valiation in the rainfall from place to place in Greater Bombay is hot much. But on individual days the rainfall pattern is by no means uniform and the rainfall at some places is very heavy compared to other places. The variation in the rainfall from year to year is quite appreciable. In the 50-year period from 1901 to 1950 the highest annual rainfall amounting to 167 per cent of the annual normal occurred in 1917. The lowest annual rainfall, which was only 51 per cent of the normal, occurred in 1905. In this 50-year period the annual rainfall in Greater Bombay was less than 80 percent of the normal in 10 years, two consecutive years of such low rainfall occurring twice. About 94 per cent of the annual rainfall in Greater Bombay is received during the south-west monsoon months of June to September. July is the rainiest month when about one-third of the annual rainfall is received. Some rainfall mostly as thundershowers is also received during the month of May and the post-monsoon months. During the period December to April there is very little rainfall. It will be seen from table No. 2 that the annual rainfall in Greater Bombay was between 1,700 and 2,300 mm (68" and 92") in 26 years out of 50.

On an average there are 73 rainy days (i.e. days with rainfall of 2.5 mn-, pr more) in a year at Colaba and 80 at Kurla. The heaviest rainfall in 24 hours recorded in Greater Bombay was 548.1 mm (21 . 58") at Colaba on 10th September 1930. This record was however exceeded to over 22" on 4th July 1974 at Colaba. The unprecedented rainfall was ascribed to a cyclone.

Temperature: There are meteorological observatories at Colaba and Santacruz. In general Santacruz is slightly warmer during day, colder during night than Colaba, especially in the cold season. After February there is steady increase of temperature till May which is generally the hottest month.

The mean daily maximum temperature in May is 32.9°C (91'2°F) at Colaba and 33.3°C (91.9°F) at Santacruz. The mean daily minimum temperature in May is 26.5°C (79.7°F) at Colaba and nearly the same at Santacruz. Due to prevailing high humidities the weather during the summer is very oppressive. On some days the maximum temperature goes above 40°C (104.0°F). The afternoon sea breezes bring some welcome relief from the heat. After the onset of the monsoon by about the beginning of June, the weather becomes progressively cooler. But, towards the end of the south-west monsoon season, day temperatures begin to increase and a secondaiy maximum in day temperature is reached in October. The October heat is vely oppressive in some years. Nights, however, become progressively cooler after the withdrawal of the monsoon. After November the day temperatures also begin to decrease. January is generally the coldest month with the mean daily maximum temperature at 28.5°C (83.3°F) at Colaba and 30.6°C (87.1°F) at Santacruz. The mean daily minimum temperature is 19.3°C (66.7°F) at Colaba and 17.1°C (62.8°F) at Santacruz. In the cold season, in association with passing western disturbances across north India, the minimum temperature occasionally drops down to about 10°C. (50'0°F).

The highest maximum temperature recorded at Colaba was 40.6° C ($105-1^{\circ}$ F) on April 19,1955 and that at Santacruz was $42-2^{\circ}$ C (1080° F) on April 14, 1952. The lowest minimum was 11.7° C (53.1° F) at Colaba on January 15,1935 and February 1,1929 and that at Santacruz was $10'0^{\circ}$ C ($50-0^{\circ}$ F) on January 17, 953 and February 10, 1950.

Humidity: In general Colaba is slightly more humid than Santacruz. Usually mornings are more humid than the afternoons over Greater Bombay. In the period from June to October the relative humidity is above 75 per cent. The driest part of the year is the afternoons during the period from November to February with relative humidity between 50 and 65 per cent.

Cloudiness: During the south-west monsoon months the skies are generally heavily clouded or overcast. Cloudiness decreases after the withdrawal of the south-west monsoon towards the end of September. During the period December to March clear or lightly clouded skies prevail generally. Later cloudiness increases with the progress of the season

Winds: Winds are generally moderate, but they greatly increase in force during the monsoon months. Winds during May and the southwest monsoon season are mainly from directions between south-west and north-west. In the rest of the year winds blow from directions between north and east in the mornings and between west and north in the afternoons.

Special Weather Phenomena: During the later part of the summer and post-monsoon months some of the storms and depressions from the Arabian sea affect the weather, causing widespread heavy rain and gusty winds. Thunderstorms occur during the later part of the summer and in the months of September and October. Rain in the monsoon season is often associated with thunder.

Table Nos. 3, 4 and 5 give the temperature and humidity, mean wind speed and special weather phenomena, respectively for Colaba, and table Nos. 3(a), 4(aT and 5(a) give similar data for the Santacruz station.

Table No.1 NORMALS AND EXTREMES OF RAINFALL IN GREATER BOMBAY

Station	No. of years of data	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	rainfall as%of	annual rainfall as % of normal and year (Years	Heviest rainfall in 24 ho Based o availabl data up 1959) Amount (mm)	urs (n all e to
Kurla	50 a	3.1	1.3	0.8	2.5	17.3	476.0	725.9	414.8	295.7	75.7	15.7	0.8	2029.6	191 (1917)	54 (1941)		1915 Jun. 2
	b	0.2	0.2	0.0	0.1	0.8	14.7	24.5	21.5	14.4	3.0	0.7	0.2	80.3				
Colaba	50 a	4.1	2.0	1.5	1.5	18.3	464.8	613.4	328.9	286.0	64.5	17.5	2.3	1804.8	153 (1949)	47 (1904)	548.1	1930 Sept. 10
	b	0.3	0.1	0.1	0.1	0.8	14.2	22.2	18.2	12.6	3.0	0.8	0.3	72.7				
Greater Bombay	a	3.6	1.7	1.1	2.0	17.8	470.4	669.7	371.9	290.9	70.1	16.6	1.5	1917.3	167 (1917)	51 (1905)		
(District).	b	0.3	0.1	0.1	0.1	0.8	14.5	23.3	19.9	13.5	3.0	0.7	0.3	76.6				

- a. Normal rainfall in mm.b. Average number of rainy days (days with rain of 2.5 mm or more).

TABLE No. 2 Frequency of Annual Rainfall in the Greater Bombay District (Data 1901-1950)

Range in mm	No. of years	Range in mm	No. of years
901—1100	3	2101—2300	5
1101—1300	2	2301-2500	4
1301—1500	3	2501—2700	4
1501—1700	7	2701—2900	0
1701—1900	6	2901—3100	0
1901—2100	15	3101—3300	1

TABLE No. 3
NORMALS OF TEMPERATURE AND RELATIVE HUMIDITY (COLABA)

	Mean Daily Maximum	Mean Daily Minimum		nest Maximum er recorded		: Minimum ever		tive idity
Month	Temperature	Temperature	ev	er recorded		recorded	0830	1730*
	°C	°C	°C	Date	°C	Date	Per cent	Per cent
January	28.5	19.3	35.0	1961, January 17	11.7	1935, January 15	70	64
February	28. 6	19.8	38.3	1949, February 28	11.7	1929, February 1	71	62
March	30.3	22.2	39.7	1958, March 8	16.7	1905, March 2	73	64
April	31.8	24.6	40.6	1955, April 19	20.0	1905, April 1	75	67
May	32.9	26.5	36.2	1959, May 1	22.8	1951, May 25	73	69
June	31.5	26.0	37.2	1901, June 10	21.1	1936, June 28	79	78
July	29.7	24.9	35.6	1902, July 11	21.7	1945, July 7	84	85
August	29.5	24.6	32.2	1948, August 28	21.7	1943, August 10	83	83
September	29.8	24 .3	35.0	1929, September 26	20.0	1947, September 29	85	81
October	31.6	24.3	35.7	1957, October 29	20.6	1954, October 29	81	74
November	31.9	22.6	36.1	1957, November 21	17.8	1881, November 20	72	67
December	30.4	20.5	35.1	1959, December 3	12.8	1929, December 21	70	63
Annual	30.5	23.3					76	71

^{*}Hours I.S.T.

TABLE No. 3(a) NORMALS OF TEMPERATURE AND RELATIVE HUMIDITY (SANTACRUZ)

Mean Daily Maximum		Mean Daily Minimum		nest Maximum		Minimum ever	Rela Hum	
Month	Temperature	Temperature	ev	er recorded	r	ecorded	0830	1730*
	°C	°C	°C	Date	°C	Date	Per cent	Per cent
January	30.6	17.1	36.2	1961, January 17	10.0	1953, January 17	63	48
February	31.6	17.2	39.4	1953, February 27	10.0	1950, February 10	61	46
March	32.8	20.2	41.7	1956, March 28	15.0	1952, March 4	65	50
April	33.4	23.5	42.2	1952, April 14	18.3	1951, April 3	67	57
May	33.3	26.4	38.8	1959, May 1	20.6	1951, May 25	69	65
June	31.7	25.9	36.7	1951, June 11	22.2	1954, June 19	80	74
July	29.6	24.8	34.8	1960, July 22	22.2	1959, July 1	86	82
August	29.0	24.4	31.1	1954, August 31	19.4	1950, August 1	87	82
September	29.7	23.8	35.6	1951, September 30	21.7	1953, September 27	86	75
October	32.4	22.6	36.8	1960, October 22	16.7	1952, October 30	75	65
November	33.0	19.6	36.1	1951, November 2	13.3	1950, November 19	61	53
December	32.1	17.9	35.2	1958, December 2	10.6	1949, December 23	62	51
Annual	31.6	22.0					72	62

^{*}Hours I.S.T.

TABLE No. 4

MEAN WIND SPEED IN KM/HR (COLABA)

January	February	March	April	May	June	July	August	September	October	November	December	Annual
10.5	11.1	11.4	11.3	10.6	14.8	18.0	15.4	10.9	9.7	10.0	10.1	12.0

TABLE No. 4 (a)

MEAN WIND SPEED IN KM/HR (SANTACRUZ)

January	February	March	April	May	June	July	August	September	October	November	December	Annual
8.3	9.2	10.4	11.6	12.8	15.1	19.0	16.1	10.8	7.6	7.1	7.6	11.3

TABLE No. 5 SPECIAL WEATHER PHENOMENA (COLABA)

Mean No. of days with	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Thunder	0.0	0.0	0.4	0.5	1.1	4.5	0.7	0.2	2.7	3.1	1.0	0.0	14.2
Hail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dust-storm	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Squall	0.0	0.0	0.0	0.0	0.1	2.4	1.6	0.7	0.1	0.8	0.1	0.0	5.8
Fog	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

TABLE N o. 5 (a)
SPECIAL WEATHER PHENOMENA (SANTACRUZ)

Mean No. of days with	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Thunder	0.0	0.2	0.2	0.7	1.8	7.0	1.6	1.0	3.0	2.8	0.1	0.0	18.4
Hail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dust-storm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squall	0.0	0.0	0.0	0.1	0.2	2.3	4.8	3.9	1.0	0.7	0.0	0.0	13.0
Fog	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3

FORESTS

The Bombay island is totally devoid of any forest at present. The National Park on the Northern outskirts of the western suburbs of Bombay is the only forest worth the name. The old accounts of Bombay and South Salsette which now comprise Greater Bombay show that there was a considerable vegetation growth in many parts. The immense growth of urbanisation and industrialisation, however, reduced the floral wealth of the city. Extensive areas under vegetation were rendered barren either for human habitation or for industrialisation; Astage has now come that extensive areas in the city are without any vegetation worth the name.

Old Marathi documents and the statements of early European writers have proved conclusively that Bombay originally consisted of seven separate islands, which remained practically unaltered in shape until the eighteenth century. During the era of later Hindu1 and Mohammedan sovereignty the area, now known as Apollo Bundar, was dotted with palm-groves and tamarind trees. Between Dongri hill and Malabar hill there were groves and orchards of oak-trees, brabs, ber-trees and plantains, extending to and perhaps covering the outskirts of modern Girgaum. There was a thick jungle on the slopes of the Malabar hill, and the reran a pathway known as *shidi* (probably the present Shery Road) from Malabar Hill to Gamdevi through groves and *babul* plantations. Tamarinds covered the land south of Parel. The Mahim area is described to be covered with trees of cocoas, jacks and mangoes. The *kasba* of Mahim contained 70,000 cocoa-palms, several gardens and rice fields while the village of Matunga was devoted to rice cultivation.

The vegetation of the island, in 1909 was composed almost entirely of types which prevailed in densely populated areas and which are usually known as weeds of cultivation. Most of the trees were grown along the road-sides, a certain number were cultivated in groves and orchards for their shade or for their fruit and other products, while the ordinary shrubs and trees which grew wild in villages on the western coast were also met with in considerable numbers. Many non-indigenous species were also grown in public and private gardens.

The luxuriant groves and gardens have almost disappeared now due to human encroachment. The only forest area within Greater Bombay lies in the Borivli National Park and the catchment areas of the Tulsi, Vihar and Powai lakes and the Krishnagiri *upawan*.

The forests in Bombay district consist of 8.07 sq. km. of reserved forests and 11.11 sq. km. of municipal foiests which are entirely under the management of the Forest Department. These forests are included in the National Park, Borivli, for the preservation of scenic, flotal, faunal, geological. historical and archaeological features in an unimpaired state for generations to come- In the National Pa!rk no silvicultural operations are carried out, and the exploitation as well as tending of the crop have been stopped.

The important species found in the Bombay forests are Teak, Khair {Acacia Catechu}, Sisav (Dalbergia latifolia), Hed (Adina or Nauclea Cordifolid), Kalamb (Stephegyne or Nauclea Parvifolia) and Bamboo.

The major portion of the forests forms the catchment areas of the Tulsi and the Vihar lakes with high hills rising on all sides. The vegetation in the Tulsi catchment area ranges from pure ever-green vegetation on hill tops to the marshy growth along the fringe of the lake. The middle zone is represented by the mixed deciduous types with teak and other

timber. Teak is found mixed with trees like *aim*, *hed*, *kalamb*, *humb* and climbers in moist areas, and is mixed with deciduous trees like *sowar* and *pangara* in drier parts. In the catchment area of the Vihar lake, there is a higher percentage of *Khair* species. Towards the lake, the percentage of *tad* trees increases progressively, while percentage of other species decreases. The lake is surrounded by thickly grown *tad* trees.

Since the forests ate included in the National Park all fellings and exploitation in these forests have been suspended from 1968-69. The main function of the Forest Department, therefore, lies in protection of the forests and regeneration of the forests, to improve the growing stock and beautify the park, construction of roads, rope ways, water channels, and provision of accommodation for tourists, etc.

The Maharashtra Government intends to develop the National Park as a holiday resort and place of tourist interest. This is particularly essential in view of the lack of recreation facilities in the city. In pursuance to this the Government decided to develop a lion sanctuary on the model of the Gir Sanctuary in Gujarat. Accordingly a lion safari was established at the National Park in the seventies. The lion park extends over an area of about 13 hectares. As many as nine lions were kept in the sanctuary initially. The lions are kept in the natural environment.

The lion park is open to visitors and tourists who can have a close view of the king of the jungle roaming in this free environment in the Park, from buses specially provided for the purpose.

The lion park has been developed by the Maharashtra Government at the cost of Rs. 9.33 lakhs, a major part of which has been contributed by the Government of India. Besides the lion park, the Government have also provided a children's recreation park and a mini railway train (Vanarani) at the National Park.

WILD ANIMALS AND BIRDS

Bombay is now so populous and overcrowded that it is no more a congenial home for wild animals. Human encroachment on their natural habitat has totallyed wild life in the environs of Bombay.

In the past a part of Salsette, which is now included in Bombay, was the hunt of wild animals like hyena, tiger, lion, leopard, panther, bison, jackal, deer, etc. Monkeys (Primates) existed in a strictly wild state prior to several generations. The jungle cat (felis chaus), the small Indian civet and the Indian palm-civet were occasionally found in the northern portion of the island, while the mungoose (herpestes munge) was of fairly frequent occurrence in Sewri, Sion and Mahim. The chief domestic animals such as horses, cattle and goats were imported in Bombay and were bred only on a very small scale in the city.

Greater Bombay at present comprises mainly of residential and industrial areas. The reclamation of vast areas in the recent years, the ever growing pressure of population, development of roads and the advent of the motor car and loiry have had a disastrous effect upon wild life. At present there is no forest in the true sense of the teim except the Borivli forest, extending over an area of about 19.18 sq. km. Hence, wild life as such is almost extinct from Bombay.

The fauna mainly consists of the common varieties of domesticated animals, such as, cows, oxen, buffaloes, sheeps, goats, pigs, donkeys, and mules. Wild life is now seen only within the National Park. Among the big game the panther is found mainly in the hills with the low dense shrubs. It sometimes comes down to prey upon stray cattle, dogs, etc. near the paik. Recent introduction of blue bull in the park has also added to the big game in the National Park. These inhabit the low-lying flat areas near the lakes of Tulsi and Vihar. The small game includes rabbit, jungle fowl, mungoose and species of squirrels. The jungle fowl in particular is abundant in the thorny bushes which occur in most of the places as undergrowth in the park areas.

The Tulsi and Vihar lakes are reported to provide a habitat to crocodiles and alligators which come sometimes to the banks of the lakes to bake in the sun.

The vertebrate wild life of the Bombay Suburban District includes, besides a number of fishes, 42 species of mammals, 251 species of birds including migratory—land and water birds, 38 species of reptiles and species of amphibia. The wild life is characteristic of that part of west Coast of India which is north of Belgaum and south of Surat. This is, for the most part, wild life of the Deccan peninsula enriched with some elements of wild life of Kerala which is so markedly different from that of the Deccan peninsula, as Salsette island, of which the park is a part, was isolated effectively from the main land till few decades past.

Some sedentary of the adjacent main land are conspicuous by thtir rarity in the park.

A brief description of some of the important species is given below :

Tiger (Panthera tigris): The Indian tigfer is a rich coloured well-stripped animal with a short coat. The average size is 275 to 290 centimetres.

Jungle Cat *{Fells Cham}*: With its long legs and comparatively short tail the jungle cat has a very distinctive appearance. Its pale green eyes give it a coldly cruel expression. The colour of its fur varies from sandy grey to yellowish grey. The tail is ringed with black towards the end and has a black tip. The paws are pale yellowish, black underneath. The ears are reddish. Underside of the body is pale with vestiges of stripes on the underside and flanks. The size of a Jungle cat is a little over 60 centimetres.

Chital or spotted Deer (Axis axis): The Chltal is the most beautiful of all deer. Its coat is a bright rufous-fawn profusely spotted with white at all ages and in all seasons. Old bucks are more brownish in colour and darker. The lower series of spots on the flanks are arranged in longitudinal rows and suggest broken linear markings.

The graceful antlers have three times a long brow tine set nearly at right angles to the beam and two branch tines at the top. The outer tine, the continuation of the beam is always longer. Old bucks often have one or more false points on the brow antler where it joins the main beam. The averrage size of the spotted deer is about 85 cm.

Sambar (Cerus unlcolor nlger): The coat of the sambar is coarse and shaggy. In the hot weather much of the hair is shed. The general colour is brown with a yellowish or greyish tinge. Females are lighter in tone. Old stags tend to become very dark, almost black. The antlers are stout and rugged. The brow tine is set at an acute angle with the beam. At its summit, the beam forks into two nearby equal tines. The Sambar is the largest Indian deer and carries the grandest horns. Its height at shoulder is nearby 15Q centimetres.

Four-horned Antelope (*Tetraceros quadrlcornls*): The four-horned Antelope or *chowshlnga* and the *Nilgai* are distinguished from the true antelopes by several characters. Its horns are not ringed as in the case of true antelopes proper. They are keeled in front. The females are harmless. These animals are grouped in a separate sub-family, *viz.*, the Boselaphinae. The four horned antelope is the only member of this group with two pair of horns. Of these the front

pair is always shorter. One of the most interesting features of a chowshInga is the presence of a pair of welldeveloped glands between the false hooves of the hindlegs in both males and feniales. The colour of its coarse coat is dull red brown above and white below, oldbucks are yellowish. There is a dark stripe down the front oft each of its legs. It is broader and more defined on the forelegs. The height of a male is about 65 centimetres.

Indian Wild Boar (Sus indicus): The Indian wild boar is allied to the European boar, but distinctive in its sparser coat and in its fuller crest or mane of black bristles reaching from the nape down the back. The colour of the animal is black mixed with grey, rustybrown and white hairs. The tushes are well developed in the males. The upper and lower tushes curve outwards and project from the mouth. A well grown male stands 90 centimetres high at the shoulder and its weight exceeds 230 kg.

Monkeys: Three species of monkeys viz., the Bonnet, Rhesus Macaques and the common langur occur in the National Park, Borivli.

- a. Bonnet Macaque (Macaca radiata): It is a medium sized long tailed macaque. A bonnet of long dark hairs radiates in all directions from whorl on its crown. The bonnet does not quite cover the forehead where the hair are short neatly parted in the centre. The coat of this monkey is variable both among individuals and with the season. In the cold weather it is usually lustrous olive brown and the underparts whitish. With the onset of the hot weather the coat loses its lustre, turns harsh and scraggy and fades to a buffy grey. Silting on its haunches this monkey is just under 60 cm. high.
- b. Rhesus Macaque (Macaca mulatta): The Rhesus has the usual squat, thickset build of a macaque. The hair on its crown radiate backwards from the forehead without the neat centre parting so distinctive in its relative the macaque of the southern India. The orange-red fur on its loins and rump distinguishes it from any other Indian monkey. The size of a male rhssus is about 60 cm. high in a sitting position, and scales about 7 to 10 kg.
- c. Common Langur or Hanuman Monkey (Presbytis entellus): This is a long-limbed, long tailed, black faced monkey seen as much about towns and villages as in forests in India Langurs from the Himalayas, Peninsular and Southern India and Ceylon are not distinct species, but merely races of a single species differing in size, heaviness of coat and details of colour. The size of a langur is 60 to 75 cm. high in a sitting position.

Striped Hyena (Hyaena striata): A dog-like bull, massive head and fat body, weak hindquarters, and a heavy dorsal crest of long hairs sharply defined from the rest of the coat, distinguish the hyena. Its colour varies from cream, buff or tawny to grey or dirty white. There are transverse stripes on its body and limbs. The total length of a male is about 150 cm. and its height is about 90 cm.

Indian Hare (Lepus nigricollis): The blacknaped hare is distinctive in having a dark brown or black patch on the back of its neck from the ears to the shoulder while the upper surface of tail is black. In the northern parts of its range this nape patch is grey.

Birds: The most abundant wild life encountered in Greater Bombay at present consists of bird fauna. A variety of birds occur all over Bombay city and suburbs, and particularly in the National Park, which are listed below :-

- Red vented bulbul (Molpastes cafercafer);
- Red whiskered bulbul (Old compsa joacosus fuscicandata);
- Spotted babbler (Pellorneum ruficeps);
- Yellow eyed babbler (Chrysomma, sinensis);
- Indian tree pie (Dendrocitta vagabunda vagabunda);
- Indian shama (Kittacincla Malabarica malabarica);
- Red breasted flycatcher (siphiaparva subsp);
- Black Dxongo (Dicrurus macrocercus);
- Racket tailed (Discemurus paradisous malabaricus);
- Tailor bird (Orthotomus, sutorius guzeratd);
- Indian oriole (Oriolus oriolus, kundoo);
- Common myna (Acridotheres tristis tristis);
- Commom babbler (Argya candata candata); White throated babbler (Dumetia hyperythra);
- Central Indian tora (Egithina tiphinon humei);
- Malabar gold fronted chloropise (Chloropsis auripons frontalis):
- Blue throat thrush (Cyapro sybroia succica pallidogularis);
 White throated ground thrush (Ceokichla citrina cyamotus);
 Blue rock thrush (Monticola solitaris pandoo);
- Paradise flycatcher (Tehitrea paradisi paradisi);
- White spotted fontail flycatcher (Leucocirca Pectorlispectorlis);
- Little minivet (Pericrocotus perogrinus peregrinus);
- Rupus-backed shrike {Lanius sehach erythronotus);
- Streaked fontail warbler (Cisticola juncidis);
- Black headed oriole (Oriolus anthormus maderas patanus);
- Common weaver-bird or Bava (Plocens philippinus philippinus):
- Ashy-crowned or black-bellied finch lark (Eremoptenix grisea grised);
- Loten's sun bird (Cinnyris lotenid);
- Purple sun bird (Cinnyris asiatica asiaticd);
- Indian pitta (Pitta brachyws);
- Southern yellow fronted pied woodpecker (Dryobates mamattensis mamattensis).

Besides, there are many other winter visitors (migratory birds) which come to Bombay in, December and January. It is reported that some of the winter visitors come to Bombay from foreign countries including Russia, Mediterranean countries, Iran and Afghanistan. In the coastal areas, are found brown headed kingfishers, white breasted kingfishers (Halcyon, Smyrnensis Smyrnensis) and filed kingfisher. These are very common along the coast and are frequently seen catching the fishes and taking fishes from the left overs of the fishermen.

FISH AND FISHERIES

Bombay is known as a fishing centre from the earliest days and fishing was one of the chief industries during the pre-British epoch. Not only did the harbour yield fish supply but also the estuaries, ponds and tanks on the island were exploited for fishing. The Kolis followed fishing as hereditary occupation and carried their operations from Colaba, Chaupati, Mazagaon, Worli, Sion, Mahim, Bandra, Trombay, Madh, Danda, Vesava, etc.

A larger fishing boat which is traditionally used by Bombay Kolis is styled as *Machava*. Besides, *ballyav* and *toni* are also used. These boats are made almost entirely of teak, though occasionally some of their parts are made of mango

tree and jack tree. They are built chiefly at Papdi near Vasai in Thane district and a few at Manori. The cost of a fishing boat in the past varied from Rs. 200 to Rs. 700 according to size and quality. The nets used by the Kolis were called *Dhol, Bhokse Jal,* etc. Formerly salt water was used to preserve the fish. Subsequently Kolis started to use ice for preservation of fish. There was little curing of fish in Bombay. The *Bombil* was not gutted before it was salted. It was simply hung up on strings in the sun for 3-4 days. The small fry was merely thrown on the sand to decompose and to dry in the sun, and then sold as manure. Fish canning and pickling on the western style was wholly unknown to the Bombay Kolis in the past.

At present marine fishing villages are concentrated along the coast line which is about 80 km. in length. There are about 21 fishing villages along the West coast, many of which are tidal ports. The tide to some extent adversely affects the free movement of fishing fleet except in a few ports of Sassoon Dock and Kasara Bundar. Fishing is extensively done throughout the coastline upto 30 fathoms from September to May. Besides this, the fishing crafts are being operated at Sassoon Dock and Kasara Bundar throughout the year. During the monsoon period off-shore fishing is suspended due to gusty winds. However, fishing at other centres is restricted to creek region. Unlike other maritime districts of Maharashtra State, the inland fishing activity in Greater Bombay is equally important. Production of fish at fish seed unit at Aarey is in progress to meet the demand of private pisciculturists.

There are about 4,917 active fishermen engaged in fishing in Bombay, of which 3,417 are engaged in marine fisheries and 1,500 in inland fisheries.

In addition to this, there are about 2,000 allied workers in fishing industry.

Marine Fishery: The important marine fishes caught in large quantity in Bombay area are as under:—

English Name	Local Name	Scientific Name
Bombay duck	Bombil	Harpodon nehereus
Golden anchovies	Mandeli	Coilia dussumieri
Prawns and Shrimps	Kolambi	Penacus sp. Actes sp.
Pomfrets	Saranga, Poplet	Pampus argentus.
Eel	Warn	Muraenosox spp.
Ribbon fish	Wagti	Trichiurus species
Clupeid	Rati	Thrissocles species
Shark ray	Mush, Pakhat	Carcharinus species
Cat fish	Shingala	Tachysurus species
Silver bar	Datal	Chirocentrus species
Jow fish and croaker	Dhoma	Sciaenidae family
Threadfins	Dara, Rawas	Eleutheronema

Besides the above, Seer fish, H. mackerel, Red snappers, black pomfrets soles, Lobsters are caught in smaller quantities.

The important fishing centres along the coastline of Bombay are Sassoon Dock, Kasara Bundar, Khar Danda, Versova, Madh. Manori and Gewarai.

Fishing Craft and Gear: A brief description of the fishing crafts commonly used is given below:—

Machava: This is a carvel type built boat pointed at both ends, stern and stem. It is an open undecked boat with a single mast at the middle part. The name Machava is supposed to have originated from the Sanskrit words Matsya Wahan, a fish carrying or a fishing boat. The size of the boat varies according to the individual requirements, but normally it is 14 metres in overall length, 3 metres in width and 11/2 metres in depth. It is usually made of teak wood. The cost of such a boat is about Rs. 20,000. These boats are being operated from Versova, Madh, Sassoon Dock and Kasara Bundar.

Ballyav: This type of boat is mainly used by fishermen of Versova and Madh. It is made of teak wood. It is also carvel type plant built boat with a length varying from 10 to 14 metres. It has a rounded broad stern and elongated high bow. The cost of the boat ranges between Rs. 12,000 and Rs. 20,000.

Of the existing boats more than 560 have been converted into mechanised boats. The total number of boats engaged in fishing is 2,034. The 560 mechanised boats in Bombay have advantages over sailing crafts.

Dol: This is one of the most important gears operated off the maritime of Bombay. It is a funnel shaped net used for fishing upto about 40 metres depth. It has a length of about 50 to 70 metres with a rectangular mouth of 30 metres width. The net was generally made of cotton twine in the past, but recently the fishermen have started replacing some of the parts of this net with a monofilament of synthetic fibre.

The nets used in the creeks are called as Bokshi. The net is set in the water against the current.

Operation of *Dol* net is interesting and includes fixing of *khunt*, a wooden pole of 40 metre length. This is carried to the fishing ground with two boats manned by 20 to 25 experienced fishermen. The technique involves the fixing of the pole vertically by pressing it as per the flowing current. As this method is very expensive, the fishermen have adopted a new method called barrel system, to operate *Dol* net. In this system, the net is used with the help of ropes and a barrel.

Gill Net: This net comprises webbing of varying meshes, to enable catching fishes of different size by gillmg *i.e.*, by getting their head portion entangled in meshes as the entanglement takes place near the gill portion of the head. There are three types of gill net, *e.g.*, surface drift, bottom drift and bottom set.

Surface drift, locally called *Daldi* or *Wawari*, it is composed of 60 to 65 pieces, each piece having a length of about 40 to 45 metres and a height of 4 to 5 metres. *Daldi* nets are used for catching *Surmai* having a mesh of 10 mm.

The floats are either triangular in shape or elongated flat pieces of wood attached to the head rope. These nets are generally used upto 50 metres depth.

Bottom Drift and Bottom Set, locally called *Budichi Jali*, are composed of a number of pieces varying from 60 to 80, each measuring about 40 to 50 metres in length. The mesh size varies from 4 to 8 mm. These nets are mainly operated by fishermen from Madh and Versova.

Trawling: Introduction of trawl nets for exploitation of demersal or bottom fisheries has been under consideration as an important aspect of raising fish production for the last about five decades. The trawl nets were introduced by Bombay fishermen in 1966. They have now realised the beneficial results of this method for haivesting demersal fisheries.

Fisheries Co-operative Societies: There are 15 primary co-operative societies in Bombay which are mainly functioning at Worli, Khar Danda, Juhu, Versova, Madh, Manori and Trombay. Besides, there is an apex fisheries co-operative society in the city. These co-operative societies have played an important role in providing ice factories, fish transport trucks, grain shops, diesel pumps and many other fisheries requisites to the members. Efforts are being made to export frozen fish, fresh as well as dry fish, in collaboration with co-operative societies to other cities and abroad.

The frozen products are exported mainly to Japan and the U.S.A. while the Bombay duck is exported to Colombo and Malaysia. In 1974-75 dry fish exported through Bombay amounted to 10,643 tonnes at the average rate of Rs. 3,781 per tonne. The turnover of fisheries co-operatives amounted to Rs. 73 lakhs in 1975-76.

The following statement shows the export of fish from Bombay Port during 1975-76:—

Name of Product	Quantity (in M.T.)	Value (in thousand Rs.)
Frozen shrimps	5,869	1,54,901
Frozen frog legs	881	20,046
Frozen lobster tails	139	8,369
Shark fins	44	1,364
Fish maws	83	4,264
Cattle fish	39	463
Dried fish	359	2,442
Canned fish	3	91
Frozen sauria	27	74
Frozen fish	85	1,088
Cuttle fishlets	9	89
Others	1,418	9,793
Total	8,956	2,02,984

There is a fisheries training centre at Versova which was established in August 1955. It imparts training in scientific methods of pisciculture and the commercial aspects of the fishing industry. This training centre trained 671 students upto December 1976.

There were 29 ice plants in Greater Bombay with a daily production capacity of 93 metric tonnes. It is estimated that about 60 per cent of the total catch of fish is dried while 40 per cent is sold in fresh condition in Bombay Market. The

average of the total catch of marine fish in Bombay during 1970-1975 was estimated to be 92,103 metric tonnes, which was worth about Rs. 1,498.81 crores.

The following statement gives the quantity and value of marine fish landings in Greater Bombay for a few years:—

	Quantity (in M.Tonnes)	Value (in lakhs of Rs.)		Quantity (in M.Tonnes)	Value (in lakhs of Rs.)
1970-71	65,109	10,44.84	1973-74	1,00,577	18,20.81
1971-72	80,477	9,32.76	1974-75	1,22,188	24,70.36
1972-73	92,165	12,25.28	1975-76	1,68,522	42,13.80

There are 7 freezing plants in Bombay. They have a freezing capacity of about 35 m. tonnes and have frozen storage capacity of about 825 m. tonnes. Shrimp, lobsters, frog legs are frozen. Efforts are being made to export frozen pomfrets to foreign countries. The dry fish trade is mostly handled by private merchants, although recently few societies are attempting to do this business.

Inland fisheries: There are 56 tanks in Bombay which are suitable for inland fishing. The potential for inland fishing in Greater Bombay extends over an area of 244 hectares. Of this, an area of 5.70 hectares is under departmental control, while the rest of the area is under private pisciculture. These tanks are stocked every year with Bengal carps. No tanks are leased out to co-operative societies. It is estimated that inland water resources yield 2.3 metric tonnes of fish per annum The following fishes are available in fresh water:—

English Name	Local Name	Scientific Name
Major carps	Catla	Catla catla
Major carps	Rohu	Labeo rohita
Major carps	Mrigal	Cirrhina mrigala
Cat fish	Shingala	Mystus sp
Tilapia	Tilapia	Tilapia mossa

Fish Seed Unit: A fish seed unit has been established at Aarey where induced breeding work is undertaken every year for the production of fish seed of major carps. The production during 1971-72 to 1975-76 was as under:—

Year	Production (fry) (in lakhs)	Year	Production (fry) (in lakhs)
1971-72	77.57	1974-75	32.18
1972-73	47.33	1975-76	60.00
1973-74	44.17		

SNAKES

(The account on Snakes is contributed by Dr. P. J. Deoras, Bombay)

There are a few hills in Borivli-Goregaon area and hillocks at Malabar hill, Worli, Sion, Andheri and Malad. The total number of people bitten by snakes and admitted to hospital is very small. There are a number of people exhibiting snakes on the road-side and trying to play with a flute. A number of beliefs have grown up in the area. An instance given below indicates as to how superstition has played its part in not understanding the problem of snakes in the Greater Bombay area. In 1957, a cobra snake came into the house of a Parsi family on Malabar Hill. They did not kill it and their efforts to get rid of it were fruitless. A snake charmer was called who pretended to have charmed the cobra and made it innocuous. It was fetched to the Haffkine Institute. On examination the scientists found that the mouth of the cobra had been stitched by a thread to prevent il from opening the mouth and biting. Picking out poison fangs, plugging the holes of fangs, removing the poison glands or stitching the mouth are usual methods adopted by the so-called snake charmers in Bombay to make a cobra innocuous.

The famous Haffkine Institute in Bombay has been conducting research on snakes for the last more than 30 years. This is the only institute in India which is producing a lyophilised polyvalent antivenin against the poisons of cobra, krait, Russel's viper and Echis carinatus snakes. Given in time, this is the only sure remedy available against snake bites in India. To produce this, they are keeping a large number of snakes, which numbered 5,000 sometimes. This is also the only institute which has a snake-farm established in 1952, and imparts education to the public about snakes and snake-bites by a public demonstration every Thursday. In the following is given a short description of non-poisonous and poisonous snakes.

Non-Poisonous:

Lycodon aulicus: Locally this snake is called Kawdya sarp or Biwatya sarp. It is found often in open gardens and grassy areas near residential areas. The dorsal surface is either camel yellow or brownish yellow with snuff coloured spots at the sides. The spots have whitish borders. The head has brown spots and the ventral scales are yellowish. It grows to a length of about 50 cm and can climb trees with ease. It feeds on small mammals, frogs and eggs. It is harmless but when disturbed it may bite viciously.

Oligodon Arnensis: Locally people call it Gargar sarp or Shankh-kankan sarp. It is about 60 cm long and 7 cm in thickness. It is greyish brown in colour with a brown tinge, and has a number of black spots at the sides that have a white border. Remaining part of the body is full of yellow spots and the head has piky white streaks. It feeds on small mammals, lizards, gekos and insects. It moves out in the evenings in gardens and green areas. This snake is often mistaken to be a krait; but it has no single row of dorsal hexagonal scales seen in krait.

Natrix Stolata: This is the common Naneti snake of Maharashtra. It is quite docile and is seen in large numbers during the rainy season. Body hue is faint yellow with an olive green tinge is the colour of the dorsal surface, which has a net of tiny dark spiky spots dispersed all over, apart from two longitudinal almond coloured streaks on the ride of the snake. The ventral surface has white spots with black ones at the sides. It lays eggs in April, and the young ones emerge in the monsoon. It feeds on insects and small frogs. The snake though slightly agile could be handled safely and exhibited at places.

Natrix Piscator: This is a very common snake particularly in the suburbs of Bombay in the areas of the creek or open drains. Locally it is called Diwad. It grows to 90 cm in length and is 14 cm in circumference at the thickest., It is olive green with black checked square marks all over the body. No wonder it is called "checkered keel black". The head is brown with black rings round the eyes and black streaks at the sides. The ventral side is white with black borders. It swims vigorously in water, and can stay there with only its tip of head popping out. It feeds on fishes, frogs, and other small aquatic fauna. It does not normally bother a man, but when some one puts his foot on it the snake will bite very viciously. It lays eggs in Apiil and the young ones are born in June.

Boiga Triagonate: This cat snake is called a Vidal sarp or Manjrya sarp. Local people mistake it to be a cobra, simply because it raises its head. The snake is deep brown with black chevron shaped marks all over the body. The ventral side is white with black spots at the sides. A bilobed brown spot with black border extends from the centre of the head to the neck. One brown stripe extends from behind the eyes on each side upto the nape. The length extends upto 85 cm. and the female is longer than the male. This snake is very irritable and on provocation raises its head with a part of the neck and opening its mouth hurls the body at the victim to bite very severely. It feeds upon frogs, small mammals. Iizards and even birds.

Dryophis Nasutus: This whip shaped parrot green snake is commonly seen on trees and grass. The head is pointed and is often held aloft as if to hypnotise the victim. It is locally called Harantol or Sarpatol The parrot green colour bears white and yellowish black diagonal streaks. At the sides are thin lines followed by faint blue dots. The tongue is yellow and neck is sky-blue. The head is pointed, with a distinct green snout beyond the mouth. When kept in cages it strikes with the snout which often gets broken. When disturbed, it jumps and is virtually seen to fly up in the air.

The snake feeds on eggs and small birds. Though non-poisonous its bite gives some swelling and causes mild pain at the site of the bite.

Coluber Diadema: This beautiful snake brown in colour and having dark blue marks on the dorsal side was very common in the Baridra area. Due to urbanisation it is disappearing from the area. The dorsal marks look as if some one has split ink over the body from a distance. Some of the dark spots may be rectangular. The ventral surface is yellow. It grows to 120 cm and its maximum thickness is 16 cm.

As age advances the marks on the body become faint, and get a good camouflage in between tree tops and bushes. It may be mistaken to be a Russel's Viper, but the head is not triangular. It feeds on frogs, lizards and small mice. It lays eggs in May and they hatch in June-July. During the monsoon this snake is commonly encountered in the grasses or tree trunks.

Elaphe Helana: Locally this trinket snake is called *Taskar sarp*. The male snake is 90 cm long. The snake has a faint chocolate colour with deep brown spots, a white dot being in the centre. A small black streak lies at the base of eyes. The ventral surface is yellowish. It is a very irritable snake which when disturbed is ready to strike. Small mammals, eggs and lizards are its staple diet.

Ptyas Mucosus: Dhaman is the common name for this brown yellow snake which has black spots on the scales in the tail region. It grows to 250 cm and can climb trees with great agility. It is in the habit of making bowline knot round an object by its tail and exude foul smelling liquid from the anal region. When held by the head, it emits a sound akin to that of kite. It feeds mainly on rats. In fact the presence of this snake in a locality reduces the number of rats there.

Cereberus Rhynchops: This water snake has a faint bluish brown colour with clear black flowery marks all over the body. The marks are clear in the anterior region. A Hack line passes over the eyes. The ventral side is faint yellow with black spots on the corners. Head and eyes are small. The skin is rough, and the rear end is blunt with the tail being flattened to be used as an oar in swimming.

It is found in creek region where it often buries the tail in the mud, keeping the head above to feed upon frogs, fishes and a number of aquatic fauna that comes with the tide. Unfortunately, it cannot run properly on dry surface especially when the tide is gone, and often becomes a prey to many predators.

Achrochordus Granulatus: In Marathi it is called Chamkhilya sarp. This ash coloured snake has faint white dots. The head is chocolate with grey spots. This snake is found on the western coast and the local fisherfolk call it Gunjal sarp. It looks furacious, because of the raised ridge over various scales, and a large number of scales with projections on the head. It is ash coloured with faint white small flowery marks all over the body. Head is chocolate with yellowish spots, and tiny black small cross-bars all over the body. The skin is folded at the sides with thorny scales on the surface.

The snake is met with near creek waters where it feeds on fishes, frogs and other edible fauna. It does not lay eggs, but begets about a dozen young snakes, before the monsoon. It is non-poisonous snake whose bite may give some painful symptoms. It is about 100 cm long.

Eryx Johnii: This sand boa snake is called *Mandol* in Marathi. It is totally chocolate brown with a very large number of tiny scales all over the body. The head is very small and looks like a continuation of the neck. The tail is blunt. It is a very lethargic snake, living in areas with sand and soil and feeds on frogs and small mice, and can easily be handled. It is 50 cm long.

Eryx Conicus: The head and tail are both blunt. The colour is brown with patches of grey and white all over the body. It looks like a python. This snake grows to about 45 cm and always remains curved up or coiled in the soil. When badly disturbed, it would break the coil and dart out to strike.

Uropheltis Phiphsoni: This snake is quite rare and is found in the hilly regions of Borivli. People call it *Khapar Khawalya*. It is a deep chocolate brown small snake with variegated yellow white and red spots on the body. The tail is not only blunt but on the upper side it has a rhomboid surface creating edges which give slrength to cutting earth, while digging to burrow. The eyes of this snake are small, and it is as thick as a human thumb. It grows to maximum of 15 cm. It is negatively phototropic and moves in darkness to feed on insects. If disturbed it strikes with its edged tail. The snake is viviparous.

Typhlops Braminius: This blind snake is often mistaken to be an earthworm, but unlike the worm it has scales covering each other all over the body. There are only tiny vestiges of eyes and two vestiges of appendage bones near the vent. There is no distinction between head and neck. It is about 23 cm long, snuff coloured except for the head side, tail and lower surface that are grey. The tail is blunt with spine-like structure meant for digging to burrow. It cannot move properly on plain ground, but on soft soil it uses the spine for movement. This snake seems to feed on earthworms, soft insects and their larval. Apart from a few teeth in the upper jaw, the snake is devoid of teeth.

Poisonous:

Naja Naja (Nag): This snake is commonly found all over Bombay, in old mill compounds, wells, crevices and even in the gardens of Malabar and Pali hills. It is distinguishable by the presence of a flattened neck region called hood. A binocoellate mark is often seen on the dorsal surface of the hood. The ventral suiface has three faint ash coloured cross thick stripes separated by white ventral scales. There are two deep black spots just above the first ash coloured stripe. Cobra scales found in the southern region have chevron shaped blackish bars all over the dorsal surface starting from the base of the hood. The most typical characteristic for recognising this snake is to see the scales on the head. Theie are three small scales behind the eyes, the third supralabrial scale is big and touches the eye and the nasal, while there is a distinct triangular scale between the 5th and 6th infralabial scales.

This is supposed to be a very poisonous but graceful snake growing upto 150 cm and feeding on rats and frogs. It requires 12 mg. of the venom of this snake to kill an able-bodied man. The only sure remedy to get relief from this venom is an injection of antivenin. This is manufactured at the Haff kine Institute, Bombay. The snake lays eggs in April which hatch by the end of July. A young cobra snake is as poisonous as an adult except that it may not be able to give the adequate dose of venom.

Callophis Melanurus: People call this snake as Kal sarp or Rat sarp. It is a small snake growing upto 34 cm in length and has a brown colour with a deep brown mark at the centre of each scale. The head and neck are black with yellow spots and two black stripes on the tail. The ventral surface is pink. There is a belief that its bite kills a man in 12 hours, especially if it bites in the evening the patient would die by the morning. It is seen mainly in the hilly areas bordering Thane district The only sure remedy is the administration of antivenin. This small snake feeds on mice, frogs and young lizards and lays eggs during the month of May.

Vipera Russelli: Russel's viper or Ghonas is common poisonous snake in the suburbs of Bombay, especially in the areas surrounded by vegetation. It grows to 160 cm and has a greenish brown body with three rows of oval deep brown spots, one on the dorsal and one each at the sides. The male snakes are pinkish hue. The head is triangular and is full of tiny scales, with deep brown patches behind the eyes. The fangs of this poisonous snake are nearly 1 cm long. It rests its head amidst the coil of its body. When disturbed it takes a liver like action from the coils and hurls the head at its victim. The fangs are capable of tearing the skin and penetrating in the flesh. The poison of this snake is vasotoxic. There is an intense burning at the site of bite accompanied by oozing of blood and swelling. The venom required to kill a normal bodied man is 15 mg. Polyvalent antivenin is the only sure cure against this snake-bite.

The snake feeds on rats and, during the monsoon, lays about 96 young ones. It hisses loudly and continuously.

Echis Carinatus: Locally it is called a *Phoorsa*, and is sometimes found near the hills adjoining Thane district. It is a small snake that grows upto 40 cm The body is deep brown with faint white chain of spots and arrow bead mark on the head. This snake always remains coiled up and moves as side winder. It darts and attacks after taking a lever action from the coils of its body. It is a very hardy snake that remains in the open even on warm rocks during midday time, feeding on lizards, scorpions, and a variety of insects. It breeds during monsoon months by giving birth to a large number of young ones. The lethal dose of the venom of this snake is only 8 milligrams, but often it is not able to give this much amount of poison. The victim therefore does not die. He survives, but may succumb to secondary infections and complications. While moving it makes a noise by rubbing the serrated scales on the body.

Trimeresurus gramineus: This small green snake growing to about 75 cm is met within the forest areas of Borivli. The head is triangular with a pit near the nasal opening and there are three faint white lines on the body over a leaf green surface. The eye-balls are golden and there are faint lines near it.

Living camouflaged in the deep green forests, it makes a loud hissing noise and darts at the victim. The pit near the nasal opening is used to perceive heat. It feeds on mice, birds, eggs and lizards and lays young ones in monsoon months. The venom is painful and polyvalent antivenin is the only antidote.

Enhydrina Schistosa: This ash colour snake with cross black stripes round the body is often met lying on the sea shore of Versova after the high tide. Its head is very small with nasal opening at the tip and the neck seems to have fused with the head. The tail is flattened out as an oar. The ventral scales are nearly coalesced forming just a ventral ridge. The snake cannot thus move on land and can easily be killed by man. The skin is very rough, and due to that it gets dry in the sun very soon. This snake is trapped in the nets of fishermen in deep sea. The fangs are situated far behind, and the poison is neurotoxic like that of the cobra. Due to its prolonged stay in sea waters the venom may be getting diluted. As the fangs are far behind it cannot take a grip to inject the poison. The lethal dose for a normal man is 14 mg. It lays eggs and feeds on fishes and other sea life.

Hydrophis mamillaries: This marine snake is found mainly near seashore, and is buff coloured. The ventral scales have fused to form a ridge and the tail is flattened as an oar. Its fangs are situated far behind, and the head and eyes are small. The nasal opening too is at the outerior end. The poison of this snake is neurotoxic, and the only remedy is the injection of an antivenin.

ANNEXURE I FLORISTIC WEALTH OF BORIVLI NATIONAL PARK

	Botanical name	Local name
I. Tre	es	
1.	Adansonia digitata	Gorakh chinch
2.	Bombax malabaricum	Sawar, Katesawar
3.	Stercula colorata Roxb. Eruthoropsis colorata	Khavas, Khanshi
4.	Sterculia urens	Pandhari, Kada
5.	Azadirachta indica	Kaduneem
6.	Saccopetalum tomentosum F. and Th.	Hum
7.	Garcinia Indica	Kokam
8.	Ochrocarpus longifolius syn. Calysaccion longifolium	Surangi
9.	Garuga pinnata	Kakad
10.	Lannea grandis syn. odina wodier	Shimti, Shimbat
11.	Mangifera indica	Amba
12.	Tamarindus indica	Chinch
13.	Dalbergia sisso	Shisham
14.	Pterocarpus marsupium var, acuminata	Bibla
15.	Terminalia belerica	Beheda
16.	Terminalia tomentosa	Ain, Sadada
17.	Syzygium cumini	Jambhul
18.	Adina Cordifolia	Haldu
19.	Ixora arborea	Kuda
20.	lxora brachiata	
21.	Madhuka indica	Mohwa
22.	Manilkana hexandra	Ahmadabadi hewa
23.	Mimusops elengi	Bakul
24.	Alstonia scholaris	Satwin, Saptaparni
25.	Heterophragma quadricularis	Wurus, Panlag

27. Sterospermum personatum 28. Tectona grandis 29. Tewia polycarpa 30. Holoptelea integrifolia 31. Tremaorientalis 32. Ficus asperrima 33. Ficus asperrima 34. Ficus arnottina 35. Ficus mysorensis 36. Ficus mysorensis 37. Borassus flabellifer 38. Cocos nucifera 39. Phoenix sylvestris 40. Anona squamosa 41. Anona reticulata 42. Flacourtia montana 43. Thespesia populnea 44. Perospermum suberifolium 45. Grewia colimnaria 46. G. tiliaefolia 47. Zizyphus xylopyra 48. Sapindus trifoliatus 49. Anacardium occidentale 40. Semecarpus anacardium 41. Moringa oleifera syn. M. pterigosperma 42. Shevya 43. Moringa oleifera syn. M. pterigosperma 44. Shevya 45. Semecarpus anacardium 46. Shevya 47. Zizyphus xylopyra 48. Sapindus trifoliatus 49. Anacardium occidentale 49. Moringa oleifera syn. M. pterigosperma 40. Shevya 41. Moringa oleifera syn. M. pterigosperma 42. Shevya 43. Bauhinia variegata 44. Kanchan	26.	Oroxylum indicum	Tetav	
28. Tectona grandis Sag, Sagwan 29. Trewia polycarpa Petari 30. Holoptelea integrifolia Wavali, Papra 31. Tremaorientalis Ranambada, Kargol 32. Ficus asperrima Kharwat 33. Ficus armottina Payar 34. Ficus bengalensis Wad 35. Ficus religiosa Pipal 36. Ficus religiosa Pipal 37. Borassus flabellifer Tad 38. Cocos nucifera Naral 39. Phoenix sylvestris Shindi 40. Anona squamosa Silaphal 41. Anona reticulata Ramphal 42. Flacourtia montana Attak, Champer 43. Thespesia populnea Ranbhendi 44. Pterospermum suberifolium Muchkund, Kanak champa 45. Grewia colimnaria Kala dhaman 46. G. tiliaefolia Dhaman 47. Zizyphus xylopyra Ghout, Ghatbori 48. Sapindus trifoliatus Railu 49. Anacardium occidentale Kaju 50. Semecarpus anacardium Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma Shevga 52. Bauhinia recemosa Apta				
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34. Ficus bengalensis 35. Ficus mysorensis 36. Ficus religiosa 37. Borassus flabellifer 38. Cocos nucifera 39. Phoenix sylvestris 40. Anona squamosa 41. Anona reticulata 42. Flacourtia montana 43. Thespesia populnea 44. Pterospermum suberifolium 45. Grewia colimnaria 46. G. tiliaefolia 47. Zizyphus xylopyra 48. Sapindus trifoliatus 49. Anacardium occidentale 50. Semecarpus anacardium 51. Moringa oleifera syn. M. pterigosperma 52. Bauhinia recemosa Pipal Naral Bhurwad Pipal Add Pipal Add Pipal Add Pipal Add Ramphal Attak, Champer Ramphal Attak, Champer Rambhendi Muchkund, Kanak champa Atsak, Champer Grewia colimnaria Attak, Champer Attak, Champer Antiha Biba, Bibwa Shevga	32.	Ficus asperrima	Kharwat	
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38. Cocos nucifera 39. Phoenix sylvestris 40. Anona squamosa 41. Anona reticulata 42. Flacourtia montana 43. Thespesia populnea 44. Pterospermum suberifolium 45. Grewia colimnaria 46. G. tiliaefolia 47. Zizyphus xylopyra 48. Sapindus trifoliatus 49. Anacardium occidentale 50. Semecarpus anacardium 51. Moringa oleifera syn. M. pterigosperma 52. Bauhinia recemosa Sitaphal Ramphal Attak, Champer Ranbhendi Muchkund, Kanak champa Kala dhaman Chout, Ghatbori Ritha Sapindus trifoliatus Ritha Sapindus trifoliatus Ritha Sapindus trifoliatus Ritha Sapindus trifoliatus Anacardium occidentale Shevga	36.	Ficus religiosa	Pipal	
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41. Anona reticulata Ramphal 42. Flacourtia montana Attak, Champer 43. Thespesia populnea Ranbhendi 44. Pterospermum suberifolium Muchkund, Kanak champa 45. Grewia colimnaria . Kala dhaman 46. G. tiliaefolia . Dhaman 47. Zizyphus xylopyra . Ghout, Ghatbori 48. Sapindus trifoliatus . Ritha 49. Anacardium occidentale . Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	39.	Phoenix sylvestris	Shindi	
42. Flacourtia montana Attak, Champer 43. Thespesia populnea Ranbhendi 44. Pterospermum suberifolium Muchkund, Kanak champa 45. Grewia colimnaria . Kala dhaman 46. G. tiliaefolia . Dhaman 47. Zizyphus xylopyra . Ghout, Ghatbori 48. Sapindus trifoliatus . Ritha 49. Anacardium occidentale . Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	40.	Anona squamosa	Sitaphal	
43. Thespesia populnea Ranbhendi 44. Pterospermum suberifolium Muchkund, Kanak champa 45. Grewia colimnaria . Kala dhaman 46. G. tiliaefolia . Dhaman 47. Zizyphus xylopyra . Ghout, Ghatbori 48. Sapindus trifoliatus . Ritha 49. Anacardium occidentale . Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	41.	Anona reticulata	Ramphal	
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45. Grewia colimnaria . Kala dhaman 46. G. tiliaefolia . Dhaman 47. Zizyphus xylopyra . Ghout, Ghatbori 48. Sapindus trifoliatus . Ritha 49. Anacardium occidentale . Kaju 50. Semecarpus anacardium 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	43.	Thespesia populnea	Ranbhendi	elleers
46. G. tiliaefolia . Dhaman 47. Zizyphus xylopyra . Ghout, Ghatbori 48. Sapindus trifoliatus . Ritha 49. Anacardium occidentale . Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	44.	Pterospermum suberifolium	Muchkund, Kanak champa	
47. Zizyphus xylopyra . Ghout, Ghatbori 48. Sapindus trifoliatus . Ritha 49. Anacardium occidentale . Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	45.	Grewia colimnaria	. Kala dhaman	
48. Sapindus trifoliatus Ritha 49. Anacardium occidentale Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	46.	G. tiliaefolia	. Dhaman	
49. Anacardium occidentale Kaju 50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	47.	Zizyphus xylopyra	. Ghout, Ghatbori	
50. Semecarpus anacardium . Biba, Bibwa 51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	48.	Sapindus trifoliatus .	. Ritha	
51. Moringa oleifera syn. M. pterigosperma . Shevga 52. Bauhinia recemosa . Apta	49.	Anacardium occidentale .	. Kaju	
52. Bauhinia recemosa . Apta	50.	Semecarpus anacardium	. Biba, Bibwa	
	51.	Moringa oleifera syn. M. pterigosperma	. Shevga	
53. Bauhinia variegata . Kanchan	52.	Bauhinia recemosa	. Apta	
	53.	Bauhinia variegata	. Kanchan	

54. Casia histula 55. Delonix regia 56. Parkinsonia aculeata 57. Erythrina suberosa 58. Erythrina variegata var, orientalis 59. Pongamia pinnata 60. Sesbania gradiflora 61. Acacia arabica 62. Acacia catechu 63. Lagerstroemia parviflora 64. Gardenia latifolia 65. Morinda tinctoria 66. Randia dumatorum 67. Diospyros embryopteris 68. Nyctanthes arbot-tristis 69. Salvadora persica 70. Cordiamyxa 71. Erhetia laevis 72. Callicarpa tomentosa 73. Gmelina arborea 74. Bridelia retusa 75. Euphorbia tirucalli 76. Exaecaria agallocha 77. Embural, Thor 78. Jatropha curcas 79. Macaranga peltata 79. Macaranga peltata 70. Richius communis 79. Macaranga peltata 70. Richius communis 70. Richius communis 71. Ernol				
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57. Erythrina suberosa . Pangara	55.	Delonix regia	. Gulmohar	
58. Erythrina variegata var, orientalis Pangara 59. Pongamia pinnata Karanj 60. Sesbania gradiflora Agasta 61. Acacia arabica Babul 62. Acacia catechu Khair 63. Lagerstroemia parviflora Bonda, Bondara 64. Gardenia latifolia Pandru, Ghogar, Dikemali 65. Morinda tinctoria Bartondi 66. Randia dumatorum Gdphal 67. Diospyros embryopteris Temburni, Tendu 68. Nyctanthes arbot-tristis Parijatak 69. Salvadora persica Khakan 70. Cordiamyxa Bhokar 71. Ehretia laevis Datrang 72. Callicarpa tomentosa 73. Gmelina arborea Shivan 74. Bridelia retusa Asana 75. Euphorbia tirucalii Newalii, Thor 76. Exaecaria agallocha Phungali 77. Emblica officinalis Avala 78. Jatropha curcas Mogil Erandi 79. Macaranga peltata Chandoda	56.	Parkinsonia aculeata	. Vedi-babul	
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64. Gardenia latifolia . Pandru, Ghogar, Dikemali 65. Morinda tinctoria . Bartondi 66. Randia dumatorum . GcIphal 67. Diospyros embryopteris . Temburni, Tendu 68. Nyctanthes arbot-tristis . Parijatak 69. Salvadora persica . Khakan 70. Cordiamyxa . Bhokar 71. Ehretia laevis . Datrang 72. Callicarpa tomentosa 73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	62.	Acacia catechu	. Khair	
65. Morinda tinctoria . Bartondi 66. Randia dumatorum . Gclphal 67. Diospyros embryopteris . Temburni, Tendu 68. Nyctanthes arbot-tristis . Parijatak 69. Salvadora persica . Khakan 70. Cordiamyxa . Bhokar 71. Ehretia laevis . Datrang 72. Callicarpa tomentosa 73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	63.	Lagerstroemia parviflora	. Bonda, Bondara	
66. Randia dumatorum 67. Diospyros embryopteris 68. Nyctanthes arbot-tristis 69. Salvadora persica 60. Cordiamyxa 70. Cordiamyxa 71. Ehretia laevis 72. Callicarpa tomentosa 73. Gmelina arborea 74. Bridelia retusa 75. Euphorbia tirucalli 76. Exaecaria agallocha 77. Emburni, Tendu 78. Jatropha curcas 79. Macaranga peltata 70. Cordiamyxa 70. Cordiamyxa 71. Ehretia laevis 72. Callicarpa tomentosa 73. Gmelina arborea 74. Bridelia retusa 75. Euphorbia tirucalli 76. Exaecaria agallocha 77. Emburni, Tendu 78. Jatropha curcas 79. Macaranga peltata	64.	Gardenia latifolia	. Pandru, Ghogar, Dikemali	
67. Diospyros embryopteris . Temburni, Tendu 68. Nyctanthes arbot-tristis . Parijatak 69. Salvadora persica . Khakan 70. Cordiamyxa . Bhokar 71. Ehretia laevis . Datrang 72. Callicarpa tomentosa . Shivan 73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	65.	Morinda tinctoria	. Bartondi	
68. Nyctanthes arbot-tristis . Parijatak 69. Salvadora persica . Khakan 70. Cordiamyxa . Bhokar 71. Ehretia laevis . Datrang 72. Callicarpa tomentosa . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	66.	Randia dumatorum	. Gclphal	
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70. Cordiamyxa . Bhokar 71. Ehretia laevis . Datrang 72. Callicarpa tomentosa 73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	68.	Nyctanthes arbot-tristis	. Parijatak	
71. Ehretia laevis . Datrang 72. Callicarpa tomentosa 73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	69.	Salvadora persica	. Khakan	
72. Callicarpa tomentosa 73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi . Chandoda	70.	Cordiamyxa	. Bhokar	
73. Gmelina arborea . Shivan 74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	71.	Ehretia laevis	. Datrang	
74. Bridelia retusa . Asana 75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	72.	Callicarpa tomentosa		
75. Euphorbia tirucalli . Newali, Thor 76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	73.	Gmelina arborea	. Shivan	
76. Exaecaria agallocha . Phungali 77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	74.	Bridelia retusa	. Asana	
77. Emblica officinalis . Avala 78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	75.	Euphorbia tirucalli	. Newali, Thor	
78. Jatropha curcas . Mogli Erandi 79. Macaranga peltata . Chandoda	76.	Exaecaria agallocha	. Phungali	
79. Macaranga peltata . Chandoda	77.	Emblica officinalis	. Avala	
	78.	Jatropha curcas	. Mogli Erandi	
80. Ricinus communis Erand	79.	Macaranga peltata	. Chandoda	
	80.	Ricinus communis	Erand	

81.	Ficus elastica	Rabarache Zad]
82.	Ficus hispida	Kharoti, Kala umbar	
83.	Ficus gibbosa	Dateer	
84.	Ficus glomerata	Umbar	
85.	Strebelus asper	Karvati, Kharota	
86.	Cyperus spp.	Motha	
87.	Fimbristylis spp.		
88.	Scirpus spp.	. Kachora	
II. Shr	ubs		
1.	Capparis spinosa	Kabar, Kalavari	
2.	Capparis zeylanica	Wagati	
3.	Helicteres isora	Kewan, murudi, Murudshcng	
4.	Microcos paniculata	Shetali	
5.	Zizyphus mauritiana syn. Z. jujuba	Bor	
6.	Z. oenoplia		
7.	Leea Microphylla	Dinda	ottoore
8.	Acacia pinnata	Shembati, Shembi	elleer 5
9.	Calycopteris floribunda	Ugshi, Ukshi	
10.	Lawsonia inermis	Mendi	
11.	Woodfordia fruticosa Kurz Woodfordia floribunda.	Dhayti, Dhaiphal	
12.	Ixora coccinea	Bakora	
13.	Meyenia erecta	Alu	
14.	Jasminum pubescens	Ranmogra, Ranjai	
15.	Carissa carandas	Karwand	
16.	Holarrhena antidysonterica	Kuda, Pandhrakuda	
17.	Nerium odorum	Kanher	
18.	Wrightia tinctoria	Kuda, Kalakuda	
19.	Wrightia tomentosa	Shurikudi, Tambdakuda	

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20.	Calotropis gigantea	Rui	
21.	Solanum indicum	Bhui, Ringani	
22.	Barleria priontes	Koranti	
23.	Dicliptera zeylanica		
24.	Lepidagathis cuspidata	Bhuigend	
25.	Oerodendron inerme	Keyanel	
26.	Lantana Gamera	Ghaneri	
27.	Vitex negundo	Nirgudi	
28.	Pogostemon parviflorus	Pangli	
29.	Acrya sanguinolenta		
30.	Bridelia Retusa	Asana	
31.	Euphorbia neriifolia	Thor, Nivdung	
32.	Sehima Nervosum	Pavan	
33.	Mallotus philippinensis	Shendri, Kunkuphal, Rohini	
34.	Melanthesa turbinata	Kangli	
35.	Pedilanthus tithymaloides	Vilayati-sher	
36.	Boehmeria scabrella	ate Gaze	etteers
37.	Asparagus racemosus	Shatawari	
38.	Bambusa arundinacea	Bamboo	
III. He	erbs		
1.	Argemone mexicana	Pivla dhotra	
2.	Portulaca oleracea	Ghol	
3.	Abutilon indicum syn. Abutilon graueolens	Mudra	
4.	Malachra capitata syn. Malachra rotundifolia	Ranbhendi	
5.	Sida Spinosa	Jangli methi, bala	
6.	Sida rhombifolia var, retusa	Atibala	
7.	Urena Lobata	Vanbhendi	
8.	Melochia umbellata	Methuri	
9.	Waltheria indica		

10.	Corchorus capsularis	Tag	
11.	C. estuans		
12.	C. olitorius		
13.	Triumfetta Rhomboidea	Nichardi	
14.	T. pilosa		
15.	Impatiens balsamina var. coccinea		
16.	Biophytum sensitivum		
17.	Oxalis martiana		
18.	Cardiospermum halieacabum	Kapalphodi	
19.	Cassia tora	Takla	
20.	Aeschynomene Aspera		
21.	Alysicarpus rugosus	Baker	
22.	Crotalaria Juncea	Tag	
23.	Desmodium triflorum	Ranmethi	
24.	Geissaspis oristata		
25.	Indigofera Gandulosa	Barbada	
26.	Phaseolus radiatus	Moong, Mug	ottoore
27.	Phaseolus trilobus	ale Gazi	ellee15
28.	Smithea hirsuta		
29.	Smithia sensitiva		
30.	Tephrosia purpurea	Unhalli	
31.	Myriophyllum intermedium		
32.	Ammania baccifera	Bharanambhul	
33.	Ammania peplodies		
34.	Jussiaca repens		
35.	Jussiaca suffruticosa	Banlavang	
36.	Begonia crenata		
37.	Mollugo lotoides		
38.	Centalla asiatica	Brahmi	
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39.	Oldenlandia corymbosa	Bitpapda	
40.	Oldenlandia diffusa		
41.	Ageratum conyzoides	Osadi, Sahadevi	
42.	Blumea eriantha	Nimurdi	
43.	Blumea lacera	Burando	
44.	Caesulia axillaris	Maka	
45.	Centrantherum phyllocaenum		
46.	Eclipta Erecta	Maka	
47.	Elephantopus scaber	Hastipta	
48.	Granges madraspatana		
49.	Helianthus spp.	Suryaphul	
50.	Sphaeranthus indicus syn. Sphaeranthus indicus.	Gorkmundi, Mundi	
51.	Tricholenis glaberrima		
52.	Tridex procumbens	Dagadipala	
53.	Ageratum Conyzoides	Sahadevi	
54.	Xanthium strumarium	Sankeshvar, Gadrian	
55.	Lobelia alsinoider	oto Coz	
56.	Plumbago zeylanica	Chitrak	
57.	Canscora diffusa	Kagdi	
58.	Centaurium roxburghii		
59.	Hopea dichotoma		
60.	Coldenia procumbens		
61.	Holiotropium indicum	. Bhurundi	
62.	Trichodesma indicum	. Ghotakalpa	
63.	Cressa cretica	. Kardi, Lona	
64.	Evolvulus alsionoides	. Shankaveli	
65.	Datura arborea	. Dhotra	
66.	Physalis minima	. Chirboti, Ranpopti	

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67.	Solanum xanthocarpum	. Bhoyaringni	
68.	Dacuna monnicri		
69.	Cantranthera hispida		
70.	Limpophila sessiliflora		
71.	Oindenhergia indica		
72.	Lindermia ciliata		
73.	Seoparia dulica		
74.	Bhamnicarna largiflora		
75.	Sesamum indicum	. Til	
76.	Blepharis asperrima		
77.	Branthemum roseum		
78.	Haplanthus tentaculatus		
79.	Hemigraphis latebrosa		
80.	Hygropnilla serphyllum		
81.	Justicia simplex		
82.	Justicia trinervia		
83.	Neuracepthus sphaerostaphys .		
84.	Peristrophe bicalyculata	are Gaze	etteers
85.	Rungia elegans	. Ghati pitpapra	
86.	Rungia parviflora		
87.	Phyla nodifolia		
88.	Anisomeles heyneana		
89.	Anisomelesoyata		
90.	Leucas aspera		
91.	Ocimum sanctum	. Tulshi, Tulas	
92.	Boerhaavia diffusa	. Ghetuli, Punarnava, Sant	
93.	Achyranthes aspera	. Aghada	
94.	Alternauthern sessilis	. Kanchari	

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95.	Celosia argentea	. Kurdu	
96.	Amarantus spinosus	. Kantemath	
97.	Digera muricata		
98.	Polygonum glabrum	. Sheral	
99.	Polygonum plebejum		
100.	Paperomia pellucida		
101.	Poliospermum montanum		
102.	Euphorbia hirta		
103.	Phyllanthus niruri	. Bhuiawala	
104.	Fleurya interrupta		
105.	Pauzolzia indica		
106.	Costna sunriousus		
107.	Erimum spp.		
108.	Dioscorea bulbifera		
109.	Dioscorea dentaphylla		
110.	Commelina benghalensis		
111.	Commelina obliqua		.1
112.	Cyanotis axillaris	e Gaze	teers
113.	Cyanotis cristata		
114.	Amorphophallus campanulatus	Suran	
115.	Colocasia Anti Quorum	Alu	
IV Climbers			
1.	Clematis triloba	Ranjai	
2.	Cocculas villosus	Parvel	
3.	Cyclea burmanni	Pakav	
4.	Tinospora cordifolia	Gulvel	
5.	Capparis horrida	Tarati	
6.	Cansiera rheedii		
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7.	Celastrus paniculata		
8.	Zizyphus rugosa	Toran	
9.	Ampelocissus latifolia syn. Vitis latifolia syn.	Planch	
10.	Cissus latifolia		
11.	Cissus carnosa	Ambatvel	
12.	Cissus auriculata	Kalivel	
13.	Cissus trilobata		
14.	Wagatea spicata Dalz		
15.	Abrus precatorium	Gunj	
16.	Cylidla scariosa	Ranghewda	
17.	Strychuos Nuxvomica	Kajravel	
	Derris trifalia		
18.	Moghania strobilifera		
19.	Teramus labialis	Ranudid	
20.	Entada phaseoloides		
21.	Combretum ovalitolium	Zellusi, Madbel	
22.	Coccinia indica	Tondli	
23.	Luffa acutangula	Shirali, Dodka	etteers
24.	Melothria maderaspatana	Chirati	
25.	Memordica dioica	Kartoli	
26.	Trichosanthes anguina	Padval	
27.	Jasminum malabaricum	Jai, Kusar	
28.	Sterculia Foetida	Nagalkuda	
29.	Cryptolepiso buchanani	Setakavali	
30.	Cymnema sylvestra		
31.	Hemidesmus indicus	Anantvel, Uparsali dudhasali	
32.	Marsdenia volubilis		
33.	Oxystellma esculentum	Dudhani	

34.	Argyraia speciosa	Samudrashok
35.	Argyraia satosa	Sambarveli
36.	Ipomea spp.	
37.	Operculina turpothum	Dudhkalai, dudhkalmi
38.	Floriosa superba	Bachnag
39.	Smilax zeylanica	Ghotvel
	V. Epiphytes	
1.	Tinospora cordifolia	. Amarvel, Akashvel
2.	Striga aulatica	
3.	Dand-rophthoa falcata syn. Loranthus parriflorus	. Bandgul
4.	Viscum nepalense	
5.	Acomoe wightiana	
	VI. Acquatic plants	
1.	Ceriops tagal	. Chauri
2.	Rhizophora mucronata	. Kamo, Dumbi, Kandal
3.	Hmnanthemum indicum	. Kumud
4.	Hydrolea xelanica	
5.	Ipomea aquatica	
6.	Donatrium indicum	
7.	Utricularia flexuosa	
8.	Asteracantha longifolia	. Kolshinda, Talimkhan
9.	Caratophyllum demursum	
10.	Morochoria hastesfolia	
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11.	. Nurdannia versicolor		
12.	Pistia stratiotes		. Gondal (waterlettuce)
13.	Lemna gibba		
	VII. Halophytes		
1.	Sonneratia apetala		
2.	Aegiceras corniculatum		. Kajla
3.	Acanthus ilicifolius		. Marandi (seaholly)
4.	Avicennia officinalis	12	. Tivar
5.	Pandanus odoratissimus		. Kewda, Keura
	MA	MMALS	
	Ins	ectivora	
F	amily Soricidac		
1.	Sunscus murinus	a St	House Shrew (Chichundri)
	Chi	iroptera	
Famil	y Pteropidae		
2.	Rousettus leschenaulti		. Fulvous fruit-bat
3.	Pteropus giganteus		. Indian flying fox (Wat- Waghul)
4.	Cyanopterus shinx		. Short-nosed fruit-bat
5.	Family Emballonuridae Taphozous me	lanopogon	. Black-bearded tomb bat
6.	Taphozous saccolaimus		. Pouch-bearing bat
	Family Megadermatidae		
7.	Megaderma spasma	_	. Malay false vampire
8.	M. lyra		. Indian false vampire
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9.	Rhinolophus rouxi	. Roux's horseshoe bat	
10.	Hipposideros speoris	. Schneider's leaf-nosed bat	
11.	H. bicolor	. Bi-coloured leaf-nosed bat	
12.	H. galeritus	. Cantor's leaf-nosed bat	
	Family Vespertilionidae		
13.	Pipistrellus coromandra	. Indian pipistrelle	
14.	P. mimus	. Indian pygmy pipistrelle	
15.	P. dormeri	. Dormer's bat	
16.	Hesperoptenus tickelli	. Indian Tickell's bat	
17.	Scotophilus heathi	. Greater Yellow bat	
18.	Kerivoula picta	. Painted bat	
	Primates		
	Family Cercopithecidae		
19.	Macaca radiata	. Bonnet Monkey (Makad)	
20.	M. mulatta	. Rhesus monkey	
21.	Presbytis entellus	. Common Langur (Wanar)	
VI:	Camivora	ate Gaze	
	Family Canidae		
22.	Canis aureus	. Jackal (<i>Kolha</i>)	
	Family Viverridae		
23.	Viverricula indica	. Small Indian civet (<i>Jowadi</i> manjar)	
24.	Paradoxurus hermaphroditus	. Common palm civet (<i>Ud</i> manjar)	
25.	Herpestes edwards i Family Hyaenidae	. Indian grey Mongoose (<i>Mungoos</i>)	
26.	Hyaena hyaena Family Felidae	. Striped Hyaena (<i>Taras</i>)	
27.	Felis Chaus	. Jungle cat (<i>Baul, Bagoda</i>)	
28.	Panthera pardus	. Panther (<i>Bibalya</i>)	

29.	Panthera tigris	. Tiger (<i>Wagh</i>)
	Artiodactyla	
	Family Suidae	
	,	
30.	Sus scrofa	. Wild boar (Ran dukkar)
	Family Tragulidae	
31.	Tragulus meminna	Indian spotted chevrotain or mouse deer (Pisorisheda)
	Family Cervidae	
32.	Axis axis .	. Spotted deer (Chital)
33.	Cervue unicolor .	. Sambar
	Family Boridae	
34.	Tetracerus quadricornis	. Four-horned Antelope (Bhekari)
7	Lagomorpha	
VI	Family Leporidae	ale Gazi
35.	Lepus nigricollis	Indian Hare (Sasa)
	Rodentia	
	Family Sciuridae	
36.	Funambulus palmarum	Three striped palm squirrel
37.	F. Pennanti	Five striped palm squirrel
38.	Hystrix indica Family Muridae	Indian crested porcupine (Saloo)
39.	Rattus blanfordi	Blanford's rat
40.	Rattus rattus	House rat (<i>Undeer</i>)
41.	Mus musculus	House mouse

	BIRDS		
	Podicipediformes		
	Family podicipedidae		
1.	Podiceps ruficollis	Little grebe	
	Pelecaniformes		
	Family Phalacrocoracidae		
2.	Phalacrocorax niger	Little or Pigmy cormorant	
3.	Anhinga rufa	Dartar	
	Ciconiiformes		
	Family Ardeidai		
4.	Ardeola graeyii	Pond heron	
5.	Bubulcus ibis	Cattle egret	
6.	Egretta alba	Large egret	
7.	E. intermedia	Median egret	
8.	E. garzetta	Little egret	
9.	Nycticorax	Night heron	
10.	Ixobrychus cinnamomeus	Chestnut bittern	
	Family Ciconidae	ate Gaze	etteers
11.	Anastomus Oscitans	Openbill stork	
12.	Ciconia episcopus	Whitenecked stork	
	Anseriformes		
13.	Dendrocygna javanica	Lesser whistling teal	
14.	Anas acuta	Pintail	
15.	A. crecca	Common teal	
16.	A. poecilorhyncha	Spotbill duck	
17.	A. querquedula	Garganey or Bluewinged teal	
18.	Aythya ferina	Redheaded pochard	
19.	A. nyroca	White-eyed pochard	
20.	A. fuligula	Tufted duck	
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Family Accipitridae 22. Elanus caeruleus Blackwinged kite 23. Pernis ptilorhyncus Honey buzzard 24. Milvus mi grans Pariah kite 25. Haliastur indus Brahminy kite 26. Accipiter badius Shikra 27. A trivirgatus Crested goshawk 28. A. nisus Sparrow hawk 29. Butastur teesa White eyed buzzard eagle 30. Aquila rapax Tawny Eagle 31. Ictinaetus malayensis Black eagle 32. Haliaeetus leucogaster White bellied sea-eagle 33. Gyps indicus Indian longbilled vulture Indian white backed vulture Jindian white backed vulture Egyptian or scavenger vulture Egyptian or scavenger vulture 36. Circus macrourus Pale harrier	
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36. Circus macrourus Pale harrier	
37. C. pygargus Montagu's harrier	
38. Spilornis cheela Crested serpent eagle	
39. Pandion haliaetus Ospery	
Family Falconidae	
40. Falco tinnunculus Kestrel	
Galliformes	
Family phasianidae	
41. Francolinus pictus Painted partridge	
42. Coturnix coturnix Common quail	
43. C. coromandelica Blackbreasted quail	

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44.	Perdicula asiatica	Jungle bush quail
45.	Galloperdix spadicea	Red spurfowl
46.	Gallus gallus	Red junglefowl
47.	G. sonneratii	Grey junglefowl
48.	Pavo cristatus	Common peafowl
	Gruiformes	
	Family Turnicidae	
49.	Turnix sylvatica	Little bustard quail
50.	T. suscitator Family Rallidae	Common bustard quail
51.	Rallus striatus	Bluebreasted banded rail
52.	Porzana pusilla	Baillon's crake
53.	P. porzana	Spotted crake
54.	Amaurornis phoenicurus	Whitebreasted waterhen
55.	A. fuscus	Ruddy crake
56.	Gallicrex cinerea	Water cock
57.	Gallinula chlorophus	., Moorhen
58.	Porphyrio porphyrio	Purple moorhen
59.	Fulica atra	Coot
Charadriiformes		
	Family jacanidae	
60.	Hudrophasianus chirurgus	Pheasant tailed jacana
61.	Metopidius indicus Family Cacanidae	Bronzewinged jacana
62.	Haemantopus ostralegus	Oystercatcher
63.	Vanellus indicus	Redwattled lapwing
64.	V. Malabaricus	Yellowwattled lapwing
65.	Numenius phaeopus .	Whimbrel
66.	N. arquata	Curlew
67.	Tringa totanus	Common redshank
68.	T. stangnatilis	Marsh sandpiper
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69.	T. nebularia	Green shank	
70.	T. ochropus	Green sandpiper	
71.	T. hypoleucos	Common sandpiper	
72.	Capella stenura	Pintail snipe	
73.	C. gallinago	Fantail snipe	
74.	C. minima	Jack snipe	
75.	Calidris minutus	Little stint	
76.	C. temminckii	Temminck's stint	
	Family Rostratulidae		
77.	Philomachus pugnax	Ruff and reeve	
	Family Recurvirostridae		
78.	Rostratula benghalensis	Painted snipe	
79.	Himantopus himantopus	Blackwinged stilt	
	Family Burhinidae		
80.	Recurvirostra avosetta	Avocet	
	Family Glareolidae		
81.	Burhinus oedinemus	Stone curwel	
	Family Laridae		
82.	Cursorius coromandelicus	Indian courser	
83.	Larus brunnicephalus	Brownheaded gull	4.4
84.	L. ridibundus	Blackheaded gull	etteers
85.	Chlidonias hybrida	Whiskered tern	
86.	Sterna aurantia	Indian river tern	
87.	S. acuticauda	Blackbellied tern	
88.	S. albifrons	Little tern	
	Columbiformes		
	Family Ptediroclididae		
89.	Pterocles exustus	Indian sandgrouse	
	Family Columbidae		
90.	Treron pompadora	Greyfronted green pigeon	
91.	T. phoenicoptera	Green pigeon	
92.	Columba livia	Blue rock pigeon	
93.	Streptopelia decaocto	Indian ring dove	
94.	Streptopelia tranquebarica	Red turtle dove	

95.	S. chineasis	Spotted dove
96.	S. senegalensis	Little brown dove
97.	Chalcophaps indica	Emerald dove
	Psittaciformes	1
	Family Psittacidae	
98.	Psittacula eupatria	Alexandrine parakeet
99.	P. krameri	. Roseringed parakeet
100.	P. cyanocephala	. Blossomheaded parakeet
101.	Loriculus vernalis	. Indian lorikeet
	Cuculiformes	- 7
	Family Cuculidae	
102.	Clamator coromandus	. Redwinged crested cuckoo
103.	C. jacobinus	. Pide crested cuckoo
104.	Cuculus varius	. Common hawk cuckoo
105.	C. micropterus	, Indian cuckoo
106.	C.canorus	. Cuckoo
107.	Cocomantis sonneratii	Indian banded bay cuckoo
108.	C. merulinus	. Indian plaintive cuckoo
109.	Surniculus lugubris	. Drongo cuckoo
110.	Eudynamys scolopacea	Koel
111.	Taccocua leschenaultii	. Sirkeer cuckoo
112.	Centropus sinensis	. Crow pheasant
	Strigiformes	
	Family Strigidae	
113.	Tyto alba	. Barn owl
114.	Otus scops	. Scops owl
115.	Bubo bubo	. Great horned owl
	Caprimulgiformes	
	Family Caprimulgidae	

116.	Caprimulgus indicus	. Indian Jungle night jar
117.	C. asiaticus	. Common Indian night jar
	Apodiformes	
	Family Apodidae	
118.	Apus affinis	. House swift
119.	Cypsiurus parvus	Palm swift
	Trogoniformes	1
	Family Trogonidae	
120.	Harpactes fasciatux	. Malabar trogon
	Family Alcedinidae	
121.	Ceryle rudis	. Lesser pied kingfisher
122.	Alcedo atthis	. Common kingfisher
123.	Ceryx erithacus	. Three-toed kingfisher
124.	Halcyon smyrnensis	. Whitebreasted kingfisher
125.	H, pileata	. Blackcapped kingfisher
VI	Family Meropidae	ale Gaz
126.	Merops philippinus	Bluetailed bee-eater
127.	M. orientalis	Green bee eater
	Family Coraciidae	
128.	Coracias benghalensis	Indian roller
	Family Upupidae	
129.	Upupa epops	Ноорое
	Family Bucerotidae	
130.	Tockus griseus	Malabar Indian grey hornbill
	Piciformes	
	Family Capitonidae	
131.	Megalaima zeylanica	Green barbet

	Family Picidae	
132.	M. haemacephala	Crimson breasted barbet
133.	Jynx torquilla	Wryneck
134.	Micropternus brachyurus	Rufous woodpecker
135.	Dinopium benghalense	Lesser goldenbacked woodpecker
136.	D. Javanense	Indian goldenbacked three-toed woodpecker
137.	Dryocorus javansis	Indian great black woodpecker
138.	Picoides maharattensis	Yellow fronted pied woodpecker
139.	P. nanus	Pigmy woodpecker
140.	Hemicircus cenente	Heartspotted woodpecker
141.	Chrysocolaptes festivus	Black backed woodpecker
142.	C. lucidus	Larger goldenbacked woodpecker
	Passeriformes	
	Family Pittidae	
143.	Pitta brachyura	Indian pitta
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144.	Mirafra erythroptera	Redwinged bush lark
VL	Mirafra erythroptera Eremopterix grises	
145.		Redwinged bush lark
145. 146.	Eremopterix grises	Redwinged bush lark Ashy crowned finch lark
145. 146. 147.'	Eremopterix grises Ammomanes phoenicurus	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark
145. 146. 147.'	Eremopterix grises Ammomanes phoenicurus Galerida malabarica	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark
145. 146. 147.' 148.	Eremopterix grises Ammomanes phoenicurus Galerida malabarica Alauda gulgula	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark
145. 146. 147.' 148.	Eremopterix grises Ammomanes phoenicurus Galerida malabarica Alauda gulgula Family Hirundinidae	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark Eastern skylark
145. 146. 147.' 148. 149.	Eremopterix grises Ammomanes phoenicurus Galerida malabarica Alauda gulgula Family Hirundinidae Hirundo concolor	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark Eastern skylark Dusky crag martin
145. 146. 147.' 148. 149. 150.	Eremopterix grises Ammomanes phoenicurus Galerida malabarica Alauda gulgula Family Hirundinidae Hirundo concolor H. rustica	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark Eastern skylark Dusky crag martin Swallow
145. 146. 147.' 148. 149. 150.	Eremopterix grises Ammomanes phoenicurus Galerida malabarica Alauda gulgula Family Hirundinidae Hirundo concolor H. rustica H. smithii	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark Eastern skylark Dusky crag martin Swallow . Wiretailed swallow
145. 146. 147.' 148. 149. 150. 151.	Eremopterix grises Ammomanes phoenicurus Galerida malabarica Alauda gulgula Family Hirundinidae Hirundo concolor H. rustica H. smithii H. daurica	Redwinged bush lark Ashy crowned finch lark Rufoustailed finch lark Malabar crested lark Eastern skylark Dusky crag martin Swallow . Wiretailed swallow

154.	Oriolus oriolus	Golden oriole	
155.	O. xanthornus	., Blackheaded oriole	
	Family Dicruridae		
156.	Dicrurus adsimillis	Black drongo	
157.	D. leucophaeus	Grey or ashy drongo	
158.	D. aeneus	Bronze drongo	
159.	D. paradiseus	Greater Racket-tailed drongo	
160.	D. hottentottus	Haircrested drongo	
	Family Artamidae		
161.	Artamus fuscus	Ashy swallow shrike	
	Family Sturnidae		
162.	Sturnus malabaricus	Greyheaded myna	
163.	S. pagodarum	Blackheaded myna	
164.	S. roseus	Rosy pastor	
165.	S. contra	Pied myna	
166.	Acridotheres tristis	Common myna	ottoore
167.	A. fuscus	Jungle myna	
168.	Gracula religiosa	Grackle or hill myna	
	Family Corvidae		
169.	Depdrocitta vagabunda	Indian tree pie	
170.	Corvus splendens	House crow	
171.	C. macrorhynchos	Jungle crow	
	Family campephagidae		
172.	Tephrodornis pondicerianus	Common wood shrike	
173.	Coracina novaehollandiae	Large cuckoo-shrike	
174.	C. melanoptera	Blackheaded cuckoo shrike	
175.	Perecrocotus flammeus	Scarlet minivet	

176.	P. cinnamomeus	Small minivet
	Family Irenidae	
177.	Aegithina tiphia	Common iora
178.	Chloropsis auriffons	Goldfronted chloropsis
179.	C. cochinchinensis	Goldmantled chloropsis
	Family Pycnonotidae	
180.	Pyconotusjocosus	Redwhiskered bulbul
181.	P. leucogenys	Whitechecked bulbul
182.	P. cafer	Redvented bulbul
183.	P. luteolus	Whitebrowed bulbul
	Family Muscicapiade	
184;	Pellorneum ruffceps	Spotted babbler
185.	Pomatorhinus schisticeps	Deccan scimitar babbler
186.	Dumetia hyperythra	Rufousbellied babbler
187.	Chrysomma sinensis	Yelloweyed babbler
188.	Turdoides caudatus	Common babbler
189.	T. malcolmi	Large grey babbler
190.	T. striatus	Jungle babbler
191.	Alcippe poioicephala	Quaker babbler
	Family Muscicapinae	
192.	Muscicapa parva	Redbreasted flycatcher
193.	M. tickelliae	Tickells blue flycatcher
194.	M. thalassina	Verditer flycatcher
195.	M. latrirostris	Brown flycatcher
196.	Culicicapa caylonensis	Greyheaded flycatcher
197.	Rhipidura albogularis	Whitespotted fantail flycatche
198.	Terpsiphone paradisi	Paradise flycatcher
199.	Monarcha azurea	Blacknaped flycatcher

200.	Cisticola juncidis	Streaked fantail warbler	
201.	Prinia hodgsonii	Franklins longtail warbler	
202.	P. subflava	Plain longtail warbler	
203.	P. socialis	Ashy longtail warbler	
204.	P. sylvatica	Jungle longtail warbler	
205.	Orthotomus sutorius	Tailor bird	
206.	Acrocephalus stentoreus	Indian great reed warbler	
207.	A. dumetorum	Blyth's reed warbler	
208.	A. agricola	Paddyfield warbler	
209.	Hippolais caligata	Booted warbler	
210.	Phylloscopus collybita	Chiffchaff	
211.	Sylvia curruca	Lesser whitethroat	
212.	Phylloscopus tytleri	Tytler's leaf-warbler	
213.	P. inornatus	Yellowbrowed leaf-warbler	
214.	P. trochiloides	Dull green leaf warbler	
215.	Erithacus svecicus	Bluethroat	
216.	Copsychus saularis	Magpie robin	
217.	C. malabaricus	Shama	
218.	Saxicols torquata	Stone chat	
219.	Oenanthe deserti	Desert chat	
220.	Saxicoloides fulicata	Indian robin	
221.	Monticola cinchlorhynchus	Blueheaded rock-thrush	
222.	M. solitarius	Blue rock-thrush	
223.	Myiophoneus horsfieldii	Malabar whistling thrush	
224.	Zoothera citrina	White throated ground thrush	
225.	Turdus merula	Blackbird	
	Family Motacillidae		
226.	Anthus trivialis	Tree pipit	

227.	A. godlewskii	Blyth's pipit	
228.	Motacilla flava .	Yellow wagtail	
229.	M. alba	White wagtail	
	Family Dicaeidae		
230.	Dicaeum erythrorhynchos	Tickell's flowerpecker	
231.	D. agile	Thickbilled flowerpecker	
	Family Nectariniidae		
232.	Nectarinia zeylonica	Purplerumped sunbird	
233.	N. lotenia .	Loten's sunbird	
234.	N. asiatica	Purple sunbird	
235.	Aethopyga siparaja	Yellowbacked sunbird	
	Family Ploceidae	为 .	
236.	Passer domesticus	House sparrow	
237.	Petronia zanthocollis	Yellowthroated sparrow	
238.	Ploceus philippinus	. Baya	
239.	Estrilda amandava	. Red munia	ottooro
240.	Lonchura malabarica	. Whitethroated munia	elleers
241.	L. Striata	. Whitebacked munia	
242.	L. punctulata	. Spotted munia	
243.	L. malacca	. Blackheaded munia	
	Family Fringillidae		
244.	Carpodacus erythrinus	. Common rosefinch	
	Family Emberizidae		
245.	Emberiza melanocephala	. Blackheaded bunting	
	REPTILES		
	Family Crocodilidae		
1.	Crocodilus palustris	. Indian Marsh crocodile	

	Testudines		
	Family Emydidae		
2.	Geomyda trijuga trijuga	. Pond tortoise	
	Family Testudinidae		
3.	Testudo elegans	Star red tortoise	
	Family Trionychidae		
4.	Trionyx leithi		
	Squamata		
	(I. SAURIA)		
	Family Geckonidae		
5.	Hemidactylus maculatus	Rock gecko	
6.	H. brooki	House gecko	etteers
7.	H. leschensulti		
8.	H. giganteus		
9.	Eublepharis macularius		
	Family Agamidae		
10.	Calotes versicolor	Bloodsucker, common calotes	
11.	Calotes rouxi	Forest calotes	
12.	Psmmophilus blanfordanus	Rock lizard	
	Family Chamaeleonidae		

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13.	Chamaeleon zeylanicus	
	Family Scinidae	
14.	Mabuya carinata	Common skink
	Family Varanidae	
15.	Varanus monitor	Common monitor
	(II. SERPENTS)	
	Family Typhlopidae	
16.	Typhlops braminus	Common blind snake
	Family Boidae	
17.	Python molurus	Indian python
18.	Eryx conicus	Russel's sand boa
19.	E. johni	John's sand boa
	Family Colubridae	1-0
20.	Acrochrodus granulatus	Wart snakes
21.	Elaphe helena	Trinket snake
22.	Ptyas mucosus	Dhaman or rat snake
23.	Coluber fasciolatus	Banded racer
24.	Liopeltis calamaria	Bridal snake
25.	Coronella brachyura	Kukri snake
26.	Ahaetulla trists	Common Indian bronze
27.	Lycodon travancoricus	Travancore wolf snake
28.	L. aulicus	Common wolf snake
29.	Natrix piscator	Checkered keelback
30.	N. stolata	Striped keelback
31.	N. beddomei	Beddome's keelback

32.	Boiga triagonate	Indian gamma
33.	Dryophis nasutus	Common green whip sn
	Family Elapidae	
34.	Bungarus caeruleus	Common Indian krait
35.	Callnphis melanurus	Slender coral snake
36.	Naja naja	Indian Cobra
	Family Viperidae	
37.	Vipera Russelli	Russell's viper
38.	Trimeresurus malabaricus	Malabar pit-viper

Maharashtra State Gazetteers

HISTORY



Maharashtra State Gazetteers

(This Chapter is contributed by the Scholar Collaborators as under:— (i) Ancient Period — Dr. V. V. Mirashi, formerly in Nagpur University, (ii) Mediaeval Period to British Period (pp. 150-275)—Dr. B. G. Kunte, former Executive Editor and Secretary, Gazetteers Department, (iii) Modern Period (1840-1947) —Shri K. K. Chaudhari, Executive Editor and Secretary, Gazetteers Department.)

ANCIENT PERIOD

FROM VERY EARLY TIMES THE MODERN DISTRICT OF BOMBAY had been included in the Vishaya (territorial division) of Shatshashti (modern Sashti) comprised in the modern Thane district. Its ancient history is almost identical with the history of the Thane district. The latter formed a part of Konkan. This country was divided into two parts (1) North Konkan also called Aparanta (the western end), later known as Puri-Konkan after its capital Puri, and (2) South Konkan also called Sapta-Konkan (or the country of seven Konkans). The former comprised the districts of Thane and Raigad and the latter, that of Ratnagiri and Sindhu-durg. This country must have originally been inhabited by the same races as the other parts of Maharashtra, though in the absence of archaeological excavations we have no definite evidence on this point. On account of its numerous ports and creeks this country must have played an important part in the formation of Maharashtra culture by letting in foreign influences in the course of trade and commerce. It is also surmised that the chalcolithic culture of Maharashtra was greatly transformed by the foreign immigrants who entered South India through the ports and creeks of Konkan. They introduced the megalithic culture of Maharashtra. According Haimandorf these megalithic builders were a people of the Mediterranean stock, who probably came to the western coast by sea, entered South India in about 500 B.C. and spread northward, subduing the earlier neolithic and michrolithic people who were in a semi-nomadic, foodgathering stage of culture. Further, since the distribution of South Indian megalithics was almost conterminous with that of the Dravidian languages, it is this people who should have introduced the Dravidian language (or languages) in the region. And it is their kings the Cholas, the Cheras and the Pandyas, to whom the Ashokan edicts were addressed. Thus the ancient Tamil should go back to about 500 B.C. (H. D. Sankalia, Indian Archaeology Today, p. 96.)

These speculations, though interesting, have not yet been accepted by scholars. Though the Konkan country must have come into contact with the near and far West and had commercial dealings with several western countries such as Iran, Iraq, Africa and Egypt, the chalcolithic culture of Konkan, like that of Maharashtra, may have been affected by the advent of the Aryans of North India rather than by the immigrants from the west.

Indian mythological legends also support this view. It is said that the country of Konkan was rescued from the western sea by Parashurama, who is regarded as an incarnation of the Aryan god Vishnu. After killing Kartavirya, who had murdered his father Jamadagni, Parashurama exterminated the Kshatriyas twenty-one times and conquered the whole earth. He then made a gift of the whole country to the Brahmana

Kashyapa. Then for his own residence he made the western ocean recede from the Sahyadri range and formed the country of Shurparaka (modern Sopara in the Thane district), extending 400 *yojanas* in length. He made a settlement of Brahmanas there and then went to the Mahendra mountain on the eastern coast for practising penance. The hill from which Parashurama is said to have discharged his arrow to make the western ocean retreat is situated near Chiplun on the western coast. The region, known as Parashurama-kshetra, contains a holy temple of Parashurama, which is famous in Konkan and is constantly visited by pilgrims. The inscriptions of the Shilaharas of North Konkan have made an addition to this legend. They say that Shilara, the progenitor of the Shilaharas rescued the ocean from the hardships caused by the arrow of Parashurama. He then founded a family which later became famous as the Shilaharas.

The earliest historical reference to Aparanta occurs in the Edicts of Ashoka, which says that Buddhism was introduced into Konkan during the reign of Ashoka. This is also indicated by a large number of Buddhist caves which were soon excavated for the residence and worship of the Buddhist monks at a number of places along the western coast. There are five groups of caves in the small island of Sashti *viz.*, at Kanheri, Kondivte, Jogeshvari, Kondane and Chandansar of which the caves at Kanheri are specially noteworthy. The excavations include arrangements such as were required for a resident community. There are here in close proximity several *viharas* or monasteries for associations of devotees, a great number of solitary cells for hermits with halls for lectures and meetings and *chaityas* or temples with relic shrines not out of proportion in number or size to the dwelling places. Outside the caves are reservoirs for water, a separate one for each cell, and couches or benches for the monks to recline on, carved out of the rock like everything else.

From the way in which Aparanta is mentioned in Ashoka's edicts it is inferred that the rulers of that country, who were the Mahabhojas and Maharathis, enjoyed a sort of semi-independence, though, like several other provinces, they acknowledged his suzerainty. After the death of Ashoka, they seem to have declared their independence. In course of time one of these rulers, Satavahana by name, rose to power and established his supremacy over other local chiefs. He might have received support from some of the Maharathis with whom he formed matrimonial alliances. The family descended from him is called Satavahana. Satavahana is not mentioned in the *Puranas*, probably because his kingdom was small. He had his capital at Pratishthana, modern Paithan in the Aurangabad district. The *Puranas* mention several later members of this family whom they call Andhra; but that it originally belonged to Western Maharashtra is proved by its earliest inscriptions which have been discovered at Naneghat near Junnar and near Nasik. The Puranas call it Andhra because they were ruling in Andhra when the Puranic account of the dynasty was compiled in the third century A.D.

The first king of this dynasty who is mentioned in the *Puranas* is Simuka (Shrimukha). His kingdom comprised at least the Pune, Nasik, Ahmadnagar and Aurangabad districts. When he ended his rule, his son, Satakarni was a minor and so his brother Krishna ascended the throne.

Krishna in his Nasik inscription is described as belonging to the Satavahana family. This indicates that he was not a son of Satavahana, but a grandson or some lower descendant.

The next ruler of the family was Satakarni I. He seems to have extended his rule over the whole of the Deccan and even carried his arms north of the Narmada. Satakarni performed the *Rajasuya* and *Ashvamedha* sacrifices (the latter twice), which probably commemorated his important victories or supremacy in the Deccan and had political significance. Satakarni left behind two sons: Vedishri and Shaktishri. The Naneghat inscription describes Vedishri as a very brave king who was a unique warrior on earth and was the lord of Dakshinapatha.

Vedishri was followed by a number of princes who are named in the *Puranas*, but about whom they furnish little information except their reignperiods, which also vary in different *Puranas* and even in the manuscripts of the same *Puranas*. But one name among them is noteworthy. It is that of king Hala, the reputed author of the *Gathasaptashati*, a unique collection of seven hundred *Prakrit* verses, descriptive of the social, religious and economic life of the period. Hala flourished in the first century A.D. (*Mirashi*, *Studies in Indology*, *Vol. I* (*Second Edition*), p. 88f)

Some years after Hala's reign Maharashtra and Konkan were conquered by the Shaka Kshatrapa Nahapana, who was probably appointed by the contemporary Kushana Emperor to rule over Konkan, Pune, Nasik and some other districts of Maharashtra as well as some portion of Central India as far north as Ajmer. Several inscriptions of his son-in-law Ushavadata (Sanskrit, Rishabhadatta) have been incised in the Pajidulena caves near Nasik. These records in the Nasik caves described the conquests and charities of Ushavadata, who was evidently governing North Maharashtra on behalf of his father-in-law. These inscriptions range in dates from the year 41 to 46, which are usually referred to the Shaka era. Nahapana, therefore, flourished in the first quarter of the second century A.D.

The Satavahanas had thus to leave Western Maharashtra and Vidarbha in this period. They seem to have withdrawn to their capital Pratishthana, where they continued to abide, waiting for a suitable opportunity to oust the Shaka invaders.

Later, Gautamiputra Satakarni retrieved the fortune of the family. He made a daring dash into Vidarbha and occupied Benakata or the Wainganga district. Thereafter, he invaded Western Maharashtra and defeated Nahapana somewhere in the Nasik district. The following provinces are specifically mentioned as situated in his dominion: Rishika (Khandesh), Ashmaka (Ahmadnagar and Bid districts), Akara and Avanti (eastern and western Malwa), Suratha (Kathiawad) and Aparanta (Konkan).

Gautamiputra Satakarni seems to have defeated Nahapana soon after Shaka 46 (A.D. 124), the last known year of the latter. Thereafter he called back Nahapana's silver coins and restruck them.

Gautamiputra Satakarni was succeeded by his son Vashishthiputra

Pulumavi, who also ruled over a large kingdom, but seems to have lost some northern provinces such as Akaravanti (Malwa) and Saurashtra (Kathiawad) and also Aparanta (North Konkan) to Rudradaman of the house of Chashtana. He was succeeded by his brother Vashishthiputra Satakarni. An inscription of a minister of his queen recording the gift of a cistern near a cave at Kanheri has been discovered, which shows that he had regained possession of North Konkan. Among his successors the most noteworthy was Yajnashri Satakarni, whose inscriptions and coins have been found over a large area. They show that he ruled over a large kingdom extending from Konkan in the west to Andhradesha in the east. He issued some ship-type lead coins indicative of his rule over the maritime province of the Coromandel coast. (Mirashi, Studies in Indology, Vol. III, p. 17f)

An inscription of Yajna Satakarni dated in the sixteenth regnal year incised in the Chaitya cave at Kanheri records the king's gift of a sum of money to the monks at Krishnagiri (Kanheri) to be put out at interest and also of a field in the village of Mangalasthana (modern Magathan in the Thane district).

Some of the successors of Yainashri mentioned in the *Puranas* are known only from coins discovered at Tarhala in the Akola district of Vidarbha. Thus, the coins of Vijava Satakarni and Pulumavi IV have been found in the Tarhala hoard. Shivaskandha mentioned in the *Puranas* as the predecessor of. Yajnashri is probably identical with Khada (Skanda) Satakarni, Shiva being only his epithet, which is also noticed in the case of some other kings of this dynasty. The Tarhala hoard contained the coins of some other kings such as Kumbha Satakarni and Kama Satakarni, who are not mentioned in the *Puranas*. On the other hand, Shaka Satakarni, whose coins were found in the Tarhala hoard, may be identical with Mathariputra Svami-Shakasena, who has left an inscription dated in the regnal year 8 in a cave at Kanheri. (J.B.B.R.A.S., Vol. VI, p. 6 f) Another Satavahana king, not mentioned in the *Puranas* but ruling in Western Maharashtra and Konkan was Vashisthiputra Chatarapana mentioned in a record at Naneghat dated in the thirteenth regnal year. R. G. Bhandarkar took Chatarapana to be a corrupt form of Sanskrit Chatushparna or of Chaturapana. In either case it would be a queer name.

Within fifty years after Yajnashri Satakarni the rule of the Satavahanas came to an end. About A.D. 250 the Satavahanas were supplanted by the Abhiras in Western Maharashtra and by the Vakatakas in Vidarbha. The founder of the Abhira dynasty was Raj an Ishvarasena, the son of Shivadatta.

Ishvarasena started an era commencing in A.D. 250 which later became known as the Kalachuri-Chedi era. The earlier dates of this era come from Western Maharashtra, Gujarat, Central India and Vidarbha. Judging by the expansion of this era, Ishvarasena and his descendants seem to have ruled over a large territory comprising Gujarat, Konkan and Western Maharashtra. Hte was followed by nine other kings, whose names, unfortunately, do not occur in the *Puranas*.

According to the *Puranas*, the Abhiras ruled for 167 years. They seem, therefore, to have been supplanted in *circa* A.D. 415 by the Traikutakas,

who were previously their feudatories. This royal family took its name from Trikuta or a three-peaked mountain.

From inscriptions and coins we get the following genealogy of the Traikutakas:—

Maharaja Indradatta (son) Maharaja Dahrasena (son) Maharaja Vyaghrasena

That the Thane district was included in the dominion of the Traikutakas is indicated by a copper-plate inscription discovered in a stupa at Kanheri. Dr. Bird, who made the discovery, has described it as follows :- " Immediately in front of the large arched cave and on a ledge of the mountain, some thirty or forty feet below, there are several small topas or monumental receptacles for the bones of a Buddha or Rahat, built of cut stones at the base. The largest of the topas selected for examination appeared to have been one time between twelve and sixteen feet in height. It was much dilapidated, and was penetrated from above to the base, which was built of cut stones. After digging to the level of the ground and clearing away the material, the workmen came to a circular stone, hollow in the centre, and covered at the top by a piece of gypsum. This contained two small urns, in one of which were small ashes mixed with a ruby, a pearl, small pieces of gold and a small gold box containing a piece of cloth; in the other a silver box and some ashes were found. Two copper plates containing legible inscriptions in the Lath or cave characters accompanied the urn and these, as far as I have yet been able to decipher them, inform us that the persons buried here were of the Buddhist faith. The smaller of the copper plates bears an inscription in two lines, the last part of which contains the Buddhist creed."

The inscription on the larger copper plates mentions that in the year 245 in the reign of the Traikutakas one Buddharuchi, hailing from the village Kanaka in the Sindhu *vishaya*, erected at Krishnagiri (modern Kanheri) the *stupa* in which the plate was found and which he dedicated to the venerable Sharadvatiputra, the foremost disciple of the Buddha. The last line mentions *dadha* or the canine tooth, probably of Sharadvatiputra (Sariputta), a sacred relic, on which the *stupa* was erected.

The Kanheri plate mentions no king of the Traikutaka family by name, but it probably belongs to the reign of the successor of Vyaghrasena. During his reign the Trikuta country was invaded by Harishena, the last known Vakataka king, who flourished in *circa* A.D. 475-500. Harishena may not have supplanted the ruling dynasty. As in other cases, he may have been satisfied with exacting tribute from it. (C.I.I Vol. v, p. 103 f)

After the Traikutakas the Kalachuris became supreme in Gujarat, North Konkan and Maharashtra. The coins of Krishnaraja, the earliest known Kalachuri king, have been found in the islands of Bombay and Sashti as well as in the districts of Nasik and Satara. In Bombay they were discovered in the former village of Cavel, which once covered the land now divided by the Kalbadevi road into Cavel proper and old Hanuman

lane. (J.B.B.R.A.S., Vol. XX, p. 7.) These are small coins of silver, which have on the obverse the figure of the king and on the reverse the figure of the Nandi with the following legend along the circular edge: Parama Maheshvara matapitripadanudhyata-shri-Krishnaraja^ (meaning that the coin is of the illustrious Krishnaraja, a fervent devotee of Maheshvara, who meditates on the feet of his father and mother). These coins weighing about 33 grains are imitated from the western issues of the Gupta King Skandagupta.

In the copper-plate grants of the Kalachuris, Shankaragana, the son of Krishnaraja, is described as the lord of the countries between the eastern and western seas. Konkan must, therefore, have been included in the Kalachuri empire, but no grants of land by the Kalachuris have yet been found as they have been in Gujarat and northern Maharashtra. Konkan was probably given by them to a feudatory family. As we shall see later, it was ruled by the Mauryas, who probably acknowledged the suzerainty of the Kalachuris.

Krishnaraja, the first known Kalachuri king, rose to power in *circa* A.D 550 and ruled from Mahishmati. His coins, have been found over a wide territory extending from Rajputana in the north to Maharashtra in the south and from Konkan in the west to Vidarbha in the east. Krishnaraja was succeeded by his son Shankaragana, who like his father, was ruling over an extensive kingdom extending from Malwa in the north to at least the Nasik and Aurangabad districts in the south.

Shankaragana was succeeded by his son Buddharaja, who was involved in a struggle with the Early Chalukya king Mangalesha on the southern frontier of his kingdom soon after his accession. He received a crushing defeat, but his adversary could not follow up his victory owing to internal dissensions. Buddharaja, therefore, continued to hold his kingdom in tact.

As stated before, north Konkan was ruled by the Mauryas, who were probably feudatories of the Kalachuris. Their capital was Puri, which has not yet been satisfactorily identified. Various places have been mentioned as possible sites of this capital, viz. Thane, Kalyan, Sopara, Chaul, Mangalapuri (Magathan), Elephanta and Rajapuri in the former Janjira State. But Thane, Sopara and Chaul were known by other names in ancient times and have besides, been mentioned together with Puri in some inscriptions. Gharapuri or Elephanta is too small an island to have served as a capital and as pointed out by Cousens, during the greater part of the monsoon it is cut off to a great extent by rough seas. Cousens proposed to locate the place at a site about a mile north of Marol village in the island of Sashti (Cousens, Mediavel Temples in the Deccan, p. 79 f.). This site is not far from Sthanaka (Thane), which is mentioned in many grants as the place of royal residence. This site is not, however, known by the name of Puri at present and has not many ancient remains such as one would expect at the site of a royal capital. Another identification suggested is with Rajapuri in the former Janjira State, but this place would be too far south for a capital of the Northern Shilaharas. The question cannot be definitely settled in the absence of conclusive evidence, but the fact that the only known stone inscription of the Mauryas was found at Vada in the Thane district may lend colour to the location of Puri as suggested by Cousens.

As stated before, the Mauryas were ruling in North Konkan in the sixth and the early part of the seventh century A.D. The Kalachuris, who were fervent devotees of Maheshvara, must have erected splendid temples in honour of their ishta-devata, but none have been discovered so far. But some cave-temples dedicated to Shiva in this period may have been carved under the patronage of the Kalachuiis. Walter Spink, who has minutely studied the architecture and sculpture of these cave temples, thus describes them:—" It is not surprising that the three most important Hindu cave temples in the Konkan, all created between about 520 and 550 A.D. when the Kalachuris were ruling in this region, are dedications of the Pashupata cult. The first of these was at Jogeshvari, near the present centre of Bombay; it contains no less than four separate images of the meditating lord. This little known monument is usually assigned incorrectly to a late period. Actually, it is a crucial missing link between the late fifth century Vakataka excavations in Vidarbha and the other early sixth century Kalachuri excavations in the Konkan. Indeed logeshvari is the earliest major Hindu cave temple in India and (in terms of total length) ' the largest'. Jogeshvari contains no inscriptions which fix its date, but it was conceived on such a scale and appears upon the stage of history so dramatically and so suddenly that one must assume it to be the product of a strong and rich patronage." (Walter Spink, Ajanta to Ellora, p. 9.) Spink refers the cave temples at Manda-peshvar and Elephanta to the same age. The temple at the former place, about two Km. from Borivali, which was converted into a church by the Portuguese during their occupation of the island, has a large mandapa measuring 51 ft. by 21 inside, with four pillars richly ornamented in front. In the middle of the back wall there is a *garbhagriha*, now empty, with two pillars in front. The temple was evidently dedicated to Shiva; for in a room to the left of the Mandapa there is still a large sculpture of dancing Shiva with accompanying figures.

The excavation of the Elephanta caves is attributed by some to the Maurya kings who were ruling in North Konkan in the sixth and early part of the seventh century A.D. But they were only a feudatory family which could hardly have financed such a great and magnificent work of art. The Early Kalachuris who had an extensive empire in that age were probably responsible for it. There is another circumstance which supports this conjecture. The cave temple was caused to be carved by the Pashupatas. This is indicated by the figure of Lakulisha, the founder of the Pashupata sect, in the recess at the north end of the shrine in the western court of the caves. It is noteworthy that the Kalachuri emperors were followers of the Pashupata sect. From a Kalachuri grant we know that the queen Ananta-mahayi was a *Pashupata-rajni*. It seems plausible therefore that the Elephanta caves were caused to be excavated by the Kalachuris in the second half of the sixth century A.D.

The Chalukyas of Badami rose to power in the first half of the sixth century A.D. The Badami stone inscription of Pulakeshin I, who is the first independent king of the family, is dated in the year A.D. 543. (E.I. Vol, XVII, p. 4f) He performed an ashvamedha and several other shrauta sacrifices. He was succeeded by his son Kirtivarman I, who made some

conquests in South India and is described as 'the Night of Destruction' to the Nalas (of the Bastar district in Madhya Pradesh), the Mauryas of North Konkan and the Kadambas of Vanavasi in North Konkan. Like the Nalas, who are known to have flourished thereafter also, the Mauryas were not completely exterminated, but continued to reign in North Konkan till the time of Pulakeshin II as we shall see hereafter.

When Kirtivarman died, his son Pulakeshin II was a minor. So his younger brother Mangalesha succeeded him. He defeated Buddharaja, the Kalachuri king who was ruling over North Maharashtra, Gujarat and Malwa, and also Svamiraja of the Chalukya family, who was governing the Revati-dvipa (modern Redi in the Sindhudurg district).

Mangalesha's reign ended in disaster and he lost his life in a civil war with his nephew Pulakeshin II. Just about this time the Chalukya kingdom was invaded by one Govinda, who probably belonged to the Rashtrakuta family ruling from Manapura in the Satara district. Pulakeshin adopted a conciliatory policy in dealing with him as he was a powerful foe. His descendants do not, however, seem to have held southern Maharashtra for a long time; for Pulakeshin soon annexed both southern and northern Maharashtra and extended the northern limit of his kingdom to the Narmada. That he ousted the Rashtrakutas from southern Maharashtra is shown by the Satara plates of his brother Vishnuvardhana, which record the grant of a village on the southern bank of the Bhima. Pulakeshin also defeated the Kalachuri king Buddharaja and annexed his kingdom. He is said to have thereby become the lord of three Maharashtras containing ninety-nine thousand villages. The three Maharashtras were evidently northern Maharashtra, Kuntala or southern Maharashtra and Vidarbha. We know that the Rashtrakutas of Vidarbha, who were previously feudatories of the Kalachuris, transferred their allegiance to the Chalukyas and began to date their records in the Shaka era like them. Two grants of this feudatory Rashtrakuta family have been found in Vidarbha-one dated Shaka 615 being discovered near Akola and the other dated Shaka 631, at Multai in the Betul district now in Madhya Pradesh. Their capital was Padmanagara, which is probably identical with Padmapura near Amgaon in the Bhandara district, once a capital of the Vakatakas. (E.I., Vol. XI, p. 27/; Vol. XXXII, p. 157/; IA., Vol,XVIII p. 230f)

Pulakeshin next invaded Puri, the capital of the Mauryas, which is described in the Aihole inscription as the goddess of fortune of the Western Ocean. He attacked it with hundreds of ships as large as rutting elephants. The Maurya ruler was probably killed in the encounter and his kingdom was annexed. Thereafter North Konkan was probably under the direct rule of Pulakeshin like the adjoining Nasik district, where a copper-plate grant of his, has been discovered.

The capital of Pulakeshin in the beginning of his reign was Badami in the Bijapur district. The Chinese pilgrim Hiuen Tsang calls him the Lord of Maharashtra. This shows that he must have visited him somewhere in Maharashtra.

After the overthrow of the Kalachuris, Pulakeshin II divided their extensive empire among his relatives and trusted chiefs. South Gujarat, extending from the Kim in the north to the Damanganga in the south, was placed in

charge of a Sendraka chief. The Sendrakas ruled over this territory and also in Konkan for three generations. The founder of the family was Bhanushakti *alias* Nikumbha. His son was Adityashakti and the latter's son was Allashakti.

Pulakeshin II was killed in battle at Badami in *circa* A.D. 642 by the Pallava king Narasimhavarman, who conquered his capital Vatapi and assumed the title of Vatapikonda (the Conqueror of Vatapi). Pulakeshin II was succeeded by his son Vikramaditya I after a long continued struggle. He appointed his younger brother Dharashraya-Jayasimha to govern South Gujarat, North Konkan and the Nasik district. Jayasimha appointed his elder son Shryashraya-Shiladitya to govern South Gujarat and his younger son Jayashraya Mangalarasa to rule in North Konkan.

From the Manor plates of Mangalarasa discovered recently this event seems to have taken place in A.D. 669-70.

Jayasimha's younger son Mangalarasa, who assumed the biruda Jayashraya, is known to have made three land grants. Of these the second grant of Mangalarasa was found at Balsad in the Surat district. It has not yet been published, but it also was probably made in North Konkan as it is dated in the *Shaka* year 653 (A.D. 731-32). Had it been made in Gujarat, it would have been dated in the Abhira era, which was then current there. Mangalarasa ruled from Mangalapuri, which was probably founded by him. It is identified by some Magathan(Mangalashthana), about half a mile east of the Borivli station, which contains several ancient remains of stupas and chaityas.

From two copper-plate inscriptions recently discovered at Anjaneri, a village near Trimbak in the Nasik district, we have come to know of another feudatory family which ruled over Northern Konkan and the Nasik district in the seventh and eighth century A.D.(*C.I.I, Vol,IV*) This family claimed descent from Harishchandra the famous legendary king of the solar race. Svamichandra, who rose to power in the reign of Vikramaditya I, was the founder of this family. He is said to have ruled over the entire Puri-Konkan country comprising fourteen thousand villages. In some later inscriptions the number of villages in North Konkan is stated to be fourteen hundred only. Svamichandra was treated by Vikramaditya I as his own son and was placed in charge of North Konkan. This was perhaps before the appointment of Dharashraya-Jayasimha to the same post.

Three generations of this family are known from the two sets of Anjaneri plates. Svamichandra, his son Simhavarman and the latter's son Bhogashakti *alias* Prithivichandra, who made the grants. Bhogashakti is said to have brought by his valour the whole territory of his dominion under his sway. This was probably at the time of the Chalukya Emperor Vinayaditya's death (A.D. 696), when owing to the captivity of his son Vijayaditya in his northern campaign, there was anarchy in the kingdom. The second set of Anjaneri plates tells us that Bhogashakti granted certain rights, privileges and exemptions to the merchants of Samagiripattana when he resettled the town and the neighbouring villages sometime after their devastation. Bhogashakti's successor was probably overthrown by the Rashtrakuta king Dantidurga, who, from his Ellora plates, is known to have occupied the Nasik district some time

before A.D. 715.

Kirtivarman II, the last of the Early Chalukyas, was defeated by Dantidurga sometime before A.D. 754, when he issued the Samangad plates. Kirtivarman continued to rule for a few years more, but he had lost the paramount position in the Deccan.

The Early Chalukyas were devotees of Vishnu, but during their time Buddhism continued to flourish as before in Maharashtra and Konkan.

The Rashtrakutas, who succeeded the Early Chalukyas in the Deccan, originally hailed from Lattalura (modern Latur) when they rose to power, they were probably in the Aurangabad district, where their earlier records have been found. His Ellora Cave inscription records his victories over the rulers of Kanchi, Kalinga, Shrishaila, Malva, Tanha and Lata, but they do not all seem to have resulted in the acquisition of new territory, Though there is much exaggeration in the description of his conquests, there is no doubt that he ruled over Karnataka, Konkan, Maharashtra, Vidarbha and Gujarat.

Dantidurga soon extended his rule to North Konkan. This is shown by his Manor plates dated in the *Shaka year* 671(A.D. 749-50). Dantidurga appointed a governor named Aniruddha to govern the territory. Konkan was so ruled until establishment of the feudatory family of Shilaharas in North Konkan during the reign of Rashtrakuta Govinda III. Dantidurga was succeeded by his uncle Krishna I, who completed the conquests commenced by Dantidurga and shattered the power of the Chalukyas completely.

Krishna I was not only a great conqueror but also a great builder and caused the great Shiva temple at Ellora to be carved out of solid rock. Krishna I was succeeded by his son Govinda II in *circa* A.D. 773. Soon after his accession Govinda II abandoned himself to a life of pleasure. He left the administration to his younger brother Dhruva. The latter took advantage of the opportunity and began to secure all power for himself. He also made land-grants in his own name though Govinda II was then the *de jure* king. Govinda was subsequently deposed by Dhruva in *circa* A.D. 780.

Dhruva died soon after this grant was made and was succeeded by his son Govinda III. Govinda III proved to be a great conqueror. Several copper plate grants of Govinda III have been found in all the divisions of Maharashtra. Most of these were issued from Mayurakhandi, which was evidently his capital. It has not yet been identified.

Govinda III was succeeded by his son Amoghavarsha I, who was a man of peaceful disposition, but whose reign was full of troubles. He had first to fight with the Eastern Chalukyas of Vengi, then the Gangas of Gangavadi and also his relatives in Gujarat. He placed Pullashakti I in charge of North Konkan. The latter states in his Kanheri cave inscription that he was ruling over the entire Puri-konkan country by the favour of Amoghavarsha I. Indra III, the great-grandson of Amoghavarsha I led a victorious campaign in North India. Indra III was succeeded by his son Amoghavarsha II, but he died within a year. His younger brother Govinda IV came to the throne

thereafter. He was known for his liberality and rightly had the *biruda* Suvarnavarsha (the gold-rainer). The Rashtrakutas of Manyakheta and the Kalachuris of Tripuri were matrimonially connected and their relations were generally cordial. But in the reign of Govinda IV, they became strained. The Kalachuri king Yuvarajadeva I espoused the cause of his son-in-law Baddiga-Amoghavarsha III, the uncle of Govinda IV, and sent a large army to invade the Rashtrakuta dominion. When it reached Payoshni (modern Purna), it was opposed by Karkara, the ruler of Achalapura, who was a feudatory of Govinda IV. He probably belonged to the feudatory Rashtrakuta family ruling in Vidarbha. A sanguinary battle was fought on the bank of the Payoshni near Achalapur between the Rashtrakuta and Kalachuri forces, in which the latter became victorious.

The Rashtrakuta feudatories who had risen in revolt against Govinda IV deposed him and placed his uncle Baddiga-Amoghavarsha III on the throne. The latter was a man of quiet nature and spiritual temperament, who left the administration of the kingdom to his ambitious and able son Krishna III. Like some of his ancestors, Kiishna also led an expedition in North India and captured the forts of Kalanjara and Chitrakuta. He succeeded his father in A.D. 939.

The Rashtrakuta power became weak after the death of Krishna III. Within six years his large empire crumbled like a house of cards. Taila II, who was a *Mahasamanta* of the Rashtrakutas, suddenly came into prominence. He defeated and killed in battle Karka II, the last Rashtrakuta king and captured his capital Manyakheta. He had to fight against the Cholas, the Pandyas and the Paramaras.

Among the successors of Taila II, the most famous is Vikramaditya VI, the founder of the Chalukya-Vikramaditya samvat. He ascended the throne in A.D. 1075. He had to fight against the Cholas, the Chalukyas of Gujarat and the Hoysalas and signally defeated them. He married a Shilahara princess at a svayamvara held at Karhad. His reign is renowned on account of some learned men who flourished at his court. Bilhana, who was patronised by him, wrote the Vikramankadevacharita, which is the poetical biography of Vikramaditya. Another great writer who flourished at his court was Vijnaneshvara, the author of the well-known Mitakshara, a commentary on the Yajnavalkya Smriti.

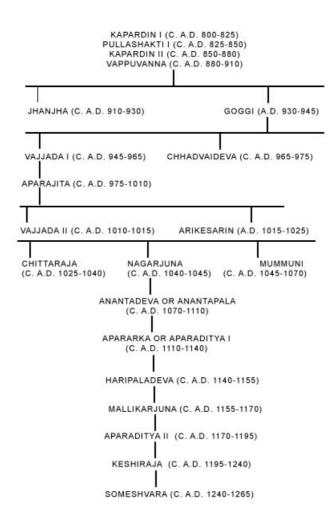
Vikramaditya VI was succeeded by his son Someshvara III, who became known as Sarvajna-Chakravarti on account of his extensive knowledge. Taila III, the last known Chalukya king, was overthrown by the Kala-churi Bijjala, who was his commander-in-chief, in A.D. 1156. The Kela-churi usurpation lasted for more than two decades. During the reign of Bijjala a religious revolution took place at Kalyani, the capital of the Later Chalukyas. Basava, who was the prime minister of Bijjala propounded a new doctrine called Lingayata. in which *Shivalinga* and *Nandig* were prominent. In a palace revolution Bijjala was killed by a follower of Basava and Kalyani was devastated. This event took place in A.D. 1167.

In about A.D. 1162 the Chalukya prince Someshvara IV wrested some of the provinces of his ancestral kingdom from the Kalachuris. The Chalukyas were, however, soon overthrown by the Yadava prince Bhillama, who rose to power in this period. During the Rashtrakuta period a feudatory family established itself in the northern and southern Konkan and also in the southern Maratha country comprising the districts of Kolhapur, Miraj, Satara and Belgaum. They bore the title of *Tagarapura-var-adhishvara*, which indicates that they originally hailed from Tagara (modern Ter in the Osmanabad district). All the branches of this family traced their descent from the mythical Vidyadhara prince Jimutavahana, who offered to sacrifice himself to rescue a *Naga* from the clutches of *Garuda*. The family name Shilahara (meaning ' food on a rock') is supposed to have been derived from this incident. The Shilaharas of South Konkan rose to power as feudatories of the Rashtrakutas. Sanaphulla, the founder of this family, is said to have had the favour of Krishnaraja, who is evidently the first Rashtrakuta king of that name.

Rattaraja is the last known king of this branch. He declared his independence during the reign of the Later Chalukya king Vikramaditya V, when the imperial power became weak. But Jayasimha, the younger brother of Vikramaditya, invaded South Konkan, overthrew the reigning king and appropriated his possessions as stated in his Miraj plates dated in A.D. 1024.

North Konkan was conquered by the Rashtrakuta king Dantidurga sometime in the second quarter of the eighth century A.D. Kapardin I, the first known Shilahara king of North Konkan, was placed in charge of the country by the Rashtrakuta king Govinda III. Since then North Konkan came to be known as Kapardika-dvipa or Kavadi-dvipa. The capital of this branch was Puri, after which the country was called Puri-Konkan.

The genealogy of this branch of the Shilaharas ruling over North Konkan may be stated as follows:—



Kapardin I was succeeded by his son Pullashakti, who has left a much abraded inscription in one of the Kanheri caves. It bore a date at the end, which has now been almost completely effaced. Kielhorn doubtfully read it as *shaka* 765. The date appears quite plausible; for Pullashakti's son and successor Kapardin II is known from two inscriptions at Kanheri dated *shaka* 795 and 799.

In the Kanheri cave inscription Pullashakti is called *Mahasamanta* and is described as the lord of Puri-Konkan, which he had obtained by the favour of the Rashtrakuta king Amoghavarsha I. The inscription records the endowment of 124 *drammas* made by one Vishnugupta for the repairs of the cave as well as for the raiment and books of the monks residing in the Krishnagiri-Mahavihara. Krishnagiri is Kanheri. (I. A., Vol. XIII, p. 136 f)

Pullashakti II was succeeded by his son Kapardin II, who is called Laghu-Kapardin in the record of his successors to distinguish him from his grandfather, who also bore the same name. He seems to have come to the throne when quite young; for the Thane plates of Arikesarin tell us that though he was an infant, his enemies paid homage to him. Two inscriptions of his reign, dated in the *shaka* years 775 (A.D. 853) and 799 (A.D. 877-78) in the Kanheri caves, record peimanent endowments of some *drammas* for the, raiment etc., of the monks dwelling in the caves. (*Ibid., Vol. XIII, p. 136f*)

Kapardin II was followed by his son Vappuvanna, about whom his

successors' records give only conventional praise. In his time a part of North Konkan comprising the Samyana Mandala (the territory round Sanjan in the north of Thane district) was given by the Rashtrakuta Emperor Krishna II to the Arab feudatory Madhumati (Muhhammad). His family ruled in this region for at least three generations. A set of plates found at Chinchani in the Dahanu taluka of the Thane district mentions Madhumati's son of Sahiyarahara, and Sugatipa, who was then ruling. (E.I., Vol. XXXII, p. 45f) Madhumati, Sahiyarahara and Sugatipa are evidently Sanskritised names of Mahammad, Shahariar and Subakta, This feudatory family often came into conflict with the Shilaharas. Madhumati is said to have conquered all ports on the western coast and established his outposts in them. He did some charitable works. He established some ferries for the crossing of rivers and also a charitable feeding house at Samyana for the use of travellers. He also made some grants of land in favour of a temple of Bhagavati after obtaining the consent of his suzerain, the Rashtrakuta Emperor Indra III. These Arab feudatories seem to have continued to rule over the Samyana-mandala till the downfall of the Rashtrakutas in A.D. 974. Thereafter the Shilahara king Aparajita overthrew them and annexed their territory to his own kingdom. (Important Inscriptions from the Baroda State, Vol. I, p. 35f)

Vappuvanna was followed by Jhanjha. He is mentioned by Al-Masudi as ruling over Samar (i.e., Chaul in the Raigad district) in A.D. 916. He was a very devout Shiva. He is said to have built twelve temples of Shiva and named them after himself. None of them is now existing.

Jhanjha was succeeded by his younger brother Goggiraja, but about him and his successor Vajjada I Shilahara inscriptions give only conventional praise. Vajjada was followed by his brother Chhadvaideva, who is omitted in all later records, probably because he was a usurper. He is known from his Prince of Wales Museum plates, which record the grant of some land in the village Salanka in the vishaya of Panada. These places may be identified with Salinde and Poinad not far fiom Alibag in the Raigad district. The grant was promised by Vajjada, but remained unexecuted during his life time. Chhadvaideva, on coming to know of it, issued these plates recording the gift. (E.I., Vol. XXVI, p. 282f)

Chhadvaideva was followed by his nephew Aparajita, the son of Vajjada. He has left three copper-plate grants. Two of them found at Janjira, both dated in the same shaka year 915 (A.D. 993) were issued by him after the overthrow of the Rashtrakutas by the Later Chalukya king Tailapa. (Important Inscription from the Baroda State, Vol. Ip. 35f) But Aparajita, true to his erstwhile suzerain, gives the genealogy of the Rashtrakutas from Govinda I to Kakkala and regretfully records that the light of the last Rashtrakuta king was extinguished by the hurricane in the form of Tailapa. He did not himself submit to the Chalukyas, but began to assume highsounding titles like *Pashchima-samudradhipati* (the Lord of the Western Ocean) and *Mandalika-trinetra* (the three-eyed god Shiva to the feudatory princes). He made several conquests. First he seems to have proceeded against the Arab feudatory family ruling at Samyana and overthrowing it, annexed its territory to his own kingdom. Thereafter, we do not hear of this Arab kingdom on the western coast. He next conquered Punaka (Pune), Sangameshvara and Chiplun and extended his rule to Southern Konkan and the Desha.

Aparajita was an ambitious king. He sought to extend his sphere of influence by alliance with mighty kings of other countires. Aparajita's extensive conquests, bis alliance with the Paramaras, his assumption of grandiloquent titles and his refusal to recognise the suzerainty of the Later Chalukyas exasperated Satyashraya, the son of Tailapa. He invaded the kingdom of Aparajita and pressed as far as the capital Puri. Ranna, the Kanarese poet, says that hemmed in by the ocean on one side and the sea of Satyashraya's army on the other, Apaiajita trembled like an insect on a stick, both the ends of which are on fire.(*I.A.,Vol XL.P.41f*) Satyashraya burnt Amshunagara in Konkan and levied a tribute of eleven elephants on Aparajita. This invasion seems to have occurred in *circa*. A.D. 1005. Aparajita did not live long after this humiliation. He probably closed his reign in A.D. 1010.

Aparajita was succeeded by his son Vajjada II, about whom only conventional praise is given in the records of his successors. An inscription from Hangal, however, tells us that Kundaladevi, the queen of the Kadamba king Chattadeva (Shashthadeva II c. A.D. 1005-1055) was the daughter of the king Vachavya of Thani *i.e.*, Thane. (E.I Vol. XV, p. 333.) As Altekar has conjectured, this king of Thane was probably the Shilahara king Vajjada II.

Vajjada was succeeded by his younger brother Arikesarin. While yet a prince, he had taken part in the Paramara Sindhuraja's campaign in Chhattisgadh and had also marched with an army to the temple of Someshvara (Somanath) and offered his conquests to the god.

It was during the reign of Arikesarin that Konkan was invaded by the Paramara king Bhoja. Two of his grants made in A.D. 1020, one in June and the other in September of the year have been found. (E.L, Vol. XI, p. 182,f; XVIII, p. 322f.) The causes of this invasion are not known. D. R. Bhandarkar thought that the invasion was undertaken by Bhoia to avenge the death of his uncle Munja by the Later Chalukya king Tailapa. This reason does not appear convincing; for there is an interval of thirty-four years between the murder of Munja (A.D. 975) and Bhoja's invasion of Konkan (A.D. 1019). Perhaps, as Altekar has suggested, Arikesarin acknowledged the suzerainty of the Later Chalukyas, which Bhoja did not like. Bhoja seems to have occupied North Konkan for some time as is shown by his Betma plates. However, the Chalukva king Jayasimha, after overthrowing the Southern Shilaharas and annexing their kingdom, planned to invade North Konkan. (I.A., Vol. VIII, p. 18.) The Miraj plates dated in A.D. 1024 tell us that he was encamped at Kolhapur in the course of his campaign of North Konkan. It is not known if he conquered the country, but it is noteworthy that Chittaraja, in his grant issued soon after this date in A.D. 1026 does not mention the suzerainty of the Chalukyas (Ibid, Vol. V, p. 277f).

Chittaraja succeeded his uncle Arikesarin sometime before A.D. 1026, when he issued his Bhandup plates. These plates record the king's donation of a field in the village Noura situated in the vishaya (district) of Shatshashti. The villages Gomvani and Gorapavali are mentioned in connection with the boundaries of the field. Shatshashti is, of course, the

island of Sashti. Noura is now called Nowohar and Gomvani goes by the name of Gowhan. Gorapavali probably occupied the same site as modern Bhandup. Two other records of the reign of Chittaraja have been discovered, *viz.* the Berlin Museum plates (*Z.D.M.G., Vol.XC,p.265 f*) issued by him in A.D. 1034 and the Chinchani plates (*E.I, Vol. XXXII, p. 63 f.*) granted by his feudatory Chamundaraja in the same year. Chittaraja may have reigned from A.D. 1025 to A.D. 1040.

The Shilaharas seem to have suffered a defeat about this time at the hands of the Kadamba king Shashthadeva II. As stated before, Aparajita, the grandfather of Chittaraja, had raided Chandrapura, modern Chandor in Goa and defeated the ruler, who was probably Guhalladeva II, the father of Shashthadeva II. The latter took revenge in the beginning of the reign of Chittaraja, who was a mere boy at the time of his accession. From his capital Chandrapura, Shashthadeva marched to the north. He first annexed South Konkan (called Konkan Nine Hundred) and advancing further, he overran Kavadi-dvipa (North Konkan). The Narendra inscription describes this expedition in the following words:—"As he took Kavadi-dvipa and many other regions, he built a bridge with lines of ships reaching as far as Lanka (i.e., the Goa territory) and claimed tribute from grim barbarians, exceedingly exhalted was the dominion of the Kadamba sovereign which many called a religious estate for the establishment of the worship of Rama." (E.I, Vol. XIII, p. 369.)

Shashthadeva, however, restored North Konkan to Chittaraja on condition that he recognised his suzerainty. There was another attack on the Shilahara kingdom during the reign of Chittaraja. Gonka of the Kolhapur branch of the Shilaharas (c. A.D. 1020-1055) calls himself the lord of Konkan. (J.R.A.S., Vol. IV, p. 281.) He had evidently scored a victory over the Shilahara ruler of North Konkan; for he had already annexed South Konkan as a feudatory of the Later Chalukyas.

Chittaraja was succeeded by his younger brother Nagarjuna, who had probably a short reign. He may be referred to the period A.D. 1040-45. He was followed by his younger brother Mummuni or Mamvani in *c.* A.D. 1045.

The power of the Shilaharas weakened in the reign of Nagaijuna and Mummuni. The latter had to acknowledge the suzerainty of the Kadambas of Goa. When Shashthadeva II visited his court, he received him with great honour. The Narendra inscription describes this incident in the following words: "When the exalted valour Chhattayadeva in his sport upon the ocean reached him, Mummuni of the famous Thaneya, hearing of it, came into his presence, saw him and led him to his palace and displayed intense affection; he bestowed on him his daughter with much pomp and gave his son-in-law five lakhs of gold. (E.I, Vol. XIII, p. 310.)

As the power of the Shilaharas declined, the Modha feudatories of Samyana began to assert their independence and assumed the *birudas* of the Shilaharas themselves. The Modha prince Vijjalain his Chinchani plates dated *shaka* 975 (A.D. 1053) calls himself the lord of Tagarapura and bears the proud title of *Sharanagata-vajra-panjara*, which is usually met with in Shilahara records. Mummuni seems to have overthrown this recalcitrant feudatory sometime after *shaka* 975 (A.D. 1053), the last

known date of the prince Vijjala.

There was a civil war (dayada-vyasana) towards the close of Mummuni's reign, but the contending parties are not known. (LA., Vol. IX, p. 34.) Taking advantage of it, some foreign king, perhaps Guhalla II, the Kadamba contemporary of Mummuni, invaded the territory. He is said to have devastated the country and harassed gods and Brahmanas. Anantapala, the son of Nagarjuna, rescued the country from this calamity, Guhalla had perhaps secured the aid of some Muslim chief in this invasion.

Only one inscription of Anantapala has been found *viz.*, the Kharepatan plates dated in *shaka* 1016 (A.D. 1094). (*Ibid.*, *Vol.IX*, *p.33 f*) It states that he assumed the title *pashchima-samudradhipati* and claimed to be the ruler of the entire Konkan, including Puri-Konkan. The inscription exempts the ships of certain ministers of his from the customs duty levied at the ports of Sthanaka, Shurparaka, Chemulya and others.

Hostilities with the Kadambas seem to have broken out again at the close of the reign of Anantapala. Jayakeshin II, the valiant king of Goa, invaded North Konkan and in the encounter that followed, killed the Shilahara king. The Degamve inscription describes him as ' Death to the king of Kavadi-dvipa. (J.B.B.R.A.S., Vol. IX, p. 266.) After this Jayakeshin annexed North Konkan. The Narendra inscriptions dated in A.D. 1125 and 1126 described him as governing Kavadi-dvipa a lakh and quarter, in the time of the Chalukya Emperor Tribhuvanamalla (Vikramaditya VI). The Shilahara prince Aparaditya was reduced to great straits.

Aparaditya was followed by Harpaladeva, several of whose inscriptions ranging in dates from *shaka* 1070 to *shaka* 1076 have been discovered in the Thane district. He may therefore have reigned from *c. shaka* 1062 to *shaka* 1077 (A.D. 1140 to A.D. 1155). From his reign onward we get only stone inscriptions and they are mostly written in a mixed language of Sanskrit and Marathi. As the inscriptions of Harpaladeva do not give any genealogy, it is not possible to say how he was related to his predecessor, Aparaditya. These inscriptions record gifts made by ministers, private individuals or village communities. The mention of a Sahavasi Brahman in one of them is interesting. These Brahmans later became known as Savase Brahmanas.

Mallikarjuna, who succeeded Harpaladeva, is known from two inscriptions—one found at Chiplun in the Ratnagiri district and the other at Vasai in the Thane district. (Bom. Gaz., Vol. I (old ed.), Part II, p. 19.)

In his *Kumarapalacharita* Hemachandra gives a graphic description of Mallikarjuna's battle with the forces sent by the Chalukya king Kumarapala. According to Merutunga's account, Kumarapala is said to have felt offended by the title *Rayapitamaha* (Grandsire of Kings) assumed by Mallikarjuna and sent an army to invade his territory. His general Ambada was defeated by Mallikarjuna and feeling disconsolate, he repaired to Krishnagiri (Kanheri) where he spent some days in black clothing. Kumarapala then sent heavy reinforcements, which enabled Ambada to inflict a disastrous defeat on Mallikarjuna. He cut off his head, mounting daringly the elephant he was riding. He presented it to

Kumarapala in the assembly attended by seventy-two feudatories. There is much exaggeration in this account, but Hemchandra also records that Mallikarjuna was killed in the fight. Kumarapala thereafter became the suzerain of the Shilaharas.

Mallikarjuna was followed by Aparaditya II, but his relation to his predecessor is not known. Three inscriptions of his reign, dated in *shaka* 1106, 1107 and 1109 have been discovered at Lonad, Thane and Parell respectively. In one of them Aparaditya is mentioned with the imperial titles *Maharajadhiraja* and *Konkanachakravarti* which show that he had thrown off the yoke of the Gujarat Chalukyas. He may be referred to the period A.D. 1170-1195.

Aparaditya's successor Keshideva is known from two stone inscriptions. The earlier of them is dated in *shaka* 1125 and was found at Mandavi in the Vasai taluka. It records some grant at the holy place of Mandavali in the presence of the god Lakshminarayana. The second inscription, found at Lonad, is dated *shaka* 1161 (A.D. 1230). It states that Keshideva was the son of Apararka and records the grant of a hamlet attached to the village Bapagama (modern Babgaon near Lonad) to four Brahmans on the *Maha-Shivaratri* in *Magha*. As the two dates of Keshideva are separated by as many as 36 years, he may have had a long reign of 40 or 45 years. He may therefore, be referred to the period A.D. 1195-1240.

The successor of Keshideva was Someshvara, who, like Aparaditya, assumed the imperial titles *Maharajadhiraja* and *Konkanachakravarti(Ranvad Inscription (Prachin Marathi Koriva Lekha, p. 159).* Only two inscriptions of his reign are known. The earlier of them, datedin *shaka* 1181 (A.D. 1259) was found at the village Ranvad near Uran and the later, dated *shaka* 1182 (A.D. 1160), at Chande. Both of them record royal grants, the former to some Brahmanas and the latter to the temple of Uttareshvara in the capital of Sthanaka.

Someshvara is the last known Shilahara of North Konkan. In his time the power of the Yadavas of Devagiri was increasing. The Yadava king Krishna (A.D. 1247-1261) sent an army under his general Malla to invade North Konkan. (H.C.I.P., Vol. V, p. 192.) Though Malla claims to have defeated the Shilahara king, the campaign did not result in any territorial gain for the Yadavas. Mahadeva, the brother and successor of Krishna, continued the hostilities and invaded Konkan with a large troop of war elephants. Someshvara was defeated on land; betook himself to the sea. He was pursued by Mahadeva. In the naval engagement that followed Someshvara was drowned. Referring to this incident Hemadri says, that Someshvara preferred to drown himself and face the sub-marine fire rather than the fire of Mahadeva's anger. The scene of this fight is sculptured on some Virgal stones found near Boiivli station. Some of the stones show the land battle in which the elephants took part, while others depict the lines of vessels propelled by oars, both in advance upon the enemy and in the melee itself. Since Mahadeva's force was strong in elephants and the stone from the sculptures upon it appears to belong to the 12th or 13th century A.D., it is quite possible, as Cousens has suggested, that these stones may be commemorating the heroes who fell in the battle between Someshvara and Mahadeva. (Cousens, Mediaeval The battle may have taken place in *c.* A.D. 1265. Thereafter, the Yadavas appointed a governor named Achyuta Nayaka to rule over North Konkan. His Thane plates are dated in A.D. 1272. Thereafter, we get several inscriptions of the Yadavas from North Konkan.

Though the Yadavas conquered North Konkan, their authority may not immediately have been recognised through the whole country. Thus, we have a stone inscription of a king named Jaitugi, dated in shaka 1188 (A.D. 1266), now deposited in the Prince of Wales Museum, Bombay. (Mirashi, Studies in Indology, Vol. IV, p. 203.) This king assumes therein the title Maharajadhiraja, Raya-pitamaha and Konkana-chakravarti, which were previously borne by the Shilaharas. Some identify this king with an unknown successor of Someshvara, but according to Hemadri, Someshvara was the last king of the Shilahara branch ruling in North Konkan. Jaitugi was probably a ruler of Mahim in the Palghar taluka. He seems to have been previously a feudatory of the Shilaharas, but after their overthrow, he declared his independence and assumed imperial titles like those assumed by Someshvara. That there was a ruler of Mahim exercising authority in North Konkan till the time of the Yadava king Ramachandra is known from the latter's Purushottampuri plates which mention the Yadava king's victory over him. He is described therein as the ruler of Mahim. He was probably the king Jaitugi.

The Shilaharas ruled over North Konkan for more than 450 years. They gave liberal patronage to art and literature. The temples at Ambarnath, and Walkeshvar, which are still extant, testify to the architectural and sculptural skill of the age. In the *Udayasundarikatha* Soddhala mentions several Jain and other poets such as Chandanacharya, Vijayasimhacharya, Mahakirti, Indra and others, who, like himself, flourished at the Shilahara court. Apararka's commentary on the *Yajnavalkya Smriti* is a monumental work of that age on *Dharmashastra*.

In the last quarter of the twelfth century A.D. the Yadavas of Devagiri came into prominence. They had previously been ruling over Seunadesha (Khandesh) as feudatories of the Later Chalukyas of Kalyani. The founder of the family was Dridhaprahara, the son of Subahu. His capital is named as Shrinagara in the *Vratakhanda* of Hemadri, while, from an early inscription it appears to have been Chandradityapura, which has been identified with modern Chandor in the Nasik district. His son and successor was Seunachandra I, from whom the country ruled came to be known as Seunadesha. It corresponds to modern Khandesh. It comprised the country from Nasik to Devagiri.

Bhillama II, an early Yadava king, assisted Tailapa of the Later Chalukya family in his war with Munja. Seunachandra II, a later member of this family, is said to have saved Vikramaditya VI from a coalition of his enemies and placed him on the throne of Kalyani. Bhillama V of this family made a bid for paramount power in the Deccan. He led victorious expeditions against the Hoysalas, the Paramaras and the Chalukyas and made himself master of the whole country north of the Krishna. He then founded the city of Devagiri, modern Daulatabad, and made it his capital. Thereafter, the Yadavas ruled from that city.

Bhillama V's son Jaitugi or Jaitrapala killed Rudradeva of the Kakatiya family on the field of battle and released his nephew whom he had put into prison. Under Jaitugi's son Singhana the power of the family greatly increased. We get considerable information about his victories from the stone inscriptions of his General Kholeshvara at Ambejogai in the Bid district. (Khare, Sources of the Mediaeval History of the Deccan (Marathi), Vol. I, p. 55f.)

Krishna was succeeded by his brother Mahadeva. From the recently discovered Kalegaon plates we know the exact date of his coronation as the 29th August A.D. 1261. The most noteworthy event of his reign was the annexation of North Konkan after the defeat of Someshvara of the Shilahara dynasty. Mahadeva left the throne to his son Amana but the latter was soon deposed by Krishna's son Ramchandra, who captured the impregnable fort by means of a *coup d'etat*. Ramchandra won several victories as stated in the Purushottampuri plates dated in the *shaka* year 1232 (A.D. 1310).

In A.D. 1294 Ala-ud-din Khilji invaded the kingdom of Ramchandra and suddenly appeared before the gates of Devagiri. Ramchandia was taken unawares and could not hold out long. He had to pay a heavy ransom to the Muslim conqueror. He continued, however, to rule till A.D. 1310 at least; for the aforementioned Purushottampuri plates are dated in that year. He was succeeded by his son Shankaragana sometime in A.D. 1311. He discontinued sending the stipulated tribute to Delhi. He was then defeated and slained by Malik Kafur. Sometime thereafter Harapaladeva, the son-in-law of Ramchandra, raised an insurrection and drove out the Muhammedans, but his success was shortlived. The Hindu kingdom ofDevagiri thus came to an end in A.D. 1318.

Like their illustrious predecessors, the Yadavas also extended liberal patronage to art and literature. During their rule a peculiar style of architecture called *Hemadpanti* after Hemadri or Hemadpant, a minister of Mahadeva and Ramchandra, came into vogue. Temples built in this style are found in Bombay also.

MEDIAEVAL PERIOD

(The portion from Mediaeval Period upto British Period is contributed by Dr. B. G. Kunte, M.A., Ph.D. (Economics), Ph.D. (History), former Executive Editor and Secretary. The matter is however mostly borrowed from the Gazetteer of Bombay City and Island, Vol II, 1909.)

The history of Bombay for well over a century after the fall of the Yadavas of Devagiri is very dim by reason of the scantiness of historical materials. Marco Polo tells us that in his days Thane had a king of her own, who owed allegiance to none, but had a mutual understanding with the pirates who infested the neighbouring seas. Friar Odoric adds that by his time (A.D. 1322) Thane had fallen into the hands of the Muslims, while Ferishta records that by A.D. 1429 the seat of Government had been transferred from Thane to Bombay-Mahim. Now a glance at the map will show that this last change, which decided for all time the future of Bombay, must have been made for purposes of defence by a ruler who found Thane too

exposed for his capital and who at the same time feared no attack from the western sea. He might well have been Marco Polo's king of Thane, but local tradition places him at the end of the 13th century and avers that his name was Bimb. Of his history there are at least three versions, differing in detail, while on particular points we have as many as six or more varying statements. None of the three versions is older in language than the 17th century; but the most coherent of them purports to have been drawn up at a great meeting held at Mhalsapuri Jogeshwari in Vikrama Samvat 1505 in order to preserve the traditional lore of the Konkan castes. In all probability the date of the meeting is ashaka date equivalent to A.D. 1583; for in the first place the shaka, and not the Vikrama era was in use in the Konkan at this period; secondly such a meeting would be a natural incident of the Hindu revival of the 16th century, while it is much less likely to have taken place one hundred and thirty-five years earlier, before the days of Eknath; and thirdly it was laid down that Bimb lived just 300 years before the meeting and to date him back Vikrama Samvat 1205 would be to locate him within the Shilahara period.

The precise identity of Bimb has been lost behind the curtains of time. He is said to have been a Suryavanshi Kshatriya like his followers, the Pathare Prabhus, a fact which forbids our connecting him, as previous writers have done, with either the Solankis of Anahilvada or the Yadavas of Devagiri. Then again he may be said to rival Homer in the variety of places which claim to have been his father-land. Kanoj, Gorakhpur, Udaipur, Anahilvada, Champaner and Paithan are each mentioned as his place of origin; and by their very number lead one to infer that the traditionary tale of his coming has been much embroidered. A reasonably probable supposition seems to be that he was simply a leading member of the Pathare Prabhu caste, which, as has been mentioned above, had already held high office during the Shilahara period and which had ample opportunity of setting up a kingdom of its own in the confusion that followed the Muhammedan invasion of the Deccan. The Bimbakhyan certainly includes matter drawn from Shilahara history and legends from other sources, but to decide how much of it represents genuine fourteenth century history is now practically impossible. The chief actors in the drama are more or less definitely fixed, but the role they sustain in the different versions varies enormously. On the Hindu side we have Bimb of Mahim with his sire and his son and Nagarshah of Chaul with his son; while on the Muhammedan side the spectres of Ala-ud-din, Nika Malik and Bahadur Shah stalk across the proscenium and vanish behind the coulisses in most bewildering fashion. Yet with all this conflict of testimony one must in the end accept the fact that a king named Bimb ruled in Salsette about A.D. 1300, that he made Mahim in Bombay his capital and granted various offices and rent free lands to his followers. On the other hand we have good cause for holding that the settlement in the Konkan of Pathare Prabhus, Yajurvedi Brahmans, and other classes who now claim to have journeyed thither in the wake of Bimb was a gradual pi ocess which lasted throughout the Shilahara period and that Bimb's rise to prominence occurred at the end rather than at the commencement of that protracted immigration.

Whoever Bimb may have been, he left an ineradicable seal upon

Bombay. He found Mahim a desert island, washed by the waters of the western sea and sparsely-peopled by families of Koli fishermen and other low-castes and there he built a city which he called Mahikavati, whence the name Mahi or Mahim has been derived. There too he built his palace and a great temple to his family goddess Prabhadevi, nor forbore to set up a court of justice or hall of audience in the area now known to us as Naigaum. The palaces have vanished utteily.

It is also very difficult to locate the site where Bimb once listened to the petitions of his people, though about a 100 years back it was the country house of a Bhatia Maharaj the one visible legacy of his rule was a rude black stone, to which, as representing his spirit, the descendants of the people, over whom he once ruled, made occasional offerings of milk, butter and fruits. Yet these scattered traditions, these magical devotions of the residents of our modern city serve together to establish the salient fact, which no criticism can shake, that Bimb the misty king was the indisputable founder of Bombay.

Edwardes in his book *The Rise of Bombay* has given the following account of Bimba:—

"Now the story of events subsequent to the victory of Alla-ud-din forms a most important portion of the history of our island. It is universally acknowledged that, after the defeat of Ramdev, a certain Bimba or Bhima Raja established himself as ruler of the North Konkan, and colonised the islands of Bombay: and our first duty is to try and discover the identity of a man who was the pioneer in the task of raising Bombay above the level of a mere fishing hamlet.

" An old poem, the *Bimbakhyan*, relates that king Bimbadev came to the Konkan by way of Anahilvada in the shaka year 1216, that is 1294 A.D., and halted upon the island of Mahim, which he found almost uninhabited. So charmed was he with the scenery of the island, that he caused a royal palace to be built there, and also houses for the accommodation of the royal guests and others, who had accompanied him to the Konkan through fear of the Muslim invaders of Devagiri and Anahilwada: with him there came from Paithan, Champaner and other places, 9 families of Yajurvedi Brahmins of the Madhyandin Shakha and 66 other families, that is to say, 27 Kulas or families of the Somavanshis, 12 of Suryavanshis, 9 of Sheshavanshis; 5 of Panchal, 7 of Kunbis or Agris, 1 family of Dasa Lad, 1 of Visa Lad, 1 of Moda, 1 of Dasa Moda and 1 of Visa Moda. Such is, in brief, the teaching of the old Marathi account of the advent of Bimbashah, in which the dates given are inaccurate, and the statements are occasionally so very conflicting that unless corroborated by independent evidence, they can scarcely be accepted for the purposes of history.

"Now some authorities, notably the late Dr. Gersonda Cunha, believe that the Bimbadev or Bimb Raja here mentioned was identical with one of the Bhima Rajas of the Chalukya (Solanki) dynasty, which reigned at Anahilvada in Gujarat; and Dr. da Cunha further observes in his *Origin of Bombay* that Bhim Raja of Gujarat after his defeat by Mahomed of Gazni at Somnathin the year A.D. 1024, " fled from his country, and, to make up for the loss in the north,marched with his colony from Patan into the south and settled at Mahim.

"But it is a well-known historical fact that, immediately after Mahomed of Gazni had departed with his army, Bhima Raja returned to his country of Anahilvada, and in virtue of his devotion to Somnath of Prabhasa, caused the temple of Somnath to be built of stones in lieu of the former wooden temple which Mahomed had destroyed, that he later sent an army against and subdued the chief of Abu, and that he reigned at Anahilvada till his death in the year A.D. 1064.

"Again, the authors of *Prabandha Chintamani* and *Dvyashraya* Jain chronicles of Gujarat have recorded the most minute details of the reigns of the Chalukya kings of Anahilvada and had the conquest and colonisation of Mahim or the Konkan by this Bhima Raja and his Gujarat followers actually taken place, they would scarcely have omitted to chronicle so important an event. At the hour of Mahomed's invasion, the Konkan province was under the sway of the Shilaharas; and a copperplate grant, dated shaka 948; which is A.D. 1025, shows that Chitaraj was then lord of the 1,400 Konkan villages, that Puri and Hamjaman were his chief cities, and that the taluka of Shashashti or Salsette formed part of his possessions. On the other hand, there is no record whatever that any king of the Solanki house of Gujarat ruled over the North Konkan; and this is natural, considering that Kumarpal, who defeated Mallikarjun through his general Ambada, was the only monarch of that dynasty whoever successfully invaded this country. It is indisputable that the Shilahara monarchs ruled these lands until A.D. 1260, and then yielded place, to the Yadavas of Devgiri.

"Thirdly, Bhima Raja II, who reigned in Anahilvada from 1179 to 1242 A.D., was so weak a man that he earned the sobriquet of Bholo', the simpleton; and the only reference made to him by the Gujarat chronicles shows that ' his kingdom was gradually divided among his powerful ministers and provincial chiefs '. Was this the man to colonise Mahim, to wrest the sovereignty of the North Konkan from powerful Shilahara rulers like Aparaditya and his successor Keshidev ? We think not.

"But who then was Bhimdev, who, according to old Marathi and Persian records, now in the possession of the family of the late Sirdesai of Malad, seized the North Konkan, made Mahi or Mahim (Bombay) the capital of his kingdom, and divided the country into 15 *mahals* or districts, comprising 1,624 villages ? "(S. M. Edwardes, Rise of Bombay : A Retrospect (Bombay, 1902), pp. 22-25)

"Bimbashah, hearing of thedefeat of his father Ramadev of Devagiri by Alla-ud-din, fled with the Rajguru Purushottam Pant Kavle and eleven *umraos* by the shore of the sea, and took possession of the fort of Parner, and of Bardi, Sanjan, Daman, Shirgaon and other places. He thus obtained all the territory from Parner to Astagar. He came unto Mahi (Mahim in Bombay), and divided the country into 12 parts, giving the province of Malad and some villages from the province of Pahad unto the Rajguru Kavle. The *Bimbakhyan* also records that the king gave the village of Pahad to the Raj-purohit Kavle, and the village of Paspavli to the *Senadhipati* and *Kulguru* Gangadhar Pant Nayak.

" Now, as Mr. Fleet's *Kanarese Dynasties* proves, the Nayak family was in high favour with the Devagiri monarchy, for in A.D. 1272 *Maha-pradhan*

Achyut Nayak was Ramdev's viceroy in the province of Salsette.

- "Secondly, there is in existence a Persian patent, bearing the seal of Mahomed Dalil, *Diwan* of Sultan Ala-ud-din of Bedar and dated the first year of the accession to the throne, that is about the year 1436, A.D., which shows that 'in the *Shalivahan era* 1212 (1290 A.D.) Raja Bimbashah, having taken the ownership and possession of the country from the hands of 'Karson', kept it for himself. The country contains fourteen *parganas* from the jurisdiction of Saratbhata to the limits of Daman. At the same time, the office of *Sirdesai* and *Sirdeshpande* was under the control of Govind Mitkari. The said Mitkari lived for 3 years in the reign of Raja Bimbashah'.
- "From the early history of the Deccan, we already know that in the *Shalivahan Shaka* 1212, a Brahmin named Krishna of the *Bharadvaja Gotra* was the viceroy of king Ramdev in the North Konkan; and we cannot help being convinced that the 'Karson' of the patent from whom Raja Bimb took possession, was identical with that Krishna.
- "Lastly, a Danapatra, or grant of the rights of Sirdesai and Sirdeshpande, made by king Bimbdev to his Rajguru Purushottam Kavle in the Shaka year 1221 (A.D. 1299), shows that the province of the Konkan contained 14 parganas or districts, and 2 kashas or sub-districts, and that the island of Mahim (Bombay) was called a pargana containing 7 hamlets. It further states that 'In the month of *Magh Shaka* 1220 (A.D. Maharajadhiraja Bimbshah purchased from Changunabai, widow of Govind Mitkari, the *watan* of *Sirdesai* and *Sirdeshpande* in the provinces of Malad, etc., for 24,000 rayats, and after keeping it in his possession for one year and three months, presented it as a religious offering to his spiritual guide Purushottam Kavle of the Bharadvaja Gotra, on the occasion of a Solar Eclipse in the dark half of the month Vaishakh in the Shaka year 1221 (A.D. 1299), and in the presence of \$n assembly consisting of the prime minister Madhavrao Shrinivas, Chitnavis Chandraban Prabhu, Patangrao Nyayadhish and others, merchants, mahajans and jamindars." (S. M. Edwardes, Rise of Bombay : A Retrospect (Bombay, 1902), pp. 25-27).

"The above evidence leads us to the conclusion that King Bhimdev, who died in the *Shaka* year 1225 (A.D. 1303), was succeeded by his son Prataphimba or Pratapshah, was none other than Bhima Raja, the second son of king Ramdev of Devagiri. It was a common custom among Hindu princes whenever they found their lives or Kingdom in danger, to send to a place of safety a scion of the royal house, in order that the *vansha* or royal line might not become extinct; and it seems to us probable that Ramdev, seeing his other son Shankar overpowered, and being surrounded by the advancing army of Ala-ud-din, took the precaution of despatching his second son Bhimdev to the Konkan, which had upto that date been free from Muslim attack, and was indeed in the guardianship of Krishna, a viceroy of his own choosing.

"With the advent of Bhimdev and his followers begins the history of the growth and colonisation of Bombay. The island of Mahim upon which he settled, had, previous to his arrival, been known as ' Mewale' or 'Baradbet' (the desert island); one of a group of isles, sparsely peopled by

families of Koli fishermen and other low castes, overgrown with *babul* trees, and dowered with a fine temple of Walkeshwar and a shrine of the ancient goddess Mumbadevi. Here Bhimdev stayed and built a fair city of temples and palaces, for himself and his followers, which he called 'Mahikavati' (Mahim). Those that accompanied him upon his journey belonged, according to legend, to four main classes who spread themselves over the face of the Heptanesia, throve, multiplied, traded and withal led so peaceful an existence, that men from other countries, both Brahmins and traders, came thither also, seeking the shelter of Bhima's rule." (*Ibid. pp. 25-28*)

- " The traditions of the Prabhus, Panchkalshis, and their priests, the Palshikar Brahmins, distinctly favour the theory that they came from Paltban with King Bhimdev, the son of Ramdev, Raja of Devagiri, at a time when the city of Devagiri was besieged by Ala-ud-din Khilji, emperor of Delhi; and their view finds support in the old Marathi and Persian records which some of them possess.
- "It remains to notice any impressions left upon our island to this day by Bhimdev's Hegira. The aboriginal settlers had formed hut-settlements within her limits and raised rude shrines to Khadakadev; the Shilaharas had built new temples and taught the Koli and Agri customs of a higher order; the immigrants from Devagiri built a capital city, introduced cultivation, built more temples, and made our islands the headquarters of a kingdom. Previously, Bombay had been merely an appendage of 'Puri'; Bhimdev deserted Puri and raised Bombay to the position of a capital under the title of Mahikavati or Mahim.
- " Among the most noteworthy legacies of his rule were the special privileges or rights, which many of the castes that came with him enjoyed till quite a recent date.
- "Again, there is to this day in the village of Naigaon, which lies between Vadala and Parel, a spot known to the villagers as 'Bhima Raja's Wadi'. At present the place is occupied by the *Arshe Mahal* or Mirror Palace of Jivanlal Maharaj; but local tradition, prevalent among the descendants of Bhim Raja's followers, declares that here stood of old one of the two palaces, built by that king, the principal seat of *nyaya* or justice. The second palace was at Kheda, Lower Mahim. Now hard by the halls of justice were quarters reserved for the use of the *Raj-guru or* royal preceptor, and other *Brahmin* followers, which earned the title of *Brahman AH* or *Baman-Ali* the street of the *Brahmins*. This is the origin of the name Bamnoli, which clings to the spot unto this day.

"Those well-known names 'Thakurvadi' and 'Bhoivadi' also date from this epoch; for the Thakurs, Bhoirs, and Gawands were three recognised divisions among the lower classes of Bhimdev's retinue. The Thakurs were the petty officers of his army; the Bhoirs or Bhois were his palanquin bearers; and both have left the legacy of their name of the locality in which they made their home.

"The memory of Bhima Raja the Good, the benefactor of Bombay, has not entirely departed from among the children of men. The villagers have defied, and still worship him; for in that Oart, called by them Bhima Raja's wadi and by others the Arshe Mahal, the descendants of old Bhois and Thakurs have set up a black stone, representative of the king, besmeared with red ochre and adorned with flowers, to which they offer, at certain seasons, milk, butter, fruits, and even goats and fowls. Till quite a recent date, an annual jatra or fair, at which animals were sacrificed, was held in his honour; but the new Maharaja, owner of the Oart, a strict Vaishnav, forbade the custom, advising the people that the feeding of Brahmins was a surer method of pacifying Bhima Raja's spirit than the slaughter of dumb creatures. We like the idea, prevalent among the uncultured denizens of Parel, that the spirit of the old monarch still haunts, still watches over, the lands for which he did so much and upon which he set an ineradicable seal.

'In the *Shaka* year 1225 (A.D. 1303) King Bhimdev died, and was succeeded by his son Pratapbimba, as he is sometimes called. Nothing of importance is known or recorded of him, save that he built another capital city at Marol in Salsette, which he named Pratappur. The name of the city still lives as Pardapur or Parjapur, a deserted village near the centre of Salsette.

"In the year 1318 A.D., after the reduction of Devagiri and the defeat and death of Harpaldev, son-in-law of the Yadava monarch Ramdev, Mubarak, the emperor of Delhi, ordered his garrisons to be extended to the sea, and occupied Mahim and Salsette. But Muhammedan supremacy was probably not firmly established till later; for old Marathi records show that Pratapshah reigned for 28 years, that is, till A.D. 1331, when he was slain, and his kingdom usurped, by his brother-in-law Nagardev, the chief of Cheul.

"Nagardev reigned for 17 years, that is, till the year 1348, when his dominions passed into the hands of the Muslim rulers of Gujarat; and thus came to an end the sovereignty of old Hindu kings over the island of Bombay and its dependencies." (S. M. Edwardes, Rise of Bombay: A Retrospect (Bombay, 1902), pp. 33-36.)

MUHAMMEDAN PERIOD

The so-called Muhammedan period of Bombay's history is greatly lacking in historical material, in consequence chiefly of the fact that Mahim was merely one of the military out-posts of a mainland monarchy and possessed no political independence. As stated earlier local tradition affirms that Bimb died about the beginning of the 14th century, and yielded the throne to his son Pratapdev, who was ousted and slain about thirty years later by Nagardey, the chief of Cheul, and it was apparently during the rule of Bimb or his immediate successor that the Muslims first set covetous eyes upon Bombay. For in A.D. 1318 Mubarak Shah I of Gujarat, who ruled from 1317 to 1320 A.D. ordered his out-posts to be extended to the sea and occupied Mahim (Bombay) and Salsette. The considerable Muhammedan population resident in the coast towns of the Konkan might have helped towards the success of that policy of empire which for a short season guided the actions of the Sultan; but general acceptance of Muslim domination was largely imperilled by their wrong policies and actions, which resulted in Bombay in the destruction of the

old temples of Mumbadevi and Mahalakshmi. Apparently however by A.D. 1322 the Muhammedans had conquered Thane and the surrounding country, including Mahim; for Friars Jordanus and Odoric, who sojourned in Thane from A.D. 1321 to 1324, remarked that the Saracens hold the whole country, having lately usurped the dominion. They have destroyed an infinite number of idol temples, likewise many churches of which they have annexed the endowments. According to their account, the headquarters of the kingdom was at Thane which was governed by a malik or commandant and by a kazi or civil official. The country was well stocked with big game, notably black lions (probably the black Javan panther) and the rhinoceros.

So far as can be gathered from local legend and external history, Mubarak Shah's possession of Bombay was never firmly established; and during the reign of Muhammad Tughalak (A.D. 1325-50), when the risings in Gujarat and the Deccan left the emperor no leisure to defend small outlying dependencies, Bombay seems to have again reverted to a Hindu overlord. The Bimbakhyan relates that in A.D. 1347 Nagardev, who had slain Pratapdev, was ruling over Salsette and Mahim, and that in consequence of the evil practices of his favourite Jaichuri and the degradation of one of his sardars, Natharao Sindha Bhongle, a revolution took place which ended in that year in the final overthrow of Hindu dominion. For the discontented sardar fled to Vadnagar in Gujarat and besought the Musalman ruler of that place, who was probably one of the amiran-i-Sadah or centurions of the Delhi sultan, to turn his arms against the Northern Konkan. An army accordingly set forth under Nika Malik, one wing of which attacked Pratappur in Salsette, a second marched against Thane, and a third laid siege to Mahikavati (Mahim) which in the absence of Nagardev was courageously defended for a time by his gueen and a small body of retainers. The struggle was however hopeless; the queen was slain, the city looted: and finally a pitched battle was fought at Byculla between the Muslim host and the forces of Nagardev, in which the former proved victorious. Bombay thus became for the second time subject to the Muhammedans; garrisons were set up in different places; while Nika Malik and another Musalman officer fixed upon Pratappur and Vasai as their respective headquarters.

Upto the close of the 14th century, little is heard of Bombay except the fact that Mahim witnessed the birth of Sheikh Ali Paru or as he was afterwards styled Makhdum Fakir Ali (the worshipful jurisconsult Ali). But shortly after the establishment of the Gujarat Sultanate, Jafar Khan (afterwards Muzaffar Shah I) was appointed viceroy of the north Konkan by Firoz Shah. On his first arrival Jafar Khan found two governors, one of Mahim and the other of Navasari, who had been appointed by the Khilji generals; and these officials of the Delhi monarchy were very shortly removed in favour of men more directly subordinate to the newly founded dynasty of Gujarat. Thus during the reign of Sultan Ahmad, one Malik-us-Sharq, a Gujarat noble of renown, was posted for some years at Mahim, and in addition to instituting a proper survey of the land, did much to improve the existing revenue system. About the same period also occurred, according to traditional accounts, the rebellion of the Bhongles, who are supposed to have been Bhandari sardars and who, by exciting disaffection among the subjects of the Ahmedabad sultan, are alleged to

have ousted the Muhammedan garrison from Mahim. Beyond the statements in the *Bimbakhyan* to the effect that the Bhongles were masters of Mahim and its dependencies for at least eight years and that their corrupt administration eventually brought about their downfall, we have absolutely no evidence of this event. It is however unquestionable that the Bhandari population of Mahim and Bombay at this date was considerable, that many of them followed the profession of arms, that to this day Bhongle is in use as a surname among the Bhandaris, and that at the outset of British dominion the Bhandaris, under the name of Bhongles, possessed the right to blow the bugle as a signal of the opening of the quarter sessions and were vested with certain privileges at public pageants. It may therefore be inferred that some revolt against Muhammedan rule, in which the Bhandaris played a leading part, took place about the close of the 14th century and resulted in the temporary eclipse of the overlordship of the Ahmadabad *sultans*.

Mahim however did not long remain independent. Mahim at that time was held by Rai Qutb. It is related that the daughter of the Rai of Mahim was given in marriage to Prince Fateh Khan, the son of Ahmad Shah of Gujarat. This Rai Qutb was probably one of the petty local princes, formerly rulers of Mahim who had embraced Islam and had been allowed by Gujarat rulers to retain a modified independence under them. On the death of Rai Qutb Sultan Ahmad Bahamani of the Deccan despatched an army under Khalaf Hasan Basri to subjugate the north Konkan and oust all contumacious local chieftains, which succeeded in capturing Salsette and Mahim. Hearing of this event the Guiarat sultan at once sent his son lafar Khan with a well appointed force to recapture the lost territory. An obstinate battle was fought on the shores of one of the island creeks between the forces of Jafar Khan and the army of the Deccan monarch, which had been reinforced by the arrival of a fresh army under Prince Alaud-din Bahamani. The Gujarat army won a complete victory, routing their opponents with the loss of 2,000 men and 2 nobles and capturing Husain. the brother of the Deccan general. Notwithstanding this defeat, the Bahamani sultan determined not to relinquish any chance of adding the north Konkan to his possessions; and when a few years later Kutb Khan, the Gujarat commandant of Mahim, died, he again despatched a large army under Malik-ul-Tujjar against Thane and Bombay. Thereupon the Gujarat king sent down a strong force under his son and one Iftikhar-ulmulk, to stem the tide of Deccani invasion and also bade Mukhlis-ul-mulk, head of the Gujarat naval depot at Diu, aid them with a maritime armament. Collecting seventeen war-ships from Diu, Gogha and Cambay, Mukhlis-ul-mulk hastily joined the Gujarat leaders at Mahim and arranged them with them for a simultaneous attack upon Thane by land and sea. Operations commenced with an attack by Malik Sohrab upon the town which was garrisoned by a large Deccani force under a kotwal. The latter held out bravely for three days; and then, seeing the Gujarat forces daily reinforced and little chance of further aid to himself, he evacuated Thane and fled. This action and the consequent occupation of the town by the Gujarat army forced Malik-ul-Tujjar to retreat to Mahim, pursued by the Gujarat prince, Jafar Khan. Malik-ul-Tujjar threw up on all sides of the island a stockade of thorn trees and martialled his forces for the enemy's onslaught. The struggle which ensued was fiercely waged and lasted till evening fell, when Malik-ul-Tujjar, considering further opposition useless, retired from the field. He subsequently made two fresh attempts to regain

possession of Mahim, but discovered that the power of the Gujarat Sultan was too firmly grounded to offer any chance of success and that the latter had considerably strengthened his position by arranging in A.D. 1432 for his son to marry the daughter of the tributary Rai of Mahim.

Some years ago this struggle between the Ahmedabad and Bahamani monarchies on the shores of Bombay received somewhat curious corroboration. The sea, which has ever been encroaching upon the Mahim shoie, washed away a considerable piece of land near the shrine of Sheik Ali Paru and thereby disclosed amid the strata of the beach numbers of bodies interred layer upon layer and in varying stages of preservation. These are supposed to have been the corpses of the men who fell in the battle above-mentioned, and have been responsible for the name Ganj-i-Shahidan or Catacomb by which the spot is known in common parlance to this day.

During the greater portion of the 15th century, from the reign of Ahmad Shah (1411-41) to that of Bahadur Shah (1527-36) Bombay remained in the hands of the Gujarat monarchy. However, the first signal of opposition was raised by Bahadur Khan Gilani. During the years 1491 to 1494 the Sultan's attention was drawn by the piracies on the Gujarat coast of Bahadur Gilani, a nobleman of the Bahamani kingdom in revolt against his master. The greatness of this monarchy came to an end with the unjust and cruel murder of the celebrated minister Mahmud Gavan, and Bahadur, who had been a protege of that minister, broke out in rebellion at the port of Dabhol and soon became master of the whole of the Konkan. He extended his depredations on the coast further to the north so that ships from the port-towns of Gujarat were at his mercy and some of the Sultan's own vessels were captured. One of Bahadur's officers, an Abyssinian named Yagut, is said by Ferishta to have attacked Mahim, near Bombay, with a fleet of twelve ships, and to have sacked and burnt the place. These insults to his authority were not likely to be tolerated by a ruler so powerful as Mahmud and he decided to take strong action.

Mahmud's expedition to the Konkan: It appears that one expedition sent under Safdar Khan failed disastrously, and the Sultan sent another by land against Dabhol under Malik Sarang, Kiwam-ul-Mulk, while he also despatched a well equipped fleet of three hundred vessels by sea to cooperate with the land army. When Kiwam-ul-Mulk reached the borders of Gujarat at Agashi and Vasai he halted and sent word to the king that he could not attack Gilani without trespassing into the territory of the Deccan ruler. Meanwhile, the ships sent under Safdar-ul-Mulk had met with a severe gale off the coast of Mahim, and being stranded, were taken by the enemy, the admiral himself being made a prisoner. Sultan Mahmud now sent an envoy to the court of the Deccan sovereign requesting him to suppress the marauder. This formal complaint roused the feeble Bahamani government to action, and Qasim Barid, its minister, led a campaign against the rebellious nobleman with the result that, after some protracted operations, Gilani was defeated and slain. Safdar-ul-Mulk was released from prison and the ships which had been captured on the Gujarat coast were restored to their owners. The admiral sailed from Mahim for the north carrying valuable gifts for the Gujarat Sultan from the feeble Bahamani ruler. It may be stated here that in 1490 Malik Ahmad,

established the Nizamshahi dynasty of Ahmadnagar, and Yusuf Adil Khan, another Bahamani noble, founded the Adilshahi house of Bijapur. It was not long before these young and vigorous powers began to assail the outlying possessions of the Gujarat Sultanate. The Nizamshahi ruler obtained peaceful possession of Danda-Rajapur and other portions of the north Konkan in A.D. 1490. Subsequent to this event the power of the Bahamani dynasty gradually waned, and their possessions in the Konkan were divided between the rulers of Ahmadnagar and Bijapur.

The reign of Sultan Mahmud Begada witnessed certain events which were destined to exercise a powerful influence over Bombay. The *Mirat-i-Sikandari* mentions an attack by the Sultan upon certain *firangis* who had created great disturbances in Mahim. These were undoubtedly the Portuguese who were just commencing to consolidate their power in Bombay, Salsette and Vasai. Mahmud's expedition was of little use for by the time his forces reached Dahanu news was brought that Malik Ayaz, his slave-admiral, had defeated the Portuguese near Bombay, sinking one of their largest vessels and killing nearly 20,000 men. In this war with the Portuguese the Egyptians had cooperated with the Gujarat Navy.

Muslim naval victory at Cheul, 1508: The Portuguese forces in India were at this time under the command of their first viceroy Francisco D'Almedia, and he was ably assisted by his gallant and popular son Lorenzo, whose exploits resembled those of the heroes of mediaeval romance. When Lorenzo was lying in shelter with a small squadron in the harbour of Cheul, south of Bombay, news reached him that the Egyptian fleet had reached Diu and had been joined by Malik Ayaz. The combined flotilla soon arrived off the bar at Cheul, where took place, in January, 1508, the first great naval battle in the heroic struggle between Portugal and Islam. After a running fight extending over three days, Dom Lorenzo's ship became entangled in a line of fishermen's stakes and was surrounded by a number of the light Gujarat fustas. The young captain refused to escape and fought on till a shot broke both his legs, and he died shortly after, telling his men to surrender to Malik Ayaz and not to the Egyptian admiral. The effect of this victory upon the Portuguese was but temporary; for from A.D. 1537, when Sultan Bahadur of Guiarat died. they gradually consolidated their predominance in all the ports of the western coast from Diu to Goa, being assisted to no little extent by the internecine dissensions which broke out among the nobles of Gujarat. By A.D. 1572 the old Sultanate of Gujarat disappeared, yielding place to the Mughal dynasty of Delhi under whose greatest representative Akbar, the Portuguese were finally enabled to establish their power in Bombay and the north Konkan.

It will be appaient that the history of the island of Bombay during the era of Muslim supremacy is somewhat indefinite. The salient fact of the period is that Mahim served purely as a military out-post, for the possession of which the forces of the great mainland monarchies on several occasions bared their swords; and in all probability the internal administration of Bombay and the surrounding country was vested in tributary Hindu *rais* or chieftains, such as the Rai of Mahim whose daughter was betrothed to a prince of the Gujarat Musalman dynasty in A.D. 1432, or the Rai of Bhiwandi who, according to an inscription of A.D. 1464, was in the habit of making grants of land to the people in his

charge. The sole legacies of Musalman dominion and immigration are firstly the shrine of Saint Makhdum Fakih Ali at Mahim and secondly the community of half-Arab half-Hindu Muhammedans who, formerly known as Naitias, are now styled Konkanis. It was not till after the establishment of British supremacy that the bulk of the Muhammedan population, Khojas, Bohras, Pathans, Siddis, Julhais, Mughals and others, immigrated into Bombay and the mosques of the city were established, and it was not until A.D. 1818 that any Muhammedan writer appeared to point proudly to the island, lying midway between the islands of Salsette and Colaba, and say 'the best of all things are the middlemost'.

The one architectural legacy of early Muhammedan rule is the shrine of the Saint Makhdum Fakih Ali Paru, built upon the eastern side of the town of Mahim. The inner side of the dome, which rises above the shrine, is ornamented with an Arabic inscription in gilt, giving the name and dates of the birth and death of the saint. Southward thereof lies the grave of his mother and other kindred. During the rule of the Mughals (H. 1085, A;D. 1674), and shortly after Bombay had become a British possession, the shrine was wholly repaired. To the north of the domed enclosure is a wooden mosque, near which stands a very ancient step-well, doubtless intended for the ablutions of the faithful. From the position of certain old graves and other mural structures, which are only revealed to view at low tide, it appears that the sea was originally at a far greater distance from the shrine than it is at present; and in all probability, at the hour when the Hindu Rai ruled the land under the eye of a military official of Gujarat, the island of Mahim covered a considerably wider area than in 1843, when Mr. Murphy prepared his chart of the seven islands of Bombay.

PORTUGUESE PERIOD

The third period of the history of Bombay rightly commences in 1534 with the cession of the island to the Portuguese by Sultan Bahadur of Gujarat. But for several years prior to this, date, the Portuguese had been consolidating their power in the north Konkan and on more than one occasion had visited Bombay. In the latter half of December 1508, for example, Don Francisco D'Almeida, the first viceroy of Goa, set sail from Cannanore to Diu with a fleet of nineteen vessels and an army of 1,600 soldiers, of whom four hundred hailed from the Malabar coast, with the express object of punishing Mir Hosain (Amir Hussein), who had been despatched by the Sultan of Cairo with an Egyptian fleet to expel the Portuguese from India. Leaving Angediv, the Portuguese reached Dabhol, then a city of considerable wealth, on the 30th December, there disembarked, and dividing their forces into three parties, made a simultaneous attack upon the three gates of the city. Its defenders sustained the attack for sometime with great courage, but were eventually put to flight by Nuno Vaz Pereira, who under the viceroy's orders executed a flank movement and attacked the city in the rear. This action put an end to the engagement, which had lasted for five hours and resulted in a loss of sixteen men only on the Portuguese side and fifteen hundred on the side of the defenders. The booty seized by the Portuguese amounted to 1,50,000 ducats; but all looting on a large scale was prevented by the firing and speedy destruction of the city. Leaving Dabhol on the 5th January, 1509, the Portuguese paid their first visit to Bombay

on the 21st January with the object of provisioning the fleet. They seized a Gujarat vessel, manned by twenty-four Moors (Muhammedans), in 'the river of Bombay' (i.e., the Bandora creek) and finding the cargo insufficient for their requirements they despatched some of the Muhammedans to the headman of the island, asking him to supply them with provisions for cash. Behind them the viceroy despatched some of his own men with instructions not to cause any unnecessary damage to the island; and they landing without molestation near Mahim fort captured twenty-four sheep and drove them down to the shore of the creek. In the meanwhile the headman who had fled inland probably to Bombay proper, with most of the inhabitants of Mahim, despatched twelve bags of rice and a dozen goats to the viceroy, excusing himself from supplying anything else on the grounds that locusts had destroyed everything on the island. An alternative account is supplied by Gaspar Correa who remarks that "the viceroy departed from Dabhol, passed by Cheul, which, to avoid delay, he did not enter and cast anchor at Bombay, where the people terrified fled away. Our men captured many cows and some ' blacks', who were hiding among the bushes, and of whom the good were kept and the rest were killed. The viceroy happening to see a welldisposed black being carried away, ordered him to be set free, on condition of his taking an oath, according to his law, that he would convey a letter to Din and deliver it to Malik Ayaz. The poor black, delighted at the prospect of freedom, consented; and the letter was delivered to Malik Ayaz twenty days before the arrival of the fleet".

The expedition then set sail for Diu and arrived on the 2nd February, 1509. Between 9 and 10 o'clock on the following morning a sharp engagement took place between the Portuguese and Malik Ayaz, who with Amir Hussein had prepared to resist the attack with a fleet of two hundred vessels. The Portuguese gained a complete victory; the ships of the Musalman were plundered; Amir Hussein was seriously wounded; and the colours of the 'Soldan' (Sultan) were despatched as trophy to Portugal. This success served but to intensify the desire of the Portuguese to build a fortress at Diu, and indirectly led to the despatch of two embassies, in 1513 and 1514, to Sultan Bahadur for the purpose of negotiating for a site. Owing to the action of Malik Ayaz, the embassies met with little success; but when the second, consisting of Diogo Fernandez, Diogo Teixeira and Ganapotam (Ganpatrao), a Hindu interpreter, conferred with the Sultan at Madoval (Ahmadabad), the island of Mahim (Bombay) was offered as an alternative site. This, however, the ambassadors refused on the ground that they were not authorized to accept any site but Diu. In 1517, during the vicerovalty of Dom Soares de Albergaria, Dom Joao de Monroyo entered the Bandora creek with seven pinnaces and defeated the commandant of Mahim. "Monroyo ", writes Barras, " arrived at the river of Mahim, where he found a ship coming from the Red Sea with merchandise. The crew, to save themselves, entered the river and ran aground. They saved themselves with the best they had, and the rest was taken by our men, who carried all to Cheul. At this capture the commandant of Mahim, Xeque-ji (i.e. Sheikh-ji) was greatly affronted, not only by reason of the vessel having been captured before his eyes, but also because his fortress had been bombarded. On the departure of our men, he hastily despatched three pinnaces after them, to stop the passage at Cheul point. Having attacked our men, the latter behaved in

such a manner that his pinnaces fled. Between 1522 and 1524, when Dom Duarte de Menezes was viceroy of Goa, the Portuguese were constantly prowling about Bombay for the ships of the Muhammedans and on one occasion drove Malik Ayaz and his fleet to take shelter in Bombay harbour; while in 1528-29 Lopo Vaz, with 40 ships, 1,000 Portuguese, and some native levies, overtook the Gujarat fleet near Bombay, destroyed half the enemy's ships, and captured many prisoners and much cannon and ammunition. He then seized Mahim fort belonging to the King of Cambay (Sultan of Gujarat) who was at war with Nizamuluco (Nizam-ul-mulk), the lord of Cheul, and handed it over to the latter. " The fleet of the king of Cambay ", writes Gaspar Correa, "consisted of 68 pinnaces under the command of a son of Camalmaluco (Kamal Malik), governor and captain of Diu, and of Ali Shah. Lopo Vaz de Sampayo anchored off a small island, where the pinnaces of Ali Shah lay; and the latter then retreated with his rowing boats to the mouth of the Than a river and there cast anchor. During the night the governor sent Vincent Correa to spy upon the enemy. He saw all their boats drawn up at the landing-place, with the exception of two which kept watch at the mouth of the river. Ali Shah under cover of night sailed for the Nagothana river with twenty well-equipped galleons, having galleries at the stern adorned with pictures (i.e., texts from the Koran). Thither followed Lopo Vaz and ordered Heitor da Silveira to attack the enemy, which the latter successfully accomplished returning to the fleet with a prize of twentyseven fustas (pinnaces). He then pursued the fugitive Ali Shah to a neighbouring fortress, pillaged the surrounding country and captured much artillery. To escape further annoyance, the thanedar of Thane made himself tributary to the Portuguese, and promised to pay them annually a sum of 2,000 pardaos (Rs. 750)." Heitor da Silveira then returned to Bombay harbour, where, according to Barros, he was received with great ovations; and when on the 20th March, 1529, the viceroy returned to Goa, Heitor was left behind with twenty bargantins, two galliots and three hundred men to harass the coast as far as Cambay. During the three months preceding the monsoon of 1529 Heitor da Silveira and his men made repeated incursions into Bombay and the neighbouring islands, and gave to Bombay the title of a ilha da boa vida (the island of the good life) in token of the abundant food and enjoyment which it supplied.

Bombay again came into prominence in connection with the attempt of the Portuguese to capture Diu in 1530-31. The commandant of the fort, having been deprived of his position by Sultan Bahadur, approached Nuno da Cunha, the viceroy of Goa, and suggested a joint attack upon the citadel. Nuno da Cunha agreed, furnished the commandant with a pass and with a fleet under the command of Gaspar Paes, and then set about preparations for an attack upon his own account. He collected the largest fleet ever seen in India, consisting of four hundred sail, including many large ships, but mostly small vessels fitted out by natives, and held a grand naval review in the harbour of Bombay, and a general parade of all his forces upon the plain now known as the Esplanade, taking a roll from each captain of the Portuguese soldiers and sailois, and of the captive slaves who could fight and assist, and the number of musketeers and of the people such as servants. The muster showed the forces to consist of 3,600 soldiers and 1,460 seamen, all Portuguese; 2,000 men from Malabar and Kanara, 8,000 slaves, 5,000 native seamen and 3,000 musketeers. Including the women and children, the whole floating population amounted to more than 30,000 souls. The review ended, the fleet sailed to Daman, which was speedily captured, and thence to the island of Bete (Shial *Bet*) which surrendered after a stern struggle. Diu was also bombarded, but managed to withstand the siege; whereupon Nuno da Cunha retired to Goa, leaving Antonio Saldanha with sixty vessels to cruise in the Gulf of Cambay and harass the foe. In the months of March and April, 1531, Saldanha rapidly seized and burnt Mohuva, Gogha, Tarapur, Mahim, Agashi and Surat, while Diogo da Silveira plundered Thane, the *thanedar* of which had attempted to rid himself of the obligation to pay tribute to the Portuguese. In consequence of this success, and later of Nuno da Cunha's capture of Vasai in January, 1533, the islands of Bombay and Mahim together with Bandra became tributary to the foreigner.

Meanwhile Sultan Bahadur Shah of Gujarat had grown apprehensive the power of the Mughal emperors, and observing the successes obtained by Portuguese arms, determined to enlist their aid. Accordingly in 1534 he despatched Xacoes (Shah Khawjeh) to Nuno da Cunha with an offer to hand over Vasai and all its dependencies and revenues by sea and land and on the 23rd December of that year the treaty of Vasai was signed on board the galleon San Mateos, under the terms of which Bahadur Shah gave and bequeathed to the King of Portugal from that day forth and for over the city of Vasai, its territories, islands and seas, with all its revenues, in the same way as he, Sultan Bahadur, King of Gujarat, held them before, provided that all vessels from the kingdom of Gujarat bound for the Red Sea should first call at Vasai for passes, and on return voyage call there again, in order to pay duties under penalty and risk of seizure.

The surrender of Vasai and Bombay was confirmed later by a treaty of peace and commerce between Bahadur Shah and Nuno da Cunha, dated the 25th October, 1535, whereby also the Portuguese were permitted to carry out the long desired work of building a fort at Diu. During the following ten years the Portuguese were constantly at war with Adil Khan, the Sultans of Gujarat, and the Zamorin of Calicut, while troubles also arose at Malacca and Diu was besieged by the Turks under Soleyman Badshaw (Suleiman Pasha), governor of Cairo. The main result was the impoverishment of the Portuguese treasury and consequent inability on the part of Portugal to reward suitably the services of her distinguished servants. This lack of money was doubtless partly responsible for the granting of lands by the crown as rewards for meritorious actions, and for the rise of the feudal system of tenure, which characterized Bombay during the era of Portuguese dominion; although it should be noted at the same time that under the Sultans of Gujarat a system approximating to the feudal had been in force in Vasai, Salsette, Bombay and neighbouring tracts. It appears in any case that from 1534 onwards Bombay was, for the purposes both of executive and judicial administration, subordinate to Vasai, and that all the territory of the Portuguese in the north Konkan was divided into manors or fiefs, the land being granted to deserving persons at a nominal rental of 4 to 10 per cent, and the leases being renewable either yearly, triennially, or in some cases for a period of one to three lives. For every distinguished services, and in cases where the grantees were religious confraternities, the lands were handed over in perpetuity. In return, the king of Portugal claimed military service from the tenant which might be commuted into a tax at the discretion of the authorities and the comptroller of the treasury. This system of tenure, which also laid upon the tenant an obligation to cultivate and improve the land, was known as *aforamento* (i.e., holding subject to the payment of foro or quitrent); and side by side with it existed a minor tenure known as *arrendarmento*, signifying the annual letting or renting of land for a fixed sum in cash or kind.

In the general distribution of estates which occurred after 1534, the island of Monbaym (Bombay proper) was let to one Mestre Diogo, as tenant or foreiro, for an annual guit-rent of 1,432 1/2 pardaos (about Rs. 537-3-0), payable at the royal treasury in Vasai. The island or kasba of Mahim was similarly rented for 36,057 foedeas (Rs. 751-3-0), the Mandovin, i.e., the mandvi or custom house of Mahim for 39,975 foedeas (Rs. 791-2-9), and the island of Mazagonfor 8,500 foedeas (Rs. 178), while between 1545 and 1548, during the vicerovalty of D. Joao de Castro, the four villages of Parel, Vadala, Sion and Worli were granted to Manuel Serrao for an annual payment of 412 pardaos (Rs. 154-8-0), the villages of Trombay and Chembur to Dom Roque Tello de Menezes, Elephanta island to Joao Pirez for 105 pardaos (Rs. 39-6-0), and the revenue of the custom house at Walkeshwar to one Posagy for 60 foedeas (Rs. 1-4-0). It cannot be definitely stated for what period Mestre Diogo enjoyed the manorial rights of Bombay; but collateral evidence proves that in or about the year 1554 during the viceroyalty of Dom Pedro Mascarenhas, the island was granted to Garcia da Orta, the celebrated physician and botanist, for a yearly quitrent equivalent to about £85 sterling. In his colloquios dos Simplese Drogas da India (conversations on the drugs and simples of India) he himself speaks of Bombay as ' Mombaim' terra eilha de que El Rei nosso senhor me fes merce, aforada em fatiota' (the island which the King has granted to me on payment of a quit-rent). Bombay apparently remained in his possession until his death in Goa in 1570, after which it appears to have been granted on the same tenure to several parties in succession, the last of whom was Donna Ignez de Miranda, widow of Dom Rodrigo de Moncanto.

Garcia da Orta was in all probability responsible for the building of the quinta or manor-house, which Fryer described in later years as a pretty well-seated but ill-fortified house and which Simao Botelhi recorded as being situated in a park with pleasure grounds, at the cacabe (kasba) of Bombaim, the principal seat of the island near the little fort. It was built sometime between 1528 and 1626; for in the latter year David Davies, the English navigator, who participated in the joint attack by the English and Dutch upon Bombay, referred to it in the following terms in the logbook of his ship the Discovery: " The 13th October we went into the Bay of Bombay and rode without the stakes. The 14th the Morris and the Dutch ships went in near the Great House to batter against it, in which battery three of the Morris ordnance split. The same day we landed 300 men, English and Dutch, and burnt all their cadjan houses and took the Great House with two basses (small cannon) of brass and one saker (heavy cannon) of iron. The 15th, all our men embarked aboard the ships, being Sunday in the evening, and left the Great House which was both a warehouse, a priory and a fort, all afire, burning with other good houses,

together with two new frigates not yet from the stocks nor fully ended; but they had carried away all their treasure and all things of any value, for all were run away before our men landed. The chief products of the island during the sixteenth century were the cocoanut palm, brab, jacktree, jambul, the jangoma, of which few specimens now exist, and mangotrees, one of which supplied the Lord of the Manor with fruit twice a year, once about Christmas, and again at the end of May. Cocoanuts and rice were the staple products of the island of Mahim; Mazagon and Sion were noted for their salt pans, while the numerous settlements of Kolis were responsible for a large supply offish, which was dried upon the island and then forwarded to Vasai for sale to the Moors (Muhammedans). As regards the population of the island, Bombay appears to have been composed of seven villages subordinate to two cacabas (kashas) or chief stations, at which customs-duty was levied. These villages were Mahim, Parel, Varella (Vadala) and Syva (Sion) under the kasba of Mahim, and Mazagon, Bombaim (Bombay), and Varel (Worli) under the kasba of Bombay.

In addition to these there were probably smaller hamlets, like Cavel, Colaba, Naigaon and Dongri, which had existed from the epoch of Hindu colonization. Bombay itself was not very populous, for it contained some years later (1634) only eleven Portuguese families or married men (cazados) and some native blacks (pretos naturaes), making altogether seventy musketeers able to serve in war. The latter were probably of Koli or Bhandari caste. The Kolis formed perhaps the most numerous class at this date and dwelt in most parts of the island from Colaba in the south to Sion and Mahim in the north. Wearing then, as they still do, their distinctive emblem, a knife suspended round the neck, these aboriginal colonists subsisted mostly by fishing and agriculture, though a few may have been forced to relinquish these duties for that of palanguin-bearing, which formed the subject of many a petition and appeal during the earlier years of the British occupation. A smaller community was that of the Moors (Musalmans) who, according to Garcia da Orta, were solely engaged in maritime trade. "They possessed the land first" he writes, " and are called Naitias, which means mixed or made up first of the Moors who came from abroad and mixed themselves with the Gentiles (Hindus) of this land." A few Musalmans of less mixed descent may conceivably have been living in Mahim or Bombay; but the bulk of the followers of Islam clearly belonged to the Konkani Muhammedan community, whose Arab and Persian ancestors had taken unto themselves wives from among the Hindu inhabitants of the western coast. Then there were Kunbis and Agris (Curumbins), who cultivated the fields and sowed them with rice and all sorts of pulse; there were Malis, who tended the orchards and were styled *Hortelaos* by the Portuguese, and thirdly Piaes (i.e. peons) or men-at-arms, who were in all likelihood Bhandaris. In Mahim, Bombay and Parel dwelt Parus (i.e. Prabhus) who collect the rents of the King and of the inhabitants and their estates, and are also merchants; while of the three other communities mentioned by Garcia da Orta as resident in Vasai and its subordinate tracts, viz., Baneanes (Banias), Coaris or Esparcis (Parsis) and Deres (i.e., Dheds or Mahars) or Farazes, the last named must from the nature of their duties have been dwelling both in Bombay and Mahim. "They are a people despised and hated by all," wrote da Orta, " they do not touch others, they eat everything, even dead things. Each village gives them its leavings to eat. Their task is to cleanse the dirt from houses and streets." The Banias and Parsis on the other hand did not actually settle upon the island until after its cession to England by the Portuguese.

The history of the dominion of the Portuguese in Western India is to a large extent the tale of the foundation and growth of their religious orders; and it was not long before Bombay became acquainted with the latter. Shortly after 1534, during the episcopate of Dom Fr. Joao de Alphonso de Albuquerque, one Fr. Antonio de Porte, a Franciscan friar, set sail for Vasai and Bombay. One of the conditions of the Treaty of Vasai was that a sum of 5,000 larins (a Persian coin equal to about six pence), which had hitherto been allocated to the mosques from the revenues of Vasai, should continue to be so applied; but so vigorously did Fr. Antonio and others set about the dissemination of their creed, that the king of Portugal eventually passed an order to utilize all funds of this nature for the benefit of missions in Bombay and Vasai. Besides converting about ten thousand natives in Vasai. Thane, Mandapeshwar and neighbouring places, the Franciscans built the church of St. Michael, which still exists in Mahim at the north end of Lady Jamshedji Road, and ranks as the oldest Franciscan building in Bombay. The keynote of Portuguese policy, indeed, is embodied in Vasco da Gama's famous remark "Vimos buscar Christaos-eespeciaria" (Welcome to seek Christians and spices) and they were slow to realize that the advancement of trade depended on the widest religious toleration as one of its principal factors. Had the Portuguese Government been able to restrain the troublesome and wanton acts of oppression which the religious orders practised under the cloak of proselytism the population and trade of Bombay and surrounding tracts would almost certainly have largely increased. But Bombay was early placed under the spiritual jurisdiction of the Vigario da Vara at Vasai and under his auspices the Franciscan mission was followed in 1542 by a Jesuit mission, the most notable member of which was St. Francis Xavier, and in 1548 by the Dominion order established in Goa in 1545 by one Diogo Bermudes, who constantly visited Bombay to confer with his friends Garcia da Orta. St. Francis Xavier lost no time in obtaining for the Jesuit order a share of the money which was formerly reserved for the benefit of the mosques, and by the year 1570 the Pauli-stines, as the Jesuits were styled, were resident in every town and village of Portuguese territory and had commenced building the church of St. Andrew at Bandra. Franciscan and Jesuit vied with one another in the erection of churches and the conversion of the inhabitants of Bombay. A chapel of Nossa Senhora de Bom Concelho was erected at Sion and affiliated to the church of St. Michael in 1596, and in the same year a church of Nossa Senhora de Salvacao was built at Dadar, both of which were built by the Franciscans and are still in existence. To the latter Fryer referred in 1673 in the words " at Salvasong the Franciscans enjoy another church and convent" and the same order also owned the Romish chapel at Parel, which was confiscated from the Jesuits in 1719, and after serving as Government House and the residence of H.M. the King Emperor during his visit to Bombay in 1875, has finally been transformed into the Haffkine Institute.

By 1585 the Franciscans had obtained practical control of Salsette, Mahim, Bombay and Karanja islands in each of which places was a state-paid official styled 'O Pai dos Christaos' and in addition to the churches

mentioned above they had built one on the Esplanade to Nossa Senhora de Esperanza, the earliest parishioners of which were the Koli converts of Cavel. These Roman Catholic ecclesiastics earned larger revenues than even the king of Portugal himself; they founded a college at Bandra, which conferred degrees upon all manner of persons and according to a writer of the seventeenth century "was not inferior as the building nor much [unlike those of our universities"; they lived sumptuously and were generally so influential that even the General of the North at Vasai felt his position to be precarious. These facts obtruded themselves upon the Reverend John Ovington, who visited Bombay in 1689 and remarked that "Few men can enjoy very peaceable lives who have any fair possessions near the convents of the Jesuits; a pleasant seat and a fruitful plantation can hardly escape their gaining."

Similarly at Naigaon the Prabhu and Brahman must still have been resident, though the latter found it harder than the former to maintain a livelihood and reputation amongst those who, once his disciples, had been largely persuaded or forcibly driven to become Christians. The Prabhu, on the contrary, being a man of business, could still comfortably subsist by petty trading or by acting as a rent collector and agent of Portuguese landlords. The defences of the island consisted of " several strong castles, such as that of Bombay, that at Dungerrey (Dongri), that at Ley am and that at Mahim". The trade of the islands was not great, being confined for the most part to the sale of dried fish, and the revenues of the Portuguese landlords were drawn mostly from taxes upon rice-lands, payable in kind, upon oil and *ghi*, and upon the cocoa-nut palms, date palms and arecanut palms, with which the island abounded.

Notwithstanding the poverty, however, the immense natural advantages of Bombay aroused the cupidity of the English who recognized its value as a naval base. It was for this reason that they fought the battle of Swally in 1612; that they landed in Bombay and burnt the manor-house in 1626; that in 1652 the Surat Council urged the purchase of Bombay from the Portuguese; and that in 1654 the Directors of the East India Company drew the attention of Cromwell to this suggestion, laying great stress upon its excellent harbour and its natural isolation from land-attacks. By the middle of the seventeenth century the growing power of the Dutch and the disturbances to which Shah Jahan's death gave rise, absolutely forced upon the English Company, both in Surat and London, the need of a station of their own in Western India; and under orders from the Directors the Council at Surat made enquiries, and finally reported in 1659 that every effort should be made to obtain from the king of Portugal the cession of either Danda Rajapur or Versova or Bombay. Thus the train was laid, which culminated in the marriage treaty of Charles II and the Infanta Donna Catherine of Portugal, and placed Bombay island in the possession of the English Crown.

BRITISH PERIOD

The various attempts of the English to obtain possession of Bombay, were the outcome of the general policy of the East India Company which justly foresaw that British trade interests in India could not flourish unless it secured fortified stations yielding a revenue equal to the charges of them

and also maintained at such stations a naval and military force sufficient to render the Company wholy independent of the intrigues and guarrels carried on between the native powers of the continent. In regard to Western India in particular the growing power of the Dutch and the disturbances consequent upon the death of Shah Jahan impressed upon the Company the imperative need of obtaining a fresh station auxiliary to their chief settlement in Surat and it must therefore have been with no little sense of relief that they received the news of the signing of the marriage treaty between Charles II and the Infanta Catherine of Portugal at Whitehall on the 23rd June 1661, whereby the post and island of Bombay with all the rights, profits, territories and appurtenances whatsoever thereunto belonging were handed over to the King of Great Britain, his heirs and successors forever. In pursuance of the terms of the treaty the Earl of Marlborough was despatched from England in March 1662 with five ships, five hundred soldiers under Sir Abraham Shipman, and with Antonio de Mello de Castro, Viceroy of the King of Portugal onboard, to take delivery of the island. The fleet arrived at Bombay in September 1662, and the Earl at once sent a formal demand for possession to the Portuguese viceroy and it was then for the first time that the representatives of the English Crown discovered firstly that the island was by no means the considerable possession that the authorities in England believed it to be, and secondly that in spite of its manifest poverty the agents and subjects in India of the Portuguese King had determined not to hand it over to the English without a struggle.

In regard to the first point one may recall Lord Clarendon's misty notion of " the Island of Bombay with the towns and castles therein which are within a very little distance from Brazil"; the statement of Captain Browne of the Dunkirk that the island had been "most strangely represented to His Majesty "; and thewords of Gerald Aungier to the effect that " the place does not answer our King's expectations by four-fifths of what was represented to him. For by the draught which was delivered to His Majesty, Bombay, Salsette and Thane were included all in one island and all under the Name and royalty of Bombay; but Captain Browne and myself having sailed round this island do find it for otherwise, being in extent scarcely one-fifth part of the other two islands and this is all the Portugals intend to surrender to us "Pepys' description of "the poor little island "and his reference to the "inconsiderableness of the place of Bombaim" were fully justified by the evidence of the English authorities in Western India and corroborate Baldeus' statement that by virtue of the marriage-treaty " the English thought to have got a great booty from the Portuguese, whereas they (Tangier and Bombay) are in effect places of no considerable traffic ".As regards the second point it is clear that the Portuguese in India were fully alive to the potentialities of Bombay and of its harbour and were very zealous of any infringement of the rights which they as tenants-in-chief of the King of Portugal had enjoyed for more than a century. For as late as January, 1665, when the final orders to cede the island were received from Portugal, Antonio de Mello de Castro, Viceroy of Goa, wrote to the King: "I confess at the feet of your Majesty that only the obedience I owe your Majesty as a vassal could have forced me to this deed (i.e., the cession of Bombay), because I foresee the great troubles that from this neighbourhood will result to the Portuguese and that India will be lost on the same day on which the English nation is settled in

Under these circumstances the Viceroy of Goa decided upon a policy of procrastination. On receipt of the Earl of Marlborough's formal demand, he spent five days in consultation and then replied that he was not authorized to hand over Bombay without His Majesty of England's immediate letter confirmed by his own hand and seal, adding that further instructions forbade him to give possession before the end of the monsoon. The King of England's letter was in possession of Sir Abraham Shipman, who did not arrive in Bombay till a month later; and in the meanwhile the Earl, finding that he could make no impression upon the pride of the perfidious Portugal contented himself with asking permission to land the English troops. This however was only permitted on condition that the men came ashore unarmed; and matters remained in an impasse until Sir A. Shipman cast anchor in the harbour. Thereupon the astute Portuguese discovered fresh reasons for delay, objecting that the form of the letters or patents did not coincide with the usual form observed in Portugal and that he must have a fresh authorization from Lisbon and England. And in October 1662, the Earl of Marlborough, seeing that no step towards delivery could be taken pending receipt of final orders from Europe, decided to return to England with the fleet. "All the art of contest I could use," he wrote, " cou<mark>ld not persuade</mark> the surrender of this paltry island, most basely deserted to the Arabians the last am more sorry for the King's dishonour and loss than for mine own trouble and care, which yet is like to fall heavy upon me, though not I hope by any default of mine." The Earl eventually set sail with the fleet on the 14th January, 1663; while Sir A. Shipman and the soldiery were forced to land on the unoccupied island of Angediv, twelve leagues to the south of Goa, where lack of proper food and an evil climate caused the death of nearly all of them, including Sir A. Shipman himself.

Just prior to Sir A. Shipman's death in April, 1664 he received a fresh commission from King Charles, dated 23rd November, 1663, which authorised him to receive possession of Bombay from the Portuguese Viceroy; but as he died before any definite step could be taken, the Supreme Court at Goa decided, after some correspondence with Antonio de Mello de Castro, that the island should be handed over to Humphrey Cooke, who had been Sir A. Shipman's secretary and had been nominated by the latter in his will as his successor. Further desultory correspondence ensued in consequence of the fact that Humphrey Cooke was not a persona grata with either the Portuguese or the English at Surat, but eventually the instrument of cession was despatched from Goa on the 17th January, 1665, and on the 18th February of that year Humphrey Cooke took himself personally possession and delivery of the said island of Bombay after signing the instrument of possession in the manor-house of D. Ignez de Miranda, the Lady of the island.

Humphrey Cooke's first action after obtaining possession of the island was to take a muster, at Sir G. Oxenden's request, of the remnant of Sir A. Shipman's forces which had accompanied him to Bombay; and his second was to endeavour to cancel the restrictions which the Portuguese had imposed upon him by the articles of cession. In pursuance of their original policy the Portuguese not only declined to hand over Salsette, but they

also declined to deliver up Mazagaon, Parel, Worli, Sion, Dharavi and Vadala, which had clearly been considered a part of Bombay in the original treaty between the monarchies of Portugal and England, alleging that these islands were dependencies of the more important island of Mahim and not of Bombay; and further they inserted clauses, to which Cooke also agreed, whereby Portuguese boats were allowed to pass and repass the island without paying any duty. Cooke fell into great disfavour both with the Government in England and with the Council of Surat for agreeing to these restrictions and generally for signing so derogatory and unjust a convention; but it probably occurred to him that he was likely, by insistence upon the full terms of the marriage treaty, to prolong the negotiations indefinitely and might even be forced to return to an island the climate of which had already caused the death of a considerable number of his compatriots, and that under these circumstances it was better policy to take Bombay with all the restrictions the Portuguese might impose and trust to cancelling them after he had the island in his grasp. Be this as it may, Cooke at once set himself to counteract what King Charles II styled " the manifest injustice of the capitulation" by seizing on the flimsiest pretexts the lands contiguous to the island of Bombay proper, by imposing a duty upon all Portuguese goods, by inviting native merchants to settle in Bombay, and by endeavouring to strengthen the garrison. Antonio de Mello de Castro in a letter to the King of Portugal, 5th January, 1666, remarked: "During the last monsoon I informed your Majesty that I had handed over Bombay. Now I will relate to your Majesty what the English have done and are doing every day in the way of excesses. The first act of Mr. Humphrey who is the Governor of that island and whom I knew in Lisbon as a grocer, was to take possession of the island of Mahim in spite of my protests, the island being some distance from the island of Bombay, as your Majesty will see from the map I send herewith. He argues that at low tide one can walk from one to the other, and if this is conceded your Majesty will be unable to defend the right to the other northern islands, as at low tide it is possible to go from Bombay to Salsette, from Salsette to Varagao (Baragaon), so that in order not to lose the north, it will be necessary to defend Mahim. He has done more. He has obliged the Roman Catholics to take an oath, by which they openly deny the jurisdiction of the Supreme Pontiff and Head of the Church. The inhabitants of the north would have taken up arms and driven out the English from thence, if I had not had my suspicions and prevented them, by assuring them that your Majesty was actually in treaty about the purchase of Bombay. And although the name of Humphrey Cooke appears in all these matters, an awful heretic named Henry Gary, a great enemy of the Portuguese nation, is the author of all these things. I believe, however, that before your Majesty remedies this, the Dutch will drive those people thence, as I am told they are preparing a large armada to besiege Bombay.". While he thus irritated the Portuguese, Cooke also fell foul of the Mugal Government and the factors at Surat. The former strongly objected to his overtures to native merchants, were afraid of his manifest attempts to strengthen Bombay, and found a ready cause of offence in Cooke's unauthorized seizure of one of their ships; while the latter could not brook his rough and ready style of correspondence and were alarmed at the accounts of his personal behaviour which reached them from Bombay. " Humphrey Cooke ", they wrote to the Court of Directors on the 1st January, 1666, " gives us

continual troubles in his daily importunities for money, to raise soldiers, forts and we know not what other bold designs, that we have been very weary with answering his letters, and upon our just denial of his unreasonable demands we have received such indignities and opprobrious terms to the great prejudice and dishonour of the Honourable Company and ourselves that we want both words and leisure at present to express them and him in his right colours".

Under these circumstances the Crown decided to relieve Humphrey Cooke of his duties and supersede him by Sir Gervase Lucas, who accordingly arrived in Bombay as Governor and Commander-in-Chief on the 5th November, 1666. Though instructed, if he thought fit, to offer the post of Deputy Governor to Cooke, Sir Gervase Lucas found matters in Bombay in so serious a condition that he not only could not offer him the post in question but was obliged to incarcerate him on a charge of extorting Rs. 12,000 from the inhabitants and of criminal mismanagement of Sir A. Shipman's estate. " Bombay island ", wrote Sir Gervase to Lord Arlington on the 21st March, 1667, "is for its magnitude one of the most pleasurable and profitable islands in India. The whole island is an orto or place planted with trees which yield great profit. And if Mr. Cooke had not sullied His Majesty's Government by taking bribes and as well indiscreetly as unjustly obstructed His Majesty's title to most of the best estates in the island, most of the inhabitants had by this time paid His Majesty's rent." So for a brief space Humphrey Cooke disappears from history. In spite of the verdict which must be passed upon his internal administration of Bombay, he surely deserves credit for inaugurating a policy of aggrandisement primarily designed to benefit English interests in Western India. Notwithstanding the protests of Antonio de Mello de Castro and Ignacio Sarmento de Sampaio, Cooke managed to acquire the villages of Mahim, Sion, Dharavi and Vadala, and had his action upheld by a commission which was locally appointed to decide between the claims of the Portuguese and the English Crown in the matter of these areas; so that by the time Sir Gervase Lucas arrived, Bombay included all the islands except Colaba and Old Woman's Island, which have been united into the modern island of Bombay.

Sir Gervase Lucas did not live long enough to initiate any sweeping alterations, but his policy even during the short period of his governorship was in consonance with that of his predecessor and was designed to satisfy Charles II's hope that Bombay would become "the flourishingest port in India ". Before sailing from England he pointed out the ruinous state of the Bombay fortifications and the need of a strong garrison and was permitted by the Crown to take with him "a reinforcement of 60 men under a lieutenant, together with a supply of clothes, ammunition and stores, and a small vessel to be attached to the garrison"; while, after arrival he was responsible for confiscating on a charge of treason a large tract of land in Bombay to which the Jesuit's College at Bandra laid claim and which they had threatened to defend by force. On Sir G. Lucas' death on the 21st May, 1667 the reins of Government were handed over to Captain Henry Gary who was serving at that time as Deputy Governor. No sooner had the news become public than Humphrey Cooke, who had escaped from durance vile and was living at Goa under Jesuit protection, sent in a claim to Gary to succeed to the governorship. A good deal of

correspondence ensued, which ended on the 24th June, 1667 in the following letter from Gary and his council to Cooke: "We thought that the answer we sent you to your last by the same messenger had been so civil and satisfactory that you would not put yourself and us to the trouble of any more scribbling. But finding our expectations deceived and again alarmed with another nonsensical paper from you (for we cannot term it either letter or epistle) we do by these return our sense unto you of your unwarrantable and foolish proceedings. We do every one of us particularly as well as generally protest against you, Humphrey Cooke (according to our bounden duty which we do understand better than you do yours) as a Rebel and Traitor." Smarting under a sense of defeat and urged on by the Portuguese who saw in him a suitable agent for annoying the English in Bombay, Humphrey Cooke voyaged upto Bandra, where with the help of the Jesuits he endeavoured to attack Bombay. For a time matters looked serious, as the Jesuit emissaries had worked upon the mind of the native population. But the Bombay Council managed to hold their own; and at length Cooke, fearing to be arrested as a traitor and finding the Portuguese ill-piepared for a struggle departed to Vasai and died soon afterwards in a monastery belonging to the Order of Jesus in Salsette.

Meanwhile Gary had not been idle. He raised the general revenues of the island from 5,214 1/2 Xeraphins to f 6,490-17-9 sterling, the tavern dues (excise) from Xs. 400 to Xs. 2,400, the tobacco fa.rm receipts from Xs. 6,000 to Xs. 9,560, and customs receipts from Xs. 4,100 to Xs. 18,000; he enlarged the land-forces by enrolling 150 new Deccanis in consequence of Dutch alarms and mounting the artillery on substantial carriages; he improved the fortifications; and he kept so watchful an eye upon the machinations of the Portuguese that the triumvirate of gentlemen who were carrying out the duties of the viceroy at Goa in January 1670, described him as very astute and an enemy of the Portuguese nation. The chief source of friction with the Portuguese concerned the port-dues which the Portuguese levied on Bombay boats at their own ports and which they declined to pay for their own boats at Bombay. These dues were generally excessive. Humphrey Cooke had been forced to put soldiers on board to resist the levy of a 12 per cent duty imposed upon merchandize and provisions brought by Bombay boats from mainland ports: Sir G. Lucas had great trouble with the Portuguese at Mahim bandar, and Henry Gary likewise fought for recognition of the right of Bombay vessels to exemption from dues at Portuguese ports. But he was unable to effect any amelioration of existing trade-conditions; and he also alienated the council at Surat by granting passes in the king's name to native vessels, which the Company's agents considered an infringement of their prerogatives.

The system of independent granting of navigating passes, the private trading in which the Crown representatives in Bombay indulged, and the hostilities which the latter provoked with Native powers (chiefly the Mughal government) and for which the East India Company were held responsible by those powers, caused endless friction between the Surat factors and the King's agents in the island and eventually led to the transfer of Bombay from the Crown to the Company under a Royal Charter, dated March 27, 1668, which specified that the port and island of

Bombay were to be held " in free and common soccage, as of the manor of East Greenwich," at a farm rent of £ 10, payable on the 30th September in each year. The copy of the charter and a warrant from the King to Sir George Oxenden arrived on 1st September 1668, and two days later the Surat Council held a meeting and decided to depute Mr. John Goodier, Captain Young and Mr. Streynsham Masters as Commissioners to take delivery of the island from Captain Gary. The Commissioners reached Bombay on the 21st September 1668, and handed the King's warrant to Captain Gary; and after a day spent in preparation for the ceremony, landed with military honours on Wednesday the 23rd. Thus Sir George Oxenden, as President of Surat, became the first Governor of Bombay under the regime of the East India Company, and upto the date of his death at Surat (14th July 1669) endeavoured through his delegates to carry out the policy of the Court of Directors, which aimed at encouraging trade in all possible directions, encouraging people of all classes to settle on the island, and rendering Bombay proof against all attacks. In pursuance of these objects the Court of Directors despatched several soldiers and artificers to Bombay in 1668, ordered the construction of a custom house, warehouse and quay and appointed a chaplain with an assistant who was also to be master of a free school on the island; while the local authorities indented upon England for a judge-advocate to decide causes of *meum* and *tuum* among the litigious inhabitants of the island, commenced building the fortifications, began purchasing land in the vicinity of the Fort, and placed the defences of the island on a better footing. In spite however of orders both from the Court of Directors and the Surat Council, the progress of the island was to some extent jeopardized by the behaviour of the Deputy Governor, Captain Young, who had eventually to be removed from his post for gross misconduct; while the climate had already begun to acquire the terrible notoriety which justified Ovington in describing Bombay at the close of the seventeenth century as " nought but a charnel-house ".

The progress of Bombay did not indeed assume very definite proportions until Mr. Gerald Aungier, " that chivalric intrepid man who dared a not less potent spirit in the Dutch Commodore Van Goen ", became President of Surat and Governor of Bombay in July 1669. In January of the following year he arrived in Bombay from Surat and, after investigating the accusations against Captain Young, he promulgated the Company's regulations for the civil and military administration of the island, "giving the people a taste of the Company's justice by the trial of several cases to their great satisfaction. ".In February Mr. Aungier returned to Surat leaving behind him as Deputy Governor of Bombay Mr. Mathew Gray, who was shortly afterwards succeeded by Mr. Gyfford. Aungier did not return to Bombay until June 7, 1672, in consequence probably of the general political outlook. The Marathas were at this date making constant petty attacks upon Surat, which rendered trading somewhat precarious, while the Mughal Governor did his best to hinder the president leaving Surat, ostensibly on the grounds that enemies might take advantage of his absence in Bombay to undermine the Company's trade interest, but really because he feared that removal to Bombay would cause an immediate decline in the general prosperity of the Gujarat port. By the middle of 1672, however, internal troubles and the covetous exactions of the Mughal had convinced Aungier of the need of moving the Company's

headquarters from Surat to Bombay, while continual disorders in Bombay arising from the unruliness of the troops and a considerable influx of weavers and other immigrants impressed upon him the need of personally residing in the island and laying down the lines of its future progress. Accordingly setting sail from Surat, he arrived in Bombay on the 7th June, after nearly losing his life in violent storm, and at once proceeded to deal with the more urgent requirements of the island. The disorders among the military forces were quashed; the English law was publicly introduced in supersession of Portuguese custom; a Court of Judicature was established, Mr. George Wilcox being appointed judge in August 1672; a town was lined out on that parcel of ground which lieth over against the present Fort; a mole was staked out capable of berthing 20 ships of three or four hundred tons; and finally the famous Convention was promulgated which put an end to the long-standing disputes between the Company and the Portuguese landholders in regard to the ownership of land in the island and enabled the Company to pursue unhindered their policy of colonization. Other innovations of more or less importance wece the establishment of a mint, the improvement of the fortifications, the building of a small hospital, the institution of trading privileges for certain corporations, the creation of panchayats or caste councils for the various native communities, the opening of a printing press, the building of houses, and the importation of English women who might be married to the traders and settlers of their own race.

Meanwhile the political outlook was far from promising. Fear of attack by the Dutch and French was rife in 1672; the Portuguese prevented the free access of Bombay ships to Thane and Karanja; and by the close of 1673 the Siddi Admiral of the Moghal was committing great insolence on the Island Patekas (Butcher's Island) and the town (Bombay), stealing cattle and vexing and robbing the poor people. The Court of Directors writing in July, 1672, informed their representatives in India of a great English victory over the Dutch, which temporarily calmed Aungier's fears and was made the occasion of a public thanksgiving in Bombay on St. Stephen's day, 1672. "The thanksgiving", wrote the Bombay Council, " was not only held by ourselves but in all the Portuguese churches with much alacrity and expressions of joy, and for that the hearts of the Portuguese, Banians and others of this island were much dejected by reason of the war and affrighted with the noise of 22 sail of Dutch ships coming against us, we thought good to rouse and cheer up their spirits with a public show. Your Governor and Council marching in the evening of the thanksgiving day with the two companies of the militia with colours flying, drums and trumpets (for by good fortune we have met with two German trumpeters which ran away from the Portuguese and are now entertained in your service). In this posture we marched quite through the town, about 600 men in arms, the Portuguese, Moors, Banians and Gentus and others crying out as we passed "God save the King and the Honourable Company". The day ended with the distribution to the pool of thirty rupees in pice and bujruks and of two butts of arrack to the militia and soldiers, and with the firing of salvoes and the lighting of a large bonfire. But the tranquillity engendered by this victory was but temporary; for on the 20th February 1673 a Dutch fleet under Rickloffe van Goen arrived in the hope of taking Bombay by surprise. According to Orme, Aungier exerted himself on this occasion " with the calmness of a philosopher and the courage of a centurion." The Dutch Commodore, discovering to his annoyancp that heavy ordnance had already been mounted on the fortifications and that three war-vessels were lying in the harbour, moved up the western side of the island and prepared for a descent upon the Mahim creek. Aungier at once marched up to Mahim and made a hostile demonstration; whereupon the Dutch with 6,000 men on board sheered off, and after hovering for some time between Bombay and Surat disappeared altogether. Shortly afterwards (17th February 1674) the treaty of Westminster was concluded between England and Holland, which relieved the British settlements in Western India of further apprehension.

It is necessary here to note briefly the relations that existed between Shivaji and the English. The initial intent of the English was not aimed at making territorial gains in India and hence there was no reason for any diject confrontation between Shivaji and the English on that score. As stated earlier the English had acquired the island of Bombay from their Portuguese neighbours and as Surat was constantly under the threat of an attack from Shivaji, the English were planning to shift their headguarters from Surat to Bombay. After his escape from Agra Shivaji's power rapidly increased and the English became anxious to secure his goodwill and friendship so that their trading operations might not suffer. The English therefore sent their envoys from time to time to Shivaji, Ustick in 1672, and Henry Oxenden in 1674 at the time of Shivaji's coronation at Raigad with presents from the company along with their congratulations. These exchanges led to a signing of a treaty of mutual trade and friendship between the English and Shivaji and their relations remained cordial during Shivaji's lifetime.

In September, 1675, Aungier returned to Surat, leaving Bombay far more prosperous than at the time of his first vieit. His task had proved by no means easy; for in 1674 the English troops mutinied on the question of pay and provisions; Sambal the Sidi anchored at Mazagaon during the monsoon of the same year and caused much annoyance to the people; and the Portuguese continued to harass British trade. " During my stay here (Bombay)", wrote Aungier to the Deputy Governor, " I have found odd neighbours to deal with; the jealous and envious Portuguese have endeavoured all that lay in their power to obstruct our settlement; the Governor of Surat hath not been wanting also to use his policy to undermine us; and Sidi Sambal with his fleet hath been no small impediment. The Dutch with their powerful fleet designed to have swallowed us up; but blessed be God who hath hitherto preserved us and rendered all their evil designs advantageous. Sevajee only hath proved and that for his own interest sake our fairest friend and noblest enemy. You must expect to encounter many ill offences from the Portuguese, especially in the pass of Karanja, as I have done; but you must not yield in the least to them." In spite of political troubles, in spite of the fact that he had drawn no salary whatever for four years, Aungier held firmly and conscientiously upon his road, and at the hour of his death in Surat on the 30th June 1677 was able to begueath to his successor an island far more populous, more strongly fortified, better governed than it had been in 1668 and bearing within it the seeds of administrative, commercial and social expansion. The history of this earliest period of British dominion may fitly conclude with the following extracts from a letter written by Aungier and his Council to the Court of Directors on the 15th December 1673, which gives a full description of Bombay at that date and forms a complement to Dr. John Fryer's graphic account of the island.

- "Bombay is made by the inroads of the sea into four small islands, passable at low water, (1) Colleo or Old Woman's island, (2) the Palmero grove of Bombay, the town of Mazagon, Parel, Matunga, Sion and Daravee (Dharavi), (3) the Cassabem (Kasba) or Palmero wood of Mahim, (4) the hilly island of Veroly (Varli). The sea hath eaten up about one-third of the island.
- " After the first intermission of the rains in May or June and after their total ceasing in October the air and water are unwholesome by reason of the crude pestiferous vapours exhaled by the violent heat of the sun into the air and vermin created in the wells and tanks which renders these months most sickly to the inhabitants and especially to Europeans.
- " All the land is employed in rice and cocoanuts; but it produceth all sorts of trees for timber and fruit, all sorts of plants, roots and vegetables necessary for the use of man for sustenance, health, pleasure or profit. We have experimented by a garden raised this year near the Castle, the produce whereof doth sufficiently evidence the fruitfulness of the soil.
- "The town is divided into the two small shires of Bombay and Mahim. The former contains the island Colleo, the towns of Bombay, Mazagon and Parel, with the several parishes of Pallo (Apollo), Deirao (?). The shire of Mahim contains Mahim, Sion, Daravee and Verlee with the several parishes of Salvacaon, St. Michael, etc., precincts.
- "The English are employed in trade and in the militia; the Roman Catholic Christians chiefly in planting the ground, some few in trade, and too many of them as soldiers in your garrison for pure want of English protestants to keep watch and defend the island.
- "The Moors have several sects and castes. They are not very numerous as yet, but sensibly increased. Some few old inhabitants are employed in the lands and others do buy possessions. Most are employed in trade, supplying the island with provisions, going to sea in ships and other vessels as lascars or marines, haberdashers of small wares, weavers, tailors, bakers, smiths and other handicrafts very useful and indispensably necessary to the island. The Moors have two places of worship, one at Bombay, the other at Mahim. The latter is the tomb of one of their famous saints there buried, much frequented in the month of October by pilgrimages made thereunto.

"The Jentues (i.e. Gentus, Gentiles or Hindus) comprise Banyans (all traders and brokers), Brahman (priests and traders), purvoos (Prabhus) (farmers of land and rent-receivers), Sinays (Shenvis) (cultivators and traders), Bandareens (Bhandaris) (Toddy distilling and making of Arrack called Phoole Rack) (Mhowra spirit), yielding a considerable revenue. They are also good soldiers, stout, faithful and lovers of the English; Corambeens (Kunbis) (tillers and mowers of lands, as well the rice as the cocoanuts); and Coolys (Kolis) general fisherman of the island, yielding a

good revenue to the Company and other useful and indispensable services; these are as it were the Company's slaves, hardy, unwearied labourers and lovers of the English; the better sort engage in trade and grow rich.

- "Also Percees (Parsis), an industrious people and ingenious in trade, wherein they totally employ themselves. There are at present few of them, but we expect a greater number having gratified them in their desire to build a burying place for their dead on the island.
- " All provisions and sustenance are procurable at Bombay, all sorts of corn and grain, beef, mutton, veal, lamb, pork, hens, ducks, geese, fish, etc. Most of these are brought from the mainland. Owing to increase of population the price of provisions has doubled.
- "The three chief breaches are at Mahalakshmi, between Worli and Mahim, and between Mahim and Dharavee.
- "Before the English came the trade was only in cocoanuts and cairo (coir). Now the country merchants drive a great trade with Surat, Broach, Cambay and Gogo, and also to Dabull, Kelsey, Rajapore and Goa, to Mocha, Persia, Scinda, Bussora, in salt, cocoanuts, cairo, betel-nut, rice, elephants teeth (from Mozambique), broad-cloth, lead, sword-blades and some other Europe goods. Last year we disposed in Bombay of 600 pieces of broad cloth, 3,000 maunds of lead, all the perpetuanes and serges, and all the sword-blades. The trade by sea and land is interrupted by the Mughal and Sevajee's fleets and armies. We are trying to open trade with Tuneer (Junnar?) Orungabad, Raybag, Hubily, Vizapore; with Mocha, Persia, Bussora* Scinda and Patan, the Maldives and Malabar coast; whence we shall get myrrh, aloes, olibanum, cohoseed, tinkall, sena, red earth, carminia wool, pertchock, skins, corryes, pepper and cardamoms and other goods proper for Europe and the South Seas.
- " Small lines or parapets and guard-houses have been raised at Mahim and Sion. We intend also to sink in the fords of Mahim and Sion quantities of sharp craged stones, some pieces of old timber stuck with spikes and nailes and to have a good number of crows' feet and spike-balls in readiness to gall either horse or foot that shall endeavour to pass those fords.
- " The Castle of Bombay lies upon a neck of land between two bays; a quadrangular Fort whereof three points command the port and the two small bays, the fourth with two of the others commands the town and the plain before the castle. It is of small circumference and irregularly built, owing to the ignorance of the engineers. The landward wall is 27 feet high and 25 feet broad, consisting of an outer and inner wall of stone and terraphene of earth; the two seaward platforms are 20 feet high and 42 feet broad, to carry 36 ordnance besides those on the bastions. Three bastions are finished, mounted with 50 pieces of ordnance; the seaward bastion is incomplete. The powder rooms inside will contain two thousand barrels of powder.
- " In the middle of the fort is the Governor's house built formerly by the Portugals, but was burned by the Arabs of Muscat when they surprized

and took the island from the Portuguese in 1661, so that when the English took possession of the island there was little more than the walls left. But since it came into the Company's hands it hath been much repaired; the front is fair and beautiful enough, but the rooms within are not so well contrived as we could wish either for lodging or other accommodation. Yet by degrees we are endeavouring to render it more and more capacious. Under the walls are raised lodgings for the soldiers with the corps on guard.

"A large spring or tank lies 100 paces outside the wall which the Engineers ought to have included. Instead they were obliged to build a new tank. There is no ditch or moat; but a fausse-bray has been raised twenty feet from the wall outside the castle and two home-works.

"The great bay or port is certainly the fairest, largest and securest in all these parts of India, where a hundred sail of tall ships may ride all the year safe with good moorage. In the small bay to the north of the castle ships of 400 tons have been haled ashore to repair, there being 15 foot of water at the springs; but this bay hath been spoiled by those who built the fort, who broke off the rocks which kept off the violence of the sea and carried away the stones to the fort. We are casting more stones to keep off the sea and secure the ships. In the lesser bay to northward of the fort ships of 300 tons may be haled ashore. At Mazagon ships of 200 tons may be haled ashore; also at a place called Drumgo(?) there is an excellent bay where 50 sail of 200 tons each may winter and repair safely. For small frigates, gorals and other vessels there are very many places.

"The President supeivises all foreign and domestic matters and all trade. The Deputy Governor has charge of treasury, militia, garrison and public works. The accountant keeps accounts under garrison, fortifications, shipping, building, house-keeping, and supervises military stores. The attorney-at-law, James Adams, looks after the Company's revenues and lands and defends the action and rights of Government before the law; he acts as a preventive-officer and as storekeeper to the garrison. The warehouse keeper takes charge of all goods received and sold, and has to take steps for increasing the indigenous trade. The Judge hears all suits and has charge of the register for probate of wills, etc. All these are in Council which meets Monday, Wednesday and Friday every week from 8 a.m. to 12 at the toll of the Castle dell. Francis Day acts as Secretary to the Council.

- "The Court of Judicature is held in a room near the Fort, and two justices of the peace sit with the Judge. There are two days a week for civil suits and one day a month for criminal matters.
- "There are two garrison companies of 200 men apiece. Of these one hundred are employed in the Company's frigates; the rest in bands of 75 each garrison the castle in turn. The guard is relieved every morning and trained. There are also three companies of militia, one at Bombay, one at Mahim and one at Mazagon, consisting of Portuguese black Christians. More confidence can be placed in the Moors, Bandareens and Gentus than in them, because the latter are more courageous and show affection and goodwill to the English Government. These companies are exercised once a month at least and serve as night-watches against surplise and

robbery.

"The revenue of the island is 70,000 xeraphins. The Portuguese still claim the Colliarys (Koliwadas?) or right of fishing in the open bays of Bombay, Mazagon, Veroly (Varli) and Parel. The people of Mazagon who fled at the approach of the Dutch fleet have returned to the number of 10,000, Their houses and lands have been restored to them; but Alvaro Pires (de Tavora) refused to return and intrigued with the French, Bassein and Goa. He has, therefore, been declared unfit to serve again on the island, and his estate has been temporarily granted to his mother in trust." (c.f. Gazetteer of Bombay City and Island, Vol. II, 1909, pp. 65-70.)

1677-1722: On the 30th June 1677 the Council at Surat wrote as follows to Bombay: "It hath pleased God to oui great sorrow after a tedious sickness to take out of this life our worthy President, Gerald Aungier, who died this morning between four and five of the clock of which we thought good to give you this timely notice that you might prevent all innovations or disturbances upon the island," to which the Bombay Council, acknowledging the receipt of the letters, replied: " We cannot rightly express the reality of the grief we conceived at the perusal of the deplorable news, of the death of our late noble President. Multiplicity of words may multiply the sense of our loss, but cannot depaint its greatness and the knowledge we have of the true worth and integrity of his successor, and it shall be our continual prayer for a blessing on your great affairs." For a brief space after Aungier's death Henry Oxenden was at the head of the Government of Bombay, but was succeeded soon afterwards by Mr. Thomas Rolt, who assumed the pompous title of Governor of Bombay, President of India, Persia, Arabia, etc., and in turn yielded place at the close of the year 1681 to Sir John Child, who under the title of Captain General and Admiral of India administered the affairs of the island until his death in 1690. During the following four years Mr. Bartholemew Harris held the reins of Government and was succeeded by Sir John Gayer, who ruled at Bombay with the revised title of General until 1704.

The governorship of each of these four gentlemen was marked by internal and external troubles of no mean magnitude, which for the time being resulted in the almost total eclipse of the island's prosperity. " The last quarter of the 17th century was not only devoid of any great achievement or of any appreciable progress in manners and morals," wrote Dr. Da Cunha, "but was on the contrary a witness to sedition, strife, immorality, unhealthiness and anarchy at home, and invasion, piracy and arrogance abroad." The dangerous climatic condition of the island had already been reported by Aungier to the Court of Directors in connection with serious mortality among the English troops; and by 1689, when the Reverend John Ovington arrived in Bombay, one of the pleasantest spots in India seemed no more than a parish graveyard. Of the twenty-four passengers who sailed with him twenty died before the rains ended, and fifteen of the ship's crew also. Overcome with horror of the island the Chaplain wrote: —" As the ancients gave the epithet of fortunate to some islands in the West, because of their delightfulness and health, so the moderns may in opposition to them denominate Bombay the unfortunate one in the East, because of the antipathy it bears to those two qualities "; and added that

the island was " nought but a charnel-house, in which two musoons were the age of a man ". The chief diseases were, according to Fryer, "fluxes, dropsy, scurvy, barbiers or loss of the use of hands and feet, gout, stone, malignant and putrid fevers " and a disease named "mordisheen" by the Portuguese, which was extremely prevalent. Between 1686 and 1696 there was a severe outbreak of plague in Western India, which wrought great havoc in Vasai, Thane and Chaul, and helped to deplete the population of Bombay. At the close of 1691 there were only eighty Englishmen left upon the island, of whom many were ill; there were only five civil servants and they had dwindled to three in January 1692; while by October 1696 only twenty-seven Englishmen, exclusive of moribund military officers, were alive. Matters were unchanged as late as 1706, for Sir Nicholas Waite wrote in January of that year: " We are only eight covenant servants including the council and but two that write, besides two raw youths taken ashore out of ships, and most of us sick in this unhealthful, depopulated and ruined island, " and later wrote again: " We are six including your Council and some of us often sick. It is morally impossible without an overruling providence to continue longer from going underground if we have not a large assistance." A year later he made his final appeal for help in the words: "My continued indisposition and want of assistance in this unveryhealthful (sic) island has been laid before the managers and your Court. Yet I esteem myself bound in gratitude and I will briefly inform what material occurs till I leave this place or the world."

The Court of Directors did what lay in their power to ameliorate the circumstances of their agents in Bombay by despatching surgeons on the munificent salary of 45 shillings a month and consignments of medicines from England which not infrequently were found to have deteriorated on the voyage and the Council at Surat also helped with the provision of a medical man at a time when the only physician on the island had died. But such aid was of little avail against the deadly character of the climate. " Of what use, " wrote Anderson " was it to send trusty factors and hardy soldiers thither? They breathed the poisonous air but a few short months, after which their services and lives were lost to their employers for ever. ". The chief causes of the general mortality seem to have been the gradual silting-up of the creeks, which at high tide divided Bombay into several islands, the system followed by the native oart-owners of buckshawing i.e., manuring the toddy-palms with putrid fish, and, in the case of the European residents, the extraordinarily loose living in which they indulged. In 1684 the Council at Surat remarked in a letter to the Directors that " Although the island may have the name in Europe of being unwholesome, it is no such thing really; but it is a pleasant sweet place and sober people may enjoy their healths there as well as in many other places in India. But when men come new out, drink punch toddy and country beer, besides that are disordered and tumble on damp ground it cannot be expected but disease must be contracted. ". The soldiers of this period were described two years later as debauched broken tradesmen and renegade seamen; and the immorality of the civil population, to which Anderson referred, is well described by Ovington, the chaplain, in the following words: "I cannot without horror mention to what a pitch all vicious enormities were grown in this place. Their principles of action, and the onsequent evil practices of the English forwarded their

miseries and contributed to fill the air with those pestilential vapours that seized their vitals and speeded their hasty passage to the other world. Luxury, immodesty and a prostitute dissolution of manners found still new matter to work upon. ". The native population also suffered severely from fever and plague during the closing years of the seventeenth century, and lost much property in a severe storm which raged over Bombay from the 20th April to the 8th May 1697.

Meanwhile the trade of Bombay suffered not a little from the internal feuds and domestic troubles of the Company. About 1680 private traders or interlopers, as they were styled, commenced to fit out ships, to form illicit trade-connections with the Company's servants in India, and to trade direct between English and Indian ports with the object of diverting the Company's trade into their own hands. Among the best-known of the interlopers on the Western Coast were John Petit and George Bowcher, who had once been in the service of the Company and who undoubtedly encouraged Keigwin's rebellion. These and others in increasing numbers, set themselves to harass the Company as much as possible, and in addition to being able to undersell the Company in every article imported England from India, led native merchants, particularly Muhammedans, to offer all manner of indignities to the Company's agents on the grounds that the Company was rent by internal feuds and was quite powerless on that account to retaliate. The Court of Directors thereupon appealed for help to the King, who ordered a man-of-war to intercept all interloping vessels; but the annoyance continued more or less unchecked until the end of 1693, when in the words of the Court " after a multitude of conflicts with the interlopers and their adherents and all others that have envied or emulated the Company's former prosperity, we have obtained of their present Majesties King William and Queen Marp a charter of confirmation of our present and all our former charters, and are in possession of it, under the Great Seal of England, bearing date the 7th instant. Of this charter we shall send you copies by our shipping, and think it fit before that comes to your hands, upon receipt of this letter, you should make such solemn public intimation of it to the natives as is usual upon such occasions. "

A brief review of the relations between the English of Bombay and the Marathas after the death of Shivaji would not be out of place here. Sambhaji after assuming the royalty had first to face the challenge of the Portuguese whom he harassed and then of the Siddi of Janjira who at the instance of Emperor Aurangzeb raided Maratha territory right up to the fort of Raigad towards the end of 1681. A great war ensued but Sambhaji had to retire due to the march of the Emperor in the Deccan. Aurangzeb cowed down the English trading establishment at Surat and Bombay, as also the Dutch and Portuguese possessions on the Western coast into abject submission and calling upon them to attack Sambhaji, Sambhaji also made similar demands upon the English. But the English clearly avoided taking sides and managed not to come into scrape with either by sending their envoys to both in order to present their neutrality.

The year 1683 witnessed also a very serious rebellion upon the island, which may conceivably have accelerated the transfer of the Company's Government from Surat to Bombay in 1685. In March 1681 Captain

Richard Keigwin had been appointed by the Court of Directors, Commandant of all the forces on the island and third member of Council. The exiguous salary of the Commandant was the result of a general desire on the part of the Company to retrench their military expenditure and in 1683 Sir John Child, in pursuance of the Company's object, ordered a further reduction by 30 per cent of all military salaries . " The military gentlemen " writes Hamilton, " had made contracts in England for their salaries, though paid at 20 per cent loss—yet to show himself a good economist for his master's interest he (Sir John Child) sent his Deputy (Charles Ward) orders to reduce their pay to 30 per cent less than it was before, though it was so small that they could hardly bring both ends to bear at the month's end. That hard pill the sons of Mars could not swallow and so bent their minds on a revolution; and having come to some knowledge of Mr. Ward's tampering with the Sevajee to land on the island they detected some letters of his to that purpose, which gave them ground for a revolt". There is little doubt that Keigwin was actuated not only by discontent at the niggardly action of the Company but also by a conviction that Sir John Child and his Deputy were grossly mismanaging the affairs of Bombay, and he complained bitterly of the oppression of the Company's government in a memorial, dated January 1684, addressed to Prince James, Duke of York and Albany, "whom we (the mutineers) look upon as the North Star of our firmament by which we are resolved to steer our course ". Accordingly on the 27th December 1683, Keigwin, aided by Henry Fletcher, Thomas Wiekins, Stephen Adderton and a fourth described by the Chaplain, John Church, as " that little false Scot Thorburne " raised the standard of revolt, seized and confined the Deputy-Governor Ward and others who adhered to him, took possession of the Company's ship *Return* and the frigate *Hunter*, and made a public proclamation before the assembled troops and militia that Bombay was henceforth to be under the Government of the King. Ward, who according to his own account was closely watched and was supplied neither pen, ink nor paper, managed to have the news conveyed by stealth to Surat, whereupon the Council decided to appoint Charles Zinzan, Francis Day, and George Gosfright as Commissioners to enquire into the naughtiness and wicked actions of some on Bombay and to suppress the revolt. The trio accordingly voyaged to Vasai, and thence sent letters promising pardon to several of the mutineers, if the island was at once restored tothe Company. To their expressions of cajolery Sir John Child added his in a letter dated February the 1st 1684, and couched in the following quaint terms: "For the expressions that I am told fell from Captain Adderton and Ensign Thorburne my particular obligations to them might have persuaded them to use me with more respect, two that I have tenderly loved and taken some care of—Oh! Johnny Thorburne, thy ingratitude is of a deeper dve, but the God of Heaven and Earth forgive thee and pardon you all and put into your hearts to return to your obedience. Come one, two or three of you and look on your Governor. I am the same that lived among you not long since and then had wars with Sambaji Raja and great disturbances from the Portuguese, yet preserved you all with God's blessing and plentifully supplied you with all provisions. Nay you well know my care, and how I kept batty at 22 xeraphins a more (muda) when all about us was at 28 and 30 xeraphins."

The mutineers, who had meanwhile memorialised the King, saying that

they would hold the island till his wishes should be known, replied firmly to the Commissioners and Sir John Child that they would not retreat from their position; whereupon the latter after some further correspondence, in which he styled Keigwin's replies as " a parcel of stuff that sufficiently discovers your ignorance and naughtiness ", issued a proclamation on the 29th February 1684, declaring them all traitors. As soon as the news of the revolt reached England, Charles II issued a royal command, dated August 23rd, 1684, to Keigwin to deliver the island to Child, and a free pardon was offered to all except the four grand incendiaries, for whose apprehension rewards were publicly offered: and eventually on the 19th November 1684 Keigwin, on receipt of a promise of free pardon, handed over Bombay to Admiral Sir Thomas Grantham, who had been despatched with a force from England to guash the rebellion. Keigwin was placed for the time being under arrest, in which plight he shewed himself as impudent as Hell, the notorious naughty rascal, and was eventually taken back by the Admiral to England in July 1685. During the eleven months that he held possession of Bombay, he proved himself to be possessed of great determination and considerable administrative capacity. One of his first actions was to send envoys to Sambhaji and conclude a treaty, under the terms of which he was peimitted to trade in any pare of the Maratha dominions and also received payment of an old debt of 12,000 pagodas due to the Company. He also built small fortifications at Mahim and Sion; collected much of the money due to the company from native debtors, and administered the affairs of the island in such a way that Gladman, one of the Commissioners accompanying Sir Thomas Grantham, was forced to admit that the Rebels had managed very well. The rebellion being thus brought to a close, Sir John Child became Governor once again, with Sir John Wyborne as Deputy Governor in Bombay: and in imitation of the Dutch at Batavia the Court of Directors decided that Bombay should be constituted a regency, and that the Governor should, for the sake of dignity, be furnished with a life-guard of twenty grenadiers, commanded by a captain. In spite, however, of this assumption of independent power, some years were to elapse ere Bombay resumed the tranquillity which she had enjoyed during Aungier's regime.

At the close of the century, when Sir John Gayer held the reins of Government in Bombay, the Company's progress was again obstructed by the machinations of the new English Company, to which king William III had granted a charter in 1698, and which owed its incorporation to the discontent felt by English merchants at monopoly enjoyed by the London East India Company. In January 1700 Sir Nicholas Waite, the English Company's President for Surat, arrived off Bombay and notified to Sir John Gayer his appointment as the King's Minister and Consul-General for the English nation. On these grounds he demanded compliance with his orders. Sir John Gayer however refused to acknowledge that he had any authority over the servants of the London Company. Sir Nicholas Waite, finding he could make no impression on Sir John Gayer and his Council, sailed for Surat. On reaching that port he notified his Royal Commission of appointment to the President and Council and required them to strike the St. George's or Company's flag, as he bore the commission of Vice-Admiral and would allow no other flag than his own. The President and Council refused to comply with his request. The Governor of Surat also

informed Sir N. Waite that the Commission or Phirmaund of the King of England was of no authority at Surat unless the Emperor chose to regard it as valid. He also added that the flag of the London Company flew by the permission of the Mughal. Sir N. Waite now tried force and landed two of the commanders of the ships with fifty men and ordered them to strike the flag. The Governor on hearing that the flag had been struck, issued orders that it should be re-hoisted. Sir Nicholas Waite, finding that force did not answer, used baser arts to gain his end. By bribery, by suggesting that the old Company were in league with pirates and by hinting that they might any day leave Surat with debts unpaid, he undermined its power. Sir John Gayer also committed the blunder of leaving the fortifications of Bombay and going to Surat to counteract the influence of his rival; for while he was there orders arrived from the Imperial Court to seize him. " The Governor's son " as an old record runs, " secured Sir John and his Granaders and then entered the lodge, obliged the Lady Gayer out of the bed: carried her. Mr. Somaster and others to accompany the General to Surat, before the Tavistock's people had notice or could come ashore to their rescue, and being brought over the river in an open boat the Lady was put into a hackery covered with a cloth and carried to the Governor's room, where with Sir John and ethers were confined to one room; and some hours after the Governor sent for President Colt who going with two of his Council accompanied Sir John in the said prison; which triumphant act, as it is esteemed of the Meer, was wrote that night to the Emperor to the no small dishonour of the old Company's General in India," The chief and the factors were confined for twelve months within the walls of the factory; but neither threats nor starvation would force them to yield to the unjust demand of the Imperial Court. At length, however, on the 20th February, 1701, the Bombay Council were able to congratulate Sir John Gayer upon his release in the following terms:—

"We heartily rejoice for the good news and we render all due praise and thanks to the Almighty God for your release from so close a confinement, and that it hath pleased him to make our innocence appear and the wicked designs of our malicious adversaries in their true colours before the face of the heathens. Now Sir Nicholas may have time to look into his actions, strictly examining himself, and at last say:— " O what have I done ! May the shame and infamy to which he most maliciously exposed his fellow-subjects together with all other his undigested politics fall heavy on his head, being but the just reward for such evil ministers. We hope with your Excellency that the general certificate sent to Court, attested by all the eminent merchants, may meet with the desired effect to the confusion of our enemies." Sir John Gayer's release synchronized with a decline in the mutual rivalry and hostility of the two companies. Both were alike inimical to anything approaching freedom of trade, and they discovered that their common interests could be effectually secured only by amalgamation. Accordingly hostilities were abandoned, and in 1702 the two companies were united under the designation of the United Company of Merchants of England trading to the East Indies. The Directors of the two companies then advised their servants in India to bury the hatchet; but owing partly to the obstinacy of Sir N. Waite and partly to the mutual rancour existing in India, the union of 1702 was reduced to a mere formality, and the resolve of the two companies to obliterate all past heats was carried to no practical issue until the Earl of Godolphin, after patient enquiry into all matters of dispute, published his famous award of the 29th September, 1708.

During a considerable portion of the period under review, the peace of Bombay was jeopardized by the presence of the Sidi Admiral of the Mughal and his fleet. During Aungier's regime, in October 1672, the fleet under the Sidi Yakut entered Bombay harbour with the object of ravaging Shivaji's kurlahs, that is the land and villages of Panvel, Pen and Alibag. As Aungier refused to let them land in Bombay they withdrew to Janjira, but returned on the 24th December and were grudgingly allotted houses in the town of Mazagon, several of which they subsequently burned. In May 1673 the Mughal and Sidi fleets anchored off Bombay and required, permission to winter (May-October) on the island. This permission Aungier, who was afraid of enraging the Mughal Emperor, accorded, and further allowed the four principal Mughal frigates to be hauled ashore under shelter of Bombay Castle. On September of the same year the Sidis, after launching the frigates and pillaging the Ratnagiri coast, returned without warning and laid waste Pen and Nagothana, in spite of Aungier's protests to both the Sidi and the Governor of Surat. On the 24th April, 1674, they were driven in by a gale and again anchored in the harbour. They were at once ordered to leave, but refused; and then despatched several boats up the Mahim creek, landed at Sion and drove the people out of their houses. All attempts by the Bombay garrison to dislodge them failed. In 1675 Aurangzeb strengthened the Sidi fleet with two large ships, two frigates and two thousand men; and this fleet arrived in Bombay harbour under the command of Sidi Kasim and Sidi Sambal in April 1677. The former was accommodated near the fort, apparently in the original custom-house near the present mint, while the latter took up his residence in Mazagaon. In October of that year Sidi Sambal and Sidi Kasim guarrelled about the command of the fleet; and Sidi Kasim with 300 men marched from his guarters and attacked Sambal and his 300 followers in Mazagaon. The sound of the firing reached the castle which detached the best of the garrison and a troop of horse to guell the riot; and Sambal thereupon retired leaving Kasim in possesion of the fleet, which eventually sailed away in November. Between 1678 and 1682 the Sidi made continual use of Bombay as a military base, and thence fortified Underi, pillaged Pen, sold Maratha captives in the Mazagaon market, attacked Kenery and endeavoured to signalise his victories by adorning the Mazagaon shore with a forest of Maratha heads stuck upon poles; and the Company felt powerless to oppose his enormities for fear that the Mughal might hinder their trade at Surat if they did so.

After the cold weather cruise in March 1683, the Sidi and Mughal fleets returned to Bombay, and the former remained at Mazagaon more insolent than ever. The presence of both fleets raised food to famine-prices, and in May of the same year two unarmed English soldiers were brutally cut down in the Mazagaon market by two of the Sidi's Pathans. By way of expressing their annoyance the Bombay Council in July despatched a crazy councillor and an intoxicated sea-captain to board Sidi Kasim's ship. They were at once overpowered and sent back, whereupon the captain fired a broadside into the Sidi vessel which did little injury, except in Surat where the mob, on learning the news, crowded the streets demanding vengeance on the English. Under Keigwin's regime the Sidi received no

encouragement and was forced to give the island a wide berth; but in 1689, after the rupture with the Mughals which formed part of Sir John Child's ambitious scheme for increasing the power of the English; Sidi Yakut landed at Sewri with 20,000 men, made himself master of the small fort there, plundered Mahim, and hoisted his flag on Mazagaon fort, which had been abandoned on the news of his arrival at Sewri. A fruitless attempt was made to dislodge him; and by the 15th February 1689 he was master of the whole island except the castle and a certain area of land to the south of it. He then proceeded to raise batteries on Dongri hill, which disturbed the garrison very much, he put four great guns in the custom house, commonly called the India House, and raised a battery at the Moody's house within 200 paces of the fort, and another in the Lady's house that the General had been so unkind to, so that it was dangerous to go out or in at the Castle gate. " We passed the months from April to' September very ill, " adds Hamilton, " for provisions grew scarce by the addition of 3,000 Shivaiis that were employed as auxiliaries in the service of the Company." The impossibility of making any headway against the invaders by force made Sir John Child sick, and accordingly in December 1689 he despatched two envoys to Aurangzeb's court to sue for peace. Their object was aided by certain external factors, namely the jealousy of the Mughal General Mukhtyar Khan, the representations of the native merchants in Bombay who realized that they would lose all if the Sidi remained master of the island, and lastly the secret influence of the Portuguese, who knew that they would probably lose Salsette if the Sidi held Bombay. Accordingly in February 1690 Aurangzeb issued a new firman to the Company, which consented the withdrawal of the Sidi on condition that moneys owing to his subjects should be paid, that recompense (Rs. 1,50,000) should be made for the Mughal losses, and that Mr. Child who did the disgrace, be turned out and expelled. Sidi Yakut eventually evacuated Bombay on the 8th June 1690; but to guote Hamilton's words, " he left behind him a pestilence which in four month's time destroyed more men than the war had done, and for joy made a malicious bonfire of his headquarters, Mazagaon fort ". From that date Bombay suffered no further annoyance from this opponent.

Meanwhile the prevalence of piracy in Indian waters added further checks to the growth of Bombay. The Bombay Council writing to London in 1691 remarked that trade was greatly hampered by the large numbers of pirates along the coast, who were alleged to be Danes but probably were of diffeient nationalities. Guillam, an Englishman, for example was caught red-handed off Junagad; the Arabs at Muscat were perpetually marauding ; the Cota or Malabai pirates swarmed about the southern coasts; and John Avery and Captain Kidd between them terrorised the merchants of both the East and West Indies. It was Avery who seized the Mughal pilgrimship Gunsway (Gania Savai) in 1695, which so enraged the Musalman populace of Surat that the Governor was obliged to put the President and all the other English residents in irons, to prevent their being torn to pieces by the mob. In July 1696 a proclamation was issued by the Lords Justices of England in the King's name against all pirates; but apparently had little effect, for between March the 22nd and October the 30th of that year at least seven serious outrages upon the high-seas were reported by the Surat Council to the Court of Directors as exemplifying the causes of the hostile attitude of the Mughal government. But the most powerful of all the sea-rovers of this period was Angre, who in 1698 was appointed Admiral of the Maiatha fleet and proved himself a brave and daring commander. He became the warden of the West Coast. As a head of the Maratha navy his career is well known in the Anglo-Maratha history. His ships crept along the coast plundering every vessel and sailing up every creek to sack the undefended towns. Shivaji had guarded every creek with a fort, and these fell into the hands of Angre who became the founder of a coastal empire extending from Goa to Bombay. The fleets of Angre consisted of fast sailing-vessels of small burden and rowing boats of forty or fifty oars, manned with desperate men. From the *wik* or creek in which their fleet lay these *wikings* or creekmen of the Konkan pounced upon their prey. They would gather astern of their victim and fire into her rigging until they succeeded in disabling her, whereupon the rowing-boats closed in and the crew sword in hand boarded her from all sides.

Kanhoji had vastly extended his power during the regime of Tarabai and when in 1707 Shahu was released from Mughal confinement he readily joined him in the latter's struggle with Tarabai, the wife of Rajaram for political supremacy. However subsequently he went over to Tarabai's party and started war upon Shahu capturing several forts above the *qhats* belonging to Shahu. It was however Balaji Vishwanath, Shahu's Peshwa, who ultimately won over Kanhoji Angre to Shahu's cause. The complete understanding between Shahu's Peshwa on the one hand and Kanhoji Angre, the supreme commander of the Maratha navy, had its natural effect upon the policy of the Sidi of Janjira and the English of Bombay, two constant enemies of Kanhoji, who had all along shown determined oppression to any Maratha ambition. The Sidi readily concluded a peace with Angre on 30 January, 1715 but the English of Bombay, would not so easily give up the game and needed a lesson. Angre's first attack was levelled against Mr. Chown, the Company's Governor at Karwar, and his wife, and ended in Chown's death and in his wife being held to ransom on Kenery island. This was followed by a two years' peace between Angre and the Bombay Council, after which Angre again attacked Captain Peacocke in the Somers and Captain Collet in the Grantham and thereafter continued at intervals to harass the trade of Bombay. By the 26th December 1715, when Mr. Charles Boone assumed the Governorship of Bombay, he had became extremely powerful, and was the subject of a petition to the Governor from the inhabitants of Bombay who complained of the heavy oppressions and injuries they had received from Angre who was then at Golabey (Kolaba) and had also the island of Kenery with the strong casde of Gere y (Gheria), the channel of whose harbour is very difficult to find out. The continual attacks committed both by Angre and European buccaneers at length caused so much alarm to the Court of Directors that they be sought the King to despatch an expedition against them; and accordingly in February 1721 Commodore Matthews sailed with a squadron from Spithead, and arrived in Bombay in September of that year.

Downing who had accompanied Charles Boone to Bombay gives an account of this expedition, and tells us that " the Commodore much resented the President's not saluting him on his arrival in the harbour The President of Bombay knew the length of his own commission, and as he

was President for the King and a Governor for the Company he imagined, as all other great men in such stations would, that he was something superior to a Commodore of a squadron, though the Directors of the Company had sent orders by the *Grantham* for him to salute the Commodore on his arrival. After many messages to and fro, disputing who should fire first, the President in Council complied to salute him and then the Commodore thought fit to go on shore. The island of Bombay was now thronged with the Navy officers who looked as much superior to us as the greatness of their ambition could possibly lead them. There were daily duels fought by one or other of them and challenges perpetually sent round the island by the gentlemen of the navy. Having such a great number of gallant heroes we were in great hopes of totally demolishing Angria". In consultation with the Bombay Council the Commodore decided to attack Angre in Alibag, making Chaul his base of operations, and the Viceroy of Goa and the Portuguese General of the North at Vasai were both invited to assist in the attack. "The Vicerov with much pretended zeal came in person, designing to head such forces as he had raised. The General of the North also came down to Bombay and was most magnificently entertained by the President." Unfortunately the attack, though well-planned, entirely failed, owing chiefly to the timidity and duplicity of the Portuguese. On the day of the attack, for example, " the Viceroy of Goa went aboard his ship, pretending that he was very ill. The Commodore sent his own doctor to him to offer his services and supply him with such medicines as should be convenient for him, if he was really taken ill. But the doctor returned and reported to the Commodore that he did not perceive anything to be the matter with him." The behaviour of the Viceroy was reflected in the conduct of the Portuguese troops, who failed to advance, as arranged, at the critical moment, and the final scene depicts the choleric Commodore " coming ashore in a violent rage, flying at the General of the North and thrusting his cane in his mouth, and treating the Viceroy not much better ".Up to the date of Governor Boone's departure, with which the period under review closes, no further action was taken against Angre.

The ill-behaviour of the Portuguese on the occasion of this attack was in keeping with the line of policy adopted by them throughout the period. Aungier had endeavoured prior to his death to arrange a treaty with them, under which Portuguese boats were to be free of all port-dues at Bombay in return for a similar concession to Bombay boats at Thane and Karanja, but on the strength of advice given to the Prince Regent of Portugal by the Viceroy of Goa the proposals were rejected. In 1679 serious friction arose over a demand made by the Governor of Bombay for payment of duty amounting to Rs. 100 on a Portuguese vessel which had loaded at Karanja; in 1684 Dr. St. John, Judge of Bombay, informed the King that the Portuguese were secretly aiding the interlopers and had given help to Keigwin; in 1685 the Portuguese seized a riceboat and ship; belonging to President Giffbrd and imprisoned the crew and passengers; and in 1691 the Bombay Council were obliged to size all the land belonging to the Jesuits in Bombay in revenge for the help accorded by the latter to the Sidi. These and other events such as the imprisonment of Fra John de Gloria by Vauxe for having converted Nathaniel Thorpe to Roman Catholicism, originated in the antagonism which first sprang into existence with the marriage-treaty between Charles II and the Infanta

Catherine, and continued until Chimnaji Appa strode victorious over the battlements of Vasai. "They (the Portuguese) have stopped all provisions from coming to the island," wrote Sir John Gayer in 1700. " All this puts the poor inhabitants into such a consternation that they think of nothing but flying off the island to save their little, for fear they should lose all as they did when the Sidi landed." About twenty years later similar attacks and reprisals were still taking place; for according to Downing, a Portuguese boat in his time ran past Bombay without paying duty whereupon "Mr. Home, the English Chief at Mayham (Mahim) sent out a gallivat to bring the Portuguese boat to. Accordingly the gallivat fired a gun, which was soon returned by the Portuguese fort at Bombay, opposite to Mayham, the river not being above musket shot over. The English soon answered their shot and they kept cannonading each other almost four days. Then we sent up some mortars, which soon beat their church and town about their ears. However, Governor Boone sent Mr. Bendall to the General of the North to adjust this affair. The President and Council also sent Mr. Cowing to the Viceroy of Goa, with complaints of the behaviour of the General of the North."

Up to the date of Charles Boone's arrival the island was continually menaced by European and Native enemies, and the progress of trade was hampered by an impoverished treasury and by internal schism. The letters and documents of the last quarter of the seventeenth and the opening years of the eighteenth centuries portray the anxiety felt both by the Court of Directors and the Bombay Council at the power of the Sidi, the Pirates, the Marathas, the Mughal Government and the Portuguese. By 1681 Sambhaji and his rival were in possession of Henery and Kenery whereby "the administration of the island of Bombay has been the most difficult as well as the most embarrassing part of our duty "; Sambhaji's twelve armed gallivats interrupted trade; the presence of the Mughal fleet exposed the island to sudden attack. The Bombay Council had no alternative but to try and keep peace with both Maratha and Musalman, and determined not to precipitate a struggle with the Marathas as long as they were powerful enough to seize Bombay boats as in 1701, and insist upon making Bombay the arena of their conflicts with the Sidi Admiral of the Great Mughal. There were French alarms also; reports of three French ships that lay at anchor off Old Woman's island, weighed and betook themselves to a clean pair of heels, and portents in the shape of a Danish fleet which, cruising too near the island, "hindered our trade and made our merchants fearful of going to sea." In consequence of these circumstances the population of Bombay decreased, the Company's coffers were gradually depleted, the defences of the island were neglected and trade languished.

But with the arrival of Charles Boone on the 26th December, 1715, a brighter day dawned. His first achievement was to render Bombay secure from attack. With that object in view he carried out the plan which Aungier had formulated forty years earlier and in the words of Downing, "built a wall round the town of Bombay and fortified the same with a strong guard, kept at Mendon's (Mendham's) point on the south part of the island, with strong gates and a large bastion, on which they could mount twelve fine cannon, and in the lower part were four large cannon that commanded all the harbour, each carrying shot of 48 pounds. The

west and north gates were as strongly fortified. He also extended the old dock-vard in the Fort, established the Marine, and encouraged the erection of several buildings, in particular the Church, now St. Thomas' Cathedral, which was opened with considerable pomp on Christmas Day, 1718. He also settled guarrels about custom dues in a treaty with the Portuguese (dated December 1716); but the Portuguese would not observe the treaty, and continued to intrigue with Angre against the English. Under his auspices the depredations of Angre were to some extent checked; a secret war committee was appointed; and an expedition against Angre's chief stronghold was despatched under the command of Mr. Walter Brown. On the 17th October 1720 " the *Defiance*, the *Elizabeth* and a gallivat from our fleet before Gheria " brought news that Mr. Brown had landed a detachment, slain a large number of the enemy and destroyed some of Angre's shipping. With the Portuguese also Boone dealt summarily. In May 1720 he ordered all Portuguese priests and bishops to guit the island within twenty-four hours, on the grounds that they were implicated in Rama Kamati's supposed treasonable dealing with Angre, to which the Portuguese responded by stopping several Bombay ships, beating Bombay workmen, and seizing Bombay letters addressed to Madras. Thereupon, in July 1720, Boone issued a proclamation "requiring all persons who live in other parts to repair hither with their arms in the term of twenty-one days, on pain of having their estates confiscated to the Right Honourable Company "—a proceeding which so greatly annoyed the Portuguese, many of whom owned property in Bombay, that they erected a gibbet at Bandora and "hoisted up and let down again three times De Chaves and another man, both inhabitants of the island, who were sent hence to give Fernando de Silvera notice of the proclamation ". Boone thereupon confiscated all the Portuguese estates and had a rule passed that no one, who was not a regular inhabitant of Bombay, would for the future be allowed to purchase any land in the island.

The one blot upon Boone's governorship was his treatment of Rama Kamati in the matter alluded to above. This man had been an old ally of the Company and apparently had given the Bombay Council much assistance in times of stress; for in a letter to Bombay of June 30th, 1690, the Surat Council wrote: " On the island is Ramagee Comajee (Rama Kamat-ji) an old trusty servant of the Right Honourable Company and one that has stood by them on the island all the wars and has been very assisting on all occasions not only in procuring men but in encouraging them to fight the enemy. He is one the general had a great kindness for, for his good services, and knowing him to be a great sufferer by the war promised him encouragement. Those that know him give him a very good character." In spite of this, however, Rama Kamati was arraigned for high treason in 1718, the chief evidence against him being a letter dated October 12th, 1718 purporting to have been written by him to Kanhoji Angre, which commenced as follows: "To the opulent, magnificent as the sun, valorous and victorious, always courageous, the liberal, prudent and pillar of fortitude, the essence of understanding, the protector of Brahmins, defender of the faith, prosperous in all things, honoured of kings above all councillors, Senhor Kanhoji Angre Sargueel,—Ramaji Kamati your servant writes with all veneration and readiness for your service, and with your favour I remain as always. Our General here has

resolved in Council to attack and take the fort of Cundry (Khanderi or Kenery), and thus it is agreed to environ the said fort on the 17th October. and the armada, powder and ball and all other necessaries for war are ready. I therefore write your honour that you may have the said fort well furnished." It is possible that the trial, which caused considerable excitement throughout Bombay and Western India, might have ended in the acquittal of the accused, but for the action taken by Boone. "On his own responsibility ", writes Philip Anderson, " the Governor examined the clerk (i.e., Rama Kamati's clerk) respecting the contents of the letter, but could not induce him to make any disclosures." So availing himself of his antiquarian knowledge and remembering, we presume, that the treason, His Honour resolved to try whether the secret could be wrenched out, and to use his own words, the man " did not confess till irons were screwed on his thumbs, the smart whereof brought him to confession." Govindii himself was then examined and although he denied all knowledge of the letter, his equivocation betraved him, so that it became necessary to squeeze the truth out of him also. His Honour, as chief inquisitor, had the terrible irons applied and Govindii confessed all that was required. These confessions turned the scale against the unfortunate Shenvi who was at once found guilty and sentenced to perpetual imprisonment in the trunk (i.e., Portuguese tronco-jail) and to have his property worth Rs. 40,000, confiscated. His fate was shortly afterwards shared by Dalba, a Bhandari, who was likewise convicted of treason. The justice of the sentence has been severely commented upon by posterity and there is some ground for holding that the documentary evidence against Rama Kamati may have been forge. " We have no reasonable doubt", writes Philip Anderson, " that Government was the tool of a base conspiracy and as such committed a cruel act of oppression. It is probable that the prisoner, with the native love of intrigue, had so far played a double game as to hold secret communication with Angre, but the evidence adduced to prove that those were treasonable was damnably false. Never even in Indian Courts of Law were perjury and forgery used with less scruple and more subtlety. Many years afterwards when the condemned man had pined in prison his family were sunk in the depths of poverty, and his judges reposing comfortably in the belief that they had administered impartial justice, it oozed out that vile caitiffs had forged the letters which were produced against Rama and attached to them fictitious seals! "

Excluding this business of Rama Kamati's trial Charles Boone's services to Bombay were of the highest value; and the results of his governorship are suitably portrayed by Downing in his account of Boone's departure from the island in January 1722. "The time limited for the Government of the Honourable Charles Boone Esquire was expired ", he remarks, " and the Court of Directors appointed the Honourable John Pitts (Phipps?) Esquire to succeed him. Governor Boone had behaved in so honourable a manner that it was with the utmost reluctance that all ranks of people at Bombay parted with him. And it may be truly said that none of his predecessors in that post ever deserved so much on all accounts or had such real respect paid them. He left the island of Bombay in January 1722, and embarked on board the *London* (Captain Upton) and had with him the *Greenwich* in company (Captain Barnes). Though this honourable gentleman was defeated in most of his undertakings against Angre with no small trouble and concern to himself, he left the island in a good

posture of defence both by sea and land. He found the same unguarded and very poor, but left it flourishing in trade, and many merchants were come from Madras and Bengal to settle there. After His Honour was attended to the waterside by most of the inhabitants, he took his leave and returned them his hearty thanks for the sincerity of their friendship and subjection during his Government. When the *London* was under sail and the other Governor taking his leave, he delivered up the keys and the charge of the island, with all the proper writings in a large box. At His Honour's embarking the guns fired all round the Fort, as did the shipping and naval forces of the island, except the men-of-war."

1722-1764: Upto the middle of the eighteenth century the policy of the Company in Bombay was to temporise with the various Native powers in Western India and to utilise the comparative tranquillity thus engendered in gradually strengthening their political and commercial position. Complete isolation was impossible; but having decided which of their natural enemies was likely to prove the most troublesome, the Bombay Council endeavoured to keep on good terms with that party; and whenever it became necessary to side with one power or the other, they sought to afford such assistance to the weaker as would prevent its being too speedily overwhelmed. In the matter of Angre and the Sidi, as also in the case of the Portuguese and Marathas their policy was based on these considerations. They fully comprehended that the power of the Sidi was waning, that Angre was an extremely dangerous neighbour, and that any successful attempt; to subjugate the latter required a long period of preparation; and in consequence they determined by supporting the former to use him as a foil to Angre until such time as they should themselves be ready to stand alone. This settled policy towards external forces, as also a settled domestic administration, were rendered possible by the fact that the dual control of affairs by the Presidents at Bombay and Surat and internal schism, which had marred all progress at the close of the seventeenth century, had disappeared and yielded place to unity of interest and purpose.

In regard to the Sidi, the President reported in 1724 that "Sidi Saut of Anianvel or Dabhol has at sundry times sent off to our vessels provision and refreshment, while cruising off that port, and has been otherwise very courteous in his advices in relation to Angre. In order to keep him in the like good disposition it is resolved to make him a present of three yards of scarlet cloth, a pair of pistols, and a gilt sword." Eleven years later (1735) the Bombay Council advanced a loan of Rs. 30,000 to the Sidi, in order to prevent his making peace with the Marathas and possibly plundering the country round Pen, although by that date his entire fleet had fallen into the hands of the Marathas and Angre, and he himself was incapable of acting on the offensive. This was probably the last occasion on which the Bombay Council found it necessary to treat the Siddi as a possible enemy; for in 1737 they actually enlisted Siddi troops for the defence of Sion fortress and in 1746 after England had declared war with France and Spain Captain James Sterling was sent to Janjira to treat with the Sidi chief for the enlistment of 200 men, who were to form an emergency camp in the centre of Bombay. The compliment was returned a year later when Sidi Masud, who had caused much trouble at Surat by his conflict with the Muhamadan governor, was permitted to enlist troops in Bombay and was

furnished by the marine storekeeper with two 4 pounder and six 6-pounder iron guns for the use of his grab, at the rate of Rs.18 per cwt. Subsequent to this date his once troublesome opponent sinks into complete insignificance, and confines his diminished activity to consolidating his own position in Jafarabad and Janjira.

The tale of Bombay's dealings with Angre is somewhat more stirring. At the outset of the period (1722) we find Bombay in attacking some of Angre's grabs at Worli and carrying one of them back to Bombay the pirate retorts by capturing a Bombay ship in 1728 and attacking another in 1730.

After the death of Kanhoji Angre his son Manaji with the assistance of Portuguese resisted his brother Sambhaji's efforts to displace him. Forming an alliance with Marathas he tried to capture fort of Anjanvel under the guns of which lay the fleet of Siddi.

After the monsoon of 1755, the naval and military strength of Bombay was increased by the arrival of Admiral Watson with the Royal Squadron and of Colonel Robert Clive with a large detachment of the King's troops from England. The troops had been sent to attack the French and their allies in the Deccan, but the Bombay Government thought they might first be employed with advantage in destroying the power of Angre. Admiral Watson consented on certain conditions to employing the King's ships in reducing the fastness, and Colonel Robert Clive tendered his services. Commodore James was sent with three ships to reconnoitre the fortress which was believed to be as strong as Gibralter and, like that, situated on a mountain inaccessible from the sea. He however reported that the place was not high nor nearly so strong as it had been represented. On the 7th February 1756, the fleet sailed from Bombay. It consisted of 12 men-ofwar (six of the royal fleet and six of the Company's), five bomb-vessels, 4 Maratha grabs and 50 gallivats. Aboard the ships, to co-operate with them on the land side, was a force of 800 Europeans, a company of King's Artillery, and 600 Native troops. Before the fleet sailed the chief officers met to determine how the prize money should be divided. According to the King's proclamation Clive was only entitled to the same share as the captain of a ship, but Watson generously consented " to give the Colonel such a part of his share as will make it equal the Rear-Admiral Pocock's".

On the 11th the squadron arrived off Gheria and found the Maratha force camped against it. Tulaji Angre terrified at the strength of the British fleet, left the fortress in charge of his brother and took refuge in the camp of his own countrymen. The Maratha general then endeavoured to persuade the admiral to postpone the commencement of hostilities, promising to bring Tulaji in person the next morning to arrange a peaceful surrender of the fortress. But as he failed to keep his word, the admiral gave the signal for attack. On the 13th February at 6-23 p.m. the flag in Gheria was struck, and an officer with sixty men marched into the fort and took possession; at 6-36 p.m. the English flag was hoisted. The following day Clive marched in with all the land forces, and then despatched a boat to Bombay with letters recording the capture of the Fort and the destruction of Angre's entire fleet. Thus the power of the Angre disappeared for ever from the political arena and in due course he settled down to the life of a

country-landholder, subject to the laws of the British Government.

The whole episode shows that the English behaved contrary to the terms of the treaty agreed upon with the Peshwa in regard to the forts in the possession of Angre as also in appropriating his valuables. However the fact cannot be denied that it was the Peshwa who sought the naval cooperation of the English for putting Tulaji and therefore a part of the responsibility for the destruction of the Maratha navy has to be squarely placed on the Peshwa's shoulders. Manaji Angre died on 23rd September 1758 and his death materially damaged the ambition of the Peshwa to subjugate the Siddi of Janjira. After Manaji's death his eldest son Raghuji was entrusted with the hereditary titles of *Sarkhel* and *wazart mali* Raghuji maintained a steadfast friendship for the Peshwa's house but could no longer recapture the glory of the House of Angre's which was lost with the defeat of Tulaji and the destruction of the Maratha navy.

Meanwhile the forward march of the Marathas had introduced a new political element into the consultations of the Bombay Council. " The power, " remarks a writer in the Bombay Quarterly Review, " which of all others, was every day becoming more formidable, not only on account of its great resources, but also of a certain mystery which in the opinion of the English hung about it, was that of the Raja of Satara, or rather of his ambitious minister. The active and marguding Shivaiees, as the Marathas had been called, now mustered regular armies, with well-equipped trains of artillery, and not content with levying blackmail in the open country, were prepared to batter down walls, and capture their neighbours' fortresses. Their propensities were indeed feline rather than canine, and preferring weak to strong enemies they set their covetous eyes on the Portuguese possessions which lay at intervals between Goa and Surat, ail of which they had sanguine expectations of acquiring. In the vicinity of Bombay their progress was more alarming than elsewhere. As they advanced, the Portuguese resisted, sometimes with desperate courage, like some wild beast at bay, which may for a while stagger the hunters by the ferocity of its aspect, but unable to save its own life, can at worst only inflict mortal injury upon one or two of its numerous assailants. Year by year the power which since the days of Albuquerque, had added romantic pages to Indian history; which instead of being content like the British with the monotonous details of commerce, had been distinguished alike by the brilliancy of its heroism and the magnitude of its vices, by the sack of cities, the plunder of helpless ryots, the establishment of the inquisition and other such tender appliances for the conversion of the heathen, by the multitude of its slaves and the capaciousness of its Hidalgos' harems —year after year that power was being curtailed by the encroachment of its enemies, and ever and anon tidings reached Bombay that the Marathas had seized another Portuguese fort or appropriated to themselves the revenues of another Portuguese district. In 1731 Thana was threatened, and the Government of Bombay, disposed at the time to assist the weaker side sent three hundred men to garrison it, but soon afterwards withdrew their aid and rather countenanced the aggressors. The Portuguese territories adjacent to Bombay ', they wrote,' have been suddenly invaded by the Marathas, a people subject to the Sow (Sahu) Raja, who have prosecuted their attempts so successfully as to render even our Honourable Master's island in danger .' In 1737 the Maratha

army sat down before Thana, and although the Portuguese repelled two assaults with bravery, the third struck them with panic, and the place was taken."

Hence en the 27th April 1737 the President recommended his Council " to take into consideration what part it will be proper for us to act in the present juncture, though it will not be prudent to come to a final resolution till we know for certain what force the Portuguese can raise. An idle proposal has been made for permitting the Marathas to conguer Salsette and privately treat with them for delivering it to us. Besides the perfidy of such an action in regard to the Portuguese and the mischief it might bring upon our Honourable Masters from that nation, so many objections and difficulties occur against so treacherous a scheme that we can by no means think of undertaking it, were we even secure of the event ".It was finally decided to hold aloof from the struggle for the present and to despatch Ramji Prabhu, a person of capacity and experience, to discover what were the exact intentions of Chimaji Appa, the Maratha general. Closer and closer pressed the invaders round the Portuguese, who repeatedly taunted the English with not making common cause against the idolators and the common enemies to all European nations, and finally sent Padre Manuel Rodrigo d'Eastrado from Vasai to Bombay to plead for assistance. In spite of the specious arguments of the priest, the Bombay Council adhered to their position of neutrality and desired the President to write to that effect to the General of the North. The end came in 1738. Once again the Portuguese raised a despairing cry for help, to which the Governor replied in the words "I dare not hazard to increase our charges by a rash and abrupt declaration of war against these people not only without the orders of my superiors, but without a force to support it and carry it through with dignity and reputation. From Goa also came a final appeal to which the Council responded by venturing a loan even at the hazard of our own private fortunes, in case of the same being disavowed by our employers;" and then—the curtain fell upon Portuguese dominion in the North Konkan. Bassein yielded to Chimnaji Appa's hordes, her inhabitants fled to safety in boats provided by the Bombay Council, and Salsette with its churches, monasteries and its Christian population became the property of the imperial banditti. "

The Bombay Council were thus called upon to decide what policy to adopt towards the Marathas, and they wisely resolved to court their friendship for the time being. No sooner had Vasai fallen, therefore, than they despatched an emissary to Chimnaji Appa with a letter of congratulation and a present of several yards of cloth, and in 1739 concluded through Captain Inchbird a treaty with the Peshwa, whereby they were permitted to trade freely throughout his dominions. The same officer was appointed to act as mediator between the Portuguese and Marathas in the matter of the transfer of Chaul in 1740; and throughout the ensuing twenty years the Bombay Council never lost an opportunity of strengthening the bonds of friendship between themselves and the government in Pune, being encouraged in their policy by the Directors of the Company in England who to their advices on the subject of alliance with the Marathas ever added a note of warning against possible acts of treachery or hostility. In 1757 when the prospect of a French invasion was imminent, the Marathas offered to accommodate all European ladies and children at Thane; in 1759 a new embassy was sent to tht Peshwa who was reported to be annoyed at the Bombay Council not having assisted him to capture Janjira; while in 1760 one Govind Shivram Pant delivered at the Company's new house an elephant presented by Nana (i.e. the Peshwa) to Honourable Masters. In this manner, by the constant exchange of presents and expressions of good-will, Bombay contrived to avoid open rupture with a power which, while thoroughly distrusting, she knew she was not yet strong enough to meet on equal terms. One by one the Sidi, the Angre and the Portuguese had succumbed: but their capacity for opposition was very small compared with that of the Marathas; and the Bombay Government very wisely set themselves to the cultivation of an open friendship until they had improved the military and marine forces of the island.

The proximity of the Marathas, coupled with the declaration of war by England against France and Spain in 1744 which lasted with intervals of comparative peace till 1762, and coupled also with the possibility of commercial rivalry with the Dutch between 1756 and the close of the period under review, was responsible for a marked strengthening of the Bombay fortifications. All trees within 120 yards of the outer Fort wall were cut down, and in 1739, after the fall of Vasai, the principal Native merchants subscribed Rs. 30,000 towards the construction of a ditch all round the Fort, which was finally completed in 1743 at cost of Rs. 21/2 lakhs. Between 1746 and 1760 continual additions in the shape of bastions and batteries were made to the Fort, while the old fortress on Dongri hill was partially dismantled as being dangerously close to the town. The military forces were increased by the enrolment of larger numbers of native troops; the dockyard was extended; a marine was established; and in 1735 Lavji Nasarwanji the Wadia, Shipbuilder, was brought down to Bombay from Surat and was actively engaged throughout the whole period in building new vessels for the Company. The growth of the Company's political status went hand in hand with the social and economic development of Bombay. In 1728 a Mayor's Court was established; reclamation of a temporary nature was carried out at the Great Breach at Mahalakshmi: communications with Salsette and the mainland were improved; sanitary administration was introduced by the appointment of a member of the council as town scavenger in 1757, by the promulgation of building rules in 1748, and by the allotment of new areas for building outside the Fort in 1746; land was taken up for public thoroughfares; the old burial-ground at Mendham's Point was demolished and replaced by Sonapur in 1760; and every encouragement was given to both Europeans and Natives to build outside the walls.

By the end of 1764 Bombay had been rendered almost impregnable and far more compact than at the close of the first quarter of the eighteenth century. Colaba was still separated from Bombay by the tide, but the dam at Varli, which Captain Bates had constructed by 1727, had operated to check the inroads of the sea and had rendered the central portions of the island partly available for cultivation and habitation. The Fort, crowded with European and Native dwellings, the former white-washed and with covered piazzas, with warehouses, shops, and workyards was still the centre of business and urban life in virtue of its docks, its Green, charity schools, Courts of Justice, Mint and Church, but north of the outer wall a

new town was springing into existence between Dongri hill and the oarts, and house-dotted gardens along the shore of Back Bay. Portions of Malabar Hill were let to the native inhabitants of this new town, and practically the entire area between the modern Grant Road and the Bandra creek was under cultivation, the inhabitants of the extra-mural area being strongly protected from attack by small forts at Mazagaon, Sewri and Varli and by the larger fortifications at Mahim and Sion. In a word Bombay, with her population of roughly 1,00,000 and her largely increased commercial relations, was practically ready by 1764 to appear in the arena and give proof of her political power, and only awaited the psychical moment to fight for the mastery of the whole of Western India.

It may be noted here that Peshwa Balaji Bajirao alias Nanasaheb had died on June 23, 1761 after the tragic Maratha defeat at Panipat and his son Madhavrao had succeeded him to Peshwaship on July 20 of the same year. He immediately came to grips with the difficult situation that cooperated him and by chastising Janoji Bhosle who had partnered the Nizam in the sack of Pune and by defeating Haider Ali restored the lost Maratha prestige to some extent. Madhavrao was alert to the menace the English paved and the relations between the two inspite of their recent co-operation in the defeat of Tulaji Angre was neither cordial nor inimical. The Marathas it may be recalled sought the help of the English at Bombay when Nizam Ali in 1761 threatened an attack upon Pune by sending their agent Govind Shivram and the English agreed to lend a military contingent with certain stipulations. However when Raghunathrao sent counter proposals with Gangadhar, the English demanded in return for such help the cession of Vasai and the whole of the island of Salsette. Raghunathrao wrote a biting reply that Vasai could never be parted with. Again when the Peshwa undertook operations against Haider Ali, the English at Bombay tried to take advantage of the discontent and captured the fort of Malwan belonging to the Chhatrapati of Kolhapur on 25th January 1765.

1764-1819: The political history of Bombay during the latter portion of the eighteenth century is concerned almost wholly with the relations subsisting between the Company and the Maratha Government. Between 1763 and 1770 the Dutch made a final attempt to secure a factory in the neighbourhood of the island by secret negotiation with the Peshwa Madhva Rao; while danger of war with France was not wholly absent. Letters from Madras in 1771, for example, observed that an outbreak of hostilities was probable, and in 1777 Mr. Mostyn, the British agent in Pune, despatched such alarming accounts of French intrigues at the Peshwa's court, that the Bombay Council applied toSir Edward Hughes or his successor to bring the Royal Squadron to Bombay as early as possible. A year later the French factory at Surat was seized by the Company, and all the Frenchmen in the city, with the exception of the Consul and his family, were deported to Bombay. But as Mr. Horsley pointed out to the Governor-General in a letter of the 2nd August 1779, there was little fear of direct attack upon Bombay; there was only the possibility that Nana Phadnavis, who was at the head of the military party in the Peshwa's government, might encourage the French by grants of territory to settle between English and Maratha territory and thus place the power and trade of Bombay in jeopardy. But the steady pursuance of a peaceful policy in earlier years had placed the island in a very strong position; and the intrigues of the French merely resulted in the adoption of measures for greater security. The confidence which now characterized the Bombay Council is shown in the despatch of an expedition to Persia in 1768. Since the destruction of Angre at Gheria they had been largely engaged in prosecuting the Company's commercial affairs at Gombroon and in the Persian Gulf and in fostering trade through Basra with the interior of Persia. In 1767 one of their ships, the *Defiance*, which was cruising in the Gulf, was blown up; and almost immediately afterwards the Bombay Council entered into an offensive alliance with Karim Khan, one of the local chiefs, against Carrack and Ormuz, and despatched ships, men and military stores to po-operate with him at the opening of the following year. (Bombay Gazetteer Materials, Part I; Edwardes' Rise of Bombay.)

The close of the preceding period, it will be remembered, was marked by the existence of friendly relations between Bombay and the Marathas, albeit the English were keenly alive to the possibilities of hostility on the part of the Maratha power. " All the States in India " writes Grant Duff " were inimical to Europeans of every nation, and even when bound down by treaties, they were at best but faithless friends, whose jealousy no less than their prejudice would have prompted them to extirpate the foreigners." Clive himself, at the time of the expedition against Angre, had clearly proved to Bombay that no reliance could be placed upon the bona fides of the Peshwa's representatives, and by 1764 the Council had decided once for all that exceptional prudence was necessary to prevent the undermining of the Company's position in Western India and the precipitation of hostilities. For the first few years of the period under review therefore the old policy of friendship was pursued, combined with orders, such as that of March 22, 1765, prohibiting the supply of arms, cannon and marine stores to any country power. In 1766 the Court of Directors, learning that Tulaji Angre's two sons had escaped from confinement in a Maratha fort and had fled to Bombay for protection. urged upon the Council the possibility of the Marathas taking umbrage at this event and the consequent advisability of dismissing the fugitives as early as possible; while in 1767 the dread of the influence of Hyder Ali led to the despatch of a fresh embassy to the Peshwa. In their letter of instructions to their envoy, the Bombay Government declared that the growing power of the Marathas was a subject much to be lamented. " and has not failed to attract our attention as well as that of the Presidencies of Madras and Bengal, inasmuch that nothing either in their power or ours would be omitted to check the same as much as possible ". The envoy was to attempt to negotiate an alliance against Hyder. On the 29th November 1767 Mr. Mostyn reached " a pagoda called Ganeshkhind within one kos of Poona ".He resided at the capital for three months and had many interviews with the Peshwa. "He was always treated with great courtesy by the Sovereign and Ministers, and many intricate negotiations were begun, but none were brought to any definite conclusion, because both parties were watching the tide of events ." (Selections from State papers (1885), Maratha Series, xi-xii)

The mission however obtained no material results as its intentions had become too obvious to the Maratha Government to be ignored. The party returned to Bombay in great disappointment on 27th February 1768. The

only gain they made was the valuable information they gathered about the acute dissension then raging between the Peshwa and his uncle Raghunathrao. The prohibition of the export of iron which Bohras and others sent across the harbour for the service of the Marathas was a further measure of precaution, taken by the English dictated by the knowledge that before long they should have to meet the army of the Marathas; while in 1771 the Board recorded their strong objection to the sale or export from Bombay of "Europe naval stores, on the grounds that they led to an increase of the Marathas' naval force, very much against the interest of the Company."

But from the year 1771 when Mr. William Hornby assumed the office of Governor of Bombay, the Company's policy suffered a radical alteration. The hour had arrived for Bombay to emerge as a military power; and dissensions among the Marathas themselves afforded the President and Council the opportunity of casting aside the role of a purely mercantile body and putting to the test the military and political capacity which for many years they had been steadily perfecting. (Bengal was declared to be the seat of the Governor-Generali n Council in 1773 by Act 13th Geo. III Cap. 63, and Bombay and Madras were created Presidencies subject to Bengal, Eleven years later (1784) the administration of Bombay was vested in a Governor and three Councillors (Auber's Analysis, p. 380).)

In April 1772 when Madhavrao was on his deathbed, the President of the Bombay Council received orders from the Home authorities to try to acquire from the Marathas some pieces on the mainland of India like Salsette, Vasai, Elephanta, Karanja and other islands in the vicinity of Bombay and to station an English agent at Pune to join that object. Accordingly Mostyn was deputed for second time being already acquainted with the Pune Court. He arrived on 13th October, 1772. On November 18, 1772, Peshwa Madhavrao died. The English seized this opportunity to attack the Maratha ports of Thane, Vasai, Vijayadurg and Ratnagiri on the west coast but these moves of the English were counteracted by Dhulap, the Maratha naval officer of Vijayadurg and Trimbak Vinayak, the *sar-subha* of Vasai and the Konkan and the English attack was repelled. After the death of Madhavrao, his younger brother Narayanrao had assumed the *Peshwaship*. It was not however destined to last long for his scheming uncle Raghunathrao encompassed his murder and assumed the *Peshwaship* himself. It is not necessary here to discuss the details of the controversy that raged in the Maratha court but suffice it to say that prominent Maratha diplomats headed by Nana Phadnis came together and formed a group which came to be called the Barbhais with the specific intent of ousting Raghunathrao. They had pinned all their hopes on the pregnant wife of the murdered Peshwa, Gangabai, and rallied round her. When Gangabai gave birth to a son, the plot against Raghunathrao succeeded beyond measure who now became a fugitive hunted down by the forces of the Pune court. It was at this juncture that the English agent residing at Pune created fresh trouble. He suddenly left Pune and visited Bombay on 8th December, 1773. Hornby was then the president of the Bombay Council. He offered to assist Raghunathrao to regain the gadi on condition that he would cede to them Broach, Jambusar and Oplad, Vasai and its dependencies, the island of Salsette and Karanja, Kenery, Elephanta and Hog islands in Bombay harbour. The

Company had for some time coveted Salsette, Vasai and Karanja, knowing fully well that possession of them would preclude other nations from access to the most commodious port in India and would secure the principal inlet to the Maratha country for woollens and other staples of England, the annual imports of which amounted at that date to some fourteen lakhs of rupees. They had, previous to their proposals to Raghunathrao, endeavoured to obtain these islands by diplomatic measures and had despatched a Resident to negotiate with the Peshwa at Pune; but the negotiations proved fruitless. The acquisition of the islands was eventually accelerated by a sudden movement on the part of the Portuguese. At the very moment when negotiations with Raghunathrao were in progress news reached the Council that the Portuguese intended to take advantage of the discord which prevailed at Pune to seize Salsette and other places. " Had this event taken place," the Bombay Government wrote to the Governor-General and Council, " it would not only effectually have prevented us from ever acquiring Salsette for the Honourable Company, but the Portuguese would then again have had it in their power to obstruct our trade by being in possession of the principal passes to the inland country and to lay whatever imposition they pleased upon it, which in former times on every occasion they were so prone to do, which of course would have been of infinite prejudice to the trade, revenue and interests of the Company in these parts, in so much that we should in great measure have been subject to the caprice of the Portuguese." (For further particulars see Danvers' Report on Portuguese Records, pp. 108-10. and Edwardes' Rise of Bombay.)

Under these circumstances the Bombay Council hastily signed a treaty of alliance with Raghunathrao and commenced (1774) the 1st Maratha war by invading Salsette and laying siege to Thane. On the day the forces set out against Thane, the Portuguese fleet appeared off Bombay, and "the commander, so soon as he gained intelligence of our proceedings, delivered a formal protest by direction, as he said, of the Captain-General of Goa, which shows the necessity of the measure we have pursued; " to which the Council replied in the following terms: "As to the claims of your nation to the countries situated between Chaul and Daman, we are perfectly unacquainted with them. Though part of those countries did formerly belong to your nation, yet they were taken from you by the Marathas about seven and thirty years ago. During all the intervening time we have never understood that you ever made any attempt to recover them.". After a long and wearisome march, " the distance from Sion to this place having been much misrepresented ", our troops took possession of the town of Thana. The siege of the fortress was a more difficult task than was anticipated. Mr. John Watson, Superintendent of the Bombay Marine, and General Gordon, who were sent to co-operate with each other for the good of the service, differed as to the method of reducing the fort; but the views of the latter eventually prevailed and the siege was commenced with the utmost vigour. During the operations a cannon ball came through an old wall near which Mr. Watson was standing, driving the dust into his eyes, while a stone struck him on the arm. The wound at first did not seem to be dangerous; but a few days later he had to leave Thane, and in the diary of the 26th December, 1774, we read: "The body of the late John Watson, Esquire, was interred this morning in the burying ground without the town (Sonapur), being

attended by the principal inhabitants. Every public honour his memory." It was also unanimously resolved that a handsome monument be ordered to his memory in the church with a suitable inscription on it at the Honourable Company's expense. On the 27th December an attempt was made to fill up the ditch; but, wrote the General, " the loss in killed and wounded was so great that I was obliged to order them to retreat before the passage across the ditch could be completed.". Next day the fort was taken by assault, and the slaughter was very great from the resentment of the soldiers from their former sufferings.

Thane having fallen, the whole of Salsette and the smaller islands were occupied by Bombay troops. As has been stated already, Raghunathrao had become a fugitive. The Pune ministers followed the capture of Thane by the English by blocking the coastal trade of the latter and stopped supplies reaching Bombay from outside but it did not help the recovery of Thane. It was at this juncture that Raghunathrao took the most suicidal step by asking the English for armed help by sending his agents to Mostyn at Pune in October 1774 and to Robert Gambier at Surat. Raghunathrao evading the Maratha forces that were pursuing him reached Cambay where he was received by Mr. Malet, agent of the English factory, when he implored for shelter and safe transport to Surat. Mostyn had already prepared the ground and instructed various British workers for extending hospitality to Raghunathrao who was enabled by Malet to travel by land to the harbour of Bhavnagar whence the English ship conveyed him to Surat on 23rd February. On the 7th March 1775 the long-deferred treaty between Raghunathrao and the Bombay Government was signed at Surat. Under the terms of this treaty (1) a military contingent of 2,500 men including 700 Europeans with sufficient artillery was to be placed at the disposal of Raghunathrao, the expenses whereof viz. one and a half lakhs were to be paid every month in advance; (2) Rs. 6 lakhs or an equivalence in jewellery was to be deposited with the English and-(3) in addition Raghunathrao was to cede to the English in perpetuity all the Bombay islands including Thane, Vasai and Salsette and the talukas of Jambusar and Oplad near Surat.

In pursuance of this agreement an English force under the command of Colonel Keatinge left Bombay and reached Surat. This naturally brought about war between the Marathas and the English, in which the latter were worst sufferers. When these events were taking place, changes were implemented in the administration of the company with the Governor-General assuming supreme powers under the Regulating Act.

It may be noted that Colonel Keatinge found his task most irksome and invidious. The war with the Marathas in Gujarat was also to the disadvantage of the English. There also arose unforeseen complications owing to a change at this time in the character of the Company's administration. Under the Regulating Act Warren Hastings was appointed the Governor-General of the three Presidencies of Bengal, Bombay and Madras of which new position he assumed charge on 26th October, 1774. Hornby, the President of the Bombay Council, preferred to acknowledge Hastings' authority who had addressed a strong remonstrance to Bombay reminding the President that he had acted without authority by contrac-

ting the treaty of Sural in violation of the existing relations with the Maratha government. He also called upon the Bombay authorities to withdraw their forces and stop the war which they had started. However the Bombay authorities took no notice of these orders of the Supreme Government and in open defiance of them continued the war on their own account. On this the Calcutta Council wrote another strong protest to Bombay which said " Our duty imposes upon us the painful necessity of declaring that we wholly condemn the measures which you have adopted, that we hold the treaty which you have entered into with Raghoba invalid and the war which you have undertaken against the Maratha State, impolitic, dangerous, unauthorized and unjust; both are expressly contrary to the late Act of Parliament. You have imposed on yourselves the charge of conquering the whole Maratha Empire for a man who appears incapable of affording you any effectual assistance in it; the plan which you have formed instead of aiming at a decisive conquest, portends an indefinite scene of troubles, without an adequate force. without navy or certain resources to extricate you from him. We solemnly protest against you for all the consequences and peremptorily require you to withdraw the Company' forces to your own garrison in whatever state your affairs may be, unless their safety may be endangered by their retreat. We expect your punctual compliance with our commands. It is our intention to open a negotiation with the ruling party of the Maratha State at Pune as soon as possible." (Forrest, Maratha Series, p. 238; Mahadji Sindia by Natu,p. 280; Secret Committee's Vth Report, p. 80.)

Warren Hastings also wrote to the Pune Court concerning this dispatch to Bombay informing the Pune Court of his intention to send a trusted and competent agent to stop the war and negotiate a friendly understanding with the Marathas. Upon this Sakharam Bapu wrote a letter to Hastings outlining the position of the Bombay Council vis-a-vis Raghunathrao. This interference from Calcutta was highly resented by the Bombay Council who dispatched a special agent to Calcutta to explain matters personally and at the same time referred their complaints for decision to the home authorities in England. Warren Hastings sent Colonel Upton to Pune in spite of the protests from Raghunathrao and assured the Pune Court that full powers had been granted to Colonel Upton for negotiating the terms of peace and that whatever he would settle would be faithfully carried out by both Calcutta and Bombay. Colonel Upton was requested by the Bombay authorities to visit them first before proceeding to Pune which he refused. Upton reached Purandar on 31st December, 1775. The Pune Court annoyed by the duplicity of the English authorities at Bombay and Calcutta tried to conciliate Raghunathrao but he was not amenable to such a move. The discussions between the Maratha Court and Colonel were long and vexatious. Upton demanded permanent cession of Vasai, Salsette and Broach and the long stretch of the Bombay Court to which the Maratha Court would not agree. Upton wrote to Hastings about this situation and the latter concluded that the only cause lay in war for the resumption of which he issued fresh orders. However an unforeseen emergency viz., the escape and rebellion of the pretender of Sadashivrao Bhau from Ratnagiri on 18th February, 1776 forced the hands of the Maratha Court which relaxed in its old demands. Accordingly a fresh treaty was signed on 1st March, 1776 which annulled all engagements with Raghunathrao on conditions that the English were not disturbed in the possession of Broach (captured by assault in 1772) Salsette, Karanja, Elephanta and Hog islands. Vasai remained in the hands of the Marathas. This arrangement was communicated by Upton to Bombay and Calcutta calling upon the former to stop their hostilities towards the Marathas. Raghunathrao was of course least expected to agree to an arrangement in which he was deprived of all poweis but the Bombay Council equally disliked the treaty and appealed to the Home Government over the heads of the Governor-General and his Council. The Bombay Council though it was disgusted with the antics and vain boasts of Raghunathrao did not: agree to the demand of the Pune Court for the surrender of his person and instead informed the Pune Court that they had already withdrawn their support to Raghunathrao and the ministers could secure his person in any way they liked. He now tried to seek the protection of the Portuguese of Goa and was on his way there but found his way blocked by a Maratha force near Tarapur. Mahadaji Shinde was also in the vicinity in pursuit of the pretender of Sadashivrao Bhau and tried to seize Raghunathrao, who made his way to Bombay on 11th November in an English ship sailing from Tarapur with his son Amritrao, where he lemained as the guest of the English. Colonel Upton was in Pune for a full year after the treaty and after he left the Bombay Council again sent Mostyn to Pune in March 1777. The Bombay authorities were however determined with the original treaty of Surat even by recourse to open hostilities. Incidentally they won in their battle against the Governor-General, the home government on the representations made by the Bombay Council deciding to overrule the objections of the Calcutta Council and to seize this opportunity of acquiring some Maratha territories on the mainland opposite the Bombay island. The Maratha Court was well aware of these developments and decided to counter these moves of the English by making friends with the French. The English who had suffered a reverse in the war with the American colonies naturally took an alarming view of this situation. Even Hastings who was at loggerheads with the Bombay Council authorised it to conduct Raghunathrao to Pune, place him as their own nominee as Peshwa and seize the Maratha possessions on the west coast and ordered, against the advice of his Councillor Francis and the Bombay Council to renew the war with the Marathas. The state of Mr. Hornby's mind becomes clear from what he wrote in one of his minutes dated the 10th October, 1777: "Maratha affairs are fast verging to a period which must compel the English nation either to take some active and decisive part in them or relinquish forever all hopes of bettering their own situation in the west of India.". Even Hastings wrote to Bombay on 26th February, 1778 that" for the purpose of granting you the most effectual support in our power, we have assembled a force near Kalpi with orders to march by the most practicable route to Bombay. We ars exceedingly alarmed at the steps taken by the French to obtain a settlement on the coast of Mulbar, to establish a political influence in the Maratha State, the object of which must be the overthrow of our Bombay settlement. As we have no property in the fort of Chaul, we cannot authorise you to prevent the French from forming an establishment at that place. You must not on any pretence become the aggressor by commencing direct hostilities.". Hastings took this step after overruling the jealous impatience of the independent action of Bombay evinced by Mr. Francis and Sir Eyze Coote. The affairs at the Maratha Court were in a disarray and a party headed by Morobadada and Tulaii Holkar favoured

the return of Raghunathrao to Pune as envisaged and planned by the English. Moroba sent hurried and repeated calls to Raghunathrao at Bombay to come at once and occupy the Peshwa's seat. But the Bombay authorities had not sufficient forces then at hand to escort Raghunathrao to Pune. There was another difficulty, viz., the President of Bombay under orders both from the home authorities and the Governor-General, was strictly prohibited from making any engagement with Raghunathrao unless a formal written invitation to that effect had been received from the first Minister Sakharam Bapu alone or jointly with the others. Sakharam Bapu flatly refused to sign such an invitation to Bombay, which would have been a clear evidence to prove his treason; and Moroba's single invitation was not considered sufficient by the Bombay authorities. The force of Colonel Leslie travelling from Bundelkhand had not yet arrived, and as the season had advanced, Raghunathrao could not leave Bombay in time to support Moroba's plan at Pune. This was an unforeseen hitch which ruined Moroba. In the meanwhile Mahadaii Shinde had arrived in the Deccan and seeing the <u>futile danger of allowing</u> the English to have a upper hand took Tukoji Holkar in his confidence and practically revived the defunct *Barbhai* Council by forcing its members to affirm their loyalty to the young Peshwa. Moroba in the face of this solidarity ran away from Pune, but was captured and imprisoned. Mr. Hornby as stated earlier had disapproved of the initial policy of Hastings and his subsequent treaty with Raghunathrao and prior to the change in Hastings' policy had made a fresh treaty with Raghunathrao stipulating for the cession of Vasai and Kenery as well as the other islands and promising to assist him with a force of 4,000 men. (In all these treaties the exclusion of the French from the Maratha territories was one of the stipulations, the Peshwa as well as the English Government being alarmed at Bussy's successes in the Deccan.) Now Warren Hastings sanctioned the new treaty with Raghunathrao and dispatched a force of six battalions of Bengal sepoys under Colonel Goddard across India to take part in the war with the Marathas, ordered the Madras authorities to join in the war and allowed full power of action to Hornby at Bombay. (Warren Hastings was totally unscrupulous in the devious means he utilised to overcome the Marathas to which his voluminous correspondence with the authorities in England, Bombay, Madras, the ministers of Pune, Raghunathrao and the individual members of the Maratha State, the Nizam and other potentates of India bears testimony.) But the Bombay government without waiting for the arrival of this force concluded a fresh agreement with Raghunathrao, formed a separate expedition under Colonel Egerton, an officer infirm in health and totally unacquainted with India to place Raghunathrao in power at Pune. Two civilians viz., John Carnac and Thomas Mostyn were attached to the party which consisted of 3,900 men with Raghunathrao with an army of his own numbering seven thousand. The expedition left Bombay harbour on 24th November, reached Panvel and from thence marched with many delays to Khopoli at the foot of the Bhor ghat. Ascending the *ghat* the force reached Khandala on the 23rd December, and was formed into three divisions, which advanced alternately at the rate of about three-quarters of a mile daily. The Marathas, encouraged by this appearance of timidity, drew near and cut off communication with Bombay at Talegaon. Colonel Egerton and Mr. Carnac (a member of the Bombay Council, who had accompanied the force) then determined to retreat, and led the troops back to Waddaon, where the Marathas

attacked and inflicted a serious defeat upon them. This defeat led to the disgraceful convention of Wadgaon, whereby, in return for getting a free passage for their troops to Bombay,the English agreed to abandon the cause of Raghunathrao and cede Broach and the islands about Bombay.

Mr. Farmer who negotiated the treaty of Wadgaon has left a few pertinent remarks on this regrettable affair, which deserve to be quoted :—

"The Government of Bombay should have waited the arrival of Goddard's detachment and acted in conjunction with it against the Maratha Government on our own footing, disconnected with the pretensions of Raghunathrao. Instead of this, the Government of Bombay misled by the assurances of poor Mostyn, resumed the romantic projects of blindly asserting the rights of Raghunathrao and declaring to all the world that the English meant to re-establish him in the possession of those rights. Such an attempt and such a line of policy naturally united against us, all the leading chiefs of the Maratha Empire and all the powers who had cause to be alarmed at our ambition : as they (the Bombay Government) wanted also to engross the whole honour of this project and would not wait for the aid of Goddard, their attempt was attended with ill-success that might have been expected. Mr. Hastings surely is not answerable for their measures nor for the horrid disgraces which were the consequences of them and which by effacing that sacred opinion of our arms, conduced to the confederacy that subsequently came to be formed against us." (Dodwell, Warren Hastings" Letters, p. 176.)

The essence of the whole matter as Lyall put it is that the Marathas were at this period far too strong and too well united to be shaken or overawed by such forces as the English could then afford or bring against them. It may be pointed out that this relative position remained practically unchanged right upto the battle of Kharda and the death of the young Peshwa Madhavrao II.

The decade ending 1780 thus witnessed the debut of Bombay as a military power. The garrison was greatly strengthened on the advice of Lord Clive and General Lawrence, Cailland and Carnac and in view also of the fact that Salsette and its outposts required the services of a considerable military force. The Fort and Gastle were again surveyed and the fortifications improved under Colonel Keatinge's supervision. The out-forts at Sion and Reva were rendered more impregnable, and Dongri fort, after some delay and doubt, was finally blown up in 1769, anew fortress called Fort St. George being commenced in the following year. Parsons, describing the island in 1775, remarked that "Between the two marine gates is the castle properly called Bombay Castle, a very large and strong fortification which commands the bay. The works round the town are so many and the bastions so very strong and judiciously situated, and the whole so defended with a broad and deep ditch, as to make a strong fortress, which while it has a sufficient garrison and provisions, may bid defiance to any force which may be brought against it. "The construction of ships and the repair of the fleet were likewise actively prosecuted. In 1769 it was decided to build a new dock at Mazagaon for the use of ships not exceeding 300 tons burden, and in 1781 a letter was received from Rear-Admiral Sir Edward Hughes, warmly acknowledging the assistance

which the marine department had given in docking, repairing and refitting His Maiesty's squadron. (Sir Edward Hughes' fleet was at anchor in Bombay harbour in February, 1775, among the vessels of the fleet being the Seahorse, which carried Nelson, then a youth of 18 years. Nelson left England in this ship in 1773 and remained in the East Indies for 18 months. He first saw " The light of Old Woman's Island near Bombay " at 2 a.m.on August 17, 1774 (Douglas' Bombay and W, India) Progress also characterized the Council's domestic administration. A regular ferry boat between Bombay and Thane was established in 1776: markets were built: estimates were prepared for town-drainage; the police force was reorganized; and in 1772 an accurate survey of the whole island was agreed upon, in order that "the situation of the farmed-out villages, namely, Malabar, Sion, Parel, Matunga, Dharavi, Naigaon, Vadala, Mahim and Bamancally and of all the Honourable Company's oarts and grounds may be exactly laid down, as well as those of all persons whatever ". In other directions also the spirit of progress was manifested. The year 1773 witnessed Mr. Holford's successful journey up the Arabian Gulf, and the earliest voyage of English ships direct from Bombay to Suez; while three years earlier, during the governorship of William Hodges, Bombay commenced to trade in cotton with China, owing to " a considerable famine in that country and an edict of the Chinese government that a greater proportion of the lands should be thrown into the cultivation of grains". The demand for cotton continued to increase until the scanty supply during the Maratha war, the inattention to the quality, and the many frauds that had been practised, prompted, the Chinese again to grow cotton for their own consumption. (Edwardes' Rise of Bombay.)

Meanwhile the aspect of the town was undergoing a gradual alteration. In 1770 the Kolis' houses on the summit of Dongri hill were removed; the dwellings of *hamals* and other indigent people between Church Gate and Bazar Gate were demolished; and in 1772 an order issued prohibiting any but Europeans to build south of Church street, which obliged the Moormen, oartowners and others to build new houses to the north of Bazar Gate outside the walls. The Esplanade underwent considerable alteration, being levelled in 1772, extended to the distance of 800 yards and cleared of all buildings and rising grounds in 1779, and subsequently further extended to a distance of 1,000 yards. Barracks, officers' quarters and a kanii, i.e., gruel or correction-house were erected on Old Woman's island, while the old powder-magazine between Church Gate and Apolio Gate, which had gradually spread to within 210 yards of the Stanhope Bastion, was relinquished in favour of new powderworks at Mazagaon. Malabar Hill, which was at this date partly waste and partly utilized for grazing, was chiefly remarkable for a lofty tower near Walkeshwar, in which Raghunathrao spent the period of his exile from Pune and whence he occasionally sallied forth to pass through the Holy Cleft (Shrigundi) at Malabar Point. Parel and Sion were being quarried for lime-stone; in Byculla an English officer of artillery had rented a certain area of waste land for building purposes; while in 1768 the old Mazagaon estate was divided up into plots which were leased to various individuals for a term of fourteen years. Perhaps the most remarkable alteration in the outward aspect of the island arose from the construction of the Hornby Vellard (i.e., Portuguese vallado, a fence) between 1771 and 1784. (Maclean (Guide to Bombay) records an amusing anecdote about the Vellard

Hornby (who appears to have possessed unusual energy and determination), perceiving that the first step towards improving the sanitary condition of Bombay was to shut out the sea at Breach Candy, fought hard throughout his term of office to obtain from the Court of Directors permission to execute this work at the cost of about a lakh of rupees. The Directors steadily refused to sanction such extravagance. At last Hornby, having only 18 months more to serve, commenced the work without sanction, knowing full well that he could finish it before the Directors could possibly interfere. Accordingly about the time the Vellard was finished, Hornby, opening with his own hand the despatches found an order for his suspension, which, his term of office being nearly expired, he put in his pocket, until he had finally handed over charge to his successor. The Court of Directors were excessively irate and sent out an order that the Governor should never open the despatches in future, but that they should be first perused by one of the Secretaries to Government.) An attempt had been made in earlier years to check the inroad of the sea: but the dam then constructed was hardly strong enough. Accordingly during William Hornby's governorship the Vellard was built, which rendered available for cultivation and settlement the wide area of the flats and resulted in welding the eastern and western shores of the island into one united area.

A general description of Bombay at this date (1775) is given both by Parsons, the traveller, and by Forbes, the author of the *Oriental Memoirs*. The former remarks that "The town of Bombay is near a mile in length from Apollo Gate to that of the Bazar, and about a quarter of a mile broad in the broadest part from the Bunda (Bandar) across the Green to Church Gate, which is nearly in the centre as you walk round the walls between Apollo and Bazar Gates. There are likewise two marine gates, with a commodious wharf and cranes built out from each gate, beside a landingplace for passengers only. Between the two marine gates is the castle, properly called Bombay Castle, a very large and strong fortification which commands the bay...... Here is a spacious Green, capable of containing several regiments exercising at the same time. The streets are well laid out and the buildings so numerous and handsome as to make it an elegant town. The soil is a sand, mixed with small gravel, which makes it always so clean, even in the rainy season, that a man may walk all over the town within half an hour after a heavy shower without dirtying his shoes. The Esplanade is very extensive and as smooth and even as a bowling-green, which makes either walking or riding round the Town very pleasant. ". Forbes was of opinion that the generality of the public buildings at this epoch were more useful than elegant. " The Government House ", he writes, " custom-house, marine house, barracks, mint, treasury, theatre and prison included the chief of these structures. There were also three large hospitals, one within the gates for Europeans. another on the Esplanade for the sepoys, and third on an adjustment island for convalescents. The only Protestant Chuichon the island stood near the centre of the town, a large and commodious building with a neat tower. There was also a charity-school for boys and a fund for the poor belonging to the Church of England. There were seldom more than two chaplains belonging to the Bombay establishment. When I was in India (1766-84) the one resided at the Presidency, the other alternately at Surat and Broach, where were considerable European garrisons. The

Roman Catholics had several churches and chapels in different parts of the Island and enjoyed every indulgence from the English government. The English houses at Bombay, though neither so large nor elegant as those at Calcutta and Madras, were comfortable and well furnished. They were built in the European style of architecture as much as the climate would admit of, but lost something of that appearance by the addition of verandahs or covered piazzas to shade those apartments most exposed to the sun. When illuminated and filled with social parties in the evening, these verandahs gave the town a very cheerful appearance. The houses of the rich Hindus and Muhammedans are generally built within an enclosure surrounded by galleries or verandahs not only for privacy but to exclude the sun from the apartments. This court is frequently adorned with shrubs and flowers and a fountain playing before the principal room where the master receives his guests, which is open in front to the garden and furnished with carpets and cushions. The large bazar or the street in the black town within the fortress contained many good Asiatic houses and shops stored with merchandise from all parts of the world for the Europeans and Natives. These shops were generally kept by the Indians, especially the Parsis who after paying the established import customs were exempted from other duties."

However all was not well so far as the relations between the English and the Marathas were concerned. After the defeat of the former at Wadgaon, General Goddard sent by Hastings arrived from Bengal with fresh troops and the Bombay authorities in consultation with him decided to repudiate the treaty and urged the Governor-General to support this policy. Hastings thereupon informed the Maratha court that the treaty of Wadgaon could not be ratified and he had therefore authorised Goddard to bring about a fresh treaty. The Maratha court of course could not agree to such a proposal and demanded the surrender of Raghunathrao. The refusal of the English involved the Bombay government in a costly war and led to anti-English confederacy of the Indian powers including Bhosles of Nagpur, Haider Ali of Mysore and the Nizam of Hyderabad besides the Maratha State. If the confederacy had succeeded, it would have considerably affected the history of the sub-continent but the English succeeded in seducing the Bhosles of Nagpur and thus making a dent in the confederacy. Though it is not necessary to detail here the progress of the war between the Marathas and the English fought on the continent elsewhere, confrontation did take place between the two in the environs of Bombay. In 1780 large parties of Maratha troops descended through the *ghats* and so completely devastated the environs of Bombay that the English at Bombay became very nervous. Their plan to capture all important islands of Bombay along with Vasai and Kalyan initially did not make any headway against the manoeuvre of Visaji Pant Lele, the Maratha Governor of Konkan, which forced the Bombay Government to seek immediate relief from Goddard who was operating in Gujarat. Goddard sent Colonel Hartley from Baroda but he was defeated near Panvel with heavy loss. However the English garrison at Thane made a sudden dash on the weakly defended port of Kalyan and captured it and plundering it with vengeance carried the booty to Bombay. The Bombay authorities now decided to make a strong effort against Vasai, the most coveted Maratha possession on the mainland north of Bombay and accordingly General Goddard was ordered to besiege Vasai. " The

European part of his army was sent down to Salsette by sea, the battering train was prepared in Bombay, and the sepoys were to march by land. Early in October the whole of the disposable force at Bombay and in the neighbourhoods, consisting of five battalions, was placed under the command of Lieutenant-Colonel Hartley, who was instructed to drive out the enemy's posts and cover as much of the Konkan as possible, so as to enable the agents of the Bombay Government to collect apart of the revenues and secure the rice harvest, which is gathered at the close of the rains. There is perhaps no part of Mr. Hornby's minute more expressive of the distress under which the Government laboured than that where, alluding to the field forces they were preparing, he observes ' our troops will better bear running in arrears when employed on active service and subsisting in the enemy's country'; for it is a principle with the British Government and its officers in India than which nothing has more tended to the national success, always to consider the peasantry under their strictest protection. After a spirited action. Hartley was enabled to cover so successfully the siege of Vasai that the city capitulated on the 11th December, 1781." (Macleans' Guide to Bombay.) It was a severe blow to Maratha pride as Vasai formed a living memorial of their former exploits. This victory encouraged the English to march once more on Pune through the Bor ghat but the campaign proved disastrous in spite of the hurried reinforcements sent from Bombay. General Goddard went back to Bombay suffering severe losses and privations in his retreat. A newsletter from Bombay records on 5th May: " Such a set back was never experienced by the British before. All Bombay disparages this performance with open ridicule. Prices have gone terribly high and famine prevails throughout. Most of the bankers and merchants have become bankrupt and the country depopulated. What population remains has no food to eat; the plight of Bombay is extremely grave and the authorities there are begging for such terms as the Marathas would impose on them." (Dodwell, Hastings' Letters, p. 142.)

Meanwhile Hyder Ali of Mysore had been endeavouring to form a confederacy of all the Native Powers of India against the English, and the Governor-General therefore decided to make peace with the Marathas and utilize against Hyder the forces which were engaged against ths former. General Goddard was accordingly directed to offer terms to the Court at Pune, while Shinde was vigorously attacked in his own dominions by another division under Colonel Carnac. Of Goddard's advance to the foot of the Bor *ghat* and his disastrous retreat to Panvel, with a heavy loss of 466 in killed and wounded, of whom eighteen were European officers, it is needless to speak at length; for hostilities were eventually closed by the Treaty of Salbai in 1782, whereby Bombay at last gained permanent possession of Salsette, Elephanta, Karanja and Hog islands, but gave back Vasai and all conquests in Guiarat to the Peshwa and made Broach over to Shinde. The Marathas on their side agreed to ally themselves with the English against Mysore, and the Peshwa pledged himself to hold no intercourse with Europeans of any other nation. The cause of Raghunathrao was definitely abandoned by the English and he became a prisoner of the Peshwa. " The treaty was a good stroke of imperial policy " writes Maclean, " for it set the English free to deal separately with Hyder Ali; but in spite of some brilliant feats of arms in Gujarat, the Konkan and Central India, it cannot be said that the reputation of the British arms had

been raised by a war in which they had suffered two such reverses as the capitulation of Wadgaon and the retreat of General Goddard."

The treaty was ratified by Hastings at Fort William on 6th June, 1782 but signed by Nana Phadnis much later on 24th February, 1783 when Hyder Ali was dead. The man behind this Anglo-Maratha reconciliation was Mahadji Shinde and one regrets that both Nana Phadnis and Mahadji Shinde could not be on the spot in negotiating this important instrument because Nana Phadnis had played no insignificant part in containing the aggression of the English at Bombay and elsewhere. It may also be noted that the singular exploits of the Maratha Navy off the coast of Ratnagiri doubtless imparted a wholesome lesson to the Bombay authorities since they realised what they would have to look for from the Maratha navy if the war had continued and peace had not been concluded.

Even though the hostilities between the English and the Marathas came to a close, the English continued their war with Mysore where Tipu had succeeded his father Hyder Ali. The treaty of Salbai was in contravention of the terms of the anti-English confederacy and was clearly a betrayal by the Marathas and Hyder Ali before his death and his son Tipu regarded it as such. The English now demanded Maratha help in their war against Tipu as on their own they found totally incapable of countering the tactics of Tipu. The theatre of war had now shifted to Madras and when the Governor of Madras, Lord Macartay, opened negotiations with Tipu, the move was bitterly resented by the Governments of Bombay and Bengal. Because earlier in 1781 the Bombay Government had dispatched an expedition under Colonel Humberstone which took Calicut and Ponani and now to relieve the pressure on Madras Government, the Bombay authorities sent a strong force by sea to the Malabar coast under General Mathews. This force gained some initial successes but it was totally defeated by Tipu who recaptured all the places taken by the English forcing the garrison to surrender. The English had to conclude a most humiliating treaty with Tipu. Tipu also showed scant respect towards the Maratha-Nizam alliance against him whose territory he devastated with vengeance. This seemed to bring the Marathas and the English together, the consequences of which Tipu was shrewd to understand and he came to a compromise with the Marathas in March 1787. It may be noted that in 1785 Hastings had retired and his place was taken by Lord Cornwallis who was bent upon destroying the power of Tipu and securing the mood of the Marathas and the Nizam concluded the tripartite treaty of alliance, after protracted negotiations. In this context, the Maratha envoy in Bombay wrote to Nana on October 12, 1788 that " Malet has been here these ten days, holding long discussions with the Governor. The subject of their talk is the projected war with Tipu and the possibility of French help coming to him.". Malet again stayed in Bombay from 29th March to 11th April next year. The treaty of alliance was the result of Malet's and Kenneway's persistent labour. Cornwallis under whose directions the operations were organised placed the Company's Bombay contingent under Maratha command during the period of war to disarm Maratha suspicion. It is not necessary here to detail the progress of war with Tipu. Tipu ultimately submitted and a treaty was concluded on 25th February, 1792. The Marathas by helping the English to destroy Tipu exposed their state to aggression by English and Tipu's ultimate warning to Haripant

Phadke that " you must realise that I am not your enemy. Your real enemy is the Englishman of whom you must beware " came to be true.

It may here be noted that the system of posting an English Resident at the Court of Pune was proposed to the Government of Bombay by Nana Phadnis himself and which the former readily accepted, for the simple reason that it would minimise the importance of Mahadji Shinde who was now proving to be a source of danger to the English. This was a strategic move on the part of the English and dangerous step on the part of Nana who misunderstood and misconstrued the notices of Shinde. Malet was the first Resident at the Maratha Court and he remained there for full 11 years leaving Pune finally after Bajirao II hadbeen initiated as Peshwa. Tipu's prophecy, Nana's vacillating attitude and the English interest in driving a wedge between Nana and Mahadji Shinde have to be understood in the broader perspective of the Indian political scene in which the English ultimately succeeded. Of course, reconciliation was brought about between Nana and Shinde when the former was convinced of Shinde's power but valuable time was lost which was taken maximum advantage of by the English. Mahadji Shinde died on February 12,1794.and trouble started bearing between the Marathas and the Nizam on the question of the payment of arrears of the *chauth* of the six subhas of the Deccan resulting in the battle of Kharda in which the Nizam was defeated. The English maintained a perfectly neutral attitude and refused to be drawn in the conflict. The battle of Kharda fought on March 11, was followed by the death of Peshwa Madhavrao II on October 27, 1795. His death let loose all the evil forces in the Maratha regime. destroying the unity and cohesion and hastening the final ruin of the state in less than a quarter of a century. The English played no mean role in this and the conflicting policies of Nana, Bajirao II, Shinde and Holkar contributed in no lesser degree resulting in the Treaty of Vasai and the campaign of Assaye. In 1798, Sir John Shore retired and Lord Wellesley succeeded him.

The main object of the policy of Lord Wellesley, who succeeded Sir John Shore as Governor-General in 1798, was to drive the French out of India. To attain this end, he compelled the Nizam to accept a British subsidiary force in lieu of a French contingent, crushed Tipu Sultan, and used all his means of persuasion to induce the Peshwa and Shinde to become subsidized allies of the Biitish Government. Nana Phadnis, the Maratha Machiavel who for the last quarter of the eighteenth century was the principal political personage at the court of Pune, always steadfastly opposed the admission of the English into the Deccan, and; even when Mahadji Shinde marched to Pune with the design of upsetting the authority of the Brahmans and becoming master of the Deccan, Nana did not ask for the fatal aid of English troops to secure himself in power. Mahadii died at Pune at the moment when his ambition seemed on the point of being fully gratified; and Daulatrao who succeeded him in 1794 had not the capacity to carry out his plans. The influence of Shinde's military power remained however supreme in the Deccan. The young Peshwa Madhavrao, in a fit of despondency at being kept in a state of tutelage by Nana Phadnis and forbidden to recognize his cousin Bajirao, son of Raghoba, threw himself from his palace window and died from the effects of the fall and Bajirao, obtaining the support of Shinde was

proclaimed Peshwa to the temporary discomfiture of Nana Phadnis, who however subsequently had the address to reconcile himself with Bajirao and Shinde, and to regain the office of minister, which he held till his death in 1800. The Governor-General tried to persuade Shinde to return from Pune in order to defend his dominions in the north-west against the Afghans, but instead of listening to this advice, Shinde and the Peshwa meditated joining Tipu against the English, and were only disconcerted by the rapidity and completeness of the English success. The weakness of the Peshwa's Government and the natural disinclination of the predatory Marathas to abandon the pleasant habit of plundering their neighbours caused the greatest disorders throughout the Maratha country, and every petty chief with a band of armed followers made war and raised revenue on his own account. In Pune itself lawless excesses of all kinds were committed, and the Peshwa and Shinde were both at the mercy of a turbulent and rapacious soldiery. In 1801 a new power appeared on the scene. The Holkar family had for many years been kept in check by Shinde; but Yashvantrao Holkar, one of the celebrated Maratha Sardars, succeeded in getting together an army strong both in cavalry and in disciplined infantry and artillery. Marching on Pune in 1802 he won a complete victory over Shinde in a desperately contested battle; and the pusillanimous Peshwa, who had not appeared on the field, fled first to the fort of Sinhgad and thence to Revadanda on the coast, where he found an English ship to take him to Vasai.

The entreaties of Yashwantrao Holkar failed to convince Bajirao and before he went over to the English he wrote on 30th October, 1802 the following letter to Jonathan Duncan, the Governor of Bombay. " My servants Holkar and his party are carrying on intrigues and wrongs against me. Much alarmed at their base conduct, I have resolved to seek an alliance with your Honour on condition that should any of these rebels demand my person, it should be positively denied. Nor must your Honour tell me to go. Should these propositions meet your approbation, you must make provision for my expenses. Also be pleased to furnish me large armed vessels in the harbour of Mahad. For further particulars on this head I refer your Honour to the bearer Naro Govind Auty." The Governor discussed this letter with John Malcolm who was then in Bombay and on the advice given by him acted on it on all his future negotiations with Bajirao. Bajirao fearing capture from Yashwantrao proceeded to Harnai and from then boarded an English ship where he was welcomed and supplied with two lacs of rupees by Capt. Kennedy the English agent at Bankot under instructions from the Governor of Bombay. He reached Vasai on 16th December, 1802.

This situation appeared to Lord Wellesley to afford a most favourable opportunity for the complete establishment of the interest of the English power in the Maratha Empire. Hence negotiations were set afoot. As a matter of fact Bajirao and his brother Chimnaji on his way to Vasai had called upon the Governor of Bombay and was received with great hospitality and entertained with dinners and presents. Chimnaji tried to persuade Bajirao to desist from following the suicidal policy of completely surrendering to the English but to no avail and the result was the Treaty of Vasai signed by Bajirao on 31st December, 1802 after much vacillations on his part and threats from the English. Under the terms of the treaty

Bajirao bound himself to accept a subsidiary force of 6000 men and to assign territory worth 26,00,000 rupees for their pay, to give up his claims on Surat, to accept the company as arbiter in the disputes of the Peshwa with the Gaikwad, to admit no Europeans in his service, and not to negotiate with any other power whatever without giving notics and consulting with the Company's Government. In return the company undertook to restore him to the office of the Peshwa and did so on the 13th May 1803 by a concerted action fielding well over 60,000 troops, the Bombav army being organised under Colonel Murray. This action of the English brought on the campaigns of Assaye, Adgaon and Laswadi against Shinde and the Bhosle. The Bombay forces were employed during the campaign in successfully reducing the fort and district of Broach and the possessions of Shinde in Gujarat and to the southward of Narmada. The war of 1803 was followed by war with Holkar in 1804, which was finally concluded by the peace of 1805. During the eleven years which followed, the Bombay Government preserved a hollow peace with the Maratha power headed by the weak kneed Peshwa Bajirao.

Before proceeding to record the final scene in the struggle with the Peshwa, it would be well to record briefly the success attained by the Bombay government in other parts of India. The success of the Bombay contingent in the wars with Mysore in 1781 and 1799 have already been noted. However the role of Bombay Government in the 1799 war was so outstanding and to such good purpose that the Marguis Wellesley, then Governor-General, expressed in the warmest terms to Mr. Jonathan Duncan, Governor of Bombay, his appreciation of the work of the Bombay contingent, declaring that "the merits of Generals Stuart and Hartley, as well as of Colonel Montiesor and other officers, have seldom been equalled and never surpassed in India." In reply to an address from the inhabitants of Bombay on the termination of the war Lord Wellesley wrote :—" The distinguished part which the settlement of Bombay has borne during the late crisis in the labours and honours of the common cause, has repeatedly claimed my warm approbation, and will ever be remembered by me with gratitude and respect. In your liberal and voluntary contribution towards the exigencies of your native country, and towards the defence of the Presidency under whose Government you reside, and in the alacrity with which you have given your personal services for the military protection of Bombay, I have contemplated with pleasure the same character of public spirit, resolution and activity which has marked the splendid successes of the army of Bombay from the commencement to the close of the late glorious campaign." Other which marked Bombay's noteworthy events increasing importance were the despatch of an expedition in 1799 to occupy the island of Perim and initiate political relations with the Arab Chief of Aden, the equipment of an expedition to Egypt under Sir David Baird in 1801. when the troops embarked in five days after the requisition was made for them and the whole business was conducted with regularity and rapidity, and thirdly the operations against the pirates of the western coast. In spite of Angre's disappearance raids were still carried on by Maratha cruisers which issued from Malwan and Savantwadi, while to the north of Bombay no serious attempt had yet been made to harry the nests of raiders who had sheltered from time immemorial in the creeks and islands along the coasts of Gujarat, Cutch and Kathiawad. During this

period Bombay bestirred herself to rid the western seas for ever of the sea-rovers, who had plundered the shipping ever since the days of Ptolemy and Marco Polo and had given the name of "Pirates' Isle" to sacred Bet. In 1807 the Kathiawad States were taken under British protection; in 1809 Colonel Walker, the Political Agent, induced the Rao of Cutch to sign a treaty binding himself to co-operate with the British Government in the suppression of piracy, while in 1812 treaties were made with Kolhapur and Savantvadi, whereby the sovereignty of Malwan and Vengurla was ceded to the English and all vessels found equipped for war were given up.

By 1805, therefore, Bombay had attained a very strong political position. The marine had established its supremacy along the Malabar coast; the Bankot district had become British territory; and in Gujarat the authority of the Gaikwad was practically wielded by servants of the English Government. The year 1800 witnessed the transfer to the Company of the whole administration and revenue of Surat, whose ruler received in exchange a pension. Finally the peace of 1805 left Bombay in possession of political authority almost co-extensive, if we exclude the province of Sind, with that which she now enjoys. She supplied subsidiary forces to the Gaikwad of Baroda and the Peshwa and garrisoned the Portuguese city of Goa, occupied by English troops during the continuance of the French war. She could despatch expeditions to foreign lands and successfully guard her own territory against attack, for English policy and arms had successively subdued all the native powers and reduced to mere ciphers those of them that still retained a nominal independence.

This expansion of Bombay's sphere of influence was reflected in the strengthening of the administration. In 1785 a marine board was created and a comptroller of maiine was appointed in the following year; a marine survey was established; and in 1785 the business of government was divided among a board of council, a military board, a board of revenue and a board of trade. " Our president and Council", wrote the Directors, "will still continue to act in their double capacity of public and Secret," and then proceeded to lay down the constitution of the military board and the board of trade, adding that all subsequent despatches will be addressed to the Bombay Government in its public, secret, military, revenue and commercial departments. Four years later the political department was instituted as also the post of Private Secretary to the Governor's Office, carrying a salary of Rs. 500 a month. In 1798 the recorder's court was founded in supersession of the old Mayor's court, and in the same year the first justices of the peace were appointed. In 1793 the Governor and Members of Council were the only justices of the peace and in 1796 sat in a Court of Quarter Sessions, inviting two of the inhabitants to sit with them. This system continued until 1798 when the sessions of Over and Terminer were transferred to the Recorder's Court. In 1807 the Governor and Council were empowered by Act 47, George III, to issue commissions appointing as many of the Company's servants or other British inhabitants as they should consider qualified to act as justices of the peace, under the seal of the recorder's court. The first commission was issued in 1808, and a bench of twelve justices was appointed whose principal duties were to attend to the proper cleaning and repairing and watching of the town, to raise money for this purpose by assessment and to grant licenses for spirituous liquors. Among other noteworthy events was the establishment of regular postal communication with Madras in 1787.

Meanwhile the town had been expanding with great rapidity. In 1787 encroachments within the walls had become so numerous that a special committee, composed of the Land Paymaster, the Collector and the Chief Engineer, was appointed to examine the private buildings which natives were erecting and decide how far they might prove prejudicial to public works and the general health of the inhabitants. The committee made various suggestions for improvement, which might have taken years to carry out had not the great fire of the 17th February 1803 indirectly aided their plans. How the fire originated was never definitely known; but, to quote the words of the Honourable Jonathan Duncan in a letter to the Court of Directors, " so great and violent was the conflagration that at sunset the destruction of every house in the Fort was apprehended. The flames directed their course in a south-easterly direction from that part of the Bazar opposite to the Cumberland Ravelin guite down to the King's Barracks. During the whole of the day every effort was used to oppose its progress, but the fierceness of the fire driven rapidly on by the wind baffled all attempts; nor did it visibly abate till nearly a third part of the town within the walls had been consumed." Altogether 471 houses, 6 places of worship and 5 barracks (the tank barracks) were destroyed. The last embers were hardly extinguished before the Government was initiating improvements, and endeavouring to persuade the people to rebuild their houses outside the walls of the Fort. In writing to the town committee they expressed a hope that, that body would be able " to convince the natives in question of the unadvisableness of their residing in a garrison crowded with lofty structures, filled with goods and merchandise and intersected by such narrow streets as existed before the late fire : and that from the conviction forced on their minds by the late sad calamity they will willingly concur in the expediency of their dwelling houses and families being without the Fort, where they ought to be sensible that under the advantage of our insular situation both will be in perfect security. "To further this object the Bombay Government chose a new site outside the walls for the import and traffic in oil, dammer, *qhi* and other inflammable substances, and authorized the committee to grant compensation to those persons who were willing to relinquish their sites in the Fort and rebuild their houses on less valuable plots outside the walls. The permanent advantages arising out of the conflagration were remarked by Milburn who gave the following description of the town between 1803 and 1808:— " Between the two marine gates is the castle called Bombay Castle, a regular quadrangle, well built of strong hard stones. In one of the bastions is a large tank or reservoir for water. The fortifications are numerous, particularly towards the sea, and are so well constructed, the whole being encompassed by a broad and deep ditch, which can be flooded at pleasure, that it is now one of the strongest places the Company have in India. Besides the castle are several forts and redoubts, the principal of which is Mahim situated at the opposite extremity of the Island, so that properly garrisoned Bombay may bid defiance to any force that can be brought against it. In the centre of the town is a large open space called the Green which in the fine weather season is covered with

bales of cotton and other merchandize, entirely unprotected; around the Green are many large well-built and handsome houses; the Government House and the Church, which is an extremely neat, commodious and airv building are close to each other on the left of the Church Gate. On the right of the Church Gate is the Bazar, which is very crowded and populous and where the native merchants principally reside. At its commencement stands the theatre, a neat handsome structure. This part of the town suffered much by a destructive fire, which broke out in February 1803 and destroyed nearly three-fourths of the Bazar, together with the barracks, customhouse and many other public buildings, and property of immense value belonging to the Native merchants. Many houses in the neighbourhood of the castle were battered down by the Artillery to stop the progress of the flames and preserve the magazine, or in all probability the whole town would have been destroyed. Since the fire of 1803 this part of the town has been rebuilt and the whole much improved, at a considerable expense to the Company." The two most important works carried out by the Company outside the town walls were the Sion Causeway which was commenced in 1798 and completed in 1803 and the Common Goal at Umarkhadi, built in 1804.

The opening of the nineteenth century was marked by the presence in Bombay of several distinguished men. Major-General Wellesley, afterwards Lord Wellington, was resident here during March and April 1801 in connection with Sir D. Baird's expedition to Egypt and again from March to May 1804, after the battle of Assaye. The Honourable Jonathan Duncan was resident in the old Government House in the Fort 1795 till his death in 1811, and took a leading part in the public thanksgiving of Bombay citizens in November 1800 for His Majesty George Ill's escape from assassination, the celebration of His Majesty's birthday on the 4th June 1801 and the jubilee celebration in 1810. Viscount Valentia was banquetted by Ardeshir Dady, one of the principal Parsi inhabitants in November 1804; and in May of the same year Sir James Mackintosh, who succeeded Sir W. Syer, the first Recorder, arrived in Bombay.

Sir James Mackintosh's arrival synchronized approximately with a very severe famine in the Konkan, occasioned by the failure of the rains of 1803. The part played by the Bombay Government during the crisis alluded to by Forbes in the following words:—" What infinite advantage, what incalculable benefits must accrue from a wise and liberal administration over those extensive realms which now form part of the British Empire, is not for me to discuss. What immense good was done by the wise policy of the Bombay Government alone during a late famine we learn from the address of Sir James Mackintosh to the Grand Jury of that island in 1804. No other language than his own can be adopted on this interesting subject The upright and able magistrate, after descanting upon famine in general, enters into particulars of that in the Konkan, occasioned by a partial failure of the periodical rains in 1802 and from a complete failure in 1803, from whence, he says a famine has arisen in the adjoining provinces of India, especially in the Maratha territories which I shall not attempt to describe and which I believe no man can truly represent to the European public without the hazard of being charged with extravagant and incredible fiction. Some of you have seen its ravages. All of you have heard accounts of them from accurate observers.

I have only seen the fugitives who have fled before it and have found an asylum in this island. But even I have seen enough to be convinced that it is difficult to overcharge a picture of Indian desolation. I shall now state from authentic documents what has been done to save these territories from the miserable condition of the neighbouring country. From the 1st September 1803 to the present time (October, 1804) there have been imported or purchased by Government 414,000 bags of rice and there remain 180,000 bags contracted for, which are yet to arrive. The effects of this importation on the population of our territories, it is not very difficult to estimate. The population of Bombay, Salsette, Karanja and the city of Surat I designedly underestimate at 400, 000. I am entitled to presume that if they had continued subject to Native Governments, they would have shared the fate of the neighbouring provinces which still are so subject. I shall not be suspected of any tendency towards exaggeration by any man who is acquainted with the state of the opposite continent, when I say that in such a case an eighth of that population must have perished. Fifty thousand human beings have therefore been saved from death in its most miserable form by the existence of a British Government in this island...... The next particular which I have to state relates to those unhappy refugees, who have found their way into our territory. From the month of March to the present month of October, such of them as could labour have been employed in useful public works and have been fed by Government. The monthly average of these persons since March is 9,125 in Bombay, 3,162 whole I am sure that I considerably understate the fact in saying that the British government in this island has saved the lives of 1,00,000 persons, and what is more important that it has prevented the greater part of the misery through which they must have passed before they found refuge in death, besides the misery of all those who loved them oi who depended on their care. "

It is now time to revert to the course of affairs in the Deccan. Upto 1817 Baji Rao remained ostensibly an ally of the English, who had restored him to his throne in 1803. But as, Maclean has pointed out, a prince who is called independent, but who knows that his authority depends on the good-will of a Political Resident and a body of foreign troops must be endowed with rare magnanimity if he does not both oppress his own subjects and chafe under the limitations placed on his sovereign power to make war and conclude treaties with other States. The consciousness that he is protected by a force strong enough to keep him on his throne in spite of all the efforts of discontented subjects removes the only curb the dread of rebellion which restrains an unprincipled despot from gratifying to the utmost the evil passions of cruelty, lust and covetousness; while at the same time a restored tyrant in nine cases out often resents his obligations to the foreigners who have given him back his kingdom, feeling that he is but a puppet in their hands when they keep him from indulging his ambition in warlike enterprises and bid him be content to stay at home and be absolute master of the lives and fortunes of his own people. The thirteen years which elapsed from the date of Baji Rao's restoration to his open declaration of hostilities are replete with instances of the grossest tyranny against his own people, and at the same time of treacherous intrigue against his European defenders. Neglect of the civil

administration, accumulation of personal gain by sequestration and extortion led to considerable unrest and rendered his sway abhorrent to the inhabitants of his kingdom. His rooted hostility to the English provoked him to stultify a guarantee of safety which the latter had granted to the Gaikwad's agent, Gangadhar Shastri, who visited Pune in 1815 for the purpose of settling certain claims preferred against his master by the Peshwa. The agent was treacherously murdered by Trimbakji Dengle, the Peshwa's infamous minister, who was subsequently handed over to the British Resident, Mountstuart Elphinstone, and imprisoned at Thane. Thence he escaped in 1816, and finding his way back to Pune persuaded the Peshwa to ally himself with the Pendharis and with Shinde, Holkar and the Bhosle in a confederacy to overthrow the British power. The hesitation which formed a considerable element in the Peshwa's character, prevented his joining issue with the English for some days; and the latter profited by the respite to obtain reinforcements from Bombay, which covered the whole distance from Panyel to Pune with only one halt and arrived in the Deccan capital on the 30th October, 1817. On the 5th November was fought the battle of Kirkee, which sealed the doom of Maratha regime. An army of 18,000 horse and 8,000 foot was powerless to save his kingdom for Bajirao, who fiom the hills overlooking the plain of Kirkee watched his ranks shiver and break. Accompanied by a small band of personal attendants the Peshwa escaped and passed the next few months in concealment, to avoid arrest by the English, who overran the Deccan and Southern Maratha Country. Eventually on discovering that his last chance of effecting anything against the English had passed away, he surrendered himself to Sir John Malcolm and renouncing for himself and his family all claims to soveieignty was permitted to rethe on the enormous pension of Rs. 8,00,000 a year to Bithur on the Ganges, where he doubtless instilled into the mind of his adopted son, Nana Saheb, that hatred of the British which bore such terrible fruit in 1857. With the exception of a tract reserved for the imprisoned Raja of Satara, Kolhapur, Savantvadi and Angre's possessions in Kolaba, the whole of the Peshwa's dominions were annexed to the Company's territory in 1818 and the Bombay Government settled down to the task of peaceful administration.

The year 1819 witnessed the final extinction of a piracy on the western coast of India. The arrangements made to undermine their power in 1807, 1809 and 1812 led naturally to disorder and insurrection among the turbulent classes of the population; and the final blow was not given to the pirates of Kathiawad till 1819 when a British force under Colonel Stanhope escaladed Dwarka and put the whole garrison, who refused to ask for quarter, to the sword. This action sounded the knell of organised raids in Western India; the last of the rover galleys, a goodly and imposing looking vessel having a lofty poop and beaked rostrum was seen by Colonel Tod lying high and dry upon the shore, and Bet, the robber' isle, bade adieu to her chieftain, who preferred the prospect of peace and a pension from the Bombay Government to the chance of amassing more wealth by acts of violence on the high seas.

Before closing the history of these years, we may draw attention to the rule, ordinance and regulation for the good order and civil Government of Bombay, which was passed in Council on the 25th March, 1812. The

regulation provided for the appointment of two magistrates of police, , the senior of whom exercised authority over the Fort and harbour and the junior over the remainder of the island: it provided for the institution of a court of petty sessions, composed of the peace; and for the appointment of European constables; it provided for the removal of encroachments, the safeguarding of wells, the registration of hired vehicles (hackereys), the prevention of nuisances, the regulation of dangerous trades, the registration of drinking and gambling houses, the carrying of weapons, the sale of poisons, the prevention of false coining, the regulation of religious rites and processions, the registration of the population and the maintenance of annual mortality and birth registers, and the emancipation of imported slaves. This was followed by Regulation III of the 4th November, 1812 which laid down building rules and the lines of setbacks both within the Fort and upon the principal roads outside it, and dealt generally with matters now falling within the scope of the Municipal Act.

About the same date the trade of the island commenced to exhibit distinct signs of progress. Up to the year 1813, the East India Company retained exclusive possession of all trades, private individuals being allowed to indulge in commerce only with the Company's licence. " Private enterprise ", writes Maclean, " had little or no chance in Bombay at a time when the Company and its servants had the pick of the trade, and Milburn gives the names of only nine independent European firms. The commanders and officers of the Company's ships employed Parsi dubashes or agents to manage their investments. The tonnage of the merchant ships in 1811 was 17,593 tons, some of the ships carrying 1,000 tons, and the largest class could take a cargo of 4,000 bales of cotton. There was only one insurance office, the Bombay Insurance Society, with a capital of 20 lakhs, but much underwriting was done by private persons." These conditions were, however, radically altered in 1813 by the passing of Lord Melville's bill which abolished the exclusive trade of the Company with India, but secured to it for twenty years longer the monopoly of the trade with China, the latter exception being introduced because the Ministry were afraid of losing the revenue derived from duties on tea. The removal of old privileges gave immense encouragement to the trade of Bombay; and this circumstance, combined with the Company's military successes in the Deccan, paved the way for the educational and economic progress which characterized the island during the nineteenth century.

The annexation of the Deccan, which followed upon the battle of Kirkee and the dethronement of the Peshwa, was one of the three great events which contributed to the making of the modern city of Bombay. (The Editor does not agree with this view.) Free and uninterrupted trade between Bombay port and the mainland, which had suffered greatly in the past from the restrictions of the Maratha Government, was thereby assured; the milder sway of the English in the Deccan permitted more regular intercourse between the inhabitants of that area and the people of the coast. About the last days of the Peshwa rule in the Deccan Mr. J. M. Maclean gives a dismal picture, as quoted below, which Indian historians may not agree. "So extreme was the misrule—justice being denied to every one who could not use force to obtain it, while cultivators and citizens alike were ground down to the dust by ever increasing taxation—

that only the court favourites and military chiefs and adventurers regretted the change of Government. Even the soldiers' pay was in arrears, and many of Bajirao's troops entered the service of the British Government within thirty-six hours after the proclamation of the Peshwa's dethronement. But while the rise of the English power must be ascribed in some degree to the radical incapacity of Hindus (?) to do any work, which they undertake thoroughly and completely, and to the more systematic and strenuous character of western civilization, it should never be forgotton that the conquest of India is really the fruit of the incomparable fighting qualities of the British soldier." The year 1817 thus witnessed the freedom of Bombay from all fear of attack by Native powers. For a century and a half she had followed a policy which enabled her to gradually strengthen her own hand and deal one by one with surrounding rivals until the last and most powerful of all was defeated.

By good fortune the affairs of Bombay were entrusted to a man of the highest genius at the very moment when supreme prudence and statecraft were required to repair the damages arising from centuries of desultory warfare. The Honourable Mountstuart Elphinstone who was appointed Governor in 1819 fostered so vigorously the expansion of trade, the moderate and uniform settlement of the revenues, and the education of the people that Bishop Heber was moved in 1827 to remark that " on this side of India there is really more zeal and liberality displayed in the improvement of the country, the construction of roads and public building, the conciliation of the native and their education than I have yet seen in Bengal. " His policy ", wrote the Bishop elsewhere, " so far as India is concerned appeared to me peculiarly wise and liberal; and he is evidently attached to and thinks well of the country and its inhabitants. His public measures in their general tendency evince a steady wish to improve their present condition. No Government in India pays so much attention to schools and public institutions for education. In none are the taxes lighter, and in the administration of justice to the natives in their own languages, in the establishment of panchayats, in the degree in which he employs the natives in official situations, and the countenance and familiarity he extends to all the natives of rank who approach him, he seems to have reduced to practice almost all the reforms which had struck me as most required in the system of Go\ernmtnt pursued in those provinces of our Eastern Empire which I had previously visited."

One of Mountstuart Elphinstone's earliest orders was directed towards securing better communication between the Deccan and Bombay. As early as 1803 General Wellesley had constructed a road for his transport up the Bor *ghat*, which had been designedly destroyed by the Peshwa; and this road the Governor determined to reconstruct. By the time Bishop Heber arrived in Bombay a tolerably good road had been commenced. "From Campoolee "he wrote, "I walked up the Bhorel Ghat four and a half miles to Khandala, the road still broad and good but in ascent very steep, so much so indeed that a loaded carriage or even a palanquin with anybody in it can with great difficulty be forced along it. In fact every one walks, or rides up the hills and all merchandise is conveyed on bullocks and horses. The ascent might, I think, have been rendered by an able engineer much more easy. But to have carried a road over these hills at all, considering how short a time they have been in our power, is highly

creditable to the Bombay Government.". The work begun by Elphinstone was completed by his successor Sir John Malcolm, who refers in the following words to the achievement. "On the 10th November, 1830, I opened the Bbor Ghat which though not quite completed was sufficiently advanced to enable me to drive down with a party of gentlemen in several carriages. It is impossible for me to give a correct idea of this splendid work which may be said to break down the wall between the Konkan and Deccan. It will give facility to commerce, be the greatest of conveniences to troops and travellers, and lessen the expense of European and other articles to all who reside in the Deccan. This road will positively prove a creation of revenue."

Improved communication by sea was likewise sought, and by 1830 a project was afoot for regular communication with England by steamers navigating the Red Sea and Mediterranean. Eight years later regular monthly communication between Bombay and London by the overland toute was established, the pioneer of the venture being Mr. Waghorn who left London in 1829 to explore the overland route. The mail was carried by the steamers of the Indian Navy between Bombay and Suez; but their further conveyance beyond Suez seems to have been often a matter of great uncertainty. In 1838 for example the Bombay Chamber of Commerce recorded an explanation by Waghorn of the delay in transmission to Bombay of the portion of the June mail addressed to his care; and considerable anxiety was often left as to whether a steamer would be available for the despatch of the mails in any particular month. Nevertheless, in spite of the delay and difficulties of the journey across Egypt, the service was carried on with more or less regularity and contributed in no little degree to increasing the importance of Bombay during these years.

The settlement of the Deccan naturally resulted in an increase of the trade of Bombay. About 1825 Bombay exports became considerable, and from 1832 onwards a rise in the price of American cotton which was caused by the operations of the bankers of the United States resulted in increased exports of Indian cotton to England. Between 1835 and 1836 these exports expanded by the large total of a million bales: and this fact coupled with a very marked increase in the number of independent European mercantile firms led in 1836 to the foundation of the Chamber of Commerce which since that date, as Maclean has remarked, "has taken an important share in the formation of public opinion and the direction of affairs".

Under the head of administration, the chief event of note was a proclamation by Government on 23rd April, 1834 appointing the Earl of Clare to be the first Governor of Bombay under a new Act for the better government of Indian territories, with William Newnham and James Sutherland as members of Council; whileon the 18th August, 1837 another proclamation was issued declaring "Queen Victoria Supreme Lady of the Castle, Town and Island of Bombay and its Dependencies". Meanwhile the growth of trade and population was responsible for various improvements in the island, notably the construction of the Colaba Causeway in 1838. Colaba, which up to that date formed the only remaining vestige of the original seven islands constituting Bombay, had

been gradually built over ever since the year 1743, when Mr. Broughton rented it of the Company for Rs. 200 per annum. About 1830 the island was held on a yearly tenure by the widow of General Waddington though the buildings erected by her husband were considered to be military quarters in the possession of Government. The junction of Bombay and Colaba was immediately followed by "commercial speculation in recovering a certain portion of ground for building factories, wharfs and the greater facility of mercantile operations". The scheme eventually proved a failure; but for the time being property in Colaba, hitherto considered of little worth, rose about five hundred per cent, in value, land was purchased by a large number of people and building operations were feverishly prosecuted. One of the chief improvements to the north of Colaba was the construction of the Wellington Pier (Apollo Bundar) which was opened for passenger traffic in 1819; while a new mint was commenced in 1825, orders for a new hospital in Hornby Road were issued in the same year, and the Elphinstone High School and Elphinstone College were founded respectively in 1822 and 1827. The erection of the Town Hall likewise dates from this period. Sir James Mackintosh had first proposed to build a Town Hall in 1811, "the object in view being to provide a suitable building for public meetings and entertainments, and also to make a home for the library and museum of the Literary Society, and for the reception of statues and public monuments of British art". Lotteries were set onfoot in 1812 and 1823 in the hope of raising sufficient funds for the building, a site for which had been granted by the Company in 1817; but eventually it was found necessary to hand over the work, commenced in 1821, to Government who provided funds for its completion in 1833.

Outside the walls of the Fort also the face of the land was undergoing change. The town was gradually creeping over the reclaimed higher grounds, westward along Back Bay and northward to Byculla, so that by 1835 new communications became essential. One of the earliest of these was the great main road, named after Sir Robert Grant and constructed during his Governorship (1835-38). Douglas has recorded the existence of country-houses in Mazagaon, of four bungalows at Malabar Hill and of Market, Mandvi, Umarkhadi and Bhuleshwar providing homes for a constantly increasing population. Another writer, speaking of the fragile residences which the European population constructed on the Esplanade during the fair season, mentions " groups of pakka built and handsome houses to be found at Girgaum, Byculla, Chinchpugli and other places". Government House, Malabar Point, which Sir John Malcolm had constructed, was in common use as the hot weather retreat of the Governor by 1835; while another well-known edifice was the Panjrapol or home for aged and diseased animals which was erected by a Prabhu in the office of Messrs. Forbes and Company who had amassed considerable wealth with the object of devoting it to charitable purposes. By the year 1838 there were two large bazais in the Fort, the China and Thieves' bazars, the latter crowded with warehouses where European articles were disposed off at a small profit, and three great bazars in the native town, from which branch innumerable cross roads, each swarming with its busy crowds. "During the Jast few years", wrote Mrs. Postans, "the leading roads of the native town have been watered and even tolerably lighted. This has proved very advantageous after all the inconveniences which

attended the old system of dust and darkness. It is still however only for an hour or two after sunrise that horsemen or carriages can pass unimpeded by stoppages of varied character. The most profitable trade carried on in these bazars is the sale of toddy; to so considerable an extent has the general use of this intoxicating beverage increased that Government have been constrained to issue an order; forbidding the existence of toddy stores within a regulated distance of each other. On a moderate computation, however, every sixth shop advertises its sale." The native town comprised roughly a portion of the modern C ward, most of B ward, Byculla, Mazagaon and Kamathipura, and was just commencing to absorb the modern areas of Dhobi Talao, Girgaum, Chaupati and Khetwadi. Parel was fairly populated but had not yet been transformed into a teeming warren of industry. Sion, Sewri and Mahim contained much the same population as they did at the beginning of the century; but Matunga which had at that period served as an European artillery station, was totally deserted by 1835 except for a couple of small hamlets sheltering the descendants of those who once performed the office of menials to the military camp.

The rapid increase of the town and of its population is to some extent portrayed by two occurrences, namely the water famine of 1824 and the Parsi-Hindu riots of 1832. In the former year only 25 inches of rain had fallen by the end of August and the wells which by Mr. Elphinstone's orders had been sunk on the Esplanade at the commencement of the drought proved totally inadequate to supply the whole population. Government thereupon appointed a committee of tanks and wells composed of the Revenue Collector, the Chief Engineer and the Secretary to the Medical Board, and placed at their disposal the services of an Engineer to frame plans and estimates of such works as they might consider necessary for relieving the scarcity. Under their superintendence several wells were repaired and improved and new wells were sunk in localities in which an additional water supply was most wanted. At considerable expense to Government many of the large tanks in Bombay and Mahim were also deepened and widened. The riots referred to above broke out in July 1832 among the Parsis and one or two Hindu sects in consequence of a Government order for the destruction of pariah dogs which at this date infested every nook and corner of the island. A couple of European constables, stimulated by the reward of eight annas a dog, were killing one in the compound of a native dwelling, when they were suddenly attacked and severely handled by a mixed mob composed of the sects above mentioned. On the following day all the shops on the island were closed and a party of about three hundred people commenced to terrorise anyone who attempted to prosecute his usual daily occupation. The bazar was deserted; and the mob forcibly destroyed the provisions intended for the Queen's Royals who were on duty in the Castle and prevented all supplies of food and water being conveyed to Colaba and the shipping in the harbour. As the mob continued to be reinforced, Mr. De Vitre, Senior Magistrate of Police, asked for the assistance of the garrison troops who speedily put an end to the disturbance.

Before describing the chief events of the latter portion of the period under review, it will not be out of place to quote the following description of Bombay in 1838 by an anonymous writer in the *Asiatic Journal* of that year:—

" In point of striking scenery, and its immediate contiguity to antiquities of the most interesting nature, Bombay possesses great advantages over the sister-presidencies; but these are counterbalanced by inconveniences of a very serious nature, to which, in consequence of the limited extent of the island, many of the inhabitants must submit. Bombay harbour presents one of the most splendid landscapes imaginable. The voyager visiting India for the first time, on nearing the superb amphitheatre, whose wood-crowned heights and rocky terraces, bright promontories and gem-like islands are reflected in the broad blue sea, experiences none of the disappointment which is felt by all lovers of the picturesque on approaching the low, flat coast of Bengal, with its stunted jungle. A heavy line of hills forms a beautiful outline upon the bright and sunny sky; foliage of the richest hues clothing the sides and summits of these towering eminences, while below, the fortress intermingled with fine trees, and the wharfs running out into the sea, present, altogether, an imposing spectacle, on which the eye delights to dwell.

"The island of Bombay does not exceed twenty miles in circumference, and communicates with that of Salsette by a causeway built across a channel of the sea which surrounds it. It is composed of two unequal ranges of whinstone rock, with an intervening valley about three miles in breadth, and in remoter times was entirely covered with a wood of cocos. The fort is built on the south-eastern extremity of the island, and occupies a very considerable portion of ground, the outworks comprehending a circuit of two miles, being, indeed, so widely extended, as to require a very numerous garrison. The town or city of Bombay is built within the fortifications, and is nearly a mile long, extending from the Apollo gate to that of the bazar, its breadth in some places being a quarter of a mile; the houses are picturesque, in consequence of the quantity of handsomely carved woodwork employed in the pillars and the verandahs; but they are incoveniently crowded together, and the high, conical roofs of red tiles are very offensive to the eye, especially if accustomed to the flat-turreted and balustraded palaces of Calcutta. The Government house, which is only employed for the transaction of business, holding durbars—a large, convenient, but ugly looking building, somewhat in the Dutch taste occupies one side of an open space in the centre of the town, called the Green. The best houses, and a very respectable church, are situated in this part of the town, and to the right extends a long and crowded bazar, amply stocked with every kind of merchandize. Many of the rich natives have their habitations in this bazar, residing in large mansions built after the Asiatic manner, but so huddled together as to be exceedingly hot and disagreeable to strangers unaccustomed to breathe so confined an atmosphere. One of the principal boasts of Bombay is its docks and dockyards: they are capacious, built of fine hard stone, and are the work of Parsi artisans, many of whom, from their talents and industry, have risen from common labourers to be wealthy shipbuilders. Many splendid vessels, constructed of teak wood the best material for building have been launched from these docks, which contain commodious warehouses for naval stores, and are furnished with a rope-walk, which is the admiration of those who have visited the finest yards in England, being second to none, excepting that at Portsmouth.

"The island of Bombay, from an unwholesome swamp, has been converted into a very salubrious residence; though enough of shade still remains, the superabundant trees have been cut down the marshes filled up, and the sea-breeze, which sets in every day, blows with refreshing coolness, tempering the solar heat. The native population, which is very large, has cumbered the ground in the neighbourhood of the fortifications with closely built suburbs, which must be passed before the visitor can reach the open country beyond, at the further extremity of the island. The black town, as it is called, spreads its innumerable habitations, amidst a wood of coconut trees—a curious, busy, busting, but dirty quarter, swarming with men and the inferior animals, and presenting every variety of character that the whole of Asia can produce. The coconut gardens, beyond this populous scene, are studded with villas of various descriptions, the buildings within the fortifications being too much crowded together to be desirable; those belonging to European residents are, for the most part, merely retained as offices, the families seeking a more agreeable situation in the outskirts. Comfort, rather than elegance, has been consulted in the construction of the major portion of those villas but any defalcation in external splendour is amply compensated by the convenience of the interiorThose persons who are compelled, by business or duty, to live in the immediate vicinity of Government house, only occupy the houses inside the fortifications during the rainy season; at other periods of the year they live in a sort of al fresco manner, peculiar to this part of the world. A wide Esplanade, stretching between the walls of the fort and the sea, and of considerable length, affords the place of retreat. At the extreme verge a fine, hard sand forms a delightful ride or drive, meeting a strip of grass or meadow-land, which with the exception of a portion marked off as the parade ground of the troops in garrison, is covered with temporary building: some of these are exceedingly fantastic. Bungalows constructed of poles and planks, and roofed with palm leaves, rise in every direction, many being surrounded by beautiful parterres of flowers, blooming from innumerable pots. Other persons pitch tents, which are often extensive and commodious, on this piece of ground, covering them over with a chupper or thatched roof, supported on slender pillars, and forming a verandah all round.

"Of the native community, as it has been already stated, a large majority are Parsis, who, at a very remote period—the eighth century of the Christian era—were driven by the persecution of the Mahomedan conquerors of Persia, to take refuge in Hindustan. The lower classes of Parsis are in great request as domestics at Bombay; they are far less intolerant in their principles than either Mussalmans or Hindus, and will, therefore, perform a greater variety of work, and are more agreeable to live with; but in personal appearance, they cannot compete with Bengal servants; whose dress and air are decidedly superior. The greater portion of the wealth of the place is in the hands of Parsi merchants, who are a hospitable race and, though not extravagant, liberal in their expenditure. The houses of these persons will be found filled with European furniture, and they have adopted many customs and habits which remain still unthought of by the Mussalmans and Hindus. The women, though not jealously excluded from all society, are rather closely kept; they have no

objection to occasionally receive the husbands of the European ladies who may visit them, but they do not mingle promiscuously with male society. The Parsi females are not distinguished for their personal appearance being rather coarse and ill-favoured; but many employ themselves in a more profitable manner than is usual in native women. Work-tables fitted up after the European mode, are not unfrequently found in their possession; they know how to use English implements in their embroidery, and they have English dressing-cases for the toilet. Considerable pains, in some instances, are bestowed upon the education of the daughters, who learn to draw and to play upon the piano; and one Parsi gentleman, of great wealth, contemplated the introduction of an English governess, for the purpose of affording instruction to the young ladies of his family.

"The lews are more numerous, and of a higher degree of respectability in Bombay than in any other part of India; they make good soldiers, and are found in considerable numbers in the ranks of the native army. There are Armenians also but not nearly so many as are settled in Calcutta The Portuguese inhabitants rear large quantities of poultry; but game is not plentiful on the island, in consequence of its limited extent: red-legged partridges are however found, and on some occasions, snipe. The European inhabitants are usually supplied with their fruit and vegetables from the bazaar, as there are comparatively few gardens attached to their houses; great quantities of the productions sold in the markets are brought from the neighbouring island of Salsette, which is united to that of Bombay by a causeway—a work for which the inhabitants are indebted to Governor Duncan, who constructed it over a small arm of the sea. This communication, which has a draw-bridge in the centre, is a convenience both to the cultivators and to the residents of Bombay, who are thus enabled to extend and diversify their drives, by crossing over to Salsette. A great portion of Salsette is now under cultivation, the Parsis and other wealthy natives possessing large estates on the island.

"The favourite residence of the Governor (who has three residences upon the island) is usually a villa at Malabar Point, a particularly beautiful situation, being a woody promontory, rising so abruptly from the sea, that its spray dashes up against the terraces. The principal residence of the Governor is at Parell about six miles from the city, and here he gives his public entertainments. It is a large handsome house, well constructed and appointed, having spacious apartments for the reception of company.

"The large Portuguese village or town of Mazagong, which is dirty and swarming with pigs, is however, finely situated, occupying the shore between two hills, and is moreover celebrated as being the place at which the fine variety of mango, so much in request, was originally grown. The parent tree, whence all the grafts were taken which have supplied the neighbouring gardens, was said to be in existence a few years ago, a guard of sepoys being stationed round in the proper season to preserve its fruit from unhallowed hands. From these groves in the time of one of the most luxurious Moghal emperors, Shah Jehan, the royal tables of Delhi were furnished with their principal vegetable attraction, couriers being despatched to bring the far-famed mangoes to the imperial court. Moore

has alluded to the circumstances in "Lalla Rookh", attributing the acerbity of the critical Fadladeen's temper to the failure in the supply of mangoes. Mazagong-house was the residence of Sterne's Eliza; but the interest which this heroine of the ultrasentimental school formerly existed, has become very much faded, and there seems to be some doubt whether her existence will be remembered by the next generation.

"A great number of the poorer inhabitants of Salsette, Elephanta and the other islands of Bombay, subsist by fishing: cultivation is, however, extending in the interior; and in the course of a few years, the influx of visitors to Bombay, which must be materially increased by steamnavigation to India, will doubtless direct the attention of persons desirous to colonize, to the purchase of land in these fertile but somewhat neglected scenes. The various remains left by the Portuguese show that in their time agriculture flourished in places now reduced to jungle, from the usual consequences of Maratha conquest; and although the invaders subsequently ceded their territories to the British Government, they have never recovered from the ravages committed by a people, who may with justice be styled the most destructive upon earth."

Among the chief military and political events, which occurred just prior to the middle of the nineteenth century, were the appointment of a British resident to Savantvadi in 1838, the inclusion of Angre's Kulaba in British territory in 1841, the bombardment of Aden in 1839, the assumption of the right to administer the affairs of Kolhapur in 1842, the conquest of Sind in 1843 and the annexation of Satara m 1848. These actions doubtless served to impress upon the public mind the fact that Bombay was now the paramount power in Western India, but had little effect upon the progress of the island as compared with the internal reforms initiated during the twenty years preceding 1860. Foremost among the latter was the introduction of railway communication. In 1844 the Great Indian Peninsula Railway, to which Sir B. Frere offered the motto primus in Indis, was projected; the first sod was turned by Mr. Willoughby at Bombay in 1850, and the first twenty miles to Thane were opened in 1853. Two years Jeter (1855) the monthly mail service, which had reached a state of inefficiency and disorganisation calling loudly for reform, was reorganised: the employment of ships of the Indian Navy for this purpose was to the relief of travellers discontinued; and a contract was granted to the Peninsular and Oriental Steamship Company for the carriage of passengers and mails twice a month between Bombay and Aden in connection with their Calcutta and Mediterranean service. In 1857 even the bi-weekly voyage was decried, and an agitation was set on foot for an effective weekly mail service which bore fruit in 1868. It may be noted that an event of great political significance took place in 1852. The Company's charter was to be renewed in 1853. The political leaders of Bombay decided to start a political organization to vent public grievances and the first political organization of the Bombay Presidency was started in Bombay in this year under the name of Bombay Association, in a meeting of the citizens of Bombay on 26th August 1852. The report of the meeting opens with the introductory remarks of Hon. Shri Jagannath Shankarshet, the Chairman of the meeting.

Hon. Shri Jagannath Shankarshet's speech.—"I wish on such an inleresting

occasion this chair was occupied by Sir Jamsetjee Jejeebhoy, who, I regret, owing to indisposition, has not been able to attend, or by my friend Bomanjee Hormusjee, Esq., or other individual better able than myself to do justice to the objects for which we are here assembled.

" We meet here today to consider a most important subject. In the newspapers a notice was printed convening a public meeting of the native inhabitants of Bombay, which I shall read. From this you will see that it is considered highly desirable to form an association in Bombay, to ascertain and note the wants and wishes of the people living under this Government; to consider what measures are calculated to improve their condition; and to submit the results of these inquiries to local Government and to the authorities in England. By these means it is hoped, under providence, that we may be able to suggest a great many things to our rulers which otherwise may pass unnoticed, and we trust, that the results will prove highly beneficial to the people of this country, particularly the poorer portion who know little or nothing of the feelings of their rulers regarding them. The anxiety of the British Government is to improve the condition of the ryots as well as of the other classes. The grand aim of this meeting at which I am called to preside, is to secure the happiness of millions of our countrymen, and as such I have no doubt that every one of you here do feel warmly interested, and that you will strain every nerve to forward the objects in view. Gentlemen, I know your good feelings and good sense are such, that no further exposition on my part is necessary. The objects of this meeting, I again repeat, are most noble, such as I believe we never proposed to ourselves before on this side of India. To every one to whom his country and its people are dear, the subject cannot fail to commend itself to their best attention and energies, and I shall conclude with the earnest hope, that success may crown our doings. Many, I have reason to believe, are of opinion, especially among those who have not moved in European society, that the British authorities are opposed to frame or concede measures simply for the benefit of our country; I mean such as do not at the same time involve their own pecuniary or other interests. But I assure such persons, in common with many here, that efforts on the part of natives to improve their own condition cannot but be looked on with pleasure by the paternal and enlightened Government that rules over this country, and meet with encouragement in proportion to their reasonableness and justice."

The following propositions were then unanimously adopted :—

Proposed by Bomanjee Hormusjee, Esquire, and seconded by Maneckjee Limjee.

" 1. That an association be formed in Bombay with the object of ascertaining the wants of the natives of India living under the Government of this Presidency, and of representing from time to time, to the authorities, the measures calculated to advance the welfare and improvement of the country."

Proposed by Cowasjee Jehangeerjee, Esq., and seconded by Vurjeewandass, Madhawdass, Esquire.

"2. That the association be denominated the Bombay Association."

Proposed by Cursetjee Nusserwanjee, Esquire, and seconded by Maneckjee Nusserwanjee, Esquire.

"3. That the association shall take advantage of the opportunity afforded by the enquiries, now being made in England, into the nature and constitution of the India Government, to represent to the Imperial Parliament of Great Britain such reforms and improvements in the existing system of government as are calculated to procure the most efficient administration of public affairs, and to secure the general welfare and interests of the people of India, and that the association do, in connection with those latter objects, open communications with, and seek the cooperation of the societies formed for the same purposes at Calcutta and Madras."

Proposed by Framjee Nusserwanjee, Esquire, and seconded by Bapoo Jugunnath, Esquire.

"4. That the association shall from time to time, on occasions arising, memorialize the Government authorities in India, or in England, for the removal of existing evils, and for the prevention of proposed measures which may be deemed injurious, or for the introduction of enactments which may tend to promote the general interests of all connected with this country."

Proposed by Narayan Dinnanathjee, Esquire, and seconded by Bhawoo Dajee, Esquire.

" 5. That a subscription list be opened for the purpose of raising funds necessary to carry into effect the objects of this association."

In moving the above proposition, Mr. Narayan Dinnanathjee said:—

" Gentlemen, I am very happy to see that this association has been formed; the advantages to be derived from it are so various and so numerous, that I am unable to describe them. The language (Gujarati) in which I now speak not being my mother-tongue, at present I labour under a disadvantage. ' Two heads are better than one'—thus runs an English proverb. What one cannot do, many can; union is power. If one person alone were to state the grievances of his country, no one would listen to him; but in an assembly formed from the community at large, such as the present one, the members can, as a body, represent to the proper authorities their grievances. In societies, if any one has any doubt on any subject, it can be removed by another member. There are innumerable advantages arising from our meeting in a body, but I am not going to enumerate them here at present."

Proposed by Nowrojee Furdoonjee, Esquire, and seconded by Dadabhoy Nowrojee, Esquire.

" 6. That the following be adopted as the rules of the Bombay Association."

Mr. Nowrojee Furdoonjee observed:—

"Gentlemen, before reading the rules I propose for adoption, I beg to say

a few words. It is usual in all civilised countries, especially in those of Europe, for the principal inhabitants to hold public meetings to deliberate on the existing and proposed measures and policy of the Governments under which they live, and to form associations like that which has this day been inaugurated, for the purpose of respectfully representing their grievances, and suggesting measures calculated to promote the welfare and prosperity of their country; and to such representations the rulers always attach due weight and importance. The want of well-regulated and well-constituted associations of this description has long been felt in this part of the country; and I am delighted to find that the want has this day been supplied at this meeting. An association like this—for the regulation and conduct of whose proceedings clear and well-defined rules are laid down, composed as it is of the heads and representatives of the native community of this Presidency, gentlemen of influence, respectability, rank and intelligence, whom I rejoice to see here—cannot fail to command attention. The British Government, which is an enlightened and liberal Government, and professes to govern Indian for its own sake, will, I feel confident, be always ready and willing to hear the respectful appeals, the reasonable remonstrances, and the earnest representations which its native subjects may consider it proper to make for the amelioration of the conditions of this country and the welfare of its people. It will be the paramount duty of this association carefully to ascertain and lepresent the wants of the natives living under the Government of this Presidency, and such reforms and measures as are calculated to procure the most efficient administration of public affairs, as well as to memorialize the Government authorities from time to time for the removal of existing evils and the prevention of proposed injurious measures or enactments. Thus this association will be permanent one, and will be of great use and advantage not only at the present juncture, but also at all times in future whenever occasions arise." He then placed the draft of the rules of the association for the approval of the meeting.

In seconding Mr. Nowrojee Furdoonjee's motion to adopt the rules of the Association, Dadabhoy Nowrojee observed :—

"Many ask what this association means to do, when it is well known that under our present Government we enjoy an amount of liberty and prosperity rarely known to the inhabitants of India under any Native sovereign. In reply to this it is said, we ought to demand redress for our grievances. But what are those grievances? There may be many or none, yet nobody here is at this moment prepared to give a decided reply; and when we see that our Government is often ready to assist us in everything calculated to benefit us, we had better, than merely complain and grumble, point out in a becoming manner what our real wants are.

"We are subject to the English Government, whose, principal offers being drawn from England, do not, except after a long residence and experience, become fully acquainted with our wants and customs.

"Though they may always be anxious to do good to us, they are often led, by their imperfect acquaintance with the country, to adopt measures calculated to do more harm than good, while we, on the other hand, have no means of preventing such occurrences. The most we can do is to complain through the medium of a paper. In time all is hushed up, and the

people carry with them the impression that Government has been unkind to them in not attending their complaint.

" We have, therefore, to consider what we ought to do, so as to secure our own good, and at the same time keep up a good understanding between us and Government.

" If an association like this, formed by the great Seths of our community, be always in readiness to ascertain by strict inquiries the probable good or bad effects of any proposed measure, and whenever necessary to memorialize Government on behalf of the people, with respect to them, our kind Government will not refuse to listen to such memorials. This, therefore, gentlemen, is one of the principal objects of the association. There are various departments of Government, such as revenue, judicial, political etc., conducted according to certain regulations. Of these some may be beneficial, some injurious. Take with it the case of the Cunbis. Much is being said about their poverty and destitution. But it is necessary to inquire into the true causes of this wretchedness. It may be owing, for aught we know, either to bad administration, wholly or partially, or to some other causes. The committees of this association shall have therefore to institute inquiries into the natures of the various acts to which we are already subject, as well as of those which might be proposed for future administration, and to report to Government in a proper manner the results of their inquiries. I see no better means of preventing the adoption of injurious measures than by a combination of the people, in the manner in which this association is proposed to be formed, and I therefore second, with great pleasure, my friend Mr. Nowrojee in his motion to adopt the rules he read over to you."

The Chairman then placed the following proposition before the meeting:—

" 9. That a copy of the proceedings of this meeting be submitted to Government, with an expression of the earnest hope of this meeting, that the objects of this association will receive the support and co-operation of Government, as the association seeks only to advance the welfare of the people of this country, which cannot but likewise be the aim and object of government."

In moving this proposition, the Chairman said—

"I have already explained that the object of this association is to ascertain what measures will promote the interests of the Natives. Now as the British Government acknowledge their duty to be to effect whatever good they can for the benefit of this country, it is clear that their object and our object are one and the same. We are not in opposition to Government, nor can Government be opposed to our objects, if it be shown that the good of the country is what we seek. The Government have the power to do much good, and we have many proofs that they have the will also. I need not go far for these proofs. Witness this noble institution which they so generously support, in which so many who are now present have received a most excellent education. Witness also the Grant Medical College, where so many have been gratuitously taught the science of medicine, and have been prepared to gain a respectable livelihood, and to occupy an honourable position. I might refer also to the recent

appointment of many Natives to the highly responsible situations of deputy collectors and magistrates. The Government are willing, I am sure, to: do what good they can, and when they are correctly informed they will always be ready to act for the advantage of the people over whom they rule. But they are not in possession of full and correct information of all subjects connected with the welfare of the people. Besides their official sources of information, Government will be glad to have other channels of information on which they can rely. An association like the one now established will doubtless be listened to with attention in respect to all matters which concern the wants and wishes of the people, which of course Natives have better means of knowing than gentlemen whose time is engaged with the duties of their official situations. I feel confident that the Government will be glad to receive suggestions from an association of respectable Natives, who intend to enquire carefully what the interest of the people may require, and seek to promote these interests in a temperate manner through the co-operation of the authorities themselves."

Subsequently in 1853 the Bombay Association submitted a petition to the British Parliament.

The progress of trade during the years 1840-60 was evidenced in various directions. The old system of houses of agency gradually disappeared in favour of joint-stock banks, of which the earliest, the Bank of Bombay, was opened in 1840. The Bombay Times of April 15th 1840, remarked that "the Bank of Bombay opens for business this day, three years and nearly four months having elapsed since the first subscription to it, and after surmounting a series of such difficulties and obstacles, as we believe no similar institution ever encountered before and such as we may safely predict no institution for the public good will encounter again." The difficulties attending the opening of this bank, however, appear to have exercised no check upon the formation of similar institutions; for in 1842 the Bank of Western India was established and by 1860 the Commercial, the Chartered Mercantile, the Agra and United Service, the Chartered and the Central Bank of Western India had all gained an assured position. The commencement of the cotton spinning and weaving industry also dates from this period. In 1850 even the model of a cotton mill could not have been found in Bombay; but shortly afterwards the enormous imports of piece goods and varns from Lancashire set the merchant community wondering whether it might not be feasible to fight Manchester with her own weapons and themselves supply the demands of the island and the Presidency. In 1854 the first mill, the Bombay Spinning and Weaving Company's Mill, commenced working, and by 1860 six more had been opened and had attracted to the island a considerable industrial population.

Meanwhile the influx of population engendered by the above causes impressed upon all minds the need of improved communications, more space for building and a better system of conservancy. The Fort this date (1850) was described as looking like "a large basket stuffed so full of goods that they threatened to tumble out of it." "The dreary, treeless, sunburnt wilderness of the Esplanade during the hot season with its few dusty narrow roads leading to the native town was appalling. Almost

universal darkness prevailed as soon as night set in: all traffic ceased, and people traversing the maidan after 9 p.m. were in mortal fear of thieves and robbers. The Fort was like a city of the dead; neither footpassengers nor carriages could be seen, and if a man passed he walked as it were by stealth and flitted away like a spectre. Had anyone the misfortune to arrive with baggage after dark at any of the three gates through which entrance could be obtained, his vehicle was gruffly stopped by the sentinel on duty and he was told that nothing could come in." In 1841, a year after reclamation on a small-scale had been initiated by Messrs. Skinner, Brownrigg and Richmond, the public press had condemned the Fort as an obsolete and troublesome burden upon the community and under the auspices of Lord Elphinstone (1853-60), the pioneer of Bombay urban improvement, some attempt was made before 1860 to clear away the oldest portion of the defences. The delay which occurred in demolishing the whole of the ramparts and the decision of the Fort Improvement Committee in 1848 to remove merely the rayelins and art works was partly due to the opposition of the native community who in an appeal to Government in that year pointed out that fresh space for the extension of the town was readily available in Colaba, Girgaum, Dhobi Talao and Breach Candy.

The conservancy of the town was likewise a subject of constant discussion at this period. Public health and the conduct of civic affairs were originally in the hands of the Justices of the Peace, who had been succeeded by Courts of Pretty Sessions, Magistrates of Police, and finally by a Conservancy Board in which "obtuseness, indifference and party spirit appeared to have completely overcome whatever medium of public spirit was still conserved among its members". Consequently in 1858 an Act was passed abolishing the conservancy board and substituting for it a triumvirate of Municipal Commissioners, which existed till 1865. It was during their regime that the Vihar waterworks, for the opening of which the city was indebted to the determination and liberality of Lord Elphinstone, were taken in hand, whereby a population annually liable to decimation by water-famine was for the first time supplied with a sufficiency of good water. They also prepared a rough scheme of drainage which was published in 1861. These projects were rendered imperative by the rapid expansion of the town. Prior to the date of the Mutiny the most important improvements were the Bellasis Road with its two gaping black ditches on either side and the construction of the Mahim causeway, which was opened in 1845 and was described as " a stupendous mound which cuts off an arm of the sea and promises to give to the husbandman what has hitherto been an unproductive estuary, a bridge which enables the traveller to pass a dangerous ferry in safety". But subsequent to 1857 the town expanded to such an extent that apathy in the matter of public improvements was no longer possible. Malabar Hill, Breach Candy and Mahalakshmi were eagerly seized upon by the European and upper class native residents; the ancient oarts and gardens were peopled by the poorer classes, whom the prospect of lucrative employment enticed from the districts of the mainland. " On the whole of the district," wrote a correspondent of the *Times of India* in 1860, " lying between the sea and Girgaum Back Road, building operations have been in active progress for some years past but have within the last two years been pushed on with unprecedented rapidity. Houses are rising in all directions and what was

some few years ago merely a cocoanut plantation will within the next half century be as thoroughly urban as Mandvi or Khara Talao. Cavel and Sonapur are utterly destitute of cross-thoroughfares and illustrate what will be the future condition of the whole oart district if systematic proceedings are not at once adopted."

Two serious breaches of the public peace occurred during this period. The earliest occurred at Mahim on the last day of the Muharram, 1850, in consequence of a dispute between two rival factions of Khojas and resulted in the murder of three men and the wounding of several others. The later riots broke out between the Muhammedans and Parsis in October, 1851, in consequence of a very ill-advised article upon the Muhammedan religion which appeared in the Guiarathi. Muhammedans, enraged by the Parsi editor's strictures upon the Prophet, collected at the Jama Masjid on the 17th October in very large numbers, and after disabling a small police patrol which had been posted there to keep the peace fell to attacking any Parsi they met and destroying the property of members of that community. The public conveyance stabled at Paidhoni were wrecked, liquor shops were broken into and rifled, shops and private houses were pillaged. Captain Baynes, the Superintendent of Police, aided by Mr. Spens, the Chief Magistrate, managed with a strong force to disperse the main body of rioters, capturing eighty-five of them; but towards evening, as there were signs of a recrudescence of violence and the neighbourhood of the Bhendi Bazar was in a state of practical siege, the troops of the garrison were marched down to Mumbadevi and thence distributed in picketing parties throughout the disturbed area. This action had the effect of finally quelling the disturbance and the annual Muharram festival, which commenced on the 27th October passed off quietly.

The period of the Mutiny was fraught with anxiety to the European residents of Bombay, and more than one native of standing narrowly escaped arrest for high treason, as the result of false complaints laid before the authorities by interested parties. Among those thus secretly impeached was Mr. Jagannath Shankarshet (1804-65) who might conceivably have incurred the same fate as Rama Kamati in earlier years, had Lord Elphinstone been less calm, circumspect and resolute. Jagan-nath's guilt was firmly believed in by several Europeans of influence, who brought the facts to the notice of the Governor: and he ordered an investigation to be made by Charles Forjett, Superintendent of Police, who was able to satisfactorily prove that the stories were wholly unfounded. Nevertheless the widespread anxiety in Bombay between May and September 1857 was by no means groundless. There were at this date three sepoy regiments on the island and only one European force of 400 men under Brigadier Shortt. The native troops were implicitly trusted by their officers and the chief danger apprehended by the Bombay Government was from the Muhammedan population which numbered at this date about 150,000. Besides the troops, Mr. Forjett was in charge of a number of native and 60 European police. Forjett, who was born and bred in India and could disguise himself as a native without fear of detection, was convinced that the towns people would not stir without the sepoys; but he knew that the latter were planning mutiny and much to the disgust of the Brigadier made no secret of his views. The Muharram was

approaching, which is always an occasion of anxiety in Bombay even in times of peace; and the plans made by Government to keep order involved the splitting up of the European troops and police into small parties. Forjett by no means approved of an arrangement by which there would be no Europeans to oppose a mutiny of the sepoys at the place where it was likely to begin. As regards the troops he could do nothing, but he told the Governor—that he felt obliged to disobey orders as to the location cf the police. " It is a very risky thing," said Lord Elphinstone, " to disobey orders; but I am sure you will do nothing rash."

Forjett did disobey orders, in spite of risk. He wandered round the city in disguise every night of the Muharram and whenever he heard anyone sympathising with the success of the mutineers in other parts of India, he at once whistled for his men, some of whom were sure to be near. The scoundrels of the town were so alarmed at these mysterious arrests, which seemed to show that the authorities knew everything, that they remained guiet. But towards the end of the Muharram, a drunken Christian drummer belonging to one of the sepoy regiments insulted a religious procession of Hindus, and overthrew a god that they were escorting. He was at once arrested and placed in custody; but the men of his regiment, incensed at the action of the police, whom they detested on account of Forjett's hostility to themselves, hurried to the lock-up, rescued the drummer and took him with two policemen to their lines. A European constable and four natives went at once to demand that their comrades should be released and the drummer given up. They were resisted by force; a struggle ensued, and the police fought their way out, leaving two sepoys for dead. The sepoys were in the utmost fury and excitement, and Forjett was summoned by his police. Forjett was equal to the emergency. He ordered his European police to follow him, and galloped to the scene of the mutiny. He found the sepoys trying to force their way out of the lines, and their officers withdrawn swords with difficulty restraining them. On seeing Foriett their anger could hardly be controlled. " For God's sake, Mr. Forjett," cried the officers, " go away ". " If your men are bent on mischief," he replied," the sooner it is over the better". The sepoys paused while Foriett sat on his horse confronting them. Soon his assistant and fifty-four European constables arrived, and Forjett cried," Throw open the gates—lam ready for them!" The sepoys were not prepared for this prompt action; and in the face of the European force judged discretion to be the better part of valour.

A few days later, Forjett erected a gallows near the police office, summoned the chief citizens whom he knew to be disaffected, and pointing to the gibbet told them that on the slightest sign that they meditated an outbreak they would promptly be hanged. The hint was taken. But there was still danger from the sepoys. Forjett learnt that a number of them were systematically holding secret meetings at the house of one Ganga Prasad. He immediately had this man arrested, and induced him to confess what he knew. The next evening he went to the house and through a hole in the wall gathered from the sepoys' conveisation that they meant to mutiny during the Hindu festival of the Diwali in October, pillage the city and then leave the island. His report of this to the officers was received with incredulity; but Forjett persuaded Major Barrow, the commandant of one of the regiments, to go with him to the house. " Mr.

Forjett has caught us at last !" said Brigadier Shortt when the facts were reported to him. Court-martials were promptly held, the two ring-leaders —a native officer of the Marine Battalion and a private of the 10th N.I. were blown from guns on the Esplanade, and six of their accomplices were transported for life. The Diwali passed off quietly, and thus by the prescience of the Superintendent of Police, Bombay was saved from the horrors of mutiny.

The town meanwhile had watched the course of affairs in Bengal with feverish interest. A great meeting was held in the Town Hall in July 1857 to form a fund for the relief of those who had suffered in the mutiny; the Parsis met *en masse* on the beach at Back Bay and thence moved to the fire temple, in Chandanwadi to prey for the success of British arms against the rebels; and after the Queen's Proclamation, which was read from the steps of the Town Hall on the 1st November, 1858, thanksgiving was offered in every temple, mosque and church upon the island and all sections of the people were present at the festivities and illuminations arranged in honour of that event.

A mention may here be made of the proselytising activities of Christian missionaries who were actively helped by responsible officials as for example Mr. Fisher, acting Governor of Bombay (1841). These activities soon assumed aggressive proportions and caused great commotion in Bombay. The Parsees were much agitated and large amounts of money were spent by them on carrying on counter propaganda against missionaries by publication of books, pamphlets, booklets etc. Vishnubuwa Brahmachari next took vp the challenge (1855) and carried on his woidy crusade on Chaupati sands. But he was gagged by Government. This agitation went on vigorously till about 1857.

Government in the beginning appeared to be having a strictly impartial policy in religious matters. They did not want to give any offence to the people, on the contrary they wanted to assure them that they would not allow any propaganda in favour of Christianity.

From the correspondence published in the name of 'a native' in the Bombay Samachar (A Gujarati weekly 11th February, 1841) and also from the comments in the Bombay Courier (4th March, 1841) it seems that two Parsi boys were converted to Christianity by the local Presbytarian Mission. The Courier states, " As both the boys gave up the religion of their forefathers, there was great excitement amongst the native (Parsi) population. The Parsis boycotted the missionary schools withdrawing their children from them, whose chief aim was the spread of Christian religion. The Parsi community organized resistance on this occasion. They sought legal assistance and went up to the Supreme Court. It seems they also lodged complaints with highest authorities in England; but nowhere they could succeed. How the highest Government officials also used to take part in such activities was proved when a public reception arranged in honour of the Hon. Mr. Fisher was effectively boycotted by the Bombay public (February 1841). Mr. Fisher who was the senior member of the Governor's Council had also worked as acting Governor. It was alleged that Mr. Fisher had helped the missionaries in their proselytising activities when he was acting Governor. At the time of Mr. Fisher's retirement from

the service a public meeting was organized as mentioned above by the Europeans in the city of Bombay in appreciation of his long meritorious services by creating scholarships in a missionary medical school from a memorial fund which was proposed to be raised from the public of Bombay. This meeting was opposed by the native population of Bombay particularly the Parsis. A correspondent in the *Bombay Samachar* (11th February, 1841) stated "I am sure nobody would join in the move for the collection of the fund. Anybody who gives money to patronize a missionary school will help proselytisation of the natives. So no native should attend this meeting.". This meeting was duly held in the Town Hall on the 19th February, 1841, under the chairmanship of Mr. James Henry Crawford. The native population effectively boycotted it. Only two natives, one Parsi and the other Muslim attended it. The Europeans were surprised by this demonstration of unity and strong opposition. One of them Mr. John Iskiner went to the length of saying, " the natives have shown their ingratitude to Mr. Fisher who had done so much for their welfare and who was their true friend. The natives thus have insulted Mr. Fisher.". Mr. Iskiner even proposed a resolution at the meeting recommending that natives be excluded from contributing to the fund. However, better counsel of the chairman prevailed and the proposal was rejected (Bombay Samachar, 21st February, 1841).

The then Governor Sir J. Rivett-Carnac while speaking before the students of the Elphinstone Institution took pains to emphasise the value and use of English education which was meant for their happiness and welfare. He asked the Europeans also to help the natives without any selfish motives (Bombay Samachar, 25th March, 1841). Sir Carnac in his talks with the professors and scholars of the said Institute declared that in order to banish fear of proselytisation and other apprehensions, small or big, the Government had instituted a board of education and entrusted to it the work of education {Bombay Samachar, 1st April, 1841).

Another incident of conversion to Christianity created the same sort of hue and cry in the city in the month of May 1841. This was described as " Zulum on the pattern of the Pindharies " by some newspapers. In this instance a 16-year old boy Sorabji according to the report in the Bombay Samachar (27th May, 1841) left his house and was traced in the house of a missionary. His old mother and sisters went there and tried to persuade him to come back but they did not succeed. Sorabji, because of the various inducements and temptations offered by the missionaries refused to go with his mother. He was the only son of the aged mother. She cried and cried and also sought police help. The police took the boy to the Mazagaon Police Court where in the enquiry it was found that the boy was illiterate but it was his wish to adopt Christianity. The lad refused to go home to his mother. So the police took him the next day to the missionary's home where he was converted to Christianity.

The *Bombay Samachar* writing on this incident states, "we cannot describe in words the misery and torture of the mother of the converted boy. She is suffering from old age and poverty. Have these missionaries and those who patronize them thought for a moment how miserable they themselves would be if their son was beguiled to court a religion other than that cf his forefathers? We ask, "what domes this immature and

illiterate boy who does not know his mother language properly (Gujarati) nor has any knowledge of his own religion understand about the Christian religion? And what advantage the missionaries bring to their religion by converting such boys of tender age and who have not much intelligence also?"

Criticising the attitude of Government the paper writes "When the British ruk in India began the people were given a guarantee that their religion would be protected and no harm would come to the people. Last time when two Parsi boys were converted to Christianity the *Native* made a petition to the Government expressing their grievance and feelings. The authorities replied that they would not interfere with religious matters and would keep aloof. This would not do. They should do more than that."

"In earlier times Pindharies plundered and tortured the people and the rulers (native) connived at it and allowed them to plunder as they (rulers) also used to have their share in the loot. Similarly the Government of the day do not prevent the missionaries who are like the Pindharies and allow them to torment the people and do what they like. The Government only says, "we do not interfere". Old rulers used to serve their cause through the missionaries. This is confirmed, if what we read in Calcutta newspapers is tiue. If that is true then we would say that the Government is openly helping the missionaries. We read from Bengal newspapers that the Government intends to bring a bill to enable the Hindus to share in their ancestral property even after their conversion to Christianity. This proves that the Government has employed Christian Missionaries for the spread of Christian religion in the country."

At the end of the article the paper has appealed the Government to stop this "Pindharies like *zulum* of the missionaries and to restore the trust and contentment among the people wherein alone lie the security and strength of the State."

It would be worthwhile to reproduce the comments of the *Bombay Times* of 15th January, 1859 on the "Deadly National Rebellion" as it deals with the great uprising of 1857.

" If you choose to turn your eyes to the truth and call it, as some of your high civil officials in 1857 called it, a mere Military mutiny, the blame of keeping up a large Sepoy Army with an absurdly small number of European soldiers in the country, with the Empire daily extending, lies at the door of the Court of Directors. If you call it by its right name a deadly national rebellion, more fierce and sanguinary than ever occurred in France, the blame of annexing Oude against solemn treaties (as now admitted by every Member of Parliament, but long ago ineffectually dinned into Lord Dalhousie's ears by the whole press of India, save the " Friend "), lies at the door of their pet servant whom they rewarded with a pension of Rs. 50,000 a year, to be paid out of the revenues of the very land which he had so cruelly despoiled. Who, but the Court of Directors, refused to allow Nana Dhoondoo Punt (the notorious Nana) to sit on the gadee of the Great Bajee Rao Peshwa, in defiance of the shastras on the false plea that a Hindoo's adopted son was not a legal heir, and on the same plea deprived the Nana of a pension of Rs. 8,00,000 per annum? Who, but the Court of Directors refused to entertain the just and equitable

prayer of the Ranee of Ihansi, to have her husband's adopted son placed on the *Masnad*, and punished her by annexing her territory? Who but Lord Dalhousie, forgetting the period of history when the Company's servants had to beg of Shah Alum for a small bit of territory known as the Dewanny of Bengal, forgetting the immense wealth, influence and power of the whole line of Muhammedan Emperors that ruled India from the Throne of Delhi in the days of Yore would so far insult and exasperate the old King (now on his way to the Cape), as to inform him that on his death (he was then 70 years of age) his throne would be extinct and his pension of rupees 1,20,00,000 per annum resumed? Who, but Lord Dalhousie would have annexed the large provinces of Nagpore and appropriated a revenue of about Rs. 15,00,00,000 per annum, merely because the Ranee of the late Raja desired to place the Raja's adopted son on the throne; and so we might go on tearing to tatters all those mighty acts of spoliation in India which the blind Ministers of England, misled by the Court of Directors, were wont to call great political achievements.

Irresistibly then will the conclusion force itself upon every impartial inquirer that, to the Government chiefly, to its breach of faith and breach of sacied Hindoo Laws in its relation with Muhammedan and Hindoo Princes, to its oppressive and defective Revenue Laws and still more defective administration of justice, civil and criminal, are we, the European residents of India, indebted for the loss of our dearest kinsmen whom the Government cannot replace and for the loss of our houses and household property, the accumulations of 20 and 30 and sometimes 40 years of hard toil in a foreign land, which the Government can and is bound to replace. The Government of India will do well to abandon the pernicious habit of disguising the true causes of this rebellion."

The years which elapsed between 1820 and 1860 were emphatically years of steady improvement. Yet, notwithstanding the building of mills, the opening of institutions like the Grant Medical College and the projection of water works the town had still to be decked in a manner worthy of her position as a possession of the British Crown. Increasing commerce demanded new facilities for transit and new wharfage and pier accommodation. Fortunately for posterity the administration was entrusted at this juncture to one who clearly realized the need for expansion and urban improvement and possessed the energy and determination to carry it out in face of the obstruction and indignation of the Government of India; while circumstances, to be referred to hereafter, placed at the disposal of Bombay the funds needed to perfect her transformation from a mercantile town into a splendid and populous city. Modern Bombay really dates from the year 1860 and was brought into existence by the achievements of Sir Bartle Frere's administration.

The period between 1860 and 1865 was one of feverish activity in Bombay, and was marked by progress in every branch of the administration. In the case of the island's railway communication the advance was particularly noticeable. At the close of 1860 the Great Indian Peninsula Company had opened their line as far as Thane, and three years later, on the 22nd April 1863, the Bor *Ghat* incline was opened. Sir Bartle Frere was present at the opening ceremony and in recalling the words of Sir John Malcolm, in 1830 said: "When I first saw the *Ghat* some years later, we

were very proud in Bombay of our mail cart to Poona, the first and at that time, I believe, the only one running in India; but it was some years later before the road was generally used for wheeled carriages. I remember that we hardly met a single cart between Khandalla and Poona. Long droves of pack bullocks had still exclusive possession of the road and probably more carts now pass up and down the *Ghat* in a week than were to be seen on it in a whole year. But the days of mail cart, and bullock cart, as well as the Brinjari pack bullocks, are now drawing to a close". The value of the railway in fostering the growth of Bombay has been well nigh incalculable; both European and Native profited by the saving of time and expense thereby assured and a journey to the Deccan, which once cost £ 6 and lasted twenty-four hours, became by virtue of a splendid feat of engineering, an easy achievement costing but a few rupees and lasting only for about six hours. Nor was Gujafat forgotten. Communications in that part of the Presidency were inferior to those of the Deccan and Konkan, by reason of the entire absence of made roads. This mattered but little in the fair season when communication by sea was open; but for three or four months every year the inhabitants of Gujarat were denied all means of access to Bombay and many a luckless resident of Kathiawar, Ahmedabad or Baroda died of sickness that might have yielded to treatment in another climate. The opening of the first section of the Bombay, Baroda and Central India Railway in 1860 therefore brought relief to many, and was followed by the opening of the Broach ajid Baroda section in 1861 and of the Ahmedabad section in 1863. Finally in 1864 the line which the Company had been forced by Government to commence at a distance from its base of operations was completed southwards as far as Bombay. The original proposal, made by Sir George Clerk when Governor of Bombay, had been to give the Bombay and Baroda Railway a concession of the shallow waters of Back Bay, which had been converted by the inhabitants of the adjacent undrained native town into a noisome and pestilential foreshore, on the sole condition of their constructing their railway across it at an estimated cost of about £ 90,000. This outlay would have been more than covered by the sale of the land reclaimed between the railway embankment and high water mark. The Home Government, however, objected to this being done by the railway with their guaranteed capital, and the concession was given to a company of Bombay merchants, the agreement being that the Back Bay Reclamation Company, after reclaiming from the sea and making over to the Government the land required for the railway and other public purposes, should make its profit out of the rest of the reclaimed land.

Further encouragement was afforded to trade by the institution of a regular service of coasting steamers and by the opening of the Suez Canal. In 1866 Government arranged with the Bombay Coast and River Steam Navigation Company for the maintenance of steam ferries between Bombay and Mandva, Karanja, Revas, Dharamtar, Uran and Ulva; while the opening of the Suez Canal in 1869 effected a complete revolution in the carrying trade of Bombay, which had up to that date been restricted by a lengthy voyage round the Cape. Early in the previous year a weekly mail service had been instituted in response to the agitation commenced in 1857 and Bombay had become the port of arrival and departure for all the English mails. The claims of Bombay to be

regarded as the imperial port of India had become too strong to be disregarded for the sake of local interests; arid by 1875 Bombay harbour had become acquainted not only with the P. & O. weekly mail steamers but with the Government transports conveying the annual reliefs to India, and with the passenger steamers of the Austrian-Lloyd, the Rubattino, the Anchor, the Clan and the Hall Lines. The British India Company also had entered into a contract with Government for the carriage of mails from Bombay to all the other large ports of India. Finally, to complete the record of what was done during these years to improve communication between Bombay and the rest of the world, we may mention that a direct submarine cable was laid down from Suez to Bombay in 1870, in connection with the cable from Falmouth to Gibraltar. A cable had been previously laid down in 1860, but it became useless after one or two messages had been transmitted through it. Telegraphic communication between England and Karachi by a Persian Gulf cable was however successfully established in 1865.

The third fundamental cause of the growth of Bombay was the enormous increase of the cotton-trade and the subsequent Share Mania of the years 1861-65. The outbreak of the civil war in America, which at once cut off supply of American staples, is calculated by Maclean to have given to Bcmbay roughly 81 millions sterling in five years over and above what she had in former years as a fair price for her cotton. " Allowing " says he, "a liberal margin for errors of valuation at the Custom House, we may compute the clear addition to the wealth of Bombay at 70 to 75 millions sterling a tolerably substantial foundation for speculators to build upon. An unexampled exportation of cotton continued as long as the war lasted ". " The produce of all the great cotton fields of India, Nagpur, Berar, Gujarat and the Southern Maratha Country ", writes Sir Richard Temple, " found its way to Bombay in order to be exported to England with all possible despatch, while the high prices ruled and the blockade of the South American ports lasted. So sudden was the demand, so high the range of price, so vast the profits, that an economic disturbance set in, Money seemed to lose its purchasing power, the prices of almost all articles rose simultaneously and the wages of labour were enhanced in proportion ". Dealers were absolutely indifferent to quality, so long as they could hurry on the staple to the market and gain the fortune spread before their eyes. The press voiced the forebodings of the wiser portion of the public, but was not heeded. The economic history of most commercial countries has shown that when money in vast quantities seeks for and fails to find sound investments, it will be wasted. The wastage takes the form of unwise or insane speculation. It was to such speculations that Bombay fell a victim during these years.

At the outset, speculation was confined to ventures in cotton and piece-goods; but as the money made in this way accumulated, and adventures from all parts were attracted to Bombay all sorts of ingenious schemes were devised for putting the newly-acquired wealth to use. By 1864 the whole community of Bombay, from the highest English official to the lowest native broker, became utterly demoralized and abandoning business gave themselves up to the delusion that they could all succeed in making fortunes on the stock exchange. Up to the end of 1863 almost the only new form of enterprise brought before the public had been the

creation of joint slock banks; but in that year the Bombay Shipping and Iron Shipping Companies were started to make Bombay merchants independent of English ship-owners, and the shares of the former company went to nearly 200 per cent, premium and were retained at that rate, the promoters being men who were reputed to have made millions in cotton and who had already secured public confidence by the successful manner of their launching of the Asiatic Bank. Then came the year 1864, when the prospect of the conclusion of the American war seemed, thanks to the genius of Lee and the stubborn valour of his soldiers, to be further off than ever. No bounds therefore, it was assumed, could be set to the flowing tide of Bombay's prosperity, and everyone hastened to plunge in and let himself be borne upwards to fame and fortune. It is literally the case that in 1864 banks were brought out by the dozen and financial associations, a new engine foi the promotion of speculation, by the score. The first, afterwards known as the old Financial Association, appeared in June and had its shares run up to nearly 100 per cent, premium on the nominal capital of Rs. 400 per share, while only Rs. 100 had been paid up and no business done. The lucky receiver of an original allotment could therefore make about £ 40 on each £ 10 share, without putting himself to any immediate trouble beyond that of signing his name. It is needless to say that there was a frantic rush for shares; and that soon the newspapers were crammed with announcements of new financial associations. But all other speculation was dwarfed by the magnitude of the Back Bay Reclamation project, which was designed in the first place to provide the land on the shore of Back Bay along which the B.B. and Cl. Railway ran, and afterwards to use the residue of the ground reclaimed for the purpose of providing sites for marine residences. The value of land had been trebled and quadrupled in Bombay, the population was daily increasing in numbers, and as the available space within the island was very little, every additional foot tacked on seemed likely to be worth its weight in gold. Fierce opposition was made to the grant to a private company of so valuable a concession; and the Bombay Government which had determined to make something for itself out of the rage for speculation by taking a number of Back Bay shares, was forced by the Government of India to abandon such a partnership. The astute promoters of the company then sold these shares by public auction, the brokers ran them up to Rs. 25,000 a share on Rs. 4,000 paid up, or more than 600 per cent., and this sale may be said to have sent the city quite mad.

A share list published on the 31st December 1864 shows that at that date there were in existence 31 banks, 16 financial associations, 8 land companies, 16 press companies, 10 shipping companies, 20 insurance companies against 10 in 1855, 62 joint stock companies where in 1855 none had existed. The Back Bay Company's transactions had proved too great a temptation for the merchants of Bombay and the chance of making 600 per cent on one's money was too strong to be resisted. "Were there not other sites as valuable as the barren sands of Back Bay? Were there not the flats to be filled up and built over, the pleasant slopes of Trombay to be covered with country houses, to which the weary speculators of Bombay might retire every evening by means of a branch railway crossing reclaimed ground at the northern end of the harbour? Were there not banks of mud at Mazagaon and Sewri which could be converted

into docks and wharves to accommodate the ever-expanding trade of the greatest port in Asia? To crown all, when Bombay and the islands in the harbour had been exhausted, and even the most keen-eved speculator might have looked in vain for a square foot of muddy foreshore not yet appropriated by a local land company, a new plague fell upon the city in the shape of an importation from Calcutta of certain public-spirited promoters who were anxious to point out to Bombay capitalists what a splendid field for investment was offered to them by the swamp known as Port Canning near Calcutta. The bait took and early in 1865 the Port Canning Company appeared before the public with a list of influential directors that was alone sufficient to send the shares up to several hundred per cent premium. This was the climax. It was impossible to surpass the Port Canning Company; and in the spring of 1865 a sudden end was put to further speculation by a telegram announcing the surrender of Lee's army and the termination of the war in America.

Then the reaction set in. The price of Dhollera cotton in the Liverpool market, which at the beginning of the year had been 19 1/2 pence per pound fell to 11 pence before the end of April; and as it was evident that in the natural course of things there must be a further heavy fall, the prices of all securities gave way in sympathy with cotton. Men who had been trading or speculating beyond their means found themselves unable to meet their engagements; a leading firm of Parsi merchants set the example by failing for 3 millions; and a panic ensued which baffles description. Every one soon discovered that the nominal capital of the numerous companies in existence only represented so much paper money; that a few shrewd men had first started banks and run up the shares to a premium, and then obligingly started Financials to lend money to other people to buy these shares from them. The banks again had been able to do no business beyond advancing money on the shares of land companies brought into being by the financial associations; and so the whole show of wealth of these various establishments had depended on nothing but dealing in one another's shares. When the crash came, there was nothing to meet it but paper, and the whole elaborate edifice of speculation toppled down like a house of cards. The shares of land companies might have been supposed to represent valuable property; but the fall in cotton was followed by a depreciation in land which brought down shares from 500 or 600 per cent, premium to a discount. The scales fell from the eyes of the public and they saw the worthlessness of the properties they had bought under the influence of a strong delusion. A wild rally made at the end of 1865, when the price of cotton was temporarily forced up again—leaching in December 17 3/4 pence a pound —was quickly followed by a relapse and by the terrible commercial crisis of the spring of 1866 in England; and then the panic at Bombay set in with renewed intensity. Finally the master-spirits of the speculative era were themselves pressed hard, and in their fall they brought down institutions whose credit had been deemed beyond suspicion. By the end of 1866 every one of the financial associations had failed and gone into liquidation; all the banks, with the exception of the Oriental, the Chartered Mercantile, the Chartered, the French Bank, and one or two others, which had not their headquarters in Bombay, had also been swept out of existence; and not a land company remained that was not insolvent, with the exception of the old Colaba Company and the

Elphinstone Company. The latter had done good work and possessed a valuable property; and it was able to keep on its way for some years till a sympathetic Government relieved it of anxiety by buying all its shares at par. The collapse of the Bank of Bombay created much scandal in India and in England; and the causes of it were investigated by a Royal Commission and discussed two or three times in Parliament. The disasters that befell the surface of society formed but a fraction of the misery occasioned by the failure of the leading merchants and firms. The impossibility of realising land assets for cash and distributing the proceeds gave rise to a widespread under current of distress, blighting careers once promising and condemning many lives to a hopeless and degrading bondage. By the close of 1867 the panic had subsided, and commercial affairs which fortunately suffered no permanent injury from the wild excesses of these five years commenced to regain a normal aspect. Moreover, the future financial independence of Bombay was placed in its own keeping by the opening in 1868 of a new Bank of Bombay, which was to form an impregnable centre of commercial stability. The new bank, as the contemporary press remarked, had the strongest negative guarantee for safety in the history of the four years downfall of the old Bank.

The Share Mania by good fortune did no permanent injury to the trade of Bombay; while it, at the same time, was responsible for improvements which might reasonably have taken many years to introduce. At the outset when the piles of gold commenced to stream into the city, the public mind was directed towards improvements that might render the island more spacious and more wholesome; and at the head of the Government was just the one man who could stimulate the public desire and guide it by zeal and enthusiasm to a practical issue. " The old town of Bombay was ill-built, ill-drained, or rather not drained at all, very dirty and very unhealthy. Land for building was urgently required by the rapidly increasing population, and space for more airy streets and houses. Frere was a keen and ardent sanitary reformer, abreast of all the latest knowledge on the subject. He had obtained a report on the condition of the city from Dr. Leith. President of the Bombay Sanitary Commission; and he called to his assistance Dr. Hewlett, then recently returned from England, where he had been making a special study of sanitation." It was Sir Bartle Frere who was mainly responsible for the final orders of 1862 for the removal of obsolete fortifications and useless public buildings and of the old ramparts of Bombay which were not only useless for purposes of defence but occupied a large space between the busiest portions of the town. The high walls interfere with the circulation of air, and the ditches contained foul and stagnant water, which was responsible for a considerable amount of disease. Accordingly, under the Governor's, auspices, the walls were levelled, and the old Fort, which had frowned upon the Malabar pirate and had watched the Company's fleet sail forth to punish Angre, disappeared forever. The space, thus set free, was partly laid out in roads, open spaces and public buildings; and the remainder, comprising a considerable area, was sold under conditions arranged so as to secure the interests of the public and for a sum which was sufficient to cover the whole expense of the work done.

The task of driving back the ocean was also undertaken. " The traveller

landing at Apollo Bandar about the year 1855 ", writes Maclean, " would have found a foul and hideous foreshore from the Fort to Sewri on the east, from Apollo Bandar round Colaba and Back Bay to the west, All round the island of Bombay was one foul cesspool, sewers discharging on the sand, rocks only used for the purposes of nature. To ride home to Malabar Hill along the sands of Back Bay was to encounter sights and odours too horrible to describe, to leap four sewers whose gaping mouths discharged deep black streams across your path, to be impeded as you neared Chaupati by boats and nets and stacks of firewood, and to be choked by the fumes from the open burning ghat and many an ancient and fish-like smell. To travel by rail from Bori Bandar to Byculla or to go into Mody Bay was to see in the foreshore the latrine of the whole population of the Native town". Of the wealth which found its way into Bombay subsequent to 1860, about six million pounds sterling was devoted to regulating and advancing into the sea below low water mark the whole of the Island's foreshore. Handsome works were carried out on either side of the Apollo Bandar, extending south westward almost to Colaba Church and stretching from the Custom House to Sewri along Mody Bay and the Elphinstone, Mazagaon, Tank Bandar and Frere reclamations—a distance of at least five miles. On the other side of the island was the great Back Bay reclamation from Colaba to the foot of Malabar Hill, whereon was constructed a good read and bridle-path. The area thus reclaimed amounted to more than 4,000,000 square vards, and resulted by 1872 in an increase of the area of the whole Island from 18 to 22 square miles. Simultaneously much energy was displayed in the construction of new roads and the widening of old tracks, among the chief works of this nature being the widening ?nd rebuilding of the Colaba Causeway in 1861-63, the commencement of the Esplanade, Rampart Row and Hornby Roads, the widening of Cruickshank and Carnac Roads in 1865 and 1866 and the completion of the Carnac, Masjid and Elphinstone overbridges in 1867.

More striking than new reclamation and communications were lhe great buildings and architectural adornments of the city which were projected and commenced during Sir Bartle Frere's tenure of office. The embellishment of Bombay was carried out by both Government and private citizens, both equally actuated by the spirit of the age, which demanded that some part of the newly acquired wealth should be allocated to the permanent advantage of the city. " It should never be forgotten," writes Maclean," that the splendour of the public buildings and useful and benevolent institutions of new Bombay is due to the munificence of the speculators of 1861-65." Thus Mr. Premchand Raichand, "the uncrowned king of Bombay " in those days of financial delirium, gave four lakhs for the building of an University Library building and a tower, to be named after his mother, the Rajabai Tower; the Jamsetji Jijibhoy School of Art came into existence; forty drinking fountains were by the liberality of Mr. Cowasji Jehangir erected in various quarters of the city; the Parsi community opened an ophthalmic hospital and a hospital at Colaba; a hospital for incurables was established at Byculla; and subscriptions were readily offered for the Victoria and Albert Museum, and the Sassoon Mechanics Institute. Public companies also played their part in the general progress of improvements. The Railway Companies opened new and extensive workshops at Parel; the Gas Company laid down their plant in 1862 and lighted a portion of the town with gas for the first time in

October, 1866; and the P. and O. Company commenced the conversion of the old Mazagaon dock into the largest and most perfect timber-slip in Bombay, Lastly may be mentioned the Elphinstone Circle, the scheme for which originated with Charles Foijett, was sanctioned by Sir George Clerk and was completed during his successors' tenure of office. The site of this imposing collection of buildings—the old Bombay Green, was purchased by the Municipality and resold by them at a profit in building lots to English mercantile firms, who gradually transformed the dusty open space, inhabited for the most part by crowds of pigeons, into an imposing example of street architecture. The suggestion that the circle should bear the name of Lord Elphinstone emanated from the firms concerned in the building thereof, who held a public meeting in 1862 at the office of Messrs. Ritchie, Stuart and Co. The proposal testifying to the support which Lord Elphinstone had accorded to the scheme in its infancy, was approved by Government, and under the name of the Elphinstone Circle one more striking improvement was added to the list of those executed during this period.

On the one hand, therefore, were private individuals and public firms, working during these years with one fixed idea of improving and enlarging the city, to which their several destinies had driven them. On the other hand were Sir Bartle Frere and his Government, actuated no less keenly by the same wish. "As lands for building purposes were very much needed " writes Sir Richard Temple, "and would command a high price, a project was formed for throwing down the walls of the Fort, taking up a portion of the plain, and making allotments of ground available for building. Sir Bartle Frere took up this project with his accustomed zeal, and obtained large sums in purchase money from those who bid for the allotments. The means thus acquired, together with grants from the Government, were collected and formed into a special fund for the construction of public offices and buildings for Bombay. The formation and management of this fund caused much correspondence with the Government of India; but the scheme held good and was duly carried into effect. Previously these buildings had been found unsuitable for the growing needs of a capital city, being cramped in space, badly situated and imperfectly ventilated; they were erected at a time when civilization was but little advanced in the settlements of the East India Company, and when architectural taste was almost unknown in British India. The opportunity was to be taken of giving Bombay a series of structures worthy of her wealth, her populousness, and her geographical situation. The designs were to be of the highest character architecturally; therefore architects were obtained from England to frame them elaborately and due thought was given to artistic effect. The operations were planned deliberately and were begun while Frere was still in Bombay. Their completion was arranged by his successors very much on the lines which he had laid down. They comprise the Government Secretariat, the University Library, the Convocation Hall, the High Court, the Telegraph Department, the Post Office, all in one grand line facing the sea. Other buildings in a similar style were built in other parts of the city, such as the Elphinstone College, the Victoria Museum, the Elphm stone High School, the School of Art, the Gokuldas Hospital, the Sailor's Home and others. Few cities in the world can show a finer series of structures; and those who admire the buildings after the lapse of fifteen years from the beginning of the work, may well be reminded that it is to Sir Bartle Frere that Bombay

owes the origination and inception of this comprehensive project. It would be a mistake to attribute too much to individual Governors; for when work is demanded by the spirit of the age, it will be done in some shape or other, whoever may be in power. But in justice it must be said, that Frere deserves the lion's share in the credit of this undertaking, and that without him the work would never have reached that magnitude which is now beheld by all English spectators with a feeling of national pride." In addition to the great buildings mentioned by Sir Richard Temple, we read of improvements to the Cathedral, new Police Courts in Byculla and the fort, the expenditure necessary for which was sanctioned by Government in 1866; of new light-houses on Kennery and the Prongs; of Harbour defences, batteries at Oyster Rock, Cross island and middle ground; of a Wellington Memorial Fountain; and of a European General Hospital; and many other works of utility and adornment. " Upwards of a million sterling, " says the *Bombay Builder* of 1866-67, " has already been expended upon the various works which have been undertaken by this Government in Bombay; and about a million and-a-guarter is the estimated cost of completing works already in progress. Two millions more will be required for projected works, including the Military cantonment at Colaba. More has been done for the advancement of important works during the present than during any previous administration. The works of progress that remain are blessings to Bombay; those that have miscarried are landmarks to guide the coming administration; and those that are retarded belong more to the financial policy of the Government of India than to the policy of Sir Bartle Frere."

No retrospect of this important period would be complete without a reference to the change and growth of Municipal Government, which was necessitated in the first instance by the increase of the city and of its population. Sir Bartle Frere, in speech delivered at the laying of the foundation-stone of the Elphinstone Circle in October 1864, remarked that " the three great objects which Lord Elphinstone had ever kept in view were, firstly, the water-supply of the city; secondly, the efficient drainage of the whole town and island; and, lastly, the reclamation of the flats." The first object had already been brought to a practical issue by the construction of the Vehar Lake; but by the time Sir Bartle Frere took up the reins of Government, the triumvirate of Municipal Commissioners, appointed by the Act of 1858, had effected little or nothing towards the consummation of the two latter desiderata. Moreover, the administration of 1858 had not met with the favour of the public, and was not so constituted as to be able to effect the radical improvements in conservancy and communications which were demanded by the spirit of those years. One of the most notable features, therefore, of Sir Bartle's administration was the abolition of the old triumvirate and the passing of Act II of 1865, whereby the Justices for the Town and Island of Bombay were created a body corporate, and entire executive power and responsibility was vested in a Commissioner, appointed by Government for a term of three years. A contemporary writer, in reviewing the events connected with the name of Sir Bartle Frere, remarked that "this Act at first sight appears quite unconnected with the building or improvement question, with which we now have to deal. But when it is remembered that the large revenues of the Municipality will come in part to be expended on works of public utility in coming years, and that the Municipal credit will

be pledged for carrying out vast and costly undertakings, our readers will confess that in the passing of the Municipal Act a rich vein of progress and development has been struck, which will yet in point of magnitude of operation and success distance even the efforts of Government and of public companies." The new system was unfortunately marred by one flaw, which eventually led in the closing year of the period under review to its discontinuation, and to the passing of a new Municipal Bill. Municipal administration, as has been remarked, was conducted by a Commissioner and the Bench of Justices; but the powers of the Commissioner were so extensive that he was practically irresponsible; and, in an age so fertile of great and costly works, he was open to a temptation to spend the money of the rate payers in a far too lavish manner. Had there only existed some constitutional check upon his powers and inclinations, the municipal system of 1865 might have lasted beyond 1872. But, as the Act contemplated no such check, costly works were set on foot, necessitating the disbursement of such immense sums, that something akin to a popular revolution took place in 1871, and Government felt itself compelled to create a new municipality, in which the rate-payers themselves should, by their representatives, have an authoritative voice. The first real experiment, for as such it has always been regarded, in municipal government in India was made by the Municipal Bill which passed the Legislative Council of Bombay, and received the sanction of the Government of India in 1872. The first municipal elections were held in the month of July 1873; and there came into existence from that date a Municipal Corporation, consisting of 64 persons all of them rate-pavers resident in the city of Bombay, of whom 16 were nominated by Government, 16 were elected by the Justices of the Peace resident in the island, and 32 were elected by the rate-payers.

Short as was the period, during which the municipal constitution of 1865 lasted, considerable progress was made in communications. An efficient health department was organised, and came into existence on November 1, 1865, which at once directed its attention to drainage, to the condition of burial grounds and to the presence of dangerous and offensive trades. The drainage question had for many years troubled the minds of those responsible for the welfare of the island. As early as 1863, journalism broke into a paean of praise over the prospect of such a reform, declaring that "Bombay is to be drained at last;" that " the Municipal Commissioners have taken steps for break-it ing ground at once in the Fort and in a fortnight or so, we may expect to see the beginning of the greatest sanitary reform, that can possibly be introduced, applied to Bombay." The unfortunate triumvirate was unequal to the task. Though the work was commenced in 1864, the feebleness of the old commission militated against a satisfactory issue thereof; and, in the meantime, the public had discovered that the most vital point connected with through drainage—namely, the location of the sewage outfall—was still undecided. The importance of deciding this question was put forward in 1865 by a special committee, appointed to deal with the drainage of flats, and it was not till after the Municipality of 1865 had been constituted that any definite advance in sanitary engineering was recorded. The Municipal Commissioner also returned his attention to the crying need of well-conducted markets and slaughterhouses, the bestknown of those erected prior to 1870 being the Arthur Crawford markets

which have been described as "the noblest and most useful of all the public improvements executed in Bombay, and as forming a grand monument to the energy and administrative capacity of the gentleman whose name they bear, and who was Municipal Commissioner of Bombay from July 1865 till November 1871". The increase of the Vehar water supply, the initiation of the Tulsi water works, and the reclamation of the flats with town-sweepings were further measures of utility introduced prior to 1872.

The birth of Bombay as a populous and beautiful city is ascribable, therefore, to the joint labours of Government, the Municipality, private firms and public-spirited citizens, who strove in their several spheres to render the once inconsiderable island worthy of her position as one of the outposts of a wide Empire. At the same time it must be remembered that the decade 1860-70 was responsible for the introduction of those conditions of urban life which have rendered the city a hot-bed of disease, and have necessitated the creation by a later generation of a special board, charged with the relief of overcrowding and the sanitary regeneration of the island. The evils arising from an unprecedented influx of population and the absence of any Act to regulate building and obviate overcrowding were clearly portrayed in the report of the health officer in 1872, whose description of the city proper forms a starting contrast to the agreeable account recorded by Maclean of the more salient features of the island. The death-rate in the Market section was unusually high in consequence of the condition of the houses in that locality; land in the Mandvi section was so valuable that the houses were built very high, the streets were narrow, and the people overcrowded, while the imperfect drains were often choked. Chakla was full of dark and ill ventilated milch cattle-stables. Naoroji Hill had already been mined by its owner " who let out plots of land to persons to build as they pleased, without any definite plan to ensure breadth of streets and ventilation of houses. In the heart of Dhobi Talao was " the dirty irregular labyrinth of Cavel. a Vehicles can only pass a very short distance into it, and one of the principal thoroughfares thither is through a liquor-shop in Girgaum road". Phanaswadi was honey combed with sewers: Bhuleshwar contained the indescribably filthy quarters of the milk-sellers known as Goghari; while Kumbharwada ranked as a shamefully neglected district, where the inhabitants sleep in atmosphere tainted with sulphurated hydrogen. Khetwadi was being rapidly covered with houses notwithstanding that during the monsoon the storm-water from the Falkland road main drain was ponded up in the Khetwadi back road to a depth of three or four feet. Chaupati and Girgaum were full of cesspools; the state of Malabar Hill was such as to cause grave anxiety to the guardians of the public health. Tardeo was beginning to attract so many people to its mills that a properly laid out village for mill-employees appeared desirable. Khara Talao possessed many houses in which it was essential to carry a light by day; the villages of Sindulpada, Agripada and Julhaipada were well nigh untraversable owing to the presence of an open drain; the thickly populated villages and hamlets of Parel were wholly undrained. The condition of Mazagaon and Sewri was more satisfactory. The former, however, still lacked a road across the waste ground reclaimed by the Elphinstone Company, which separated it from the Fort on one side and the native town on the other. The foreshore of Sewri had been vastly

improved by the Frere reclamation, but the section was handicapped, from a sanitary point of view, by the detached hamlets of Ghorup-deo and Jackeria Bandar in which dwelt the labourers and quarrymen of that time. Mahim was covered with thick cocoanut plantations and formed an agreeable resort during the morning or evening hours.

Of social events which occurred during this decade one may remark the rejoicing of the 1st May 1863 on the occasion of the marriage of the Prince of Wales, when the entire town was decorated and a huge children's fete was held on the Esplanade. This was followed by the visit of H.R.H. the Duke of Edinburgh on the 11th March 1870, in commemoration of which H. H. Khande Rao Gaikwad of Baroda, gave a munificent donation for the new sailors' home, and by the visit of Lord Northbrook, the Viceroy, in November 1872, who held a huge darbar of Native princes in a *shamiana* on the Esplanade and in whose honour the Northbrook Gardens in Grant Road were thrown open to the public. Improved communications by sea not only brought Bombay into contact with notabilities of the western world, such as Livingstone the explorer who sailed from Bombay for Africa in January 1866, but also inculcated a desire for travel in the minds of the Natives of India. Members of the Vani community began about this date to visit England in the interests of commerce, while several Khojas, Bohras and Marwadis, overcoming their inherited prejudices against foreign travel, set out for China.

The enormous increase of population engendered by the Share Mania of 1861-65, which led Sir Bartle Frere to order a census to be taken in 1864 in face of the opposition of the Home Government, naturally introduced fresh problems into the police administration of the city and for the first time brought the guardians of law and order face to face with the difficulties attendant upon the presence of a large and fanatical Eastern population. Both in 1872 and 1874 the orderly course of urban life was broken by riots of a serious character. The Muharram celebration of the former year formed the signal for a violent outburst of antagonism between the Sunni and Shia Muhammedans of the city, which was admirably held in check by the police under Mr. Frank Souter, but not before about sixty persons had sustained more or less severe injuries: while about a month later a somewhat serious fracas occurred outside the gates of the Towers of Silence on Gibbs Road between two factions of the Parsi community. But these outbreaks were almost trivial by comparison with the Parsi-Muhammedans riots of February 1874, which were caused by a scurrilous attack upon the Prophet written and published by a Parsi resident. Shortly after 10 a.m. on the morning of the 13th February a mob of rough Muhammedans collected outside the Jama Masjid and thence, after hearing the exhortations of the Mulla, began attacking the houses of the Parsi residents in the neighbourhood. Two fire-temples were broken open and subjected to desecration by a band of Sidis, Arabs and Pathans. who next proceeded to loot and damage every Parsi residence in the street and to attack with sticks and stones any stray Parsi whom they met. On the arrival of the police, the mob gradually dispersed, leaving about seventy of their number in custody, but not before considerable damage to person and property had been perpetrated in Bhendi Bazar, Khetwadi and parts of the Dhobi Talao section. The chief feature of the riot was the refusal of the Governor, Sir Philip Wode-house, to call out the

troops until the police were breaking down, in spite of urgent appeals from the leaders of the Parsi community. Sir Philip believed his powers in this matter to be restricted, but was subsequently informed by Lord Salisbury that extreme constitutional theories could not be safely imported into India and that therefore troops might be legitimately used to render a riot impossible.

The year 1870 was remarkable for the formation of the Bombay Port Trust, though the board of trustees was not actually appointed till June 1873. The decision to constitute a board originated in an apprehension on the part of Government that trade-interests were seriously endangered by the possession by private companies of a monopoly of the landing and shipping facilities at the port, the salient case being that of the Elphinstone Land Company, mentioned above, which had been granted extensive rights of reclamation on the eastern foreshore of the Island in return for its undertaking to provide land for the terminus of the G.I.P. Railway Company. The Company did very good work between 1862 and 1866, but, like all other firms in Bombay, suffered considerable loss when the Share Mania declined; and in 1866-67 its finances had sunk so low that it was forced to apply to Government for assistance. At this juncture (1867) the Government of Sir Seymour Fitzgerald strongly urged upon the Government of India the importance of buying out the company, thus regaining possession of the harbour foreshore and of placing the future administration of the harbour and wharves in the hands of a public trust. This proposal was sanctioned by the Secretary of State in 1869 and the Company went into voluntary liquidation in the following year, their property being transferred to the Secretary of State in consideration of the payment of the purchase money in 4 per cent Government of India stock. With effect from the date of purchase, May 1st, 1870, the whole of the property of the Company was managed by a department of Government in anticipation of the formation of the new Port Trust.

In November 1875 H. R. H. the Prince of Wales, the King-Emperor, landed in Bombay at the outset of his Indian tour, and was received with universal expressions of loyalty and goodwill, and two years later (1st lanuary 1877) Her Maiesty Oueen Victoria assumed the title of Empress of India. Bombay was en fete that day. The seamen of the Royal Navy and the mercantile marine were feasted in the Sailors' Home, the military and naval pensioners were feted in the old Sailors' Home: after which. Her Majesty's Proclamation was publicly read out before the troops and the people in front of the Queen's statue on the Esplanade. The day concluded with illuminations and with the despatch of congratulatory addresses to Her Majesty from the leading communities of the city. Equally spontaneous expressions of loyalty characterised the arrival of the Duke and Duchess of Connaught in 1883, the jubilee celebration of February 16th, 1887, and the visit of the late Duke of Clarence and Avondalein 1889. Meanwhile the two great railway companies threw out fresh lines and linked themselves with more remote railroads, until the island became the central terminus of a series of arterial railways, radiating in various directions across the continent of India. Communication by sea became yet more regular to the advantage of the inhabitants of the coast-villages who thereby were brought into even closer touch with the life of the city. Trade rapidly increased and with it

the demand for labour, which was responsible for an enormous increase of the Maratha population by the year 1882. " Bombay ", said the members of the Municipal Corporation in their address of 1875 to the Prince of Wales, " may lay claim to the distinction of being a Royal City; for this Island, first became an appanage of the Crown of England through forming part of the Dowry of Charles the Second's Portuguese bride; and during the two centuries that have elapsed since then, Bombay has had every reason to be grateful for this fortunate change in her destiny. From a barren rock, whose only wealth consisted in coconuts and dried fish. whose scanty population of 10,000 souls paid a total revenue to the State of not more than £ 6,000 a year whose trade was of less value than that of Thana and Bassein, and whose climate was so deadly to Europeans that two monsoons were said to be the age of a man, she has blossomed into a fair and wholesome city, with a population which makes her rank next to London among the cities of the British Empire, with a municipal revenue amounting to £ 30,000 a year, and with a foreign commerce worth forty-five millions and yielding in customs duties to the Imperial treasury three millions a year". The mill-industry throve apace during these years. Id 1870 there were only 10 mills on the island; in 1875 when the Millowners' Association was first established there were 27; in 1880, 32; and in 1890, 70 mills. The foundation of each new mill or new press, the opening of each new spinning or weaving department augmented the numbers of the industrial population, so that by the time the census of 1881 was taken, 8.4 per cent of the total labouring population were classed as mill workers. Meanwhile building operations and reclamations were steadily progressing. Three hundred new houses were yearly constructed in different parts of the city; new police stations were erected at Paidhoni and Bazaar Gate between 1871 and 1881; churches, temples and mosques sprang into existence and new water works were projected to supply the rapidly growing needs of the city.

"The Vehar Lake", writes Sir Richard Temple, " was found insufficient for the growing community, and the formation of an additional lake was undertaken in the time of my predecessors. The work was completed in my time and water was conducted to a higher level than before.". The Tulsi water works were completed in 1879; but even they failed adequately to supply the whole city. Accordingly in 1884 the Bhandarwada and Malabar Hill reservoirs were constructed, and in 1889-90 Mr. Tomlinson's scheme for works in the Pawai valley was put into execution. But these improvements were of minor importance compared with the great Tansa water works which were commenced about 1885. Sir William Hunter characterizing the project as the most important undertaking of the years 1885 to 1890 observes that "the city was and is for the present supplied with water from the Vehar and Tulsi lakes. But the growth of population has been so rapid that the supplies from these though comparatively recently provided, soon inadequate. The Municipality therefore decided, on the 19th November 1885, to adopt a magnificent project that will provide the city with an inexhaustible water supply. The scheme when carried out will afford another splendid proof of the public spirit of the citizens of Bombay and the skill of English engineers.". The Tansa works were finally opened in the year 1891-92 by the Marguis of Lansdowne who, referring to the magnitude of the achievement, congratulated Bombay upon the true

measure of municipal self-government which she had been the first among all cities in India to introduce.

Another great work was the construction of the Prince's Dock, the first stone of which was laid by the Prince of Wales in 1875. It was designed by Thomas Ormiston as part of a scheme for improving the whole foreshore of the harbour, and was finally opened on the 1st January 1880, the earth which had been excavated during the process from an area of 30 acres being applied to the further reclamation of the Mody Bay foreshore. Land reclamation was also steadily progressing. Fifty acres of swamp at Sion and Kurla were reclaimed with town sweeping and converted into a garden; a part of the foreshore near the wilderness was reclaimed by a member of the Petit family; the flats near Tardeo were being rapidly filled up by the Municipality; and a considerable area near Arthur Road was rendered fit for building operations. Tramway communication was instituted between 1872 and 1877. Some attempt at this form of communication had already been made in Colaba in earlier years, but a properly organised system was not projected till the date of Sir Philip Wodehouse's administration. By 1880 the Company's line had reached from the Fort to Girgaum, Byculla and Grant Road. Throughout this period also the Municipality was actively engaged in widening old streets, opening new roads, setting aside new sites for burial grounds, extending the lighting of the city and opening public gardens, such as the Victoria Gardens opened in 1873 and the Northbrook Gardens opened in 1874. Systematic drainage of the island was also taken in hand. " Much had already been done," wrote Sir Richard Temple in 1882, " at great cost and labour for the drainage of the city. Still a mass of sewage entered the harbour to the great detriment of all concerned. So additional drainage works were undertaken for diverting the sewage to a guarter where it would not be hurtful.". A comprehensive scheme had been prepared by Mr. Pedder, the Municipal Commissioner and Major Tulloch, R. E., and this was scrutinized and reported upon by a special commission in 1878. As a result of the Commission's report the Municipal Corporation resolved in the same year to commence the scheme immediately and raised a loan of 27 lakhs for that purpose.

The progress of Bombay between 1870 and 1880 is summed up by Sir Richard Temple (1877-80) in the following words: "The City of Bombay itself with its vast and varied interests, and its fast growing importance, claimed constant attention. The police, under the able management of Sir Frank Souter, was a really efficient body and popular withal. The public structures, begun or designed under Sir Bartle Frere's administration, were advanced towards completion; and although these showed a goodly array, still not a year passed without several new buildings being undertaken, as the demands of an advancing community in a great seaport are incessant. The stream of native munificence continued to flow, though somewhat diminished in comparison with former times by reason of agricultural and commercial depression consequent on the famine. A marble statue of the Queen had been erected by the Native community on the Esplanade. Sir Albert Sassoon presented to the city a bronze equestrian statue of the Prince of Wales, in memory of the visit of His Royal Highness. The new Sailors' Home, built partly through the munificence of Khande Rao, Gaekwar of Baroda, in honour of the visit of

His Royal Highness, the Duke of Edinburgh had become a noble institution. The new Wet Dock, accommodating the largest ships, was named the Prince's Dock, because the first stone of it was laid by the Prince of Wales.

"The elective principle had been introduced into the Municipality of Bombay by Sir Seymour Fitzgerald and established by Sir Philip Wodehouse, and I found it to operate advantageously. The citizens and rate payers exercised their franchise judiciously, electing good and able men, Europeans and Natives, to serve on the Municipal Corporation."

"The resources of Bombay were tested when in 1878 an expeditionary force was despatched to Malta. Within fourteen days after the receipt of orders from the Governor-General in Council (Lord Lytton), the Bombay Government, of which Sir Charles Staveley, then Commander-in-Chief, was a member, despatched 6,000 men and 2,000 horses, with two months' supplies of provisions and six weeks' supply of water. They all arrived at their destination in good condition, and after some months returned equally well; still the risks attending the navigation of the Red Sea, in sailing ships towed by steamers, caused us anxiety."

The first decade of the period under review (1880-90), during which Sir James Fergusson, and Lord Reay held the office of Governor in succession, was characterized by much activity in Municipal administration, by the further growth of the island trade and by large public benefactions. During Lord Reay's tenure of office a new Municipal Bill was passed, which not only served to consolidate the enactments of 1865, 1872 and 1878, but also introduced alterations designed to systematize the prosecution of drainage works and water works, the registration and assessment of properties, and the expansion of education. Street-widening and urban improvement were actively prosecuted during the decade, nearly a lakh of rupees being spent on the former object during the year 1889-90; more than 12 lakhs were sanctioned by the Corporation in 1882 for the completion of a scheme of surface-drainage and storm-water drainage; the Matunga leper asylum was founded in 1890 chiefly through the exertion of Mr. H. A. Acworth, the then Municipal Commissioner; the Joint Schools Committee, which was charged with the task of educating the masses, came into existence; the Victoria Jubilee Technical Institute was founded in 1887; and much good work was accomplished in the matter of communications, the erection of hospitals, and the general sanitary administration of the city. But the improvement of Bombay was not permitted to devolve wholly upon the Municipality. In January 1888 Sir Dinsha Petit offered more than a lakh for the construction of a hospital for women and children as an extension of the Jamsetji Jijibhoy Hospital; he founded a patho-bacteriological laboratory in connection with the Parel Veterinary College, and subscribed handsomely towards the foundation of a gymnastic institution; and he also presented Government with the property known as the Hydraulic Press, valued at Rs. 3 lakhs, in exchange for the Elphinstone College buildings which were converted into the Victoria Jubilee Technical Institute. Bai Motlibai, widow of Mr. Naoroji Wadia, founded an obstetric hospital in connection with the Sir J. J. Hospital; Mr. Framji D. Petit gave nearly a lakh of rupees towards the foundation of a laboratory in the Grant Medical College; the Albless family established an obstetric ward in the Cama Hospital and quarters for the lady doctors of the Cama Hospital; and Mr. S. C. Powalla founded a gratuitous charitable dispensary in the Fort. Besides donations for medical objects by Sir M. M. Bhownaggree, Mr. Cama and Mr. Dwarkadas Lallubhai, funds were provided by a Parsi lady for the establishment of an animal hospital at Parel which was opened by Lord Dufferin in 1884, an anglo-vernacular school for poor Parsis was opened with the help of Mr. Byramji Jijibhoy in 1890, and a handsome fountain was erected in Bazaar Gate Street by a charitable Parsi in the memory of Bomanji H. Wadia.

Among the institutions and landmarks of the island, which owe their existence to the action of the Bombay Government during these years, are the Victoria Teiminus of the G.I.P. Railway (The Victoria Terminus, G.I.P. Railway, is situated on the original site of the old Mumbadevi temple near the Phansi Talao or Gibbet Pond. The old temple was removed by Government in 1766 to allow space for fresh fortifications, a new shrine being erected by a Sonar, Pandurang Shivaji in the city proper. The old gibbet remained till 1805, when it was re-erected close to the Umarkhadi (ail.) and the European Hospital, which was erected on the ruins of the old St. George Fort and to which Lord Reay, on laying the foundation-stone in February 1889, gave the name of St. George's Hospital. The Government Central Press building, which subsequently became the Elphinstone College, and the Presidency Magistrate's Police Court on the Esplanade were also commenced during these years. Nor were the defences of the harbour forgotten. In 1884 the Press pointed out that they were practically useless, Colaba Battery being untenable, the turretships out of order, and the batteries at Middle Island, Cross Island, Malabar Hill and Breach Candy being wholly inefficient. In the following year a new scheme of defence was sanctioned and was carried into effect by the year 1890. The Port Trust, which, in spite of yearly reductions of dues, showed a steady surplus of revenue between 1880 and 1889, was responsible for the construction of a new light house in 1884 and of the Victoria Dock, of which the first sluice was opened by Lady Reay in February 1888. The Mere wether Graving Dock was subsequently projected and opened by the Governor in 1891.

With the exception possibly of the year 1889-90, the commercial prosperity of the island increased year by year and was referred to by Lord Reay in the following terms at the jubilee celebrations of 1887. "The prosperity of Bombay ", said His Excellency," is one of the most remarkable events of the Victorian reign. Its internal appearance is as much changed as its external condition. It is one of the most beautiful towns of the Empire, if not of the world. Its sanitary condition is also vastly improved. Fifty years ago the exports amounted to nearly 60 millions of rupees and the imports to little more than 47. In 1885-86 the exports amounted to more than 419 millions and the imports to nearly 440 millions. In 1885-86 the value of cotton exported amounted to more than 84 millions of rupees, of pulse and grain to more than 43 millions. The municipal income has risen from 18 to 42 lakhs. The Prince's Dock would do credit to any port in the world.". The growth of the mill-industry during this decade was responsible for the further colonization of the northern areas of the island; and the industrial population which flocked from the Deccan and Konkan found work not only in the cotton-spinning factories but also in the flour-mills and workshops which sprang into existence at this date. Complaints regarding the smoke nuisance were for the first time brought forward in 1884; the Millowners' Association were reported in 1883 to be about to despatch travelling agents to open up new markets for Bombay piece-goods in Europe and Africa; and in 1890 a Factory Commission had perforce to be appointed for the regulation of female and child labour. A strike of female operatives in the Jubilee Mill was reported by the daily papers of 1890; a monster-meeting of millhands was convened at Parel in the same year to protest against the closing of factories for eight days in the month; and by 1890 the Tardeo, Parel, Byculla, Nagpada and Chinchpokli sections of the island had expanded by the forward march of industrial enterprise into the populous dwelling places of a huge immigrant labour population.

To one visiting Bombay after a long absence, the change in the appearance of the city must have seemed extraordinary. " Bombay of today ", remarked Sir Edwin Arnold in 1886," is hardly recognizable to one who knew the place in the time of the Mutiny and in those years which followed it.". Augustus said of Rome, " I found it mud; I leave it marble;" and the visitor to India after so long an absence as mine might justly exclaim, 6 M left Bombay a town of warehouse and offices; I find now a city of parks and palaces.". The expansion of the population went hand in hand with the growth and adjournment of the island. All the tribes of Western India seemed to have flocked to Bombay like the Adriatic tribes who sought refuge in the city of the lagoons and settled in certain definite areas according to traditional belief, social instincts or tribal affinities. The Parsi sought the home of his ancestors in the Fort or Dhobi Talao; the Yogi and Sanyasi found a resting place near the shrines of Mahalakshmi, Kali or the God of the Sand (Walkeshwar); the Goanese and Native Christians were never absent from Cavel, the old home of early converts to Roman Catholicism; the Julhai silk weaver sought Madanpura; the grainmerchants were a power in Mandvi; the Bene-Israel owned their Samuel Street and Israel moholla; the dancing girls drifted to Khetwadi and Byculla, the scarlet women to Kamathipura; in the Null Bazaar and Umarkhadi lived the Siddis; in Parel, Nagpada and Byculla were mill-hands from the Konkan and labourers from the Deccan; many a Koliwadi, from Colaba to Sion, sheltered the descendants of the aboriginal fishing-tribes of Bombay: the Musalman was a power in Mandyi. Chakla and Umarkhadi: the Arab haunted Byculla; and in Girgaum the Brahman had made his home. This huge population of more than 8,00,000 lived in perfect contentment under the rule of perhaps the greatest monarch the world has ever known and contributed largely to establishing Bombay's position as the Gateway of India.

MODERN PERIOD

(The History of Bombay—Modern Period has been, contributed by Shri K. K.Chaudhari, Executive Editor and Secretary, Gazetteers Department, Government of Maharashtra, Bombay.)

THE MODERN PERIOD IN THE HISTORY OF BOMBAY can be said to have dawned in the eighteenthirties. The quarter of a century beginning with 1840 is appropriately characterised as the most significant epoch in the

history of Bombay. This period marks the emergence of a prosperous, modern and progressive city. The city's fortunes rose and fell, and finally settled on a stable basis. Bombay received a much needed face-lift, and several momentous changes revolutionised her educational and economic status. There was an all-round awakening in the matters of education, a vibrant press and administration of justice, all of which contributed to her emergence as a vibrantly progressive and modern city of the world. This metamorphosis was the result mainly of the collaborated efforts of a truly enlightened and dedicated section of citizens.

The period was most remarkable for the keen, and hitherto absent, public spirit so predominantly displayed by a segment of the Bombay men, both European and Indian. The same fervour created a multi-sphered collaboration between the rulers and the ruled. Both Indians and Europeans were represented, although not equally, on various fronts: the Board of Education, the Chamber of Commerce, the Bench of Justices, the Press, the Courts of Law and the Governor's Legislative Council. During this quarter of a century the Governors of Bombay were highly motivated by a zeal for the common good. But it was also outside the government circles that men like Dr. John Wilson, Jagannath Shankarshet, Sir Jamshetji Jijibhai, Muhammad Ibrahim Mukba, Mahomed Ali Roghay and Balshastri Jambhekar strove hard to further the progress of the island. The young intellectual elite always sought the blessings of their enlightened elders. And it was the moral and financial support extended by the latter that crowned the manifold efforts of Young Bombay with success.

Bombay's commercial fortunes during this period, particularly during the Cotton Boom, greatly augmented her prestige. Although many individuals suffered irreparable losses after the collapse of the boom, the city herself surged forward, with her economy placed on a stable base. The Share Mania of the sixties shot up Bombay's finances to great heights. It hastened the economic resurgence of Bombay. Moreover much of the wealth created in the speculative era was utilised to embellish the city. Not only was the material prosperity utilised to embellish Bombay, but her citizens also benefited by the advantages of education and awakening. It is true that education did not percolate downwards to the entire masses but created an elitist society in Bombay. It engendered the spirit of self-reliance. The new air of confidence that was manifest in the active participation of Indians, newly admitted into the Governor's Council, and more so in the righteous indignation against discrimination evinced in the proceedings of the Bombay Association, was the consequence of this education.

The alert and vigilant Press, particularly vernacular, became the mouthpiece of the people. Karsondas Mulji's (Famous Maharaja Libel Case). vehement outburst against adultery perpetrated by revered religious heads unleashed a fury of pent-up denunciation of hypocracy and blind allegiance to tradition. The vigilance against the encroachment on rights was frequently expressed in the working of the Chamber of Commerce, the Bench of Justices, and the Board of Education.

The revision of the various law codes and the creation of the High Court ushered in reforms of the system, and the administration of justice in

India provided for greater participation of Indians.

EDUCATIONAL AWAKENING

The history of Bombay is closely related with the growth of modern Western education. The rise of what is termed as the intelligentsia (The intelligentsia of the period is defined, after Christine Dobbin, " as all thosein Bombay who received English education in the collegiate classes of the Elphin stone Institution before the founding of the University, and those who gained University degrees after that date. The term also comprises those who attended professional institutions, such as the Grant Medical College and the Government Law Classes ". Christine Dobbin, Urban Leadership in Western India. Politics and Communities in Bombay City, 1840-1885 (Oxford Historical Monographs, OxfordUniversity Press, 1972), p. 28.) in this premier city was a precursor of the upsurge in political and social awakening. The intelligentsia, also styled as ' Young Bombay ' in collaboration with the rich shetias(The word was used to mean a great man, a rich man, and a man of influence and respectability.) initiated the process of national awakening. Bombay became the leading centre of higher education in the middle of the nineteenth century, both because of its position as headquarters of the British Government in Western India and the virtual lack of any realistic alternative. The foundations for educational progress were laid by the benevolent Mountstuart Elphinstone, Governor of Bombay (1819-27), who desired the educated enlightened Indians to participate in public administration. Under his presiding influence the Bombay Education Society (Bombay Education Society was started in 1815 by some members of the Churchof London. The Charity School of the St. Thomas Church, established in Richard Cobbe, was probably the first English School Europeans. It was patronised by the East India Company in 1807.) decided, in August 1820, to extend its activities by openingschools for natives, and the first important English school was started in 1825. The first college classes were projected from public and Government subscriptions in 1827. The Bombay Native Education Society was commenced in 1827, under which name it continued until April 1840 when the school and the college became one, under the name of the Elphinstone Native Education Institution. (Christine Dobbin, op. cit. p. 27.) It was in 1835 that two Elphinstonian professorships were endowed from a public fund to commemorate the distinguished services of Mountstuart Elphinstone, and Prof. Harkness and Prof. Orlebar commenced teaching English literature and arts, and European science, respectively, in the Town Hall. The collegiate classes attached to the Elphinstone High School were renamed as the Elphinstone College School and later the Elphinstone Native Education Institution in 1840. The Elphinstone College became an independent institution in 1856. The overall control of education was vested in the Board of Education in 1840 (The functions of the Board including co-ordination of education in the Presidency were transferred to the new Department of Public Instruction at Pune in 1855.) under Sir Erskine Perry, a devoted imaginative man. Although the Board was under European domination, it did have lagannath Shankarshet, Sir Jamshetji Jijibhai (He was knighted in 1842, and obtained baronetcy in recognition of his charities in 1857.) and Muhammad Ibrahim Mukba as its members.

Under Elphinstone's influence, educational facilities in Bombay steadily increased. Magnates like Jagannath Shankarshet, Framji Cowasji, Jamshetji Jijibhai and Mahomed Ali Roghay were the patrons of education.

The Grant Medical College was founded in fulfilment of a resolution in a public meeting in the Town Hall on 28 July 1835, and commenced on 3 November 1845. Jamshetji Jijibhai and Jagannath Shankarshet were among the native inspirators. The Government Law College, the first of its kind in India, was founded in 1855 on public demand under the inspired leadership of Shankarshet.

Thus, the Elphinstone College, the Grant Medical College and the Government Law College, came to form the apex of Western education. The Free General Assembly's Institution, later named as Wilson College after its founder, Dr. John Wilson, was another seat of Western education. The Elphinstonian institution along with the institutions started by Dr. John Wilson, a missionary, philosopher and educationist, and his wife, generated an enquiring spirit and liberal enlightenment eager for improvement and advancement of natives. Western learning was hoped to work a moral, cultural and scientific transformation of the Indian scene. (A detailed history of all the colleges and the University of Bombay is given later in this Chapter).

The University of Bombay founded in 1857 after the Calcutta University not only formalised the educational structure in Bombay but also gave birth to the intelligentsia and epoch-making forces.

Jagannath Shankarshet and Dr. Bhau Daji Lad, as leaders of the Bombay Association, played a very active role in the foundation of the University. It is a great tribute to Indians that among the Fellows mentioned by name in the Act of Incorporation of the University, there were five Indians, Jagannath Shankarshet, Bhau Daji, Sir Jamshetji Jijibhai, Bomanji Hormusji and Mahomed Yusuf Moorgay. Shankarshet, a protagonist of the synthesis of oriental and occidental cultures, was a member of the Senate ever since its foundation, till his death in 1865. Dadabhai Naoroji, a product of the renaissance, and one of the inspiring spirits of the times, was also one of the founders of the University. Sir Alexander Grant, John Wilson, Justice James Gibbs, Sir Raymond West, Dr. Mackichan and many other enlightened Europeans devoted themselves to the mission of educational expansion in Bombay which had a startling impact on the growth of allround awakening and far-reaching results.

The first four graduates of the University, Mahadeo Govind Ranade, Ramkrishna Gopal Bhandarkar (1837-1925), Bal Mangesh Wagle and Vaman Abaji Modak, awarded B. A. degree in 1862, were great luminaries and distinguished persons of the times. They were shortly joined by Pherozeshah Mervanji Mehta (1864), Kashinath Trimbak Telang (1867) and Rahimtula Muhammad Sayani (1868). Balshastri Gangadhar Jambhekar, Atmaram Pandurang Parmanand and Vishwanath Narayan Mandlik were also vital constituents of the intelligentsia. The Parsis were just beginning to emerge from their mercantile mould. Pherozeshah Mehta, Dinshaw Edulji Wacha, Naoroji Furdunji and Sorabji Shapurji Bengali emerged on the scene and enriched the elite in Bombay under the inspiring spirit of Dadabhai Naoroji.

It was precisely this galaxy of luminaries who were to be precursors of the intelligentsia and the rising social and political awakening in Bombay.

Sir Erskine Perry, president of the Board of Education, was the man associated with the spread of education in the Presidency in the forties. He was proud of his work in Bombay, where he found the growth of a true intellectual awakening accompanied by a rising public spirit and closer communication between the rulers and the ruled. (cf Report of the Board of Education, Bombay, 1849, app. iii, pp. 69-91. There arose a controversy over the medium of instruction. A compromise was finally reached and cemented in 1854 by the Wood Educational Dispatch: higher education was to continue in English, but more attention was to be paid to the vernacular instruction of the masses. As per Government the two aims of higher education in English were to raise up a class of Indian ' gentlemen' and to train the best class of natives suitable for Government service. The Government had wished to associate the city's rich shetias with its educational plans, (Ibid), However the rich shetias of Bombay, with a few exceptions, took no interest in the new education, and English education was mainly confined to Brahmins and other literary castes and middle class Parsis. The fact, however, remains that many shetias did, in fact, become patrons of education, either privately helping poor students or founding Anglo-Vernacular schools, as did Jagannath Shankarshet, Goculdas Tejpal and Varjivandas Madhavdas, or endowing the Bombay University with buildings and scholarships like Sir Cowasji Jehangir Readymoney, (Knighted in 1872.) Premchand Raichand and Sir Mangaldas Nathubhai. (Received Knighthood in 1875). Sir Alexander Grant continued to propagate English education among the merchants, and Shankarshet, the second Jamshetji Jijibhai, Cowasji Jehangir Readymoney and Goculdas Teipal were made Fellows of the University.

Considering the smallness of its number, the Elphinstone College contained a quite startling quantity of talents in the period. These were the persons to make an important mark in the life of the city and of the country. (Christine Dobbin, op. cit, p. 36.) Among the teachers in the College were Balshastri Gangadhar Jambhekar (1812-46), and Naoroji Furdunji (1817-85), the latter distinguishing himself as one of the architects of the political organisations in Bombay, jambhekar was an acting professor of Mathematics in 1842. In 1850 Dadabhai Naoroji (1825-1917) was appointed as acting professor of Mathematics and Natural Philosophy. Of a later generation, M. G. Ranade (1842-1901) was appointed professor of English, R. G. Bhandar-kar (1837-1925) as professor of Oriental Languages in the Elphinstone College and B. M. Wagle at Poona College. (Ibid., p. 41. Poona Sanskrit College, founded in 1821, was renamed Deccan College in 1867). These were choice positions for Indians in those days.

Among the distinguished Elphinstonians who were later on to play an excellent role in the social and political history of Bombay, the following were the most honourable. Dr. Bhau Daji Lad (1822-74) who later became one of Bombay's first medical graduates from the Grant Medical College, was an antiquarian. He was one of the most active members of the Bombay Association of which he was a secretary for many years. He played an outstanding role in the political life of the city throughout his

life. R. N. Khot (1821-91), who became extremely rich through trade, was a great conservative in Bombay politics.

Atmaram Pandurang Tarkhadkar (1823-98) distinguished himself in medical studies, and was destined to found the reformist Prarthana Samaja.(First Report of the Elphinstone Native Education Institution, 1840.) S. S. Bengali (1831-93), an elite Parsi, was a noted journalist, political activist and social reformer of Bombay, though for a short time. Kharshedji Rastamji Cama (1831-1909), renowned for his subsequent researches in the Zoroastrian religion, completed college education, and occupied an important position in the intellectual ferment in Bombay.

The most noteworthy Elphinstonians included V. N. Mandlik (1833-89), who later distinguished himself by playing many roles in Bombay's political history, particularly as a pioneering Marathi journalist and political activist. Javerilal Umiashankar, achieving highest academic honours in the college, became a leading Gujarati political figure. Naramdashankar Lalshankar (1833-86), a Gujarati poet, and Karsondas Mulji (1832-71), a Bania reformer, were among those who adorned the public life of the city of Bombay.

The next generation of distinguished Elphinstonians included Dinshaw Edulji Wacha (1844-1936), the politician and writer who dominated the Congress politics not only in Bombay but also in India, for several decades. Badruddin Tyabji (1844-1906), one of the first Muslim students, later became a leader of the Muslim community and the Indian National Congress, and a Judge on the Bombay High Court. Also worth mentioning is Narayan Mahadev Paramanand (1838-93), the religious reformer and journalist.

Pherozeshah Mervanji Mehta (1845-1915), one of the greatest of the Bombay luminaries, a "Lion of Bombay ", and a Congress leader of unrivalled status of the day, gained his B.A. in 1864 and was allowed to appear for his M.A. in the same year. (Homi Mody, Sir Pherozeshah Mehta: A Political Biography (Asia Publishing House, London, reprinted in 1963), p. 192.) He was instrumental in several political, municipal and social reforms, besides University reforms throughout his lifetime. Kashinath Trimbak Telang (1850-93), who was awarded B.A. in 1868 and M.A. the following year, distinguished himself at the High Court Bench and the activities of the Bombay Presidency Association, as well as other political organisations. His work in the Legislative Council, civic government and Congress politics, was outstanding. R. M. Sayani (1847-1902), Telang's contemporary, was an important politician of 1880's, a Congress president and a Muslim leader.

GROWTH OF POLITICAL CONSCIOUSNESS

BOMBAY ASSOCIATION

The Charter of 1833 granted to the East India Company by the British Parliament for the governance of India had specifically laid down that there should be no bar against anybody in addring any position in the Company's administration on account of religion, race or caste.(Source Material for a History of Freedom Movement, 1818-85, Vol. I (Government

of Bombay, 1957).) However this benevolent clause in the Charter was observed by its breach by the Company. The distinction between covenanted and uncovenanted services was tantamount to the distinction between the white and coloured races. This state of affairs was keenly felt by the enlightened Indians. At this juncture the Company's charter was to be renewed in 1853. Against this background the political leaders of Bombay decided to start a political organisation to vent public grievances, and accordingly, the Bombay Association was established on August 26, 1852 at Bombay. It was the first political organisation of the Bombay Presidency, and was founded at the inspiration of luminaries like Jagannath Shankarshet, Dr. Bhau Daji Lad, and Dadabhai Naoroji. The architects of the organisation felt that although the British had established a rule of law and peace, their motive was economic exploitation of India, that the promises in the Charter of 1833 were bluntly violated by the Company Government; and that the better mind of England would improve the situation with petitions and pursuances.

A public meeting was held under the chairmanship of Jagannath Shankarshet in the meeting hall of the Elphinstone Institute on August 26, 1852, wherein the objectives of the Bombay Association were spelt out. Besides Jagannath Shankarshet, Dr. Bhau Daji Lad and Dadabhai Naoroji, the distinguished participants in the meeting, and so to say the functionaries of the Association, were: Sir Jamshetji Jijibhai, Bomanji Hormusji, Cowasji Jehangir, Cursetji Nasarvanji, Manakji Nasarvanji, Framji Nasarvanji, Naoroji Furdunji, Manakji Limji, Varjivandas Madhavdas, Bapu Jagannath, Narayan Dinanath, Manakji Kharshedji, etc.(I have attempted to standardise the spellings of Indian names in the body of the text. For Parsi names I have followed the spellings used by D. F. Karaka in The Parsees: Their History, Manners, Customs and Religion (London, 1858), except where usage has made this unacceptable. A few variants, however, have crept in due to the particular spellings in the sources used.)

As unanimously adopted in the public meeting, the object of the Association was to ascertain the wants of the people in Bombay Presidency and to represent to Government regarding the measures for achievement of welfare of the people. It was decided to take advantage of the opportunity afforded by enquiries in England as regards the constitution of the Indian Government, and to represent to the British Parliament in the matter of reforms in the system of efficient Government so as to safeguard Indian interests and welfare of the people. It was decided to seek co-operation of similar Societies at Calcutta and Madras.

It was also resolved to memorialise the Government for the removal of existing evils and for the enactment for promotion of general Indian interest. Subscriptions were prescribed for raising necessary funds. The Rules of the Association were also adopted.

The object of this political body was not to offer opposition to Government, but was to secure the largest good by persuasions. Jagannath Shankarshet in his speech, appreciated many good things done by Government, such as "gratuitous" teaching in Grant Medical College, appointments of natives as Deputy Collectors and Magistrates, etc. The

gravamen of the deliberations of the distinguished gathering in Bombay was to create a forum for assessment of the measures essential for the welfare of the natives, and to represent to the Government in India or England regarding redressal of grievances. (For text of propositions and speeches in the meeting refer Source Material fora history of Freedom Movement in India, Vol. I, pp. 133-39.)

Sir Jamshetji Jijibhai, the first Baronet and an elite citizen of Bombay, was elected the first president of the Bombay Association, while Jagannath Shankarshet was elected executive chairman, and Dr. Bhau Daji and Vinayak Shankarshet as secretaries. Throughout the life of the association Bhau Daji (1822-74) worked with deep devotion and involvement. As a matter of fact, he was concerned closely with practically every movement of public interest and social organisation in Bombay from 1851 to 1874.

The Association prepared an elaborate petition to be sent to the House of Commons (*Parliament of Great Britain and Ireland.*) which was adopted at a meeting held in the Elphinstone Institution on October 28, 1852 under the presidentship of Jagannath Shankarshet. Dr. Bhau Daji was one of the principal architects of the petition which was signed by 3,000 enlightened citizens from Bombay, Pune and Thane.

The petition was drafted with great care after collection of information from people in various districts, as regards the drawbacks and despondency in administration. The petition entreated upon the British Parliament for an enlightened system of Government, with the participation of qualified and trustworthy natives in the civil services. It sought for establishment of a University in each Presidency for educating Indians to man the civil services. The authors of the petition demanded an increase in allocation of funds for education and a measure of local self-governing councils.

This petition was followed by another very elaborate petition sent to the House of Commons in May 1853. It was also competently drafted by Dr. Bhau Daji.(This account is based on the text of the Petition given in Source Material for a History of Freedom Movement, Vol. I, pp. 139-49.) It recalled that the enquiries made by the Committee of both Houses of Parliament, which had examined only persons of vested interests and beneficiaries of the covenanted service of the East India Company, were by no means thorough nor impartial. The petitioners sought the services of the ablest and most experienced persons in Indian affairs and a review of the existing system of local government. There was an interest and spirit of inquiry, in certain circles in England, about the Indian problem, but it did not form part of evidence collected by the Committee of the House of Commons. The Courts of the East India Company in the Bombay Presidency were on no better footing as regards judicial fitness and capacity than those of Madras.

The petitioners sought for efficient and properly constituted local governments as the prevailing government was " quite unequal to the efficient discharge of its duties and that nothing but the impenetrable veil of secrecy...... protects it from Universal condemnation."

The Government of the Presidency then consisted of a Governor, a

Commander-in-Chief and two civil servants as members of the Council. The business was conducted primarily by four secretaries and two deputy secretaries, each secretary having a separate department of his own and being the adviser of the Governor. The latter, who generally lacked local knowledge and experience, was obviously in the hands of secretaries, and was compelled to adopt the minutes they placed before him. The Commander-in-Chief, pre-occupied with army matters and being least acquainted with civil affairs, hardly could devote time to civil government. He used to enter the Council apparently merely to record his assent to the minutes of the Governor. Although knowing nothing of the subjects in hand, the Commander felt it his duty invariably to vote with the Governor. Several boxes full of papers on revenue and judicial matters were sent to him at one time which, it has been stated, he used to return from his house to the other members of the government within one hour after putting his initials. (Petition of the Bombay Association, May 1853, cf. Source Material for a History of Freedom Movement, Vol. I, pp. 139-49,)

The Civil members of the Council were appointed from those who enjoyed the confidence and personal favours of the Court of Directors without due regard to their ability. The appointment was more in the nature of a gift bestowed on a favoured member of service about to close his Indian career, by the Court of Directors. The Civil members had no specific duties to discharge and little or no responsibility, and their views were very often liable to be outvoted by the Governor and Commander-in-Chief. The practical effect of a Government so constituted was that for the most part each secretary in his own Department was almost like the Governor. The secretaries, exceptions apart, selected from the Civil Service, having passed their lives in the subordinate agencies of Government, were suddenly called upon to discharge the most onerous duties for which their previous training did not at all qualify them. Their lack of knowledge of the economy, systems of the country and requirements of the people, coupled with the short time at their disposal, compelled them to dispose of the greater part of their business in a very imperfect manner. The net result of the government so constituted was that the actions of government were executed in -an arbitrary manner and they were protected with the most rigid secrecy. In everything that came before Government, an impenetrable secrecy was preserved to escape public scrutiny. The most cruel justice was done even with the best intention. As the petition said "as a system it is the very worst that could be devised and the very last which good sense would indicate as adopted to strengthen British Rule in India by giving it a hold on the affection of the people. On the contrary its obvious tendency is to engender and perpetuate among the young servants of Government an illiterate and despotic tone to give full scope to the prejudice, the ignorance and the self-sufficiency of all, to discourage progress, to discountenance all schemes of improvement emanating from independent and disinterested sources and not within the view of the officer to whose department they are referred, and to cramp all agriculture or commercial energy, all individual enterprise."(Petition of the Bombay Association, May 1853, op. cit. pp. 144-45.)

The petition entreated upon the British Parliament to abolish the Councils as they were constituted and to create an useful and efficient Council of

which the judges of the Supreme Court in legislative matters, and some of the European and native citizens should form part. Persons experienced in public offices in England were urged to be inducted in the local government with greater advantage to strengthen the hands of the Executive Government.

Trustworthy and qualified natives were excluded from the higher grade of judicial, revenue and regular medical services to which covenanted Europeans sent from England alone were appointed. Such exclusion was contrary to the letter and spirit of Section 87 of the Charter Act of 1834, being injust and impolitic. The petitioners prayed that the invidious and unjustifiable distinction between the covenanted and uncovenanted services, which exclude the natives from higher offices, be abolished and that qualified Indians be appointed. Even competent Indian physicians and surgeons trained by the Grant Medical College and the Medical College at Calcutta were not appointed in superior service. The distinction between covenanted and uncovenanted was rigidly preserved, and even meritorious persons were refused admission to covenanted services.

The Petition proposed the establishment of a University for imparting education to Indians in various faculties so as to qualify them for efficient administration of Government and administering the necessary justice in the country.

It was also proposed to separate the judiciary from the executive services, and to appoint Indians as Zilla judges along with Europeans who should know Indian jurisprudence, the law and constitution of India, and her modern history. As regards legislation by Parliament on Indian affairs, it was proposed to have subject-wise legislation instead of a single enactment comprising all subjects, such as, constitution and powers of several local governments, judiciary, revenue, etc. The petition also urged upon the House of Commons to be placed before its Committee on Indian affairs for proposing appropriate legislation.

The petition was well-timed as the Committee of British Parliament was then studying Indian affairs. It had won over many sympathisers in Great Britain, and enabled a number of friends of India to understand the Indian problem. Englishmen like Sir Edward Ryon, Sir Erskine Perry, Lord Monteagle, John Bright and Joseph Hume, championed the Indian cause in England. A meeting of the Friends of India was convened in London on March 13, 1853, and it constituted itself into what was termed as the Indian Reform Society with Danby Seymour (a Member of the British Parliament) as its president and John Dickinson as secretary. Although its efforts could not influence much the enactment of the House of Commons, a significant change was effected in the constitution of the Court of Directors of the Company. Accordingly the Court was reconstituted by reducing the number of members to 18, of whom six members were to be nominated by the British Crown from among persons who should have resided in India for a minimum of ten years. Another salutary change was that the appointments to civil and medical services in India were thrown open to public competition. The outcome was, however, not very favourable to Indians as the competition was to be conducted in Great Britain, and Indians were practically held ineligible for

contesting on various grounds. This invited protests. All said and done, the net outcome was that the concerted agitation had wrung from the British Ministers more than it was considered possible.

The memorials of the Association were always restrained and dignified. However, a section of Englishmen considered it a rebellious body, while men like Mr. Cobden could see no advantage either to the Indians or their British masters in the vast possession called India. Some of the members of the Bombay Association itself ventilated the misgivings of the Englishmen. Mr. Manakji Kharshedji, for example, had opposed its activities and published a pamphlet containing libellous statements against Dr. Bhau Daji, its staunch leader. The latter was obliged to file a suit of defamation against the former which was heard with great interest in the Supreme Court. Bhau Daji was acquitted.

The British press, as it could be expected, did not respond favourably to the Indian demand, although it felt the inevitability of administering Government of India with the concurrence of Indians. Many Englishmen like Col. Pope considered the Bombay Association a political body which was opposed to English rule. Naoroji Furdunji and Bhau Daji came in for criticism frequently.

During the presidentship of Nana Shankarshet, the English friends of India like Danby Seymour (M.P.), president of the Indian Reform Society in London, paid a visit to Bombay to study the points of view of the Bombay Association. In a meeting of the citizens of Bombay held at Nana's house on 13 February 1854, Danby Seymour complimented the Association on its efforts to educate the British intelligentsia on the Indian problem. He also expressed that a section of people in England was eager to obtain authentic information, and desired the deputationists to be self-reliant and be prepared for a long drawn out movement. Another member of the British Parliament Mr. A. H. Layard visited Bombay in 1857-58 (Date not known.) who was briefed competently at Nana's house by Bhau Daji, Nana, Naoroji Furdunji, Bomanji Hormusji, Framji Nasar-vanji and many others. Mr. Layard appreciated the Bombay Association as an institution which reflected the mind of the people, and as a good link between the Indians and the Government. The Association functioned as per the guidelines given by, the above referred Englishmen.

The matters taken up by it included joining the cotton producing tracts of Khandesh and Berar with Bombay by railway, which was already opened upto Thane; appointment of Indian judges; revival of gold coinage; publication of the Government *Gazette* in provincial language; representation before Parliament about the treatment given to Indians by the English; and increase in expenditure on education, etc.

After the demise of Nana (1865) who was its president for 12 years, the Bombay Association became defunct. Vishwanath Narayan Mandlik and N. M. Paramanand, the other celebrities of the day, tried to revive it in December 1867. The two celebrities who were publishing the *Native Opinion* from 1864, convened a meeting on December 14, 1867, wherein a new executive committee was appointed. Its office bearers were as under: Sir Jamshetji Jijibhai Batliwala (Hon. president), Mangaldas Nathubhai (working president), Framji Nasarvanji, Vinayak Jagannath,

Cowasji Jehangir Readymoney and Byramji Jijibhai (vice-presidents), and Naoroji Furdunji (secretary), Bhau Daji, V. N. Mandlik, V. G. Shastri and Bal Mangesh Wagle (members). The Association, however, did not survive for long as it had to fight against manifold difficulties.

It was during this period that the foundations of modern Bombay were laid and embellishment of the city was initiated. The birth of Bombay as a beautiful modern city could be ascribed to the joint labours of Government, public-spirited citizens associated with the Bombay Association and a few private firms who strove in several spheres. (Details of developments in the city are furnished in an earlier section in this Gazetteer and in Chapter 9 of this Gazetteer.) The leaders of the Association persistently pursued the authorities in Government and the Municipality for improvements in almost all spheres.

The success of the Bombay Association was precluded by internal dissensions from the very beginning. There were many supporters of British rule whose creed was that India required the undisturbed peace and tranquillity of British rule, without participation in the highest levels of Government. On the contrary ardent men like Bhau Daji and Naoroji Furdunji determinably expressed their views on the political needs of India in a plain and unmistakable language. (Times of India, 10 October 1885.) The spirit of the first petition was not particularly moderate. (Christine Dobbin, op. cit., p. 82.) It characterised the existing system of Government as "but little suited to the present state of the country, and the fair demands of the people of India." The second petition dispatched in May 1853, and detailed above, drew on the more extensive pamphlet literature collected by the ardent leaders.

Although the intelligentsia were ardently working behind the scene, the public face which the Association presented was increasingly that of its *shetia* leaders. The Association, at one stage, described itself as comprised of men " mostly possessed of considerable property and all deeply interested in the efficiency of those Departments of Government which are charged with the preservation of order, the protection of life and property, and the vindication of the Law." (*Proceedings of the Third Annual General Meeting of Bombay Association, 1856.*)

These interests were exemplified in the main question dealt with by the Association during the 1850's. Although the problems of civil service and educational policy were not neglected, they received far less attention than the two questions of immense interest to the mercantile community, the administration of justice in the Presidency, and the encouragement of public works. The dominance of these matters was, of course, made possible by the fact that they were also of interest to the intelligentsia working in courts, like Naoroji Furdunji, and like Dadabhai Naoroji, engaged in commerce. (Christine Dobbin, op. cit., p. 84.) The last petition of the Bombay Association to the British Parliament in 1857, protesting against certain aspects of the supercession of the Supreme Court by the High Court, warned that no change could afford to ignore the grim fact that the entire prosperity of Bombay rested on the application of the English mercantile law to commercial transactions in Bombay. The Association along with the Chamber of Commerce (The desire of European

businessmen to exert pressure on government culminated in the establishment of the Bombay Chamber of Commerce in 1836, comprising 15 European and 10 Indian firms.) demanded extension of railway and improvement of means of communications.

The Elphinstonians kept in touch with the activities of their colleagues through their newspapers. They were aware that Government was recognising their importance increasingly. Jambhekar was the first Elphinstonian to be appointed a Justice of the Peace in 1840, and although wealthy *shetias* continued to dominate the Bench, in time all the outstanding Elphinstonians became Justices of the Peace. " Above all they were aware of their own importance, and a sense of mission. Trained in school and college to believe that they were the regenerators of their country, they could not permit their own city to slip through their hands." *(Christine Dobbin, op. cit., p. 86.)*

The powerful weapon of the press was under their command. The *Rast Goftar* began to direct their fire against the society and its *shetia* members. The *Rast Goftar* inflicted heavy criticism against the mercantile interests in the Bombay Association, and accused it of servile imbecility and decried it as 'a disgrace to the community', 'the laughing stock of all thinking men' and of being incapable of even terminating 'its imbecile existence'. The most important *shetias* were proclaimed totally unfit to provide political leadership, both because of their lack of knowledge and interest in anything beyond their commercial interests.

The problem of political leadership was made more evident in 1862 by the desire of the Bombay Government to appoint natives to the Governor's Council. (*Ibid., p. 87.*) The organs of the intelligentsia, the *Native Opinion*, this time taking a leading part, decried the Government to induct the mercantile magnates in the Council, branding them as foreigners to the people in the country. (*Native Opinion, 24 January 1869.*)

During this period the Bombay Board of Censors, a private society, was founded by European merchants, civil servants and army officers. Its aim was to bring public opinion to bear on the basically autocratic Government. It used to discuss government policies pertaining to services, legislation, agriculture and education. Bhau Daji, Cowasji Jehangir Readymoney, Mangaldas Nathubhai and A. H. Gubbay were associated with this body which afforded them a good deal of political experience. It, however, collapsed in March 1864, owing to the fear of public exposure by those Government servants and army officers involved. Meanwhile, although the Bombay Association did show signs of life in 1865 with a petition against Income Tax, it was moribund for all practical purposes. Jagannath Shankarshet had died in 1865 and Jamshetji Jijibhai in 1859.

The collapse of the unprecedented boom and Share Mania of 1861-65 also caused a collapse of many mercantile magnates of Bombay. This paved the way for the revival of the intelligentsia and of the Bombay Association. The revived Association was also under influence of the *shetias* without whose donations it was difficult to manage its day-to-day affairs. However, the intelligentsia were well represented this time. Along with Bhau Daji, Narayan Dinanathji and S. S. Bengali, prominent new

graduates of the Government Law Classes (College), such as V. N. Mandlik, Shantaram Narayan, B. M. Wagle and the solicitor Kamruddin Tvabii, were inducted in the committee in 1867. In 1869 their number was strengthened by the addition of R. G. Bhandarkar, M. G. Ranade and Nanabhai Haridas. Of the 40 members of its committee in 1867, only 16 were Parsis, the rest being Brahmins, Banias and Muslims. Its membership increased from 87 in 1867 to 141 in 1869. With the increased participation of the intelligentsia in the revived Bombay Association, its first activities were directed towards the burning problem of appointment of natives to the covenanted and higher grades of civil service. A memorial was dispatched to the Secretary of State. The memorial reiterated the earlier demands for simultaneous examinations in India and England, and a raising of the age limit for Indian students. It protested against privileged position of Europeans in courts and the conditions in the Colaba lunatic asylum. It also dealt with the government Bill for assessment of lands in cities and towns, and with the construction of public works.

A remarkable feature of the late sixties in Bombay was the growth of popular interest in municipal affairs. The Bombay Association channelised the growing public interest. The first public meeting, to adopt the civil service memorial in March 1868, was an attempt to mobilise public opinion on behalf of the intelligentsia. The second public meeting with more than 600 participants, held in October 1869, was on behalf of the mercantile interests. The meeting held in Town Hall protested against the Bombay Government's measure to treat the adulteration of cotton as a criminal offence. It was opposed on the ground that it would hamper the trade and cultivation of cotton in Western India.

The third meeting, attended by about 2,000 in the Town Hall, protested against the increase in income tax by the Government of India. The London *Times* noted that the meeting attracted not only the leaders of society, but also small traders in large numbers, all concerned to memorialise the Secretary of State to disallow the Indian Income Tax Act of 1870. The speeches were delivered by Mangaldas Nathubhai, Sir Jamshetji Jijibhai, V. J. Shankarshet, Nanabhai Beramji Jijibhai and Narayan V. Dabholkar. They ventilated the points raised in the native newspapers, and attacked the heavy military expenditure. Narayan Dabholkar urged for English political institutions for India, and censured the existing system of representation in the Councils 'as a farce and delusion'. Sir Jamshetji Jijibhai, the third son of the first baronet, warned the British that they should take congnizance of a rising power in the state.

Consequent upon the meeting, the Association sent a petition to Parliament, and Naoroji Furdunji (secretary) was deputed to London to give evidence before the Fawcett Committee on Indian Finance. The petition was doubtless prepared by educated members. The *Times of India* of 7 April 1871, described the petition as " the Indian Grand Remonstrance of 1871 ". It was on the eve of Bombay's own great financial crisis that the petition condemned almost *in toto* the entire financial system of India. The excessive public expenditure and mismanagement of public finance had inflicted an intolerable burden on the people. Naoroji Furdunji expounded the Indian cause and the point of

view of the Bombay people in his London interviews with prominent Members of the House of Commons. Asking for a Select Committee of Parliament to inquire into Indian affairs, he painted a picture of an India burdened with heavy taxes, and impoverished by a drain of wealth to England. The solution was granting of representation to Indians in the Governor General's Council and Local Legislative Councils in the matters of public finance and legislation. (For details refer Proceedings of the Third Annual General Meeting of the Bombay Association, 1871.)

This petition on the financial conditions of the country was followed by an identical memorial from Bombay's second political association, the Bombay Branch of the East India Association. It also demanded greater representation of Indians in the Legislative Councils, a broad scheme of decentralization, investigation of uncalled for military expenditure, and reforms in the civil service. (Journal of the East India Association (J.E.I. A.), V, 1871, Part ii, pp. 130-34.)

A deep crisis was provoked within the Bombay Association by the municipal reform agitation of 1871 and 1872, during which it was quite active. It was this crisis which led to its ultimate dissolution. The mercantile magnates along with Narayan Dabholkar, V. J. Shankarshet, R. N. Khot, Beramji Jijibhai and his son deserted the body because they could not oust Naoroji Furdunji. They ended that body completely. They incorporated a rival association, the Association of Western India with the help of anti-reform rich persons. "It was alleged that the inspiration behind new association was Narayan Vasudev Dabholkar." (Christine Dobbin, op. cit, p. 186.)

After his prominence in the civic reform debates, he was unwilling to go into oblivion once the reform question had been settled. V. J. Shankar-shet was also eager to acquire the influence and position which his illustrious father had possessed. The municipal reformers had, in the opinion of Pherozeshah Mehta, done considerable harm by their espousal of exploded fallacies'. (Bombay Gazette, 14 May 1873).

Sir Pherozeshah Mehta had claimed that the new Association of Western India had higher aims than the Bombay Association. It was aimed at training the people in political observation and discussion, and teaching them the administrative policy of India, instead of perpetually putting up grievances before the rulers. However, the published aims of the new Association differed little from those of the Bombay Association. Its creation provoked violent criticism from the organs of reform, both European and Indian. The *Times of India* described its members as "those who have injured Bombay in every way." (*Times of India*, 25 April 1873.) It remained more or less a moribund body and died with its principal shetia supporters, V. J. Shankarshet in October 1873 and Narayan Dabholkar in August 1874.

Although the Bombay Association survived the demise of its rival body, its activities appeared very sporadic in comparison with those of the Poona Sarvajanik Sabha which was a very active body of enthusiasts, established in 1870. The ardent Naoroji Furdunji and Bhau Daji, who dominated the committee, did prepare a good report on the low standard of living of agriculturists which was attributed to the revenue assessment

system. They also strived for numerous reforms. But the Association's lack of contact with rural areas and the loss of talents were responsible for its desultory activity. Bhau Daji died in 1874. Justice Ranade had migrated to Pune. Pherozeshah was alienated from the Association. Dadabhai Naoroji was in England, and Badruddin Tyabji was busy in his profession and Muslim problems. The remainder members viz. Naoroji Furdunji, Telang, Mandlik, Wagle, Bhandarkar and Atmaram Pandurang with the help of Morarji Goculdas, Kesowji Naik, D. M. Petit and Sorabji Jamshetji Jijibhai tried to save the Association. Jam-shetji Jijibhai as honorary president, Mangaldas Nathubhai as president and F. N. Patel and K. N. Cama were still there. However, it became practically moribund.

"The real reason for the lack of political dynamism in Bombay was the very dislike of the majority of *shetias*—including those prominent in political associations—for any activities which involved public criticism of Government, coupled with their basic lack of sympathy with the English educated group who promoted the criticism." (*Christine Dobbin, op. cit, pp. 188-89.*) There was personal criticism from within. Naturally Naoroji Furdunji and Mangaldas Nathubhai resigned by the end of 1875, and the end was doomed. After its faltering revival by the Elphinstonians, it was declared dormant in 1879, (*Times of India, 5 May 1879.*) due to lack of support. It is pertinent to note that many newspapers including the *Rast Goftar, Indu Prakash* and *Native Opinion* had expressed the advisability of founding a political association purely of the intelligentsia, and basically different from the Bombay Association. This idea came into reality when Dadabhai Naoroji, while in a visit to Bombay, established the Bombay Branch of the East India Association, in May 1869.

EAST INDIA ASSOCIATION

Although intended to be an organ of the intelligentsia, the Bombay Branch of the East India Association was constituted in collaboration with the mercantile magnates of Bombay. This was particularly because of financial requirements and the influence of the *shetias* on the public life in Bombay. A formula was therefore evolved whereby the Managing Committee was comprised largely of Elphinstonians, while president and vice-presidents were mercantile magnates, many of whom were also taken on the Committee. Sir Jamshetji Jijibhai was chosen president, while eight of the ten vice-presidents were shetias such as Mangaldas Nathubhai, F. N. Patel, Beramji Jijibhai, Dinshaw M. Petit, K. N. Cama, etc. Dr. Bhau Daji was chairman of the Managing Committee, Mr. William Wedderburn was the vice-chairman and Pherozeshah Mehta and B. M. Wagle were honorary secretaries. The 31 ordinary members of the Managing Committee were almost overwhelmingly Elphinstonians, such as V. N. Mandlik, Shantaram Narayan, S. S. Bengali, M. G. Ranade, R. G. Bhandarkar, Javerilal Umiashankar and K. N. Kabraji. They were all active members of the Bombay Association as well. The notable absentees were Naoroji Furdunji, who did not leave Bombay Association, Badruddin Tyabji who joined later, and K. T. Telang. Despite Bhau Daji's opposition, the princes and chiefs of the Southern Maratha Country, Gujarat and Kathiawar, were admitted as life members at the instance of Dadabhai Naoroii. They numbered about 25 in July 1871. The total membership of the association swelled to 700 by end of 1871. (Journal of East India The Bombay Branch of East India Association did not fare better than the Bombay Association, although the former was equipped with better talents. It was still led by mercantile interests. Sir Jamshetji Jijibhai died in 1877 and was succeeded by Mangaldas Nathubhai as president. Its main work was shouldered by K. T. Telang who was its joint secretary throughout the period, in combination with J. U. Yajnik. Other committee members included Dadabhai Naoroji, V. N. Mandlik, Atmaram Pandurang, R. G. Bhandarkar, B. M. Wagle, K. C. Bedarkar, M. M. Bhavnagari, D. A. Khare, etc. "Although Telang was become an important political figure in Bombay, his leadership as never parti cularly dynamic..... J. U. Yajnik was similarly never thought of as an activist. Mandlik was a difficult colleague to work with. His newspaper already provided him with a forum for his views, and he was not particularly popular because of his well-known ambition, his grandiloguence and his aristocratic notions. Of the remainder Dadabhai Naoroji was frequently absent whilst Bhandarkar, Atmaram Pandurang and others were more interested in religious and social questions." (Christine Dobbin, op. cit, pp. 190-91.) Pherozeshah had withdrawn after the Crawford affairs while Badruddin Tyabji was otherwise busy.

Hence, the body could do little to further its original objectives. The furore over municipal reforms in the city also distracted the energies of the leaders.

It should, however, go to the credit of the Association that it strived for the grant-in-aid system in education. It fought for the cause of Indian entry into the Indian Civil Service. It submitted a memorial to Government advocating a wholly elective Municipal Corporation for Bombay. Its enthusiasm in the initial period under the Elphinstonians was commendable.

The most significant contribution of this body was to the contemporary political ideology of India. Dadabhai Naoroji elaborated a theory of drain of wealth from India. It was natural that this theory was first systematised in Bombay by men educated in Western political philosophy and mercantile practices. In July 1870 Dadabhai invited attention to the high cost of foreign rule in India, leading to a drain of one crore pound sterlings per annum from India. (Journal of East India Association, viii (1874), pp. 33-80.) He elaborated the losses to India by foreign rule, in various meetings. The managing committee under Telang suggested investment in agriculture and growth of industries by utilizing Indian raw material and labour, and induction of natives in public service.

The Press Act, which circumscribed the freedom of press and the rule of law under the Viceroyalty of Lord Lytton, gave a fresh lease of fife to the Bombay Branch of the East India Association. This body attacked the involvement of India in the Afghan War and the Egyptian contingent. However, the opening of the eighties witnessed decline in the membership from 700 in 1871 to 153 in 1882. Telang was still there. But Mangaldas Nathubhai was replaced by D. M. Petit, whilst Mandlik took over as chairman on the resignation of R. N. Khot. Moreover the domination of Richard Temple over the parent body in London was a still

greater handicap. Hence after its faltering existence it went defunct in 1884.

There was a certain amount of political activity in Bombay even outside the associations described above. Public meetings were organised on some occasions by the leaders of public opinion. The Town Hall was very often the chosen venue. The salt pan owners in the city organised such a meeting for attacking the Salt Bill of 1873, while the public meeting in April 1876 was arranged to oppose the Revenue Jurisdiction Bill. The latter was addressed by Mandlik and Telang. The 1878 meeting over the Licence Tax on trades and dealings was more spectacular. An interesting episode in the history of Bombay was the furore over the decision of the leading *shetias* to join the Anglo-Indian officials in voting an address and statue to Sir Richard Temple on his retirement as Governor of Bombay (March 1880). Despite the bitter criticism by the *Native Opinion* and the intelligentsia, the third Jamshetji Jijibhai and his supporters including Badruddin Tyabji, did in fact express their gratitude to Richard Temple in the meeting.

Lord Lytton left India as possibly her most unpopular Viceroy. His unpopularity had begun to assume serious proportions after the middle of 1877 on account of the hardships caused by the famine of 1876-77. The hurried enactment of the Vernacular Press Act (March 1878) further exposed his despotic and 'patriarchal' rule, as denigrated by Telang. The Imperial Assemblage at Delhi in January 1877 at which Queen Victoria was proclaimed the Empress of India, threw open to doubt the intentions of the British to establish a despotic rule in this country. These events coincided with the Governorship of the unpopular Sir Richard Temple, of Bombay (April 1877 to March 1880). The Vernacular Press Act with its severe limitation on the freedom of press was received as a shock in Bombay. A meeting was held in Bombay comprising, besides representatives from Pune, Nashik, Thane, Ratnagiri, Dhule and Surat, the city's most influential men like Pherozeshah Mehta, Telang, Cowasji Jehangir, and Nanabhai B. Jijibhai. The Marathi press was more unequivocal in its criticism than the Gujarati papers. M. R. Jayakar has given a vivid account of his impressions about the Marathi press during his studenthood. (M. R. Jayakar, The Story of My Life (Bombay, 1958), i. 10.) The reaction against the Act was, however, not well-organised in Bombay due to some conservative elements, although it was formalised into a campaign by the Poona Sabha. The Bombay Association did not memorialise to Parliament, but the BombayBranch of the East India Association submitted a memorial to the House of Commons, signed by Telang and Bhavnagari. (Jim Masselos, Towards Nationalism: Group Affiliations and the Politics of Public Associations in Nineteenth Century Western India (Popular Prakashan, Bombay, 1974), p. 196.)

The rule of Lytton and Richard Temple led to increasing interests in political questions among the young graduates, manifested in the press. The newspapers in Bombay were over-joyed by the success of the Liberals in England in 1880 and also by the appointment of Lord Ripon as the Viceroy of India.

The Viceroyalty of Lord Ripon really galvanized Bombay politics. A number

of issues raised during Ripon's regime, particularly pertaining to the future of India, and the role of Indians in the administration, aroused hopes and stimulated the minds of the educated and generated a sense of solidarity among them. Lord Ripon's Local Self-Government Bill of 1882, which was an instrument of political and popular education granting the principle of elective representation, was highly welcomed in Bombay. It stimulated political thought and a feeling of common interest in the educated people. By a small extension, the arguments in favour of local self-government were applied to the larger issue of representation in the Legislative Council. The elective principle which had earlier been introduced in the Municipality of Bombay during the Governorship of Sir Seymour Fitzgerald (From 6 March 1867 to 5 May 1872), and Sir Philip Wodehouse (From 6 May 1872 to 29 April 1877) was extended further. Unfortunately, however, "Sir James Fergusson and his executive council proved most reluctant to accept the basic principles of the Resolution so that the two bills introduced as a consequence, the Bombay Local Boards Bill and the Bombay District Municipal Act (Amendment) Bill, made few real concessions. Though they did grant the right of election, they failed to concede any real responsibility to the new committees and boards which were to be controlled by an official chairman." (J. Masselos, op. cit,, p. 225)

A more important episode of the days was the Ilbert Bill crisis of 1883, in Lord Ripon's regime. The aim of the bill was the removal of an anomaly whereby Indian District Magistrates and Sessions Judges were prevented from hearing cases involving Europeans. It sought to remove judicial disqualifications based on creed or race. Its promulgation caused an uproar among the Anglo-Indian community, who were able to get the Bill modified to their own advantage after uproar. Although Bombay remained fairly guiet throughout the Ilbert Bill agitation, the guestion did reactivate the city's political life. The meeting of 28 April 1883 was convened by the Bombay Branch of the East India Association which constituted the first major demonstration of Indian support for Lord Ripon and the Bill. It was a widely representative meeting of over 4,000. Almost all the public leaders of the city were present, the intelligentsia, industrialists, merchants, etc. Dadabhai's great popularity was seen from the uncommon warm ovation he received. However, the speeches of Pherozeshah, Telang and Badruddin made the greatest impact. (J. Masselos, op. cit, p. 214) Mehta appealed for Indian unity and self-sacrifice, and observed that the conflict was a conflict of opposing ideas about the future of India, and about the policy of Indian participation in administration.

However, Ripon was forced to grant some concession to the Anglo-Indians. By this time (second half of 1883), William Wordsworth, Principal of Elphinstone College and A. O. Hume emerged as European sympathisers of Indian cause. Prof. Wordsworth was in contact with the Poona Sarvajanik Sabha.

The Indian leaders were frustrated by the final terms of the Bill. The Bombay Branch of the East India Association sent a memorial to Government for raising the age limit of civil service candidates to its former level, after a large public meeting in August 1884. Another meeting of 15,000 was held in December at the Town Hall to express

thanks to Lord Ripon for his administration. Practically the entire city seemed to have turned out among noisy rejoicing, to bid farewell to Ripon. The *Times of India* (19-12-1884) acknowledged that for the first time in Indian history the people of India have learnt how to demonstrate and agitate as a whole, irrespective of caste.

BOMBAY PRESIDENCY ASSOCIATION (1885)

In view of the political excitement in the city it was felt that Bombay should have a political organisation to direct public activity, particularly because the Bombay Branch of East India Association (The London headquarters had become more conservative and even hostile towards Indian interests in the 1880's, and hence the Bombay Branch was handicapped,) was almost defunct. Accordingly the triumvirate, Mehta, Telang and Tyabji, assisted by leaders of the earlier generation, Mandlik, Dadabhai Naoroji and Naoroji Furdunji, founded a new political association, the Bombay Presidency Association, on 31 January 1885. It was inaugurated at a public meeting at the Framji Cowasji Institute. It was established on the crest of a wave following the Ilbert Bill agitation and the Ripon farewells. Its architects had designed it to be a truly national association. Its aims were to give information to Government, and to enlighten the people about public affairs. While advocating Indian national rights, its aim was to remain loyal to the throne.

The intelligentsia dominated the Presidency Association, although the presence of wealth was acknowledged in its hierarchy. Sir Jamshetji Jijibhai, the third Baronet, was the first president, although his influence in the body was limited. Of the 16 vice-presidents, eight were rich men, such as Mangaldas Nathubhai, D. M. Petit, (He was also a Baronet.) Beramji Jijibhai, Varjivandas Madhavdas, F. N. Patel, R. N. Khot, M. A. Roghay and Kamruddin Tyabji. The three secretaries were Mehta, Telang and D. E. Wacha. Six of their collaborators, including Mandlik, Dadabhai, Bengali and N. Furdunji were made vice-presidents. It had 300 members even before its inauguration.

In its meeting on 29 September 1885 it was decided to enlighten the British electorate in Indian problems. Leaflets on Indian issues were already being distributed in England. It was decided to support John Bright and W. S. Blunt of the Liberal Party in elections. Dadabhai's resolution marked the beginning of Indian attempt to ally with a particular political party in England, and seek its support for Indian issues. Sir Jamshetji objected to the resolution and resigned under pressure from English friends. D. F. Karaka also resigned. D. M. Petit, Bombay's leading industrialist, became the new president.

The Association focussed its attention on issues of imperial significance. It was more in unison with other associations and particularly the Poona Sabha. It did considerable propaganda work in England and sent several telegrams to educate British friends of India. Funds were raised to support Lai Mohan Ghose's (He was defeated along with ottyer candidates who were supported by Indian associations.) candidature to the House of Commons and attempts were made to bring Indian opinion before the British electorate.

Mandlik as a vice-president and a member of the Legislative Council had some influence in the Association. But successful attempts were made to

reduce his influence. Dadabhai's role was significant until he left Bombay for England in March 1886. He, however, wielded influence upon the politics in Bombay till his death.

The Presidency Association was dominated by Pherozeshah, Telang and Badruddin. Governor Lord Reay considered Telang as " undoubtedly the foremost man in the Presidency. " He was responsible for the energy and enthusiasm which rendered the Association so vigorous an entity in its first few years. He was appointed judge on the Bombay High Court in 1889, since when he withdrew from public affairs. His early death in 1893 left the field open to Pherozeshah. Badruddin, who was also closely connected with the Congress, gained popularity during his opposition to the Bombay local self-government bills. He wielded influence in public meetings of the Association. However, after his elevation to the High Court in 1895 he also withdrew from public life.

Consequently Pherozeshah assumed a dominating position in the Association, and became the city's major leader, appropriately called the " Lion of Bombay ". He had a leading role amongst the Parsis and a stronghold of influence in the Municipality, where he was a chairman from 1884 to 1886. During 1887-88 he led the battle for a representative and yet workable constitution for the Municipality, and was considered largely responsible for its new form. His position had become unrivalled by 1890. He was chosen president of the Congress in 1890, and was a member of the Bombay Legislative Council from 1887 to 1893 when he was elected to the Viceroy's Legislative Council. His position within the Presidency Association had also been nothing but formidable. His leadership was accepted by the educated and the lawyers who met regularly in his chambers, where most of the decisions of the Association were taken. His bonds with industrialists, including J, N. Tata, who was rising in the nineties, and D. M. Petit and others, brought support, funds and goodwill for the Association from industrialists and the rich. D. M. Petit, who continued to be its president until well unto the twentieth century, and Tata ensured the general support of Bombay's rich class to this body. Pherozeshah, working in close co-ordination with Dinshaw Wacha, the secretary, and being supported by the intelligentsia and the wealthy persons, continued to dominate till the Presidency Association's control went into Dinshaw's hands. By then, new factions of younger graduates and lawyers had emerged in and outside the Association to win its control. (/. Masselos, op. cit, p. 242,)

In subsequent years the young educated desired to bring the Association more close to the Home Rule ideology. The Presidency Association made numerous representations to the governing authorities on local, provincial and imperial matters. It used to call public meetings for ventilating the grievances of the people. It sent N. G. Chandavarkar as a delegate to London on the occasion of the general elections of 1885 in England to submit Indian public opinion to the British Electors. He was one of the three delegates, the other two being Man Mohan Ghosh and Ramaswamy Mudaliyar. In 1897 the Association was invited by the Government of India to select a representative to give evidence before the Royal Commission on Indian Expenditure. The Government had granted it a privilege to select a Director for the London Imperial Institute, which undoubtedly was a recognition of its importance as a representative body. Although the propaganda and pamphleteering work of the Indian organisations did not influence the British electorate, it did have some impact. As Pherozeshah

observed, if the delegates had not set the Thames on fire, they had certainly kindled a spark in the hearts of the British public. It had won over many friends among the Englishmen, such as, Lord Reay, Lord Rosebery and Mr. Bryce.

The Presidency Association sent its delegates to all sessions of the Indian National Congress held from time to time. Its name became synonymous with that of the Congress in the Bombay Presidency, and very few important decisions were taken without its prior approval. Its formidable position was due to various reasons as under: (1) It was a stable body with strong leadership. (2) It could raise large funds and could undertake energetic work for the Congress. (3) There were close personal bonds between the Bombay politicians and A. O. Hume, W. Wedderburn, Ranade and others throughout India. (4) With Wacha becoming its secretary, it had an upper hand in the Congress. "Thereafter no key decision was taken without Pherozeshah's approval although there was, of course, discussion and consultation with other leaders throughout the country ".(J. Masselos, op. cit, p. 245)

The first Bombay Provincial Conference emerged in November 1888 as a means of concerting policy and action for the forthcoming session of Congress in Bombay. Its goal was also to deal with local grievances. Bombay leaders obtained a significant foothold in the conference.

Badruddin Tyabji of the Presidency Association was the president of the Congress of 1887. He possessed a national and strong regional reputation. His opposition to the Bombay local self-government bills in 1884 had enhanced his reputation not only as a leader of the Muslims but also of "the whole native community".

Two stalwarts of the Bombay Presidency Association, Pherozeshah and R. M. Sayani, were appointed to the provincial Legislative Council in 1894. The former was elected by the Bombay Municipal Corporation, while the latter was nominated by the Governor, Lord Harris. The Association had effectively superceded all earlier political clubs in Bombay. It functioned almost as the nerve centre of the Congress for many years.

The period 1860-1885 can be styled as the period of petitions and memorials by various associations. The Poona Sarvajanik Sabha was one of the leading political organisations of India in the latter half of the nineteenth century. It was founded on April 1870 in lieu of the Poona Association, established in 1867. It is interesting to contrast the role of the Poona Sarvajanik Sabha with that of the Bombay Association. The difference between the two was that the former used to go to the people and create informed public opinion in support of its demands. It was not a mere petition making body. The relief measures organised by the Sabha at the time of the famine in 1878-79 and also the sober agitation conducted by it, compelled Government to accept many of over many friends among the Englishmen, such as, Lord Reay, Lord Rosebery and Mr. Bryce. The Presidency Association sent its delegates to all sessions of the Indian National Congress held from time to time. Its name became synonymous with that of the Congress in the Bombay Presidency, and very few important decisions were taken without its prior approval. Its formidable position was due to various reasons as under: (1) It was a stable body with strong leadership. (2) It could raise large funds and could undertake energetic work for the Congress. (3) There were close personal bonds between the Bombay politicians and A. O. Hume, W. Wedderburn, Ranade and others throughout India. (4) With Wacha becoming its

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The latter half of the nineteenth century witnessed a rapid growth of the cotton textile industry in Bombay. While an enterprising class of enlightened industrialists was coming to the fore, many native newspapers like *Native Opinion, Indu Prakash and Rast Goftar* were strongly advocating the cause of the manufacturing industry in Bombay. In the wake of growing industry, the influence of the free trade doctrine in England and its application to the disadvantage of India was taken with alarm by the press as well as the intelligentsia in the city. The Bombay

Branch of the East India Association memorialised to Lord Northbrook to withdraw the tariff on raw cotton in 1875. Economic issues came to the fore when Lord Lytton abolished custom duties on imported cotton goods in 1879. This caused a stir in the quiescent political life in Bombay. The political forces in the city joined hands, and a public meeting was held on 3 May 1879, under the leadership of Telang, Mehta, Tyabji, Mangaldas Nathubhai, Morarji Goculdas, Beramji Jijibhai and Nanabhai, representing the intelligentsia and the millowners. " For perhaps the first time in the history of Bombay politics the speakers from both sides echoed identical sentiments: that over the question of import duties......India was unfairly treated by Britain".(Christine Dobbin, op. cit., p. 204,)

The Bombay Millowners' Association was formed in February 1875 in order to protect interests threatened by possible factory and tariff legislation. Common interests tended to promote group consciousness amongst the millowners. The Parsis comprised the wealthiest section, although Bhatias and Banias were equally significant.

After the intelligentsia and the millowners, the third force of organised workers in cotton mills was making itself felt in Bombay's political life in the eighties. It was a new class in Bombay politics. N. M. Lokhande, the father of the labour movement, formed the Millhands' Association in 1884. It consisted of the head jobbers in cotton mills in Bombay. At a public meeting of about 4,000 mill workers (23 September 1884) at Parel, Lokhande read a petition of demands concerning hours of work, regular payment of wages and appointment of two representatives of workers on the Factory Commission (1884). Under N. M. Lokhande's influence, the Bombay workers were heard by the Commission. The Millhands' Association was received with mixed reactions in the press. Even papers like Native Opinion and Indu Prakash seemed to have misunderstood its aims, and showed more regard for the mill industry rather than for the workers.

The Bombay Government had recommended to the Secretary of State, for the enactment of factory legislation in 1874 in view of the rapid growth of mills in Bombay. Surprisingly even patriotic newspapers like the Native Opinion, the Jame Jamshed, the Bombay Samachar and the Gujarati denounced the whole concept of factory legislation, which argued that such interference would crush Bombay's rising cotton industry. The Rast Goftar, and later, the Indian Spectator were the chief supporters of the Factory Bill which was introduced into the Viceroy's Council in November 1879. Naturally the Bombay Millowners Association vehemently opposed the Bill as well as Government efforts at factory legislation. It protested in a memorial to Government that any restrictions in the hours of work would harm the industry, and that the Bill was unsuited to Indian conditions and that government interference in such matters was objectionable in principle. It lauded the benefits enjoyed by a mill worker fortunate enough to get a job.

In spite of opposition from vested interests the Bill was passed in the Viceroy's Council in March 1881. The official and non-official opposition to the Bill was reflected in its provisions. (The Factory Act provided for a 9-hour day for child labour under 12, forbade child labour under seven,

ensured one hour rest every day and four holidays in a month) Even before the Act came into force in Bombay a movement for its amendment and for alternative provincial legislation, was started. The Rast Goftar and the Indian Spectator, as also official opinion in Bombay was in favour of amending the Act. Accordingly the Bombay Government appointed a Commission in 1884 to investigate into the working of the Act. Many representatives of the 31,812 workers in Bombay mills, under the leadership of N. M. Lokhande were heard by the Commission/However, the latter body reported against amendment of the 1881 Act, and the Government fell in line. The Act was ultimately amended by enactment of the Factory Act of 1891.

UNIVERSITY EDUCATION

The renewal of the Charter of the East India Company was an occasion for a comprehensive restatement of educational policy of Government. A select committee of the House of Commons under Charles Wood prepared a comprehensive document known to history as Wood's Educational Despatch of 19 July 1854 which has been regarded as the starting point of modern university education in India. It may be recalled that the distinguished citizens of Bombay including Jagannath Shankarshet, Sir Cowasji Jehangir, Naoroji Furdunji, Dadabhai Naoroji, Bhau Daji, Varjivandas Madhavdas, David Sassoon, Beramji Jijibhai, Muhammad Ibrahim Mukba, etc. established the Bombay Association in a public meeting in the Elphinstone Institution on 26 August 1852, and sent petitions to British Parliament regarding improvements in the system of government and education. Undoubtedly the suggestion in the petitions to establish in each Presidency a University for qualifying persons for various professions, must have weighed with the Court of Directors in issuing the Despatch, in supersession of their earlier decision of 1845. (S. R. Don&erkery, A History of the University of Bombay, 1857-1957 (University of Bombay, 1957), p. 9) A ground had also been prepared by the Elphinstonian institutions and by the efforts of Jagannath Shankarshet and Dr. Wilson for higher education leading to University stage. Accordingly the Bombay University (The Calcutta University was established a few days earlier in the same year. The Madras University was founded a little later than Bombay in 1857) was established under Act XXII of 18 July 1857 during the Governorship of Lord Elphinstone. It was on the model of the London University and was a purely examining body like the model body. Its jurisdiction extended over the whole of the Bombay Presidency including Sind upto 1947 after which the jurisdiction became more and more circumscribed as regional universities were founded. (For details see S. R. Dongerkery, History of the Bombay University, 1857-1957)

With the founding of the University the educational structure was formalised. The first Matriculation examination was held by it in October 1859 and the first B.A.s were granted in 1862. It was reconstituted from time to time by the Acts of 1904, 1928 and 1953.

The first graduates of the University to receive B.A. degree in 1862 were M. G. Ranade, R. G. Bhandarkar, B. M. Wagle and V. A. Modak. Justice Ranade was destined later to play important roles in the progress of the

University and in the initiation of political and social reforms, while Dr. Bhandarkar was destined to shed lustre as a great Sanskrit scholar and Vice-Chancellor.

For more than 17 years the University was without a permanent building of its own and its offices were located in the Town Hall. The convocation hall, named after Sir Cowasji Jehangir Readymoney who had donated a munificent donation of one lakh as early as 1863, was completed in November 1874 until which convocations were held in the Town Hall. The Cowasji Jehangir Hall, representing an early type of French architecture of the thirteenth century, is a magnificent structure which, in the beauty of its architecture, its excellent proportions and its spacious interior with a lofty receiling, is one of the finest buildings the city can boast of. Few universities even in the West are the proud possessors of a Senate Hall such as this, as has frequently been observed by academic visitors from abroad. Its actual cost of construction was Rs. 3.79 lakhs. (S. R. Dongerkery, op. cit., p. 22.)

The University Library and Rajabai Tower is unique among the buildings which enhance the beauty of Bombay and has amply fulfilled the desire of the donor that it should be "an ornament to this city, and by becoming a store house of the learned works of past and future generations promote the high ends of the University." The Clock Tower, one of the most attractive features of the city, rises to a height of 280 feet. Above the first gallery, in niches cut in the pillars at the corners of the octagon, are large figures carved out of Porbunder stone, representing the different races and costumes of Western India, and higher still is another series of figures of the same description representing the features and mode of dress of the different communities of Bombay State. The building was completed in November 1878 at a total cost of Rs. 5.48 lakhs covered by the gift of Rs. 4 lakhs generously donated by Premchand Raichand in 1864 and the interest which had since accumulated thereon. The donation was made by him in commemoration of his mother. (*Ibid, p. 20.*)

This was the first university in India to admit women to all degress in 1883. (London was the first British University to throw its degree open to women, in 1878. Oxford and Cambridge took a much longer time to get over their prejudice against the fair sex.) There was a long drawn out controversy over the desirability of general education as against specialisation upto B. A. level. The stalwarts like Telang, Bhandarkar, Pherozeshah Mehta and Chimanlal Setalvad who wore the robes of vice-chancellorship, were ranged on the side of general education.

The constitution of the University remained unaltered until 1904. The Indian Universities Commission of 1902 appointed by Lord Curzon, became a subject of controversy in Bombay. Justice Chandavarkar was invited to join the Commission for the purpose of the enquiry relating to Bombay University. Pherozeshah criticised the Commission very severely in regard to its constitution, encroachment upon university autonomy, recommendation of courses of study and perfunctory approach, in the debates in the Senate. The echoes of the debate in the Senate were voiced in the columns of the daily press, and there were many protests against the encroachment on university autonomy and officialisation of higher education which the Bill had purported. Gopal Krishna Gokhale combated against infringement of autonomy in the Imperial Legislative Council. In spite of the powerful opposition from stalwarts like Pheroze-

shah and Gokhale, the Indian Universities Bill was passed into law in 1904. The battle was really between Lord Curzon, who was determined to bring universities under Government domination and the leaders of public opinion like Pherozeshah and Gokhale who stood for university autonomy and Indian interests in higher education. Lord Sydenham did in fact interfere with the University affairs in a subsequent year as foreseen by Pherozeshah and Gokhale. The tall claims made for the Bill by Lord Curzon have also not been justified by events in the following period. The Act of 1904 had, however, some redeeming features, as conceded by Gokhale, such as better control of the University over colleges, enabling the former to increase efficiency of the colleges by inspection, etc.

In pursuance of the provisions in the Act of 1904, concrete steps were taken towards the transformation of the affiliating university into a teaching university in 1914-15, and post-graduate lectures were arranged at the University in Economics, History, Philosophy, Sanskrit and Persian. The University Department of Sociology was founded in November 1919 under the able Prof. Patrick Geddes. This was a right step towards a transition to teaching university. Another landmark in the history of the University was the foundation of the Department of Economics in September 1921 under Prof. K. T. Shah. The Civics and Politics department followed suite in 1948 with the help of the Pherozeshah Mehta Memorial Fund and a grant from the State Government. These three departments constituted a single administrative unit, called the University School of Economics and Sociology until June 1956, when they were reorganised into independent units. The Departments of Chemical Technology and Statistics were founded in 1934 and 1948, respectively. Several other departments were opened during the last about 25 years. The Departments of Economics, Politics, Sociology and Technology have helped to bring the commercial, social and industrial life of the city into close relationship.

The Bombay University Act of 1928 was a great advance over the Indian Universities Act of 1904 in many respects. It was a great step forward towards democratisation of the University which was under Government domination with four-fifths of the Senate members nominated by Government. The Senate was made more broad-based to represent principals of colleges, headmasters, municipalities, local bodies, Chambers of Commerce and the Millowners' Associations of Bombay and Ahmedabad, besides graduates and faculties. The University thus assumed a more democratic character and echoed the voices of academicians, educated public as well as commercial interests in the city. The 25 years after the Act of 1928 constituted a momentous period in the history of the University. It was marked by horizontal and vertical expansion and changes in university education. This was but natural because the country was passing through the vicissitudes of the Second World War, the enthusiasm and pangs of the struggle for freedom, the Quit India movement of 1942, the partition of India, and "the ferment of new ideas of linguistic loyalties which was a concomitant of the political movement, and which was to lead to the decentralisation of university education on a linguistic basis." The expansion of collegiate education may be judged from the fact that the number of affiliated colleges increased from 29 to 79 and the student population swelled from 11,059 to 41,829 from April 1927 to March 1947. Even after formation of separate universities for Sind, Poona, Karnatak and Guiarat, there were 31

colleges with 34,000 students in the city of Bombay in 1956. The expansion of the University activities in the direction of teaching and research was remarkable. The School of Economics and Sociology expanded rapidly and produced celebrities like K. T. Shah, C. N. Vakil, J. J. Anjaria, D. T. Lakadawala, M. B. Desai, M. L. Datwala, Patrick Geddes, G. S. Ghurye, P. R. Brahmanand, A. R. Desai and a galaxy of great men. The Department of Chemical Technology which shifted to the magnificent building at Matunga in 1943, was expanded very rapidly from time to time. The University Hostel and the Birla Hostel (through donation by the Birla Education Trust) were inaugurated in June 1952 for accommodating 148 students.

It was in 1937 that the bifurcation scheme was introduced under which students were required to exercise a choice between arts and science studies from the commencement of the University course. Prior to that year, the first year course used to be a composite one, and the student had to choose between arts and science courses only at the intermediate stage. This scheme was extended to commerce colleges from 1938. The Matriculation examination conducted so far by the University was abolished from 1949 as the S. S. C. Examination Board for the Bombay State was created for conducting the S. S. C. Examination. Thus, the supervision of the University over secondary schools ceased for ever.

The Poona University was fully constituted in February 1949, when all colleges in its jurisdiction were affiliated to it. This was a culmination of the prolonged efforts of persons like Narayan Chandavarkar, M. R. lavakar, G. S. Mahajani and others in the Bombay Legislative Council and outside. The Marathi Sahitya Sammelan in its Bombay session in 1926 had earlier urged the Government, princely states and the educated to help the foundation of a university for Maharashtra. Similarly separate universities were constituted for Gujarat (November 1949) and Karnatak (March 1950). The Shreemati Nathibai Damodar Thackersey Women's University was given a statutory recognition in 1949. Thus, the jurisdiction of the Bombay University became circumscribed, and it emerged as a City University worthy of the first city of India which had given its birth. It then became a "teaching and federal" university by virtue of the Bombay University Act of 1953 which came into force on June 1 1953, and under which the colleges have become constituent parts or limbs of the University.

At the dawn of the University, there were only four faculties, viz., Arts, Law, Medicine and Civil Engineering. The Faculty of Science was started much later in 1917, in lieu of the Faculty of Civil Engineering. There are at present seven Faculties: Arts, Science (1917), Law, Medicine, Technology (1933), Commerce (1949) and Dentistry (1956).

One of the most historic events in the life of the Bombay University was the opening of a new campus atKalina in Santacruz area in July 1971. Its jurisdiction now extends over far and wide territories including Greater Bombay, Thane, Raigad, Ratnagiri and Sindhudurg districts and the Union Territory of Goa.

BUILDERS OF THE UNIVERSITY

The history of the Bombay University or even of Bombay city would not be complete without a brief account of the great men and luminaries who paved the way for its foundation or strived to build up the noble traditions which are associated with it in the public mind today. Mount-stuart Elphinstone, John Wilson and Jagannath Shankarshet as pioneers of education had prepared a ground for the University. As stated earlier Shankarshet and Bhau Daji had played a very active role in its foundation. It is a great tribute to Bombay that among the Fellows mentioned by name in the Act of Incorporation of the University there were five Indians, namely, Shankarshet, Bhau Daji, Sir Jamshetji Jijibhai, Bomanji Hormusji and Mahomed Yusuf Moorgay. Shankarshet was on the Senate ever since its foundation till his death in 1865.

Bhau Daji, although a medical graduate, was an antiquarian and a Sanskrit scholar and was for a long time a syndic. He is rightly commemorated by the Bhau Daji Prize, awarded since 1876 to the highest in B.A. Sanskrit of the University.

Dadabhai Naoroji, a product of the renaissance which had given birth to the University, had also a claim to be included among the founders of the University. He was the second Indian professor in the Elphinstone Institution of which he was very proud.

Sir Alexander Grant, (The Succession List of Vice-Chancellors of the University is given at the end in an Appendix) one of the most distinguished Vice-Chancellors, which position he adored twice, brought the University in its infancy the high academic tone of the Oxford University. A protagonist of university autonomy and scholarly traditions, he is said to have left his noble impress on the personality of a distinguished student like Pherozeshah Mehta.

John Wilson, a great scholar in Sanskrit, Persian and Philosophy, and one of the founders of the University, succeeded as Vice-Chancellor in October 1868. He enhanced the reputation of the University and fostered its growth on sound footing. The Wilson Philological Lectureship and his bust in the Library serve as a fitting memorial to him. Justice James Gibbs who succeeded Dr. Wilson as Vice-Chancellor (March 1870) and continued to adore that position for more than nine years, helped development of modern Indian languages and academical buildings. A bust statue and the " Gibbs Testimonial " in the library section were raised in his honour as a memorial to his services. Sir Raymond West, who adorned the vicechancellorship for three terms extending over a period of eight years imparted strength to the University and strove for its autonomy and development into a teaching university. He is remembered for his services to the University in drafting a Bill seeking autonomy which was, however, unfortunately rejected by the Government of India, although approved by the Bombay Government. It was during his regime that a new degree in Science was instituted in 1880, specialisation at the B.A. level was allowed, and women were admitted to the degrees.

Dr. Mackichan was Vice-Chancellor four times, and almost continuously a member of the Syndicate for 30 years, besides being in the echelons of higher education in the city for 42 years. He had not only become one of the living institutions and landmarks of Bombay but also a maker and moulder of the University. The duration of the B.A. course was extended from three to four years during his tenure.

Justice K. T. Telang was the first Indian to be appointed Vice-Chancellor in August 1892, which position he adored worthily till his death on 1 September 1893. He was one of the brightest *alumni* of the University, and was endowed with a sweet persuasive reasonableness illumined by a diffused radiance of feeling. He served the University faithfully for 16

years. His name will always be remembered for reformation of the B.A. and LL.B. degree courses, which are known as "Telang courses ".He was a protagonist of all-round development of a graduate, which can be achieved through knowledge of English, Sanskrit, Mathematics, Logic, Political Economy and Physical Sciences. As a member of the Indian Education Commission, 1882, he held independent views. Besides being a nationalist leader, he was a great Sanskrit scholar and a distinguished Judge of the Bombay High Court.

Although not appointed as a Vice-Chancellor, the services of Justice Ranade to the University were devoted and highly meritorious. He gave the benefit of his talents to the University as Fellow, Syndic and Deccan till his death. Dr. R. G. Bhandarkar, one of the most pre-eminent oriental scholars of his day, was also a distinguished Vice-Chancellor of the University (1893-95). He was a syndic of the University from 1873 to 1882. He was keenly interested in the improvement of curricula, and was a great protagonist of general education as well as research. Dr. Bhandarkar's works included treatises on Sanskrit grammar, critical editions of Sanskrit texts, reports on Sanskrit manuscripts and contributions to proceedings of learned societies and journals. His book *Ancient History of* the DeccanhsLS been acclaimed as the most authoritative work on the subject. A strong adherent of the critical and historical school of Philology, and unrivalled in the accuracy and thoroughness of his scholarship and literary criticism, Dr. Bhandarkar soon attained a world-wide reputation for oriental learning. In 1904, the honorary degree of Doctor of Laws, an extremely rare honour, was bestowed upon him. The Bhandarkar Oriental Research Institute(It was formally inaugurated by Lord Willingdon, Governor, on 6 July 1917.) was founded at Pune by his disciples and admirers as a temple of learning.

Sir Pherozeshah Mehta's association with the University was much longer than the brilliant trio, Bhandarkar, Telang and Ranade. However, it was not until the Senate was rocked by the controversy over the reforms in university administration, sought to be introduced by Lord Curzon in 1902, and again, over the attempt by Lord Sydenham to interfere with the autonomy of the University in framing its curricula, that Sir Pherozeshah threw himself with full vigour into the debate on the floor of the Senate to meet the challenge to the University's independence and autonomy. Although his tenure as Vice-Chancellor was brief, he will be remembered for the work done earlier. He rose to the full height of his powers, when he was opposing any measure which he regarded as unjust or undemocratic, whether in political, civic or academic sphere. There were three occasions when he took a lead in the Senate which no historian of the University can lightly pass over. These were : (/) the constitution of the Indian Universities Commission of 1902 by Lord Curzon; (ii) consideration by the Senate over the Commission's recommendations; and (iii) the Senate Committee's report on Sir George Clarke's (Governor of Bombay.) letter which came up before the Senate in January 1910. " Sir Pherozeshah was at that time unquestionably the strongest and ablest politician in India.

The University lay near his heart." (Mr. Lovat Fraser.) His services have been commemorated by a life-size painting on Venetian glass and a marble bust in the University Buildings.

It was in the Viceroy's Council as well as in the Senate that Gokhale fought valiantly along with his political *guru*, Pherozeshah, for the sake of

University autonomy. His political pre-occupations, however, prevented him from participating in the affairs of the University actively.

Sir Narayan Chandavarkar who succeeded Dr. F. G. Selby in January 1909 continued to be Vice-Chancellor till August 1912. Earlier he had adorned the Bench of the High Court in succession to Ranade. He was closely associated with Pherozeshah and Dinshaw Wacha in public life. He was elected president of the Indian National Congress in 1900, and represented the University in the Bombay Legislative Council from 1897 to 1901. After leaving Chief Ministership of Indore State (1912-14), he returned to active public life. He was a great social reformer, a protagonist of female education and depressed class reforms. In 1920, he was one of the three distinguished recipients of the honorary degree of Doctor of Laws.

Sir Narayan was the first non-official president of the Reformed Bombay Legislative Council from 1921 to his death in 1923. "He displayed a wide knowledge of parliamentary precedent and custom, and established in the Legislative Council a procedure founded upon the best traditions of the House of Commons." (Resolution of the Government of Bombay, May 1923.) An extremely fierce controversy over Sir George Clarke's (Lord Sydenham) attempt at violating autonomy of the University arose during Chandavarkar's vice-chancellorship. This was a historic combat (In the course of this combat, at one stage, Chandavarkar disallowed Pherozeshah's address to the House, which incident came perilously near wrecking the life-long friendship between them. The dignified tone of Pherozeshah and the admirable temper of Chandavarkar, however, did not leave any bitterness.) between the Government and the protagonists of autonomy.

Sir Chimanlal Setalvad had the unique distinction of occupying Vice-Chancellorship for 12 continuous years (1917-29), the longest period for which any one has hitherto been privileged to serve the University. He was on the Senate from 1895 till his death in 1947, and on the Syndicate from 1899 upto 1929. He represented the University on the Municipal Corporation for 20 years and on the Bombay Legislative Council for 12 years. He succeeded Gokhale as a member of the Imperial Legislative Council on the former's death in 1915. He acted as Advocate General for sometime. He was a Judge of the Bombay High Court in 1920 but resigned shortly to participate in active public life and politics.

He strived for the progress of the University, and was instrumental in establishment of the School of Economics and Sociology. He was appointed Chairman of the Committee on University Reforms (1924-25), the report of which bears the impress of his personality. His contribution towards the establishment of the G. S. Medical College is noteworthy. A marble bust of Sir Chimanlal stands in the Convocation Hall side by side with the busts of the distinguished Vice-Chancellors, Telang and Pherozeshah.

The account of Vice-Chancellors, which has necessarily to be brief, is illustrative and not exhaustive. Among the celebrated Vice-Chancellors of the later period, Justice M. C. Chhagla, Dr. P. V. Kane, Justice N. H. Bhagwati, Dr. John Matthai and Justice P. B. Gajendragadkar deserve a mention.

HISTORICAL COLLEGES

The Elphinstone College, the oldest institution of its kind in Western India, occupies a unique position in the annals of education as also of the growth of all-round awakening. It has produced men of outstanding merit in all spheres of life. The College was opened as a befitting memorial (Public contributions amounting to Rs. 4,43,900 were collected for the memorial, the Maharaja of Satara and the young widow of Nana Phadnavis donating Rs. 17,000 and Rs. 1,000, respectively.) to Mountstuart Elphinstone on his retirement as Governor, in recognition of his valuable services to the cause of Indians. The college assumed independent existence as Elphinstone College in April 1856 and was formally affiliated to the Bombay University in 1860. The College classes were first held in the Town Hall, and were shifted opposite the Grant Medical College in 1855. After 1862, the college migrated to the Tankar Villa near Gowalia Tank, and then to Cowasji Jehangir Readymoney building on Parel Road in 1871. Finally, it was housed in the present magnificent building with high stone walls and mediaeval arches, and was inaugurated by the Governor, Lord Reay, on 4 February 1889.

The celebrated professors of the Elphinstone College as well as its distinguished alumni which constituted the intelligentsia of Bombay have, already been mentioned in an earlier account in this Chapter.

The robe of the Vice-Chancellor of the Bombay University has often been worn by Elphinstonians like Telang, Narayan Chandavarkar, Pherozeshah Mehta, Chimanlal Setalwad, Vithal Chandavarkar and Justice Bhagwati. Maharshi Dhondo Keshav Karve, the founder of the S. N. D. T. Women's University, C. D. Deshmukh, former Finance Minister of India, Dr. B. R. Ambedkar, Chairman of the Drafting Committee of the Constitution of India and S. R. Dongerkery, the first Vice-Chancellor of the Marathwada University, belong to the galaxy of great Elphinstonians. Famous cricketers like Vijay Merchant, Khandu Ranganekar, Madhav Mantri, Datta Phadkar, Subhash Gupte and Madhav Apte were Elphinstonians. (Ibid.,p.) Lokamanya Tilak, the father of Indian unrest, and Gopal Krishna Gokhale. a constructive statesman and nationalist, were the distinguished Elphinstonians who played eminent roles <n India's struggle for freedom. There are numerous others who have rendered meritorious service to the cause of India, whose names cannot be mentioned here for paucity of space.

Dr. Wilson, the missionary scholar, opened an English School in his house at Girgaum on 29 March 1832. The school was shifted to the Military Square and was named as General Assembly's Institution in 1835. Dr. Wilson formed the college division of the Institution in 1836, and himself taught many subjects. On 31 April 1855, new buildings for the Institute were opened by Dr. Wilson on the site now occupied by Wilson High School in Girgaum. The college was affiliated to the Bombay University in 1861. The college grew in numbers and reputation, and its traditions of scholarship and all-round enlightenment were firmly founded when Dr. Wilson died in December 1875. He was closely connected with the Bombay University from its foundations, and during his tenure as Vice-Chancellor the foundation stone of the University Library and the Rajabai Tower was laid'. He was a great protagonist of the study of Indian languages. The College was moved from Girgaum to Chowpati with the zealous efforts of Dr. Dugald Mackichan. The original building, built in Domestic Gothic, was inaugurated by Lord Reay, Governor, in 1889. Dr. Mackichan was appointed Vice-Chancellor of the Bombay University four times, a unique record. Dr. Mackenzie, who succeeded him as Principal of the Wilson College and held that post upto 1944, was a great educationist. He was also Vice-Chancellor of the University from 1931 to 1933. The Pandita Ramabai Hostel for Ladies, attached to the college, was opened in February 1932 out of the funds collected in commemoration of Pandita Ramabai, an emancipationist of women. The College has produced illustrious men and women of outstanding merit. The first two Chief Ministers of Bombay State after Independence viz., B. G. Kher and Morarji Desai were Wilsonians. (University of Bombay, Centenary Souvenir (Bombay, 1957), p. 34.) It is remarkable that Morarji Desai distinguished himself in national politics for about a quarter of a century, and adorned Prime Ministership of the country from 1977 to 1980.

The Government Law College, Bombay, the first of its kind in India, was established in 1855 on public demand under the leadership of Jagan-nath Shankarshet. It was affiliated to the University in 1860. The College has produced a galaxy of eminent men who have made history both in the legal profession and national life. Only a few of them are mentioned here: H. J. Kania, the first Chief Justice of India, Nanabhai Haridas, the first permanent Judge of the High Court, M. G. Ranade, K. T. Telang, B. G. Tilak, Badruddin Tyabji, N. G. Chandavarkar, Ghimanlal Setalvad, Bhulabhai Desai, M. R. Jayakar, K. M. Munshi, D. F. Mulla, Dinshaw Davar, G. V. Mavlankar, B. R. Ambedkar, M. C. Chhagla, Justice N. H. Bhagwati, C. Coyajee, S. R. Tendulkar, M. C Setalvad, Haribhau Pataskar, Mangaldas Pakvasa, H. P. Mody, B. G. Kher, Jamshedji Kanga etc. (Christine Dobbin, op. cit., p. 47.)

By the latter half of the nineteenth century, legal profession was the only profession respected by the English ruling class. Indians' admission to this profession was not barred by political considerations. The rich in Bombay went to England also for advanced learning in law, and ultimately gained leadership in the Bombay intelligentsia. Badruddin Tyabji, Pheroze-shah Mehta, G. V. Karkare, Kharshedji Manakji and Hormasji A. Wadia were among the first generation of Barristers, who formed the nucleus of an India-wide fraternity. While studying in England, the Bombayites, along with Bengalis like W. C. Bannerji and Man Mohan Ghosh, formed a circle around Dadabhai Naoroji. Such early friendships were to prove invaluable in the political field in the following decades. (*The first Baronet.*)

Modern education in medicine was deliberately encouraged by Government. The idea of a medical college was first originated by Robert Grant, Governor of Bombay, in 1835. After his death, the citizens of Bombay with Jagannath Shankarshet and Sir Jamshetji Jijibhai, 3 resolved in public meeting in the Town Hall on 28 July 1835 that the proposed college may be named to commemorate Robert Grant. Accordingly the Grant Medical College was inaugurated on 3 November 1845 by George Arthur, the Governor. The main building was raised out of funds contributed by the East India Company and public subscriptions in equal measure. The idea of a hospital was mooted in a public meeting on 16 March 1838, in which Jamshetji Jijibhai offered a munificent donation of Rs. 1,64,000. The East India Company contributed an equal amount, and the J. J. Hospital was opened on 15 May 1845. Since then many hospital buildings were constructed in charity in the premises by benevolent donors. The C.J. Ophthalmic Hospital was opened on 21 July 1866 out of a donation by Sir Cowasji Jehangir Readymoney. Bai Motlibai, widow of Naoroji Wadia, founded the Obstetric Hospital which was inaugurated by Lord Harris. Governor, in March 1892. Sir Dinshaw Maneckji Petit constructed the Petit Hospital for Women and Children which was also opened in March 1892. It was on the same date that the Governor inaugurated a dispensary in the J. J. Hospital premises donated by Dwarkadas Lallubhai.

The Grant Medical College awarded its first diplomas in 1851 and first degrees in 1862. From the beginning it attracted a large number of Parsis, while Hindus were repugnant to the modern system of medical education. Bhau Daji Lad and Atmaram Pandurang were among the first 15 medical graduates from this college. (Christine Dobbin, op. cit., p. 48.)

Another teaching hospital affiliated to the Grant Medical College, namely G. T. Hospital, was inaugurated on 8 April 1874. It owes its foundation to the munificent donation of Goculdas Tejpal, an enlightened public figure and patron of English education in Bombay. Goculdas TejpaPs donation of Rs. 15 lakh deserved particular appreciation because it came forth during the bad days of the general economic crash in Bombay after the Share Mania

The other teaching hospital affiliated to the Grant Medical College owes its origin to the movement by Sorabji Shapurji Bengali, a journalist and political figure, and Pestanji Hormasji Cama, a philanthropist. It was the Cama Hospital opened on the Esplanade in August 1886. In connection with this hospital, the Jafar Suleman Dispensary was opened in the same year which was followed by the Bomanji Edulji Albless Obstetric Hospital in 1890.

While the above hospitals were established for natives out of philanthropy by the generous citizens of Bombay, the St. George's Hospital was raised by Government for Europeans in December 1892. Erected on the site of the historic Fort St. George, it is also a teaching hospital.

To resume the story of general education, it is certain that Government was not alone in the field of education. Missionaries had been quite active from the beginning. The *shetias* were ambivalent in their approach. While they desired to train their boys in English, they were averse to their children studying in government or mission schools. This was not only because of their aversion to profundity in literary education but also because they did not wish their children to mix with poorer children in government and mission schools. They, therefore, began to arrange for at least a smattering of English language and culture by organising their own seminaries, run mainly by British ex-army officers. Jagannath Shankarshet, D. M. Petit, Beramji Jijibhai and Mangaldas Nathubhai were educated in such a school. (*Times of India, 4 Feb, 1884*) Gradually the *shetias* became concerned at their self-imposed exclusion from university education, and the Fort Proprietary School was opened in 1859.

The St. Xavier's College was one of the early protagonists of Western learning and owed its origin to the St. Mary Institution and St. Xavier's High School. It was affiliated to the Bombay University in January 1869.

The Sydenham College owed its origin to the pioneering efforts of K. Subramani Aiyar, Sir Vithaldas Thackersey, Sir Dinshaw Wacha, Manmohandas Ramji and Lord Sydenham (Governor), and to some philanthropists of Bombay. The degree of Bachelor of Commerce was first instituted in India by the Bombay University in 1912. The college was named after Lord Sydenham in 1916, and was moved into its newly built present premises as late as 1955.

Veterinary education in Western India was initiated by the establishment of the Bombay Veterinary College in August 1886 in collaboration with the

Bai Sakarbai Dinshaw Petit Hospital for Animals, which was established by D. M. Petit as a wing of the Society for Prevention of Cruelty to Animals. The work of medical relief was entrusted to the Municipal Corporation in 1907 under the famous Police Charges Act which came into being after an incessant protracted fight by Pherozeshah Mehta, both in the Legislative Council and the Corporation. (The account has already been given elsewhere.) The municipal authorities then proceeded to formulate plans for developing additional hospital facilities in the city. The sad demise of King Edward VII occurred soon after, and the enlightened citizens of Bombay, under the leadership of Pherozeshah Mehta, raised a fund to be utilised for building a hospital in memory of King Edward VII. The Memorial Fund Committee raised about Rs. 7 lakhs inclusive of Rs.1.20 lakhs donated by Sir Currimbhoy Ibrahim Entertainment Fund, rupees one lakh from Purshottamdas M. Nathubhai in memory of his wife Bai Lilavati, and Rs. 30 thousands from the estate of Dr. Habib Ismail Jan Mahomed. (University of Bombay, Centenary Souvenir, p. 68.) The balance of the money from the celebration fund for the visit of King George V in 1911 was also handed over to the Corporation for naming a ward after the King. Government also contributed a sum of Rs. 4 lakhs and rendered considerable help by granting rebate on construction cost. The eminent citizens like Pherozeshah, Narayan Chandavarkar, Chimanlal Setalvad and D. N. Bahadurji who were trustees of the Seth Gordhandas Sunderdas Estate, offered a sum of Rs. 12 lakhs for endowing a medical college in connection with the proposed hospital. The zealous efforts of the elite bore fruit, and the Seth Gordhandas Sunderdas Medical College was started in June 1925, and the King Edward Memorial Hospital in February 1926, under the deanship of Dr. Jivaraj N. Mehta, who later played an important part in the Governments of Bombay and Gujarat States. The college and hospital were formally opened by Leslie Wilson, Governor of Bombay, on 22 January 1926. (The college was affiliated to the University of Bombay in August.) Unfortunately Pherozeshah did not live to participate in the inaugural ceremony.

The foundation of the K. E. M. Hospital was followed by construction of the Nowrosjee Wadia Maternity Hospital in 1927 and the Bai Jerbai Wadia Hospital for Children in 1929, in the immediate neighbourhood. Both these hospitals owe their origin to the munificence of the Wadia brothers, Sir Ness Wadia and Sir Cusrow Wadia.

The role of Dr. D. D. Sathe in the public life of Bombay is too well-known. It was he who started the National Medical College on 4 September 1921 in collaboration with some patriotic doctors in Bombay. (University of Bombay, Centenary Souvenir, p. 100) He was inspired in this endeavour by the spirit of the Non-co-operation Movement launched by Mahatma Gandhi. The patriotic zeal of the pioneers was responded by Dr. Nair's munificent endowment. This paved the way for opening of the B. Y. L. Nair Hospital, in memory of his mother, in July 1925, and of the college building on 28 November 1927. Later the college was renamed after Motiram Desai Topiwala, a generous donor, with the zealous efforts of S. K. Patil. It was S. K. Patil, one of the most eminent men of Bombay, who prevailed over the Municipal Corporation to take over the college as well as the hospital in November 1946. It was affiliated to the Bombay University in the same month. The Nair Hospital Dental College was started by the philanthropist Dr. A. L. Nair in the Dental Department of the

B. Y. L. Nair Hospital in 1933. It is now housed in a separate building, in the neighbourhood, erected by the Corporation, and has been affiliated to the University since June 1954.

The Ismail Yusuf College, established in 1929-30, owes its origin to the generosity of Sir Mahomed Yusuf who had donated eight lakh rupees for higher education of Muslims, way back in 1914. It has, however, been a cosmopolitan institution. (*Ibid., pp. 77-78.*)

The Shikshan Prasarak Mandali of Pune, who expanded Western education after the Dcccan Education Society, established two colleges in Bombay, viz., Ramnarain Ruia College in 1937 and R. A. Podar College of Commerce and Economics in 1941. The first one received a donation of Rs. 2 lakhs from the house of Ruias and the second one Rs. 1.46 lakhs from the house of Podars, (*Ibid., pp. 80, 85.*) both of which have many textile mills and other business to their credit in Bombay. The colleges were named as per the desire of the donors.

The Sikh community also contributed to the expansion of educational facility in the city. The Khalsa College was established in 1937 by the Gurudwara Committee of Shri Nankana Sahib, the birth place of the founder of the Sikh religion, Shri Guru Nanak. (Ibid., p. 82) The Partition of India inflicted severe miseries on the Hindus in Pakistan and thousands of Sindis had to migrate to Bombay in 1948. Although displaced from their native land, they made Bombay their home and participated in the public life of the city. Naturally they founded many institutions which have contributed to the enrichment of the educational and other fields of life. Accordingly the Jai Hind College and Basantsing Institute of Science was founded in June 1948 by the migrant professors from Karachi. The new building of the college at Churchgate, constructed out of donations and government grant, was inaugurated by Dr. S. Radhakrishnan, then Vice-President of India, in 1952. The National College, Bandra, the second college to be established in the suburbs of Bombay, (The Ismail Yusuf College was the first in the suburbs.) stands testimony to the undaunted spirit of the Sindis. It was opened in June 1949 by the Hyderabad Sind National Collegiate Board at the efforts of H. G. Advani and Prof. K. M. Kundnani. (University of Bombay, Centenary Souvenir, p. 113) The munificence of the houses of Wassiamull Assomuland Kishinchand Chellaram, and Bagomal Trust helped the emergence of the college as a successor of the two colleges at Hyderabad Sind, which were shattered after Partition of India. The K. C. College was the second remarkable venture of the above mentioned Board in 1954.

The Sophia College for Women was founded by the Society for Higher Education of Women in India in 1940. It is a unique institution striving for all-round development of ladies.

Although a cosmopolitan first city of India, Bombay lacked a college entirely managed by persons belonging to the scheduled castes, till 1946. It was in that year that Dr. B. R. Ambedkar launched the People's Education Society for propagation of higher education among the downtrodden. The society and its Siddharth College stand testimony to the keen interest and passionate urge of Dr. Ambedkar towards the emancipation of the downtrodden by opening the portals of the University to them. Besides the Arts and Science College founded in 1946, Dr. Ambedkar opened the College of Commerce and Economics in June 1953. The institution was shifted to its present premises in 1951.

Bombay, and in fact India, owes the initiation of technical education to the immense foresight and zealous efforts of such public spirited leaders as Dadabhai Naoroii, Pherozeshah Mehta, M. G. Ranade, Dinshaw Wacha and Badruddin Tyabji, as well as to the support of Lord Reay, the Bombay Municipal Corporation and the Bombay Mill-owners' Association. The foundation of the Victoria Jubilee Technical Institute in 1887, which is probably the oldest institution of its kind in India, was mainly due to the endeavour of these men of vision and the organisations which actively supported the cause. (Ibid., p. 97) The Institute wasnamed to commemorate the Jubilee of Queen Victoria and was housed in the old Elphinstone College building at Byculla which was donated by Sir D. M. Petit. It was later shifted to its present premises at Matunga in 1923. It was initially awarding diplomas, and started degree courses from June 1946, and is now one of the famous institutions of its type in the country. It has excellent teaching and material testing laboratory facilities, and has produced eminent engineers.

RESEARCH INSTITUTES

Bombay as the first city of India has provided a haven to a number of research institutes, besides those imparting general and professional education. They have contributed towards the enrichment of the hoards of knowledge and of the cultural heritage of this city of gold as well as of the country as a whole. Many of them have earned an international reputation and have given birth to renowned scientists and scholars. Although there are many such organisations, a detailed account of all of them is beyond the scope of this study. Hence only a selected few research institutes which have played a historical role are mentioned below. (Information about many voluntary social service organisations in Bombay, including a few research institutes, is given in Chapter 18 of this Gazetteer. Hence, repitition of the same is avoided as far as possible.)

The Haffkine Institute is one such celebrated organisation. It is the biggest research institution of its kind not only in India, but also in the whole of Asia. (University of Bombay, Centenary Souvenir t p. 162,) The building and the site where it stands have a long history. The Shiva temple stood on this site in Parel in olden times. A monastery and a chapel managed by the Jesuites, flourished here during the Portuguese regime. During the British rule, the building was constructed as Government House, and made the Governor's Palace. It was in 1882 that the Government House was permanently shifted to the Malabar Hill. This abandoned old magnificent building was used as a hospital from 1896 when a virulent epidemic of plague attacked Bombay.

It was in 1899 that Dr. Waldemar Mordecai Wolfe Haffkine, a brilliant student of Dr. Louis Pasteur, laid the foundation of the Plague Research Laboratory in this building, wherein were conducted some of the most fundamental researches in plague epidemiology and plague prophylaxis. Dr. Haffkine fought a crusade against the deadly epidemic by evolving an anti-plague vaccine and propagating it among the hostile native citizens. This zealous scientist gave public demonstrations by injecting the vaccine in his own body to get over popular hostility of the conservative natives, who opposed it due to orthodox beliefs. The Laboratory was renamed as the Bombay Bacteriological Laboratory in 1906 as it was further

expanded to undertake research in other infectious diseases, besides plague. In 1923, the Biochemistry department and Rabies section were added. This facilitated anti-rabic treatment which was available only at Coonoor and Kasauli in India till then. The Laboratory did excellent work in the control of tropical diseases in India, and was therefore aptly renamed as Haffkine Institute in 1925 (University of Bombay, Centenary Souvenir, p. 163) after its founder whose inspiration and work bestowed enormous benefits upon mankind in general and India in particular.

The Entomology department was formed in 1938 for systematic studies in tropical diseases. The Second World War gave a great impetus to the Institute as it was the only one that supplied plague vaccine to an area stretching from the Mediterranean to Japan. The Blood Bank also played an important role in saving life during the war. The Institution was further expanded from time to time for the research and manufacturing of antibacterial vaccines, T.A.B. vaccines, antivenene, anti-tetanus, antidiphtheria, anti-gas-gangrene, polyvalent anti-venene and a number of sera and vitamin preparations. A number of facilities were provided to equip the Institute for research in biological products and medical health problems in connection with endemic and epidemic diseases. It collaborates with different international organisations like WHO, UNICEF, Colombo Plan, etc. It also conducts post-graduate and doctorate research and training on behalf of the Indian Council of Medical Research and the Council of Scientific and Industrial Research, as also the Bombay University.

The Tata Institute of Fundamental Research (TIFR), which was founded by the Sir Dorabji Tata Trust and the Bombay Government in 1945, owes its origin to Dr. Homi Bhabha and the enlightened house of Tatas. It was initially started out of the funds provided by the Dorabii Tata Trust, the Bombay Government and Council of Scientific and Industrial Research, at temporary premises at Peddar Road, declared open by Sir John Colville, Governor of Bombay, on 19 December 1945. (The work had commenced on 1 June 1945 at the Indian Institute of Science, Bangalore, and its venue was shifted to Peddar Road in December 1945.) The Institute shifted to the old Yatch Club in September 1949 and then to present campus at Colaba. The Atomic Energy Commission of the Government of India, established in 1948 at the instance of Dr. Bhabha and JawaharJal Nehru, was faced with the acute problem of the shortage of nuclear scientists. The Government of India, therefore, entrusted to the TIFR a concerted programme of training scientists for the future requirements of the Atomic Energy Commission from 1948-49. It was in February 1956 that the Government of India recognised the TIFR as the national centre for advanced study in Nuclear Physics and Mathematics, and a tripartite agreement was concluded between the Government of India, the Bombay Government and the Dorabji Tata Trust, in April 1956, as regards the financing and management of the organisation. (University of Bombay, Centenary Souvenir, p. 160.) There is no parallel to this institute in India which has made great contributions to the theory of elementary particles and advanced studies in Physics, Mathematics, Chemistry and Biology. The country owes a debt of gratitude to the TIFR for producing scientists of international reputation such as Dr. Homi Bhabha, Dr. Vikram Sarabhai, Dr. H. N. Sethna, Dr. Raja Ramanna and Dr. Jayant Naralikar.

Institute of Science: Dr. Dugald Mackichan, who made a great impress on the educational life of Western India, inspired the necessity of scientific

research and an institution devoted to science in Bombay in 1903. Shortly Dr. Morris W. Traverse also stressed the importance of such an institution. Lord Sydenham took the initiative and appealed to the generous citizens of Bombay. Sir Cowasji Jehangir Readymoney (He was called Readymoney" because he was always ready to give money in charity.) pioneered the project by donating Rs. 3.25 lakhs for the building of the Institute and Rs. 4.75 lakhs for a public hall, which is still known after him. Sir Jacob Sassoon made another magnificent donation of Rs. 10 lakhs, while Sir Currimbhoy Ibrahim generously donated Rs. 4. 50 lakhs. (Of this fund, one lakh rupees were reserved for endowment of scholarships for Muslim students of the Institute.) A total of Rs. 25 lakhs including Rs. 5 lakhs by the Government of Bombay were collected for the building of the Institute. The foundation stone was laid by Lord Sydenham on 5 April 1911. King George V was pleased to allow the word ' Royal' to be associated with the name of the Institute. The building was completed in 1915. But it was requisitioned by Government for the Gerard Freeman Thomas Hospitals, in memory of the son of Lord Willingdon who was killed in the First World War. Even after cessation of the War, the building was not allowed to be used for its legitimate purpose. It was on 27 March 1920 that the Governor of Bombay, Leslie Wilson formally inaugurated the Royal Institute of Science and the Cowasji Jehangir Hall (University of Bombay, Centenary Souvenir, 1957.) Since then this premier Institute in India has contributed immensely in various fields of scientific research, and some of the scientists produced by it have adorned honourable seats in the Indian Science Congress, It was after Independence that it was renamed as Institute of Science.

With the increasing interest in social service, there was a keenly felt need for professional education of social workers in Bombay. The Sir Dorabji Tata Trust in keeping with its rich traditions, came forward, and founded the Sir Sorabji Tata Graduate School of Social Work in 1936 which was renamed as *Tata Institute of Social Sciences* in 1944. (*Ibid., p. 169.*) The Institute is recognised to guide students for Ph.D. degree of the Bombay University.

The Mumbai Marathi Grantha Sangrahalaya, established in 1898, (Ibid., p. 150.) has been rendering excellent reading and research facilities to citizens of Bombay. It has had the benefit of guidance of eminent public men like M. G. Ranade, Bhalchandra Bhatavadekar, Lokamanya Tilak, M. R. Jayakar, P. B. Gajendragadkar and S. K. Patil and eminent scholars like P. V. Kane, A. K. Priolkar, N. R. Phatak, P. M. Joshi and K. P. Kulkarni. The Marathi Samshodhan Mandal was established as its wing in 1948.

The Bombay Branch of the Royal Asiatic Society is one of the most distinguished institutions of its type in India. The names of several distinguished scholars of Bombay are connected with it. They included Bhau Daji Lad, Telang, V. N. Mandlik, R. G. Bhandarkar, Bhagwanlal Indraji, Jadunath Sarkar, P. V. Kane, Erskine Perry, John Wilson, James Mackintosh, James Campbell, Dr. Buist, Dr. Bird, John Malcolm, Maneckji Cursetji, Prof. Orlebar, Malcolmson, Carter, Dr. Lisboa, Buhler, Peterson, Dr. Gerson da Cunha, George Grierson, John Marshall, Ganganath Jha, Prof. Thomas, V. S. Sukthankar and many others. (A.D.Pusalker and V. G.Dighe, Bombay—Story of the Island City (Bombay, 1949). The Bombay Literary Society owed its origin in 1804 to James Mackintosh. It was in 1825 that the Royal Asiatic Society of London was founded which adopted the Bombay Society as its child. The latter was made an integral part of the former under the

appellation of the Bombay Branch of the Royal Asiatic Society in 1829. It received gifts of money and books from princely Bombay men like Jagannath Shankarshet, Cowasji Jehangir Readymoney and Premchand Raichand. It now functions as a central library. (Details can be seen in Chapter 18 of this Gazetteer.)

The Bombay Historical Society, established in 1925, has done a good deal of work relating to research in Indian history, epigraphy, archaeology, numismatics and allied subjects, more particularly on Bombay and Western India. It is functioning in association with the Prince of Wales Museum. (Pusalker and Dighe, op. cit.)

The Gujarat Research Society at Khar was founded in 1936 for promotion and co-ordination of research in all branches of knowledge, particularly with reference to Gujarat. (See Chapter 18 for details.) The Indian Historical Research Institute of the St. Xavier's College founded in about 1925, maintains a historical and archaeological museum and rare books and manuscripts, and an excellent reference library. It was founded by Father Heras. The Islamic Research Association was founded on 1 February 1933 for encouragement of Islamic culture, religion, history, literature and biography. It has published several volumes on history, religion, etc.

The K. R. Cama Oriental Institute inaugurated on 18 December 1916, was founded in memory of the late Kharshedji Rastamji Cama, (A. D. Pusalker and V. G. Dighe, op. cit.) the pioneer of the Avesta Studies on Western lines. The Institute is equipped with a good library of oriental literature and has always encouraged oriental studies.

The Prince of Wales Museum of Western India was established under Bombay Act No. Ill of 1909 in commemoration of the visit of Prince of Wales (later King George V) to Bombay in 1905. The magnificent building and galleries were raised through munificent donations by Currimbhoy Ibrahim, Cowasji Jehangir, Ratan Tata, Dorabji Tata, etc. The building, on completion in 1914, was allowed to be used as a war hospital during the First World War, after which the Museum comprising three main sections—Art, Archaeology and Natural History was opened to the public in 1922. (Ibid). The exhibits include a rich varied collection including the loan collections of the Royal Asiatic Society, specimens lent by the Bombay Natural History Society, the K. R. Cama Oriental Institute and several hoards from public institutions and individuals.

The Victoria and Albert Museum, now known as Dr. Bhau Daji Lad Museum, was founded in 1858 and finally housed in the Victoria Gardens, where it was inaugurated on 22 May 1872. Its ownership was transferred to the Bombay Municipality from 1 October 1885. The Museum stands testimony to the pioneering zeal of Dr. Bhau Daji.

COMMUNAL UPHEAVALS

In Bombay in the eighteenseventies, majority of the communities became aware of the necessity to reorganise themselves so as to enable them to present a united front on questions relating to them. There was also a movement for internal reforms to losen the shackles of conservatism and ostracism. However, there was an increasing tension between the

communities. Traditional enmities, such as those between Parsis and Muslims, flared into large-scale rioting in 1851 and 1874. The Parsis very often referred to the alleged favouritism of Hindus by Government in the matter of employment. (D. Framjee Karaka, The Parsees: Their History, Manners, Customs and Religion (London, 1858), p. 38).

There was an unprecedented awareness of education in several communities, particularly the Parsis and Hindus, in those days. In 1842 Sir Jamshetji Jijibhai established a fund which evolved into the Sir Jamshetji Jijibhai Parsi Benevolent Institution for education of the Parsis in Bombay and Gujarat. (*Ibid., pp. 285.88.*) B. M. Malabari was one of the champions of education and regeneration of cultural heritage of the Parsis. Jamshetji Jijibhai, the first Baronet, upheld the interests of his community till his death. The succeeding second Sir Jamshetji Jijibhai was rather unconcerned about social involvement. The other enlightened Parsis of the day who took great interest in community advancement included Sorabji Jamshetji, N. M. Wadia, K. N. Kabraji, D. M.Petit, M. F. Pandey, H. H. Sethna and K. F. Parekh.

Riots broke out in the city between Parsis and Muslims in 1851. "An article written by a Parsi Youth on Prophet of Arabia gave umbrage to the Muslims. At a meeting held on 7 October 1851, they proclaimed *a. jihad* (holy war) against the Parsis. They overwhelmed the small police force on duty and marched triumphantly to the Parsi quarters of the Bombay town. The Parsis were 'belaboured mercilessly by the rioters'. *6* For weeks together that part of Bombay was a scene of pillage and destruction, and the Parsis had to put up with shocking atrocities such as defilement of corpses.' Throughout the trouble, the Parsi community failed to secure any police protection." (R. C. Majumdar (ed.), History of the Freedom Movement in India, Vol. I, p. 493.)

In February 1874 similar riots broke out in Bombay between Parsis and Muslims. An objectionable reference to the Prophet in a publication by a Parsi gave rise to the unfortunate episode. The publication was suppressed by Government, and the Governor of Bombay, Sir Philip E. Wodehouse (1872-1877) laid the blame for the riot on the Parsis. The Muslims " invaded Parsi places of worship, tore up the prayer-books, extinguished the sacred fires and subjected the fire-temples to various indignities. Parsis were attacked in the streets and in their houses, and free fights took place all over the city....... Considerable loss of life and damage to property were caused." (Homi Mody, op. cit., pp. 81-88.) The riot continued for several days till the military was called out.

Both Pherozeshah Mehta and Dadabhai Naoroji, who were eyewitnesses and who could not be accused of having any special animosity against the Muslims or the Government, laid emphasis on the callousness of the police and the indifference of the Government. The attitude of the Commissioner of Police was particularly hostile and objectionable. Even the Governor advised a Parsi deputation, that waited on him, to make its peace with the Muhammedans and to learn the lesson of defending itself without dependence on the authorities. (Ibid.)

It is noteworthy that but for the question of riots, the Parsi leadership in the seventies was far from united. In 1877 they were divided on the issue of leadership of the community when it was proposed by Pherozeshah Mehta that the third Jamshetji Jijibhai should be formally acknowledged as the head of the Bombay Parsis. Although the intelligentsia rallied behind Mehta, 600 eminent Parsis met on 25 July 1877 under the chairmanship of K.N. Cama to oppose the above proposition. On 29 July 1877, 5,000 Parsis with F. N. Patel, Pherozeshah, S. S. Bengali, Cowasji Jehangir Readymoney, H.N. Saklatwala, Naoroji Furdunji and H. D. Pleader met in Bombay, and resolved that the present Sir Jamshetji should act in concert with the trustees of the Parsi Panchayat, as also the heads and leaders of the community, and enjoy the position of a president. (*Times of India, 31 July 1877.*)

The Pathare Prabhus, among the Marathi speaking communities, were also aware of the need for community reforms. The Pathare Reform Association was founded by Moroba Kanoba and Nana Moroji in 1863 for helping persons from the caste and fighting a crusade for widow remarriage. However, the Association could not rise to expectations till J. J. Jayakar and his friends appeared on the scene and strived for its revival. It was in 1879 that the caste managed to put its affairs on a more regular footing. (Christine Dobbin, op. cit., p. 225.)

In 1876 the Chandraseniya Kayastha Prabhus of Bombay organised themselves to raise funds for improvement of their educational and social condition. The Panchkalshis, a prosperous old caste of Bombay, but depressed to the level of carpenters due to the loss of their land to the Portuguese, also were awakened to raise their status by education. They preferred to call themselves Somavanshi Kshatriyas, and introduced many reforms in marriage and other rituals. In 1884, they founded the Kshatriya Union Club for the cause of education and care of the poor.

The Sonars under the able leadership of Jagannath Shankarshet's son Vinayakrao founded the Daivadnya Dnatiya Association for welfare of the community. (*Times of India Directory, 1869.*) The Daivadnya Caste Charitable Fund was organised for monetary assistance to kinsmen in marriages and education. It published its own newspaper, the *Daivadnya Samachar.*

The first Brahmin Club in Bombay was established in about 1890. This was followed by clubs and conferences of Saraswats, Prabhus and Shimpis. (Christine Dobbin, op. cit., p. 226.) Mahatma Phule opened a branch of the Satya Shodhak Samaj in Bombay in 1874. The Hindu Gujaratis established the Gujarati Social Union in 1879, while the Jain Association was formed in 1882 in Bombay. The coming of the Jesuits encouraged foundation of manyschools. The St. Xavier's College started by them in 1869 was an important addition to Bombay.

Bombay owed a lot to Kamruddin Tyabji and Badruddin Tyabji. The former was the city's first Muslim solicitor, while the latter was the first Muslim barrister. The Tyabji brothers promoted the cause of Muslim education and social reforms. They were joined in their endeavours by Mahomed Ali Roghay, a very rich man from the ship-building family, and a great liberal. Roghay's interest in Syed Ahmad Khan brought him into contact with Ghulam Muhammad Munshi. At the latter's suggestion Roghay consulted the two Tyabjis, and in March 1876 the Anjuman-i-Islam of Bombay was

established, (Times of India, 27 May 1876.) under presidentship of Kamruddin Tyabji. R.M. Sayani, (Sayani was the only Khoja pleader in Bombay in 1870s, and was a member of Government Commission on Laws relating to Khojas.) Badruddin and a group of Khojas were among the founder members, besides the three mentioned above. The Anjuman aimed at amelioration of the Muslims, and at improvement in their educational and social condition. As per the Times of India (2 October 1876) Muslims of Bombay had no real identity as they were far from united. The Anjuman opened the Anjuman-i-Islam school for English education through Urdu medium in September 1880. (Christine Dobbin, op. cit., p. 236.) The Tyabjis did a great deal in regard to Muslim education and unity, although their position was never undisputed. One Dr. Kassim, trained in the Grant Medical College as a surgeon, was their great critic. He was instrumental in foundation of the Bombay National Mahommedan Association in April 1882, as a rival body for Muslim welfare. (Ibid., p. 239.) It was, however, soon realised that the Muslims languished behind other communities in education, employment and material progress. This feeling was aired before the Education Commission (1882) by Badruddin Tyabji and Sayani. It was admitted by the Bombay Government also that there was an exceedingly small proportion of Muslims in the public service. (*Ibid.*, p. 242.)

On behalf of the Anjuman the Tyabji brothers drew up a memorial on 25 April 1885, on the question of Muslim education and employment. It demanded a share for Muslims in proportion to their population. After considering the pros and cons the Muslims were guaranteed a number of free studentships in Government high schools. The number of free studentships available to advanced classes, viz. Brahmins, Parsis and Europeans was curtailed. This measure came in for criticism by these classes and the press.

Meanwhile, despite the personal differences of the past and the political differences heralded by the founding of the Congress, the Muslims of Bombay appeared to have moved closer together for communal purposes in the 1880 (Christine Dobbin, op. cit., p. 246.)

DAWN OF CONGRESS

The entire history of the struggle for freedom and the mass political mobilisation in India is intimately connected with the Indian National Congress. The foundation of the Congress was one of the most important political events in the later nineteenth century. It soon became recognised as the symbol of nationalism in this country. "Few other nationalist organisations in Africa and Asia can match the long history of the Indian National Congress or rival its political sophistication, and even fewer have survived so successfully the ending of the imperial rule. Almost everything about the Congress is remarkable, and yet it did not spring into existence by chance. It emerged within a particular constitutional context and it was this that determined the form the Congress took and ensured its ultimate pre-eminence in Indian Politics." (Gordon Johnson, Provincial Politics and Indian Nationalism: Bombay and the Indian National Congress, 1880-1915 (Cambridge University Press, 1973), pp. 5-6.)

A study of the Congress is central to any understanding of the political history of Bombay as also of India after 1885. The Congress, in the initial stages, found a congenial home in Bombay and Poona. At least for the first about 40 years of the organisation's history many of its most important leaders and constant supporters came from Bombay city and Poona. The politicians from these two cities provided the core of national leadership.

Whatever might be the genesis of the Congress, the credit of organising it rightly or wrongly goes to Allan Octavian Hume, a retired I.C.S. Officer, who " was deeply impressed by the general discontent in India threatening imminent danger to the Government." (R. C. Majumdar, History of the Freedom Movement in India, Vol. I, p. 389.) He discussed his plans with many leaders of Pune and Bombay, such as Justice M. G. Ranade, Dadabhai Naoroji, Pherozeshah Mehta, K. T. Telang and Badruddin Tyabii. The ball was set rolling, and the culminating point was that the Indian National Union decided in March 1885, to hold a conference at Pune from 25 to 31 December, and immediately a circular letter was sent all over. Pune was considered the most central and suitable venue, and accordingly the Poona Sarvajanik Sabha forming a reception committee made extensive preparations. The place selected was Peshwe Park at the foot of Parvati hill. However, the venue of the first Congress was shifted at the eleventh hour to Bombay on account of the outbreak of cholera epidemic in Pune.

The Bombay Presidency Association came to the rescue and promptly shouldered the responsibility of the first historical meeting of the Congress. The Association convened the meeting in concert with the Sarvajanik Sabha. The trustees of the Goculdas Tejpal Sanskrit College and Boarding Trust, Telang being one of them, placed the grand building above the Gowalia Tank at the disposal of the Bombay Presidency Association and also supervised the furnishing and lighting of these large premises on behalf of the' Association who played a host. The Representatives began to arrive in the morning of 27 December, by which time preparations were complete.

It is noteworthy that Europeans like Sir W. Wedderburn, Justice Jardine, Colonel Phelps and Prof. Wordsworth (*Principal of Elphinstone College.*) and several leading citizens of Bombay welcomed the Representatives and expressed their sympathy with the endeavour, and participated in the Congress.

The first meeting took place on 28 December 1885. Very close on 100 gentlemen attended, but a considerable number of them being Government servants like M. G. Ranade (Member of the Legislative Council and Small Cause Court Judge of Poona), Prof. R. G. Bhandarkar (Deccan College), Mr. D. S. White (Eurasian Association), R. Raghunath Rao (Collector of Madras), Lalla Baijnath (Agra), Prof. A. V. Kattawate (Ahmedabad), Prof. Kadambi Sundararaman and Mr. T. N. Iyer, did not participate in the political discussions, although they gave some advice. The number of active participants was 72. (Source Material for a History of Freedom Movement, 1885-1920, Vol. II (Government of Bombay, Bombay, 1958), p. 14.)

The worthy speakers on the grand occasion included Dadabhai Naoroji, Hume, W. C. Bannerjee (who was elected president), K. T. Telang, Subrahmania Aiyar, Pherozeshah and Wacha. Dadabhai made a strong plea for the transfer of the actual Government of India from England to India under the simple controlling power of the Parliament and Secretary of State. He also made a plea that the whole power of taxation and Legislation be transferred to representative councils in India, with full financial control and interpellary powers. Pherozeshah's share in the proceedings was not inconsiderable. (Homi Mody, op. cit., p. 104.)

"The Congress was the culmination of much that had been hoped for by the Bombay intelligentsia, and, of the 17 delegates sent by the city, only one, Tribhovandas Mangaldas Nathubhai, had any connection with shetiadom. The delegates consisted of 7 Parsis, 5 Maratha Hindus, 3 Gujarati Hindus and 2 Muslims, and comprised nearly all the names—Telang, Mehta, Wacha, Sayani, Wagle, Malabari, Yajnik and Dadabhai Naoroji—prominent in Bombay politics over the past decades. Of the 17, 11 were in some way connected with the legal profession.....Paradoxically, although they had still not captured their own city, they had been able to unite to capture the Indian political leadership of the country." (Christine Dobbin, op. cit., pp. 215-16.)

The delegates were mostly lawyers, school teachers, newspaper editors and others who represented the intellectual power of India. They demanded political power and political changes giving an increased share to natives in the governance of this country. The Indian Council came in for wrath, while a Standing Committee of Parliament was demanded in place of the former. There was an expression of patriotic feelings, but a tone of loyalty to the British Crown pervaded all proceedings. The Queen Empress was applauded, and the beneficial effects of British rule, such as, education, law and order and material benefits were mentioned with gratitude.

In an editorial on the Congress, the Times (The Times, London, cf, Source Material for a History of Freedom Movement, Vol. II, pp. 18-21.) (of London) observed that Bombay had been making a noteworthy effort to substantiate its claim to be a leading city of India. It was at Bombay that India had given proof of national spirit for the first time. The Congress was not satisfied with the slender political power which the natives of India possessed. It demanded a larger share in the deliberative and executive functions of Government. The memory of Lord Ripon's administration was still held in honour in Bombay. The Congress was in favour of a Royal Commission of Inquiry into the working of the Indian administration. The delegates had sketched a scheme of reforms, (This was to be put up before the Royal Commission.) which included, (i) abolition of the Indian Council; (ii) constitution of a Standing Committee of the House of Commons; (iii) the Supreme Legislative Council and Provincial Councils in India to be expanded with more elected members; (iv) the examination for the Indian Civil Service (I.C.S.) should be held simultaneously in England and India by removing the disabilities imposed on natives; (v) military expenditure to be deduced; (vi) customs duty to be reimposed, etc. (The Times disapproved most of the demands, and sarcastically opined, " If India can govern itself, our stay in the country is no longer The *Times* observed that every important political society in India sent its delegates to Bombay, but no Mahomedan took any part in the proceedings, and that the question of social reforms was not even touched. K. T. Telang, one of the secretaries of the Congress, however, had made it clear that two leading Muslim leaders, viz., R. M. Sayani and A. M. Dharamsi did attend the Congress. Both of them were graduates of the University and attorneys of standing at the Bombay High Court. Sayani was the Sheriff of Bombay the previous year, and was appointed by Government as a member of the Khoja Law Commission. He was also a member of the Municipal Corporation and Town Council of Bombay for many years. Mr. Dharamsi was also a member of the Bombay Municipal Corporation. The Tyabji brothers who were important office bearers of the Bombay Presidency Association could not attend because they were out of station. Telang further observed that the main object of the Congress was a political one. Hence the question of social reforms was allowed to be raised on the third day of the meeting when Diwan Bahadur Raghunath Rao and M. G. Ranade gave eloquent addresses on social questions. (K. T. Telang's letter, dated 9th March 1886 to the Times, cf Source Material for a History of Freedom Movement, Vol. II, pp. 22-23.)

The main result of the first session was that it quickened the political consciousness of the people. The Resolutions passed by it were widely circulated and discussed by the local political associations. The newspapers also heartily welcomed the new organisation as the most powerful organ of Indian political opinion.

The Congress was always in need of money, and it was to Bombay that other Indian politicians looked to provide it. In the initial stages the largest contributions often came from the Parsis, such as D. M. Petit, although Gujarati rich persons like Varjivandas Madhavdas were also persuaded to donate. However, the city politicians occasionally resented the burden of fund collections. In June 1889 D. E. Wacha reported to Dadabhai Naoroji: "Pherozeshah and Telang flatly say they cannot dance attendance on the rich and influential.". (Dadabhai Naoroji MSS, file I: Wacha to Dadabhai, cf Christine Dobbin, op, cif) The founding of the Congress also created other strains in Bombay. The political leaders of the Parsis and Muslims, who had worked together with other groups in Bombay in the past, now split among themselves over the wisdom of supporting the Congress movement. (Ibid.)

The second session of the Congress was held in Calcutta in December 1886 under the presidentship of a Bombay luminary, Dadabhai Naoroji. Bombay was represented by Pherozeshah, N. G. Chandavarkar, Dadabhai Naoroji and many others. The third session, held at Madras in 1887, was also presided over by an eminent Bombay leader, Badruddin Tyabji. Thereafter the sessions of the Congress became regular annual events. The objective of this study is, however, limited to the political history of

Greater Bombay. Hence the scope of narration of Congress activities in the following pages is limited to the sessions of the Congress in Bombay, and the political activities of the city politicians. The narration is focused mainly to the association of Bombay politicians with the national movement, and their role in the Indian politics.

The Bombay politicians provided the core of national leadership. The reasons are obvious. They were the beneficiary of liberal Western education, and came closely in contact with British institutions and political thought. Their literate occupations and business interests also brought them into contact with the day-to-day working of the Government and the European Community. Naturally they were tempted to politics. It is noteworthy that 22 of the 39 non-official members of the legislature who held office between 1893 and 1899 habitually lived in Bombay city itself. Many of them represented mofussil interests on the Council and were proposed by constituencies in the districts. The rules for election to the Council laid down a minimum qualification for members of the Council based on property. Thus, many men who usually lived in Bombay were able to use the fact of holding some property outside as a circumstance qualifying them for election from that district. The Bombay Government had also observed that a flexible interpretation of the rule about ownership of property " gives perhaps undue weight to residents of Bombay, (but) it is difficult to interpret the rule more strictly without excluding some most valuable candidates. While a stricter interpretation might ensure a more exact representation of local interests..... it would certainly entail a lower standard of intelligence and education among the candidates for election by bodies outside the city of Bombay.". (Bombay Legislative Proceedings, 1899, Vol. 5772, India Office Records) Most of the native legislators were lawyers from the city and a few from Poona.

The Bombay politicians expressed their demands through the Bombay Presidency Association, the Poona Sarvajanik Sabha and the Congress. The demands related mainly to the following issues: (i) reform of the Legislative Councils in India to include more natives, (ii) reform of the civil service so as to enable Indians an easier entry into Government, (iii) reform of judicial administration on lines of English law, (iv) abrogation of discriminatory racial legislation, (v) economic development, and (vi) changes in taxation laws. For example, K. T. Telang moved a resolution in the 1885 Congress session recommending reform of the Legislative Councils. This proposal was repeated in some form or the other every year until 1894, and intermittently for many years later on. Another example, Dadabhai Naoroji told the 1885 Congress in Bombay that increased Indianisation of the administration was the most important key to our advancement. This feeling was echoed in various public meetings in the city.

Bombay men attained prominence in the upper ranks of the judiciary also. Telang, Tyabji, Chandavarkar and Ranade, all sat on the bench of the Bombay High Court, and were highly respected by Indians and the English alike. They were also deeply concerned about the poverty of India. Naoroji's economic essays exercised an overwhelming influence on economic thought in India at the end of the nineteenth century. He formulated the theory of economic drain purporting that Indian poverty was mainly due to a drain of wealth to England. (R. P. Masani, Dadabhai Naoroji: The Grand Old Man of India (Kavyalaya Publishers, Mysore, 1957). He left for England in 1886 for contesting election to the British

Parliament. But he was defeated in the election. He was later on elected to the Parliament in 1892, (Homi Mody, op. cit., p. 153.) and was the first Indian Member in the British Parliament.

The Bombay Presidency Association had taken over from all earlier political clubs in Bombay. Many of its leaders made Congress politics their life's work. They considered that control of the Congress was of vital importance. Dinshaw Edulji Wacha was the secretary of the Congress from 1895 to 1913. He acted practically in every capacity on behalf of the more powerful patrons of the organisation in Bombay. (Gordon Johnson, op. cit., p. 43.) During the more important years 1903-08 Gopal Krishna Gokhale was appointed as an additional joint secretary. (Hume retired permanently to England in 1892 and the main burden fell on the joint secretary.) He was succeeded by D. A. Khare in 1908, who helped Wacha in paper-work. " All three of these men were members of the Bombay Presidency Association, and it is to this association that we must look for the hard core of Congress leadership during this period. When the leadership of Gokhale and Pherozeshah Mehta came under attack between 1904 and 1908, the Bombay Presidency Association's hold over such formal Congress organisation as existed was to prove a decisive advantage." (Gordon Johnson, op. cit., p. 43.)

Bombay was honoured again as a venue of the fifth session of the Congress in December 1889, although Poona had shown considerable interest. A consideration of the relative merits of Poona and Bombay went in favour of the latter city. The session proved to be the most memorable gathering of the "unconventional conventions" that had yet taken place. Very few Congress sessions indeed have surpassed it in brilliance. (Homi Mody, op. cit., 134.) Sir William Wedderburn, who had retired from service two years ago, and was loved and honoured by all, was the president of the session. (Glowing tributes were paid tohim at the time of his retirement from office, by the leaders of public opinion in Bombay at the Town Hall. The same feelings found expression on the occasion of the 1889 session.) Charles Bradlaugh, a sympathiser of the Indian national movement, had graced the occasion. His magnetic eloquence had thrilled audiences in England. He took keen interest in Indian questions. His object in visiting India (on the occasion of the 1889 session) was toascertain personally the maturity of views of the educated Indians on certain points in his Bill for the reforms of the Legislative Councils in India. The presence of Sir Wedderburn and Mr. Bradlaugh, who had come from England, was regarded as a further stimulus to the Indian cause." No Englishman living is more trusted or more respected throughout India than Sir William Wedderburn, and the news that he had consented to come out to India to preside over the assembly, undoubtedly gave a further stimulus to the country.". (Source Material for a History of Freedom Movement, Vol. II, pp. 92-93.)

It was a great assembly with 1,248 delegates (There were 1889 delegates according Homi Mody, op. cit.) who represented about three million people in India who had taken a direct part in the election. The delegates included representatives of the Sarvajanik Sabhas of Poona, Satara, Ahmadnagar, Wai and Berar as well as other bodies in Belgaum, Surat, Broach, Nagpur, Nadiad, Thana, Vasai, Ratnagiri, Ahmedabad and

Bombay. There were even delegates from the caste associations in Bombay. (J. Masselos, op. cit., p. 244.)

A very large and picturesque structure was erected on a site at Byculla belonging to Sir Albert Sassoon, (He was head of the Jews in India.) and next to his grand mansion, the "Sans-Souci", to accommodate the delegates and visitors, who numbered nearly 6,000. (Homi Mody, op. cit., p. 135.) The burden of making arrangements on the occasion was shouldered by Dinshaw Wacha, the secretary of the Reception Committee. His untiring efforts to promote the success of the Bombay session were later on appreciated by the Reception Committee. Pherozeshah was the chairman of the Reception Committee. Mr. Bradlaugh was charmed at the magnificent deliverance and eloquence of Pherozeshah. Many others like D. A. Khare and Motilal M. Munshi, also from Bombay, really did exert themselves.

The Bombay gathering in the quaint picturesque hall represented all the multitudinous clans and peoples of India. A considerable section of Europeans attended. Not less than 10 lady delegates graced the assembly, one elected by men at a public meeting and the others by various ladies associations. (Official Reports of the Congress Sessions,) They included European and native Christians, a Parsi, an orthodox Hindu, and three Brahmo Samaj ladies. Pandita Ramabai Ranade was one of the most distinguished persons in the assembly, and was known for her ardent services, well-known not only in India but also in Europe and America. (Ibid.)

Although open opposition had ceased, a considerable section of the European officials and police were still credited by the people with a secret hostility towards the Congress. There was, however, no opposition from them.

Pherozeshah addressed the session with the best exhibition of his gifts of oratory, full of sarcasm, banter and ridicule of opponents. It gave a vindication of loyalty to the Government and of inflinching national spirit. The policy of the Congress was seditious, but conservative of public welfare and dignity of the Crown. The Congress was credited with the growth of the national idea among the people, and with the initiation of a series of reforms. Pherozeshah dealt with the opposition to the Congress which had culminated in the formation of the Anti-Congress United Patriotic Association. (Homi Mody, op. cit., p. 136.) The speech was well received and appreciated. The newspapers spoke of it as an eloquent and vigorous pronouncement.

Two incidents in this memorable Congress are worth mentioning. One was an address to Mr. Bradlaugh, which was in the nature of a resolution moved by Pherozeshah on the second day of the session. It was presented in the Congress Hall attended by Europeans and Indians. Mr. Bradlaugh's speech appealed and won the audience. He encouraged them to persevere ceaselessly. A resolution was passed to collect a sum of Rs. 45,000 for the expenses of Congress work in India and England. (*Ibid, p. 139.*) A handsome collection was made instantly. A Congress deputation was also appointed to represent in England the Congress opinion on political reforms. Five members of the deputation to England,

Surendranath Bannerji, R. N. Mudholkar, W. C. Bannerji, Norton and Hume, went and addressed a large public meeting and many private meetings, and rendered a useful service to the Indian cause. (Others on the deputation were Pherozeshah, George Yule, Adam, Manmohan Ghosh, Sharfuddin and J. E. Howard.)

The Congress of 1889 thus proved an unqualified success from every point of view. (Homi Mody, op. cit., p. 139,)

Pherozeshah was chosen president of the Calcutta Congress held from 26 to 30 December 1890. His devotion to public movements, oratorial excellence, generosity and towering personality, elevated him to the presidentship. His election was greeted by the public of Bombay and the press.

In 1889, the Parsis of Bombay mounted an attack on the Congress. They, however, did not get a following outside. The editor of the *Rast Goftar*, K. N. Kabraji, once a staunch member of Young Bombay, had organised the attack. His opposition was partly due to an apprehension of Government disapproval of Congress, and partly due to strained relationship with Pherozeshah. However, Parsis attended the 1889 Bombay session five times more than the earlier sessions, although they were apathetic. The non-Brahmins of Bombay and Pune had also organised a movement against Congress in 1889 on the ground that it was the monopoly of Brahmins. The *Din Bandhu* (founded in 1871) and the Din Bandhu Sarvajanik Sabha under N. M. Lokhande launched the attack. An anti-Congress petition was circulated, and a series of meetings were organised. But their petition did not succeed.

The Ripon Club, founded by Pherozeshah in 1885 for social and semipolitical objects, occupied a distinctive place among the social institutions of the day in Bombay.

It appears that some of the chiefs of Native States had subscribed to the Reception Committee of the Congress of 1889. Some of them had contributed out of fear that their mis-government might be exposed. The British Government had always discouraged the chiefs from spending State money on philanthropic schemes outside their own territories. Even contributions from personal private funds by the chiefs were looked with hostility. (P. D. Volume 212 of 1889.)

Pherozeshah's presidential speech in the 1890 session at Calcutta "was a sober, eminently practical and refreshingly vigorous presentment of the Congress cause". (Homi Mody, op. cit, p. 141,) He pledged support of the Parsis to the national cause. The question of reforms of Legislative Councils was also dealt with. The Bombay Gazette observed that Bombay by providing a president had contributed something of its own spirit to the assembly.

On 12 April 1890, Lord Reay handed over the reins of governorship of Bombay to Lord Harris. This event was regretted in Bombay whose fortunes he had guided with ability and a high sense of duty. He was instrumental in giving to the city the charter of local self-government, measures of technical education and a spirit of progress. The Bombay Presidency Association, hence gave a worthy send off to him. (*Ibid.*, p. 148,)

Developments in Bombay City: It may be interesting to refer here to the enactment of the Bombay Municipal Act of 1888. The Bill was introduced in the Legislative Council in July 1887. It was drafted mainly by the Legal Remembrancer (Mr. Naylor) and the Municipal Commissioner (Charles Ollivant). The only Indian of outstanding merit in the Council at the time was Mr. Telang. Lord Reay appointed Pherozeshah as additional member of the Legislative Council which position he held from 1887 to 1893. In its original form the Bill was retrograde as it sought to enlarge the authority of the Commissioner at the expense of the Corporation, and as it reserved to Government wide powers of initiative and interference in civic matters. It was referred to the select committee which comprised Pherozeshah and Telang, beside high officials. Dinshaw Wacha helped Pherozeshah in this process, the latter's performance being excellent. (For deeper study, readers may refer to Dinshaw Wacha's graphic history of municipal institutions in his Rise and Growth of Bombay Municipal Government, 1913.) The strenuous efforts of Pherozeshah and Telang, backed by Frank Forbes Adam, helped removing many drawbacks in the Bill. Lord Reay's fair attitude also contributed to enactment of the Bombay Municipal Act of 1888. The Act fulfilled the cherished desires of Telang and other Bombay men. In the Legislative Council, Lord Reay paid tributes to Pherozeshah and Telang who laboured for five years to give Bombay a pure and progressive charter of local self-government. It is remarkable that while the Bombay luminaries deserve the credit for the charter, the liberalism of Lord Reay was equally responsible for the same. He set a liberal tone to the Council, and the debates throughout maintained a high level of ability, moderation and good sense. (Homi Mody, op. cit., p. 113,) This piece of legislation gave Bombay an "inestimable boon of a sound and progressive municipal administration, which has been regarded as a model for the whole country. (Ibid., p. 114,)As observed by the Duke of Connaught, the municipal constitution of Bombay "bears the indelible mark of genius impressed upon it by the late Sir Pherozeshah Mehta ".

After his tenure in the Legislative Council (1887-93), he was elected to the Viceroy's Legislative Council in 1893. He strongly opposed the Police Bill in the Council in 1895, which elevated his public position immensely.

Arthur Crawford inquiry of 1889 was one of the notable events of Lord Reay's regime. The dominating and dynamic officer, after his brilliant but extravagant administration of Bombay as Municipal Commissioner, was, at the time of his tragic downfall, the Commissioner of a Division. It was during this tenure that an unparalleled corruption prevailed, which amounted to a public scandal. He developed a widespread network of graft and bribery involving local officers. There was a furore all over; which led to the appointment of a Commission of Enquiry by Lord Reay in 1889. Although Arthur Crawford was adjudged not guilty of the specific charges levelled against him, the Commission held that grave irregularities had been committed during his regime. He had, therefore, to resign from service.

This created a furious campaign of vilification and misrepresentation against Lord Reay's Government among the organs of bureaucracy. The note written by the Inspector-General of Police who was in charge of the case, excited the Parsi community. The incident was cleverly manipulated

by the opponents of Lord Reay's Government. Pherozeshah played a dominating role in persuading the Patsis to abstain from agitation. The episode did, however, a considerable damage to the political life in Bombay.

The Governorship of Lord Reay (1886-90) was characterised by many beneficial developments in Bombay. Besides the charter of local self-government, a good deal of urban improvement and street widening was executed. There was a considerable expansion of education. The Acworth Leprosy Hospital, named after the then Municipal Commissioner, was established in 1890. (Gazetteer of Bombay City and Island, Vol. II, 1909, p. 186.) The Joint Schools Committee was founded for mass education. The Victoria Jubilee Technical Institute, one of the pioneers in the field, was founded in 1887. Much good work was accomplished in the matter of communication, education, medical facilities and sanitation in the city. (Ibid.)

The Jubilee celebration in honour of Queen Victoria's reign was celebrated in 1887 at Bombay under Lord Reay. The Victoria Terminus of the Great Indian Peninsula Railway, a colossal monument of Gothic architecture, which is one of the finest stations in the world from the architectural point of view, was completed in 1888 at a cost of Rs. 16,35,562. On the Jubilee Day 1887, the building was named in honour of Oueen Victoria. The station proper was erected and opened earlier on 1 January 1882. The foundation stone of the St. George Hospital was laid by Lord Reay in February 1889 on the ruins of the old Fort St. George. It was originally named as the European Hospital, the present name being given by Lord Reay at the time of the foundation. The Government Central Press building which was subsequently occupied by the Elphinstone College, and the Presidency Magistrate's Court on the Esplanade were also commenced during these years. The first sluice of the Victoria Dock was opened by the Governor's wife in February 1888. The Merewether Graving Dock was opened by the subsequent Governor in 1891. (Ibid., pp. 187-88.)

The philanthropists in the city also came forward with several schemes for public welfare. In January 1888, Sir Dinshaw Petit, an eminent millowner, offered more than a lakh for the construction of a hospital for women and children, as an extension of the J. J. Hospital. He founded a pathobacteriological laboratory in the veterinary college at Parel, and subscribed handsomely to the foundation of a gymnastic club. The widow of Naoroji Wadia, Bai Motlibai, founded an obstetric hospital within the J. J. Hospital. Framji D. Petit donated nearly a lakh of rupees for the Laboratory in the Grant Medical College. The Albless family constructed the obstetric ward in the Cama Hospital. Mr. Cama, M. M. Bhavnagari and Dwarkadas Lallubhai also contributed generously for medical facilities, etc.

The great Tansa water-works and two well-known hospitals were opened in 1892 by the Marquis of Lansdowne. Technical schools and orphanages were opened and mills and factories increased before the end of the 19th century. Immense new dock-works had been projected. A number of other projects were also taken up.

The new building of the Elphifistone College was opened by Lord Reay on 4 February 1889. (C. Y. Chintamani (ed.), Speeches and Writings of the Honourable Sir Pherozeshah Mehta (Allahabad 1905,) p. 265.) Reay retired as one of the popular Governors of the Presidency. A public meeting was held in the Town Hall on 9 April 1890 for the purpose of arranging to raise a suitable memorial to commemorate the distinguished services of Lord Reay. Badruddin Tyabji and Pherozeshah appreciated the services of the former Governor in the fields of education, local self-government, justice and public comforts. (Ibid., p. 287.)

Shortly after Lord Reay left India, the relations between the Government and the Municipal Corporation became very strained. The bureaucracy was determined to impose its will on the body which was to be a selfgoverning institution. The Coiporation, led by Pherozeshah and others, however, wanted to guard its independence and dignity. One of the points of dispute was the comparative responsibility of the Government and the Corporation for the cost of primary education in Bombay. The protracted controversy dragged on for 17 years. The dispute was sparked off by a government letter to the Corporation, raising the entire question of their shares in respect of primary education. Under the Act of 1888, primary education was a joint liability, but the manner of sharing the liability was not clarified. The matter was discussed in the Corporation on 17 July 1890, Pherozeshah championing its cause. It was resented that the Government was shifting new burdens without transferring equivalent revenue. Pherozeshah held that Government had done very little for primary education, when the liability was on their shoulders, as was the case upto 1888. Now that it was a joint responsibility, they wanted the Corporation to bear all sorts of burdens. Municipal funds were to be saddled with mounting burden, which the Government never showed any inclination to shoulder. The Corporation was, however, saved from such an uncertain liability mainly because of the determined and skilful fight given by Pherozeshah. (Homi Mody, op. cit., pp. 149-150.)

Another point of dispute between the Government and the Corporation was due to the insistence by the Government that the latter should provide a hospital for infectious diseases in Bombay, failing which a "bludgeon" clause provided in the Act of 1888, was to be used. It was a threat to the Corporation that the cost of the same would be recovered in a court of law. There was an acute controversy within and outside the municipality, as the dispute also related to the dignity of the local body. A. O. Hume congratulated Pherozeshah for his stand by which the municipality stood firmly. The Corporation represented to the Government of India on this issue. But the Government was very firm about its decision, " and in October 1892, for the first time in local politics, the . bludgeon' clause was applied, and the Corporation was bullied into submission to a high-handed and indefensible proceeding." (Homi Mody, op. cit., p. 153.)

Pherozeshah enjoyed a commanding supreme position in the civic Government of the day. The Municipal Commissioners of the day were obliged to convince the 'Lion of Bombay 'on any measure contemplated by them, failing which the measure could not be carried through. He, however, never abused the power he had won by sheer force of

Dadabhai Naoroji's election to the British Parliament (He was elected from the Central Finsbury constituency in England.) in 1892, was one of the important occasions in the political history of modern India. It was a successful culmination of a seven year war, the opening campaigning of which had taken place in the rooms of the Association in 1885. The Bombay Presidency Association held a public meeting at the Town Hall on 23 July 1892, under the chairmanship of Dinshaw M. Petit, to congratulate the 'Grand Old Man' as the first native of India ever elected to the House of Commons. Lord Harris, the Governor, also expressed his pleasure through a message. The citizens of Bombay, in the meeting, gave " expression to their boundless satisfaction at the success which has crowned his unselfish and devoted exertions for the welfare of this country and which have earned for him the respect, affection, and admiration of the people." (Resolution moved by Pherozeshah Mehta, quoted from Speeches and Writings of Sir Pherozeshah Mehta, edited by C. Y. Chintamani.) Dadabhai's election was upheld as a means of championing the Indian cause in the House of Commons. It enabled the discussions of the Indian question in the party politics in Great Britain, and a direct appeal to the British electors.

Dadabhai came for a brief spell to India to preside over the Lahore Congress in December 1893. There was a remarkable demonstration at a mass meeting of welcome to him in Bombay by her citizens. The elite of Bombay as also the working class in great multitude, gathered at the time of the Dadabhai's landing on the shores. Dadabhai was welcomed at Poona the next day in a public meeting organised by Lokmanya Tilak and his friends. Similar receptions were arranged at Lahore and other places on the way, Dinshaw Wacha accompanying him.

The enlargement of the Legislative Councils in 1892 offered the representatives of the people an opportunity to criticise the administration. The first non-official member in all India to be elected to the new Councils was Pherozeshah. He was unanimously chosen by the Corporation, which had been empowered to return one representative. The first meeting of the provincial Legislative Council was held on 27 July 1893 at Pune, the monsoon capital of the Presidency. The other representatives included Ranade, Naoroji N. Wadia and Chimanlal Setalvad. The main questions before the Council were, Government grant to the University, the contribution of the Bombay Corporation to the city police force and separation of judicial from executive functions. The Corporation had to shoulder, under the Act of 1888, three-fourths of the cost of maintaining police in the city. This was ultimately changed in 1907, and the Corporation was spared of the liability of police expenses in return for taking over the full responsibility for primary education and medical relief. This issue is dealt with separately below. The problem of separation of judicial from executive functions, however, remained unsolved.

Justice K. T. Telang passed away on 1 September 1893 which cast a gloom over the city. He belonged to the earliest cadre of brilliant Elphinstonians who had devoted themselves to the advancement and upliftment of their countrymen under the guidance of Dadabhai, and had sowed the first

seeds of national awakening. As a scholar, lawyer, judge and politician, he had won equal distinction. A memorial meeting was held in the Town Hall on 6 October under presidentship of the Governor, Lord Harris, which testified to the warm regard and esteem in which Telang was held by all classes of people. His elevation to the Bench when he was less than 40, was a well-deserved recognition of his high character and attainments. His death in the prime of his life was, therefore, a great blow to the Bombay men as also to many Indians. (Homi Mody, op. cit, p. 169.)

It was on 2 June 1893 that the House of Commons passed a motion to the effect that the open competitive examinations for the I.C.S. be held simultaneously in India and England. This was in fulfilment of the long cherished aspirations of the Bombay elite. A meeting attended by Pherozeshah, Gokhale and J. U. Yajnik, greeted the decision. (*Ibid.*, pp. 170-71.)

Pherozeshah Mehta was elected to the Imperial Council, also called Viceregal Council, in October 1893, as a representative of the Provincial Legislative Council. The first measure of importance before the Imperial Council was the Cotton Duties Bill introduced in December 1894. In January 1895 came another important measure before the Council, namely, amendment of the Deccan Agriculturists' Relief Act of 1879. This was followed by the amendment of the Police Act of 1861, amendment of the Civil Procedure Code, the Cantonments Act of 1889, the guestion of the restitution of conjugal rights in Hindus, and several other legislative measures. Pherozeshah did splendid work in the Council for which he was highly applauded in Bombay. " All classes of people vied with each other to do honour to one who had come to be regarded as 'the uncrowned King of Bombay'." (Homi Mody, op. cit, p. 195.) The Ripon Club gave him a public banquet. This was followed by rich tributes to him at the Novelty Theatre, present Excelsior, on 20 April 1895, at the Eighth Provincial Conference held at Belgaum on 4 May 1895 and at the Gaity Theatre on 20 December 1895. The last one mentioned was probably the most remarkable. The Elphinstonians presented him with a massive silver centre-piece which he preserved as a proud possession. The Municipal Corporation passed a worthy resolution congratulating Pherozeshah, and " recorded the great and valuable work done by him for the country and the Empire in manifold directions, and the exemplary self-sacrifice and rectitude of purpose with which he had served the city of Bombay for more than a generation."

It was Lord Curzon who recommended the conferment of the distinction of the title of K.C.I.E. on Pherozeshah in appreciation of the latter's brilliant abilities and eminence. This was particularly noteworthy because he was the most formidable opponent of the great Viceroy, and had waged many a war against the Viceroy on the issues of University reforms and measures of local and national magnitude.

Plague and Riots: The close of the nineteenth century was characterised by the misfortunes of a virulent plague which first appeared in 1896 in a chawl near the Masjid railway bridge. It wrought the greatest havoc upto the dawn of the twentieth century. The year 1897 might be said to have marked the zenith of the city's misfortunes. (Gazetteer of Bombay City

and Island, Vol. II, 1909, p. 190) It was also the blackest year in the history of India as the country suffered from plague, famine, earthquake, cyclone, sedition and frontier wars. In a single week in 1897, over 10,000 persons fled away from Bombay. The condition of the city resembled that of Constantinople in the sixth century. In 1898 occurred riots due to plague and a strike of dock and railway workers, which paralysed life for some days. The early months of 1899 were marked by a fresh exodus from the city, to save life, However, the migrants to native places were not spared by the acute famine. They were, therefore, compelled to return to the city, and they preferred death from plague to death from hunger. This increased mortality in the city. The epidemic again swept through the city, and the people fled from the unseen death. (S. M. Edwardes, Rise of Bombay : A Retrospect (Bombay; Times of India Press, 1902). The old Government House at Pare] which was vacated by the Governor earlier, was used as a hospital for plague patients from 1896.

The situation did not improve in 1900 or 1901. The cotton mill industry was adversely affected due to the flight of workers. There was acute shortage of labour, which led to intense bidding for labour at street corners. While almost all the mills had to drastically cut their operations to three days in a week, some mills had remained closed. (For condition of the industry see account of Cotton Textile Industry in Chapter 5 of Greater Bombay Gazetteer, Vol. II.) Between 1891 and 1898 the total number of factories in Bombay rose considerably in spite of the fact that the China market, the chief outlet for Bombay's output, was being rapidly glutted. But the condition of the industry was "most critical" in 1899 according to Sir George Cotton.

The years 1904-05, however, witnessed a reversion of this state of affairs. The cotton mill industry had started showing conspicuous improvement. The Swadeshi movement gave a great impetus for the growth of the indigenous industry.

The virulent plague epidemic which ravaged Bombay from 1896 to 1901, shocked the conscience of Government as well as of the public men of Bombay. It created an awareness and a compelling necessity for improvement of public health and medical facilities in Bombay. This situation gave birth to two great organisations, namely, the City Improvement Trust in 1898 and the Haffkine Institute in 1899. Lord Sandhurst, the Governor, was the architect of the former, while the inspiring spirit behind the latter was the world-famous Dr. Haffkine. The account of these organisations is given elsewhere in this chapter.

On 11 August 1893 a very serious riot (For details of the riots refer Gazetteer of Bombay City and Island, Vol. II, 1909, pp. 192-96.) took place between Hindus and Muslims in Bombay. The unfortunate episode commenced with an attack on a Hindu temple in Hanuman lane. Within a very short time, the entire areas of Parel, Kamathipura, Grant Road, Chinchpokli, Mazagaon and Tank Bunder were under mob rule. The tumult was enormous. At about 4 p.m. the Police Commissioner secured the help of the army. The troops were posted in different areas, but the fighting still continued, and the infantry was required to fire on the mob in the

Grant Road area. The crowds, raging from street to street, desecrated temples, idols and inflicted fatal assaults. The riots continued on the 12th August in all parts of the city, and casual murders and assaults took place on the 13th also. But from the evening of the 13th tranquillity was gradually established. About 80 lives succumbed to injuries, and 1,500 were arrested by the police. The damage to temples and mosques, exclusive of the value of property stolen, amounted to three quarters of a lakh. (Gazetteer of Bombay City and Island, Vol. II, 1909, p. 193.) The riots had deep repercussions in the Salsette island and even beyond. The butchers at Bandra observed a strike in consequence. (Ibid., p. 194.)

There was another serious riot in Bombay on 9 March 1898. It started with a sudden outbreak of hostility against the measures adopted by Government for suppression of plague among the Julhai. The trouble commenced with an attempt on the part of a plague-search party to remove a patient. The Julhai community thereupon turned violent and assaulted the police in Ripon Road area. The Presidency Magistrate ordered to fire. The rioters dispersed, but very shortly the uproar spread to Bellasis, Duncan, Babula Tank, Parel, Grant, Falkland and Foras Road areas. Attempts were made to set fire to plague hospitals, the fire brigade station at Babula Tank road was attacked, and two European soldiers were murdered in Grant Road. The army was deployed instantly, and peace was restored the next day. The casualties of the riot were 19 killed and 42 wounded. About 205 were convicted and sentenced to imprisonment.

The third unfortunate episode of a riot in this period took place on 23 March 1904, on the fifth day of Muharram, between the Sunni and Shia sects of the Muslims in Bombay. Casual fighting between the Bohras and theSunnis occurred upto the 27th March, and the police were forced to cancel the licence for the *tabut* procession from Rangari *moholla*. This enraged the Sunnis, and the police were attacked. There were conditions of panic among the Bohras, and the Police Commissioner thereupon sought military aid. Stray incidents continued upto April 1, about 34 persons being injured.

The fourth unfortunate riot flamed forth between the Sunni and Shia Muslims at the Muharram of 1908. A quarrel took place, in the morning of the 13th February, between a *tabut* procession composed of Julhais, Mughals, Khojas, Bohras and some Sunni Muslims congregated in a mosque on Falkland Road area. The news of the encounter quickly spread and resulted in a general refusal of the Sunnis to take out their *tabut* procession. Spasmodic attacks were made which resulted in serious rioting late in the afternoon in Parel area. The police had to take recourse to firing. The military forces were called out in the evening, which guarded the troubled areas until the next day. (S. M. Edwardes, The Bombay City Police, 1922.)

To resume the story of the Congress, its growth necessitated the creation of local public bodies which became Standing Congress Committees. By 1892, there were about nine committees in the Bombay Presidency with those at Bombay and Pune being the most important. By and large, these were merely the Bombay Presidency Association and the Poona Sarvajanik Sabha under a different name. (Mahratta, 6 November 1892.)

The name of the former was synonymous with the Congress in the Presidency, and almost all decisions were taken with its approval. This was due to the towering leadership of the Association and its ability to raise funds for the party. It was also attributable to the close relationship between the Bombay leaders and Congress leaders like Hume, Wedderburn, Ranade, etc. Dinshaw Wacha's assumption of secretaryship of the Congress also gave Bombay an upper hand in the party. Thereafter no key decision was taken by the Congress without Pherozeshah's approval. (J. Masselos, op. cit.)

The first Bombay Provincial Conference emerged in November 1888, convened by the Poona Sarvajanik Sabha as a means of concerting policy and action for the coming session of the Congress. It was also intended to deal with local problems. The first six sessions were all held in Pune. Bombay did not join the provincial conference until its fifth meeting in 1892. It was from the 1892 meeting that Bombay played a dominating role in this body. Pherozeshah presided over the Pune meeting in 1892. He " at once lifted it up from the narrow platform of parochialism to something higher and nobler and more national." (Wacha to Naoroji, 12 November 1892, Naoroji Papers.) His reputation was distinctly enhanced by the part he played in the Poona Conference.

At this juncture Lokamanya Tilak was engaged in taking over the Poona Sarvajanik Sabha and in reasserting the influence of Pune over Bombay, in respect of domination on the Congress. However, the Congress could not function without Bombay. The city was to contribute Rs. 15,000 out of the total of Rs. 40,000 needed for the Poona Congress session of 1895. (Mahratta, 29 September 1895.) Pherozeshah, controlling the Bombay Presidency Association, and Wacha, the Congress secretary, " were too essentially part of the Congress fabric to be more than polemical target for Tilak, and they steadfastly refused to take any notice of Tilak's public meetings." (Gordon Johnson, op. cit., p. 121. The author has dealt with the discordant views between Tilak and other Congress leaders.) It was in the Bombay Congress Committee meeting on 26 October 1895 that the Bombay leaders elected Surendranath Bannerji as president of the Poona Congress of 1895. It was decided not to recognise Tilak's Reception Committee.

The Congress at Pune turned out to be a greater success than what even the most sanguine had expected. Unfortunately, however, Tilak's activities had fluttered the dovecots. The association of Ranade and Gokhale with Pherozeshah and Wacha, besides the jealousy between the politicians in Bombay and Pune automatically drew the Congress Committees into the quarrel. Tilak wanted the Social Conference to dissociate from the Congress. His much publicised conduct and utterances in Pune embarrassed the Congress in many ways. These aspects are, however, beyond the scope of this study.

Mr. R. M. Sayani, a popular enlightened citizen of Bombay who belonged to the school of thought of Pherozeshah Mehta, adorned the presidentship of the Calcutta Congress session of 1896. He gave quite a good impression as a leader of the party and as president. The success and excitement of the Poona Congress was followed by a sort of disinterest

and languidness in the organisation. Attendance at the annual sessions dropped, and the proportion of local delegates increased. After the 1900 session at Lahore even Dinshaw Wacha lost his enthusiasm and considered giving up his post of joint secretary. (Gordon Johnson, op. cit.., pp. 124-25.) He once complained to Dadabhai in England, " Your big leaders now-a-days don't care to attend the Congress, so we have a minor crew most of whom try to boss themselves without judgement and wisdom." (Wacha to Naoroji, 16 February 1901, Naoroji Papers.)

This period coincided with the unprecedented plague and distress in Bombay which is dealt with above in this chapter.

TWENTIETH CENTURY

Lokamanya Tilak was undoubtedly the embodiment of the spirit of the new school of politics in the beginning of this century. He rebelled against the attitude of prayerfulness and importunity and the method of mendicancy which characterised the Congress. He strove hard to make the movement truly national by bringing into it the mass of people. He and his followers regarded the redemption of the motherland as the true religion, and as the only means of salvation. It was but natural that he came into conflict, very often than not, with the Moderates, as they came to be known later on. The Moderates wanted reforms in administration under the aegis of the British rule, while the Extremists strongly held that 'good government is no substitute for self-government'. Tilak admirably summed up the position in one sentence: "Home Rule is my birth-right and I will have it." He endeavoured to introduce the cult of Shivaji and to organise the Ganapati and Shivaji festivals in Bombay and the rest of Maharashtra.

The revolutionary activities of Tilak in Bombay and the Deccan, and of Swatantryaveer Vinayak Damodar Savarkar, Madame Cama and Shyamji Krishna Verma in England had many ramifications in Bombay. (S. M. Edwardes, The Bombay City Police, 1922.) The vernacular newspapers disseminated patriotic fervour and incitement to sedition. This had a definite impact on the people of Bombay.

Lord Curzon came to India (1899-1905) with a strong determination to stem the rising tide of nationalism. He inflicted one contemptuous measure after another to which the people took strong exceptions. (Gazetteer of India, Vol. II, History and Culture (Government of India, Ministry of Education and Culture, 1973), p. 562.) He deprived the universities of their autonomy by forcing the Indian Universities Act (1904), and in the same year, the Official Secrets Act extended a good deal the scope of the term' sedition'. The climax was reached by the partition of Bengal (1905) which was regarded to be a subtle attack on the growing solidarity of Indian nationalism. Curzon's obstinate refusal to pay any heed to popular views sounded the death-knell of constitutional agitation. Hence amidst unprecedented scenes of enthusiasm, resolutions were passed at a huge public meeting held on 7 August 1905 at Calcutta, to boycott British goods, and adopt swadeshi goods and to spread national education. (Ibid., p. 563.)

The ineffectiveness of the Congress to change the decision of the Government enabled the Tilakites to make their voice felt in deliberations of the Congress. And it was in the Calcutta session of 1906 presided over by Dadabhai Naoroji that the Congress not only endorsed their plans, but for the first time in its history laid down as its goal, ' the system of Government obtaining in the self-governing British colonies'. This goal was summed up by Dadabhai in one word ' Swaraj (*Ibid .*)

The gestation of the new spirit of swadeshi and boycott had, however, been progressing for some years prior to these events.

The politicians in Bombay were ostensibly moderate nationalists who followed a policy of mendicancy and persuasion. At the dawn of this century the Congress was still under domination of Bombay, particularly Pherozeshah Mehta, D. E. Wacha, Dadabhai Naoroji and Gopal Krishna Gokhale. The latter although from Poona was identified with the Bombay leaders.

At the dawn of the twentieth century the Congress seemed to lose its vitality and enthusiasm. It was, however, in 1903 that the political pendulum in England started swinging in the direction of the Liberal Party. Sir William Wedderburn, a former Bombay civilian, was now a Liberal Member of Parliament and an inspiring spirit of the British Committee of the Congress. He exhorted Indians and his Bombay friends to revitalise the Congress. The most significant results were: firstly, Pherozeshah and his colleagues in Bombay invited the 1904 Congress to Bombay, and secondly, G. K. Gokhale was appointed an additional joint secretary to take over command of the Congress. (Gordon Johnson, op. cit, p. 43.)

In the mean time Pherozeshah was persuaded by his friends to attend the Madras session of December 1903 ostensibly to save the Congress from Extremists. Pherozeshah handled the situation adroitly. He, however, did not maintain a close and personal touch with the organisation in subsequent years. (Homi Mody, op. cit, p. 251.) But all said and done his influence in Congress sessions in Bombay was absolutely supreme.

Bombay Congress of 1904: As said earlier, he took the cue from Wedderburn's exhortation and invited the next session of the Congress to Bombay. The three-day session was held on the Oval (Speeches and Writings of Sir Pherozeshah Mehta, p. 254. According to Homi Mody the vast gathering had assembled in the spacious pandal erected on the site on which the Prince of Wales Museum stands now.) ground from 25 December 1904. Sir Henry Cotton, a distinguished personality, presided over the session, Pherozeshah being the chairman of the Reception Committee. William Wedderburn and Mr. Samuel Smith, M.P., graced the occasion by their presence. Henry Cotton was described as a staunch and devoted servant of India. William Wedderburn had always cherished the fulfilment of the aspirations of India. Samuel Smith had guietly and unostensibly, but earnestly, raised hip, voice in England to further the cause of India. Their presence at the Bombay session of 1904 was, therefore, an important factor. They suggested that Indian delegations be sent to England for gaining support of the British public. The gathering, however, missed the presence of Dadabhai, Hume and W. C. Bannerjee. It was representative in all various ways. (Speeches and Writings of Sir

Pherozeshah Mehta.) The delegates represented all strata, the intelligentsia, advocates and persons experienced in Government mechanism.

Pherozeshah's welcome speech, running into 19 printed pages, struck a note of robust optimism calculated to drive away counsels of dispair. (*Text is reproduced in Speeches and Writings.*) He accepted the British rule as a wonderful dispensation, but scouted Lord Curzon's notion that the salvation of India was not to be sought in the field of politics in the existing stage of her development. Achievements of the Congress from 1885 were put on record. Its greatest triumph lay in the awakening of the soul of the nation.

The official report of the Bombay Congress session of 1904 peaks in grateful and eloquent terms of Pherozeshah's share in the success of the session. (As per D. E. Wacha there was no other Indian who could rival Pherozeshah in the manner and matter of his public speeches on high politics. Two specimens may be discerned in his addresses to the 1889 and 1904 Congress sessions.) The Times of India also paid high tributes to him. It was at the Bombay session, however, that a mild revolt against his authority broke out. Lala Murlidhar from the Punjab, in a heated discussion, complained bitterly against Pherozeshah overthrowing all opposition, and carrying everything in his own way.

The Bombay city politicians and their allies gave a firm lead to the Congress in 1904. They strived for widespread support and emphasised the unity of the movement by controlling critics. Besides working in Bombay and Pune, Gokhale visited Bengal, Madras, and the C. P. and Berar to stimulate interest in the Congress prior to the December session. The Bombay session not only marked the reawakening of the Congress, but it also underlined the supremacy of Bombay city leaders in the all-India movement. About 20 per cent of the delegates had been elected by the council of the Bombay Presidency Association at a meeting held at Pherozeshah's chambers. The council had approved 256 names, of whom 202 actually attended the 1904 Congress. (Bombay Presidency Association papers, cf., Gordon Johnson.)

The Bombay session of 1904 had endorsed the strategy of putting its main emphasis on campaigns in England in view of forthcoming elections. William Wedderburn had desired Pherozeshah to lead the delegation. The latter, however, did not go. It was therefore decided that G. K. Gokhale and Mr. Jinnah should go as the representatives of Bombay on the Indian deputation. They went to London in 1905 to present the Congress case before the British public and to campaign for the Liberal Party. Gokhale addressed 45 meetings during his 7-week stay in England. On his return to India he was elected president of the Congress at Banaras (1905).

Gokhale was earlier elected to the council of the Bombay Presidency Association on 17 June 1893. His alliance with the Bombay politicians became his great political strength. (Gokhale was reported in 1909 saying that he had no supporters among the ignorant masses, but he could count upon the educated in Bombay as his supporters.) It was his Bombay friends on the provincial legislature who decided in 1902 to send him as the Bombay representative to the Viceroy's Legislative Council. The

Bombay Presidency Association raised money for his visit to England in 1905, and also supported his next two trips in 1906 and 1908. It was through the Bombay connection that Gokhale not only became recognised by the Government as the main Congress spokesman, but he also became a key figure in maintaining the all-India alliance which constituted the Congress itself. (Gordon Johnson, op. cit., pp. 116-17.)

As stated earlier, Dadabhai Naoroji was the president of the Calcutta Congress of 1906. This again meant influence of Bombay over the organisation. This session was a notable landmark in the history of the Congress. It placed Swaraj as a goal before the party in distinct terms. It had urged more activity in India and more self-help. National education and Swadeshi were endorsed by the delegates. The Congress had reaffirmed the legitimacy of boycott as a political weapon. This was, however, not much to the liking of the Moderate leaders from Bombay, particularly Pherozeshah and Gokhale, the former having kept the Congress as the undisputed domain of his leadership.

Congress Split: A number of situations developed whereby the wrangles between the Moderates and the Extremists became more and more acute. The Bombay leaders were inclined in the initial stage to hold the 1907 session at Nagpur, relying on G. M. Chitnavis and B. K. Bose to keep it out of difficulties. The Extremists tightened their sinews to ele^t Tilak as president. There was no possibility of a compromise between the two camps. The neutral negotiators had failed to mediate which led to the conclusion, " no Congress at Nagpur this year". (Gordon Johnson, op. cit., p. 164.)

A vexatious wrangle between the Moderates and the Extremists was inevitable. The Bombay leaders decided to shift the venue of the 1907 Congress which was earlier decided to be at Nagpur. The Central Standing Congress Committee was summoned to Pherozeshah's house at Napean Sea Road on 10 November 1907. The following members attended: Pherozeshah Mehta, Wacha, Gokhale, Jinnah, Tilak, Khaparde, Khare, Mudholkar, Kolhatkar, Desai and Parekh. (Khaparde Diary, 10 November 1907, Khaparde papers, National Archives of India, New Delhi.) Pherozeshah carefully arranged to send the Congress to Surat. The Reception Committee at Surat, composed largely of Pherozeshah's followers, set itself to the difficult task to arrange the session within a short time. Throughout December 1907, Mehta, Gokhale and the Moderates worked to secure a majority at Surat. The Bombay Presidency Association elected 219 delegates to go to the Congress. Tilak, N. C. Kelkar. Khaparde and the Extremist followers were also tightening their sinews. Pherozeshah had already made attempts to fill the 25 Bombay seats on the Subjects Committee. Tilak was outnumbered in the Bombay delegation on the Committee. (Gordon Johnson, op. cit., p. 168.) Rash Behari Ghosh of the moderate camp was chosen president. Tilak felt that the Bombay leaders were retreating from the Calcutta resolution, which had adopted Swaraj as a goal on the lines of self-governing colonies, and had endorsed for Swadeshi, boycott and national education. Tilak denounced such retrogression on the part of the Bombay leaders as suicidal for India. The draft resolutions were reactionary. Tilak's willingness to negotiate was spurned. He was left with no alternatives. His

attempts for leadership at Surat were all foiled. (Ibid.)

The Bombay leaders and Gokhale were in a majority, but they had also an unnerving experience. The Surat meets on 27-28 December were tumultuous, tempestuous and ended in pandemonium. (A Deccani shoe was hurled on to the dias which struck Surendranath Bannerji and Pherozeshah. See Homi Mody's Pherozeshah Mehta, op. cit.)

Tilak alleged that Pherozeshah and Gokhale sought to pervert the Congress from a national into a sectional movement. He had hoped that his popularity in Maharashtra could be utilized to capture the Congress from the Bombay city leaders and Gokhale. However, it was he who was to be excluded from it in future. (Gordon Johnson, op. cit., p. 172.)

The split of the Congress and the desire for reunion were almost simultaneous. (Mahratta, 23 February 1908.) The desire for reconciliation was initially stronger amongst the Extremists than the Congress leadership. Bombay city leaders saw no point in patching up with Tilak. They felt that Tilak and his followers had to be excluded from the Congress once for all. The Bombay Presidency Association (The Allahabad Convention where the Bombay men were stronger ended all hope of an immediate rapprochement.) was in a stronger position and there were no signs of rapprochement.

In the first quarter of 1908, several things happened which changed the political situation completely. The summer of 1908 saw the disintegration of the extremist leadership. After Bipin Chandra Pal's going to London, the severest reversal in fortune rapidly followed. Tilak was arrested on 24 June 1908 and charged with sedition for writing an article in the *Kesari* of 12 May 1908. The article headed " The Country's Misfortune " relating to the Muzzaffarpur murders, was construed by Government to justify terrorism. He was placed before the Chief Presidency Magistrate, Bombay, on 25 June and remanded to jail till the 29. On 27 June he was again placed before the above court for a similar offence in respect of an article headed " These remedies are not lasting " which had appeared in the *Kesari* of 9 June 1908. Tilak was convicted and sentenced by the Sessions Court to six years transportation and to pay a fine of Rs. 1,000, on 22 July 1908. (According to some sources the date was 23 July 1908.)

TILAK'S TRIALS

During the trial of 1898 the judicial authority had agreed to release Tilak on bail on a security of one lakh rupees. It was Dwarkadas Dharamsi, (He was father of the famous Home Rule Leader, Jamnadas Dwarkadas,) a millowner of Bombay, who ventured boldly to deposit security of the amount to secure release of Tilak on bail. He had many friends among the rich, but the fear of government wrath prevented them from the venture. Hence the importance of Mr. Dharamsi's action which secured the release of India's great patriot. It will be interesting to note that Tilak's advocate in this trial was Mr. Davar, (Jamnadas Dwarkadas, Political Memoirs, (United Asia Publications, Bombay, 1969), pp. 29-30.) who later sentenced Tilak to six years rigorous imprisonment in July 1908.

A brief narration of Tilak's trial of June-July 1908 may not be out of place

as it is an important event in the history of India's freedom struggle. During this protracted trial he stood towering in the box of the accused. He delivered his extempore memorable address to the Judge and the Jury which lasted for six days. (*Ibid., p. 31*). The Jury returned the verdict of 'guilty 'as was expected, and Justice Davar pronounced the sentence with strictures that were unwarranted and in bad taste. Tilak said to the Judge, "Despite the sentence passed on me, I feel and know that I am innocent, but I believe that there are higher powers who rule the destinies of nations, who feel that the cause I represent may prosper more by my suffering than by my remaining free. Swaraj is my birthright and I shall have it."

The impact of Tilak's imprisonment on the people was greater than ever had been the case at any moment in the past. The workers, students and the entire middle class society were all galvanized into displaying sympathy to him and expressing their angry protests against Government. For the first time in the history of India students deserted their schools and colleges and refused to attend them. (Dwarkadas Jamnadas, op. cit, p. 32.) There was a massive hartal. The rich in Bombay, completely cowed down, helped the Government in restoring order. (Ibid.)

Tilak's trial was received as an electric shock in Bombay as in rest of Maharashtra. The *modus operandi* of the trial was condemned with indignation and public fury. The newspapers with nationalist views reacted very sharply. The *Dnyan Prakash* of 24 July 1908 wrote, "This is an occasion for greater sorrow than that felt for the death of Ranade. It is greatly to be lamented that we have lost the services of such a talented Tilak out of the country in the present political situation and preferred to resort to the law court to accomplish that end to deporting him outright." (Report on Native Papers for the week ending 25 July 1908, p. 31.) The staunch Kal of 31 July 1908 wrote, "There was a mockery of justice, not justice. It is sheer madness to argue that there was a possibility of obtaining justice where everything was going on according to a pre arranged plan.....The present crusade undertaken by government is very dangerous, and we should meet it in a becoming spirit. Government are enraged at the Swadeshi and Boycott movement, but cannot oppose it publicly. They want to kill the agitation by having recourse to subterfuges and by removing the renowned leaders of it from our midst Mr. Tilak was sent to Mandalay not because he caused any personal loss to the Governor, but apparently because the Swadeshi movement which he organised so successfully made the Manchester mills work half time." (Report on Native Papers for the week ending 1 August 1908, p. 33.)

It may be of great interest to give here a brief account of the intense disturbances incidental to Tilak's trial in Bombay. The account is mainly based on the report of Mr. H. G. Gell, Commissioner of Police, Bombay, to the Secretary to Government. (The report is published in Source Material for a History of Freedom Movement, Vol. II.)

Mr. S. M. Paranjape, Editor of the *Kal*, a supporter and admirer of Tilak, was arrested in Pune on 11 June 1908, and convicted in the, Bombay High Court and sentenced to 19 months rigorous imprisonment on 8 July 1908.

This caused a good deal of excitement in the city. Meanwhile Tilak was arrested in Bombay on 24 June.

From the moment of Tilak's arrest many nationalists descended upon the mill area in Bombay. The working class understood that Tilak had been arrested because he was the friend of the industrial workers, and had tried to obtain better wages for them. The probability of a disturbance was foreseen by the authorities. British regiments, Indian infantry and cavalry were held in readiness, while the Commissioner of Police took all precautions to circumscribe the area of the outbreak. Several officials and non-officials were appointed Special Magistrates and were posted at important points to watch the progress of events, assist the police, and take all feasible measures for securing peace in the city. However, some of the precautions were superfluous. (S. M. Edwardes, The Bombay City Police, 1922.)

The first hearing of Tilak's case came on in the Chief Metropolitan Magistrate's Court on 29 June which was greeted by disorderly and turbulent crowds. There was also desultory stone-throwing on Europeans. The High Court refused Tilak's application for bail. This caused as much consternation as his arrest, and demonstrated the animus of Government against him. There was a feeling that Tilak's gospel of Swadeshi and boycott had antagonised the rulers who were for protection of the interests of England. Tilak's sympathizers and nationalist papers stirred up the feelings of the people, and particularly the millhands in Bombay.

There were 85 mills employing about one lakh workers in the city. This was a formidable mass of people which could be fomented against the Government. Just before his arrest, Tilak had addressed meetings at Chinchpokli on 15 December 1907, and 6 and 7 June 1908, to educate the millhands in his gospel of Swadeshi and evils of drinking. He had won their admiration.

The trial began on 13 July before Justice Davar and a special Jury. Tilak was removed from the common Jail and was kept in the High Court lock-up. During the trial 20 European police officers, 11 armed, 190 unarmed, 30 mounted native officers and men were on duty in and around the court. There was also a military detachment posted in the University hall. The millhands were dispersed away from the court. On 16 July, workers from the Queen and Lakmidas Mills and four other mills struck work as a protest against the trial. On 17 July, about 35,000 workers from 28 mills stopped working, and the spirit of unrest seemed to seize them. There were unruly incidents at DeLisle Road. Europeans were mobbed and assaulted at Currey Road by a mob of 6,000. The Commissioner of Police who arrived was greeted by a volley of stones. The cavalry had to take action. All mills were closed on 19 July, but every thing was quiet.

There was violent stone throwing and a turbulent situation arose on 20 July. The workers from the Jacob Sassoon Mill prevented the working of the Moiarji Goculdas Mill by violent methods. Police officers including the Commissioner had to take recourse to firing revolvers. Casualties were not known. Arrival of the military dispersed the crowd. The next day witnessed closure of four mills. The coolies in the grain bazar obstructed and over-turned carts carrying goods belonging to the Englishmen, along

Frere Road.

Tilak was convicted and sentenced to six years transportation, and was immediately sent away to Ahmedabad by a special train on 22 July 1908. The employees in the Mulji Jetha Market held a meeting and decided to observe strike for six days as a protest against rigorous imprisonment of Tilak. The news of conviction spread in the city on 23. Nine mills struck work, while the cloth, grain, freight and share markets and Cotton Exchange also closed their business out of sympathy for the leader. A crowd in Girgaum and Princess Street area forced shops to be closed. Two persons were convicted.

As many as 70 mills stopped work on the 24th morning. A crowd at Kala Chowki stoned the Bombay Cotton Mill which had commenced work, and forced its closure. The crowd then proceeded along Chinchpokli road, and forced the workers of Rachel Sassoon Mill and E. D. Sassoon Mill to come out, by stoning the mills. The City of Bombay Mill was similarly closed. The police and the cavalry had to fire revolvers, killing three and wounding others. There was another confrontation between the police and rioters at the junction of Gholupdeo and Connaught road. The police force was stoned savagely. Meanwhile the military had been sent for from the Byculla Bridge, where a detachment of 50 Royal Scots had previously been stationed, and while they were coming by train the crowds along Parel road stoned them. The mob not daunted by the approaching military force stoned it, and further continued to do so in spite of the Magistrate's (Mr. C. H. Setalvad) orders to disperse. Seven rounds were fired, one person being injured.

About 9 a.m. on 24 July there were encounters between the cavalry and the rioters in the Gholupdeo area. Further in the neighbourhood there was a skirmish between the military assisted by police and mill-hands armed with sticks. One man was found dead. At noon, 1,400 employees of the G.I.P. Railway workshops at Parel repudiated orders and struck work. They went away peacefully. A dye works at Mahim was attacked, and the caretaker was brutally assaulted. The manager had to use his gun in defence. The police and military had to intervene. The latter on their way to headquarters were confronted by mill workers at Pipe road. The military opened fire, killing two and injuring one. The Currey Road railway station was partially wrecked. The military was ordered to fire again which killed five and injured 15 persons.

On the morning of 25 July the mills began to work satisfactorily. This was disturbed by a hoard of workers in the Standard mill. There was firing, but the crowd was still hostile. Ultimately a fresh military detachment, which arrived, could avert a further calamity. Seventy-six mills struck work this day.

The Governor, George Clarke, arrived at Bombay from Pune on 26 July, which was a day of strike. It was rumoured on 27 July that the Governor intended to drive through the native town *via* Shaikh Memon street for assuaging the feelings of the people. This was at once seized upon as a good opportunity to make a demonstration in favour of Tilak. The Shaikh Memon street was densely crowded by hostile and demonstrative people. There were confrontations with the police. The military was also stoned.

Four rounds were fired, and four persons were found to have succumbed to bullets. The military and police had to attend many calls for action.

On 28 July 1908, workers in Maneckji Petit mill struck work after commencing work. They shouted slogans in favour of Tilak and became turbulent. Even the ordinarily peaceful area of Thakurdwar was infested with strife, and military was required to take action. Later on the whole of Girgaum was in a state of disorder intermittently. The police and the military were greeted with stones. Nine rioters were convicted and sentenced to rigorous imprisonment. The feeling against Europeans was most hostile. It was only military action throughout the Island which could avert further troubles.

The presence of George Clarke in the city, for some days, until peace was restored, was much helpful in relieving the situation.

The Bombay National Union with, its mouthpiece, the *Hind Swarajya* popularised Tilak in Bombay. This newspaper was produced under support of the revolutionary, Shyamji Krishna Varma. The *Vihari* and the *Arunodaya*, Marathi newspapers, preached Tilak's philosophy (*The editors of these papers were prosecuted and sentenced to rigorous imprisonment, (see Source Material for a History of Freedom Movement, Vol. II, p. 269). Besides newspapers, many Tilakites harangued audiences on Chowpati sands in favour of his preaching.*

Mr. Gell had opined that if Tilak had been tried elsewhere than Bombay' the agitation would not have been carried on in the city to the extent it was. The agitation was engineered, in his opinion, by Brahmin clerks in mills. More than anything else Tilak's address to the Jury gained him sympathy. This address, which occupied 21 hours, " was made not so much to the jury as to the gallery and he seized this opportunity to make what was a vehement political attack on British administration".

The Bombay Millhands Defence Association was formed after Tilak's inspiration. The mill workers were the chief instrument used for disorder. "But they had no organisation, no leader, no common object and no weapons other than stones. They broke the windows of mills.....but that was because some of their number stuck to their work and they wanted them to come out. Had all the mills closed down simultaneously, the probability is that the millhands would have been at a loss as to what to do."

The police force in Bombay, in 1908, consisted of 85 Europeans armed with revolvers, 2,038 native constables armed with batons, 100 native sowars armed with sabres and 70 native constables armed with breech loading, smooth bore, 476 rifles firing buck shot. The Bombay Garrison was comprised of three companies of the Royal Garrison Artillery, half a batalion of British Infantry, one regiment of Native Infantry and a force of 1,274 volunteers. (The Commissioner suggested to Government a thorough reorganisation of the police force in Bombay, after this event.)

The Mahratta (From Report on Native Papers for the week ending 1 August 1908, p. 26 cf Source Material for a History of Freedom Movement, Vol. II.) of 2 August 1908 gave a plausible analysis of the riots in Bombay.

According to the newspaper, in the initial stage the disturbances were a mere passive expression of sympathy, sorrow and respect for Tilak by the workers. This assumed the form of a temporary cessation of work. But the imprudent authorities and the Anglo-Indian Press took umbrage at it. Some mills were kept going in spite of the unwillingness of the workers. A kind of coercion was also used to keep them working. The consequence was that with one class of workers clamouring outside, and another coerced to work inside, the passive expression of sympathy at once assumed the form of a disturbance. The same thing happened in the case of markets in Bombay due to unwise meddlesome officers.

The effects of the prosecution and conviction of Tilak were great and enduring. Some months later, the *Rashtramat*, an organ of Tilakites, admitted that the sudden removal of Mr. Tilak's towering personality threw the whole province into dismay. It not only dampened extremist political activity, but also affected the Moderates. G. K. Gokhale was shocked at the severity of Tilak's sentence, and saw in it a great blow to the party and a threat to other nationalist leaders. The *Hindu Punch* went so far as to suggest that Gokhale had instigated Tilak's arrest. Gokhale, however, denied the allegation and prosecuted the editor of the newspaper.

MISCELLANEOUS EVENTS

A number of important schemes were taken by the City Improvement Trust and the Municipal Corporation, which were changing the face of Bombay at this time. With the enormous growth of population, the need for wide roads to disperse the population northwards was becoming increasingly apparent. A broad road known as Mahomed Ali road was cut right through the heart of the bazar from north to south. The Improvement Trust was endeavouring to make Bombay a model city. People were beginning to look towards Back Bay as a site providing "the most unique opportunities for reclamation which it has ever been the lot of any city to possess". Another important project was that for an overhead railway between the Victoria Terminus and the Mazagaon-Sewri area which was being reclaimed, to provide additional transport accommodation and facilities for storing cotton, grains, oil-seeds and manganese ore. (Raymond J. F. Sulivan, One Hundred Years of Bombay: History of the Bombay Chamber of Commerce 1836-1936 (Times of India Press, Bombay, 1937), p. 136.) The construction of the Harbour Branch of the G. I. P. Railway from Kurla upto Reay Road station was completed in 1910. The work of construction of the permanent way and bridges for this railway was done by the great contractor, Mr. Walchand Hirachand. The overhead railway between Reay Road and Masjid Road railway stations

opened a new chapter in the history of transport and commerce of Bombay. It facilitated transport of goods to and from the business quarters in the Fort area as also from the Bombay Harbour.

The completion of the Nagda-Muttra railway section on the B. B. and C. I. Railway in 1909 fulfilled the long cherished ambition of securing for Bombay a direct trade route with North India. (*Ibid., p. 128.*)

The Alexandra Dock was opened by the Viceroy, Lord Hardinge, on 21 March 1914, (*Ibid., p. 138.*) which was to prove a great boon during the First World War, broken in August 1914. It doubled the dock area of the port. Attached to the Alexandra Dock was the Hughes Dry Dock, built to accommodate the largest battleships. The total expenditure on these and other related works amounted to 6 1/2 million pounds.

The *Bombay Chronicle* which was to play an important role in the national movement till Indian Independence, saw the light of day in April 1913 after tireless efforts of Pherozeshah and his friends in Bombay. Within a short time, it began to exercise an enormous influence over public affairs. Under the able editorship of B. G. Horniman, it became a very powerful organ of satyagraha, non-co-operation, civil disobedience and every other facet of the Gandhian movement.

One of the most memorable events of Lord Curzon's Viceroyalty was the controversy which raged over the question of University autonomy under the guise of reforms. Lord Curzon's Universities Commission of 1902 recommended a raising of college fees and examination standards, a reconstitution of the Syndicate and the Senate, the imposition of stringent conditions with regard to the recognition of affiliated institutions, and a general discouragement by various devices of private enterprise in the field of education. As per the Commission, it was "better for India that a comparatively small number of young men should receive a sound liberal education, than that a large number should be passed through an inadequate course of instruction leading to a depreciated degree ". Pherozeshah Mehta delivered heavy indictments against the report of the Commission and the Bill in the Senate of the Bombay University, while G. K. Gokhale combated against the infringement of university autonomy in the debates in the Imperial Legislative Council. (Also see the account given under University Education, for their work) Despite powerful opposition the Indian Universities Bill was passed into an Act in 1904 which enabled the Government to interfere with university autonomy and to curb proliferation of education.

Whilst Lord Curzon had excited bitterness, disaffection and alarm heedless of the currents of national life and thinking, the Prince of Wales (later King George V) was to visit Bombay. The announcement of the Royal visit created limitless enthusiasm and preparation. The Bombay Government, however, out of obduracy announced that the Royal pair will be accorded reception by the Government in disregard to the privilege of the civic body. This created a wild indignation and uproar in the city. While the Extremists among the nationalists including Tilak were opposed to any type of reception to the imperial heir, many sections of the people in Bombay were also either hostile or indifferent to the same. In the Corporation the obduracy of Government created fury. The Chief

Secretary to Government of Bombay was given to understand the consequences of disregarding the right of the Corporation. Consequently Lord Lamington, the Governor (1903-07), saw an alarm, and conceded the privilege to the Corporation of which Pherozeshah was the president. The incident left no bitterness mainly due to the tactfulness of the latter. The Prince of Wales and the Princess were greeted at the Apollo Bunder on 9 November 1905, and an Address, drafted by Pherozeshah himself, was presented by him in a gaily-decorated *shaniiana* in the presence of the Viceroy. Hundreds from the Presidency had attended the gay ceremony. The Prince expressed his thanks for the magnificent preparations made by the city in his honour. (*Homi Mody, op. cit, pp. 277-79.*)

In 1906-07, there arose an excitement and bitterness known as ' the battle of clocks' in the city. Bombay was thrown into the controversy after Lord Curzon's proposal of adopting a standard time. Bombay clocks were to be put 39 minutes in advance of the local time. This gave rise to unfortunate controversy in the civic body and outside. (*Ibid.,, pp. 281-84.*) It was decided on the motion of Sir Bhalchandra Krishna in the Corporation that the municipal clocks should not be altered. The issue, however, had not been upon the merits of the standard time, but upon personal issues. The controversy was shelved after sometime.

Caucus (Account is based on Homi Mody's account in Sir Pherozeshah Mehta,.-pp. 284-94.): Bombay was convulsed, and her harmony was seriously impaired by a discreditable movement relating municipal elections, by Mr. Harrison (Accountant General, Government of Bombay), Mr. Lovat Fraser *{Times of India}*, Mr. Gell (Commissioner of Police) and Mr. Hatch (Collector of Bombay). Mr. Harrison began a series of manoeuvres, unparalleled in the history of municipal elections, to put an end to the powerful regime of Pherozeshah and to undermine his unquestionable domination over the Bombay municipality. The organisers of the Caucus issued a "ticket" containing the names of 16 nominees of their choice for the 16 seats allotted to the Justices of Peace, for the general elections to the Corporation in February 1907. The nominees were from different communities, and were dubbed as' Independents '.Pressure and persuasion were employed by the high officials to get all the Justices who hung on their favours, or were afraid of their frowns, to vote for the ticket'. Mr. Fraser (Mr. S. A. Wahed had contracts with the Municipality, and was hence disqualified.) sought the help of Aga Khan also for influencing his followers.

The Caucus was the talk of the town. A violent wave of feeling swept over Bombay, and even distant parts of India. A majority of the newspapers expressed public indignation against the Caucus. The election took place among scenes of wild excitement on 22 February 1907. The citizens raised eloquent slogans, such as, "Pherozeshah means the Corporation and the Corporation means Pherozeshah ". However, the Caucus was successful. The only outsider elected was Dinshaw Petit, Pherozeshah being the 17th on the list. This was received with deep resentment and anger throughout India. Newspapers gave a full vent to public opinion against the Caucus. The observations of the *Madras Standard* and the *Indian Patriot* were quite representative of the public feeling for Pherozeshah and against the Caucus. Pherozeshah was, however,

inducted into the Corporation due to the disqualification of one of the candidates of the Caucus.

The unfair election was challenged by a petition in the Small Causes Court. There was a long and protracted trial. "Some dramatic incidents were witnessed, some damaging disclosures were made, and many people had to look foolish in the course of the inquiry." (Homi Mody, op. cit, p. 290.) The petition however failed in the court as also at Government level, as the Caucus had the support of people in high places. (Lord Lamington was the Governor then.)

A mass meeting was held at Madhav Baug on 7 April 1907 to give expression to the universal feeling of condemnation of the unconstitutional action of Government officials in interfering in the purity and freedom of the election. G. K. Gokhale who was in the chair referred to Pherozeshah's position in Bombay Corporation as without any parallel in India. Thousands from all communities attended the demonstration. As decided in the meeting a memorial was addressed to the Government of India.

Although the Caucus had won the elections, its candidates could not undermine the position of Pherozeshah, because they had no policy, no programme of their own. He still held sway. The ranks of his supporters had been thinned, but the civic body continued to be dominated by him.

As Homi Mody observes, "The Caucus had triumphed, the Caucus had failed." (Homi Mody, op. tit, p. 292.) "The Caucus forms a sad chapter in the civic annals of Bombay." (Ibid., p. 294).

There was another controversial issue mentioned earlier which occupies an important chapter in the annals of Bombay. This was over the constant vexation over the cost of maintenance of the police force, between the Corporation and Government. By the Municipal Act of 1865, the entire cost of police force in Bombay was charged on the municipality. There was a vague proviso under which a proportion of the cost was to be borne by Government under some conditions. This led to many petitions by the municipality to the Government of India and the Secretary of State in London. Lord Ripon's resolution on local self-government which sought to relieve municipal bodies of the police charges in exchange of the expenditure on primary education and medical relief, was not implemented by the Bombay Government in its spirit. Hence the vexation continued in a protracted manner. The Bombay Municipal Act of 1888 also did not strike out a definite line of policy. It provided that a certain proportion of the charges of the police was to be borne by the Bombay civic body, and the cause of the friction continued further.

Several petitions were sent to Government. During his speeches in the Legislative Council, Pherozeshah appealed to Government to remove the obnoxious cost of police. The question became acute when it was decided to increase the police force after the Hindu-Muslim riots of 1893. The hostility of the Corporation against Government on the question of police charges grew constantly. This also affected the settlement of the policy with regard to primary education and medical relief, which was another cause of friction. After a protracted wrangle, Lord Lamington's Government showed its willingness to solve the question relating to

transfer of liabilities. It proposed to hand over to the Corporation the liability of primary education and medical relief in the city, and to relieve that body of the police charges. The Bill to that effect was introduced in the Council in July 1907 which was enacted two months later. The protracted vexation was thus put to rest. The Act may be regarded as one of the most constructive achievements of Pherozeshah's career. (*Ibid., p. 319-21.*)

SWADESHI AND BOYCOTT MOVEMENT

The agitation against the Universities Act (1904) was but a prelude to the massive Swadeshi Movement which followed another spurious measure of Lord Curzon, viz, the partition of Bengal. The anti-partition protest! ed to the Swadeshi Movement, and its " right hook " the boycott of foreign goods. This political and economic campaign in Bengal made a tremendous impact on Bombay. The gestation of the Swadeshi was initiated first by Lokahitwadi Gopal Hari Deshmukh. (Gazetteer of India, Vol. II (Government of India, 1973), p. 540.) In 1905-06, however, it was attempted to widen the Swadeshi Movement from a mere boycott of British goods to a boycott of everything British. After the emergence of Mahatma Gandhi, the Non-co-operation Movement was essentially a revival of the Swadeshi on an all-India scale. (The idea was expounded with its economic implications in the 1840s by Lokahitwadi, and in the seventies by M. G. Ranade.) It urged the people to resign from government jobs, shun the British law-courts, withdraw from schools and colleges and boycott the elections. But we shall turn to these events afterwards.

Tilak was the principal advocate of the Swadeshi in Bombay. The Swadeshi Wastu Pracharini Sabha, Bombay, comprising patriotic mill owners, businessmen and political workers in the city was quite active. In September 1905 Tilak exhorted the Bombay millowners to extend their helping hand to the movement by supplying *dhotis* produced by them at moderate rates. Their response, however, was in the negative. Tilak presided over a large public meeting in the city on 15 October 1905 in which it was resolved to encourage indigenous goods and to request the mills of Bombay to stop the price rise. His speech was eloquent and bristling with political suggestions, and he vehemently attacked the *Times of India* for reactionary views. Tilak was on the platform in Bombay often and on for the same mission. (Source Material for a History of Freedom Movement, Vol. II, p. 213.)

The Swadeshi Wastu Pracharini Sabha organised a meeting in September 1906 under Tilak who exhorted his audience to the cause of swadeshism. He also expressed his sympathy for the employees who participated in the postal strike. (Ibid., p. 214.) The Sabha organised another meeting on 9 October 1906 presided over by Tilak who deprecated the extension of railways with British capital investment on the score of its facilitating the export of Indian goods which was to the advantage of England's economy. Tilak also advocated the anti-free trade policy, and asserted that swadeshism and boycott were inseparable. (Ibid., p. 215.)

On 21 October 1906, Tilak explained to the Bania merchants at the

meeting of the Swadeshi Wastu Pracharini Sabha that the essence of swadeshism did not lie so much in boycotting foreign articles as in making efforts to reduce foreign imports and to increase exports of India. He advised them to transact their business direct and not through foreigners. Tilak, was reported to have interviewed the Russian, German and Austrian Consuls ostensibly to obtain letters of introduction to commercial firms in those countries with a view to purchase goods and machinery in furtherance of the Swadeshi Movement.

During the Governorship of George Clarke, later Lord Sydenham (1907-1913), a number of controversial issues ruffled Bombay. He, as it appears, decided to put the coping stone on Lord Curzon's work, and lost no time in formulating his ideas and setting things in motion for carrying them into effect. Hostilities commenced with a letter from Government to the University, dated 18 December 1908, stating that radical reforms were necessary if the teaching of science and higher education generally were to be brought into harmony with modern requirements. (Source Material for a History of Freedom Movement, Vol. II, p. 216). It was an attempt by Government towards infringement of university autonomy in academic matters. The issue came before the Senate for the first time in January 1910, and subsequently in 1910 and 1911. The bureaucratic imagination had taken fright at the idea of the young students being fed on the noble story of the struggle for freedom which enriched the pages of English history. Pherozeshah was vehemently opposed to the change, (Homi *Mody, op. tit, p. 332.)* while the Vice-Chancellor, Sir Narayan Chandavarkar took a complacent attitude towards Government machinations. Even Sir R. G. Bhandarkar unfortunately charged Pherozeshah with employing obstructive tactics. (Ibid., p. 335.) The machine-made majority had gathered obedience to carry out the behests of the reactionary Governor. (Ibid., p. 332.)

With the retirement of Lord Sydenham and the advent of Lord Willing-don, a Governor with liberal tendencies, in 1913, there came a change over the spirit of the Secretariat/The new Governor, brought up in the vivifying atmosphere of the House of Commons, (*Ibid., p. 359.*) had the sagacity to recognize critics of Government as valued assets. During the last two years of his career Pherozeshah wielded a great influence over the intelligentsia as well as in the Legislative Council.

The First World War broke out in August 1914, and it was on 13 August that the citizens in Bombay held a meeting in the Town Hall to give expression to the feelings of loyalty which the war had aroused among large sections of the people. Pherozeshah presided and delivered one of the most memorable speeches he ever made. (*Ibid., p. 361.*) According to a newspaper report, it was " a great resolve expressed in noble words; it found an echo in every speaker who followed and it was greeted with unparalleled enthusiasm by the audience which crowded the historic Town Hall".

Mahatma Gandhi's Home-Coming: The most important event in Bombay early in 1915 was the home-coming of Mahatma Gandhi. During his earlier career he had sojourned in the city for an aggregate of about five years at intervals. On arrival in Bombay Gandhiji and Kasturba were

accorded a most cordial welcome at the Apollo Bunder by a large concourse of distinguished people including J. B. Petit, Sir Bhalchandra Krishna, B. G. Horniman, Bahadurji, Narottam Morarji, Narandas and Revashankar Jagjivan (Gandhiji's host). Gandhiji had a meeting with Gokhale who gave him appropriate counsels, and also saw the Governor at the latter'sdesire. A series of receptions were arranged in Gandhiji's honour in the city, the most grand of which was organised at J. B. Petit's residence(Mount Petit at Malabar Hill.) on 12 January 1915 by an influential committee comprising Pherozeshah, M. A. Jiiuiah, Dinshaw Wacha, J. B. Petit, Sir Richard Lamb, Sir Claude Hill, Pattani and K. M. Munshi. Pherozeshah as president of the meeting, said that for the last few years the whole country had resounded with the tale of Gandhi's great deeds, his courage and great moral qualities, his labours and his sufferings in the cause of the Indians in South Africa. In a welcome accord to Gandhiji by the Gujarat Association, Girgaum, Jinnah recounted Gandhi's illustrious services, and expressed an absolute unanimity of the Indians in presenting a united front to the enemy of the Empire at war and the Indian loyalty to British Government. The Bombay Branch of the Servants of India Society under Gokhale gave a befitting reception to the newly arrived hero. The Bombay National Union at Hira Baug with Tilak, the citizens of Ghatkopar and the women of Bombay at an assembly at Madhav Baug (The speakers included Ramabai Ranade, Lady Pherozeshah Mehta, Lady Cowasii Jehangir and Lady Tyabii.) also arranged for warm receptions in honour of Gandhiji and Kasturba. (The account of receptions is based on K. GopaUwami's Gandhi and Bombay (Gandhi Smarak Nidhi and Bharatiya Vidya Bhavan, Bombay, 1969).)

G. K. Gokhale passed away on 19 February 1915 within six weeks of Gandhiji's return to India, while he was engaged in a solution of the momentous problems that confronted India at one of the turning points in her history. His death seemed to be nothing short of a national calamity. Bombay gave fitting expression to her sense of loss at a very impressive gathering in the Town Hall on 5 March 1915. Lord Willingdon was in the chair, and " in a singularly felicitous vein paid a tribute to the departed leader. The pathos of the situation struck the audience.". (Homi Mody, op. cit., p. 361.)

During his visit to Bombay the Viceroy, Lord Hardinge desired Pherozeshah to accept the vice-chancellorship of the Bombay University, which he accepted in March 1915, but did not live long to enjoy the chair. His services to the august body were distinguished and highly meritorious.

The Municipal Corporation of which he was the creator and uncrowned king, celebrated its Golden Jubilee on 2 March 1915, under the presidentship of Sir Fazulbhoy Currimbhoy. (Homi Mody, op. cit., p. 369.)

Pherozeshah Mehta, the towering figure which had dominated the stage for more than a generation, died at Napean Sea road in Bombay on 5 November 1915. Public sorrow over the event was profound and universal. The Municipal and University offices as great many institutions observed mourning. Rich tributes were paid even by bitter political opponents like Tilak and Lord Harris, Lovat Fraser and Bhavnagari in a memorial meeting in London presided over by Aga Khan. The remarkable

memorial meeting of the citizens of Bombay. which took place a little later, provided a befitting culmination to the demonstration of popular feeling which marked the great Bombay citizen's death. It was held on 10 December 1915, in a *Shamiana* erected for the forthcoming session of the Congress, as the Town Hall would have been too small for the occasion. The meeting of over 10,000 was presided over by Lord Willing-don, the speakers being Chandavarkar, Mr. Birkett, (Representative of British mercantile community.) Ibrahim Rahimtulla, Dr. Mackichan and many others. (Homi Mody, op. cit., pp. 377-82.)

The first number of the *Young India* was published on 17 November 1915 under editorship of Jamnadas Dwarkadas in Bombay. (Jamnadas Dwarkadas, op. cit., p. 90.) This paper was destined to become the mouthpiece of the freedom movement.

COMMERCE AND INDUSTRY (1825-1915)

Enormous fortunes were reaped on imports and exports and the large princely merchant houses had become established in Bombay in the first half of the nineteenth century. The wealth of Bombay's leading merchants gave them power and social prestige. It also earned them the title of shetia. By about 1840 the shetias had assumed a distinct public role in the city's life. Many of them regarded Bombay as their home and were concerned for its embellishment. The Par sis were in the forefront in this respect. Sir Jamshetji Jijibhai Batliwala, the first Baronet (1783-1859), Framji Cowasji, Cowasji Jehangir, Jagannath Shankarshet, Goculdas Tejpal and Roghay were among the business magnates and public spirited philanthropists of the day. They were deeply involved not only in the nexus of the economy of the city but also in its public life. The Government associated the *shetias* with significant official positions and committees in Bombay. Many of them were appointed as Justices of the Peace and as members of the Board of Conservancy. A good many shetias functioned as Commissioners of the Court of Requests and as members of the Board of Education. They were acclaimed to be the representatives of the natives as a whole. They had developed a sense of corporate identity and a certain public role as leaders of society.

As early as 1829, leaders like Shankarshet, Jamshetji Jijibhai and Framji Cowasji, had urged the House of Commons, through a petition, that Indians be included in the hitherto solely European Bench of Justices, a body which was responsible for the functioning of municipal affairs and for raising revenues. The *shetias* had also requested the Government for induction of natives in the Grand Jury and positions of office. When Indian Justices were finally appointed in 1834, twelve of the thirteen were *shetias.* (Of them 9 were Parsis, 2 Marathi and 1 Muslim, cf J. Masselos. op. cit., p. 18.)

A great deal of wealth and public influence in Bombay in the early nineteenth century was concentrated in a few families such as, the Jamshetji Jijibhais, the Banajis, the Readymoneys, the Wadias, the Camas, the Dadyshets, Varjivandas Madhavdas, Mangaldas Nathubhai, the Tyabjis, the Roghays, the Ghatays, etc. Dadaji Dhakji was an eminent Prabhu millionaire of the forties. Jagannath Shankarshet (1802-65) was

the most prominent Maratha *shetia* who had inherited money-lending business from his grandfather and trading from his father. His own banking activities ensured that he remained a wealthy man. However, his status was based not so much on the vast riches typical of the Gujarati *shetias* but more on his own force of character, his unique position in the Marathi speaking population and the respect with which his advanced ideas were regarded by Government. (Bombay Gazette, 1 August 1865, cf. Christine Dobbin, op. cit.)

With the opening of the China trade and the rise in the price of American cotton after 1833, there was a large increase in the number of independent European mercantile firms in Bombay. Nearly all these firms had Parsi guarantee-brokers, (H. B. Wadia, B. H. Wadia, Jijibhai Dadabhai, Dadabhai Pestanji Wadia, Manakji N. Petit, Cowasji Jehangir, etc. were the leading guarantee brokers of many European firms. Dadabhai P. Wadia was regarded as the greatest Parsi house in Bombay until it collapsed in the early fifties, Dinshaw Wacha, Shells from Sands of Bombay (Oxford, 1972).) who guaranteed the solvency of the constituents and advanced huge capital to enable them to carry on trade. The families most closely associated with the China trade comprised the Readymoneys, the Petits, the Camas, the Banajis and the Jamshetji Jijibhais. The Ready-money family owned several ships and their prosperity was assured by the association of Cowasji Jehangir Readymoney with the prosperous shipbuilding family of Roghay. The Readymoneys had come to Bombay from Navsariin the eighteenth century. Upon arrival they established the China trade, and Sir Cowasji Jehangir acquired a slight knowledge of English at the Sykes' School. At 25 he was appointed guarantee broker of two European companies and eventually became one of the richest persons. (Anon, Representative Men of the Bombay Presidency (Bombay, 1900), p. 73.) The Petits, one of the first mill-owing families in Bombay, were the early migrants from Surat Sir D. M. Petit was an agent for French vessels (hence the name), and his son Sir Dinshaw Petit began his career in 1840 as a clerk in a European concern and afterwards a manager for other European firms. Meanwhile, the family had become very wealthy on its own account and had opened textile mills in the city. (Ibid., p. 70.) The Wadia family, the most successful and forward-thinking of the Bombay millionaires, was well-established as shipwrights to the East India Company during the heyday of the Bombay Docks in the eighteenth century. It was in 1735 that Lavji Nasarvanji Wadia was brought down to Bombay from Surat, and was actively engaged throughout the whole period in building new vessels for the Company. The family continued a tradition of shipbuilding till about 1880. (R. Wadia, The Wadia Dockyard and the Wadia Master Builders.) K. N. Cama (1815-85), the founder of the Cama family, became one of the most successful merchants trading between India and China. They built ships and were the first Indians to establish a mercantile firm in London in the mid-1850s. The Banajis owned many ships and had extensive trade with China and Burma. Sir Jamshetji Jijibhai (1783-1859), the first Baronet, was, however, the most prominent among them all. He built his own fleet of ships and was by far the greatest trader with China. He earned huge profits in cotton exports and also a reputation for being the most enlightened philanthropist in Bombay. By virtue of his being the head of the Parsi Panchayat the title of " Sir Jamshetji Jijibhai " was continued on the head of the family for

generations ahead. The Tatas migrated to Bombay early in the nineteenth century and by 1859 they were general merchants, contractors for the British and China traders. Jamshetji, the future giant of industry, received English education in the Elphinstone College and had gained experience of the Lancashire cotton industry. (F. Harris, Jamshetji Nusserwanji Tata: A Chronicle of his life (Bombay, 1958),pp. 1-10.)

The Thackerseys, a Bhatia family from Kathiawar, had their fortune founded by Damodar Thackersey Moolji who began to establish intercourse with the European export-import houses of Bombay in about 1866 and acquired wealth power through trade and industry. (Anon, op. cit., pp. 114-15,) The Currim-bhoy house was established in the city prior to the advent of industry, and was mainly engaged in trade with China. This Khoja family hailed from Cutch where they used to ply country crafts between Mandvi, Arabia and Zanzibar. They acquired mill agencies, and in 1888 startedtheir own mills, and eventually built an empire of their own in Bombay. (S. M. Rutnagur, op. cit., pp. 697-732). The Sassoons were another successful family, the largest millowners in Bombay. These Baghdadi Jews who had come to Bombay in 1832, entered the Gulf trade and opium business. (S. Jackson, The Sassoons (London, 1968), pp. 17-22.) They were a westernised family enjoying important positions and contacts with Englishmen.

Many of the Banias of the 1850 period were equally prosperous as the Parsis. They were cotton traders, bankers and guarantee brokers.

The decline in China trade in the middle of the nineteenth century was instrumental in the economic decline of the Parsis and the Muslims who, besides being traders, were also shipbuilders. This period witnessed the emergence of David Sassoon(Bartle Frere, Governor of Bombay, described him as ' the first of our non-European merchants in wealth and respectability'.) and other Jews as men of wealth.

The decline in old spheres of influence, was, however, partially compensated for by the rise of new ones. There was an enormous increase in cotton trade. The outbreak of American Civil War in 1861 and the consequent spurt in export of cotton to England contributed enormously to the economic growth of Bombay. The Parsis, Banias and Bhatias amassed huge fortunes in cotton trade. (The value of cotton exports increased from 5.25 millions in 1860 to 80 millionsin 1865.)All sorts of ingenious schemes were devised for channelising the money earned. The economic situation was characterised as the Share Mania of 1861-65. The economic life of the city was electrified during the Share Mania. The super abundance of wealth stimulated investments in shipping, banking, trade and land reclamation. Enormous money was injected into the city which transformed Bombay into the most important mercantile centre, the *Urbs* Prima in Indis. The cessation of the war in 1865, however, brought a general disaster on the economy of the city and the textile industry was overwhelmed by a stagnation.

It was between 1818 and 1860 that road and railway communications were established between the city and the mainland. The opening of the first railway ever constructed east of the Suez Canal (16 April 1853) was one of the most important landmarks in the annals of Bombay as well as

of India. The railway was extended from Thane to Kalyan on 1 May 1854. The railway sections upto Igatpuri were opened from time to time until 1 January 1865. (For details see Chapter 7—Communications in Greater Bombay Gazetteer, Vol. II,) The cherished goals of the public spirited men in Bombay to link the cotton producing tracts of Khandesh and Berar with the city by railway were fulfilled in 1865. The rail link from Kalyan to Khandala was opened on 14 May 1863, and was extended further to Pune. Bombay, thus, became the nerve centre of trade and industry. Its fine natural harbour, and the opening of the Suez Canal in 1869, made it the most important international port in India; (Development of the Bombay harbour was commenced in 1736. The history of railways, harbour, docks and roads is furnished in Chapters 7 and 9 in Greater Bombay Gazetteer, Vol. II.) The opening of the sub-marine cable to England in 1870 provided a sensitive link with the markets of the world.

Besides the several changes in physical infrastructure, the administration of commerce was improved by trade regulations, and new joint-stock legislation. There was a change over to the joint-stock principle. The growth of trade and the collapse of many houses of agency, stimulated the establishment of many banks. In 1840 the Government-sponsored Bank of Bombay was established/This was followed by the Bank of Western India in 1842 and the Commercial Bank of India in 1845. (Christine Dobbin, op. cit, p. 18.) Shankarshet was a director of both the latter banks. Dadabhai Pestanji Wadia, Framji Cowasji Banaji, Jamshetji Jijibhai, Jijibhai Dadabhai, B. H. Wadia and Cowasji Nanabhai Davar, were all connected with the banks. The mercantile magnates, headed by Framii Banaji, took up shares when the G. I. P. Railway Company was projected. Insurance companies were beginning to attract attention. establishment of banks opened up new opportunities in the field of brokerage in stocks and shares. Premchand Raichand was by far the greatest name in this sphere.

These developments paved a way for the pioneering of the cotton mill industry in Bombay. The first mill in the city, the Bombay Spinning and Weaving Company was floated by a shareholders agreement on 7 July 1854. It was ventured by Cowasji Nanabhai Davar (1814-73). The profits of the same exceeded all expectations, and many mills followed. The Oriental Spinning and Weaving Company, floated in 1855 under the leadership of M. N. Petit, Beramji Jijibhai, Varjivandas Madhavdas, E. Sassoon and two Europeans, started functioning in 1858. M. N Petit's entry into the mill industry marked the transition of his family from trade to industry. Prosperity of the industry attracted a number of *shetias*. Mangaldas Nathubhai floated the Bombay United Spinning and Weaving Company in February 1860. B. H. Wadia and Kesowji Naik promoted one mill each in the same year. There were ten mills with 6,600 employees in the city in 1865.

A good many mercantile magnates were close personal friends by virtue of their business partnerships. They promoted not only trade and industry but also were munificent in their charities. The total sum donated by Jamshetji Jijibhai in his lifetime amounted to Rs. 25 lakhs. Cowasji Jehangir Readymoney, likewise, became famous for his charities, which included large donations for the University and for hospitals, amounting to Rs. 14

lakhs. *(Christine Dobbin, op. tit, p. 21.)* Other philanthropists included Jagannath Shankarshet, Mangaldas Nathubhai, Goculdas Tejpal, Framji Banaji, F..N. Patel and M. N. Petit.

The Bombay Chamber of Commerce was established by Europeans, inducting three Indians on its first committee, in 1836. Although not a political body, many complaints made by the Chamber to Government had attracted Indian political associations in subsequent years. It showed its concern for development of communications in the Presidency and growth of Bombay. Its members, including Framji Banaji and Jamshetji Jijibhai established the *Bombay Times* in 1838.

Besides the men of amazing commercial career mentioned above, the other pioneers of industry in Bombay included, Dinshaw Petit, Nusserwanji Petit, Bomaiyi Wadia, Dharamsey Punjabhai, David Sassoon, Merwanji Pandey, Khatau Makanji, Tapidas Varajdas, James Greaves, George Cotton, Morarji Goculdas, Mancherji Banaji, Mulji Jetha, Thackersey Moolji, Jamshetji Tata and many more. They were said to be men of initiative and integrity. Jamshetji Tata emerged as an enterprising industrialist who was the first to introduce economies in cotton mills, a fair deal to workers and a system of bonus and provident fund to employees. He went to England to study the Lancashire mill industry in 1865, and started the Alexandra mill in 1869 and the Swadeshi mill in 1886, while the Tata mills was established after his death in 1915.

Morarji Goculdas established a mill which bears his name even today, in 1870. Thackersey Moolji floated the Hindoostan Spinning and Weaving Company in 1873. This was followed by the mills of David Sassoon in 1874 and of Khatau Makanji in 1875. The progress of the industry was particularly rapid from 1875 to 1885. The Greaves Cotton and Company and the firms of D. M. Petit and the Thackersey family expanded their textile ventures by establishing many new mills. The number of mills in the city increased to 70 in 1895. The new mills which saw the light of the day during 1885-95 included those floated by Currimbhoy Ibrahim and Sons, Sassoon J. David and Company and E. D. Sassoon and Company.

The progress of the industry was, however, retarded by a depression, an unprecedented plague and famine. Many inefficiently managed companies went into liquidation or changed Agents.

The outbreak of the First World War and the stoppage of imports of machinery from Lancashire hampered establishment of new mills in Bombay for many years to come. While Bombay had been exporting yarn to China on a large scale upto 1914, the exports slumped rapidly due to Japanese competition. Surprisingly, Japanese yarn and piecegoods were imported in Bombay as their cost of production was much less. The number of mills, therefore, declined gradually after 1915.

The role of the Bombay Millowners' Association in the pre-Independence period was particularly beneficial to the industry. It is one of the oldest trade organisations in the country, established on 1 February 1875. It advocated the cause of the industry in regard to its advancement, safeguarding of interests and arbitration with Government, in matters of commercial and fiscal policies. The mills owe a debt of gratitude to this

body which functioned as its mouthpiece. Increasingly the mills became the predominant source of wealth and investment. It was on this basis that the owners and their Association built up their social position and standing in the public life of Bombay. They financed the charities which earned them influence and esteem.

Although the Millowners' Association was a body of vested interests of the owners of mills, it often extended its helping hand to the nationalist movement. Many of its members were closely associated with the Bombay Presidency Association and other public organisations in Bombay. The mercantile class and *shetias* which this body represented had always their impress on the political activities in city. They provided timely finance not only to the Bombay Presidency Association but also to the Indian National Congress from time to time.

The Bombay Millowners' Association welcomed and supported the Swadeshi Movement in so far as it suited industrial interests. The ideas of Swadeshi were kept alive and brought to every door by articles in newspapers, processions and enrolment of volunteers to keep vigilant watch and by occasional bonfire of foreign cloth. The British interests complained that the Bombay millowners made huge profits on account of the Swadeshi sentiment for buying indigenous cloth. Undoubtedly the movement supplied a momentum to the cotton mills in Bombay.

The formation of the Bombay Port Trust in June 1873 was one of the most important landmarks in the history of economic development of Bombay. It originated in the apprehension of the Bombay Government that trade interests were seriously endangered by the monopoly of private companies in regard to landing and shipping facilities at the port. The properties vested in the Port Trust included the Elphinstone Estate, the Mody Bay reclamation, the Apollo Bay reclamation, the Wellington reclamation, the Apollo Pier, the Tank Bunder Estate, the Customs bonded warehouses, the Kasara Bunder, and the whole of the property of the Harbour and Pilotage Board, the Mazagaon Pier, etc. During 1873-83 it mainly executed the works on the Elphinstone Estate, including construction of the Prince's Dock which was opened on 1 January 1880. The Frere road was also completed. During 1883-93, the Victoria Dock and Merewether Dry Dock were constructed for the convenience of growing trade and shipping. Work on the Apollo Pier was completed; additional cranes were purchased and channels of the Prince's Dock were improved. The Trust purchased the property on the foreshore at Sewri. Although no major work was done during 1893-1903, works were designed to facilitate trade and to develop property of the Trust. During the subsequent period important schemes for expansion of dock accommodation and construction of new docks were executed in Bombay. The Ballard Pier was farther extended to meet the rquirements of increased overseas traffic. The existing docks were also improved from time to time.

The most spectacular work of the Bombay Port Trust was, however, the construction of the Port Trust railway in 1915. (A detailed account of the Bombay Port Trust and Docks is given in Chapter 7 of the revised Greater Bombay Gazetteer, Vol. II, and the Gazetteer of Bombay City and Island,

Vol. III, 1910, pp. 66-81.) The post-war boom gave a burst of energy to the budding cotton textile industry of Bombay. By 1917-18, Bombay had 43.7 per cent of the total number of spindles in India and 50.5 per cent, of the looms. (A. K. Bagchi, Private Investment in India, 1900-1939 (Cambridge, 1972), p. 234.) Although cotton textile was the principal industry, there were also the railway workshops and engineering works which prospered during the period. The railway workshops were the second largest employers of labour. Between 1860 and 1920 the entire market economy of the city grew apace in association with the growth of the mill industry.

The opportunities afforded by the progress of trade, industries and communications attracted considerable number of merchants, entrepreneurs and workers to Bombay from all over Western India. Among the migrants the businessmen were from Gujarat, Cutch and Rajasthan, millhands from Ihe Deccan and Konkan and clerks from South India The enterprising men of industry and trade included Parsis, Banias Bhatias, Marwaris, Khojas, Memons and Jews. By 1921, an enormous 84 per cent population of the city had been born outside it. (Census of India, 1921, IV, p. 15.)

The Parsis (84,868 in 1921) had a powerful central organisation, the Parsi Panchayat whose traditional leader was Sir Jamshetji Jijibhai. Although they were a more or less homogeneous group there were some recalcitrant elements and nationalists like Mr. K. F. Nariman who had shown their resentment at the Parsi merchant princes. For example, middle class Parsis boycotted the address arranged in honour of the Prince of Wales who had come to Bombay in 1921. Besides the Parsis, the old merchant communities of Bombay included the orthodox Surati Banias, the Bohras and the Jains. The Marwaris arrived in substantial numbers during the 1916-21 boom. In the 1930s they moved into the mill industry in substantial numbers, buying up the Currimbhoy empire, and later, the Sassoons. (A. D. D. Gordon, Businessmen and Politics: Rising Nationalism and a Modernising Economy in Bombay, 1918-1933 (Australian National University Monograph, Manohar Publications, New Delhi, 1978), p. 50.)

By the dawn of the twentieth century, Bombay exhibited a division between the old native town housing the bustling markets and the masses of the proletariat, and the modern section housing fashionable establishments and the westernised gentry. As Joseph Baptista, later Mayor of Bombay, said in 1913, "Bombay was the graveyard of the poor, although its rapid rise was remarkable, although it was then the first city of India, the second in the British Empire and the tenth in the world and although its potentialities were prodigious." By 1921 Maharashtrian labourers from the Konkan and the Deccan constituted more than half of the recently arrived manual workforce of 2,30,000. (Burnett Hurst, Labour and Housing in Bombay (London, 1925), pp. 3-4.) The labour force was, at this time, highly volatile and lacking in a definite leadership. The growth of modern industry as a result of the boom of 1916-21 attracted educated middle-class professionals and clerks, mainly from Kanara, Cochin, Goa and Madras. In 1921, Bombay supported 3,709 lawyers, 6,651 doctors and 2,450 teachers. A high percentage of doctors were Parsis and South Indian Christians. (A. D. D. Gordon, op. cit., p. 47.)

By the end of the World War I it was overwhelmingly those industrial or business houses, with a few notable exceptions, which were well-established in Bombay prior to 1850 that were able to capitalise on the new mill industry. The prominent industrial or business houses included the Petits, the Wadias, the Readymoneys, the Thackerseys, the Currimbhoy family, the Sassoons, and the Tatas. All of them owned several mills and huge wealth.

The Sassoons were however, the largest millowners in Bombay in the 1920s. The Currimbhoy house owned the second largest number of mills in this period.

These business houses constituted an "inner circle" among the millowning companies in the city. They were highly westernised and adept in modern business methods. There was a close liaison on the social and business levels between them and Europeans. The Willingdon Sports Club at Hornby Vellard was founded by Lord Willingdon during his Governorship with the specific objective of promoting harmony between Ind ians and Europeans, and it served an admirable venue for meetings and rapprochement between the bureaucracy and the industrialists till Independence. (After 1947 it, however, became more of an entertainment club for the rich thananything else.)

Most of these families sent their sons to England, and were the members of several westernised clubs. The cultural affinity between the Englishmen and the Bombay industrialists was so close that the Willingdon Club was treated with scorn. Many of them were members of the Bombay Chamber of Commerce and the Indian Merchants' Chamber which were under European domination. Men like Sir Purshottamdas Thakurdas and Sir C. V. Mehta and many others were closely associated with European firms. (Frank Moraes, Sir Purshottamdas Thakurdas' (Bombay. 1957)

The industrialists in Bombay also enjoyed Government patronage and substantial representation in various institutions ever since the midnineteenth century. After the Montagu-Chelmsford reforms of 1919 both the Indian Merchants' Chamber (hereafter called IMC) and the Bombay Millowners' Association (BMA) were granted representation on the Bombay Municipal Corporation, the Port Trust, the Bombay City Improvement Trust and the Bombay Legislative Council. Besides, many industrialists were either elected or nominated to the legislatures on independent basis because of their economic power, while some of them sat on the Governor's and Viceroy's Executive Councils. Victor Sassoon, Currimbhoy Ibrahim, Lallubhai Samaldas and Manmohandas Ramji, all sat in the Legislative Assembly during the 1920s, while C. V. Mehta, Cowasji Jehangir Jr., D. M. Petit, Vithaldas Thackersey and others were members of the Bombay Legislative Council. Ibrahim Rahimtoola, C. V. Mehta and Cowasji Jehangir Jr., were on the Bombay Governor's Council, and Hussenbhai Lalji was a member of the Viceroy's Council. (A. D. D. Gordon, op. cit., Notes on p. 265)

The industrialists as a group could also exercise influence because of their economic power, and the Government was dependent upon them for political support. Many of the Governors of Bombay impressed upon the Viceroy or the Secretary of State about the importance of maintaining the

friendship Of the Bombay interests. The industrialists had extended financial support to the War Loans. Naturally many times the Governors were compelled to persuade the British Government not to offend them on tariff and fiscal matters. Sir Leslie Wilson (Governor, 1923-28), was faced with such a predicament in 1927 when he wrote to Lord Irwin (Wilson to Irwin, 22 June 1927, MSS. EUR. D. 703 (15) to do something to retain the goodwill of these people. Sir Frederick Sykes (Governor, 1928-33), had similarly to urge to Lord Irwin (Sykes to Irwin, 16 April 1930, MSS. EUR. F. 150 (2).

) on several occasions that the Bombay industrialists should not be alienated by Government fiscal policy. Besides, the powerful industrialists such as Sir Purshottamdas Thakurdas and Sir Ibrahim Rahimtoola and Sir Fazulbhoy Currimbhoy could influence bureaucrats in the Presidency as well as at New Delhi. Sir Ibrahim Rahimtoola was in close association with Lord Willingdon and Sir George Lloyd. Sir Fazulbhoy Currimbhoy had the ear of Sir Leslie Wilson, and Sir Ness Wadia was almost an adviser of Frederick Sykes in the matters relating to cotton industry and trade.

The entire mill industry and other industries owned by Indians, as well as most of the Indian-owned modern financial institutions, were controlled by about 50 individuals. Five great family-based managing agencies, namely Currimbhoy Ibrahim and Company, E. D. Sassoon and Company, Nowrojee Wadia and D. M. Petit and sons, controlled over half the spindles and looms in Bombay mills. (A. D. D. Gordon, op. tit., p. 62.) A small core of 18 men, two of whom were Europeans, between them controlled 77 companies registered on the Bombay Stock Exchange in 1924, and four giants, Sir Sassoon J. David, Sir Jamsetji Jijibhai, F. E. Dinshaw and Purshottamdas Thakurdas sat each on the boards of more than 22 companies. In fact F. E. Dinshaw, at one time, was on the boards of 65 companies. This shows the oligopolistic control of Bombay industry by a few magnates. This concentration was partly due to the dearth of managerial talents, but largely due to the managing agency system which was imported to Bombay by the Petits in 1860. (Ibid., p. 63.) Agencies such as the Tatas, Currimbhoys, and later Walchand Hirachand, spawned great conglomerates which handled all stages of production.

The mill ownership in Bombay was overwhelmingly in the hands of Indians. Between 1912 and 1935 the estimated gross assets of the British in the city fell from 43 per cent of the total to 10 per cent and the European paid-up capital decreased from 30.8 to 21.6 per cent. This decline was mainly due to the withdrawal of capital by the European entrepreneurs during the Civil Disobedience Movement and the depression. This was coincident to the general withdrawal of British capital in India. Even among the mills controlled by the Europeans a large portion of the share capital was held by Indians. In seven of the eleven Europeanowned mills in 1930, for which data is available, there were 5,356 Indian shareholders holding shares worth Rs. 72.11 lakhs. (*Ibid., p. 64.*)

Among the Parsi millowners, the Wadias were the most successful. They controlled the Bombay Dyeing, Spring and Textile mills with a total of 180,296 spindles and 4,810 looms. Sir Ness Wadia was the most prominent among them, and was adept in gaining political concessions for the millowners. The Tatas under Sir R. D. Tata, controlled four mills in

Bombay with 211,996 spindles and 5,708 looms in 1925-26. R. D. Tata and F. E. Dinshaw were in league with the conservative elements in the Congress on the one hand and the anti-nationalist elements in the Government on the other. (A. D. D. Gordon, op. cit., p. 66.) Sir D. M. Petit, a mill magnate, was a supporter of the Non-co-operation Movement, although he later changed sides.

Bhatias and Marwaris were prominent among Hindu millowners. The Thackerseys controlled 124,144 spindles and 3,104 looms (*S. M. Rutnagur, op. cit.*) in the 1920s. Sir Vithaldas Thackersey,. the most noteworthy among them, had a distinguished career as a member of the Municipal Corporation, City Improvement Trust, Imperial Legislative Council and the All-India Home Rule League. He died in 1922. Hansraj Pragji Thackersey was also a noted nationalist, member of the Municipal Corporation as well as the All-India Home Rule League, and a'treasurer of the Satyagraha Sabha. "Of the millowning families, the Thackerseys along with the Morarjis, were the least paradoxical in their relations with the nationalists." (*A. D. D. Gordon, op. cit, p. 66.*) Walchand Hirachand was another nationalist industrialist who advocated the doctrine of economic nationalism. By and large the Hindu millowners as a group were more involved in marketing than in industry.

The Muslim and Jewish mills were owned by a few families. The Sassoons controlled 513,850 spindles and 11,400 looms in 1924. (S. M. Rutnagur, op. cit., p. 59.) Sir Victor Sassoon, the most prominent Jew millowner, was a member of the Legislative Assembly. The Sassoons, however, gradually shifted from industry to trade with China in the 1920s, and were international bankers. The Currimbhoys controlled 509,458 spindles and 9,744 looms, and enjoyed government favour through an unswerving loyalty to the British. Sir Ibrahim Currimbhoy was a longtime member of the Bombay Legislative Council, while he and Sir Fazulbhoy Currimbhoy were members of the Municipal Corporation.

In the 1920s there was, surprisingly, a good rapprochement between the industrialists and the intelligentsia in Bombay, who were opponents formerly. The leading Advocates, for example, had a close political and economic relationship with the millowners through the National Liberation Federation and the Independent Party, and through the induction of the former into the lattei due to the paucity of managerial talents and the exigencies of company law. Eminent persons such as Sir Chimanlal Setalvad, Barrister Jinnah, M. R. Jayakar, F. E. Dinshaw and Sir Lallu-bhai Samaldas, became rich in the practice of company law. Samaldas was on the boards of 12 companies. Sir Homi Mody, Samaldas and Dinshaw were inducted into industry at management level and Mody eventually came to be totally identified with the millowners. He became head of the Tatas, and in 1927 the permanent chairman of the Bombay Millowners' Association. Mody was a disciple of Pherozeshah Mehta. The industrialists and the intelligentsia also became composite as an elite class, and they mixed socially in clubs and on the racecourse as well as in business. (A. D. D. Gordon, op. cit, p. 67.)

The marketeers who arrived in the later waves of migrants to Bombay were the antithesis of the industrialists. They were not represented in the

Bombay Legislative Council and the Municipal Corporation, and were excluded from positions of authority in the city. Their inability to speak English was also their great handicap. For example, they were unable to influence the Indian Tariff Board of Inquiry into the cotton textile industry or the Cotton Contracts Bill of 1918 in the Bombay Council due to lack of knowledge of English. They did not rely on lateral business organisations like the Millowners' Association. They were fragmented into myriads of small associations dealing in one specific commodity. This also contributed to their political weakness in contrast to industrialists. (*Ibid.*, pp. 69-70.)

The Bombay cotton market was the largest in the East, with an annual turnover of about three million bales. (Onebale=2/3 ton.) The ready cotton market was shifted from Colaba to the open space at Cotton Green (Sewri) in 1924, due to the dearth of adequate space at Colaba for the ever growing market. The future market was located at Kalbadevi, and attempts to shift it were defeated by the stalwarts of the Marwari Bazar, as it was called. Cotton exports were dominated by European firms such as the Bombay Company, Forbes Forbes and Campbell, Ralli Brothers and Volkarts.

The Bombay Cotton Trades Association founded in 1875 was a joint-stock company which admitted very few Indians and that too, only millowners and exporters. The Indian merchants had, therefore, founded the Bombay Cotton Exchange in 1890. In 1913 the muccadams and importers of cotton founded the Bombay Cotton Merchants' and Muccadams' Association under impetus from one Mr. Breul, an anglicised German in Bombay. The Bombay Cotton Brokers' Association was founded in 1915 in opposition to the Bombay Cotton Trades Association and the Bombay Cotton Exchange which were dominated by millowners. (A. D. D. Gordon, op. cit., p. 75.) Anandilal Poddar, Begraj Gupta and Mathurdas Vassanji were the leading lights of the Cotton Brokers' Association. Anandilal Poddar held nationalistic views and had gifted Rs. 2 lakhs to the Tilak Swaraj Fund in 1921. (Ibid.,)

The end of the First World War left the Bombay cotton market in a state of flux. The Bombay share market which had received an unprecedented impetus during the Share Mania of 1861-65 was the largest of the indigenous money markets. After the towering influence of Premchand Raichand had ebbed, it was formalised into the Bombay Native Share and Stock Brokers' Association (BNSSBA) from about 1887. Sir Shapurji Broacha held sway over it till about the end of the First World War. However, the market was hardly well-organised upto the period under review.

There were three main piecegoods markets in the city in the 1920s viz., the Mulji Jetha Market (Shaikh Memon street), Morarji Goculdas Market (Kalbadevi) and Lakhmidas Market (Shaikh Memon street). The Mulji Jetha Market was, however, the largest and the most important. It housed the Bombay Native Piecegoods Merchants' Association (BNPMA) and about 374 shops. This as well as the other two markets were politically important because throughout the Non-co-operation and Civil Disobedience Movements the merchants extended their full-support to

the Congress and Gandhiji. Their participation in the freedom struggle was all the more important because the millowners very often changed sides between the nationalists and Government. This point will be illustrated later on.

Bombay dominated the bullion trade of India, and most of the bullion entering India came through the city. (A. D. D. Gordon, op. cit., p. 79.) The Bombay Bullion Exchange played an important role in the market, the leading brokers being G. D. Birla, a great nationalist, C. B. Mehta and Somani. G. D. Birla always supported the nationalist movement and was a close associate of Gandhiji.

The groundnut and oil-seeds market was another large market in the twenties, situated at Dana Bunder, near Masjid railway station. However, it was not very significant politically. Perhaps the most influential of all the Bombay markets was the traditional money market. This is because of the close financial relationship that existed between the shroffs and traders, and because most of the shroffs were also themselves traders in commodities. (*Ibid*,, p. 81.) The shroffs were known, in the nineteenth century, even to have financed Government. They continued to finance crops in the Presidency, share dealings and bullion trade till about Independence. They were jealous of the encroachment of modern financial institutions on their sphere of activity. They were represented by the Marwari Chamber of Commerce which assumed great political importance during the Civil Disobedience Movement.

The War, the reforms of markets by statutory provisions and growth of industrialisation, wrought great economic changes in Bombay during the twenties. On the one hand rapid industrialisation created enormous physical and social problems in the city, while on the other the economic reforms and the war cost the Government of Bombay good many financial resources, which it might have used to overcome these problems. The failure of Government to solve the problems of Bombay contributed to the political response of the city businessmen to the Congress agitations.

BOMBAY CITY IMPROVEMENT TRUST

The municipal politics in the city by the last decade of the nineteenth century revolved around three interest groups, namely, the landlords. large merchants and industrialists. The working class was still a minor group. There were conflicts between the three groups about the development strategy as well as about the guestion who should pay for the development. The ravages of the bubonic-plague of 1896 which persisted for guite long, were an eye-opener to all. About one guarter of the population fled away the horrors of plague. The city was faced with commercial extinction. This prompted the European dominated Bombay Chamber of Commerce, by itself an interest group, to urge upon the Government the necessity for proper drainage, reticulation of clean water and planned reclamation in the city. It was against this background that Lord Sandhurst, Governor, created the Bombay City Improvement Trust (BCIT) in 1898, on the pattern of the Glasgow City Improvement Trust. It was intended to be a parallel organisation, if not actually a rival, to the Bombay Municipal Corporation. It is said that the Municipal Corporation

was not so much amenable to the will of Government, and sometimes confronted the latter. The Government could not easily renege on civil freedoms. (A. D. D. Gordon, op. cit, p. 121). This prompted the Governor to introduce an additional element into local politics, a parallel organisation to the Corporation. It was established with the express purpose of developing the city in a planned way. It was charged with the laying of new roads, improvement of crowded localities, construction of sanitary tenements for the poor, reclaiming of further lands and providing accommodation for the police. (Ibid.) Its constitution and powers were similar to the Bombay Port Trust. In keeping with Government's reliance on millowners and business magnates, it was dominated by these interests throughout its existence. The scheme, having been generally approved by the Municipal Corporation, the Port Trust and the Chamber of Commerce, was finally legalised by enactment of Act IV of 1898, and the Trustees commenced work from 9 November 1898. The Trust started guite well and effected clearance at several localities such as Nagpada, Mandvi. Koliwada, Naoroji Hill, Kholbhatwadi and Bhatwadi. Besides. congested localities of Guzari Bazar, Memonwada, Tulsirampada, Anantwadi, Pathakwadi and Vithalwadi, were improved and provided with important arteries such as Mohammed Ali road, Princess street and Sandhurst road. Further clearance of Kamathipura, Nagpada, Sewri and Worli-Koliwada could not be undertaken due to financial constraints, although the same was proposed. (Municipal Corporation of Greater Bombay: Monographs on the occasion of Centenary Celebrations, 1973.)

The road schemes of the Trust were primarily designed to maintain a north-south thoroughfare for speedy transport. Schemes were also prepared for opening out areas of congestion. The broad road from Carnac road to Sewri was constructed. A road section from Carnac road to its junction with Parel road was newly laid out, opening out the Memonwada, the worst congested locality.

Hughes road was cut through Malabar Hill. Areas lying between Malabar Hill and Gowalia Tank road were thus made suitable for residential purposes. Hughes road was developed into a western artery connecting Peddar Road. The Princess street opened areas around Dhobi Talao, Crawford Market, Chandanwadi, Vithalwadi, etc. Sandhurst road was another east-west link between Chowpati to the Dock area. The Chunam Kiln lane and the Gilder road on the north were widened into the present Lamington road. The Cuffe Parade was developed into another grand promenade on the reclaimed land.

The BCIT had all along conceived the reclamation of the low-lying northern areas for accommodating the poorer sections, thereby decongesting the central parts of the city. The scheme did not achieve the desired end as the cost of reclamation placed the value of plots beyond the reach of the poor. It included the Dadar, Matunga, Sewri, Wadala and Sion areas. Agripada was similarly reclaimed and made available for residential development. (*Ibid.*)

The accommodation schemes of the BCIT were two-fold, rehabilitation of those displaced by clearance schemes and residential accommodation for the police. The tenements were constructed by the BCIT at Agripada, Princess street, Chandanwadi and Mandvi and Koliwada. The Kohinoor mill and the Century mill constructed chawls for their workers at Naigaum and Worli, respectively, in consequence of amendment to the Trust Act.

The development of Bombay was being done by different public and private institutions without any co-ordinating link and without any regard to the interests of the masses. The Railways were acquiring valuable lands on the eastern and western parts of the city although it was felt that they should have concentrated on the eastern fringe alone to serve the harbour and the large population around. The B. B. and C. I. Railway, however, had extended to Colaba in the interest of the cotton merchants at Cotton Green. This involved heavy bullock cart traffic between the Harbour and Colaba. Hence the Cotton Green was removed from Colaba to the Sewri reclamation. Consequently, there was no apparent justification for the continuance of the rail link to Colaba. (*Ibid.*)

Whilst the several schemes were still on the anvil, Government issued a questionnaire on 9 December 1907 relating to (i) segregation of areas according to income groups, (ii) co-ordination and improvement of different channels of communication and (iii) a mode of travelling suitable for the displaced population. However, in this instance too, it was the industrial and business magnates who had the final say, and most of the replies received had a bias in favour of the replier's respective interest. Based on the replies received Government embarked upon a policy in 1909 which was to govern Bombay for the next 20 years. (A. D. D. Gordon, op. cit, p. 122.) It was recommended that the western shores should provide accommodation for the wealthy class (as they already did); that Salsette should provide accommodation for the middle class; that broad arterial roads should be knocked through the congested areas of themiddle island; and that the Back Bay reclamation was the only solution. (Ibid.) It was decided to transfer the right of Back Bay reclamation from the Trust to Government by a suitable legislation. No specific areas were earmarked for the middle class except for the land rendered vacant by the shifting of the rich class. The northern areas were being developed for those who could afford. Factory workers were "benevolently " to be accommodated near their place of work. (Municipal Corporation of Greater Bombay . Monographs on the occasion of the Centenary Celebrations, 1973.) The road system was also sought to be improved. The suggestion to terminate the B. B. and C. I. Railway at Grant Road was dropped as it was necessary to serve the reclamation areas. So also suggestion to terminate the B. B. and C. I. Railway at Victoria Terminus via Parel was dropped on the grounds that it would cause serious congestion of traffic and would prevent expansion of the G. I. P. Railway. (Ibid.)

In 1913 Government decided to review the progress made with a view to ascertain if any change was necessary in the order of priorities. It, therefore, appointed a Development Committee which submitted a plan known as the *Report of the Bombay Development Committee* in 1914. The Committee did not suggest substantial changes in the policy of 1909. It held that mills should not be moved from their present situation, and that new mills should be concentrated in the north-east of the island. The Committee advocated land reclamation, particularly the Back Bay

scheme, which, it was claimed, would fulfil the twofold purpose of providing middle class housing and offices as well as a thoroughfare between the wealthy residential areas on the western foreshore and the offices at the Fort.

The industrialists and magnates including Vithaldas Thackersey, Dinshaw Petit and Sassoon David favoured the reclamation, while Ramji Manmohandas and Purshotfamdas Thakurdas, on behalf of the IMC, and Ibrahim Rahimtoola on behalf of the landlords, opposed the scheme. The IMC felt that the emphasis of expansion should be to the north, to the Mahim Woods. The landlords opposed the scheme due to their fear that additions to the area of the island would reduce rents and land values. Most of the supporters of the reclamation were guided by a desire to enhance the prestige of Bombay as a mercantile centre as well as by personal interest as contractors. These interests gave rise to a syndicate involving R. D. Tata, his contractor lieutenant Walchand Hirachand, Shapurji Broacha, Lallubhai Samaldas, Sassoon David, Fazulbhoy Currimbhoy and Vithaldas Thackersey. (A.D. D. Gordon, op. cit, pp. 125-26; Back Bay Inquiry, 1926,1, p. 346.)

The Trust in adherence of Government policy followed a policy suited to the magnates, and not to the Corporation. It concentrated on activities such as widening of streets, probably its most valuable activity, and reclamation. By 1920 it had provided 21,387 new tenements in slum areas, which had involved demolition of old dwellings of an equal number. By 1918 it had accumulated 11 percent of the total area of the island although two-third of this land had remained undeveloped. On the other hand, by 1924-25 it successfully undertook a large reclamation at Colaba, and fully drained, paved and lit 29 kilometres of roads, while a further of 47 kilometres of roads were in the process of improvement. (A.D.D. Gordon, op. cit, p. 126.) The following quotation gives a fairly accurate assessment of the BCIT's work in 1925: " That body has followed a cautious policy by paying attention rather to the widening and bettering of streets, and in a measure, to the improvement of the actual structure for human habitation, than to the problem of over-crowding, and the insanitation which results as a consequence of it the evil of overcrowding remained as acute as ever." (K. Shah and Bahadurji, Constitution, Function and Finance of Indian Municipalities(Bombay, 1925), p. 221.)

While the Government was trying to circumvent the Corporation unsuccessfully, that august civic body had done little since 1898 to alleviate conditions in the city. The expenditure of the Corporation on public works increased by 88 per cent, while that on public health only by 14 per cent over 15 years from 1900 to 1915. "On the eve of the war time inflation and influx of people and the attendant social disorder, there was no public body prepared to handle the enormous physical problems faced by Bombay, and that these problems were largely the result of years of empire-building on the part of government and the large business magnates, and of obstruction on the part of landlords." (A. D.D.Gordon, op. cit., p. 128.)

Sir George Lloyd, a personal friend of Lord Montagu (Secretary of State), a

clear-headed and hardworking man, but an imperialist, assumed the office of Governor in late 1918. He could execute his massive schemes in spite of the apathies of the bureaucracy qf the Government of India because of his friendship with Montagu. (See Lloyd to Montagu, 20 Dec. 1919, MSS. EUR. D. 523 (24).

George Lloyd believed that the housing problem contributed to political unrest in the city. He wrote to Montagu that the situation was so acute that the only solution was a combination of a northward expansion of the city and reclamation of Back Bay. He designed a massive scheme for housing and development, and decided to undertake the same on behalf of Government rather than entrusting it to the Improvement Trust or the Corporation. He formed the Bombay Development Department (BDD) in 1920 as a specially formed organisation under a civil servant. The department was financed from a development loan (*The loan was mounted under the catchword," By Bombay for Bombay ".)* and a one-rupee town duty levied on each bale of cotton entering the city.

George Lloyd had, thus, brushed aside the business magnates, the members of the 1918 syndicate, and usurped their right to 'develop' the city. This was bound to have ramifications in the local politics of Bombay.

In 1920 there were three authorities engaged in the development and improvement of Bombay, *viz.*, Municipal Corporation, Bombay City Improvement Trust and Bombay Development Department. The Corporation under the domination of industrialists was jealous of the BCIT and the BDD, while Lloyd himself was frustrated by the civic body denigrating it as a "wisp of Landlords".

Municipal Reforms: It may be necessary at this stage to examine the movement for municipal reforms as it developed after 1918.

The reforms movement was led initially by the Municipal Reform Association under the leadership of Joseph Baptista and the European Association. The former wanted a wholly elected civic body and a wholly elected standing committee. A Franchise Sub-Committee was appointed to go into the problem of enlarging franchise. The sub-committee comprised eight nationalists, i.e., the followers of the Congress and the Home Rule Leagues. Sir Ibrahim Rahimtoola, a member of the Governor's Council, had aligned himself with the landlord faction. In the end, Bombay Act IV of 1922, which established the new Corpo^ ration, fixed the franchise at Rs. 10 and the total number of corporators at 106, 80 elected by the ratepayers, the Chambers of Commerce and the University, 17 nominated by the Government and 10 co-opted. (A. D. D. Gordon, op. cit., p. 137.)

As a result of the Reforms, there was a surge of nationalists into the Corporation in the 1923 civic election. They, however, could not capture the Corporation, which came under domination of the Progressive Party of Homi Mody. In fact V. J. Patel, leader of the Municipal Nationalist Party (MNP), lost the 1923 mayoral election to Mody. The MNP represented professionals, millowners, merchants and landlords in the 1923 and 1926 elections.

The important members in the Corporation at the time included Jamnadas

Mehta, V. J. Patel, Homi Mody, K. F. Nariman, Bhulabhai Desai, S. H. Jhabwalla, L. R. Tairsee, Ranchhoddas Gandhi and Dinshaw Petit (2nd Bart.). An overtly communal element was introduced into municipal politics for the first time in the 1926 elections. (Ibid., p. 146.) The Corporation ostensibly represented millowners, business magnates, landlords and professionals, while Maharashtrian workers, non-Brahmins and the middle class were totally out of municipal politics. (Ibid., p. 148.) This situation was voiced by R. V. Vandekar, a leader of the Peoples' Union in 1925 saying that the Corporation was dominated by powerful " monied interests " representing less than half the population of the city. (General Department, Bombay Government, 28 Feb. 1925.) The MNP was "also said to be representative of Gujarati interests. The Maharashtrians pleaded Government to nominate more members of the working class and Maharashtrians to the Corporation. " In a sense it is true to say that Maharashtra separatist movement of the late 1950's can be found in embryo in this upsurge of the mid 1920s." (A. D. D. Gordon, op. cit, p. 149).

It is noteworthy that throughout the period there was an intense conflict in the city between different groups over the question, who was to pay for the increased revenue needs of the Municipal Corporation, the Bombay Development Department and City Improvement Trust. Mill-owners, merchants and landlords vied to thrust the burden of the new taxes necessitated by the crisis onto each other. The BMC had a desire to wrest the BDDand the BCIT. Another area of conflict developed over the amount and type of municipal expenditure.

This conflict concerned which development projects were essential. Projects like the East-West road were costly, and the MNP was opposed to them. Bhulabhai Desai moved that a retrenchment committee be appointed to see if certain development schemes, and those involving compulsory acquisition of land for roads in particular, could not be dropped. (BMC Proceedings, 1923-24,1(A). p. 705.) The committee suggested drastic reductions, but there was disagreement as to the cuts and who was to decide them.

The manner of Government spending invited acute discontent. The Municipal Commissioner, a Government Officer, very often awarded contracts to patrons of Government, Europeans and Muslims. (A. D. D. Gordon, op. cit., p. 150.) Hence, there was a feeling that the Corporation should be given the right to appoint the Commissioner.

It was in 1917 that Ibrahim Rahimtoola made the first demand to transfer the BCIT to the Corporation on the plea that its work was entirely a local self-government function, and that the Trust was originally intended to be a temporary body. Now the Corporation overwhelmingly supported Rahimtoola. The Trust invited opposition partly due to its limited achievements in the matter of housing schemes, but mainly because the Corporation had no control over its functioning in spite of contribution to the Trust funds. The landlords and contractors were also opposed to the Trust because it controlled 19 per cent of the land of Bombay Island. (*Ibid, pp. 150-51.*)

The Bombay Government, however, resisted stubbornly the transfer of

the Trust on the belief that the Corporation was a stronghold of landlords. The struggle of the Corporation towards this end was joined, by the Swaraj Party which challenged the Government in the Bombay Legislative Council on the issue in 1925, but was defeated. The Trust was ultimately dissolved in 1926, and the bulk of its work was then entrusted to the Corporation under the Bombay Improvement Trust Act of 1925. The same Act was repealed in 1933, and its main provisions were incorporated in the Bombay Municipal Corporation Act of 1888.

BOMBAY CONGRESS (OF 1915)

To recapitulate the story of the Congress, in 1910 it was the turn of the Moderates to initiate moves for reunion after the split at Surat. Gokhale got the impression that the time was ripe for a move toward reunion. Efforts were made in that direction. Unfortunately, however, the gulf between the secessionists and the Moderates remained unbridged for various reasons. Lokamanya Tilak after his imprisonment at Mandalay was released in Pune in the early hours of 17 June 1914. (Gordon Johnson, op. cit, p. 185,) His political utterances, after the release, suggested his eagerness for unification of the factions. Gokhale also felt encouraged. Mrs. Annie Besant and N. Subba Rao, among a few others, campaigned for reunion. Mrs. Besant argued that Tilak if he was persuaded to return, could be adequately kept under control by constitutional safeguards in the Congress constitution. But a trail of events made the Bombay politicians adamant. Pherozeshah, Wacha and Gokhale opposed the entry of the Nationalists into the Congress at this juncture. Sir Vithaldas Thackersey invited the next Congress of 1915 on behalf of Bombay. (Ibid., p. 190.) It seemed as though once again Tilak had been outmanoeuvred. However, several changes occurred in Indian politics which rapidly brought an end to the Maha-rashtriah quarrelling, as it was called. Gokhale died in Pune on 19 February 1915. Pherozeshah, the most obdurate of the Bombay men, also passed away on 5 November 1915. The death of the two opponents greatly weakened the opposition to Tilak. Infirmities of advancing years were creeping upon Wacha. Sir Narayan Chandavarkar was already a spent force in politics. Surendranath Banrierii was not guite in tune with the new thought. In 1915 Tilak should have been the uncrowned king not only of Maharashtra, but of the whole of India. (Pattabhi Sitaramayya, The History of the Indian National Congress, Vol. I. (Pajdma Publications, Bombay, 1946), p. 120.) But the hostility towards him was still strong enough, and he himself preferred not to attend the Bombay Congress or 1915. The reconciliation between him and the Congress in the following year, however, went almost unnoticed, for there were more important things to consider. It was against this background that the Congress session was held in the Chiistmas of 1915 in Bombay. It was essentially a moderate Congress. The president chosen for the year was Sir Satyendra Prasanna Sinha, an ex-Law Member of the Government of India, who had left office in favour of the freedom movement. He was an eminent learned man largely influenced by the elderly Congressmen. Dinshaw Wacha was chosen chairman of the Reception Committee due to the demise of Pherozeshah.

The session opened with great interest as there were high hopes for reunification after the Surat imbroglio. Not less than 2,259 delegates

attended the Bombay gathering and the resolutions that were passed covered a large variety of subjects, (*Ibid.*, p. 122.) some of which were quite important.

Gandhiji attended the session, although he played an unconvincing and minor part in the proceedings. He was nominated to the Subjects Committee by the president as he was not elected. Among the distinguished leaders at the session were: Sir S. P. Sinha, Surendranath Bannerji, Malaviya, Jinnah, Annie Besant, Wacha, Vithaldas Thackersey, Mazharul Haq and many others. The Congress was certainly poorer for the loss of Gokhale and Pherozeshah.

One achievement of the session was that the constitution of the Congress was suitably amended to enable the entry of the Nationalist delegates, who were allowed to be elected by public meetings convened under the auspices of any of the associations having the object of attainment of self-government within the British Empire by constitutional means. This paved the way for Tilak's entry into the Congress.(*Pattabhi Sitaramayya*, op.cit., Vol.I,p.124)

HOME RULE MOVEMENT

Mrs. Annie Besant had been making stout attempts for formation of the Home Rule League. She propounded that the Congress was, at best, a deliberative body, and hence the Home Rule League would become the executive arm of that body. She convened a conference at China Baug in Bombay soon after the Congress session. It was attended by Bannerji, Malaviya, Srinivasa Sastri, Motilal Nehru, Jinnah, Sapru, Jehangir Petit and Chimanlal Setalvad. Tilak was not invited at his own suggestion. The conference proved abortive mainly because the Congressmen were suspicious that Annie Besant wanted to start a rival organisation and " they abhorred the very idea of others taking up political activity." (Jamnadas Dwarkadas, Political Memoirs, (United Asia Publications, Bombay, 1969), p. 92.) The influence of Government in those days was so appalling that the leaders were susceptible to its malevolent effects. (Ibid, They advised Mrs. Besant to refrain from starting another organisation for the time being. Later on the All-India Home Rule League was inaugurated by Mrs. Besant at Madras in September 1916. (Ibid., p. 105.) Meanwhile Tilak had already started his own Home Rule League in May 1916, the activities of which were mainly restricted to Maharashtra. So after the Madras inaugural, seven persons from Bombay, namely, Jamnadas Dwarkadas, Dr. V. S. Trilokekar, Ratansi Morarji, Umar Sobani, Shankarlal Banker, L. R. Tairsee, and Kanji Dwarkadas, met formally in China Baug and inaugurated the Bombay Branch of the Home Rule (Ibid., p. 106.) They engaged themselves in vigorous League. pamphleteering and propaganda activity educating the people on the evils of British rule and the urgency of securing home rule for India. Their hands were strengthened by the starting of the Young India by Jamnadas Dwarkadas. The reactionary elements in Bombay scoffed at first. For example, Mr. F. E. Dinshaw, a financier and industrial magnate made a fun of the Home Rulers. (Ibid., p. 107.)

In the mean time the repressive Press Act of 1910 spread its tentacles far

and wide, and the process of unprecedented repression was helped by the unjustified use of the Defence of India Act. There was a great resentment in the vernacular press in Bombay and Pune. The Government launched a prosecution against Tilak in the High Court for certain articles he had written. Jinnah was Tilak's counsel and he fought so competently that the Judge Mr. Batchelor was compelled to dismiss government plea. B.G. Horniman, President of the Journalists' Association and some of the stalwarts of the Congress and Jamnadas Dwarkadas took a deputation to the Viceroy, Lord Chelmsford, in March 1916, against the abuse of the Defence of India Act. Though the latter's response was not favourable, this and several other occasions were exploited to give wide publicity to the misdeeds of Government.

The incarceration of Annie Besant in June 1917 was greeted with hostility in Bombay; particularly by the Home Rulers. They organised a public meeting in Bombay, wherein Gandhiji also spoke. By this time the younger generation had taken hold of Bombay and the Moderates realised that their power was almost gone. (*Ibid.*, p. 111.) Besides the Home Rulers mentioned above, Joseph Baptista was also a staunch protagonist of Mrs. Annie Besant, in Bombay. He was elected president of the League, and led it for several years.

Mrs. Besant's internment brewed a storm, and many started to identify themselves with the League.In Bombay, Jinnah, M.R. Jayakar, Horniman, K. M. Munshi, Vithalbhai Patel, Bhulabhai Desai, Jehangir Petit, D.N. Bahadurji, M. S. Captain, S. R. Bomanji, and several other persons enrolled themselves as members. Eventually Jinnah became the Bombay Home Rule League's president. They held many meetings for the release of Mrs. Besant. A whirlwind propaganda campaign was started in the city. Bhulabhai Desai, K. M. Munshi, Jamnadas and Indulal Yajnik used to address public meetings. Gandhiji supported and guided the movement, although Annie Besant did not always agree with him. Government was forced to release her and her companions three months later.

The conclaves at Shantaram's Chawl led by Horniman, Umar Sobani, Jamnadas Dwarkadas, Dr. M. B. Velkar and Dr. D. D. Sathe, and occasionally Baptista and Jinnah, were inaugurated during the agitation over Annie Besant's internment. They dominated all district organisations throughout the Presidency. (Source Material for a History of Freedom Movement, Vol. II p. 693.)

The Home Rule Leagues were the first of the post-war movements to bid for support of the mill workers in Bombay. The Leagues were mainly middle class in character, and provided a political outlet for the young professional persons who were disgusted with the leadership of the Bombay Presidency Association. (Richard Newman, Workers and Unions in Bombay: 1918-1929, A Study of Organisation in the Cotton Mills (Australian National University, Canberra, 1981), pp. 92-93.) Besides the Bombay Branch of the All-India Home Rule League, the other League was the Indian Home Rule League. It was mainly Maharashtrian with a few Marwaris. Its leaders in Bombay were Joseph Baptista, Dr. M. B. Velkar and Dr. D. D. Sathe, its outstanding figure being Tilak. Relations between the two Leagues were generally harmonious as their aims were similar. Some

of the followers of Dr. Annie Besant like the Dwarkadas brothers took a warm and paternalistic interest in the lot of the workers. They had friends among the millowners and drew a large proportion of its membership from mill clerks, cloth brokers and other people on the fringe of the workforce. (Ibid., pp. 93-94.) Naturally they sought to extend their influence among the millhands. However, their connection with millowners, and the barrier of language did weaken their position among the Marathi speaking workers. Tilak's position among the workers was hardly better. The spirit of the 1908 millhands' strike on Tilak's imprisonment had almost withered away. (R. I. Cashman, The Myth of the Lokmanya: Tilak and Mass Politics in Maharashtra (University of California Press, Berkelay and Los Angeles, 1974). Tilakites, in fact, engaged a Maratha lawyer, V. M. Pawar to organise the Bombay labour and to launch pro-League newspapers in English and Marathi. (Richard. Newman, op. cit, p. 94.) Tilak also encouraged Vithal Ramji Shinde, the leader of the Depressed Classes Mission, to establish Maratha Leagues in Bombay and to harness them for propagation of the Home Rule gospel. (AITUC—Fifty Years, Introduction by S. A. Dange, All-India Trade Union Congress. 1973.) Tilak, of course, did organise the meetings of the Bombay labour with success. His vast reputation was another asset for him. However, Tilak had no time at his disposal for linking his political tactics with the economic grievances of workers.

The world-wide influenza epidemic raged through Bombay from September to December 1918, causing hundreds of deaths per day. Many charitable organisations extended a helping hand, and started enrolling volunteers for supplying medical relief to the victims and cremating the dead. The Home Rulers wanted to organise relief services under their own auspices with an eye on winning away labour support. However, they were handicapped due to the paucity of a cadre of volunteers. On the contrary the Social Service League of N. M. Joshi did an excellent job which earned the organisation and her leader an immense popularity among the working class. (V. B. Karnik, N. M. Joshi—The Servant of India (United Asia Publications, 1972), pp. 29-30.) The Home Rulers were at a loss, and could not make inroads in to the working class in Bombay.

Another episode in December 1918 showed the handicap of the Home Rulers in Bombay. The occasion was the Lord Willingdon Memorial Several prominent mercantile magnates and requisitioned the Town Hall for a public meeting to present the outgoing Governor, Lord Willingdon, with a memorial extolling his services to Bombay. The requisitionists comprised leading industrialists professional men, and the moderate politicians. The Home Rulers took this as a challenge to their principles and influence. A joint committee of the two Leagues was framed for disruption of the Memorial meeting in the Town Hall and its environs. The mill workers were highly useful for such a manoeuvre. A rally of workers was arranged in Lower Parel area, and famous Marathi journalists were called from Pune to address the rally. Umar Sobani declared a holiday in his mills to enable the workers to participate in the rally and achieve the disruption of the Town Hall meeting. (Richard Newman, op. cit., p. 95.) However, the cloth merchants and their servants, led by Mavji Govindji were heavily in evidence among the anti-requisitionists at the meeting. The Mulji Jetha and the Morarji War Conference at Bombay, 1918: The Governor, Lord Willingdon, convened the Provincial War Conference at Bombay on 10 June 1918. The object of the Conference was professedly to seek the co-operation of the people in the war measures which Government thought it necessary to take in the Presidency. A similar conference had been called by the Viceroy at Delhi a little earlier. Lord Willingdon had designed it to be a Conference rather than a public meeting for fear of Lokamanya Tilak's attacking stance. The eminent invitees to the Conference included Tilak, Gandhiji, N. C. Kelkar, Horniman, Jamnadas Dwarkadas, Jinnah, S. R. Bomanji, Narayan Chandavarkar and Ibrahim Rahimtoola. The whole procedure and resolutions before the Conference were prepared in the Secretariat and no sub-committees were formed as it was done at the Delhi Conference. (Home Department Special, File No. 398-1, Cutting from the Bombay Chronicle, dated 12 June 1918). Consequently, the participants in the proceedings, were prompted to move amendments to them in the Conference. But Government had decided before hand that no amendments were to be allowed, nor even changes of wording were to be suggested in speeches. Some of the Home Rulers, Messrs. Tilak and Kelkar, proceeded to make speeches by way of explaining their position as non-officials invited to co-operate with Government in recruiting manpower and carrying out other war measures. Tilak protested that the loyalty resolution had an addendum which deserved his criticism. Lord Willingdon peremptorily stopped him before he had uttered a few sentences, on the ground that no political discussion was to be allowed on the resolution expressing loyalty to the Crown. (Ibid.) Kelkar followed and shared the same fate. The only self-respecting course for Tilak and his followers was to refuse to take further part in the Conference and to retire from it. Accordingly Tilak, Kelkar, Jamnadas Dwarkadas, S. R. Bomanji, Horniman, Gandhiji, Jinnah and R. P. Karandikar left the Conference Hall.

The contention of the leaders was : " The entire procedure at the Conference was peculiarly inequitable and unfair But to a hide bound programme of resolutions and procedure, prepared in the Secretariat, His Excellency added a high-handed and indefensible exercise of his authority as Chairman The resolution was more than a mere expression of loyalty to the King Emperor... (It) invited the fullest discussion in regard to the whole of the proposals and methods adopted by the Government for the purpose of translating into action the loyal determination of the Presidency to do her duty, methods and proposals to which we were unable wholly to assent." (Letter by Tilak, Jamnadas Dwakadas, Bomanji,

Kelkar and Horniman, published in the Bombay Chronicle of 12 June 1918.) The Home Rulers had in fact expressed their full loyalty to the Crown. "But they desired to point out why the Presidency could not possibly do her duty 'to its utmost capacity' so long as certain existing conditions were not altered." (Ibid.)

The main ground of objection on the part of the Governor was that of political discussion. He impugned the speeches of Tilak and Kelkar as out of order, and stopped them. This was taken as an insult. Hence the outcry on the same. Gandhiji had not spoken on the advice of Tilak, although he fully endorsed the great patriot's stance, both in a straight forward personal letter to Lord Willingdon and in the huge public demonstration which followed. Sir Narayan Chandavarkar, who spoke last in the Conference, entirely endorsed the Governor's ruling and dissociated himself from the action and sentiments of Tilak. (Source Material for a History of Freedom Movement, Vol. II, p. 710)

This episode was followed by a huge outcry against Willingdon's bungling and insulting behaviour at the War Conference. It developed into an anti-Willingdon agitation. A huge rally of 10,000 was organised at the Shantaram's Chawl (Kandewadi) to protest against the Governor's provocative remarks about the Home Rule League. The meeting was presided over by Gandhiji. It was the culmination of the Home Rule Day.

It was contended in the public meeting that the Governor's aspersion upon the Leaguers was a tactical blunder, and Tilak was the idol of the people. India was willing to co-operate with Britain's war efforts, but is bound to strive for Home Rule in the quickest possible time.

This public meeting on 16 June 1918, which was also observed as the Home Rule Day anniversary, passed two resolutions which were cabled to the British Prime Minister. The first resolution purported that the distrust toward Indians, discrimination, delay in the amendment of the Arms Act, the prohibition of Indians in the commissioned ranks in the Indian Army, and their admission to military colleges, were the factors making it difficult for the leaders to secure whole-hearted support of the people in regard to military service. The second resolution related to the condemnation of the Governor's treatment and aspersions cast on the Home Rule leaders.

There were some differences of opinion among the Congress and Home Rulers about the support to Government in the matter of recruitment to the Indian Army, in the following days in Bombay. But that need not detract us.

Another important event of the day was the War Loan public meeting held in the Town Hall on 12 June 1918. It was summoned by the Sheriff of Bombay on a requisition of the leading citizens. Actually it was inspired by the Governor who presided. The Home Rule leaders not only abstained from it but also opposed it. The millowners were quite active in supporting the Governor's appeal. Chandavarkar appealed to the Bombay men to contribute to the War Loan, which was readily responded to by the millowners and mercantile magnates. There was an expression of support to the Government in the hour of need. The Bombay Government viewed

the results of the two meetings (of 10 June and 12 June) with cheerful equanimity. The striking demonstration on the occasion of the War Loan meeting constituted a success for Government. (*Ibid.*, p. 707.)

Labour Activities: The first important strike in the textile industry began rather unobtrusively (Richard Newman, op. cit., p. 120.) in January 1919, although the ground for it was being prepared in December 1918. On 9 lanuary, several thousand strikers and crowds assembled at the mill gates and succeeded in bringing the workers out to join them. Police and troops were guickly deployed, but they made no serious attempt to prevent the strike from spreading, because it was clear that no show of force could stem the tide of discontent. (Ibid., p. 121.) During the next few days the strike spread southwards to Madanpura and Tardeo, and finally to the Bombay United mill at Girgaum. Only a few mills were unaffected. "The scale of the dispute was unprecedented, as was the driving force behind it. So heavily did the cost of living weigh upon the millhands that the slightest protest from one group of workers was capable ot creating a general revolt." (Ibid., p. 122.) Prices had risen sharply in Bombay, which was accompanied by drought in the Deccan. It was at this stage that the idea of bonus, as a boost to wages, emerged as the strikers' aim. Although the workers were not educated, they had definitely some economic intelligence.

The official correspondence suggested that the Home Rule Leagues were the driving force behind the strike. (Sir George Lloyd to Lord Montagu, 10 Jan. 1919.) Mr. H. B. Mandavale, an advocate and a member of the All-India Home Rule League, approached the workers and encouraged them to form the Girni Kamgar Sangh. The Home Rulers addressed meetings of workers, and a plan of aibitration was endorsed. However, the intervention of the Home Rulers was a failure. The Government was happy that the Home Rulers could not make effective inroads among the work-force, and attempted a solution through the Commissioner of Police, Mr. Vincent, (Mr. Vincent had been commemorated by naming the long and broad road from Byculla to King's Circle after him. This road was recently renamed Dr. Ambedkar Road.) who played the most important role not only in maintaining law and order but also in settling the industrial dispute. Mr. Vincent summoned the most influential millhands, rather than non-worker leaders, to his office and arranged for negotiations with the Governor, Sir George Lloyd. Mill-owners like Jamshetji Jijibhai also responded to the Governor's call, and their concessions were posted on the mill gates over Vincent's signature on 22 January. (Richard Newman, op. cit., p. 126.)

Mr. N. M. Joshi, rightly honoured as the father of Indian labour movement and a great servant of India, was appointed India's delegate to the first International Labour Conference. This invited criticism of Government by union leaders in Bombay. In a neat accommodation of the claims of the two groups, Tilak and B. P. Wadia, the Madras labour leader and supporter of Annie Besant, were put forward as the peoples' nominees to the Conference. Unhappily, their credentials were immediately disputed by the Kamgar Hitwardhak Sabha, which objected equally to Tilak and Joshi on the grounds that both were Brahmans and were connected with the millowners as friends or clients. (Bombay Police Secret Abstract of

Intelligence, 25 Aug. and 8 Sept. 1919.) The Government, however, clung to its decision to send N. M. Joshi as India's representative.

Tilak exhorted the Bombay millhands to foster communal harmony and to form trade unions. He was chosen the workers' representative for the Washington Labour Congress. The labour leaders convened a large public meeting behind the Elphinstone mills on 29 November 1919 for presenting an address to Tilak. Mawji Govindji presided. (Source Material for a History of Freedom Movement, Vol. II, p. 317.) The Tilakites in Bombay continued to influence the millhands. The Gujarati leaders, however, lost their influence. The sporadic violence during the general strike and the Rowlatt Satyagraha had shocked them. They were, therefore, prompted to rebuild their relations with the workers on the basis of welfare work. At the end of 1919, the future of labour organisation in the mill area mainly lay with Maharashtrians, among whom the Tilakites and the Hitwardhak Sabha were the most prominent. In practical terms, the leading organisers were S. K. Bole, H. A. Talcherkar, S. B. Gavade and D. G. Pandit. (Richard Newman, op. cit., p. 130.)

The second general strike in Bombay occurred in January 1920. It started spreading from 2 January, and by the 12th instant all mills had been caught up in the dispute. The grievances of workers related this time, as in the case of the 1919 strike, to hours of work, payment of bonus and increase in wages by 60 per cent. This time, however, there was no able negotiator like Mr. Vincent, who had retired, and the new police chief was neither able nor willing to intervene. Into this vacuum stepped the trade unions. The Girni Kamgar Union and the Bombay Labour Association then emerged into the picture. This provided an opportunity to leaders like L. R. Tairsee, Joseph Baptista, and F. J. Ginwala to make their mark in the trade unions in the city. The Social Service League which, hitherto was mainly a social service organisation, crystallised its thinking, and joined the two unions in the strike. A united Labour Settlement Committee had been established with a strange combination of forces such as Baptista, a Home Ruler, and Sir Narayan Chandavarkar, an eminent liberal supporter of Government. But the Home Rulers needed to use the contacts of the liberals with employers and officialdom. (Bombay Chronicle, 14 Jan. 1920.) Chandavarkar continued his exchanges with the millowners, and prompted the Governor to intervene. However, the strike ended on 2 February 1920 very suddenly. Joseph Baptista emerged as a respectable labour leader during this strike. He was an able barrister and an intelligent politician. His circle of friends was as wide in politics as it was in club rooms. In his six-year term as chairman of Municipal Standing Committee, he steered every proposal in the committee to a successful conclusion with diplomatic skill. He was later elected to the Legislative Council in 1924, the Mayor of Bombay in 1925, and to the Central Legislative Assembly in 1926. After this he did not enjoy good health and faded quickly from public life, to die in 1930. (K. R. Shirsat, Kaka Joseph Baptista: Father of Home Rule Movement in India (Popular Prakashan, Bombay, 1974); S. P. Sen (ed.), Dictionary of National Biography, Vol. I (1972), pp. 136-38.)

The Montagu-Chelmsford reforms of 1919 divided authority between Governments of the Provinces and the Government of India at New Delhi. The latter was comprised of the Viceroy's Executive Council and a bicameral legislature with a majority of non-official members, but a minority of elected members, in both the houses. The Central Government controlled all important subjects such as external affairs, civil and criminal law, industry and commerce, customs and excise, and the subjects not specifically allotted to the Provinces. The Viceroy had many special powers in reserve. Bombay's commercial interests were represented in the Council of State where there was a reserved seat for European businessmen, and in the Legislative Assembly where there was a seat for the Indian Merchants' Chamber and Bureau and another one occupied in rotation by the Bombay Millowners' Association and its counterpart in Ahmedabad. There were two nominated seats for labour in the Assembly, one of which was occupied almost continuously from 1921 to 1947 by N. M. Joshi, the most celebrated of Bombay's labour leaders and social workers.

The Bombay Government consisted of a Governor, an Executive Council and Ministers responsible to a Legislative Council with a majority of elected members. Government administration was divided into two categories. The Executive Council controlled 'reserved' subjects, such as, police, justice, industrial disputes and labour welfare, and it could override the legislature across all matters through the exercise of emergency powers of the Governor. Ministers in the Legislative Council were allotted 'transferred' subjects such as local government, education, agriculture and public works. Bombay city and its businessmen were well represented in the legislature by virtue of the system of franchise based on ownership of property. The city elected nine members in the triennial elections: one European, two Muslims and six non-Muslims, of whom one had to belong to the Maratha caste. In addition there were special electorates for the Bombay Chamber of Commerce, the Bombay Millowners' Association, the Bombay Trades' Association, and the Indian Merchants' Chamber and Bureau, and there was also a seat for a nominee of the cotton trade. There were three nominated members to represent labour and two nominees of the backward castes. (Richard Newman, op. cit., p. 86.) Labour originally had only one seat, but its representation was raised to three in 1926. Among the nominees were S. K. Bole, Kanji Dwarkadas and Syed Munawar, who were all prominent in the cotton textile unions in Bombay.

The publication of the Montagu-Chelmsford Report raised an angry outcry from the extremist organs. Tilak and Annie Besant had denounced it strongly. A special session of the Congress, held at Bombay in 1918 under the presidentship of Hasan Imam, had condemned the proposals as 'disappointing and unsatisfactory' and had suggested some modifications as absolutely essential to constitute a substantive step towards responsible government. It also decided to send a deputation to England, to press the Congress views on the British democracy. These reforms were, however, acceptable to the Moderates, who formed an organisation distinct from the Congress, known as the Indian National Liberal Federation. (Gazetteer of India, Vol. II, History and Culture (Govt, of India, 1973), p. 570.)

Gandhiji was at first in favour of giving a fair trial to the new constitution. The Congress had also decided accordingly in 1919. But certain factors soon caused considerable excitement in India. Economic troubles, due to additional taxation and rise in prices, produced extreme hardships for the people and accentuated discontent everywhere. Muslim sentiment in Bombay was deeply stirred by the Khilafat Movement on the question of the dismemberment of Turkey after her defeat in the World War1. Shaukat AH and Mohammed Ali, and Abul Kalam Azad, organised the Khilafat Movement. India's hopes for a true responsible government were soon belied in the face of unmitigated governmental repression. The Rowlatt Bills were calculated to perpetuate the extraordinary powers given to the Government during the War for suppressing political activity and depriving Indians of the ordinary rights and privileges of trial and defence provided by law. As a protest against this, Gandhiji organised a great movement and emerged as a great force.

DAWN OF GANDHIAN ERA

Prior to 1919 Mahatma Gandhi was merely a peripheral figure in the national politics. He had joined the ranks of the politicians in the pursuit of great causes. As a matter of fact he was not prompted by any political ambition, and was content with smaller dints of limited leadership. He did not make any eifort at wresting leadership even though he disagreed with the stalwarts of Indian Nationalism. The Great World War had just ended in November 1918, and consequently, the British bureaucracy had cast off its' velvet glove and came out with a massive dose of repression calculated to scotch every form of patriotic activity. After preparation of the ground for four years, Gandhiji made a bid for leadership. The Home Rule agitation, the anti-Willingdon outcry in Bombay and the Kaira episode, had already enthused the people, who found in him a promising leader. And now the occasion for a transition from peripheral to committed leadership, from local to national leadership, was furnished by the satyagraha against the repressive Rowlatt Bills.

Bombay was the centre of his activities for the next three years, till his incarceration in 1922, indeed till his release in 1924. Civil disobedience against the Rowlatt Bills was followed by a movement against the deportation of B. G. Horniman, the Khilafat Movement, the Tilak Swaraj Fund, the Non-co-operation Movement, and the visit of the Prince of Wales. All these acts of the national drama were played on the Bombay stage under the inspired directorship of the Mahatma.

ROWLATT SATYAGRAHA

The Rowlatt legislation was a sequel to the war-time British policy of conciliation and repression. Before the lapse of the Defence of India Act after the War, the British were gravely concerned with the loss of coercive power against conspiracy and political agitation, which they had anticipated. The Government, therefore, appointed a committee under Mr. Justice Rowlatt to review the situation, in December 1917. The Committee recommended that the Government should have emergency powers to deal with subversion and political agitation. The Bill received the assent of the Viceroy on 21 March 1919. It threw a wave of indignation throughout

the country as it meant a determined policy of repression.

"Once the bill became law verbal protest was useless and the politicians' unanimity disintegrated. The episode had showed up the poverty of their limited politics, built on the assumption that the raj and the politicians could best serve their interests by coming to a mutually, acceptable agreement about the division of power. On the rare occasions, such as this, when the raj was adamant, the politicians had no leverage, and they were at a loss to know what to do. Protest in Council and public meetings had got them nowhere, and they could not take to violence, even if they had countenanced such methods, without inviting more repression and proving to the government that the Rowlatt legislation was indeed necessary. They had reached a political impasse, and the man who stepped forward to offer them a way out was Gandhi." (Judith M. Brown, Gandhi's Rise to Power, Indian Politics 1915-1922 (Cambridge University Press, 1972), p. 163.)

Gandhiji saw a national wrong which could possibly be set right only by his methods, and a way of bringing the entire country nearer to his ideal of Swaraj through the strategy of Satyagraha.

The first phase of the Satyagraha, the phase of deliberations and preparations, lasted from February to the observance of hartal at the beginning of April 1919. Bombay city and Ahmedabad were the main centres of the movement. Jamnadas Dwarkadas, Sarojini Naidu, B. G. Horniman (editor of the *Bombay Chronicle*) and Umar Sobani from Bombay, were joined by Vallabhbhai Patel, Chandulal Desai, K. Thakoor and Anasuya Sarabhai from Ahmedabad. From the meeting there emerged Gandhi's Satyagraha Sabha, a majority of whose members were from Bombay, and the city, therefore, became its headquarters. (K. Gopalswami, Gandhi and Bombay (Gandhi Smarak Nidhi, Bombay, and Bharatiya Vidya Bhavan, Bombay, 1969), p. 67.) Gandhiji prepared a manifesto containing a satyagraha pledge for its members. He wrote to the Viceroy about his intentions on 24 February 1919 and also to politicians and newspapers. The Satyagraha Sabha canvassed actively and expounded the principles of satyagraha. Bombay responded enthusiastically and within a few days 100 signatures were obtained. (Ibid., p. 67,) Earlier the Home Rule League had held a large public meeting in the mill areas of Bombay. It was emphasised that the Rowlatt Bills would deprive them of personal liberty and enable officials to rule despotically.

As observed by the Commissioner of Police, on 3 March 1919, the Rowlatt Bills were the talk of the town, and since Gandhi's return to Bombay on 1 March, he was constantly visited by the Home Rule leaders of the city. Speculation was rife as to the manner in which the passive resistance movement would be effected. The younger generation was profusely enthused, and the cloth merchants were determined to follow Gandhiji at any cost. The people were agitated, and they expressed that such a legislation after the armistice was unwarranted. The agitators successfully campaigned that Government machinery would collapse in the face of this movement. Posters printed by the Dnyansagar Litho Press, Girgaum Road, were exhibited in all parts of the city. The signatories of the

satyagraha pledge, in a meeting held in Bombay in March, appointed the Executive Committee with Gandhiji as president and Horniman as vice-president. Dr. Sathe, Shankarlal Banker and Umar Sobani were secretaries, the other members of the committee being Jamnadas Dwarkadas, Sarojini Naidu, Dr. Erulkar, Manu Subedar, L. R. Tairsee, Azad, Dr. Velkar, Jamnadas M. Mehta, L. G. Khare, V. A. Desai, Mrs. Avantikabai Gokhale, Chunilal Ujamsi, R. N. Mandlik, Jethmal Narandas, Hansraj Pragji Thackersey and Vithaldas Jerajani with the later addition of Pandharinath K. Telang, Dr. C. M. Desai, and Kanji Dwarkadas. (Bombay Government records.)

In spite of Mrs. Annie Besant's dissuasions to Gandhiji from his plan of a mass civil disobedience and her later opposition to the movement, Gandhiji's main lieutenants were the Home Rulers in Bombay. They dominated the Executive Committee of the Sabha, actively campaigned for the satyagraha pledge, and their local branches held meetings in support of a satyagraha in provincial towns and villages. (Bombay Police Secret Abstract, 1919, para. 378 (b) f(g)) They were, however, not experienced in guiding a movement of the Bombay working class. Gandhiji also was not interested in winning over the factory workers or to involve them into his movement for many a long day.

The news of passing of the Rowlatt Act reached Bombay on 19 March 1919, and the merchants at the Mulji Jetha Market, the Lakhmidas Khimji Market and the Morarji Goculdas Market, observed a hartal on 21 March spontaneously. The Bombay Native Piecegoods Merchants' Association took a very active part in the hartal.

Gandhiji had, however, to face opposition on several fronts from established political leaders. His opponents included Sir D. E. Wacha, Sir Fazulbhoy Currimbhoy, S. N. Bannerji, T. B. Sapru, M. M. Shafi, Srinivasa Sastri and G. S. Khaparde. (Judith M. Brown, op. cit. (Referred to hereafter as J. M. Brown).) Mrs. Besant created trouble for Gandhiji throughout, because she believed he was stealing away her followers in Bombay. She visited Bombay in Gandhiji's absence, and tried to wean her men from the satyagraha. (J. M.Brown, op. cit., p. 169.)

The second phase of the satyagraha started with Gandhiji's decision of a hartal as a novel form of protest and self-purification. The hartal was scheduled on Sunday, 6 April 1919. Gandhiji arrived in the city a couple of days earlier. He, along with Mrs. Naidu, Horniman, Dr. Savarkar and others, organised meetings in Bombay. The 6 April was observed as a "Black Sunday". The *Bombay Chronicle* of Horniman gave a vivid account of the same as under. (*Bombay Chronicle*, 7 April 1919.)

Bombay presented the sight of a city in mourning on the occasion of the day of national humiliation, prayers and sorrow at the enactment of the Rowlatt Act, and observed 24 hours' fast. The Back Bay foreshore was humming and throbbing with life much before sunrise. The people had come to Chowpati to bathe in the sea before the day's programme. The women of Bombay came out of their seclusion to join in the demonstration. They fasted and marched in procession to Chowpati, clad in black saris symbolising the nations's sorrow. Gandhiji was one of the first to arrive, and was joined by Sarojini Naidu, Jamnadas Dwarkadas,

Horniman and others. The crowd swelled to one and a half lakh, and represented Muhammedans, Hindus, Parsis and even one Englishman. (K. Gopalswami, op. cit., p.73.)

Gandhiji's speech, read for him by Jamnadas, (As Gandhiji was ill it was read out by Jamnadas.) was a stirring one. Gandhiji's two resolutions, charity for the bereaved in the Delhi hartal and prayer for repealing the Rowlatt Act, were passed amidst silence. After the meeting the procession went to Madhav Baug temple to offer prayers. Gandhiji addressed a meeting in a mosque at Grant Road which stirred the 5000 Muslims as well as Hindus present. He made a strong plea for emotional integration and eternal friendship of the two communities. Mrs. Jayakar organised a ladies'meeting.

"The hartal in Bombay was a complete success. Full preparation had been made for starting civil disobedience." (K. Gopalswami, op. cit., p. 76.) Two of Gandhiji's books, Hind Swaraj and Sarvodaya, which had been proscribed were sold out within no time. The police admitted that the whole effect was a strategic success for Gandhiji.

On 7 April Gandhiji issued, from the hallowed Mani Bhavan, an unregistered newspaper, the *Satyagrahi*, in open defiance of the Indian Press Act. Its copy was sent to the Police Commissioner. The principles of satyagraha and civil disobedience were explained through it. The Satyagraha Sabha issued a statement regarding the scope and limitations of civil disobedience. Proscribed literature was disseminated, and a few laws were selected for disobedience.

The Bombay Government did not deem it fit to arrest Gandhiji for his illegal newspaper as it would involve cumbersome proceedings. But he was prohibited from leaving Bombay Presidency as it was feared that his entry into Delhi or the Punjab would precipitate the agitation. Gandhiji, however, left Bombay on 8 April to promote satyagraha in Delhi and Amritsar on receipt of a telegram from Delhi. Near Delhi he was served with an order prohibiting his entry into the Punjab. Hence, on 9 April he was removed from the train near Delhi, and sent back to Bombay, to be set free. The news of his " arrest" became public on 10 April which precipitated the events in Bombay, and excited the masses.

became very violent At this juncture the Cavalry patrol arrived. Their appearance was the signal for a fresh outburst of stone-throwing and a number of troopers were hit. The Cavalry continued to patrol the streets for some 2 hours and were on occasions compelled to charge the mob particularly when they were belabouring a British officer and two troopers who had been dehorsed."

The situation in the Punjab had already assumed dangerous proportions. At Amritsar, on 10 April, mob violence, burning and looting ensued, and four Europeans were murdered. This culminated into the tragic Jallianwala Bagh massacre by General Dyer's troops. The atrocities at Jallianwala Bagh inflamed the Bombay workers, Jawaharlal Nehru, who had come to Bombay to consult Gandhiji, suggested that Gandhiji should defy the prohibitory order and go to the Puniab. Gandhiji saw that his defiance of the order would lead to his arrest and further tensions. He, however, went to Gujarat to study the grave violent situation at Ahmedabad, Nadiad and Viramgaum. He was filled with remorse at his failure to enthuse the masses with the true principles of satyagraha, and returned to Bombay on 18 April. He was deeply distressed at what he discovered, and admitted publicly the "Himalayan miscalculation" in offering civil disobedience to people insufficiently prepared by the discipline of satyagraha to practise it. (M. K. Gandhi, An Autobiography, pp. 391-92.) He underwent a three day fast in penitence, and suspended the civil disobedience part of the satyagraha programme on 18 April 1919. However, the really operative part of the movement, namely, preaching and practice of truth and nonviolence continued through leaflets published in Bombay by Shankarlkl Banker, At this point Gandhiji also acquired the Young India (English) and the *Navajivan* (Gujarati) newspapers, which he very effectively used for preaching satyagraha. (Ibid., p. 395. The Young India was upto that time controlled by Sobani and Banker, and the Navajivan by Indulal Yajnik.)

The All-India Congress Committee met in Bombay on 21 April 1919, and condemned the Government action in preventing Mahatmaji from proceeding to Delhi. It drew attention of Government to the fact that had he been allowed to proceed to Delhi, the situation in Delhi and the Punjab would not have deteriorated to that extent. There was an informal conference of satyagrahis from different parts of the country on 28 May 1919. Gandhiji suggested that, if the Government would not appoint a commission of enquiry into the Punjab disturbances, the administration of martial law and the sentences imposed by martial law tribunals, civil disobedience should be resumed, but only by individual satyagrahis chosen from Bombay, in order to avoid violence. All present, with the exception of Jamnadas, (Jamnadas felt that volience would take place if Gandhiji or any other prominent satyagrahi was airested. He formally

resigned the Satyagraha Sabha on 3 June 1919.) agreed. While the preparations for renewal of civil disobedience were going on, Gandhiji was attempting for some kind of agreement with Government. He told the Police Commissioner of Bombay on 1 July 1919 that he intended to violate the orders restraining him within the Bombay Presidency, but said that if Government showed signs of relaxing its attitude on the Rowlatt legislation, he would postpone civil disobedience indefinitely. (Bombay Police Secret Abstract, 1919, para. 901). The Governor of Bombay, Sir George Lloyd, took Gandhiji's hint. After the interview with the Governor on 12 July, Gandhiji thought that there was a hope of withdrawal of the Rowlatt Act, and said that he would postpone civil disobedience, if the Viceroy so desired. The Viceroy, Lord Chelmsford, announced that this was his desire also, and issued a warning of the consequences of the resumption of the movement. In response to this and the desire publicly expressed by many persons, Gandhiji informed the press on 21 July that he had decided to suspend civil disobedience as a practical way, although it could be resumed, if the Rowlatt Act was not repealed. (Collected Works of Mahatma Gandhi. Vol. 15 (Government of India), pp. 468-71.)

The important assumption of Government policy towards Gandhiji was that it must avoid making him a martyr. Officials admitted that Gandhiji had done his best in restoring peace in Bombay and Ahmedabad in April, and even the police noted that he had done his utmost to prevent outburst, when B. G. Horniman was deported in late April by the Bombay Government. (Bombay Police Secret Abstract 1919, para 598.)

Aggrieved satyagrahis, mainly from Bombay, felt abandoned by Gandhiji's suspension of civil disobedience, and blamed him for stopping it, just when it had assumed enough momentum to be productive, and argued that nothing could be achieved without bloodshed. Such hostility increased when Gandhiji refused to permit demonstrations against Horniman's deportation. Gandhiji said that he had received a number of letters protesting against his inaction, some of which threatened him with poison and murder. (Bombay Police Secret Abstract, 1919, paras, 574, 598 and 625.) After his second suspension of civil disobedience the satyagrahi critics became more vehement, and in a Bombay meeting of about 200 of them on 26 July, he was mercilessly cross-examined on his decision. (Bombay Police Commissioner's note, Source Material for a History of FreedomMovement in India, Vol. II, pp. 788-89.) Gandhiji was publicly and unfavourably compared with Tilak, who suffered 'martyrdom' in jail, and even ini the cloth market, people were known to be calling him a murderer. (Bombay Police Secret Abstract, 1919, para. 1063.) The Hindu, a Gujarati newspaper of Bombay, styled Gandhiji as a murderer. The Police Commissioner reported that at a subsequent meeting of satyagrahis, Gandhiji was severely heckled. They guestioned him whether he had received any definite promise from the Government that the Rowlatt Act would be repealed, if civil disobedience was suspended. Some argued that his policy had interfered with the good work that was being done by the Home Rule League and other associations. (Bombay Police Secret Abstract, 1919). Such was the violent reaction of some of the satyagrahis.

Gandhiji's opponents, on the other hand, vehemently criticised him for

undertaking the civil disobedience movement. For example, Sir Dinshaw Wacha who represented the Moderates as well as industrialists in Bombay, branded it " as a grave mischief Gandhi has consciously or unconsciously created by his fantastic propaganda, utterly illogical, utterly unconcerned and utterly devoid of an atom of political sagacity." (Sir D. E. Wacha to G. A. Natesan, 12 April 1919, G. A. Natesan Papers.) Srinivasa Sastri and Mrs. Besant had been opposing him from the beginning. Ambalal Sarabhai came down to Bombay from Ahmedabad to persuade Gandhiii to abandon civil disobedience permanently. Surprisingly, even B. G. Horniman, one of his staunchest supporters, and vice-president of the Satyagraha Sabha, urged that all satyagraha activity should be suspended temporarily, because the movement had been utilised and corrupted by unscrupulous elements, with objects totally opposed to our own, and calculated to defeat our ideals, resulting in the recent deplorable revolutionary outbreaks. (Bombay Police Secret Abstract, 1919, Source Material for a History of Freedom Movement in India, Vol. II, p. 111.)

Gandhiji had considered Umar Sobani, Shankarlal Banker, Horniman and Jamnadas Dwarkadas as the main props of satyagraha in Bombay City. Unfortunately Horniman was deported and Dwarkadas yielded to renewed pressure from Annie Besant and even resigned from the Satyagraha Sabha (29 May 1919) on the ground that the resumption of civil disobedience and its extension to the Punjab, would precipitate violence further. Gandhiji had no popular appeal in the rest of Maharashtra. Tilak was for Maharashtra what Gandhiji was becoming for Gujarat. Khaparde's adherence to Tilak blocked the way for Gandhiji's satyagraha in the Marathi speaking C. P. (Fortnightly report from C.P. for the second half of April 1919, Home Political, Deposit, July 1919, No. 47.) The satyagraha disintegrated in all other parts of India also.

"The Rowlatt Satyagraha, as a political campaign on the lines which its author conceived, was a manifest failure. It did not obtain its object, the repeal of the Rowlatt Act. It erupted into violence, though its essence was intended to be non-violence. It petered out miserably in the summer months of 1919 instead of becoming the constructive campaign laying the foundations of true Swaraj which Gandhi had envisaged. Nonetheless, as Gandhi's first essay in all-India leadership, it was remarkably instructive to those who could read it correctly, since it showed both the strengths and the weaknesses of the Mahatma in politics." (J. M. Brown, op. cit., p. 185.) The Rowlatt Satyagraha showed Gandhi as an all-Indial eader of immense potential. His personality, his ideology, his novel approach to politics, and his technique of satyagraha enabled his campaign to become the focus for multifarious local grievances and gave him access to the power they generated. (Ibid., p. 187.)

The ban on Gandhiji's entry into the Punjab was lifted on 15 October 1919. The Royal Proclamation of December 1919, which accompanied the Reform Act better known as Montagu-Chelmsford Reforms, was one of the most important landmarks in the constitutional history of India. In the 34th session of the Congress at Amritsar from 27 December 1919 to 1 January 1920 Gandhiji, Jinnah, Pattabhi Sitaramayya and Malaviya welcomed the reforms, although they thought them to be inadequate,

while Tilak, C. R. Das, and others condemned the reforms.

An all-party public meeting was held in Bombay to demand the repeal of the Press Act on 5 March 1920. In the same month Gandhiji was persuaded successfully to accept the presidentship of the All-India Home Rule League.

NON-CO-OPERATION MOVEMENT

Before 1919 Mahatma Gandhi was merely a peripheral figure in the politics of nationalism. It was the Rowlatt Bill agitation which furnished him with an occasion for a transition from peripheral to committed leadership, and from local to national leadership. The enactment of the Rowlatt Bill had cast a spell of helplessness among the established stalwarts. "They had reached a political impasse, and the man who stepped forward to offer them a way out was Gandhi." (J. M. Brown, op. cit., p. 163.) Although the Rowlatt Satyagraha was a manifest failure, as it deflected into violence in the Punjab as well as in Bombay, Gandhiji's campaign became the focus of interest.

It were, however, the leadership of the Khilafat agitation and the inauguration of Non-co-operation which hastened Gandhiji's rapid emergence as an all-India political leader who was markedly different from the politicians, who had previously dominated India. The pre-eminence of satyagraha as a method of resolving conflict, the Hindu-Muslim unity as a prerequisite for India's peace and the assertion of the people's rights, were the three aims which propelled Gandhiji to assume control of the Khilafat and Non-co-operation Movement. He maintained that his sense of moral responsibilities made him take up the Khilafat question. (Young India, 28 April 1920.) And it was Bombay city which provided a congenial home for the growth and blossoming of Non-co-operation. As a matter of fact, the events of 1920 in Bombay centred round the Non-co-operation and Khilafat Movement. It is, therefore, essential that a narration of the movement in the city, in details, should be furnished here.

The first phase of the Khilafat Movement lasted until-December 1919, by which time the sympathy for the Muslim cause had received institutional expression in the Central Khilafat Committee. The leaders of the Committee were a middle group within the Muslims, mainly prosperous Bombay merchants. It was only in March 1919 that the Bombay Khilafat Committee, with Mia Mohamed Chotani as president, was elected in a public meeting in the city on the 19th. Meanwhile the Muslim League despatched to London a deputation consisting of M. A. Jinnah and G. M. Bhurgri from Bombay along with two others. In Bombay the non-Muslim press, rather than Muslim papers, were busy rousing opinion on the Khilafat issue. (Fortnightly report from Bombay, 1 October 1919, Home Political, Deposit, Nov. 1919, No. 15.) The Khilafat Day was observed in the city, as in India, with the persistence and the purses of Bombay men, on 17 October. A majority of Muslims in the city were, however, averse to any plan of boycott of foreign goods, because over three-guarters of the city's Muslim merchants dealt in British goods. They were content with expression of disapproval of the British policy throughout this deliberative phase.

The second phase of the movement was inaugurated with the release of

the Ali brothers at the end of December 1919. Bombay remained the seat of the Central Khilafat Committee of India. Late in January, the Alis were accorded a grand welcome in the city in a public meeting organised by the Home Rule League and the Bombay National Union, at which Tilak pledged the Hindu's help on the Khilafat issue. (Bombay Police, File No. 4044/M/I. However, the Bombay Tilakites stayed away from many other Khilafat meetings.) The next policy discussion occurred at the All-India Khilafat Conference from 15 to 17 February 1920 in Bombay. No definite line of action emerged from this meeting. Gandhiji, however, saw the signs of restlessness among some Muslims, and organised the observance of the Khilafat Day with a hartal on 19 March. The threat of Non-co-operation was mentioned for the first time in a mass meeting of all communities in the city. The Bombay men still carried considerable weight because of their financial support and because they still had the benefit of Gandhiji's alliance. (J. M. Brown, op. cit., p. 207.) When the Central Khilafat Committee met in Bombay from 11 to 14 March, Gandhiii suggested that the ground for Non-co-operation should be prepared thoroughly before it is attempted. (Ibid.) Meanwhile discussion of Non-cooperation began in earnest among Hindu-Muslim leaders.

The first National Week was organised by Gandhiji in Bombay from 6 to 13 April in commemoration of the first anniversary of the Rowlatt Satyagraha and the tragic Jallianwala Bagh massacre. The entire week was devoted to the collection of funds for the Jallianwala Bagh memorial. Bombay responded generously. Gandhiji' addressed three meetings in Bombay. A mammoth public meeting of the citizens of Bombay was held under the joint auspices of the Bombay Presidency Association, the Provincial Congress Committee, the Bombay branches of the Home Rule Leagues and the National Union, at the open space near the French Bridge, on 6 April 1920. In response to Gandhiji, Jinnah, Dinshaw M. Petit (K. Gopalswami, op. cit., p. 105.) and Annie Besant, a sum of about Rs. 5 lakhs was raised in the city with the active co-operation of the Bombay Native Piecegoods Association, the Stock Exchange Association, the Bombay Bullion Merchants' Association, the Bombay Millowners' Association and the Indian Merchants' Chamber.

Another public meeting of the citizens of Bombay was held under the auspices of the Central Khilafat Committee of India by Gandhiji under the presidentship of Mia Mohamed Chotani. Mahatmaji moved the following resolution: " This meeting of the Hindus, Mohammedans and other inhabitants of Bombay, trust that the Khilafat question will be solved consistently with the just demand of the Mohammedans of India and with the solemn pledges of His Majesty's Ministers, and this meeting records its opinion that in the event of adverse decisions being arrived at, it will be the duty of every Indian to withdraw co-operation from the Government until the pledges are fulfilled and Muslim sentiment conciliated."

The National Week was concluded by another public meeting near French Bridge under the auspices of the Home Rule League and the Bombay National Union, Jinnah presiding. It was resolved that whilst mob excesses at Amritsar, although committed after grave provocation, were worthy of condemnation, the deliberate and calculated massacre, without warning, by General Dyer, of the innocent and defenceless people at Jallianwala Bagh, was an unexampled act of barbarity. The Bombay Home Rule League and the National Union under leadership of Gandhiji and Jinnah,

demanded, in another meeting on 26 June 1920, for the impeachment of Sir Michael O'Dwyer and an appropriate punishment to General Dyer for the barbaric massacre at Jallianwala Bagh. The Hunter Committee's Report also came in for condemnation. Throughout this period Gandhiji persistently harped on the people's grievances against the Rowlatt Act, the Punjab episode and the Khilafat wrong, and built up the spirit of Nonco-operation (K. Gopalswamy, op. cit., p. 107.), which was later formally sanctioned by the Congress at the Calcutta special session in September 1920.

The third phase of the Khilafat movement lasted from mid-May to 1 August 1920, when it merged with the agitation over the Punjab, into a single movement of Non-co-operation. (J. M. Brown, op. cit., p. 216.) The publication on 14 May of the proposed allied peace treaty with Turkey was a staggering blow to the Indian Mussulmans'. At this stage Gandhiji advocated that Non-co-operation was the only way to secure justice and avoid violence. M. M. Chotani was reported to have moved away from his original moderate stand. The Central Khilafat Committee also decided to vigorously take up Non-co-operation. (Bombay Chronicle, 18 May 1920.) Now Gandhiji was the only guarantor of Hindu support to the Khilafat leaders, and they accepted him as a virtual dictator of their movement. The Congress leaders were also forced to rely on him for securing a Muslim alliance and avoiding violence.

The Central Khilafat Committee as well as Gandhiji, sent memorials to the Viceroy to the effect that Hindu-Muslims would resort to Non-co-operation from 1 August if the Khilafat question was net settled amicably. Actually many Muslim traders refused to jeopardize their trade by boycott. Even Jinnah and Bhurgri had not come out in favour of Non-co-operation, and the Muslim League had not given its support either. The disciples of Annie Besant including Jamnadas Dwarkadas were not only sceptical but were also opposed to the move. A majority of Hindus were also apprehensive. Gandhiji was searching for a mechanism for a communal alliance between the Hindus and Muslims. The Punjab issue provided the missing link. On 30 June he linked the Punjab and Khilafat issues as twin reasons for resorting to Non-co-operation, including the boycott of the reformed councils, to gain Indian self-respect. (J. M. Brown, op. cit., p. 245. Tilak was frustrated in the face of Gandhiji's stand on Punjab.)

"The reluctance of Hindu politicians to commit themselves to non-cooperation before the discussion of it at the Special Congress in September, made Gandhi act on his own authority". (J. M. Brown, op. cit., p. 251.) The Non-co-operation sub-committee of the Central Khilafat Committee published instructions for observance of 1 August. Gandhiji was the soul behind. The people were urged to pray, fast and hold meetings approving Non-co-operation, but not to hold processions or commit civil disobedience, and the holders of titles and honorary posts were advised to resign.

Mahatmaji himself inaugurated the Non-co-operation Movement in Bombay by returning his Zulu and Boer War medals and his Kaiser-i-Hind gold medal to the Viceroy with the explanation that the Khilafat and Punjab ' Wrongs' had estranged him from the raj and convinced him that a new type of politics was necessary in India. It was a Sunday. An impressive peaceful hartal was observed in the city. Gandhiji and Chotani

went round the town and helped maintenance of peace.

The inauguration of the movement synchronised with the sad demise of Lokamanya Tilak in the Sardargriha Hotel, and the celebration of the third Khilafat day. In accordance with the call of Gandhiji many persons renounced titles, resigned public offices and Honorary Magistrateships. A few Mohammedans also made a start in this direction by renouncing titles and resigning J.P.ship. Vithalbhai J. Patel and Sheriff Devji Kanji, resigned their membership of the Legislative Council. Several candidates belonging to the Congress Democratic Party, while disapproving the boycott of Councils, resolved to withdraw their candidature for the Legislative Council. Accordingly Joseph Baptista, H. P. Thackersey, Dr. M. B. Velkar, Dr. D. D. Sathe, Dr. M. C Javle, Vithaldas Damodar Govindji, F. J. Ginwala and V. M. Pawar from Bombay, withdrew their candidature for elections. (Non-Bombay City. co-operation Movement in 1920-25. (Gazetteers Department, Govt, of Maharashtra, 1978), pp. 9-10.) M. R. Jayakar (Bar-atlaw), Jamnadas Madhavii Mehta and Jehangir B. Patel, suspended legal practice. About 16 Justices of Peace, 14 of them being Muslims, renounced the office. One Mr. A. H. Mohammed surrendered his title of Khan Saheb. Four teachers and a lecturer in a college resigned their jobs in Government institutions in Bombay. Three distinguished students, namely, R. S. Nimbkar, B. R. Modak and V. G. Sardeshmukh, renounced their college education in favour of the freedom movement, while a scholar J. P. Bhansali renunciated his scholarship from the Bombay University. (Ibid., p. 10.) Such was the response to the call of Non-cooperation.

The *Bombay Police Secret Abstract* dated 7 August 1920, furnishes a Government version of the events on the Non-co-operation day in Bombay which is summarised below:

The first of August passed peacefully in Bombay. There was no manifestation of violence and no regrettable incidents occurred anywhere. The suspension of work was complete in the heart of the city and in the business quarters. It was complete during the middle hours of the day, after the news of Tilak's death had become generally known. All the mills and most of the markets were closed. No performances were given in the theatres during the day, but in the evening the cinemas were open. Very few public conveyances were to be seen, though the tramways, like other municipal and public services, worked as usual on Sundays.

Throughout the forenoon large crowds thronged the neighbourhood of the Sardargriha Hotel in the verandah of which the dead body of Tilak was seated in state, in full view of the spectators below. Shortly after the arrival of the special train from Pune, the funeral procession (Gandhiji, Shaukat Ali and Dr. Kitchlew, shouldered the bier turn by turn). started from Carnac Road. After traversing for three hours some of the densest parts of the city, the body was finally placed, between 5 and 6 p.m., on a pyre erected on Chowpati foreshore and there burnt in the presence of a large crowd. But for the heavy rain which fell at intervals throughout the day, the mourning crowds would have been larger even than they were. Two more special trains arrived from Pune later in the day. The evening meeting at Mastan Tank was attended by 4,000 persons. As a test of the strength of feeling in regard to Non-co-operation, the day was a failure (?).(This is the version of the Police authorities.) Hindus and Mohammedans participated in normal proportions in all the day's

observances.

The hartal was continued as a mark of respect for Tilak throughout 2 August. Though less generally observed than on the previous day, it caused some anxiety and occasioned some minor disturbances. Interference with traffic was reported from Ripon Road, Grant Road, and Frere Road. At Colaba, the Cotton Green employees compelled the stoppage of work in the mill. In the north of the Island a few mills closed down in the early morning, and a larger number after midday. Seven hundred men of the B. B. and C. I. Railway Workshops at Paiel refused to work, while all work ceased at the G. I. P. Railway Workshop at Matunga. Throughout the day, large crowds visited the place of Tilak's cremation. During the evening an unruly crowd, several thousand strong, and carrying a large black flag, suddenly appeared at Sandhurst Bridge. However, the police on duty, reinforced by a heavy shower, restored order and dispersed the mob. The day's observances ended with a public meeting presided over by Khaparde to mourn Tilak's death.

In the morning of the 3rd of August, a large crowd of millhands tried, but failed to stop, working mills. The hartal on Tilak's tenth day observances was general and, if anything, more complete than that of 1 August. No previous hartal had evoked so much interest among the millhands, the dock labourers and the railway workmen of Bombay. The mills were all shut, and though the docks and the railway workshops remained for the most part in action the men absented themselves therefrom in large numbers. Crowds streamed down to Chowpati throughout the day for the purpose of visiting the spot where Tilak was cremated. Numerous processions moved through the larger thoroughfares towards the sea or to the public meetings. But the peace was never broken. This Police report, although partial, speaks for the mass involvement.

The Bombay Provincial Congress Committee approved of Non-cooperation with 36 members for and 21 against, but left the actual details to the Special Congress to decide. The Bombay followers of Tilak appear to have calculated that it was better for them to align with Gandhiji than to risk absorption into the ranks of Annie Besant's local faction.

The Special Congress in Calcutta (A Congress special train was plied from Bombay to Calcutta), (September 1920) endorsed the Non-co-operation programme, including surrendering of offices, titles and nominated seats, withdrawal of students and teachers from. Government owned or aided institutions, boycott of courts and foreign goods, boycott of elections to the Legislative Council which were to take place in November, etc. This enhanced Gandhiji's prestige in Bombay as all over India.

The All-India Congress Committee met at Bombay under the presidency of Pandit Motilal Nehru on 2 October 1920. It reiterated the policy of non-violent Non-co-operation which was to be continued until the Punjab and Khilafat wrongs were righted and Swaraj was established. It further advised adoption of Swadeshi in piecegoods on a vast scale and revival of hand-spinning in every home and hand-weaving on the part of the millions of weavers in the country. The boycott of titles was to be secured through non-violence. Government owned or aided schools were to be boycotted because Government was trying to consolidate its power through them. The establishment of the Swaraj Fund was also decided.

During the first week of October, there was a spate of political activity in furtherance of Non-co-operation. Placards had been posted up in large numbers urging the people to have nothing to do with the Council

elections. The Indian Merchants' Chamber and Bureau also decided, at this time, to join the Non-co-operation Movement, and out of its 500 members, one-half signed a requisition asking the Chamber to adopt the boycott of Councils. The arrival of the Khilafat deputation from Europe on 4 October 1920 activated the political workers, and a public meeting was held at Mastan Tank to welcome the deputation. Gandhiji addressed a meeting of millhands and other workers on 3 October (Bombay Police Secret Abstract, 30 October 1920.) so as to seek their participation in the movement.

The Muslim leaders of public opinion guided by Gandhiji and Shaukat Ali, were quite active on the Khilafat issue. They exerted on the Muslim candidates to withdraw from the Council elections. The Bombay Native Piecegoods Association decided, on 10 October 1920, to boycott the Council elections. The propaganda continued for a month by way of holding public meetings. Doctors D. D. Sathe and N. D. Savarkar addressed the millhands persuading them not to vote for candidates to the Council. (Ibid., 23 October 1920.)

It was late in October 1920 that Gandhiji announced a change in the name of the Home Rule League into the Swarajya Sabha, and its aim was to strive for Swaraj of the people's choice without recourse to violence. The Swarajya Sabha worked as a subsidiary body of the Congress. It had many followers in Bombay, although a few following Jinnah, resigned from the organisation due to differences of opinion. Those who joined Jinnah included M. R. Jayakar, Jamnadas Dwarkadas, Kanji Dwarkadas, Jamnadas Mehta, H. P. Thackersey, Mangaldas M. Pakvasa, K. M. Munshi, H. D. Divatia and Gulabchand Devchand. (*The Times of India, 11 October 1920.*)

The Bombay Provincial Congress Committee and the Bombay Congress Democratic Party, in a joint meeting on 15 November 1920 under leadership of Dr. Sathe, urged the audience to abstain from elections. On the same day about 500 students of the Wilson College attended a meeting under Mr. Ginwala and protested against the attitude of the authorities. (Bombay Police Secret Abstract, 23 October 1920.) Gandhiji, Shaukat Ali and Sathe addressed a public meeting of about 5,000 including 1,000 students, on the 14th instant for the propagation of Nonco-operation. There were processions for collection of money for the Swaraj Fund in Bombay. The merchants in the Mulji Jetha Cloth Market promised to donate about Rs. 1,25,000 to the Swaraj Fund. (On 13 November 1920.)

As stated earlier, the leaders of the Congress Democratic Party withdrew their candidature for elections to the Bombay Legislative Council. All the staunch nationalists abstained from the elections and 12,000 voters signed the memorandum denouncing the candidates who entered the Councils. However, eight Moderates, namely S. K. Bole N. M. Dumasia, C. A. Fernandez, K. E. Dadachanji, A. M. Surve, S. S. Batliwala, Ebrahim Suleman Haji and M. H. Haveliwala did participate in the elections. (Non-co-operation Movement in Bombay City, 1920-25, p. 25,)

Non-co-operation and National Education: Soon after the emergence of the Swarajya Sabha, it began to identify itself fully with Non-co-operation activities. It devoted itself to the establishment of national schools in

Bombay. Under the auspices of the Young Nationalists League, 300 college students were exhorted in Bombay by Gandhiji, Shaukat Ali and R. S. Nimbkar (26 October 1920) to emulate the students of the Aligarh College. Pandit Motilal Nehru and Gandhiji exploited other venues for the boycott of colleges and propagation of national education in Bombay. In November 1920 the students of Goculdas Teipal High School started an agitation for severing the school's connection with the Bombay University and for surrendering Government grant. This led to the foundation of the Guiarati National School on 29 November 1920. It was accommodated in the Marwadi Vidyalaya and the Gandharva Mahavidyalaya on Sandhurst Road. This school began to progress after the Nagpur session of the Congress. Within a year its strength rose to 650, although it failed in the subsequent years. The first National Marathi School was founded in the city on 6 January 1921. The Lokamanya Tilak Girls' School, a national school, was inaugurated by Gandhiji on 22 June 1921. Like other national schools, this institution also made remarkable progress but declined from 1924.

The National College, Bombay, founded on 1 February 1921, with S. V. Puntambekar as principal, and about half a dozen nationalist professors, was an important move towards national education. It, however, declined badly in 1925. The most progressive of the institutions established under the movement was, however, the National Medical College which was founded through the efforts of the eminent patriotic doctors like R. H. Bhadkamkar, A. P. Kothare and D. D. Sathe. The phenomenal progress of this college with a strength of 430 students in July 1923, could partly be attributed to the inadequate accommodation at the Grant Medical College and partly to the nationalist zeal among the sponsors and the students. The college secured its own building at Victoria Gross Road, Byculla, out of funds raised by public subscriptions and the Bombay Provincial Congress Committee's loans. The affiliation of the College to the Bombay University was, however, in contravention to the pledges of Non-cooperation. Hence there were protests and resignations by staunch nationalists like Dr. D. D. Sathe. The management, however, gained the upper hand and went ahead with the affiliation proceedings. This college is now known as Topiwala National Medical College attached to the Nair Hospital.

Antagonistic Movement: While the Non-co-operation Movement was making a strong headway in the city, a counter antagonistic movement was also initiated by the Liberals and Moderates. These vested interests organised a forum in the city, and strongly condemned the Non-cooperation Movement under the auspices of the Western India National Liberation Association which met under the presidentship of Sir Dinshaw Wacha on 23 October 1920. Sir Narayan Chandavarkar was another leading light of the counter movement. Sir Narayan issued a manifesto on behalf of the anti-Non-co-operation Movement, in a pamphlet, appealing to the country against Gandhiji's movement. (The first part of the pamphlet appeared in the Bombay Chronicle of 22 October 1920.) While trying to dissuade the people from joining the Non-co-operation Sir Narayan's manifesto said, " Non-co-operation is deprecated by the religious tenets and traditions of our motherland nay, of all the religions that have saved and elevated the human race." The manifesto and the movement naturally gained support from the European mercantile community as well as the Indian industrialists in Bombay. The

Bombay Millowners' Association was a great protagonist of this antagonistic movement. Sir Homi Mody, Sir Purshottamdas Thakurdas and F. E. Dinshaw, were great enthusiastics of the antagonistic stance, as they were more keen about their business interest, for which they required Government favours. Their opposition to the nationalist movement was also evidenced by their opposition to the All-India Tilak Swaraj Fund.

Mahatma Gandhi very effectively contradicted Sir Narayan's manifesto, and justified the Non-co-operation Movement, both on the grounds of religious tenets and a practical philosophy of nationalist struggle. (Young India, 4 August 1920 published in his book Young India by RajendraPrasad, 1924 edition.)

The Liberals led by Dinshaw Wacha and Sir Narayan, wanted to support the Montagu-Chelmsford reforms and the Councils. An anti-Non-Cooperation Committee was elected, its members being industrialists and a few Servants of India. (Bombay Chronicle, 12 October 1920.) Anonymous funds were forthcoming from R. D. Tata through mediation of Sir Purshottamdas Thakurdas, who along with Sir Chimanlal Setalvad, was an honorary secretary. (A. D. D. Gordon, op. cit., p. 159.) By November 1920 Mrs. Annie Besant and some of her theosophist followers were also supporting the Committee, and Liberals like Sethna and C. V. Mehta were also involved. (Ibid.)

Jinnah, Jayakar, Jamnadas Dwarkadas, Mavji Govindji Seth, Joseph Baptista and many of Annie Besant's followers in the city were also opposed to Non-co-operation, as they were the advocates of Council entry. Some Marathas, of course a few, were also opposed to the boycott of the Council. The polling in Bombay city was, however, only 8 per cent despite these vested interests.

It is noteworthy that during this period, the Marwari and Gujarati traders were fairly consistently pro-nationalists, while the industrialists were consistently pro-Government. (*Ibid.*) This issue is dealt with at length elsewhere in this chapter.

After Nagpur Congress: The decisions of the Calcutta Special Congress (September 1920) were confirmed at the Nagpur session of December 1920. The discussion centred round the change in the creed of the Congress and the Congress constitution. The amendment read as under: The object of the Indian National Congress is the attainment of Swaraj by the people of India through " all legitimate and peaceful means ", the omission of the qualification within the British Empire being deliberate. It was decided to raise a national fund to be called the All-India Tilak Memorial Swaraj Fund for financing the Non-co-operation Movement and the Indian National Service. The latter was organised as a band of national workers for service to the country. A special emphasis was laid on non-violence as an integral part of the Non-co-operation Movement. Swaraj was sought to be attained within an year. Communal harmony was strongly urged and an anti-untouchability movement was launched.

Another important outcome of the Nagpur session was the re-organisation of Congress bodies. The All-India Congress Committee (hither after referred to as the AICC in this narration) at Nagpur divided the country into 21 different provinces on a linguistic basis, and allocated 356 seats among the various provinces. Bombay city was allocated seven seats in the AICC. Under the new constitution of the Congress, the Bombay Provincial Congress Committee was organised with 150 representatives (three from the depressed classes) elected by the seven District Congress

Committees formed in the city. The Committees with the number of their elected representatives, were asunder: Fort 14, Mandvi 20, Bhuleshwar 28, Girgaum 26, Byculla 25, Parel 17, Dadar 17, and depressed classes 3. (Non-co-operation Movement in Bombay City, 1920-25, pp. 31-32) The city was authorised to send 23 delegates to the Indian National Congress including seven members of the AICC.

Boycott of Duke of Connaughfs Visit: The Swarajya Sabha in Bombay, in accordance with the Nagpur resolution on S.R. Bomanji and Gandhiji's advice, initiated an agitation for refraining from the Royal functions in honour of the Duke's visit in February 1921. The Bombay Native Piecegoods Merchants' Association decided to close the Mulji Jetha Cloth Market for three days. The New Share Bazar in the city did likewise. Many traders voluntarily suspended their business. Five public meetings were held during the week of the Royal visit expressing popular determination to boycott it. (Bombay Police Secret Abstract, 1921.) The boycott was, however, not so very successful.

Tilak Swaraj Fund: The AICC which met at Bezwada on 31 March 1921, resolved to place a constructive programme, commonly known as the Bezwada Programme, before the country, namely (i) collection of one crore rupees for financing Non-co-operation Movement, (ii) enlistment of one crore members, and (iii) introduction of 20 lakhs of charkhas into households, before the end of June 1921. Bombay was the scene of Gandhiji's activities in this respect from April to June. He employed every kind of strategy for building up the Tilak Swaraj Fund. He had budgeted for Rs. 60 lakhs from Bombay and Rs. 40 lakhs from the rest of India. A happy beginning had been made in Bombay. Earnest workers, themselves endowed with riches, were working ceaselessly for the collection. (M. K. Gandhi, Young India.) Labour leaders like A. B. Kolhatkar, R. S. Nimbkar, D. R. Mayekar and Jamnadas Mehta joined hands with Gandhiji. The drive was mainly for the Swaraj Fund.

The city had given the largest sum for the Jallianwala Fund, and it was capable of giving a large sum to the Tilak Fund. Mandvi Ward contributed Rs. 60,000 through Velji Lakhamsey Napoo. Ghatkopar presented Gandhiji with an address and a purse of Rs. 40,000 for the Tilak fund. He put his trust in the four communities in the city, namely, Bhatias, Memons, Marwadis and Parsis. The citizens of Santacruz, which was Gandhiji's abode when he was practising as an advocate, presented him with Rs. 30,000. Bandra, Vile Parle, Borivli, Malad and other suburbs also made good contributions. (K. Gopalswami, op. cit., pp. 149-50,) The cotton merchants and workers of the Bombay Cotton Brokers' Association presented Gandhiji with a purse of Rs. 2,50,000. (Ibid., p. 150,) This was a sign of awakening in the mercantile class in the city.

According to Mrs. Fatima Ismail, her brother Umar Sobani gave a cheque to Gandhiji for one crore; but Gandhiji insisted that the money must come from the people. Umar underwrote the target amount and left the cheque with Gandhiji in the presence of only Shaukat Ali. Somehow the news reached the Government, which broke the cotton corner created by Umar Sobani by bringing into Bombay special trainloads of cotton by orders of the Viceroy. This measure ruined Umar's mills, and he sustained a heavy loss and paid out Rs. 3.64 crores. (K. Gopalswami, op. cit, pp. 149-50.) Umar Sobani was a staunch supporter of Gandhiji, and a great patriot till his death in 1926. He opposed his father, Haji Yusuf Sobani, who contested the office of the Sheriff of Bombay, simply because he did not

want his father to enjoy an office under the British. Umar was successful, and Sultan Chinoy's father became the Sheriff.

Mr. A. B. Godrej, a Parsi merchant prince and staunch nationalist presented Gandhiji with a handsome donation of Rs. 3 lakhs (Ibid.) at the Mani Bhavan, which was throbbing with Gandhian activity throughout the period. One Jainarayan Indumal Dani was, however, the biggest single donor who donated a munificent sum of Rs. 5 lakhs. Mr. A. B. Godrei being the second with three lakhs and Anandilal Podar5 the third, with a sum of Rs. 2 lakhs. (Non-co-operation Movement in Bombay City, 1920-25, p. 59,) Bombay city totally contributed about Rs. 37.5 lakhs to Tilak Swaraj Fund at the call of Gandhiji. It was at about 10 p.m. on the last targeted day that the managers of the Fund totalled up an amount of about Rs. 98 lakhs from all over India. Newspaper reporters were frantically telephoning for news whether the target had been reached. Jamnalal Bajaj, Shankarlal Banker and others suggested that the press be told that the one crore mark had been reached. Gandhiji, however, insisted that they must tell the truth. On the next morning a message from Calcutta came that three-four lakhs had already been collected there which had not been accounted earlier. Thus, the Bezwada target for the Fund was more than fulfilled, Bombay's generosity earned for the city the sobriquet, "Bombay the beautiful", at the hands of Gandhiji in the Young India of 6 July 1921.

Although Bombay city was the single biggest contributor to the Tilak Swaraj Fund, the Bombay Provincial Congress Committee decided to spend it on constructive programme all over India. A special committee with Raghavji Purshottam, Velji Napoo, Revashankar Jhaveri, Umar Sobani, Jamnalal Bajaj, A. B. Godrej, Shankarlal Banker and L. R. Tairsee, was appointed to control and manage the funds. The Bombay Provincial Congress Committee did an act of self-denial by extending the funds to other regions for spread of khadi, upliftment of depressed classes, national schools and prohibition of liquor. It also made room for the election of two Muslim representatives to the AICC from the city. (K. Gopalswami, op. cit., pp. 152-53.)

As a part of the Bezwada programme, about 19,756 Congress members were enlisted, and 1,887 charkhas were introduced in the city upto May 1921. As many as 18 centres for spinning khadi were opened, while arrangements were made for the manufacture of charkhas at Lalbaug, Kalbadevi, Kumbharwada, Khetwadi, Sandhurst Road and Chowpati (at S. G. Banker's house). (Non-co-operation Movement in Bombay City, 1920-25, pp. 48, 60, 61.)

Anti-Liquor Picketing: The anti-liquor agitation in Bombay was first suggested by A. B. Kolhatkar, the editor of the Sandesh, in its issue of 19 May 1921. The 'G' Ward Congress Committee took up the issue first in Dadar area on 3 June 1921. By the middle of the month prohibition propaganda was launched in Girgaum, Golpitha and then in Mandvi, Frere Road, Mazagaon, Dhobi Talao, Jacob Circle and Arthur Road. Liquor shops were picketed by volunteers and prohibition education was imparted zealously. The BPCC formed a vigilance committee to weed out bad characters from the agitation. Picketing was, however, temporarily suspended from 14 July 1921 due to rowdyism, and resumed from 20

August under the vigilance of Shaukat Ali and P. G. Sahasrabuddhe. Many picketers were prosecuted during the movement. A number of liquor and toddy shops were burnt or damaged during the November riots in the city. (*Ibid., pp. 70-73.*) The agitation was, therefore, suspended.

Currency and Exchange Policy Problems: The currency and foreign exchange policy of the Government of India was highly detrimental to Indian industry and trade. Naturally it roused protests and petitions by the business community in Bombay. The Congress Working Committee also took up the issue so as to enlist the support of businessmen. The Indian Merchants' Chamber and Bureau, Bombay Native Piecegoods Merchants' Association, Woollen Piecegoods Merchants' Association, English Bleached and White Shirting Merchants' Association, Fancy Prints Association, Bleached Dhoties and Fancy Goods Association, all from Bombay, were actively seeking the Congress support for their protests to Government. It was advocated that Government interference with the currency and exchange issue was highly detrimental to Indian interests, as it was dictated by Britain's interests.

This issue is dealt more at length subsequently.

Boycott of Foreign Cloth: The AICC met in Bombay from 28 to 30 July 1921 to congratulate the citizens for their splendid response to the Tilak Fund. It resolved to attain a total boycott of foreign cloth by the end of September, and advised people to boycott the visit of the Prince of Wales. The Bombay Native Piecegoods Association had earlier resolved to stop trading in foreign cloth. Gandhiji stayed in the city for the most part of July, August and September, mainly to direct the boycott campaign. He exhorted the millowners to regularise their profits and to manufacture mainly for the Indian market, and the importers to abandon buying foreign goods and to dispose of existing stocks outside India. He appealed the consumers to wear only khadi cloth, mill cloth being retained for the poor. The citizens were also to destroy imported cloth. Narandas Purshottam and Jamnalal Bajaj were very active in the campaign, and the latter tried his best to dissuade the Marwadi cloth merchants and commission agents from dealing in foreign clotb. Several public meetings were held. The response from the Mulji Jetba Market was favourable, although the movement in general met with a limited success. Two thousand posters containing Gandhiji's message of swadeshi and khadi were published by Swarajya Sabha. In response, piles of foreign clothes were received. Umar Sobani was reported to have given clothes worth Rs. 30.000.

The Bombay Provincial Congress Committee and the non-co-operators tried their best for the success of the movement. Besides public meetings, house to house propaganda was raised. The discarded foreign clothes were collected Ward by Ward, and processions were organised. Gandhiji lighted a bonfire of a huge pile of foreign cloth, about 20 feet high, in the compound of the Elphinstone mill owned by Umar Sobani, on 31 July 1921. The all-India leaders who were in the city for the AICC meeting also attended the bonfire programme in the presence of over 12,000 people. They addressed public meetings on the Chowpati. The response of the millowners and merchants of foreign cloth was, however, much less than expected. (Non-co-operation Movement in Bombay City, 1920-25, pp. 49, 74, 76, 78.)

The second bonfire of foreign clothes was held on 9 October 1921 in the compound of the Elphinstone mill in the presence of a vast crowd with

boundless enthusiasm. It was impossible to pass along the Elphinstone Bridge. A disciplined meeting was addressed by Gandhiji, Lalaji, Maulana Azad, Sarojini Naidu, Rajendra Prasad and Sobani. Gandhiji's speech was full of pathos and sorrowfulness at the failure of the people. The sight was extremely impressive: the vast audiences, the burning clothes and the passionate speakers under God's sky in the growing night!

This touching event was preceded by the arrest of Shaukat Ali in Bombay on 16 September 1921, and of Mohammed Ali at Waltair, in connection with the Karachi resolution which was alleged to have tampered with the loyalty of army troops. The arrest of the Ali brothers invited the wrath of the mill hands which resulted into a stoppage of work in 14 mills in Bombay. Most of the mills were in the Muslim localities, and undoubtedly the strike was intended to demonstrate the political loyalties of the Khilafat rank and file, which included at least, some of the Muslim millhands. Even so, the strike was brief and half-hearted, and was promptly condemned by the Congress and Khilafat Committees. (Richard Newman, op. cit., p. 98.)

Mr. Chotani suggested that the third bonfire of foreign cloth on the day of arrival of the Prince of Wales should be so big that the flames might be easily seen from Apollo Bunder and that the Prince be impressed by Indian determination for Swaraj and Swadeshi. Accordingly the third bonfire was lighted by Gandhiji in the presence of an impressive gathering of more than 25 thousand in the compound of the Elphinstone mill on 17 November 1921. The bonfire as planned, coincided with the landing of the Prince of Wales at Apollo Bunder. It was accompanied by a general hartal in the city.

All these bonfires were symbolic of India's determination for the Swadeshi and Swaraj. They were all held solemnly with a splendid and spectacular show of discipline and self-denial. Gandhiji's speeches were full of emotional appeals. At the time of the second bonfire, some tears were to be seen in his eyes, the tears of sorrow at the failure of the people to fulfill their duty towards the country. (Bombay Police Secret Abstract, November 1921.)

Prince of Wales Riots: The Prince of Wales's visit was intended to uphold the prestige of the British Government, although it was most inopportune and uncalled for at the time. The AICC as well as the Congress Working Committee which had met in Bombay from 28 to 30 July and 5 October 1921, respectively, had resolved to boycott the Royal visit and to observe a general voluntary hartal throughout the land. During the six weeks preceding the Prince's visit, 19 public meetings had been held in Bombay for the express purpose of rousing all patriotic citizens against the visit. Accordingly Bombay was to observe a hartal on the day of the Prince's landing at Bombay, and the citizens were directed by Gandhiji to religiously refrain from attending charities, fetes or fireworks organised for the purpose. No ill-will or insult was intended to be shown to the Prince. However, the Prince's visit itself and the circumstances attending the ceremonials arranged and the public money wasted for the royal functions, constituted an unbearable provocation. And yet Bombay had remained self-restrained initially, although the Swarajya Sabha's office was needlessly raided by the police.

The purpose of the bonfire, apart from its obvious symbolism, was also to provide a counter-attraction to the extravagant ceremonies going on in the Fort area, where the Prince was beginning a royal tour of India. (Mahatma Gandhi, Young India (Date not available)).

The mills continued to work as Gandhiji had proposed, but some of them had apparently to close later because their workers slipped away to watch the spectacle. There was no disturbance in the north of the city that day. The focus of events was in the south, where trainloads of Congress and Khilafat volunteers returning from the bonfire, disembarked at Marine Lines and Charni Road railway stations and found themselves face to face with Parsis and Europeans leaving the route of the Prince's procession. Full scale rioting developed across the city from Tardeo and Girgaum in the west to the lower reaches of Parel Road. (Richard Newman, op. cit., p. 98.)

There was stone-throwing at cars and trams and the decorations were dragged down and burned. Tramway services were totally paralysed. The persons returning home after the Prince's State procession were assaulted. The military had to be summoned and 13 people were killed as a result of firing.

- As D. G. Tendulkar records: "The Parsis as a community having joined in the demonstration of welcome to the Prince, in defiance of the wishes of the general body of people, had been the target of attack. When they were returning home from the reception ceremony, the foreign caps and foreign garments on their persons were seized and consigned to flames. A Police station and another building were set on fire. Four policemen had been beaten to death and some sustained injuries. Gandhi arrived and witnessed the scene. A huge crowd had gathered and there was a terrible noise and confusion all around. When they saw Gandhi in their midst, they gave themselves up to frenzied demonstrations and began to shout, Mahatma Gandhi-Ki-Jai. He reproved them and ordered them off. Sprinkling water on the faces of the injured policemen, he remained there for some time nursing them. After having made arrangements for their removal to the hospital, he left.
- "From every part of the city reports of frightful excesses of murder or rioting continued to pour in till ten in the night. Gandhi had been an eyewitness to such dreadful scenes, and the agony he suffered was unbearable Weighed down by grief and remorse, he went on recalling the high hopes with which he had been directing the movement. But these hopes had now vanished into thin air....."
- " The next morning, November 18, the Parsis, the Anglo-Indians and the Jewish residents, were adequately armed and, frantic with rage, were thirsting for revenge. Meanwhile the Congressmen went round the city, trying to pacify the people. But the situation was hopeless. Reprisals led to reprisals, and there was no knowing how things would end.

I must not recklessly run the risk of being killed. Then what was I to do?' At last came the idea of a fast to his rescue...... On November 19 he called back his son Devdas to Bombay and he gave out that Devdas had been brought back on purpose. He was to be sent out as a 'sacrifice' for slaughter by the rioters, should a fresh outbreak occur in neighbouring areas." (D. G. Tendulkar, Mahatma: Life of Mohanchand Karamchand Gandhi.)

The millhands, the white-collared gentry and even the intelligentsia, were involved in rioting. Bhendi Bazar was a great scene with not less than 20,000 unwilling to listen to any body, and frantically out on an operation destruction. Gandhiji and Sobani were ultimately successful in restoring peace there. In some areas there were painful events of molestation of Parsi sisters. (For details see K. Gopalswami, Gandhi and Bombay, pp. 121-38.)

The situation had deteriorated rapidly on the second day. Parsis were hacked to death in the streets, and Parsi youths responded against Muslims and Hindus with equal savagery. Gangs of Muslims moved north from Madanpura along DeLisle Road, intimidating the millhands and closing down the mills, so that by the afternoon, the central part of the mill area had come to a standstill. The millhands, however, did not allow themselves to be caught up in the violence, and went back to work again the next day. Meanwhile the rioting continued in the area south of Grant Road, where it eventually subsided about five days later. "The riots were only the culmination of months of tension between the Congress volunteers and the Parsi community, arising out of the latter's refusal to wear khaddar or close down their liquor shops in response to Gandhi's condemnation of alcohol. Apart from a small number of workers who were drawn into political events by their individual links with non-co-operators of other social classes, the millhands were hardly involved in any of the agitations of the time, and the evidence suggests that the nationalist leadership did not intend them to be." (Richard Newman, op. cit., p. 99.)

The Government openly took sides, and armed and aided the Parsis and Christians in retaliatory madness; and neglected to protect the Hindu and Muslim victims of the former's wrath. The police and the military looked on with callous indifference. Over 50 persons were reported to have been killed and 400 injured in the carnage and insolence which persisted for five days upto 21 November. Gandhiji and others including Sarojini Naidu, Azad, Sobani, Jayakar, Jamnadas Mehta, Dr. Sathe and Mouzam Ali, strived to restore peace. Gandhiji undertook an indefinite fast in penance, from the 19th instant. Ultimately peace appeared to have dawned on 21 November, and leaders belonging to all communities, non-co-operators and co-operators, convened a meeting on that day. There were speeches of goodwill and harmony by a representative of each community. (K. Gopalswami, op. cit., p. 132.) And Gandhiji was persuaded to break his fast. The injuries and wounds of the event were gradually healed.

The Congress Working Committee (henceforth called the CWC) was called at Mani Bhavan on 22 and 23 November 1921. Resolutions were passed deploring the tragic occurrences in Bombay, and inviting Congress workers and Khilafat bodies to be vigilant about violence. The CWC also

warned all Provincial Congress Committees against embarking upon Mass Civil Disobedience without first making certain of a peaceful atmosphere. (Non-co-operation Movement in Bombay City, p. 85.)

The disturbances gave a real setback to the Non-Co-operation, Mass Civil Disobedience and boycott movements, and no material progress towards advancement of the boycott programme was made until at the close of the year.

Gandhiji's success in collection of a crore of rupees for the Tilak Swaraj Fund and other programmes made him more and more popular towards the end of 1921. The people reposed their faith in him, and it was at the Ahmedabad Congress (December 1921) that he was appointed as the 'Dictator' of the Congress giving him all powers to appoint a deputy in case he was arrested. During January-February 1922 the activities of the Congress workers in Bombay were confined to the enrolment of national volunteers.

Boycott of Councils, schools and courts, collection of funds, Swadeshi, had all been tried in succession: each aspect of Non-Co-operation had attracted some support, but none gave the movement more than a temporary momentum. Violence was its worst enemy. By and by a good deal of mutual recrimination developed in the carefully built Hindu-Muslim brotherhood. (J. M. Brown, op. cit., p. 335.) Tension developed between Gandhiji and the Ali brothers. There were many among the Muslims who argued that nothing had ever been achieved by non-violence. (Comments of the Bombay Police Commissioner, 25 January 1922, Home Political, 1922, No. 551.) That was a formidable danger to the movement.

By mid-March 1922, the three bases on which Gandhiji had built up the movement, collapsed. Many of the Hindu and Muslim leaders realised that non-co-operation was not a profitable tactic through which they could pursue their own aims. It could neither guarantee a communal alliance nor secure them the power they sought. Into this ferment, Gandhiji dropped his bombshell of suspending civil disobedience after the Chauri Chaura violence.

Soon after, Gandhiji was arrested on 10 March 1922 and sentenced to six years' simple imprisonment. His incarceration created a general depression and frustration, although the BPCC continued to pursue his constructive programme in the city. There was practically a lull in the city throughout 1922, except for the usual Gandhian programme. (Khadi propaganda was activated, and the sale proceeds from Khaddar in the city, reached Rs. 1,39,000 during the last months of the year. Bajaj and Chotani were appointed treasurers of the Congress.)

NON-CO-OPERATION BECOMES LANGUID

While eminent Tilakites including Jayakar and Kelkar denounced the triple boycott, even Congressmen like Vithalbhai Patel and Jamnadas Mehta clamoured to contest the January 1923 elections to the Municipal Corporation and to seek an entry into the Council in repudiation of the pledge of Non-co-operation. They organised the Municipal Nationalist Party, while pledging their adherence to the Congress creed, both inside and outside the Corporation. As many as 67 members of the Municipal

Nationalist Party contested the Municipal Corporation election held on 29 January 1923, of whom 47 were elected. The most important of the elected members included V. J. Patel, Mia Mohammed Chotani, V. L. Napoo, Dr. Velkar, H. P. Thackersey, Sarojini Naidu, B. N. Motiwalla, L. R. Tairsee, K. F. Nariman, Jamnadas Mehta, Dr. Sathe, S. L. Silam, A. H. S. Khatri, V. A. Desai, P. G. Sahasrabuddhe, F. J. Ginwala, Avantikabai Gokhale, Joseph Baptista, Dr. G. V. Deshmukh and Umar Sobani. (For the names of the ward-wise contestants and the elected candidates refer toNon-co-operation Movement inBombay City, 1920-25, pp. 147-50.)

However, these 47 members could not capture the Corporation and, except for a few specific issues, the loyalists, Government nominees and members of Homi Mody's Progressive Party, dominated the municipality. Actually, V. J. Patel, the leader of the Municipal Nationalist Party, lost the 1923 mayoral election to Homi Mody, by three votes. Yet the Progressive Party comprising professionals, landlords, rich merchants and millowners, was by no means a homogeneous group with regard to the interest of its members. (A. D. D. Gordon, op. cit, p. 139.)

The clash between the Municipal Nationalist Party and Progressive Party was significant in so far as it related to the crucial question which group was destined to bear the brunt of the burden of the rising taxation consequent upon the Municipal Reforms Act of 1922. The nationalists were still dependent upon the support of a number of landlords in the civic body. (It may be necessary to review a few past events to understand the role of the Municipal Nationalist Party and other pressure groups in the city. " The Corporation prior to the reforms of 1922 was, in essence, a landlord-millowner-large merchants Corporation and was overtly antinationalist. However, intense agitation for reform of the franchise for municipal voting had been going on since early in 1918. It was led at least initially, by strange bed-fellows— the European Association and the Municipal Reforms Association, the latter being led by the nationalist and future mayor of Bombay, Joseph Baptista. By the end of 1919 these voices had been joined by a group of quasi-worker and lower middle class South Indian associations, including the People's Union, the Clerks' Union and the Tenants' Association." (A. D. D. Gordon, p. 131.) At this stage, the Maharashtrian labourers had not yet begun to take deep interest in municipal reforms, although they were eventually to replace the Gujaratis and the Parsis as the dominating influence in civic government.

The Municipal Reforms Association wanted a wholly elected corporation to avoid the situation wherein the nominated members were servile instruments of the Municipal Commissioner. George Lloyd, the Governor, was also urging for a wide extension of franchise, in 1919, to reform the landlord dominated civic body. The landlord faction in the Corporation received the support of Sir Ibrahim Rahimtoola, a member of the Governor's Council in charge of the General Department (A. D. D. Gordon, p. 136). He was one of the biggest landlords in the city and had a great influence over the civic body. At one stage Lloyd was " in constant friction with Sir Ibrahim over the housing scheme."

There was some kind of polarisation of forces in the Corporation, and a more expected result of the reforms was a surge of nationalists into the

body. It was against this background that the emergence of the Municipal Nationalist Party was an important factor.)

The nationalists, with the support of professionals and merchants dominated the Municipal Nationalist Party. However, it could not be claimed to be an anti-landlord party. "On the other hand, it might also be termed the party of the traditional Hindu merchants who had hitherto been denied a voice in the affairs of the city. (A. D. D. Gordon, op. cit., pp. 139-40.) Many of such merchants found a berth in the Corporation on the support of the Municipal Nationalist Party during the 1923 and 1926 elections. Their leaders, V. L. Napoo, G. G. Nensey and Mathuradas Tricamji (grain and cloth merchants), had come to the forefront as non-cooperators. The conflict between the landlords, millowners and merchants related mainly to taxation and its incidence. This is, however, a very complicated issue which need not detain us.

An important activity of the Municipal Nationalist Party was in connection with its protests against voting an address to Sir George Lloyd on his retirement, in the last quarter of 1923. In spite of their protests, the Corporation did arrange for the farewell address to the outgoing Governor and welcome to the incoming Governor, Sir Leslie Wilson (1923-28). The Municipal Nationalist Party boycotted the functions in the spirit of Non-cooperation, and held protest meetings on the Chowpati sands and other places on the day previous to the old Governor's departure. (Non-cooperation Movement in Bombay City, 1920-25, pp. 124-125.)

It was in April 1924 that V. J. Patel succeeded in being elected the Mayor (President) of the Corporation, and K. F. Nariman was appointed leader of the Municipal Nationalist Party. During his regime as mayor the Corporation presented an address to Gandhiji on 29 August 1924. V. J. Patel had the courage to boycott the Viceregal function in spite of the Corporation's resolution to that effect. He resigned the mayorship in repudiation of the Corporation's action. At the next meeting of the Corporation, however, he was allowed to occupy the Mayor's chair and was re-elected as Mayor again on 5 January 1925.

To resume the chronological narration of the Non-co-operation movement, Sarojini Naidu, Vallabhbhai Patel, Jamnalal Bajaj and Vithalbhai Patel continued to strive for the Tilak Swaraj Fund by holding public meetings throughout February 1923. (*Ibid., p. 130*). The *Bombay Chronicle* announced large amounts contributed to the Fund. (*Bombay Chronicle*, 7 Feb. 1923.) The 18th of every month was continued to be celebrated as a Gandhi Day in furtherance of the Swaraj Fund, enrolment of national volunteers, propagation of khaddar, and a fight against untouchability. The Marwadi Vidyalaya Hall was a favourite venue for meetings of leaders like Vallabhbhai Patel and Sarojini Naidu.

A Congress Employment Bureau was formed with a view to helping the non-co-operating young men, who had renunciated government services, in securing jobs. This was in pursuance of the resolution of the Congress Working Committee in Bombay in January 1923. The city firms and nationalist employers were exhorted through meetings and columns of the Bombay Chronicle to notify vacancies to the Bureau of which Mathuradas Tricamji was the secretary. There was, however, not much

progress in this respect in the year.

The labour sub-committee of the Congress under Dr. Sathe, S. A. Dange and L. G. Khare, appears to have become active at this juncture. It approached the Bombay Provincial Congress Committee to allot Rs. 50,000 for the labour movement in Bombay. The fact, however, remains that the nationalists could not make deep inroads in the millhands. This aspect is examined further subsequently.

Nagpur Flag Satyagraha: The courageous Flag Satyagraha under the leadership of Jamnalal Bajaj at Nagpur (May to August 1923), evoked tremendous enthusiasm in Bombay. The Bombay Provincial Congress Committee sent volunteers to participate in the agitation at Nagpur. Sarojini Naidu was an inspiring force behind the movement in the city. The Bombay Grain Merchants' Association and the Marwadi Bazar appreciated the patriotism of Jamnalal by observing a hartal on 19 June 1923. The Gold and Silver Satta Bazar and the Marwadi Bazar in Bombay protested against the conviction of Jamnalal with a closure of business for the second time on 11 July. Kasturba Gandhi played an important role in activating the ladies in the city by organising meetings and processions on the occasion.

The Nagpur Flag Satyagraha evoked so great an interest in Bombay that the Bombay Provincial Congress Committee and the District Congress Committees in the city, sent a great many volunteers including a member of the Birla family, to Nagpur. Several processions were held and patriotic activities were sponsored. Many youths from Bombay were convicted and sentenced to various terms of rigorous imprisonment. (A list of the convicted is given in Non-co-operation Movement in Bombay City, 1920-25, pp. 174-76.)

Nabha Abdication: The Bombay Congressmen, and Sikhs in particular, condemned the action of the Government of India in bringing about a forced abdication of the Maharaja of Nabha as being unjust and unconstitutional. The citizens of Bombay congratulated the Akali martyrs, and applauded their courageous stand against the repression by the Punjab Government under the pretext of putting down the Babbar Akalis. The Sikhs in Bombay expressed full sympathy with the gallant struggle of the Akalis (July and November 1923).

Kenya Betrayal: The adverse decision of the British Government on the Kenya question roused indignation in Bombay in August 1923. The Swaraj Party as well as the Bombay Provincial Congress Committee and the Central Khilafat Committee, were active against the Kenya Betrayal. The Bombay Provincial Congress Committee and the Khilafat Committee gave a call for the observance of a hartal on 27 August after the disembarkation of the Kenya Deputation. (It consisted of Jinnah, Khaparde, Sastri and Jamnadas Dwarkadas.) The citizens emphatically condemned the betrayal of Indian interest in Kenya by the British.

Swaraj Party: After the Gaya Congress, Chittaranjan Das issued instructions to Jayakar and Jamnadas Mehta for the formation of a Bombay branch of the Swaraj Party, which had accepted the principle of Non-co-operation, but stood for the creation of an atmosphere of

resistance making Government by bureaucracy impossible. While accepting Civil Disobedience as a powerful weapon, the party felt that the country was not yet ready for it. Accordingly M. R. Jayakar, J. M. Mehta and K. Natarajan, convened a meeting to form the Bombay branch on 25 March 1923. They, however, decided initially to subscribe to the Congress programme and creed, and postponed the formation of the party till the dawn of May. It was on 8 May that the Swaraj Party (Bombay branch) was organised. Its leading lights were: K. Natarajan, Jayakar, V. J. Patel, J. M. Mehta, J. K. Mehta, A. G. Mulgaonkar, Purshottamdas Tricumdas, S. H. Jhabwalla, B. G. Kher, Shantaram N. Dabholkar and M. D. Nanavati. The main thrust of the policy of the party was on carrying on a constitutional fight in the Legislative Council. The manifesto was announced the same day. (Bombay Police Secret Abstract, 1923.) Although not a rival party, it was undoubtedly a faction bent upon entering the Councils in difference with the programme of non-co-operation and boycott. By the middle of May 1923, it opened four branch offices in different areas in Bombay for collection of funds and enlistment of members. The main plank of their propaganda was that Non-co-operation had been a success in so far as it had caused an awakening among the people, but at the same time Nonco-operation had given the bureaucracy an opportunity to consolidate its powers. The Swaraj Party was founded to undermine those powers. The boycott of the Councils had been a failure as had been the boycott of schools and colleges. Government continued to enact unjust laws in the name of reforms, while undesirable elements found a berth in the Councils. The Swarajists decided upon a policy of obstruction against the bureaucracy. B. G. Kher, who later became the Prime Minister of Bombay State, emerged as a Swarajist at this juncture.

Unfortunately differences of opinion fermented very soon between Jayakar and Natarajan on the one hand and V. J. Patel and Jamnadas Mehta on the other, over the issue of nomination of candidates for the Assembly and the Councils. The differences culminated in the resignations of Tayakar, Natarajan, Dabholkar and eight others. (Times of India of 9 July 1923. The signatories slated that there was a certain section in the party in Bombay (probably referring to Patel and Mehta), from which they were fundamentally and irrevocably separated in principles and. methods.) The unfortunate breach in the party made it imperative for the central leaders to reorganise its hierarchy with V. J. Patel as the president; J. M. Mehta, M. B. Velkar and Bhulabhai Desai as vice-presidents; and J. K. Mehta, R. N. Mandlik, Bhadkamkar and Appabhai Desai as its secretaries in September 1923.

The Bombay Swaraj Party further patched up the internal dissentions and launched a vigorous campaign for elections to the reformed Councils and the Legislative Assembly to be held on 14 November 1923. It is noteworthy that the Congress Party which was opposed to Council-entry as a matter of principle, suspended its propaganda against Council-entry by virtue of the decision in the Special Congress session held in the middle of September. This had undoubtedly a favourable impact on the election results from the point of view of the Swarajists *vis-a-vis* the Moderates.

The Swarajists aimed at mending or ending the Councils and the

Assembly, if the demands of the Indian National Congress were not conceded. The election results were quite startling and encouraging. Vithalbhai J. Patel, president of the Swaraj Party of Bombay, was elected to the Central Legislative Assembly from the Bombay city non-Muslim constituency, while the other Swarajist candidate from the Muslim constituency, namely, HussenbhailA. Lalji, lost to his rival. The performance of the Swarajists in the elections to the Bombay Legislative Council was rather spectacular. Of the nine seats from the city, the Swaraiists captured six. The successful Swaraiists included K. F. Nariman. M. B. Velkar, J. K. Mehta, Punjabhai Thackersey, Jafferbhai Lalji and Jayakar. (Non-co-operation Movement in Bombay City, 1920-25, p. 160.) Mr. Jayakar had contested the election from the Bombay University constituency as a Swarajist after some rapprochement. He was elected leader of the Council Swaraj Party in January 1924, which formulated a policy to be adopted in the legislature. The policy contemplated continuous obstruction of bureaucratic high-handedness, abstention from any office or commission and opposition to budgetary demands and grants. (Ibid., p. 156.)

A General Lull: It can broadly be said that the entire year 1923 was characterised by a wrangle between the Swarajists and the No-change factions of the Congress in the city. The temporary patch up on Council entry was rather a tactical move. The news of Gandhiji's grave illness and his removal from Yeravada prison to the Sassoon Hospital in Pune on 13 January 1924, cast a spell of gloom in the nationalist circles. Sarojini Naidu, president of the Bombay Provincial Congress Committee, had just left Bombay for Mombassa on 9 January 1924. Consequently there was a general lull in the political activities in the city for about six months. (The Congress Working Committee met in Bombay from 30 January to 2 February 1924 under the presidency of Mohammed AH and passed resolutions of a routine type.)

Gandhiji's release on 5 February 1924 was greeted with enthusiasm and delight in the city. The entire cloth market, Share Bazar and the Cotton Association, observed closure to celebrate the happy occasion. The month commencing from 18 February to 18 March 1924 was observed as a Gandhi month under instructions of the Congress Working Committee, while the District Congress Committees in the city, carried out the usual constructive programme. Gandhiji with S. G. Banker and Mrs. Anasuya, came to Bombay on 11 March for a week's convalescence in Narottam Morarji's bungalow at Juhu. The Chowpati Beach was the scene of a very large gathering under K. P. Khadilkar, the journalist, politician and ardent follower of Gandhiji and famous playwright. Mohammed Ali and Shaukat Ali also became active within the Congress and Khilafat circles in Bombay.

Gandhiji's first reaction to Council-entry was not favourable, but he conceded that it had become a fait accompli and gave it the imprimatur of the Congress. The talks between Gandhiji and the Swarajists, particularly Motilal Nehru and C. R. Das, continued from March to May 1924. After recuperating his health, Gandhiji left Bombay at the end of May, and toured the country extensively for the rest of the year. " As the year wore on, Gandhi realised in increasing measure the futility and harm of the wrangle between the two wings of the Congress. He struck a bold blow for

unity by 'surrendering' to the Swarajists. The gap was eventually closed at Calcutta in November, when a joint statement was issued by him and the Swarajists, which was later endorsed by the All-India Congress Committee." (K. Gopalswami, op. tit, pp. 206-07.)

The year was also significant for the nomination of Gandhiji as the president of the Congress to be held at Belgaum. It was the first and the last time that he held any formal office throughout his life.

The Bombay Municipal Corporation, on behalf of the citizens, offered felicitations to the Mahatma on the occasion of his recovery from serious illness and release from prison, on 29 August 1924. It was the second address presented to a national leader by the Corporation, the first having been presented to DadabhaiNaoroji. The brief but brilliant felicitation was offered at the Sir Cowasji Jehangir Hall in the presence of a distinguished gathering. The address was encased in a simple silver casket.

Meanwhile there were communal clashes between Hindus arid Muslims in the city and several parts of India. Bombay was deeply moved by Gandhiji's 21-day fast from 18 September 1924 at Delhi, (The fast was undertaken at Mohammed Ali's house at Delhi. The fast brought about a conference of leaders of all communities who took a pledge for communal peace.) in self-purification against communal disharmony. The Bombay Provincial Congress Committee and several other bodies in Bombay appealed for communal harmony and prayed for the Mahatma's life. The native Share Bazar closed its activities for a day as a mark of respect for the fast.

All-Party Conference: The All-Party Conference convened by the Congress president, Mohammed Ali, at the Muzaffarabad Hall in Bombay on 21 and 22 November 1924, was one of the most important events of the day. Nearly 275 prominent members of the All-India Congress Committee and about 200 delegates of different political parties graced the occasion. Nearly 50 non-party persons, such as solicitors, doctors and merchants also participated. The prominent among those present were: Gandhiji, Mohammed Ali, Shaukat Ali, Annie Besant, Sarojini Naidu, Dinshaw Petit, Sastri, Motilal Nehru, C R. Das, B. G. Pal, J. B. Petit, Jinnah, Jayakar, Vallabhbhai Patel, V. J. Patel, Natarajan, C. Y. Chintamani, the Dwarkadas brothers, Sir Purshottamdas Thakurdas, K. P. Khadilkar, Dr. Ansari, Abul Kalam Azad. Hakim Aimal Khan, Brelvi and Dr. Savarkar. Sir Dinshaw Petit, a non-party person, was voted to the chair. The Conference was motivated " to unite all parties and induce those who in 1920 felt called upon to retire from the Congress to rejoin it and to meet the recrudescence of repression which is evidently aimed at the Swaraj Party of Bengal".

The main point of discussion was an alteration of the Congress programme in such a manner as to bring on the Congress platform all the parties which had seceded from it. (Bombay Police Secret Abstract, Nov. 1924.) Gandhiji made it clear that he had conceded sufficient concession in the alteration of the programme as laid down in the joint statement issued by him, C. R. Das and Motilal Nehru, and that he would not yield further.

As there were sharp differences of opinion among the delegates on the various issues before India, Gandhiji tried to secure unanimity on the questions on which there was an agreement. It was therefore decided to appoint a committee representing the several parties at the Conference for the preparation of a draft resolution on the repressive measures adopted by the Bengal Government and the Bengal Ordinance promulgated by the Government of India. (Criminal Law Amendment Ordinance of 1924.) The Conference strongly condemned the Ordinance, empowering the Government to invade upon individual liberty and to suppress constitutional political activity. At the same time it disapproved the anarchical terrorist activities, but urged immediate withdrawal of the Ordinance as well as Regulation III of 1918. (See Bombay Police Secret Abstracts for detailed accounts.)

On the other question of achieving unity of all the parties, Gandhiji told the Congress Working Committee, that if they handled other questions such as the creed of the Congress and the spinning franchise, there might arise disagreement which would be prejudicial to the main object of calling the All-Party Conference. Therefore, a committee representing different shades of ideology was appointed to consider " the best way of reuniting all political parties in the National Congress, and to prepare a scheme of Swaraj including the solution of Hindu-Muslim and like questions in their political aspects". The committee included Gandhiji, Mohammed Ali, Azad, Jinnah, Sastri, Chintamani, Purshottamdas Thakurdas and Baptista. (For names of all members of the committee see Non-co-operation Movement in Bombay City, 1920-25, p. 199.)

The next day after the All-Party Conference (23 November) the All-India Congress Committee met at the Muzaffarabad Hall and ratified the Gandhi-Das-Nehru Pact, which had earlier been arrived at Calcutta. The ratification of the pact (*Two No-changers voted against it.*) paved the way to political unification of the Congressmen and Swarajists. However, the question of political unity for which the All-Party Conference had been convened, was relegated to the background, and ultimately shelved by the appointment of a committee. (*Non-co-operation Movement in Bombay City, 1920-25, p. 200.*)

The entire year 1924 had been one of continual drift marked by paper pacts and compromises, but by no practical achievement. There was also a feeling of uncertainty regarding the future programme of the Congress. (*Ibid.*, p. 201.)

Responsive Co-operation: The Congress had to give further concessions to the Swaraj Party throughout 1925. Ultimately Councilentry was officially recognised by the All-India Congress Committee as part of the Congress programme. Thenceforth elections would be contested not by the Swaraj Party but by the Congress itself. The Non-co-operation organisation was virtually wound up, and the political activity was taken over by the Swaraj Party. The year 1925 also witnessed a sliding back within the latter, slackening of discipline and the first rumblings of 'responsive co-operation (K. Gopalswami, op. cit, p. 229.)

The protagonists of responsive co-operation conferred with leaders of other parties in Bombay, and consequently the Indian National Party was

born in April 1926. The objective of the new creation was to prepare for establishment of Swaraj of the Dominion type by all peaceful and legitimate means, excluding mass civil disobedience and non-payment of taxes. Gandhiji was all the while a silent spectator. (In the meantime the Congress House was inaugurated by Gandhiji on 26 March 1925,) By and large the millhands were left outside the Non-co-operation Movement. They did not join the Congress organisation in any significant number. "There was, it is true, a minority of members in the Congress Committees, whose imagination had been fired by the possibility of giving the workers an active role and extending the Congress organisation downwards to promote, both social and political reform, but the minority was consistently outvoted by a conservative majority reflecting professional and mercantile interests. The result was a paralysis of Congress labour policy and drift towards socialism and communism among the frustrated radicals." (Richard Newman, op. cit., p. 99)

The Khilafat Movement was mainly instrumental in increasing political consciousness among the Muslims in Bombay. Maulana Shaukat Ali commanded influence in Madanpura, and he built a hierarchy of local leaders between the Khilafat Committee and contingents of volunteers. (R. Kumar, "From Swaraj to Purna Swaraj Nationalistic Politics in the city of Bombay, 1920-32, in Congress and the Raj: Facets of Indian Struggle, 1917-47, D. A. Low (ed.) (Arnold-Heinemann, London, 1977), p. 81) But the main inspiration of the Khilafat organisation was religious. Hence it also could not make deep inroads among the proletariat.

While the Congress and the Khilafat organisations were preoccupied with Non-co-operation, an organisation of the remnants of the old elite of business and professional leaders, combined with Moderates, emerged in Bombay. It was formalised into the National Liberal Federation. This, rather reactionary body, comprised Sir Dinshaw Wacha, SirNarayan Chandavarkar, SirR.P. Paranjape (aminister in the Bombay Government), and Sir Homi Mody. They actively opposed Non-co-operation, and regarded the Montagu-Chelmsford constitution as a vindication of their policy of collaboration with the British Government. They played a major part in conciliar Government, (Richard Newman, op. cit., p. 100) both in Delhi and Bombay. Their electoral influence was rather diminished by the extensions of the franchise, but they still wielded a substantial share of the reserved and nominated seats in the legislatures. Their source of influence also lay in their informal contacts with the British (Ibid) bureaucrats, which were strengthened in the clubs and gymkhanas in Bombay. Among the liberal camp, Homi Mody, a lawyer, businessman, an arbiter of municipal politics and nternational diplomat for the textile industry, emerged as a rising star.i It is true that the relations between Government and industrialists were not as cordial after 1922 as they had been before, mainly due to differences over the measures against the economic recession in the city. In fact, some of them extended feelers to the Swaraj Party, as and when possible. Even then these Liberals maintained their ties with the British.

Another political movement of growing importance in Bombay was non-Brahminism. (*Ibid,*) It was growing up for over half a century in the central and southern districts of the Deccan, partly in Ratnagiri also, against the

predominance of the Brahmins. Bombay provided a congenial home to the movement. An interesting feature of the non-Brahmin movement was that it was hostile to Congress politicians in the Presidency because of their high caste origin. The protagonists of the movement, therefore, chose to co-operate with the new constitution under the Montagu-Chelmsford Reforms. They captured many of the elected seats in the provincial council, occupied one of the transferred portfolios in Government and controlled many district boards in the Presidency. Had they not been divided by factionalism; they would have accomplished much more. (I. Rothermund, Garidhi and Maharashtra (1971), pp. 56-73, and Government of India, Reports on the Working of the Reformed Constitution, 1927, pp. 137-47.) B. V. Jadhav, Minister of Education, and later of Agriculture, led one group which opposed Brahmins whenever possible, and exploited the rural prejudices of the Bombay workers to win their support. Another non-Brahmin group represented by S. K. Bole and R. S. Asavale collaborated with the Moderates and Liberals to continue the traditions of social reforms and welfare activities in the hope of achieving a shift of power before the dawn of independence. (Richard Newman, op. cit., p. 101.) Bole, Asavale and their associates worked closely with the Social Service League and similar bodies in the furtherance of their objectives. They also occupied the Council seat reserved for Bombay Marathas: (Ibid.)

The politics of the industrial city of Bombay rather tended to emphasise caste loyalties instead of diminishing them. Prior to the World War I men belonging to S. K. Bole's group included both Marathas and untouchables (so called) in the reform movements for the backward castes. By 1930, however, the untouchables had explicitly repudiated such a combination by emphasising their own distinctive interests. (Ibid., p. 102.) This was mainly due to the large-scale migration of the Mahars to Bombay during the post-war boom and the modernising consequences of urban life and recruitment into the army, mills and railways. The non-Brahmin movement could not reduce the hostility of the Mahars to the Marathas to any appreciable degree. It was at this juncture that Dr. B. R. Ambedkar emerged as the greatest leader of the untouchables. By about 1927, their's had become a self-conscious and much more self-confident protest movement. They published a newspaper of their own, held conferences and used the strategy of satyagraha (Dhananjay Keer, Ambedkar (1971), E. M. Zelliot, Dr. Ambedkar and the Mahar Movement (Unpublished Ph.D. Thesis, University of Pennsylvania, 1969)) for their own good.

Such were the influences working upon the Bombay proletariat at the times. The non-Brahmin movement, the responsive co-operationists and Liberals were all urging the Government for social reforms. The Government had also to subscribe to their kind of reformism because of the pressure of liberal ideas from abroad.

Swaraj Party and Industrialists: The economic recession in Bombay in the mid-twenties was attributed to the currency policy of the Government of India. All aspects of the recession were interpreted in terms of the high exchange ratio adopted by Government, following the World War. This state of affairs forged an alliance between the Swaraj Party and the industrialists in Bombay. The Swarajists needed funds for nationalist

activities, while the industrialists needed the Swarajists' support in the Legislative Assembly against Government policy. Although men such as J. B. Petit were extending financial support to the Swarajists right from 1924 without any strings, most of the industrial magnates donated on a reciprocal basis. Motilal Nehru's appeal for money through Lalji Naranji was partially responded in 1925 only on a basis of quid pro quo. The All-India Congress Committee accounts show that the Tatas contributed through Sir F. E. Dinshaw, a nationalist. (All-India Congress Committee Papers, F. 27.) The mill-owners, particularly, Sir Purshottamdas Thakurdas and G. D. Birla, campaigned for the Congress only to gain the latter's support for their argument that the high ratio had damaged industry, workers and peasants. They also appealed to Gandhiji for his support. The Gauhati Congress of 1926 responded to the deliberations of the industrialists by instructing the Congress Working Committee to decide upon the currency policy the Congress was to support. The Indian Merchants' Chamber, the Bombay Millowners' Association and the Currency League, in their replies to the guestionnaire of the Congress Working Committee, emphasised the adverse effects of the 18 d. to one rupee exchange ratio on labour and agriculturists. The Congress Working Committee, therefore, decided in favour of the 16 d. sterling ratio. (Ibid., F. G. (2), 1927.)

The position of the millowners within the legislature was further consolidated in 1926 by the establishment of the Indian Nationalist Party of responsive co-operators. This party enjoyed a certain degree of support from the Swaraj Party; and along with the support of Independents like Jinnah, it could form a good opposition during these years. The Swarajists, Nationalists and Independents could secure 69 out of 144 votes in the Assembly. (B. D. Shukla, History of Indian Liberal Party (Allahabad, 1960), p. 295.) Consequently they lost to the Government which had managed to gain the support of loyal Muslims. Government had also played its trump card, the threat of increased taxation in the event of the Assembly opting for 16 d. ratio. (Indian Legislative Assembly Debates, 1927.)

The rapprochement between the Swarajists and industrialists was bound to decline as the former had reasons to suspect the motives of the latter in response to Government measures. However, between certain Swarajists and industrialists friendship lingered on after 1927. For example, during the 1928 Assembly elections and the sitting of the Nehru Committee, industrialists contributed some money to Motilal Nehru for the election funds. (Nehru to Thakurdas cf. A. D. D. Gordon, op. cit., p. 187.)

BACK BAY SCANDAL

The battle over the Bombay Development Department was the most fierce and long-fought. The most prominent engagement of this battle was fought over the reclamation of the Back Bay. The issue became a rallying point for all the discontent felt over the Bombay Government's "usurpation" of functions of the municipality. Reports from the popular press show that the battle was the concern of the whole of Bombay rather than the specific concern of the Municipal Corporation. Indeed, it was actually fought out in the courts of law and in the Bombay Legislative

Council rather than in the municipal forum.

The Back Bay scheme was vehemently attacked after the financial crisis incidental to the post-war slump in the city. Earlier in 1921, landlords and small merchants had been critical of the project. However, they were unable to obstruct the scheme in the Legislative Council where the businessmen, and industrial magnates had fully supported it. " Although nationalist merchants were involved at this stage, it was not until 1924 that the nationalist leaders and commercial magnates were actively engaged in criticism of Back Bay scheme and the Development Department in general. When they did, moreover, it was for ostensibly different reasons than the reasons for the involvement of the small merchants. " (A. D. D. Gordon, op. cit., p. 152.)

It was K. F. Nariman who was the greatest crusader in the Back Bay engagement. He tenaciously pursued the Bombay Government of Sir Leslie Wilson (1923-28) over the issue, from 1924 onwards, both in the Municipal Corporation and the Legislative Council. It was at his instance that a vigilance committee was appointed by the municipality to watch over the Back Bay project. (Bombay Chronicle, 23 April 1926.) It was alleged that he was prompted to the move by the petitions of disappointed contractors, and the business partner of the Tatas, Walchand Hirachand, was one such contractor who had approached Nariman in 1925. (Times of India, 31 Oct. and 7 Nov. 1927.) Walchand Seth had also expressed his bitterness at Government's decision to undertake the work by itself at the time of the Back Bay Inquiry of 1926, when he submitted a ioint statement on behalf of the contractors of the city. He was associated with the syndicate of 1918. Other members of the syndicate were equally bitter. The Governor, Leslie Wilson, reported to Birkenhead, on 8 October 1926, that the disappointed contractors were behind some of the criticism of the scheme. (A. D. D. Gordon, op. cit., p. 152.)

The substance of Nariman's complaint was as under: (i) development should have been a transferred subject under the head "Public Works" under the Devolution Rules of the Government of India Act of 1919; (ii) although the Municipal Corporation paid a cotton cess towards the chawl building programme of the department, it was not represented in the latter body; and (iii) the Back Bay Scheme was extremely costly. He said, "This mad and chimerical venture has practically mortgaged the resources of the Presidency for at least a generation to come ".(Back Bay Inquiry, 1926,1.) The most electrifying accusation, against the Government, by Nariman related to mismanagement and malpractice within the Development Department. Sir Lawless Hepper, the head of the department, was accused of falsehood when he gave a favourable report on the scheme to an interim inquiry conducted in 1925. The department was accused to have favoured specific contractors by illegal gratification, as well as of gross financial bungling. (*Ibid.*)

The Corporation and the millowners fully supported Nariman at this stage. The Progressive Party and the Municipal Nationalist Party submitted a joint statement when the Corporation testified before the Inquiry of 1926. The Indian Merchants'Chamber expressed the fury of the businessmen of Bombay against the scheme.

[&]quot; If 1925 was the year of currency issue in Bombay, 1926 was the year of

the Back Bay 'scandal', for thus Nariman's accusations had dubbed the scheme. That year the papers were full of it, and when Nariman was sued for defamation for his remarks made before the Back Bay Inquiry Committee, publicity reached fever-pitch Millowners, small merchants and landlords, all sank their differences over the issue because each had been alienated by government in a different way The Back Bay scandal furnished the nationalists with their greatest triumph in city politics of the 1920-30 decade. As a result of the scandal the Government was put under a cloud, a cloud that was all the blacker because the scandal was exposed by a nationalist."

"Generally speaking, however, the incursion of nationalists into local city politics in Bombay was not marked with singular success." (A. D. D. Gordon, op. cit, pp. 153-54.)

If Nariman, later commemorated by the Nariman Point and the Veer Nariman Road in South Bombay, was the crusader in the Back Bay battle, it was also he who was involved in the unfortunate Nariman episode of 1937 which ousted him from the city's public life. The episode is dealt with separately in this chapter.

BUSINESSMEN AND NATIONALISM (1918-30)

The Congress split of 1918 was not at first absolute in Bombay. It had been setting in for long, and the prestige of the politicians such as Dinshaw Wacha, Sir F. E. Dinshaw, Sir Lallubhai Samaldas and Sir Vithaldas Thackersey was such that their influence in nationalist circles lingered on even after the parting of ways. Whenever an issue affected Bombay in particular, or outraged Indians in general, it was they who chaired protest meetings. Thus, for a time after 1918, the Moderates in conjunction with the nationalists, opposed the Rowlatt Bills. It was only when Mahatma Gandhi launched the passive resistance movement against the Bills that certain moderates like Wacha, Homi Mody, Cowasii Jehangir Jr. and Fazulbhoy Currimbhoy signed a manifesto against passive resistance. They coalesced the Western India Liberal Association into the Bombay branch of the National Liberal Federation. This Association was the main focus of moderate thought during the period under review. A further dividing of ways between the Moderates and nationalists occurred in 1920 when Gandhiji took over the All-India Home Rule League and renamed it as Swarajya Sabha, having complete independence as its goal. A number of members resigned the Sabha, and the Swarajya Sabha split was a completion of a process started with the Congress split of 1918. (A. D. D. Gordon, op. cit, p. 157.)

The Bombay industrialists as a group were overwhelmingly in favour of the moderate line as they enjoyed government patronage. There were, however, several noteworthy exceptions. Both J. B. Petit and Sir Dinshaw Petit maintained their nationalist stance. J. B. Petit was an early associate of Gandhiji and had worked with him on African problems. (Collected Works of Mahatma Gandhi, Vol. XIII (Ministry of Information and Broadcasting, Government of India, New Delhi). Dinshaw Petit, being a big landlord, was opposed to Government's anti-landlord activities. The Morarjis were adherents of economic nationalism. Ratansi Morarji and Tricamdas Morarji were both prominent members of the All-India Home

Rule League. Another notable exception was A. B. Godrej, the maker of safes, and, after 1920, of swadeshi vegetable soaps. In 1921, A. B. Godrej gave a munificent sum of Rs.6 5 lakhs to the Tilak Swaraj Fund. But the millowners did not support either swadeshism or boycott as they were absolutely loyal to the British rule. They were not active participants in the political agitations between 1918 and 1922. Some, indeed, were active opponents. The Liberals met in October 1920 under the presidency of Dinshaw Wacha, and resolved that (i) public opinion should be mobilised against non-co-operation, '(it) lecture committees should be formed for the purpose, and (iii) a fair trial should be given to the new Legislative Councils under the Montagu-Chelmsford Reforms. Afterwards an Anti-Non-co-operation Committee comprising of the Servants of India and industrialists, was elected. (*Kanji Dwarkadas—Gandhiji Through My Diary Leaves (K. Dwarkadas, Bombay, 1950), pp. 33-34.*)

In contrast to the industrialists of Bombay, the Marwari and Gujarati marketeers were pro-nationalists quite consistently during the 1918-22 period. The turbulent currency crisis created by the war resulted in the rationing of the sale of Council Bills, (Council Bills were used for remittances between the U.K. and India, and Reverse Councils for remittances between India and U.K.) during 1917-18. The sale of the Bills was strictly limited to financing of export articles for use in the prosecution of the war. There was a strong agitation by the merchants against these measures. The nationalists in Bombay such as J. B. Petit, S. R. Bomanji, Hansraj Pragji Thackersey and Manu Subedar (Expert in exchange matters, a professor of Economics and an industrialist.) took up this issue into the December 1920 session of the Nagpur Congress, as also in the columns of the Bombay Chronicle. They also ventilated this issue in a public meeting in Bombay. The merchant delegates at the Nagpur Congress expressed their anger against the Government for the post-war readjustment of the exchange rate of the rupee. (J. M. Brown, op. cit, p. 293. This issue is also dealt with more at length elsewhere in this Chapter) The businessmen boycotted financial relations with Europeans and invoked the help of the Satyagraha organisation in the matter of foreign exchange.

The Income Tax Act of 1917 and the subsequent changes were greeted with wide agitation by the Bombay businessmen who regarded any measure of direct taxation with hatred and fear. The traditional accounting system and the pattern of joint-family firm, conflicted with the western mode of business. The new taxation measures were attempts to graft British Taxation Law onto Indian conditions. The administrative changes, necessitated by the war, actually succeeded in bringing many businessmen, brokers and commission agents into the taxation structure for the first time. Consequently several petitions and complaints were sent by the merchants to the Commissioner of Income Tax and the Viceroy. Eminent nationalist leaders and Home Rule protagonists such as Bhulabhai Desai, Velji Lakhamsey Napoo, Lalji Govindji, Goculdas Jivraj Dayal and many others, provided leadership to the agitating businessmen in Bombay. August and September of 1918 witnessed several memorials by about 71 associations, except the Indian Merchants' Chamber and the Bombay Millowners' Association, (A. D. D. Gordon, op. cit.) which were dominated by industrialists and Europeans. In short, the agitation of the

marketeers over the foreign exchange and taxation policy of Government, brought them more closer to the nationalist movement. The industrialists, however, had their own vested interests.

A number of businessmen in the city contributed to the nationalist treasury in the form of the Jinnah Memorial Hall Fund and the Tilak Swaraj Fund, which has been dealt with at length earlier. The Jinnah Hall Fund of 1918-19 had 517 recorded contributions including those who contributed more than once. (*Bombay Chronicle, 21 December 1918, and 2, 6, 7, 8, 9, 11, 13, 14 January 1919.*) Of these, only one, H. P. Thackersey, was an industrialist. In contrast, there were 37 merchant firms and 184 members of merchant associations. Gujaratis, Hindus and Marwaris comprised 45 per cent of the contributors, while 5.6 per cent were Muslims and 30 per cent Maharashtrian Hindus.

Gandhi's ardent appeal for the Tilak Swaraj Fund received a worthy response from the rich merchants from Cotton Green, who gave him four lakhs of rupees, the next largest amount being donated by the jewellers of Bombay. The piece goods dealers were another group of donors, and Gandhi told them that it was they who had made possible the Bezwada Congress promise (March 1921) regarding the Tilak Memorial Swaraj Fund. Gandhi's main followers in this drive were Gulabchand Devchand, who, besides campaigning among the shroffs and jewellers, gave his house (Shanti Bhavan) for the movement, Anandilal Podar (Rs. 2 lakhs), and S. H. Ruia (Rs. 60,000). (*Ibid., 1 and 7 July 1921.*)

A deep involvement of the marketeers in the nationalist movement is further evidenced by the fact that 680 signatories from Bombay signed the satyagraha pledge at the call of Gandhiji, 74 per cent of whom were merchants or merchant firms. (*Ibid., 5 March 1919*.)

The merchants responded guite well to the call of Gandhiji and the Home Rulers at several events. The favourite venue for meetings of the Home Rule League was the Shantaram's Chawl in the heart of the cotton speculation area. The Home Rule League's call for boycott of the Willingdon Memorial, which was debated for many days in Bombay, was also responded to by the cloth merchants and their servants. The cloth merchants led by Mavji Govindji conducted an anti-requisitionist movement by observing a complete hartal in the Mulji Jetha and Morarji Goculdas Markets on the day of the presentation of an address to Lord Willingdon. (Source Material for a History of Freedom, Movement, Vol., II, p. 719.) Invariably the nationalist marches during 1918-22 were organised to pass through the business quarters of old Bombay (i.e. Kalbadevi, Shaikh Memon Street, Girgaum, etc.). At Gandhiji's call, the workers in Mulji Jetha Market and the middle class people signed the satyagraha pledge at the house of S. G. Banker in March 1919. The piecegoods merchants in the Morarji Goculdas and Khimji cloth markets and the share market, observed a complete hartal against the Rowlatt Bills. (Ibid., pp. 746-47.) There was also a complete business hartal in the cotton, cloth and bullion markets along with the Marwari Bazar and Mulji Jetha Market on Gandhiji's arrest. (Ibid., Some of these points have been elaborated earlier in this account.)

With the cessation of agitation in 1919, a Swadeshi Movement was

introduced as a substitute which Gandhiji advocated first in Bombay. It was reported that the Swadeshi Movement was being shaped and handled by businessmen, and many of them had taken the swadeshi vow. However, the businessmen involved in this, included all merchants rather than industrialists. Cloth merchants, jhaveri and other commodity dealers, were in the forefront. (Bombay Chronicle, 20 June 1919.) Unfortunately the booming mill industry ridiculed the Swadeshi Movement through its journal, the Indian Textile Journal

In regard to the boycott movement, the "right hook "of Swadeshi, the pattern was similar: the merchants, particularly the cloth merchants, joined it with enthusiasm after its inception in 1920. (A. D. D. Gordon, op. cit., p. 168.)

Throughout these times the *Bombay Chronicle* was an advocate of economic nationalism.

There was a deep involvement of the marketeers in the agitational nationalist politics in Bombay during 1918-20. There was also a significant co-relation between the leaders of merchants and their associations and the organisers of the All-India Home Rule League and the Satyagraha Sabha. For example, V. P. Shah, Gulabchand Devchand and H. V. Desai, who were close associates of Gandhiji and the nationalist organisers, were also prominent in the Bombay Shroffs' Association. V. P. Shah was later named the Bombay Congress 'Dictator'. The nationalist organisers among the merchants, also included V. L. Napoo (a close associate of Vithalbhai Patel), Manmohandas Ramji<mark>, Lalji Vassanji, Vit</mark>haldas and Mavji Govindji and Naranii Daval who were all connected with the Grain Merchants' Association or the Piecegoods Merchants' Association. Jamnadas Dwarkadas, son of the millowner Dwarkadas Dharamsi (who had fallen on bad times), was one of the most prominent Home Rulers in the city and was an importer of textile dyes. The band of activist Home Rulers and Congressmen among the share brokers and cotton brokers in Bombay also included W. T. Halai, Vithaldas Govindji and Mavji Govindji and Narandas Purshottam, who worked in collaboration with the original band of Home Rulers such as Jamnadas Dwarkadas, S. G. Banker, L. R. Tairsee and Umar Sobani.

The rapprochement between the nationalists and the merchants was partly due to the clash between the latter and the industrial oligarchy in the city. The clashes in the Indian Merchants' Chamber which represented both merchants and industrialists from 1907 (The Chamber was established 1907 bv Manmohandas Ramii in PurshottamdasThakurdas.) and 1932, were, quite well-known. During the period of agitational politics from 1918 to 1922, the tradition of dominance by the industrialists over the chamber, came under attack for the first time. Although the issues were nominally political, many of them related to economic and social frictions. The Indian Merchants' Chamber was granted a prerogative of electing one member of the Bombay Legislative Council under the Reforms of 1919. The nationalist element in the body, mainly merchants, wanted to boycott the Council in keeping with Congress policy of Non-co-operation.

In 1921 the Indian Merchants' Chamber was split again on the issue of the proposed Back Bay development and other proposals, such as the East-West Road. While the industrialists had supported the schemes, the nationalist members of the Indian Merchants' Chamber had exhorted for a satyagraha, if Government persisted with the scheme. (A. D. D. Gordon,

op. cit, p. 171.) A similar skirmish between the two factions of the Indian Merchants' Chamber occurred over the decision of the body to present an address to the Prince of Wales at the time of his visit on 17 November 1921.

The Home Rule or Congress organisers made deliberate attempts on several occasions to woo the merchants, often using the political and economic battle between the merchants and industrialists as a focus for their efforts. Conversely, the merchants appealed many times to the nationalist organisations for help against the industrialists and Government. For instance Bhulabhai Desai, S. R. Bomanji and H. P. Thackersey were involved in the anti-taxation agitation, currency agitation, and the call for satyagraha over the Back Bay issue. (*Ibid.*, p. 172.)

Right from 1917, the Home Rulers such as Jamnadas Dwarkadas, S. G. Banker, Halai, Sobani and Narandas Purshottam used to arouse the merchants against the industrialists and Government. Even Gandhiji himself paid special attention to the cloth merchants, particularly in 1919 and 1921. The involvement of Congress with the economic and political grievances of the merchants, continued throughout the decade 1920-30. It was in 1929 that the nationalists gave additional support to the cotton brokers when they introduced a Bill into the Legislative Assembly to repeal the hated Cotton Contracts Act of 1922.

"While the nationalists and Bombay industrialists were opposed to each other prior to 1922, later events created a climate in which they achieved a rapprochement lasting until 1930 and which at times was close....... This approchement was largely a case of combined forces to meet a common enemy, in this case the economic policy pursued by government in the climate of a deteriorating economy in Bombay." (*Ibid.*, p. 174.)

The collapse of the post-war boom was particularly severe in the Bombay mill industry, which persisted almost upto 1932. There was a slump in demand and a failure of costs to readjust, particularly on account of the rigidity in wage rates. The slump was reflected in a crisis in the share market at the end of 1922. Many industrialists including Sir Chimanlal Setalvad, Ibrahim Rahimtoola and Lalji Naranji faced near ruin, although Tatas and Wadias remained reasonably strong. (S. M. Rutnagur, op. cit.) Generally the picture was one of extreme gloom. The strike of 1925 gave another blow to the cotton mills in Bombay. By 1926, more than eleven mills or 14 per cent of the total number, besides those closed by the strike of 1925, were closed down, throwing more than 20,000 persons out of employment. (Times of India, 9 January 1926.) In addition, seven mills had changed hands and five had been liquidated by 1926. As late as 1929, seven mills were still not working, and the Government of Bombay reported in its White Book that the industry had been severely hit by a period of depression. (Bombay Merchants9 Association Annual Report, 1930.)

The invariable concomitance was unemployment, unrest, and political capitalisation by the nationalists and labour leaders. N. M. Joshi, Jamnadas Mehta, V. J. Patel, Manu Subedar, Bhulabhai Desai and S. H. Jhabwalla, entered the fray. There was a series of strikes, and a generation of labour leaders emerged on the horizon of the city. (A detailed history of labour movement and its relationship with freedom struggle is given separately in this Chapter.)

The Bombay industrialists used the Bombay Merchants' Association, the

Indian Merchants' Chamber and the Federation of Indian Chambers of Commerce and Industry as a forum to fight government policy and European influence. The Assembly was also used with success for this purpose. The Bombay press and the nationalist leaders were woed for support from time to time. Bombay's economic recession came to be attributed to the high exchange ratio, fiscal policy and British protection to Lancashire, after the war. In eply, Government continued to use the arguments adopted by the Babington Smith Committee with regard to inflation, and the need for consumer protection, as well as by the Royal Commission on Indian Currency and Finance, 1926.

In 1925 Purshottamdas Thakurdas, an advocate of the "Bombay point of view ", introduced two money bills into the Legislative Assembly, on behalf of the Indian Merchants' Chamber. He was supported in public forums by B. F. Madon, Prof. C. N. Vakil, Prof. K. T. Shah, Prof. P. A. Wadia, Prof. G. N. Joshi and J. A. Wadia. The Government attempted to split the Swarajist ranks which attempt was foiled, particularly by Jamnadas Mehta. The money bills prompted Government to appoint Thakurdas as the Presidency's sole representative on the Royal Commission of 1925-26. The Indian Currency League was founded in 1926 as a synthesizer of the Bombay and Ahmedabad industrialists and the Swarajists with M. R. Jayakar, Mrs. Naidu and Jamnadas Mehta and J. Dwarkadas. Perhaps its most important propaganda activity was the funding of the Free Press of *India* news agency, founded in 1924, and run by a coalition of Bombay industrialists and journalists. (The other spokesmen of industrialists were the Indian Daily Mail of 1. B. Petit, the Prajamitra of the Tatas and the Indian Social Reformer of Samaldas, Thakurdas and Jayakar.)

The new relationship between the Swarajists and the industrialists was reciprocal—the former needed funds for political activity, while the latter needed support for their point of view in the Assembly. J. B. Petit was donating to the Swaraj Party as early as 1924. The Tatas also contributed heavily towards the Swarajists funds, while the millowners helped Motilal Nehru and Pandit Malaviya to purchase the *Hindustan Times(All-India Congress Committee Papers F. 27 (Naranji to Motilal, 22 March 1925).*

The Indian National Party was founded in April 1926 in Bombay by way of a coalition of Liberals and other responsive co-operators. It was overwhelmingly liberal in membership, with a few of Jayakar's followers. This party enjoyed a certain amount of support from the Swarajists and Independents like Jinnah. (A. D. D. Gordon, op. cit) Its object was to prepare for establishment of Swaraj of the Dominion type. But it was opposed to mass Civil Disobedience. Gandhiji was not associated with it. The other government measures which invited the wrath of the Bombay businessmen was an increase in taxation, stamp duties, court fees and excise duty, in the 1920's. The millowners attributed the slump to unfair Japanese competition through the use of cheaper labour, and the higher rate of exchange. The millowners were also disturbed because the Communists began to get a grip on the trade union movement in Bombay from the strike of 1925. (For details see the section on Emergence of the Communists in this Chapter.)

The Bombay Government, on several occasions, was influenced by the millowners, and in 1925 the Governor, Leslie Wilson expressed strongly against the cotton excise duty both to the Viceroy and the Secretary of State. On another occasion Frederick Sykes, Governor of Bombay,

protested to the Viceroy as well as to the Secretary of State against the exchange rate and tariffs.

BUSINESSMEN AND CIVIL DISOBEDIENCE (1930-34)

Bombay was in the vanguard of the Civil Disobedience Movement launched by Mahatma Gandhi. The salt law was violated in Bombay on the same day (6 April 1930) when Gandhiji broke the salt law at Dandi. Vile Parle was the headquarters of the Salt Satyagraha in Bombay/ Although the satyagrahis in the city wanted Gandhiji to lead the movement in Bombay, he had nominated Jamnalal Bajaj to head the agitation. The eminent leaders in Bombay to be sentenced to jail on the occasion were, K. F. Nariman, Gokulbhai Bhatt and Kishorelal Mashruwala, besides Jamnalalji. These events heralded a mass agitation throughout the city.

With the advent of the Congress campaigning of Civil Disobedience, the Bombay industrialists who were ardent campaigners against the British in the earlier years, quickly reverted to the role they had played during the agitation of 1918-22. This pould probably be attributed to two principal reasons. Firstly, the Great Depression of 1930 had affected Bombay with particular severity generating acute unemployment. The labour force had become highly volatile, its intransigence being fomented by recession, wage cuts, retrenchment and inflation over the years. Consequently, the workers injected an element of violence in the Civil Disobedience Movement from the beginning. Secondly, the movement was accompanied by the boycott of foreign goods and of European firms.

The industrialists argued that the boycott movement tied up valuable capital, and so deepened the depression in Bombay. It also resulted into retrenchment in the boycotted mills. Further, the hartals and boycott of foreign firms created friction between industrialists and businessmen. The Congress and the businessmen, however, countered these arguments and attributed the depression directly to the fiscal policy of the Government of India. " These two interpretations of the depression in Bombay soon became the central planks of a propaganda battle which raged throughout the course of civil disobedience." (A. D. D. Gordon, op. cit., p. 201.)

Even among the industrialists, persons like G. D. Birla, Naranji and Ambalal Sarabhai, felt that the Government itself had forced the depression on the country, and it was only Mahatma Gandhi's movement which had diverted the people from violence to his nonviolent methods. However, the supporters of the Congress campaign were in a minority.

The industrialists were alienated from the Civil Disobedience Movement due to two main reasons. (A. D. D. Gordon, op. cit., p. 203.) Firstly, during the Great Depression, the Government of India maintained a high exchange rate, balanced the budget by merciless fresh taxation, and tied the rupee to sterling after England abandoned the gold standard. The deflationary budget of 1931 raised a storm of protest. Government's rigid approach deepened the crisis. The depression caused closures and liquidation of several mills in the city. The Fazulbhoy, Madhavrao and Scindia mills had been closed in 1929, and in January 1930 the Petits

closed four of their mills. At the same time E. D. Sassoon group notified closures of three mills. By August 1930, a total of 12 mills went out of production. By October, 24 mills or over 25 per cent of the total, had closed. (*Ibid., p. 205.*) Acute unemployment was the natural corollary, which was further intensified by rationalisation of production. Consequently the average daily employment in the city mills, declined from 154,398 in 1927 to 136,774 in 1930; 129,057 in 1931, 129,534 in 1932 and 119,943 in 1933. (*Bombay Millowners. Association Annual Report, 1933.*)

The Bombay Port also experienced a sharp decline in trade, in spite of the fact that the depression forced a constant stream of valuable " distress gold "which passed through the port, and increased the value of exports. The insurance companies were also hit hard. The cotton merchants were perhaps the worst hit. Although no reliable estimates of unemployment are available, the 1931 Census estimated that 1,50,000 people were forced away from the city due to unemployment, and that 54,694 workers were thrown out by industries between 1921 and 1931. (Census of India, 1931, IX, I, p. 948.)

The Indian Merchants' Chamber informed Government in February 1930: "Trade is at a standstill. The cotton mill industry is in imminent danger of being ruined. Unemployment has been on the increase and is still increasing." (See Indian Merchants' Chamber Annual Report, 1950, p. 234.)

The second factor which alienated the industrialists from the movement was boycott and hartals. The Congress policy of boycott was not clearly spelt, and ad hoc expedient measures were adopted, which led to confusion among the rank and file. The Bombay Millowners' Association negotiated with the Congress through Motilal Nehru, who had links with Thakurdas and Birla, in the city. However, with Nehru's arrest, the " disruptive section in the Congress " went ahead with its original criteria of signalling non-swadeshi mills. Accordingly, the Congress workers banned 24 Bombay mills which directly affected 51,000 millhands, which formed more than a third of the total. The aggregate investment by Indians in the banned mills was over Rs.1.8 crores, while 342,000 bales of cotton remained unutilised. This was responded with grave concern by shareholders and millowners. The Bombay Provincial Congress Committee was also embarrassed, and negotiations were opened with all concerned. After negotiations, 15 mills employing 34,000 workers and producing about 25 per cent of the gross production in the city, were kept on the banned list. (Bombay Chronicle, 2 September 1930.) Even as late as October 1931, many mills were still branded as swadeshi for some days and non-swadeshi afterwards. This state of affairs shook the sense of security in the industry during the depression. Hartals further raised several problems for the mills. (A. D. D. Gordon, op. cit., p. 210.)

The foreign cloth dealers also suffered immensely during the boycott. Initially their associations passed boycott resolutions in April 1930. By October, however, they felt the strain of it, as they had to lay off the employees, and large amounts of capital and stocks were blocked. In November, they were forced to approach Vallabhbhai Patel to lift the

boycott in their case. The Bombay Provincial Congress Committee also found itself cast in the role of implementing an unpopular central decision. (All-India Congress Committee Papers, F.G.-150, 1930.) Consequently, in March 1931, Gandhiji, Banker and Jawaharlal Nehru, devised a scheme under which a syndicate of millowners under the leadership of Sir Ness Wadia, was created which was to buy the foreign stocks and re-export them. The scheme, however, proved a failure. (A. D. D. Gordon, op. cit, p. 211.)

The entire Mulji Jetha Market had been closed either by hartals or picketing for four months early in 1932. It was only after four months of continuous closure of Bombay's largest cloth market that Sarojini Naidu was finally able to open a special swadeshi wing at the market. The mills had, therefore, to open retail stores at some places such as the Victoria Terminus.

There were tensions between industrialists and merchants in the Bombay raw cotton market. These added to the intensity of the Civil Disobedience and there were almost constant hartals after the campaign, commencement of the movement. The millowners complained that they were not able to obtain supplies of cotton in order to take advantage of the Swadeshi Movement. The hartals and boycott in the cotton market were initiated by the Bombay Cotton Brokers' Association in concert with the Congress. The matters led to a closure of the market for three days a week, refusal to do forward business and to deal with English firms, permission for the Congress to picket the market, and refusal to do future business on the Liverpool Exchange. (Fortnightly Report, 16 February to 4 March 1932 from Home Department of Bombay Government to Government of India) Thus, the most important market in Bombay was virtually closed, trading being interrupted for 93 out of 159 working days between January and August 1932.

The closure of the cotton market in 1932 was particularly embarrassing to the Bombay Government. It tried every means to reopen the market during 1932. The Governor, Frederick Sykes, urged the Viceroy to solve the problems of cotton traders, and accordingly the Cotton Contracts Bill of 1932 was passed.

The Civil Disobedience campaign also affected almost all other markets to some extent. After Gandhiji's arrest in 1932, the Share Bazar was often closed, and processions of businessmen frequently set out from it. (Bombay Chronicle, 6 May, 21 and 25 June 1930) The Stock Exchange was fairly consistently closed during 1930(It was closed for about three months in 1930, Bombay Chronicle) and again after Gandhiji's arrest in 1932, in spite of the efforts of some shroffs to keep it open with Government support. Share prices were closely related to the political situation. (Bombay Chronicle, 11 July 1930)

Politics and Economics were closely entwined in the bullion market too. The Marwaris were very active nationalists in the Bullion Exchange. The sale of silver by Government had slumped the price of the white metal, and hence the Government came in for criticism. There was enormous "distress sale " of gold by the people through economic constraints. The distress gold was allowed to be exported on a large scale by Government

on the plea that it was necessary to strengthen the rupee. The Congress placed an embargo on the export of gold as there was a cry to save India's gold. (Bombay Congress Bulletin, II, 247, 17 October 1932)

The boycott and hartals engendered uncertainty in business and industry. Even the Bombay Provincial Congress Committee complained to the Working Committee that its position in the matter of swadeshi was hopeless and that the indigenous manufacturers were faced with hardships. The industrialists felt that the ill-effects of the boycott far outweighed the benefit of swadeshi after the initial euphoria had worn off. Purshottamdas Thakurdas, on behalf of the Millowners' Association, wrote: " The continuous Hartals have completely dislocated business and brought about a paralysis of the economic structure if immediate steps are not taken to relieve the situation, it may very soon end in a disaster from which Bombay may not recover for a decade." (Thakurdas to Bombay Millowners' Association, 20 August 1930)

Others who opposed the boycott on economic as well as ideological grounds, included F.E. Dinshaw, Sir Phiroze Sethna, Cowasji Jehangir Jr., Setalvad and Ness Wadia. Dinshaw felt that Civil Disobedience had brought Bombay to the brink of financial ruin. (A. D. D. Gordon, op. cit., p. 218.)

The depression contributed to a noticeable tendency of labour to enter the Civil Disobedience Movement with increasing vigour and violence. Earlier in 1928 the city had experienced a severe riot which was economically triggered, and had killed 298 and injured 739 persons in the city. The 1928 great strike in mills had also wrecked the industry thoroughly. In such an atmosphere there came the Civil Disobedience Movement. The workers began to practice frequent hartals and conduct civil disobedience with increasing violence. The violence was detrimental to the movement as it tarnished its non-violent image. By June 1930 the Congress had not only failed to harness labour as a non-violent cadre in the movement, but also was on the defensive that its campaign had not created unemployment. The Congress tried to gain the allegiance of labour which was rewarded with a little success. The attitude of labour to the boycott and hartals was a very complex affair. This aspect has been separately dealt with elsewhere in this chapter, particularly because the Labour Movement in Bombay has a distinct history of its own.

The millowners felt that their best interests lay in destruction of Civil Disobedience, or in seeking peace between Congress and the Government. In June 1930 the Millowners' Association (Bombay Millowners' Association Annual Report, 1930) issued a statement that the time had come for an unequivocal declaration by the British Government that Round Table Conference was designed to win for India complete independence with Dominion Status. The Government of Frederick Sykes was active in disseminating propaganda linking depression with Congress activities. As early as 1930 the Bombay police distributed a pamphlet, namely, Boycott on British Goods, tarnishing the Congress movement. Sir Sykes in a speech in the Bombay Legislative Council, in March 1932, pointed out the signs of trade migrating elsewhere and the danger of "Bombay being passed by in the returning flood of prosperity". Homi Mody

adopted a similar line of argument.

The *Times of India* and the *Indian Daily Mail* disseminated government propaganda and published series of interviews with industrialists attributing Bombay's economic recession to the Civil Disobedience Movement, The Bombay Chronicle, however, marshalled the Congress arguments effectively. It published a series of articles by academicians such as P. A. Wadia and V. K. R. V. Rao, journalists like Vithaldas C. Bhuta and many nationalist writers. The Bombay Chronicle wrote: " The National Movement has disorganised trade but it has also created a wonderful spirit of swadeshism and boycott which will help trade.... There is a world depression of trade and continuous reduction of prices to meet a continuous decline of purchasing power consequent upon the deflation policy of foreign countries. The (currency?) inflation policy adopted by the Indian Government, the exchange ratio and the growing government expenditure and loans since the end of the war, have produced the effect of reducing the peasants' purchasing power." (Bombay Chronicle, 30 August 1930.)

Congress leaders countered the damaging propaganda of Government and squarely blamed the Government's fiscal policy for the severe unemployment. They explained to the ryots that the low prices were not due to political agitation. In August 1930, Pandit Malaviya and V. J. Patel addressed 1200 cotton merchants at Sewri. Malaviya told them that trade depression had become severe because the masses had lost their purchasing power due to a loss of Rs. 400 crores through exchange manipulation. He also addressed a huge meeting of cloth merchants (Ibid., 12 August 1930.) and another one of shroffs in Bombay. The shroffs and the cloth merchants appreciated the Congress arguments. Hirachand V. Desai, in an extraordinary meeting of the Bombay Shroffs' Association in 1930, explained the adverse effects of exchange ratio on the shroffs, the ruin of indigenous banking by joint-stock banks in collusion with Government and foreigners, and the prejudices of the exchange banks, Income Tax Department, railways and insurance companies, against Indian merchants. He praised Gandhiji's fight which was " meant to save the country from economic ruin ". V. P. Shah and other shroffs were in the forefront of picketing against the Imperial Bank and exchange banks in Bombay. (Ibid., 24 April 1930.) K. M. Munshi also waged a war against the industrialists. He remonstrated Victor Sassoon that it was not the boycott which had closed 24 mills in Bombay, but rather it was over-production and depression. (Ibid., 18 October 1930.) Only seven of the 24 mills were on the boycott list. He argued that the boycott of foreign cloth had done much to stimulate production of cloth by swadeshi mills. (Ibid., 18 October 1930.) The All-India Congress Committee also participated in the economic debate, and it issued a pamphlet arguing that the riots were cooked up by the British in conjunction with the Muslims for breaking the powerful boycott movement organised by the Congress in Bombay. (All-India Congress Committee Papers, F. 2,1932.)

While disseminating propaganda against boycott and hartals, the industrialists under the leadership of Thakurdas and the Indian Merchants' Chamber, sought to end Civil Disobedience by mediating between the Congress and Government. They worked mainly on Gandhiji and Vallabhbhai. M. R. Jayakar, Sapru and Motilal Nehru were also involved in

the process. The industrialists tried to woo the Government and the Congress, and demanded that the Round Table Conference should be convened.

The industrialists and the Liberals had earlier attempted to offer an alternative to the Congress, in January 1930, in the form of the All-Parties Conference. The main organisers in Bombay were Thakurdas, Sethna, Setalvad and Rahimtoola. But the efforts were defeated due to the intransigence of the Marwaris and the Hindu Mahasabha.

After failure of the efforts of the Indian Merchants' Chamber, M. R. Jayakar played a key role in helping Thakurdas contact the Congress. Lalji Naranji and Chimanlal Setalvad and others, tried to impress upon Gandhiji and Vallabhbhai in Bombay, after their release from prison in January 1931, to restore peace. (Thakurdas papers, F. 107.) At one stage, Thakurdas threatened Vallabhbhai that he and his friends might "come out into the open against Congress".(Viceroy to Secretary of State, 4 January 1931, L/PO/53, Private Office Papers.) He also personally reported to the Viceroy what transpired between the industrialists and the Congress leaders in Bombay. It was against this background that the Bombay industrialists greeted the Gandhi-Irwin Pact of 1931 with enthusiasm. (Bombay Chronicle, 6 March 1931.)

After failure of the Round Table Conference, the businessmen were against the renewal of the Civil Disobedience Movement. Even a nationalist like G. D. Birla preferred to continue negotiations with Government through the second Round Table Conference rather than resume the struggle.

The Bombay Citizens' Conciliation Committee was designed by businessmen to establish communal peace which was greatly disturbed, although its motive was to end Civil Disobedience. (Thakurdas to Birla, 4 August 1932.) The Welfare of India League was formed as a " dinner club "(Bombay Chronicle, 2 April 1932.) furnishing a platform for those Europeans and Indians who stood for a system of Government for India, assuring her a place as an equal partner in the British Commonwealth of Free Nations. Throughout 1932, both Birla and Thakurdas continued to mediate between the Congress and Government.

The traders, as distinct from the industrialists, continued to be the backbone of the Congress Civil Disobedience Movement throughout the period. Most of their leaders were sworn Congressmen. Virachand Panachand Shah was, for example, nominated the Congress "Dictator " or head of the War Council in 1930. The other staunch Congressmen and leading merchants included Hirachand V. Desai, Begraj Gupta, Mathuradas Matani, Mathuradas Tricamji, Mulraj Karsondas, Vithaldas Jerajani, Vithaldas Govindji, C. B. Mehta and Velji Napoo.

As Phiroze Sethna wrote to Sapru in February 1931, that the Indian Merchants' Chamber came to be entirely controlled by the Congress clique, throwing out himself, Purshottamdas Thakurdas and Homi Mody. The industrialists further lost their control over the chamber in 1932. The old stalwarts like Manmohandas Ramji, Matani and Manu Subedar, became active radicals, and passed a resolution condemning

Purshottamdas Thakurdas for attending the Round Table Conference. (Indian Merchants. Chamber Annual Report, 1932) They also got the Indian Merchants' Chamber to pass a motion condemning Gandhiji's arrest and the ordinances. (Thakurdas Papers, F. 107(3))

The condition of Bombay's economy deteriorated with the boycott campaign in 1932, which as in 1930, reached significant proportions. Again a vicious circle developed of depression generating support for Congress and its strategy, which in turn, contributed to the disruption of the city's economy. Picketing was resumed, particularly against foreign cloth shops, but in a lesser degree against chemists and druggists. There were protracted hartals in Mulji Jetha Market, and the Stock, Bullion and Cotton Exchanges, Cotton trade was the hardest hit. The Mulii letha Market observed hartal for the first three months of the year, but even when traders began to deal again in swadeshi cloth in April 1932, the threat of picketing dissuaded them from opening the foreign cloth section, and many foreign cloth merchants shifted into Kalbadevi and adjacent areas. It was not until October 1932 that the East India Cotton Association, under satyagrahi zeal, decided to rescind the boycott. The proprietors of the cotton market offered to reduce rents by over half, if traders would return. About eighty of them did return, but they were nervous about stocking goods there and dealt covertly for fear of picketing. English cotton merchants were subject to severe pressure. Some of them were blacklisted for boycott in a Congress leaflet, and the Japanese Consul had to admit that his compatriots were afraid to deal with British companies lest they should also be boycotted. (Judith M. Brown, Gandhi and Civil Disobedience: The Mahatma in Indian Politics 1928-34 (Cambridge University Press, Cambridge, 1977), p. 294) Bombay's European companies, unlike their Calcutta counterparts, were heavily dependent on Indian co-operation, and were ambivalent about resorting to government help in these circumstances. Some of them began to negotiate with their Indian associates for terms of open trade. A few of them, against the advice of the Bombay Government, signed a statement that they shared the national sympathies of their Indian colleagues in the cotton trade, in October 1932, to gain a relaxation. They also agreed, among many other things, to close trade on all Mondays which were observed as . Gandhi Days' in the city. It cannot be said that all the Indian merchants were in favour of the Congress campaign, but the Bombay Cotton Brokers, the Native Share and Stock Brokers, and the Bombay Shroffs' Association, were among the prominent supporters of boycott in the city. The Bombay Government was seriously worried that such groups of businessmen could disrupt the whole markets, and that the cotton market was beyond the control of the East India Cotton Association. (Ibid). As referred to earlier, the Government, therefore, got enacted the Bombay Cotton Contracts Act to gain control over the operations in the cotton market; by this Act it would supersede the Association's Board of Directors to secure free trading. The power was, however, not used because the boycott tailed off from the autumn of 1932. (For details see Bombay Congress Bulletins for 1932, and Daily Reports of the Police Commissioner to Secretary, Home Department, Bombay Government.)

The Governor, Lord Sykes, noted that the Police Commissioner believed

that the Congress had more power than Government in the cotton market. He himself admitted, "That upto the present they have achieved a considerable measure of success, if success is to be measured by interference with normal trade and influence over a particularly susceptible section of the Bombay Commercial community." (Sykes to Lord Willingdon, 13 May 1932, MSS EUR. F. 150(4).) Bombay being the major port affected by boycott, the value of import of piecegoods in India dwindled by about 26 per cent.

Mr. P. A. Kelly, Police Commissioner, reported to M. H. Haig, Home Member, Government of India, that the Gujarati part of the city was as hostile as ever. Not only was the Congress able to show its power in the cloth market and in picketing, but also it continued to publish the *Bombay Congress Bulletin* despite police attempts to track it down and totally destroy its publication network.

From February to March 1933, Civil Disobedience became steadily languid, and the decline culminated in the Poona Conference in July, at which even ardent leaders like B. G. Horniman expressed the desire that the movement be abandoned. (Bombay Chronicle, 10 and 13 July 1933.) In September 1933, Walchand Hirahand, Vithaldas Govindji and Subedar, supported a deputation of Indian Merchants' Chamber to persuade Gandhiji to call off the movement.

It is interesting to note here that the millowners' leaders such as Homi Mody and Thakurdas, did a good deal of exercise to bring about a bilateral agreement between Bombay and Lancashire mill interests.

In return for this trade agreement Lancashire was to offer no resistance to the Government of India Act of 1935. They kept up their word in the debate in the House of Commons. (D. R. Mankekar, Homi Mody—A Many Splendoured Life (Bombay, 1968), p. 73.)

It may be concluded that the working out of the Civil Disobedience Movement was extremely complex in Bombay City. There was acute unemployment, and the labour force was a victim of over-rapid industrialisation in a confined area. The market structure was unable to serve the needs of industry upon which the city was dependent. The worsening economic situation shattered the ability of the city to withstand the depression. The depression itself had a paradoxical effect upon the Civil Disobedience Movement. It did create unrest amongst the industrialists as their profits depleted. "Finally it sapped the will of Bombay to fight, taking away the Congress supporters in the markets who were so vital to a non-violent campaign." (A. D. D. Gordon, op. cit., pp, 236-37.)

EMERGENCE OF COMMUNISTS

(This author is indebted to Richard Newman for the information about the early lives of the Communists, which he collected by personal interviews and newspapers.)

Tilak was the main inspiration of the young radicals in Bombay. Admiration for Tilak led the Bombay Students' Brotherhood into a clash with the authorities of the Wilson College which developed into a students' campaign, and the intervention of the nationalist leaders into their affairs. The circumstances helped the emergence of S. A. Dange and R. S. Nimbkar. These two youths with considerable intellectual calibre and oratorial powers were to become the most prominent Bombay Communists of the inter-war years. Nimbkar was flamboyant, restless and eager for results, while Dange was calm, patient, meticulous and thorough. Dange's personality has always been something of an enigma. Dange and Nimbkar were joined by K. N. Joglekar from Pune and L. M. Pendse from Bombay, in matters of labour organisation.

Almost all these future Communists were active non-co-operators. They had reservations about Gandhiji's methods, but they were impressed by the magnitude of his movement and its potential as an instrument of reform. It was for these reasons that they were all the more disheartened when the Non-co-operation Movement was temporarily abandoned in 1922. Nimbkar and Pendse were involved in the Mulshi Satyagraha in Pune district, while Nimbkar became the secretary of the Maharashtra Provincial Congress Committee for about two years and supported M. R. Jayakar's responsivist group in the Swaraj Party.

Some other young radicals in Bombay were also emerging. Their mentor was R. B. Lotwala, a successful businessman but an avid reader of socialism. He encouraged study groups and subsidised socialist periodicals, and built up a library out of his own money. His secretary, C. Q. Shah, an enthusiastic convert to Marxism, had joined the student coterie as its local ideologist. S. A. Dange, K. N. Joglekar and T. V. Parvate, with the financial support of Lotwala, launched a monthly newspaper, the *Socialist.* S. V. Ghate, a Mangalorean graduate working in a tea-shop in the city, and S. S. Mirajkar, a non-Brahmin, were among the early converts to communism. Mirajkar could win over the millhands with his rhetorics and histrionics, and was successful in organising many trade unions.

While Marxism provided an intellectual justification for organising industrial workers, most of the radicals were participants in the Non-cooperation Movement. They had also a background of public work. They had earlier attended the All-India Trade Union Congress which met for the first time in October 1920 (One of Tilak's acts of his last days had been to plan formation of a trade union federation in Bombay. Unfortunately he did not live to attend the first meeting of the All-India Trade Union Congress.) in Bombay, although they could not play a significant part in the work of its federating unions until the middle of the decade.

Undoubtedly the Bombay Communists were not so much Communists as nationalists before everything else. They did not make any efforts to Bolshevise the Indian Trade Union Movement. (N. M. Joshi, Joshi to H. W. Lee, 25 February 1926.)

Moreover, for most of the time, the Bombay Communists were not committed to any firm political ideology or strategy. They hesitated for long whether to work independently of the national movement or to collaborate with the nationalists. They found that the revolutionary potential of the proletariat in Bombay was very much limited on account

of caste differences and lack of class consciousness. Probably, therefore, they remained firmly in the nationalist camp. Although the Communist Party of India was established in 1925, it was to remain in the background (Bombay Chronicle, 8 June 1927, resolutions of the Communist party of India.) and the Communists decided to function within the broad current of nationalism.

Under these circumstances, the radicals under Dange were hoping that the Congress resolutions passed at the Nagpur and Gaya sessions would set in motion a programme of labour organisation. (The Indian National Congress 1920-23 (All-India Congress Committee 1924), pp. 34, 237.) started campaigning within the Congress hierarchy for implementation of the labour resolutions. By the middle of the 1920s, most of the Communists became members of the District Congress Committees in the city. There were 17 of them in the Provincial Congress Committee. (Richard Newman, op. cit., p. 107.) They ventilated their proposals in the AICC, under the leadership of loglekar and Nimbkar. They also endeavoured to gain some foot-hold in the Legislative Council. But they were frustrated by a hostile majority in the AICC. Hence the Communists had to rely increasingly on a nationalist party of their own creation, inside the main body of the Congress. They experimented with many political forums in the 1920s, but the only one to achieve any momentum was the Workers and Peasants Party of 1927-29. (Ibid., p.

Dange and some other Communists were arrested in March 1924, tried at Kanpur and were declared guilty of participating in an international conspiracy. Dange was in jail until May 1927. This was a serious set-back to the Communist movement.

After Dange's release in May 1927, the Bombay Communists received considerable help from abroad, including the Communist Party of Great Britain. Under the guidance of the Communist visitors from England, the left wing faction of the Bombay Congress was reorganised into the Workers and Peasants Party. The latter organised new unions in the docks, printing industry, tram services and municipal workers. The Communists attempted to supersede N. M. Joshi and the moderates as the controlling influence in the AITUC. (*Ibid., p. 171.*) Their aim was to infiltrate the labour movement in the city. Much of their work was of a propagandist type, educating the workers against the antagonisms created by a capitalist system.

The policy of the Bombay Communists can be summed up as: the use of specific grievances to build trade unions and a genuine working class leadership. On the wider political level, they hoped, through the vehicle of the Workers and Peasants Party, to develop class consciousness and give the masses a decisive role in the national movement. (*Ibid., p. 110.*)

Assertions by Labour: The cotton textile industry was in the grip of a depression from 1922. The entire period upto the end of the decade was plagued by stagnation and glut, and the resultant measures of economy by the mills. The millhands on their own part, became assertive of their rightful share in the products of their labour. The inevitable concomitance was a struggle between the employees and the owners. The entire

decade was, therefore, characterised by fateful strikes, some of which are of great historical importance.

As it was to be expected, the millowners announced the abolition of annual bonus in July 1923. The Millowners' Association firmly asserted that the payment of bonus was dependent on 'profits and goodwill'.

Both were now in short supply. They made no secret of the fact that they were contemplating a cut in regular wages in the course of time. This produced a ripple of concern among the millhands. Labour leaders and politicians in the city such as Joseph Baptista, N. M. Joshi, Ginwala, Kanji Dwarkadas (a labour representative in the Legislative Council) and S. K. Bole, tried to organise opinion against the millowners. Some of them persuaded the millhands to avoid intransigence and wait till the intensity of the depression is reduced. But the audiences were unreceptive and in no mood to surrender their bonus without a struggle, a course which the leaders regarded as disastrous, since it was obvious that the employers were waiting for an opportunity to close the mills and clear their accumulated stocks. (Richard Newman, op. cit., p. 142.) Baptista and others sought for the intervention of the Governor. The latter refused to oblige because he saw no wisdom in risking his prestige at a moment when the owners were utterly implacable.

The inevitable happened. Trouble began in mill after mill from 17 January 1924 and by 1 February the industry was at a standstill in Bombay. (This account is based on issues of the Bombay Chronicle and Times of India.) As the strike was a protracted one, the millhands started forsaking Bombay for their villages, and the exodus started mounting.

The results of the Settlement Committee, appointed by the Governor, were not tangible, but only of an academic and legalistic nature. The workers started showing signs of despair, and riots broke out in several parts of the mill area. The millowners' stratagem was ultimately successful. (Richard Newman, op. cit., p. 148.) On 17 March 1924, a trickle of men began to enter the mills, and within a few days the frustrated workers resumed work. The middle-class leaders comforted themselves that their strategy had own for labour' the principle of arbitration'.

It is obvious from the survey of the labour movement in the period that although many of the labour leaders were actively associated with the nationalist movement, the millhands did not have an open involvement in the political organisations. The radical Congressmen like Joglekar, D. M. Deshpande, V. H. Joshi and D. R. Thengdi, who had Communist leanings, were, however, actively associated with the trade unions.

The Strike Against Wage Cut-1925: The Bombay Millowners' Association announced their intention to cut wages and reduce hours, or both. The millowners attributed the 'deplorable condition' of the industry to Japanese competition, foreign exchange policy of the Government of India and the excise duty. The millowners further came with a proposal, on 29 July 1925, to reduce the dearness allowance. Their decision was criticised in the press universally. (Case Against a Wage Cut, AITUC (1925), pp. 2-11.) The workers had no option but to resort to a general strike. This time

only a few Swarajists like Satyamurti tried to seek a political solution to the problem through the Swaraj Party. But they were brushed aside by the millhands themselves. The latter had a well ventilated and clearly defined grievance, an erosion of their earnings. Ultimately the strike became complete by 1 October 1925. As the Bombay Chronicle reported, " We cannot recall any strike of such magnitude being produced in such an atmosphere of serene compliance; there is no heat, no sensational collision." The workers migrated to their villages during the strike. Altogether about 60,000 workers deserted the city. (Bombay Chronicle, 23, 24 September, 17 October 1925. Bombay Police Secret Abstract of Intelligence XXXVIII, pp. 611-12 (28 September 1925).) It was futile for labour leaders to conjure up a compromise, and they concentrated mainly on relief to the needy workers. They received contributions from several sources in the country and abroad, particularly from the International Federation of Trade Unions in Amsterdam and the International Textile Workers' Federation in London. The Municipal Corporation under the mayorship of Baptista, employed many strikers on reclamation projects and other public works in the city.

The Governor was widely criticised for his inaction. As a matter of fact he was persuading the Government of India in the matter of abolition of the excise duty. The latter obliged to do so on 1 December 1925, and the Millowners' Association immediately agreed to restore wages to their old level. The strike had been another remarkable victory for the millhands, remarkable not only for its outcome, but also for the praiseworthy relief work. " Even at a time of economic crisis, the millhands could not easily be brushed aside." (Richard Newman, op. tit, p. 159.)

The successful conclusion of the strike of 1925 inspired the leaders to organise a permanent union. Accordingly a well-organised body with economic objectives emerged in the form of the Bombay Textile Labour Union (BTLU) by amalgamating the Madanpura Union, the Bombay Textile Workermen's Union and the Girni Kamgar Sangh.

Great Strike of 1928: The Bombay millowners had to reconcile to the harsh realities of international competition and technical innovation in the mid-1920s. The millhands were also confronted with the grim economic situation which made necessary to organise themselves into unions. Consequently the Bombay Millowners' Association increasingly became the mouthpiece of the industry and a forum for evolving a common approach to the problems. During 1927, there was a growing involvement of young Communist members of the Provincial Congress Committee, in the industrial life of Bombay. The Workers and Peasants Party, under inspiration from British Communists, became vigorous in organising new unions and infiltration into old ones. The Communists strived hard to supersede Joshi and the moderates, as the controlling force in the AITUC and its provincial subsidiary. (Bombay Police Secret Abstracts, XL, 1927.)

The rationalisation programme and efficiency system in the Sassoon group mills and the Spring, Finlay, Kohinoor, Apollo and Manchester mills, sparked off sporadic strikes. (Bombay Chronicle, 5 January 1928.) The Workers and Peasants Party and radical Communists favoured an immediate show-down with the mill-owners, while there was an acute

rupture in the Mahamandal, wherein Joglekar, Mirajkar and their allies subscribed to such a course of action. There were acrimonious charges of Bolshevism and counter-charges of strike-breaking.

N. M. Joshi believed that technical reforms were in the long term interest of the workers. An honest humanitarian that he was, his paramount concern was the prevention of poverty and suffering of the workers, and he was more inclined to compromise than to counter-attack. The Communists, on the other hand, believed that nothing short of a general strike would save the workers from piecemeal defeat. It is true that the Communists were still only partners in the industrial relations in the textile industry. But with the spread of rationalisation and the collapse of sporadic strikes in 1927-28, the millhands began to listen to the Communists, with a new respect. "It was, therefore, to Dange, Nimbkar and Mirajkar rather than to Joshi, that the millhands turned for advice as the industry slid into the greatest crisis of its history." (Richard Newman, op. cit. p. 178.)

The millowners also launched a strategy of 'nibbling off' wages, extra rules and stricter discipline. A number of factors were contributing to the rising tempo and bitterness of industrial conflict, and it was realised that the Communists' predictions were to become a reality. Hence the Mahamandal voted to declare a general strike.

Bombay's greatest strike began to evolve on 16 April 1928. The sudden spread of the strike was neither a Communist plot nor a show of class solidarity; it was only a conglomeration of sporadic disputes over economic matters. It was due, as much to management policy, as to the Communist urging, the ineptitude of the police and the threat of unemployment.

Eventually a Joint Mill Strike Committee was appointed on 30 April. It included moderates like Joshi, Ginwala, Asavale, Munawar and S. V. Parulekar; militants like Dange, Nimbkar, Mirajkar and Bradley; and others like Jhabwalla, Alve, K. A. Desai, K. R. Avasekar and P. T. Tamhanekar. It was within a day or two that the seventeen demands that set out the strikers' case were published. The Joshi-Dange partnership became, as time went on, something more than an alliance of convenience. These two men, so different in age and attitudes and yet so alike in their qualities, developed a mutual understanding, and drew upon each other's intellectual capacities to master technicalities of the industrial dispute.

The Millowners' Association played its tactics to divide the union leaders, but to no tangible results. There were recriminations and well-worn arguments between the owners and the unionists during their meetings. But the only result was a hardening of the strike. (Richard Newman, op. cit., p. 199.) The Strike Committee organised picketing and relief operations. The millhands had started migrating to their villages right from May. The Government estimated that 50,000 workers spent the strike away from Bombay. (Ibid., p. 202.) The Strike Committee provided rations and food to the striking workers out of public contributions. A good amount of contribution was received by Joshi from foreign countries like England, Belgium and the U.S.S.R. The Social Service League also performed a very good job by providing relief. The number of strikers

receiving doles rose to 30,140 on 4 July.

While there were diehards among the millowners, cracks began to appear in the carefully preserved facade of the owners' intransigence. The managements with lesser efficiency had always resented standardisation because it compelled them to increase the wages on parity with the common level. Such kind of owners captured the opportunity of the deadlock in negotiations, and desired to make separate agreement with the Strike Committee.

Dange and Joshi drafted a standardisation scheme and pitted it against the owners' version, item by item. They envisaged a wage level that was higher than the owners' proposals by 30 per cent. (*Ibid., p. 206.*) In the course of time millowners and strikers were coming to the point of exhaustion.

The Millowners' Association decided to reopen the Morarji Goculdas mill, on 20 September as a test case because its pay and conditions were already close to standard levels. Eventually the other owners were too exhausted to wear the strike in this Way, and they agreed to attend the new conference of owners and labour leaders as proposed by Government. The conference agreed that the Government should appoint an independent body, the Bombay Strike Enquiry Committee, to examine the standardisation scheme and the seventeen demands of the unionists. The Committee recommended that the wages were to be on par with those in March 1927, except for certain categories. Cases of disputes were to be referred to the Committee for adjudication. The agreement was signed by the General Member of the Bombay Government, Joshi and J. B. Petit, on 4 October 1928. Accordingly the mills reopened officially on 6 October.

"The settlement was a victory for the millhands, in spite of its qualifications. The owners had been forced to accept terms which they had rejected at the beginning of negotiations; wages had been restored to their former levels, if not quite to the levels of 1925 The whole issue of wages and working procedures was now on the anvil of the Enquiry Committee, where Dange and the other unionists could hammer it into a more acceptable shape.

" The most remarkable feature of the strike was undoubtedly, the behaviour of the men. In depriving their employers of the output of 22 million working days, they sacrificed Rs. 3.5 crores of their own wages." (Richard Newman, op. cit, pp. 207-08.)

The workers' commitment to the strike was impressive, and gave the lie to the first hasty judgement of the officialdom that the issues were 'not so much economic as political'. (Labour Office to Government of India, 23 April 1923, H. Police, 8/VIII/1928, National Archives of India.) The Communists and radicals might have prophesied the strike, but it was the millhands who launched it and the jobbers who brought about its consummation. Rationalisation and retrenchment provided the foundation of protest, standardisation, the unity of purpose, and the jobbers and the Strike Committee translated these elements into a form of industry-wide organisation. (Richard Newman, op. cit., p. 208.)

The strike radically altered the balance of power among the unions. The Communists were transferred from a faction of Congressmen to a band of popular heroes. Dange wrote, "The strike was not our creation, but we were the creation of the strike." (Meerut Communist Conspiracy Case, Statement, p. 2426.) The Communist alliance with Joshi and the moderates, strengthened their own position, and they could give a successful resistance against the mighty Bombay Millowners' Association. The Communist orators found an eager audience in Bombay. They forced the millowners to recognise them as the spokesmen of millhands.

Labour Movement on Trial: Although the outcome of the strike of 1928 was a victory for the workers and the unionists, it led inexorably to a new phase of conflict for which the Communists were extremely well prepared. The ambiguities of the settlement made themselves to be felt as soon as the workers resumed work. The workers discovered that they were required to implement the 'efficiency systems'. The Communists, very soon, started to combat the settlement terms, and started preparing for another revolt against rationalisation. Their principal motive was to organise the working class, and they realised that negotiations as well as agitation could be a means to that end. The discontended workers appeared to have thrown their lot to them. Encouraged by such circumstances, the Communists captured the Girni Kamgar Union (GKU), and converted it into an instrument for conflict between the workers and the employers. Dange and Nimbkar gained a tremendous influence over the mill managements, while Joshi and Bakhale were being completely ignored. This was not to the liking of the Labour Office of Government. However, the GKU became so influential that employers' best hope of controlling the workers, lay in the Communists. (Richard Newman, op. cit., p. 212.)

While the Strike Enquiry Committee was arbitrating in various disputes, it had no jurisdiction over the issue of victimisation. This lacuna forced workers to align with the GKU. It became a vital force in the daily life of the mill area. (It should however be admitted that the GKU never really succeeded in wresting the Muslims from the BTLU, North Indians and the backward class workers were also outside its fold.) The union membership swelled to one lakh in January 1929. (Labour Gazette, VIII, 5 (Jan. 1929), p. 457.) The Communists very methodically educated the workers to organise and manage branch unions. The Kranti was an organ of Communist propaganda.

At this juncture, the non-Brahmin reactions against the Communist leadership began to come to surface in Bombay. The *Kaivari*, a Marathi weekly edited by D. S. Javalkar, began to attack the high-caste characteristics of the Communists. This movement had the blessings of B. V. Jadhav, a minister in the Bombay Government. *(P. G. Kanekar to N. M. Joshi, 18 Mar. 1928, Joshi Papers.)* The Workers and Peasants Party as well as the GKU felt some impact of the movement.

The Hindu-Muslim riots which broke out in February 1929 were the second instance of communal tension and a major crisis in radical labour movement in general and GKU's activities in particular. Although the Union's authority had proved stronger than communalism, the riots did

cause much heart searching among the Communists.

The incarceration of the Communists in the city in connection with the Meerut Communist Conspiracy on 20 March 1929 had far-reaching consequences on the labour movement as well as political life in Bombay. All the senior leaders including Dange, Joglekar, Nimbkar, Mirajkar, Alve and Kasle were arrested. (Pendse, V. H. Joshi and B. T. Ranadive were left out.) The action was part of a Government plan which had been maturing since the previous May. The Meerut arrests were the prelude to a third phase of industrial strife which culminated in the general strike of 1929. The persons who succeeded to the leadership of the Communist movement lacked influence, a fixed strategy and tactical finesse of Dange. (Richard Newman, op. cit., p. 237.)

However, the junior leaders like G. L. Kandalkar, Pendse, V. H. Joshi, V. K. Tawde, Tamhanekar, S. V. Deshpande (He was not so close to the Communists as to the Congress. In fact he was a member of Provincial Congress Committee.) and B. T. Ranadive, rallied quickly. Ranadive had just graduated from the Bombay University, and was a man of exceptional intellect, a brilliant debater and a voracious worker.

The Strike Equiry Committee published its report on 24 March 1929.

This committee approved rationalisation as well as standardisation, but recommended the postponement of wage cut incidental to standardisation as a gesture of goodwill. The reactions of the GKU as well as the Mill-owners' Association were of a mixed nature. Further negotiations were initiated between the two. However, there was a resentment among the unionists at the victimisation of union workers in the Wadia and Currimbhoy groups. Sir Homi Mody, chairman of the Milliowners' Association, was a hard nut to crack. Henceforth the problem of victimisation became the main issue in industrial relations. (Richard Newman, op. cit., p. 238.) The GKU had been preparing its members for a strike, and ultimately decided to call a strike from 26 April 1929.

The 1929 strike was a turning point in the conduct of industrial relations. This was the first strike of millhands called by a union's orders to defend its own existence. The workers showed an impressive discipline; there were no processions, no picketing or violence. However, as regards the desirability of the strike, sober labour leaders like V. B. Karnik accused the GKU leadership of recklessness, sectarianism or blind obedience to the revolutionary policy advocated by the Communist International in 1928. (V. B. Karnik, Strikes in India (Manaktalas, Bombay, 1967), p. 200.)

The Miiiowners' Association took an aggressive attitude after the strike became a reality. They launched a vigorous propaganda campaign and organised the Blue Flag Union. They recruited strike-breakers from distant places like Bangalore, Ahmedabad and Indore. (Labour Office weekly report, 17 Aug. 1929) These tactics gradually reduced the scale of the strike. Naturally the union was driven to wage a battle for its own existence. There were growing tensions in the mill area, and street affrays were a daily occurrence. Some of the miiiowners exploited communalism and started recruiting Muslims. A new outburst of communal rioting had already been in progress when the strike had broken out, and it was only

a matter of time before it developed into clashes between Muslim workers and Hindu strikers. (Bombay Riots Enquiry Committee Report, 1928-29, p. 19. Bombay Chronicle, 2 May.) Dr. B. R. Ambedkar also urged the backward class workers to return to work. (Richard Newman, op. cit., p. 247.)

Union appeals for solidarity of workers fell on deaf ears. The millhands were finally forced back to work on the owners' terms. Thus, the GKU destroyed its own foundations. The failure of the strike left the union penniless and demoralised. It was a shattering blow to the working class in the city. To make matters still worse, the cotton textile industry was about to slide into the vortex of the world depression, and the workers were helpless to resist wage cuts, lay-offs and mill closures that were to be imposed upon them during the next few years. (*Ibid.*, p. 249.)

As the strike crumbled, recriminations flew thick and fast among the Communist factions. The new leaders were in no way as skilful as those imprisoned at Meerut. None of them was a substitute for Dange in either ability or energy, or a feeling for popular mood. Naturally fratricidal squabbling did nothing to improve their performance. By the end of 1929 they appeared to be scattered and powerless. Undoubtedly, however, "their experience remained to form a backbone for the organisations of the next decade." (Ibid., p. 250.)

There is a general supposition that there was a close relationship between the Bombay millhands' unrest and post-war nationalism and communism. Richard Newman, (Ibid., p. 250.) however, shows in his study that the Bombay millhands were hardly touched by nationalist agitations. The two main currents in the Congress—the Gandhian and the Swarajist— ebbed and flowed around the edges of the mill area and carried off very few of the millhands. Those workers, who were drawn into an alliance with the Congressmen, apparently acted from class motives rather than from the desire to topple the British rule. " It is an even grosser distortion to suggest, as some writers have done, that the AITUC was an industrial wing of the Indian National Congress and that its foundation was symptomatic of the spread of rationalism to the working classes. In Bombay at least, the majority of AITUC leaders were either not Congressmen at all, or Congressmen who were far removed from the mainstream of their movement. Their motives in founding the AITUC were as much to strengthen their position against the pro-Gandhian elements in local politics as to contribute to the spread of nationalism." (Ibid., p. 263) There is also no evidence to show that the mill workers were influenced in any way by Communist ideas and methods in 1919 and 1920. Price inflation. and not Marxism, was the cause of unrest in the immediate post-war period. The real importance of the political activities lies in the changes of attitude which were being germinated within the millhands. Many activists in the Non-co-operation Movement established the first links between the workers and the nationalists and Communists. They also formed a nucleus of experienced organisers who could induct millhands into political demonstrations.

Communal Riots of 1929: The communal tension between the Hindus and Muslims, which broke out in February 1929, was a great stigma on the fair

name of Bombay whose cosmopolitan population usually maintained communal harmony. It was rumoured that Pathans were kidnapping children. The kidnapping scare had culminated on 3 February 1929 in Pathans being specially singled out for attack. (Police Report on the Bombay Riots of February, 1929 (Bombay Government, 1929,) p. 12.) The Commissioner of Police opined that the Pathans were singled out because they were employed as blacklegs by the Burmah Shell Company, the Standard Oil Company and the Indo Petroleum Company, in place of the employees who were on strike at the instigation of the Communists. (Ibid., p. 12.) The strike leaders were annoyed that the Pathans were enabling the oil companies to carry on. Consequently there were several stray attacks on them from January itself. The guiet locality of Sewri was converted into a battlefield by the strikers. As the situation worsened further, the Governor summoned military regiments from Pune and Deolali on the 7th. Besides, district police were also deployed along with the city police. In spite of these arrangements disorder showed no signs of diminution. A stern curfew order enabling the authorities to 'shoot at sight' was clamped. This had a salutary effect. The situation was so tense that military pickets were gradually withdrawn only from 17 to 20 February, while the district police were retained till the 27th. The riots took a heavy toll of life and property as 149 persons lost their lives. The number of injured persons, as per hospital returns, rose to 739. Property worth about Rs. 4.63 lakhs was looted in Princess Street, Dongri, Nagpada, Pydhonie, Maharbourij Agripada and Lamington Road areas. (For details see the Police Report on the Bombay Riots of February 1929.)

Animosity against the Pathans in the mill area was essentially economic in character, an outgrowth of strikes past and present. (Meerut Communist Conspiracy Case, p. 951-T.)

The tragic episode of February was repeated shortly in April-May 1929. The old tensions began to reappear among the millhands during the course of the 1929 strike of mill workers. Street affrays became a daily occurrence. The serious riots of February had left behind a feeling of mistrust amongst the lower classes of both the communities, which culminated in a serious riot on 23 April 1929. The hooligan element took advantage of the disorder, and the trouble spread to other parts of the city. There was a fresh series of attacks and counter-attacks on 27 April, and it was only a matter of time before it developed into clashes between the two communities.

Concurrently the Girni Kamgar Union (GKU) under Communist domination had launched the general strike of millhands (26 April 1929). During the strike some millowners selected Pathans as picketers and brought in gangs of Muslims to replace Maratha weavers, from the Konkan. Many Muslims were recruited in Madanpura for work in the northern mills, and police escorts were provided for them to and from suburban railway stations. (Richard Newman, op. cit., p. 246.) This contributed immensely to the communal tensions in the city.

Under these circumstances, the Hindu millhands driven to desperation fully participated in the riots. The situation did not return to normal until 9 May. The military was on duty from 3 to 18 May. The Government

appointed a Court of Enquiry under the Trade Disputes Act, presided over by a Judge of the Calcutta High Court.

But the pertinent point here is that these tragic episodes preceded the fateful mass Civil Disobedience Movement which was to take deep roots in Bombay.

RE-EMERGENCE OF MAHATMA GANDHI

The Council entry programme of the Swarajists had proved a disillusionment. The Congress was groping in the dark for quite some time, while Gandhiji was watching the situation. Government increased repressive measures against trade unionists and Communists which culminated in the arrest of Dange, Joglekar, Nimbkar, Mirajkar, Alve, Kasle, Jhabwalla and many others from the city in connection with the famous Meerut Trial. The Viceroy announced the intention of convening a Round Table Conference, but refused to concede the demand for Dominion Status.

Under such circumstances the year 1929 witnessed the re-emergence of Gandhiji as the undisputed leader of the Congress and India. The Bombay Provincial Congress Committee along with nine other provincial Congress Committees voted for Gandhiji as the president of the Lahore Congress of 1929. It was, however, at his will that Jawaharlal Nehru was elected in his stead. The Lahore Congress abrogated the Councilentry programme and defined Swaraj as "complete independence".

The All-India Congress Committee, which met at Bombay in May under Gandhiji's (The year 1929 also witnessed brisk activity in the propagation of khadi and boycott of foreign cloth in the city. Gandhiji opened the Khadi Bazar organised by the Bombay League in the Jinnah Hall and later a khadi printing and dyeing factory at Girgaum. The Foreign Cloth Boycott Committee which met at Mani Bhavan on May 23 and 24 under Gandhiji invigorated the boycott programme. He also opened the Umar Sobani Library in the newly constructed building in the Congress House compound.) leadership, resolved that in view of the cruel campaign of repression and barbarous treatment to the All-India Congress Committee members and the Meerut trail detenues, nation should be prepared for a prolonged Civil Disobedience Movement.

CIVIL DISOBEDIENCE MOVEMENT

The Civil Disobedience Movement was the zenith of Gandhiji's achievement in his political life. It was a crowning point in terms both of the establishment of his absolute leadership and of the universal acceptance of the preaching of truth, non-violence, swadeshi and khadi,and the brave and fearless defiance of authority and evil. Mass Civil Disobedience was a grand saga of stoic determination and peaceful resistance. Bombay, which had besmirched its name in 1919 and 1921 (and later in the Quit India Movement), again came in the vanguard in this movement. The citizens withstood the most cruel reprisals of Government with a mounting zest. "The city wrote patriotic poetry with its blood. Bombay's part in the salt satyagraha was a model for the rest of India-raids on the

Wadala salt depot, boycott and picketing, *bhoi-patrikas*, *prabhat pheris* and mass processions, *desh sevikas* and *vanar senas*, 'war councils', 'dictators' and Congress bulletins, making the textile mills sue for peace and leaving the Government totally helpless. Its enthusiasm in 1930 and in the years following was unique, not bettered in any other part of the country or at any other time, except perhaps in 1942-44—but the latter was stained with violence. " (K. Gopalswami, op. cit., p. 239.)

It was in accordance with the proclamation of independence at Lahore that Gandhiji asked the Congress Working Committee to fix January 26, 1930 as the "Independence Day ". Gandhiji tested public temper by seeking response to the "pledge " on that day in Bombay and other places. The celebration of the "Independence Day " (After three decades, the Constitution of India was adopted on 26th January which has since been celebrated as a Republic Day.) made it clear that the time was ripe for Mass Civil Disobedience and that the breach of the oppressive salt law (The Bombay researchers propagated that as early as 1836 the Salt Commission had recommended that Indian salt should be taxed to enable English salt to be imported in India. The imports of English salt was also intended to boost up the traffic of British ships. Thus, Bombay provided the economic and political justification for violation of salt law.) would be a symbolic appropriate measure.

On 14 February, the All-India Congress Committee at Ahmedabad gave Gandhiji and his followers full powers to initiate civil disobedience wherever and in whatever manner they chose. All Congressmen were to adhere to complete non-violence, notwithstanding any provocation. Boycott of law courts and schools was also recommended. In pursuance to the "charter of freedom", as Gandhiji termed it, which was given to him by the Working Committee, he wrote to the Viceroy to concede the substance of independence immediately, failing which a mass movement was contemplated. On hearing from the Viceroy's private secretary to the contrary, Gandhiji set out from Sabarmati to the Dandi beach on 12 March, where he proposed to make salt in defiance of the salt laws. Gandhiji formally infringed the law on the Dandi beach on 6 April, and this was a signal for the mass violation of the salt laws throughout the Presidency (Bombay—1929-30: A Review of the Administration of the Presidency (Bombay Government, Government Central Press, 1931).

The inauguration of Civil Disobedience is an important landmark in the history of Bombay. The advent of the movement generated a polarisation of political, economic and social forces in the city. Civil Disobedience along with the devastating Great Depression affected Bombay with great severity. Unemployment incidental to depression was a significant political factor because the labour force was highly volatile. The volatility was built up from years of inflation, recession, wage cuts and retrenchment. The Government had failed to solve the city's pressing social problems. Hence civil disobedience also brought in its trail an element of violence. Secondly, it also brought with it boycott of foreign firms and goods, while Government and industrialists vociferously propagated that civil disobedience had intensified the evil effects of the depression. The Congress had a ready audience for the view that Government's fiscal policy was the root of the depression, amongst the

marketeers and the middle class society. It is, therefore, particularly necessary to furnish a rather comprehensive narration of the ominous Civil Disobedience Movement in Bombay.

The mass movement was inaugurated by Jamnalal Bajaj on 6 April 1930 at Vile Parle as decided by the Bombay Provincial Congress Committee and the Maharashtra Provincial Congress Committee. Jamnalal was nominated the first "Congress dictator "of the satyagraha in city at the instance of Gandhiji. The Bombay headquarters were located at the Vile Parle camp where Kasturba Gandhi was camping till the camp was declared illegal in August 1930.

The outbreak of the movement coincided with the national week celebration by the Bombay Provincial Congress Committee which organised a mass meeting on the Chowpati exhorting the people of all communities to participate in the satyagraha. The four cloth markets, the share bazar and shops at Mandvi were closed in sympathy to the movement. The activists, besides Jamnalal Bajaj, included K. F. Nariman, Prof. D. R. Gharpure, Pandit Sunderlal, Sardar Sardul Singh Kahishwar, Ali Bahadur Khan and Mohiuddin Kasuri. They announced a programme for action for the city in the very first meeting. According to the programme, Nariman, Mrs. Avantikabai Gokhale, Mrs. K<mark>amaladevi Chatto</mark>padhyaya, Yusuf Meherali and Ali Bahadur Khan, organised salt making at the Haji Ali park on the next day. They organised a mammoth meeting at the Chowpati on the 7th which was followed by the arrest of K.F. Nariman (president of the Bombay Provincial Congress Committee) in the same night. This was greeted with a sharp commotion and partial hartal in the city. (Police Commissioner of Bombay to G. F. S. Collins, Secretary to Bombay Home Department, 8 April 1930 (Daily Reports on Civil Dis obedience, Head Police Office, Bombay). Although the response of the Parsis and Muslims was rather unfavourable, the middle class crowds and Marwari merchants pledged themselves to participate in the campaign. The movement was organised in Bombay with forethought and thoroughness. The leaders had anticipated arrests, and hence, they had prepared long lists of " dictators " and " War Councils " in advance to keep the campaign undeterred, so that immediately after the arrest of one, the next in line stepped into the breach. And this went on for days, weeks, months and years.

The secret daily reports of the Police Commissioner of Bombay to the Secretary to the Government of Bombay Presidency, Home Department, are a valuable treasure of information of the happenings in Bombay. But appraisal of them all is beyond the scope of this study. Hence the narration of happenings in the city during only the first few days is furnished below for the benefit of students of history.

The members of the Bombay "War Council" including Mrs. Kamaladevi Chattopadhyaya and D. R. Gharpure launched upon a programme of making salt from sea-water on the terrace of the Congress House by boiling the water and making salt in cement salt pans on the terrace from 8 April. The sentence inflicted on K. F. Narimanj Jamnalal Bajaj and others was greeted with a mammoth rally of 30,000 on the Chowpati the same evening. The novelty of the rally was that about 200 ladies actively participated. (*Police Commissioner to Mr. Collins, 9 April 1930.*) The Satyagraha Committee of the Bombay Provincial Congress Committee

was in an unrelenting mood. The contraband salt was sold at Vile Parle and many other places in the city. The police raided the Congress House, destroyed the salt pans and arrested three prominent members of the war council viz., Y. J. Meherali (vice-president of the Bombay Youth League), Abidali Jafferbhai (secretary of the Bombay Provincial Congress Committee) and M. Sadik (editor of a nationalist weekly), on 10 April. They were sentenced to imprisonment on the next day. (Ibid., 11 April 1930.) The war council was undeterred by the police action. They constructed new salt pans and sold contraband salt which fetched fantastic money for the campaign, practically every day. Several patriots including ladies courted arrest. The brave and worthy activities of eminent ladies like Kamaladevi Chattopadhyaya, Avantikabai Gokhale, Perin Captain, Laxmiben Dosani, Laxmibai Bhide, Ratanben Mehta, etc. encouraged the womanhood to fight for the national liberation war. The contraband salt was auctioned, and there were patriots to buy it at fantastic prices. This went on for months together in the city. The movement also comprised the boycott of liquor and foreign cloth.

The last day of the national week, 13 April was marked by four large processions to the Chowpati where they culminated into a mass rally of 50,000 including about 1,000 women. The principal speakers were Sarojini Naidu, Kamaladevi, Perin Captain, Mrs. Abidali Jafferbhai, Gharpure, K. P. Khadilkar, Dr. D. D. Sathe, Dr. J. N. Chowksy and Ganapatishankar Desai (newly elected secretary of the Bombay Provincial Congress Committee). There was a complete hartal in the cloth markets, while shops at Mandyi, Bhuleshwar and Girgaum were closed in the afternoon. (Police Commissioner to Collins, 14 April 1930.) The arrest of Pandit Jawaharlal Nehru on the 14th was strongly reacted in the city the next day. The Cotton Brokers' Association, the Grain Merchants' Association, the Bombay Shroffs' Association, the Indian Merchants' Chamber, the Rice Merchants' Association, the Bombay Native Piecegoods Merchants' Association and the Sugar Merchants' Association closed the various markets under their control. Even the Municipal Corporation adjourned its sitting on the motion of Jamnadas Mehta. Besides the usual speakers, S. K. Patil, who was later to become the uncrowned king of Bombay, Mrs. Hansa Mehta and B. F. Bharucha enthused the mass rally to carry out the civil disobedience programme. (Ibid., 15 April 1930.) The eminent lawyers and solicitors of the Bombay High Court such as Bhulabhai J. Desai and K. M. Munshi were the loudest in their condemnation of Government. They along with many of their colleagues renunciated legal practice, while K. M. Munshi resigned from the Bombay Legislative Council. (Bombay Chronicle, 15 April 1930.)

The most demonstrative coup against the salt laws in Bombay was an invasion of the Government salt depots at Wadala by an army of more than 1,000 young men and women on 16 April. They were led by Kamaladevi, and had to encounter lathi charges by the police. Three days later, the salt works were raided again in which many volunteers were injured and 25 were arrested. On 25 May, 100 volunteers, accompanied by 2,000 spectators, carried out a further determined raid. The police handled them mercilessly and even opened fire. Wadala was the scene of many heroic raids by satyagrahis. The most demonstrative raid, however, took place on the morning of 1 June 1930, when 15,000 volunteers and spectators participated in the great mass action. Time after time the satyagrahis broke through the police cordons, they invaded the salt pans,

and carried away salt. The police could not cope up with the situation and the mounted police charged into the crowd with rearing horses, striking bare heads with clubs.

The Bombay lawyers demonstrated their solidarity behind Gandhiji's movement in an exemplary manner. At least 102 advocates and solicitors in the city took a pledge in support of the Swadeshi Movement. The Bombay Chronicle of 19 April 1930 published the names of the signatories. The 20th April was marked by a huge impressive rally of a lakh, on the Chowpati, under the leadership of the usual persons, besides K. M. Munshi, Lilavati Munshi, V. V. Jairajani and others. (Bombay Chronicle, 21 April 1930.) K. M. Munshi and K. K. Master were arrested the next day. They were followed by the militant D. R. Gharpure (president, Bombay Provincial Congress Committee), G. N. Desai (secretary, Bombay Provincial Congress Committee), and S. K. Patil (Police Commissioner to Collins, 22 April 1930.) (joint secretary of the Bombay Provincial Congress Committee). On several occasions the Congress volunteers were meted with brutal outrages by the police. But their spirit was indomitable and exemplary, and they persistently continued with their activities. (Congress Bulletin, 21 April 1930 (Bombay Provincial Congress Committee).

Many women offered ornaments and jewellery which were auctioned for large sums, again and again, for the sake of the movement. The Bhatia Baug satyagraha of 20 April, was a grand testimony to the determined but peaceful and disciplined behaviour of the men in spite of tyranny of government. Among the notable arrests were B. G. Kher, J. M. Mehta, K. M. Munshi and G. V. Ketkar (president, Maharashtra Provincial Congress Committee). (Ibid.) The whole atmosphere was surcharged with subdued excitement and solemn determination for pursuit of the goal of independence. Even the Police Commissioner was moved by the stirring scenes. (Congress Bulletin, 23 April 1930.) The Mandvi front was another great success for the Congless. There was a grand victory procession on the 26th, and a national flag salutation ceremony at several places which culminated into large public meetings at Chowpati and Shivaji Park, which stirred the masses on the 27th. (Police Commissioner to Collins, 28 April 1930.) The Bombay Native Piecegoods Merchants' Association, which was with Gandhiji all the while, was the most active of the business organisations during this movement. The Bombay Satyagraha Committee's intense propaganda in the labour area generated great enthusiasm for the Congress message. The principal activists were Kamalatfevi, Sarojini Naidu, C. K. Narayanswami, C. B. Johri, S. K. Pupala, Prof. Kosambi, Mohamed Ibrahim, Dr. Chowksy and W. P. Kabadi. (Bombay) Congress Bulletin, 28 April 1930.)

As directed by Mahatma Gandhi, women were particularly chosen for picketing against liquor and foreign goods in Bombay. Among the women activists in the city were Lilavati Munshi, Avantikabai Gokhale, Kamaladevi, Ratanben Mehta, Jankibai Bajaj, Gangaben Patel, Gajjar, Perin Captain, Hansa Mehta, Ramibai Kamdar and Miss Khandvala. They organised a Desh Sevika Sangh and conducted an intensive house to house campaign for the propagation of swadeshi by obtaining signatures for the swadeshi pledge. Many times, however, the Satyagraha Committee could not channelise a sufficient number of women volunteers. (Police Commissioner to Collins, letters from time to time.)

Gandhiji advised the Bombay Provincial Congress Committee to enrol a

lakh of active volunteers to carry on propaganda for the boycott of British goods and the use of khaddar. He was willing to come to Bombay when the city was ready with its quota of volunteers, and he would then lead the raid on the salt depot at Bombay. (Police Commissioner to Collins, 1 May 1930. Gandhiji's advice was conveyed through R. S. Padbidri (secretary, Bombay Provincial Congress Committee), S. K. Pupala and C. B. Johri) But he was arrested shortly.

The promulgation of the Press Ordinance infringing on the rights of the press was greeted with strong protests by the Journalists' Association of India as well as by popular leaders in the city. The Ordinance was defied in many cases. The citizens also reacted very sharply to the tragedy at Peshawar, and congratulated those who suffered silently and bravely for the cause of the nation.

Even a few foreigners had participated in the movement. For example, Cyril Walter Thornton, a young Australian, arrived in Bombay to help the movement. He was initiated as a salt satyagrah with due ceremony at the Congress House. He told the gathering that he was very keen to help the cause of Indian Independence for which he had specially come from Australia. He signed the swaraj pledge and became an activist.

Gandhiji's Arrest: The climax of the agitation was reached on 5 May when Gandhiji was arrested at Karadi (Gujarat), and secretly taken to Yeravada via Bombay. The news thoroughly stirred the city, and was greeted with a complete hartal in all the principal markets and business quarters. The Cotton, Share, and Javeri Markets and the Mandvi Market observed a hartal for two days, while the Mulji Jetha Market decided to close down for six days. (Police Commissioner to Collins, 6 and 7 May 1930. He, however, writes that the Muslims and Parsis did not conform to the hartal, and that mills functioned as usual except the Jubilee and Morarji Goculdas mills, which is contradictory to some of the paragraphs in his letters.) There was a series of mass rallies at the Esplanade (presently Azad Maidan), the Dana Bunder and Lalbaug. The GKU activists picketed in the mill area and got the mills closed for the day. The railway goods yards and workshops, and docks were also paralysed.

The meeting of the Municipal Corporation was adjourned. The Bombay Shroff's Association, the Bombay Cotton Merchants' Association the Bombay Seed Merchants' Association, the Indian Merchants' Chamber, the Marwari Chamber of Commerce and other organisations, expressed their high sense of patriotism by advising the members to participate in the hartal and propagate the Congress pledge. There was a mile-long procession led by women, and followed by Pathans, Sikhs and other martial races, all peaceful. About 65,000 workers abstained from work to swell the procession. Two hundred volunteers decked six donkeys in foreign clothes and paraded the thoroughfares exhorting the public to burn foreign cloth. (K. Gopalswami. op. cit., p. 245.)

It is noteworthy that the volunteers showed an indomitable courage to pull down the Union Jack from the flag staff of the Municipal Corporation building, and replacing it by the national flag facing Pherozeshah Mehta's statue. The municipal officers were present, but nobody took any objection. (Police Commissioner to Collins, 7 May 1930.) Such was the spirit of the day.

Government servants including policemen were exhorted to renunciate their services to the alien Government. All the commercial associations, headed by the Share and Stock Brokers' Association appealed to the Indian Merchants' Chamber to withdraw their representatives from the Legislative Council and the Assembly (*Ibid.*) K. F. Nariman was released from jail on the 7th morning.

After Gandhiji's incarceration, violation of salt laws, defiance of authority and other civil disobedience activities became a daily feature of Bombay's life. Picketing of foreign emporia, especially by women, was organised. Many of them courted arrest. The *Congress Bulletin* of the Bombay Provincial Congress Committee was published almost daily in a cyclostyled form. The surreptitious distribution of its copies by lakhs, was also a remarkable feature of the mass movement in Bombay during this time. Defiance of prohibitory orders, and picketing of liquor and foreign cloth shops were intensified. The spirit of swadeshi charged the atmosphere and khadi was on the ascendant. (K. Gopalswami, op. cit, p. 245.)

D. G. Tendulkar, Mahatma Gandhi's biographer, gives a vivid description of the activities in Bombay which the readers may find it interesting to refer. (D. G. Tendulkar, Mahatma'. Life of Mohanchand Gandhi.)

Wadala Raids: A succession of raids on the Wadala Salt Depot were an important phase in the Salt Satyagraha in Bombay. Hundreds of volunteers dashed to the salt pans and, despite police resistance, removed salt. They used to be arrested almost daily. On 22 May, 188 volunteers were arrested and taken to Worli. This drama was enacted every day, and more and more repressive measures were taken. But the most spectacular and demonstrative raid was to come off on 1 June for which the War Council was diligently preparing. Nearly 15,000 volunteers and other citizens including women, raided the salt pans under the leadership of Mrs. Lilavati Munshi and Mrs. Harnam Kaur. (Times of India. 2 June 1930.) Successive batches marched up to the Port Trust Railway level crossing, and the surging crowds were held up there by the police cordon. The gallant raiders, including women and children, broke through the cordon, splashed through slime and mud, and ran over the pans. About 150 Congress volunteers were injured. The raiders were repulsed by the Police who were acting under the immediate supervision of the Home Member. (B. Pattabhi Sitaramayya, History of the Indian National Congress, Vol. I Padma Publications, Bombay, 1946, p. 400.)

The Wadala raiders were detained in the Worli Detention Camp as undertrials, whose number swelled to four thousand. On 3 June 1930 these Wadala raiders were involved in a brush with the Police. The Military was called out to cope up with the situation resulting into about ninety casualties. The way in which the raiders were dealt with by the Police, caused great public indignation and protest. The spectators were aghast at the gruesome spectacle. (*Ibid.*)

Mr. George Slocombe, the representative of the *Daily Herald* of London, who was an eye-witness to some of the salt raids, cabled to his paper as under: "I watched the events from an observation-post on one of the rocky hills which ring Wadala. It was humiliating for an Englishman to

stand among the ardent, friendly, but deeply moved crowd of volunteers and sympathisers and watch the representatives of the country's administration engaged in this ludicrous, embarrassing business." (cf. Ibid., p. 401. George Slocombe saw Gandhiji in jail and wrote a masterly despatch which disturbed the slumbers of House of Commons.)

The policy of harsh treatment on the part of the bureaucracy moved the whole city to anger. To face the *lathi* charges became a point of honour, and in a spirit of martyrdom, volunteers went out in hundreds to be beaten. They gave a display of disciplined, passive courage. But the burly constables, under English officers, inflicted severe punishment for disaffection. *(Manchester Guardian, 12 Jan. 1931.)*

The official historian of the Congress also gives an excellent account of the events in Bombay, which is quoted below (Pattabhi Sitaramayya, op. cit, Vol. I, p. 400.):—

- " Wadala Raids: A succession of raids were also made on the Wadala Salt Depot. On the 22nd, 188 volunteers were arrested and taken to Worli. On the 25th, 100 volunteers were accompanied by a huge crowd of 2,000 spectators. The Police charged them with lathis injuring 17, and later arrested 115. The rest with the crowd got off with the salt. On the 26th afternoon, 65 volunteers were afield and 43 of them were arrested, when 18 more were injured. The rest with the crowd got off with salt. An official Press Note stated that the disturbances that had so fax taken place, had been caused largely by the sight-seers who were, unlike the volunteers, not disciplined. The Note warned the public to keep away from Wadala, while the raids were in progress.
- "But the most demonstrative raid was to come off on the 1st June for which the War Council was diligently preparing. On the morning of the 1st nearly 15,000 volunteers and non-volunteers participated in the great mass action at Wadala.
- "Successive batches marched up to the Port Trust level-crossing and the swelled crowd were held up there by the Police cordon. Soon the raiders, among whom were women and children, broke through the cordon, splashed through slime and mud, and ran over the pans. Congress raiders numbering about 150 were slightly injured. The raiders were repulsed by the Police who were acting under the immediate supervision of the Home Member.
- "Serious troubles ending in two police charges and the calling out of the Military to cope with the situation occurred at the Worli Detention Camp on the 3rd June, when about four thousand undertrial Wadala 'Raiders' were involved in a brush with the Police, resulting in about ninety casualties, twenty-five of them being serious."

On June 1930, Motilal Nehru gavejan interview to George Slocombe of the London *Daily Herald* which formed the basis for negotiations with Mahatmaji in Yeravada jail. In the interview Motilalji sketched the terms on which the Congress might be prepared to participate in the Round Table Conference. Then followed the correspondence between Mr. Slocombe, Tej Bahadur Sapru and Jayakar, who became the intermediaries for

approaching the Viceroy (Lord Irwin) on the basis of the terms agreed upon. Sapru and Jayakar met Gandhiji on 3 and 24 July 1930 in jail. Later, there was a conference between the Congress leaders, Gandhi and Sapru and Jayakar in Yeravada. The effort, however, failed as the Government were in no mood to come to terms, but on the contrary forged fresh weapons to suppress the people's will.

Meanwhile the Round Table Conference was convened in London on 12 November 1930. But it was destined to be a futile exercise as the principal party (the Congress) and its leader had boycotted it. It was a *Hamlet* without the Prince of Denmark. The determination and in-built strength of the mass movement, coupled with the futility of the Conference, made it imperative on the part of the Government to soften their policy. Accordingly Gandhiji and all other leaders were released on 25 January 1931, the eve of Independence Day, as it was so celebrated.

Gandhiji's arrival in Bombay was greeted by a very large crowd at the Victoria Terminus from where they drove to Mani Bhavan, the hallowed house. It became a place of pilgrimage, despite the early hours. The enthusiasm of the jubilant people knew no bounds.

January 26, 1931 the first anniversary of Independence Day, was celebrated with great gusto in Bombay. Release of Gandhiji added to the surging enthusiasm of the people. The Mani Bhavan was a scene of jubilation. The momentous day was observed in the city by holding mass meetings which confirmed the resolution of independence, and passed an identical resolution called the Resolution of Remembrance. Gandhiji himself participated in the celebration of Independence Day at Mani Bhavan. The Bombay Provincial Congress Committee had organised a public meeting at Azad Maidan. Although the meeting was announced to begin at 6 p.m., the surging masses began to pour in thousands from 3 p.m. The entire maidan as well as the roads leading to it presented the spectacle of a sea of human beings, a huge mela exceeding two lakhs. A platform was improvised with loud-speakers at different centres to enable the audience to hear Gandhiji. Women and children, squatted close to the platform, while the vast mass of people remained squatted or standing around, hundreds of rows deep.

The citizens of Bombay, on the maidan, became so tumultuous that it took nearly half an hour for Gandhiji to reach the platform through a narrow passage made by volunteers and leadeis with immense difficulty. The members of the War Council, Sarojini Naidu, Nariman, Munshi, Dr. S. K. Vaidya, etc. strived their utmost to control the tumultuous crowd. Gandhiji reached the dais with great difficulty and remained standing on the special seat for about five minutes. But there appeared to be no sign of the stampede subsiding. The crowds eager to have a *darshan* of Gandhiji tried to rush towards the platform. Women and children began to scream. The situation became too serious to continue the meeting. Hence the same was announced to be cancelled. It took nearly an hour for the disappointed masses to disperse, while women and children were escorted out along a separate passage. Thirty-three persons were injured in, the stampede, while one lady died of suffocation. The eminent leaders including Vallabhbhai Patel, Shankarlal Banker, Jamnalal, Sarojini Naidu,

Mathuradas Tricamji, Jivaraj Mehta and Pyarelal Shah strived hard to control the crowds. However, the unprecedented tumultuous craze and zeal of the Bombay crowds to greet the Mahatma, resulted into abandonment of the first anniversary of "Independence Day". Rightly the Esplanade was later named Azad Maidan.

Gandhiji was to leave for Allahabad the same night by train to see Motilal Nehru (Motilal Nehru died shortly on 6 February 1931.) who was seriously taken ill. In order to avert another tragedy at Bombay V.T., where a huge crowd had assembled to see him off, Gandhiji had to board the train at Dadar. Such was the zeal of the Bombay people during the Civil Disobedience Movement.

It may be necessary to refer briefly to the repercussions of the Sholapur (Solapur) Martial Law tragedy in Bombay. The four men convicted for the murder of two policemen in Solapur during the riots in May 1930 were executed on 12 January 1931 and a hartal was observed throughout the Presidency. (Bombay—1930-31, p. iv. (A Review of Administration of the Presidency issued by the Bombay Government every year. In this account hereafter the books are referred to as Bombay, followed by the year to which they pertain.) In Bombay city bands of agitators indulged in stone throwing and stopping vehicular traffic. The police had to make several lathi charges in the course of the day. Encouraged by this, the BPCC arranged for another demonstration of protest on 16 January against the unjustified and wanton acts of barbaric massacre of innocent people at Solapur. A total hartal was observed, but the imminent violence was aveited by the presence of mind of the leaders and the timely action of the police. The BPCC issued a *Bulletin* on the Solapur tragedy, in spite of government ban. (The Solapur agitation is a glorious page in the history of freedom struggle). The agitation continued with little abatement, and it appeared as though the Congress, irritated by the statements of the Viceroy on the future constitution of India, had determined to intensify civil disobedience till the release of leaders.

The War Council of Bombay was so active that it extended its sphere of activity to the rest of the Presidency. While the agitation in Gujarat and Bombay city was almost in unison, it also deputed bands of volunteers to boost up the activity in other areas. For example, about 116 volunteers were deputed to Shiroda (Congress Bulletins issued from time to time.) in Ratnagiri district, the salt satyagraha at which is another glorious page in the history of freedom struggle.

In February 1931, public attention was, for the most part, directed towards the negotiations between Gandhiji and Lord Irwin. It was generally hoped that a satisfactory agreement Would be reached, although the Civil Disobedience Movement was not allowed to slacken. It was apparent, however, that the public showed comparatively less interest in the various demonstrations organised. (Bombay—1930-31, pp. iv-v.)

The civil disobedience campaign along with the devastating depression had a great impact on the economy of Bombay. There was a sharp collapse of prices, but with no corresponding fall in the prices of cotton manufactures. The growing imbalance between costs and prices

compelled the manufacturers to resort to rationalisation. The invariable concomitance was retrenchment and unemployment. The average daily employment in the Bombay mills dropped from 154,398 to 129,534 in 1932 and to 119,943 in 1933. (Bombay Millowners' Association Annual Report, 1933.) The weapon of boycott had several facets. The lack of a clear-cut boycott policy on the part of the Congress very often created confusions in the city. It was sometimes exploited for the purpose of domestic business competition causing hardships to the consumers and throwing labourers out of employment. Such abuses did occur in Bombay, but not to the extent to which the opposition to the Congress claimed when it made political capital (A. D. D. Gordon, op. cit., p. 208.) in relation to the depression. Although the boycott and swadeshi movements might have been beneficial to Bombay during the depression, the Congress image nonetheless suffered in the long run because of them. (Ibid.) The boycott from the point of view of the millowners did involve some problems. They were concerned not only with the tying up of huge capital but also with marketing of their products. The Mulji Jetha Market, the largest one in the country, had been closed either by hartals or picketing for about four months in early 1932. The Bombay Millowners' Association endeavoured to reopen the market through the good offices of Lalji Naranji and other nationalists. However, the police excesses had so much enraged the pickets that it was impossible to achieve the reopening of the markets. Eventually the millowners planned the removal of some shops to the Lakhmidas Market which was to be made wholly swadeshi. (Ibid., p. 211.) But they were still unable to achieve a complete division of swadeshi and non-swadeshi stores within the Mulji Jetha Market. The boycott by this stage assumed the form of a general hartal. So it was not until after four months of continuous closure that Sarojini Naidu was finally able to open a special swadeshi wing at the Mulji Jetha Market. (Ibid., p. 212.)

The raw cotton market, the most important one in Bombay, was virtually closed, trading being interrupted for 93 out of 159 working days between January and August 1932. (Bombay Legislative Council debates on Cotton Contracts Act of 1932.) The closure of this market was particularly embarrassing to the Bombay Government. The authorities regarded the closure as a seminal point of Congress activity among the merchants. They were also coming under political pressure from within Britain because of the boycott. Therefore, throughout 1932, the Bombay Government strived very hard to reopen the market. In these attempts the Governor worked on the assumption that it was the cotton brokers who were causing the trouble, while the consumers (millowners) were eager to keep the market open. Hence, the Bombay Government got enacted the Cotton Contracts Act (XV of 1932), which enabled it to interfere in the operations of the East India Cotton Association. It could achieve the enactment by an intensive propaganda campaign to the effect that Congress activities within the market, were causing the slump in the prices of cotton payable to cultivators.

The Civil Disobedience Movement had a great impact on almost all other markets. The arrest of Mahatmaji in January 1932, sparked off sharp reactions in the Share Bazar which was often closed, and processions of businessmen were started from it many times. The closure was also

attributed to the uncertain economic climate. It also reflected the fact that share prices were closely related to the political situation. Eventually, the Bombay Government forced the Stock Exchange to open by threatening to rescind the charter of the Bombay Native Share and Stockbrokers' Association. (A. D. D, Gordon, op. cit, p. 215.)

The bullion market was also an important centre of disaffection, and it suffered constantly from boycott and hartals. The Marwaris were especially active nationalist campaigners within the Bullion Exchange. The 'distress sale of gold' and Government permission to the export of the precious metal on a large scale, added a sting to the campaign against Government. The Congress placed an embargo on the export of all gold, and eventually the cry 'save India's gold' became a propaganda plank. (Congress Bulletin, 17 October 1932.) The Congress picketing in the bullion market did achieve the objective of reducing distress sale of gold to some extent.

Throughout the turmoil of 1932, the Indian Merchants' Chamber actively supported the Congress activities. It was now entirely controlled by Congressmen under Manmohandas Ramji, Mathuradas Matani and Manu Subedar. It took a very radical measure in squarely condemning Gandhiji's arrest and the Ordinances promulgated by Government. (Thakurdas Papers, F. 107 (3).)

After consultations between the eminent leaders and the CWC in Allahabad and Delhi, the CWC passed a resolution investing Gandhiji with the powers of a plenipotentiary to negotiate a settlement with the Viceroy in the name of the Congress. Gandhiji saw the Viceroy for the first time on 17 February, and had talks with him for about four hours. The deliberations continued for three days, during which Gandhiji demanded an enquiry into police excesses, and the right to picket, a general amnesty, repeal of confiscated property, and reinstatement of all officials who had resigned or were removed from government service. (Pattabhi Sitaramayya, op. cit, Vol. I, p. 432.) In the nature of things, the demands were not readily acceptable to the Viceroy. There was a good deal of suspense. The CWC unanimously was of opinion that the negotiations may be broken and renewal of hostilities be agreed. The situation was altogether depressing. After vexatious suspense and consternations, the Gandhi-Irwin Pact was solemnised on 5 March 1931. (Government of India, Home Department Notification, dated 5 March 1931.) According to the truce the Congress agreed to discontinue civil disobedience, and the Government withdrew all its repressive Ordinances. All the political prisoners, excepting those who were guilty of acts of violence, were released. Provision was made for the restoration of confiscated, forfeited properties, except in certain circumstances, administrative concession was given to prepare salt in some areas. The Congress endorsed this 'provisional settlement' at its next annual session at Karachi in March 1931.

Gandhiji visited Bombay in the third week of March for a couple of days. He was accorded a very hearty and warm welcome. The two days' crowded programme kept him incessantly busy and even on Monday, the day of silence, he could get no rest or sleep, having to listen to numerous

interviewers. An important interview with Subhash Chandra Bose kept him busy until half past two the next morning. After about an hours' sleep, he was up again for the morning prayer, having thus kept awake 23 out of 24 hours of that day. Interviews began again soon after the prayer, and the whole day was fully occupied with interviews and public meetings. The reception that the citizens of Bombay gave to the Mahatma, was magnificent. (Gandhiji and Mani Bhavan (Gandhi Smarak Nidhi, Bombay, 1959), p. 25.)

There was a conference of Desh Sevikas who had done a praise-worthy constructive work during the Civil Disobedience Movement by picketing liquor shops and foreign cloth shops. Gandhiji called on Shaukat Ali who was in the city and discussed with him the communal problem. (K. Gopalswami, op. cit., p. 257.)

A deputation of Indian merchants consisting of the eminent businessmen and politicians in the city, such as Walchand Hirachand, Chunilal Mehta, Hussainbhai Lalji, Shantikumar Morarji, J. K. Mehta, Mansukhlal Master, K. S. R. Iyer, etc. called on Gandhiji. (Ibid. It is essential to mention this event because all these forces were connected with the Civil Disobedience Movement.) They urged him for seeking political protection for Indian industries against British and foreign competition. They were advised to carry on their agitation, assuring them that the Congress would strive to support their case at an opportune time. A deputation of millowners comprising Homi Mody, F. E. Dinshaw, G. D. Birla, Sir Victor Sassoon, C. R. Wadia, Lalii Naranji and N. B. Saklatwala, (There were also a couple of millowners from Ahmedabad among them.) also conferred with Gandhiji. They laid before him the unfairness of the terms imposed by the Congress Boycott Committee on the Indian-owned mills. They also complained about the difficulties faced by the foreign cloth sellers in the city, in the wake of the activities of the civil resisters. They also pleaded for Gandhiji's support to the demand for the abolition of the excise duty on mill cloth. An agreement was reached between them regarding a scheme for disposal of stock of foreign piecegoods with a view to enabling the marketeers to deal in indigenous piecegoods. (K. Gopalswami, op. cit., p. 258.)

A mammoth public meeting was organised on the Azad Maidan by the BPCC. It was one of the biggest rallies ever held in the city, and the entire environ of the maidan gave the spectacle of a seething mass of humanity. There was boundless excitement and tumultuous enthusiasm among the audience. However, within a short time after Gandhiji started his speech, pandemonium broke out among the crazy audience, and the meeting, like the one on a former occasion, had to be abandoned. (*Ibid., p. 258.*)

The Congress Camp at Vile Parle, the performance of which was magnificent during the entire movement, was honoured by Gandhiji by a prolonged visit. He was presented with an address and a purse of Rs. 52,465 contributed by the suburbs (*Ibid.*, p. 259.) for the national cause.

Some of the terms of the Gandhi-Irwin Pact appear to have caused some disappointment in certain quarters, though the pact was generally upheld in the city. They argued that the release of all political prisoners, including the Meerut Conspiracy prisoners and the revolutionaries namely,

Bhagat Singh, Sukhdev and Rajguru, (They were sentenced to death for the murder of Mr. Saunders on 13 September 1928, in the Lahore Conspiracy Case.) ought to have been made a precondition of the agreement. The Communists, in particular, were highly disappointed. Some young Communists even disturbed Gandhiji's meeting in the labour area. After admonishing them, he explained why he could not make their release a pre-condition for the agreement.

The execution of Bhagat Singh, Sukhdev and Rajguru at the Lahore jail, cast a gloomy shadow over Bombay as also over the Karachi Congress assemblage. The city mourned the execution of the three martyrs, and observed a partial hartal on 24 March 1931. Schools, cloth markets and many mills remained closed. A procession of ladies with black flags marched through many localities in the city. Youngmen and students tried to stop traffic which involved the use of police force. A large rally was convened at Azad Maidan by Nariman, Ganapatishankar Desai and Umashankar Dixit, (K. Gopalswami, op. cit, p. 259.) to mourn the execution of the heroic martyrs and express wrath against the bureaucracy which had repugned Gandhiji's pleading to commute the death sentence.

Meanwhile propaganda against Government was continued with unabated vigour in the city. Numerous public meetings were held at which stress was laid on the necessity of keeping alive the struggle for freedom. Measures for the boycott of foreign cloth, particularly British goods, were improved upon. Picketing was revived on an intensive scale. Special attention was directed towards the reorganisation of the Hindustan Seva Dal as an auxiliary to the Congress. The enlistment of volunteers was intensified. (Bombay—1931-32, pp. i-ii.)

After the Karachi Congress of March 1931 Gandhiji came to Bombay on 18 April 1931 to bid farewell to Lord Irwin, the retiring Viceroy, (Gandhiji and Mani Bhavan, op. cit., p. 26.) and presumably to talk about the ensuing Round Table Conference. He also discussed the issues regarding implementation of the truce terms with Frederick Sykes, the Governor. The points discussed related to restoration of the confiscated landed and other property to owners, by Government, and release of the residual political prisoners for their part in the Civil Disobedience Movement in Bombay, Solapur and Chirner. (Times of India, 19 April 1931.) The Municipal Corporation presented a civic address to Gandhiji, for the second time. The address was in appreciation of Gandhiji's efforts at establishing peace and goodwill among different communities, the statesman-like truce with the Viceroy, and evolving a basis for attainment of national freedom. The address, read out by Boman Behram, the mayor, also displayed the rich civic traditions evolved by the Corporation and the splendid part the citizens played in the struggle for freedom.

The hostile attitude of the bureaucracy and the absence of communal understanding after the Gandhi-Irwin Pact raised doubts about the efficacy of the proposed Round Table Conference. Gandhiji expressed his premonition of what was likely to take place in the conference, in the Bombay meeting of the CWC on 9 June 1931. But the majority of the CWC prevailed upon him that non-participation of the Congress in the

conference would amount to playing into the hands of the enemy. Hence he, as the sole representative of the Congress, decided to set out for London after talks between himself and the new Viceroy, Lord Willingdon. A special passport mentioning his profession as Barrister-at-Law, although he had been debarred from the roll of Barristers in November 1922, was issued instantly by the Bombay Government. He sailed to London from Bombay on 29 August 1931 by the *S. S. Rajputana*. The enthusiasm of the people of Bombay on the occasion knew no bounds, although he had his own premonition about the venture. The distinguished gathering to wish bon voyage to him included Kasturba, Vallabhbhai, Maniben Patel, K. M. Munshi, Bhulabhai Desai, Jivaraj Mehta, Purshottamdas Thakurdas, Ibrahim Rahimtoola, Homi Mody, Kasturbhai Lalbhai, C. V. Mehta, etc. (K. Gopalswami, op. cit., p. 264.)

A few days prior to his departure, the millowners of Bombay led by Homi Mody, had pleaded with Gandhiji that, while the Indian mills were asked not to use artificial silk yarn, there was a glut of Japanese cloth made from the same quality of yarn. This was harmful to the interests of Indian mills. Gandhiji exhorted them to bear with these difficulties which were due to the Congress anxiety to make the country self-dependent, by utilising indigenous cotton. It was, therefore, proposed to strive for increase in tariff against Japanese fabrics in the future. (*Ibid.*, p. 263.) This was the burning question in the industrial section in the city, during the times.

P. Balu, a well-known cricketer, led a deputation of the depressed classes to Mahatma Gandhi in the city on 26 June 1931.

In the mean time, a bold attempt was made by a student on the life of Sir Ernest Hotson, the Acting Governor of Bombay, when, accompanied by his wife, he visited the Fergusson College at Pune at the invitation of the college authorities. The Governor had, however, a providential escape owing to the defective ammunition. (The assailant was sentenced to eight years' rigorous imprisonment under the I.P.C. and to two years' rigorous imprisonment under Arms Act (A Review of Administration of the Presidency, 1931-32, p. ii)

More Repression: After the resumption of Vicerovalty by Lord Willing-don, there was no peace in sight, although weapons were laid down. The bureaucracy, jealous to preserve its supremacy, started to feel that the pact was an affront to them. Peaceful picketing against liquor was not allowed at unlicensed places and hours. Many prisoners were not released. Several watan lands were not restored. Several government servants were not reinstated. The Solapur Martial Law prisoners, in respect of whose release Lord Irwin had made a definite promise, were not released. The flagrant breach of the truce committed by Government at Bardoli, was a bitter reality. The response of the Governor of Bombay was altogether disappointing. The Simla authorities supported the Bombay Government, (The correspondence between Gandhiji and the Viceroy, the Home Secretary to Government of India (Mr. H. W. Emerson) and the Bombay Government from June 1931 onwards reveals the stubborn attitude of the Government towards the implementation of the truce. (Extracts quoted by Pattabhi Sitaramayya, pp. 471-79). There was

nothing wanting to fill the Congress leaders with utter dispair. The horizon was as black as it possibly could be. The Government also rejected Gandhiji's request for an impartial tribunal to decide upon matters of interpretation of the settlement between the Government and the Congress that might be submitted to it from time to time. There were arrests galore, and patriotic fervour in all forms was suppressed with all the might. In fact the CWC which met in Bombay in the first week of November 1931, arrived at a conclusion that Gandhiji's further participation in the Round Table Conference was unwarranted. The situation deteriorated rapidly. Abdul Ghaffar Khan was arrested on December 24, and Jawaharlal Nehru on 26, two days before Gandhiji's arrival from London. Gandhiji returned to Bombay, full of frustration on 28 December 1931. The situation in the country was grave. Government repression was continuing and the people were groaning under a plethora of Ordinances as a challenge to the Congress.

Gandhiji was welcomed by representatives of all provinces and the people of Bombay, with an unprecedented enthusiasm. The road from Ballard Pier to Mani Bhavan was gaily decorated. People thronged streets and rushed to Ballard Pier to welcome him. Rows of volunteers strived hard to keep order in the multitudes throughout the route. (Gandhiji and Mani Bhavan, op. cit., p. 30.) The grand plan of reception arranged by the BPCC was abandoned due to the several arrests and prevailing political atmosphere. " That day the men-folk of Bombay were on the roads and the women-folk were gathered on the balconies of the sky-scrapers of the city." (Pattabhi Sitaramayya, op. cit., Vol. I, p. 509.) He conferred with Vallabbhai Patel (the Congress president), Subhas Babu and other members of the CWC. The committee was advised by Gandhiji to defer their decision that further negotiations with Government were useless. He addressed a mass meeting the same evening at Azad Maidan. He condemed the Government's attempt to unman a whole race, and repeated that he would not have the dismemberment of the 'untouchables' from the Hindu fold. The Civil Disobedience Movement was not to be renewed till he had a chance of ascertaining the Government's view before renewing the struggle.

The entire country was passing through dire distress and depression. But unfortunately the communal elements and the moderate mentality in India seemed to have practised vivisection and enacted scenes at the Round Table. (*Ibid.*, p. 510.) The commercial community represented at the conference by Mr. Benthall, issued a confidential circular purporting as under: Gandhi and the (Indian) Federated Chamber of Commerce were unable to obtain a single concession, he failed to settle the communal problem; the Muslims had become firm allies of the Europeans. (*Ibid.*, pp. 519-20.) Many such things ensured the failure of the conference.

Resumption of Civil Disobedience: Gandhiji sent a cable to the Viceroy from Mani Bhavan on 29 December asking whether the Ordinances, shootings in the Frontier Province, and arrests of esteemed persons, were an indication of the end of friendly relations. There was a further exchange of telegrams between Gandhiji and the Viceroy. (Ibid., pp. 511-19.) The CWC was continually in session in Bombay. The end of the truce was at hand.

In fact the truce period was a period of preparation on the part of Government for renewed hostilities, the outbreak of which was imminent any time. While the Government began where they had left, the Congress had to begin it all over again. Repressive measures were rampant. Several persons in Bombay were subjected to inhuman torture. New occasions called for new Ordinances, and a series of them were promulgated. Besides the five Ordinances of December 1931, four new ones were promulgated by the Government of India on 4 January 1932 known as, (1) Emergency Powers Ordinance, (2) Unlawful Instigation Ordinance. (3) Unlawful Association Ordinance, and (4) Prevention of Molestation and Boycott Ordinance. The bureaucracy was conferred with unlimited powers. Special Courts, Summary Courts, special procedures and special punishments were provided. The bureaucratic leviathan arrogated plenipotentiary powers to itself. (Even Sir Samuel Hoare, the Secretary of State for India, had to admit in the House of Commons, on 26 March 1932, that the Ordinances were very drastic and severe.) They covered almost every activity of Indian life. They were drawn up in that comprehensive form because the Government sincerely believed that they were threatened with an attack on the whole basis of Government. (Pattabhi Sitaramayya, op. cit., Vol. I, pp. 523-25.) All the Ordinances and repressive measures were, in fact, under contemplation even in the year of truce (1931). The fact is that the Bombay Branch of the European Association (Its Secretary had written a letter to the Secretary, Home Department, Government of Bombay on 15 October 1931 to deal firmly with the civil resisters and Congressmen.) and the Bombay Chamber of Commerce were pressing the Government to take firm and immediate action in the event of a recrudescence of the Civil Disobedience Movement. They made specific suggestions that the Congress flag should be forbidden and likewise all parading of volunteers, and that all former civil disobedience men should, forthwith, be brought under restraint, be treated as enemy subjects in war, and interned. They demanded that Congress funds should be stopped at the source and unearthed by a special Ordinance. The mills favourable to the Congress should be denied railway transit of goods, and no one should be permitted to benefit financially from political agitation and boycott. (Pattabhi Sitaramayya, op. cit., Vol. I, p. 526.)

Under these circumstances the course of events was destined to be what it was. The CWC had no illusions about Government's intentions. It was continually in session in the Mani Bhavan, and it had to take a fateful decision to call upon the nation to resume Civil Disobedience Movement including non-payment of taxes, under twelve conditions.

In the meanwhile the Viceroy, Lord Willingdon replied to Gandhiji on 2 January 1932, stating that the Government would take all measures necessary to put down all subversive activities and refused to grant him

interview which he had demanded under the threat of revival of the Civil Disobedience Movement. (Mahatma Gandhi in Maharashtra, 1915-1946 (Gazetteers Department, Government of Maharashtra, 1980), p. 214.) The Working Committee could read the writing on the wall. Gandhiji gave the following message to the country through the press: "The nation must now respond to the challenge of the Government. It is to be hoped, however, that whilst the people belonging to all classes and creeds will courageously and in all humility, go through the fiery ordeal considering no price too dear and no suffering too great, they will observe strictest non-violence in thought, word and deed; no matter how great the provocation may be...... Our quarrel is not with men but with measures."

Representatives of almost all the important merchants' associations in Bombay came to see Gandhiji at Mani Bhavan and to discuss the future programme and how best they could help the work of the Congress. The prayer gathering went on swelling at the terrace of Mani Bhavan. Gandhiji gave the following message to an American press correspondent: " On the eve of embarking on what promises to be a deadly struggle, I would expect the numerous American friends to watch its career and use the influence of the great nation for the sake of oppressed humanity. This Indian struggle is more than national. It has an international value and importance." (Gandhiji and Mani Bhavan, p. 34.)

A deputation of the Welfare of India League, of which Sir Purshottamdas Thakurdas was a president, waited on Gandhiji in their bid to avert the crisis by impressing upon Sir Frederick Sykes, the Governor, to arrange for a meeting between the Viceroy and Gandhiji. The latter agreed to their efforts, and said that it should be absurd for the head of a State to refuse to see a public-man. The Viceroy had placed himself completely in the wrong. The pleading of the delegation with the Governor was absolutely of no avail as the latter probably had the mind of the Viceroy, and he disposed them off with a mono sentence.

The impending arrest of Gandhiji was very much in the air in the city. He put before the public the plan of action to be put into effect in the event of his arrest.

Leading Liberals and merchants in the city continued to come to Mani Bhavan on 3 January 1932. They entreated Vallabhbhai Patel to persuade Gandhiji to postpone his proposed departure to Ahmedabad. They were all in communication with the Viceroy, and desired that, if the Viceroy permitted their deputation to wait on him, Gandhiji should be available for consultations. Gandhiji agreed and postponed his departure. But this was all futile. (ibid., p. 36.)

The day was spent by Gandhiji in giving interviews and messages to various organisations and in drafting a comprehensive resolution for the Indian Merchants' Chamber, the members of which had stood solidly by him during these days of trial. (*Ibid.*) A message was also given to the Indian Christian followers of the Prince of Peace, which insisted that his word must reach the community before he was imprisoned.

The Government of India was making elaborate arrangements and sending secret instructions to the Bombay Government for Gandhiji's

The expected did happen. Gandhiji was arrested in his tent on the terrace of Mani Bhavan in the small hours of the morning of January 4, 1932, when the nation was sleeping. The arrest (The warrant of arrest was worded as under, " Whereas the Governor in Council, for good and sufficient reasons, has under the powers vested in him by Bombay Regulation XXV of 1827 resolved that Mr. Mohanchand Karamchand Gandhi shall be placed under restraint in the Yeravada Central Prison during the pleasure of Government.") was effected personally by the Police Commissioner of Bombay, Mr. Wilson, (He was accompanied by Pettigara, Hurst and Kamat.) at 3 a.m. when the Mani Bhavan was fast asleep. As Devdas Gandhi woke his father and broke the news to him, Gandhiji smiled. It was Monday, his day of silence. He listened to the prayer, wrote out farewell messages and instructions to his associates, and guietly took his seat in the police car within 35 minutes. He was cheered by the crowd which by then had collected outside Mani Bhavan. He was taken by car to Yeravada prison to be placed under restraint " during the pleasure of Government".

Sardar Vallabhbhai Patel, the president of the Congress, too was arrested the same morning, and detained with Gandhiji.

The events of 1932-33 ran on much the same lines as those of 1930-31. Only the fight was more intensive and more determined. The repression was ever so much more ruthless and the suffering was ever so much more deep. The BPCC, the District Congress Committees in the city, National Schools and many other institutions were declared unlawful, and their houses, furniture and funds and other moveables seized. Most of the leading Congressmen in the city were suddenly clapped into jails.

The Congress organisation was thus apparently left without leaders, without funds, and even without any local habitation. The Congressmen who had been left behind were not, in spite of this sudden and determined swoop, without resources. Every one took up the work wherever he happened to be.

Leaderless, the people burst out into strikes, hartals and defiance of prohibitory orders, boycotts and picketing, leading to mass arrests. Following the promulgation of the Ordinances, wholesale arrests of Congress leaders of Bombay Were made by the Police. The arrests were carried out mostly before day-break when people were still in bed. Thus, any public demonstrations were rendered impossible during the arrest and the transport of the arrested persons to police vans and cars to the different police stations for detection. Leaders in the suburbs were also arrested. The Congress Working Committee had been declared illegal by

an Ordinance. By another Ordinance, the launching of civil disobedience campaigns, picketing and boycott of foreign goods were declared illegal. The Congress House was taken possession of by the police and a Union Jack was hoisted on the flag post. (K. Gopalswami, op. cit., p. 280.)

Bombay city observed a complete hartal on Gandhiji's arrest. An imposing procession in which thousands of men and women participated, started from the Congress House in the afternoon, and after wending its way through important thoroughfares in the city, terminated in a mass meeting at the Azad Maidan. K. F. Nariman, who presided, exhorted the citizens of Bombay to carry on the non-violent struggle till freedom was won. Meetings were held by the different ward committees condemning Gandhiji's arrest. (Ibid., p. 280. Mr. Gopalswami was then the Bombay correspondent of a foreign news agency and was an eyewitness to the movement.)

Bombay city was divided into seven wards, each with its local organising "Dictator ", and by the end of March 1932, twenty emergency councils had been arrested. As the organisation became more diffused, the police found greater difficulty in suppressing it. In February/March 1933, they raided various Congress propaganda centres in Bombay, seizing typewriters and duplicating machines, and arresting several Gujarati youths and a barrister, A. K. Amin, who, they believed, was the principal organiser. However, these swoops only stopped the circulation of the Bombay Congress Bulletin for short periods. (Judith M. Brown, Gandhi and Civil Disobedience: The Mahatma in Indian Politics, 1928-1934 (Cambridge University Press, Cambridge, 1977), pp. 287-88. Since two books of this author have been referred to in this Volume, this book will hereafter be quoted after the author as Gandhi and Civil Disobedience.)

After the arrest of men, women were chosen as "dictators", Janakidevi Bajaj exhibited an uncommon valour. She used to address the rallies in Gujarati, Marathi and Hindi, and became personally acquainted with most women in the suburbs.

The Congress offices and institutions seized by Government were attempted to be won over by "raids" of satyagrahis who were brutally beaten by the police. Under the Ordinances, publicity through the Press was totally prohibited to the Congress. This handicap was got over by the issue of unauthorised bulletins and leaflets, which were typed, cyclostyled, sometimes printed secretly, or handwritten. It is noteworthy that in spite of police vigilance-, these bulletins were regularly issued and they furnished detailed information to the people. The service of the post-office and the telegraphs was denied to the Congress. Hence it established its own postal communication. Sometimes the volunteers carrying postal articles were detected and severely punished. This system which had really been started towards the second part of the movement of 1930, was almost perfected in 1932.

The imperialistic Government responded to the resumption of civil disobedience with the brutal measures. They had prepared to squash all manifestations of the campaign and neutralize its guiding organisations and individuals, in stark contrast to the 1930 policy of using just enough force to control the situation. The four Ordinances they had in readiness

were promulgated on 4 January 1932, and from that date the AICC, the CWC, the BPCC and many other organisations were banned, and leading Congressmen were swiftly incarcerated. In January, 2,273 persons in the Bombay Presidency were convicted, 2,892 in February, 1,185 in March and 1,482 in April. Between January 1932 and April 1933 as many as 14,101 persons including 939 women were convicted in the Presidency. The convicts formed 0.064 per cent of the 1931 population in the Presidency. This percentage was many times higher than that in other provinces. (J. M. Brown, Gandhi and Civil Disobedience, pp. 282-86.)

The share of Bombay was very high in this series of measures as the campaign was most intense in the city. The vigorous offensive against the Congress on all fronts, combined with the authoritative control exercised over the press, seemingly enabled the Government to restore peace. As per Government reports, the Ordinances were promulgated to enable the authorities to discharge their duty towards the people and to save them from the consequences of the Civil Disobedienec Movement. Even by the steady pressure maintained on all forms of Congress activity, the movement was not under control in Bombay city.

The Government utilised the powers under the Ordinances to enable it to collect its revenue in the city. The political ferment made a definite impact on college students, and much less students passed the Matriculation (Bombay~1931-32, pp. iii-v.) Almost every revenue examination. producing department of Government was affected by the Civil Disobedience Movement, which, on the other hand, necessitated an increased expenditure on the police and jails. The principal cause, however, of the disastrous deterioration in the finances of Government was the tremendous slump in agricultural prices, combined with the continued trade depression. The economic landslide was continuing in full force, throughout 1931-32, though the depression eased slightly in 1932-33. The severity of its impact may be gauged from one example. Exports of raw cotton, Bombay's chief export commodity, slumped down to Rs. 16 crores in 1931-32 as against Rs. 48 crores in 1928-29. As cotton comprised about 50 per cent of the total exports, it can easily be realised to what depths the export trade had dwindled. (Ibid., p. vi.)

In 1931-32, Bombay's imports were down by nearly 13 per cent on the previous year, most commodities falling in quantity and value. In 1932-33 there was an improvement of 9 per cent in value. Exports fell by nearly 41 per cent in value in 1931-32; in the subsequent year exports dwindled again by 26 per cent in value. The fall in exports was despite the large shipment of distress gold which was in consequence to the economic plight of the people, the British suspension of the gold standard and the rise in the sterling price of gold. The entrepot trade declined in both the years. Yet another indicator of the plight of Bombay's premier industry was the collection of income tax and super tax from the textile millowners. In 1931-32, only Rs. 13 lakhs were collected, compared with Rs. 15 lakhs the previous year, in spite of an increase of almost 50 per cent in the rate. As many as 27 mills in the city were incurring operational losses during the year, while in the next year many mills had closed due to non-disposal of their stocks in the adverse market conditions. (J. M. Brown, Gandhi and Civil Disobedience, pp. 293-94.)

Atrocities: The bureaucracy used all the powers conferred upon it by the Ordinances. But there were certain other forms of repression which even the brute Ordinances had not contemplated. The arrests were made in large numbers, but they were made with deliberate discrimination. It soon became apparent that, despite camp jails and temporary jails being opened, the satyagrahis that offered themselves for arrest could not all be accommodated. Hence, only Congressmen of organising ability were ordinarily imprisoned. The people had believed that most of the civil resisters would, by reason of their education, social status and mode of living, fall in class ' B ' at least. Graduates, professors, lawyers, editors, businessmen, rich landlords, and philanthropic workers were all thrown into the 'C class. The conditions of prison life were intolerable for those patriots who had sought imprisonment for the sake of their convictions and the noble cause of freedom. The temporary jails were filthy horrible places, although the conditions in the permanent jails were not much better.

The lathi-charges were very often indiscriminate and inhuman. In many places, the injuries caused were serious and the number of those injured large. The peaceful satyagrahis also did not escape assaults by the police. Unmentionable atrocities and tortures were perpetrated, the cruelty of which varied with the resourcefulness or callousness of the concerned police officers. Even women and children were not spared. In certain cases, heavy fines, sometimes rising to four or even five figures, were imposed on conviction. Many were subjected to extra-legal and even illegal harassment.

It may be unnecessary to burden this narration with details. It would also be invidious to mention names of persons and individuals who were the victims of atrocities. In the midst of all this havoc and terror, one thing stands out most prominently. Never did the people resort to any serious acts of violence, and the lesson of non-violence had gone deep down, and enabled the movement to be continued for long; and this too in the face of the very negation of all laws and civilized Government. All open means of communication having been closed, the Congress workers, with their resourcefulness, proved quite a match to the widespread ramifications of the Police—ordinary, special and secret. The campaign was never allowed to starve of funds. The anonymous donor paid without knowing to whom he paid. Strict accounts were maintained even in those exciting times.

Repression had crossed legitimate limits. A governmental terrorism was spreading through the land. Both English and Indian officials behaved in a brutal manner. The latter were becoming demoralized by reason of Government regarding as meritorious any disloyalty to the people and inhuman conduction towards their own kith and kin. They were being cowed down. Free speech had been stifled. Women, the Desh Sevikas, who had been inspired by public service, had their honour being insulted. All this was done in order to crush the spirit of freedom. Repression was not confined to punishment for civil breaches of common law. It goaded people to break newly issued orders for the most part to humiliate them. (Gandhiji's letter to Sir Samuel Hoare, from Yeravada Prison, 11 March 1932.)

The Government justified its actions in various ways. The Police Commissioner of Bombay, for example, styled his actions in the city, as a smashing drive against the forces of murder, anarchy and disruption concentrated in the alien domination of India. (Sir Patrick Kelly, Police Commissioner, to R. M. Maxwell, I.C.S., Secretary to Government of Bombay, Home Department (Special), 4 March 1932.) Flogging in jails was a daily occurrence. The atrocities in the North West Frontier Province sparked off undaunted demonstrations in Bombay. Pathans and their Hindu brethren showed an invincing solidarity behind the call given by Gandhiji and Khan Abdul Ghaffar Khan. (Bombay Provincial Congress Committee Leaflet dated 24 February 1932, entitled Frontier Atrocities,) A spate of intense hostility rose in Bombay against the police brutalities in Surat district, and the attachment of the Swaraj Ashram and the Bardoli Ashram by Government. The Ashram lads were persecuted. Even the Mahatma's hut at Karadi near Dandi was burnt by police. This was bound to agitate the people of Bombay. Many were imprisoned. But imprisonment failed miserably to daunt them. Hence the police started to resort to personal violence. The Home Member of Bombay Government, Sir Muhamed Usman, gave an honest although a Machiavellian explanation in the Legislative Council: "The prisons are getting overcrowded which means that the whole situation in India has got nearly out of control and the Government is finding it very difficult to manage it." (Congress Bulletin, 29 Feb. 1932)

Despite repression and suppression, the Bombay Provincial Congress Committee had been functioning openely through successive 'Emergency Councils' and Dictators'. The members of the councils and the dictators were imprisoned and convicted, but there were others in the field to fill the void. They were in supreme command, in the city, and their names were published and known to public. The *Bombay Congress Bulletin*, which was published almost daily, had been the Bombay citizen's only guide and philosopher from January 1932. (Bombay Congress Bulletin, 2 April 1932) Many volunteers were convicted under Section 18 (1)-XXIII of 1930 for distributing the unauthorised news-sheets and sentenced to prolonged rigorous imprisonment.

After the arrest of Gandhiji in the small hours of 4 January 1932, the Desh Sevika Sangh made a splendid contribution to the success of swadeshi and boycott. Sarojini Naidu, Kamaladevi Chattopadhyaya, Hansa Mehta, Perin Captain, Avantikabai Gokhale, Lilavati Munshi, and many others gave an exemplary account of their work in organising heroic but peaceful picketing in favour of swadeshi and boycott of foreign cloth. They also conducted a movement against foreign liquour and the drinking habit. The Mulji Jetha Market, the biggest cloth mart in the country, was paralysed for more than three months till Sarojini Naidu inaugurated the swadeshi wing in the market on 7 April 1932. About the inaugural ceremony, the Bombay Chronicle (Bombay Chronicle, 8 April 1932,) writes: A fervent exhortation was made to merchants to standby the Swadeshi creed and help the country achieve freedom. Every shop flew a tri-colour national flag. There were about 110 shops in the wing and every merchant took a pledge to deal in swadeshi cloth only. Bombay merchants stood solidly behind the patriots who had courted sufferings. A hundred more shops were opened at the Mulii Jetha Market on 11 April

under supervision and inspection of a saffron-saried Brigade of Women. It was due to the determination of merchants to convert the market into a purely swadeshi one that they were able to declare another portion to deal in swadeshi cloth. The credit was solely due to the efforts of women volunteers. (*Ibid., 12 April 1932*)

Besides the *Bombay Congress Bulletin*, the *Congress Prabhat Patrika*, the *Kamgar Bulletin*, and the *Bombay University Students' Bulletin* were also published occasionally. The Congress Prabhat Patrika Press at Dongri was raided by the Police on 23 March 1932. (*Police Commissioner to Secretary, Home Dept, Bombay, Daily Reports.*)

From the Daily Reports (The Daily Reports, secret as they are, have been preserved in the Office of the Police Commissioner. These Reports are maintained for a period from March 1930 to 1934.) of Sir Patrick Kelly, Police Commissioner of Bombay, to R. M. Maxwell, Secretary to Government of Bombay, Home Department (Special), a detailed account of the events in Bombay is available. These accounts read along with the issues of the Bombay Congress Bulletin, many other bulletins and the Bombay Chronicle enable us to write a succinct history of the Civil Disobedience Movement in Bombay. The present author has attempted to furnish such a succinct history, although briefly, in the above pages as well as in the subsequent pages.

After the incarceration of Gandhiji on 4 January 1932, the Emergency Councils of the Bombay Provincial Congress Committee became very active in the city. ' Dictators ' were appointed for each ward and each District Congress Committee in the city. They conducted an intensive campaign and picketing. Both men and women participated in the same and courted imprisonment with an undaunted spirit. Picketing of foreign cloth shops was almost a daily affair. The particular venues of picketing of foreign cloth shops were the Mulji Jetha Market, Mangaldas Market and Shaikh Memon Street, Lakhmidas Market, Hornby Road, Esplanade Road, Musjid Bunder Road, Chakla Street, Ralli Bros, godown at Ahmedabad Street, Tarachand Motichand's godown at Carnac Road, Chira Bazar, Charni Road, and Haines and DeLisle Roads. The Bhendi Bazar, although comparatively complacent, also participated in the picketing on a couple of occasions. As a result of picketing, the four big cloth markets, namely Mulji Jetha, Lakhmidas, Mangaldas and Morarji were paralysed for considerable time on several occasions. The arrest of Dr. Iivaraj Mehta and Mrs. Hansa Mehta on 2 March 1932, of Nariman, K. M. Munshi and Mrs. Perin Captain, three days later, of Jamnalal Bajaj on the 14th, of Kamaladevi Chattopadhyaya on 6 April, of Mrs. Sarojini Naidu on 23 April and of Madan Mohan Malaviya on the 24th April, were but a few occasions (It is not the intention of the present author to give a burdensome account of the several events of dislocation of trade and closure of which were a regular feature of the period.) when those markets. markets along with many others observed a spontaneous hartal. The swadeshi wing was expanded gradually under the strict vigilance of the Desh Sevika Sangh. They were particularly vigilant that none of the complacent traders should deal in foreign cloth under the guise of swadeshi cloth. The breaches, negligible though they were, were dealt with instantly. By and large, the merchants stood solidly behind the

patriots and contributed money for financing the campaigns. It is remarkable that the Bombay Millowners' Association with Government help had earlier tried to open the Mulji Jetha Market on 16 March 1932 with all the means at their disposal. But their efforts were futile and fruitless. (Patrick Kelly to R. M. Maxwell, 17 March 1932.) Public opinion under Congress leadership was strongly against opening the Mulji Jetha Market. The millowners' attempts to run with the hare and hunt with the hounds failed. (Congress Bulletin, 21 March 1932.)

European business in Bombay was dashed to pieces. The British Press in India and England showed dire anxiety for the situation in Bombay. The cotton market, the biggest among the city markets, was totally paralysed and brought to shambles. The patriotic cotton brokers, particularly the Gujaratis, Marwaris and Jains, stood fervently behind the movement. Numerous cotton brokers were imprisoned, which further intensified the closure of the Cotton Green. The Bombay Cotton Brokers' Association which was under domination of the Gandhian movement foiled all attempts of the Bombay Government in general and the Governor, Frederick Sykes, in particular, to open the market from time to time. (Details are given in the section on Businessmen and Civil Disobedience.) G. B. Pradhan, the Finance Member of the Bombay Government, convened a meeting of 60 persons interested in the cotton trade, at the Council Hall. (Times of India, 22 March 1932.) They included millowners like Purshottamdas Thakurdas, H. P. Mody, Phiroze Sethna, Pochkhanwalla and F. E. Dinshaw. (They had earlier been denigrated as hypocrites by the Congress Bulletin of 29 Feb. 1932.) Sir Purshottamdas said that the cotton market be opened and hartal prevented. All the speakers expressed their deep concern at the state of cotton trade and the city. There would be diversion of trade from the city which would jeopardize the very existence of Bombay as the premier city in India. The millowners had secret and treasonable negotiations with the Secretariat in Bombay as well as the Central Secretariat in New Delhi for the pursuit of their vested interests in cotton business and against the Congress. (Congress Bulletin, 28 March 1932.) They were, however, only partially successful under the guise of championing the cause of the cotton growers in the Presidency, who were suffering badly due to the miserable slump in cotton prices. Accordingly, the Bombay Cotton Brokers' Association under pressures from the vested interests as well as the Governments at Bombay and New Delhi, resolved to transact business for three days in a week to facilitate the sale of cotton growers' produce, under certain conditions. But normal trade could not be restored. (Times of India, 30, March 1932. Also see the account given in section on Businessmen and Civil Disobedience.)

Another target of picketing and demonstrations was the Bullion Exchange and the exports of gold. As stated elsewhere in this Chapter, huge quantities of gold and silver were sold under conditions of economic distress and the Great Depression in the Presidency, as in the country. This coincided with the abandonment of the gold standard in England resulting into devaluation of the pound sterling in terms of the rupee. Consequently there was a huge shipment of Indian . distress gold ' from Bombay. The Congress saw in it a miserable impoverishment of India, and launched an agitation against the export of gold and silver from the

Bombay Port. There was intensive picketing, almost daily, at the Bullion Exchange, gold and silver shops at the Shaikh Memon Street, the Mint and many foreign exchange banks. The particular targets of picketing were the Ralli Bros. Office and five exchange banks in the city, namely, Mercantile, Eastern, National, French and P. & O. Banks. The volunteers also boycotted the bullion merchants who were responsible for selling gold and getting the Congress volunteers arrested by police. (Police Commissioner to Secretary, Home Dept. (Special), Bombay, 3 March 1932,) There were hartals in the Bullion Exchange on several occasions. The Javeri Bazar also observed spontaneous hartals very often.

The chemist and druggist shops were also a target of the Congress volunteers. The common venues of picketing were the shops on the Princess Street, Lohar Chawl and Shaikh Memon Street. The police used to compel the owners to open the shops, while the volunteers were most of the times able to effect the closure. The volunteers attached some importance to their action on the ground that these shops used to sell foreign medicines. But here also their wrath was directed more towards English medicines rather than other products. Peace was restored after the chemists agreed to close business for three days in a week. But this truce was breached shortly. (Ibid., 31 March 1932,)

Bonfire of foreign cloth and salt manufacture were the other symbols of the Civil Disobedience Movement in the city. The Chowpati witnessed many an enactment of this drama. The Bhatia Baug and Javeri Bazar also were the scene of such demonstrations. Despite prohibitory orders large public meetings were held on the Chowpati and many open grounds in the city. Mrs. Amrit Kaur, Mrs. Lilavati Munshi, Abidalli Jafferbhai, Y. J. Meheralli and many eminent persons were convicted for holding a public meeting and a bonfire at Chowpati on 29 February 1932 under the Criminal Law Amendment Act. (*Ibid., 1 March 1932.*) This action further agitated public opinion in the city.

Several occasions were celebrated as a part of the mammoth Civil Disobedience Movement in the city. The fourth day of every month was celebrated as Gandhi Day till ,the Mahatma was released. Hartals were observed on these 'Days'. Salt was manufactured at several places and sold in packets at public meetings. Bonfires were made which intensified the wrath of the imperialistic bureaucracy. The Bombay Swadeshi League, with office at Apollo Street, conducted house to house propaganda for swadeshi. The Red Shirt volunteers were particularly active. The National Week was celebrated from 6 April to 13 April. However, it assumed a different significance in 1932 in view of the intensity of the movement and the atrocities by the administration. Each day was symbolic of the various aspects of the movement. The first day was observed as Ladies Day in recognition of the splendid contribution of the fair sex to the success of boycott. The militant Kamaladevi was arrested on the very day. Then came the Flag Day and the Swadeshi Day. The fourth day was devoted to the boycott of foreign cloth. A thrilling event of the fifth or the Workers' and Peasants' Day was the arrest of Achyut Patwardhan of the Banaras Hindu University who was working secretly in Bombay. (Ibid., 11 April 1932.) Then followed the No Tax to Government Day. The eighth day was celebrated in a befitting manner as the Jallianwala Bagh Day with an

impressive hartal in the city. Throughout the National Week, numerous persons including women were arrested and convicted.

Although no sabotage of means of transport was attempted or even contemplated in the movement, the ticket offices at Bombay V. T. and Bombay Central Stations were picketed by volunteers during the National Week. This was intended to awaken the people that railways were not run to the benefit of Indians, but were primarily exploited as an instrument of repression and defence against the Congress. The railway rates were also manipulated to encourage foreign trade and discourage indigenous industry and to provide employment to Britishers. So the people were exhorted to travel as less as possible. (Congress Bulletin, 16 April 1932.)

The Indian Franchise Committee (1932), under the chairmanship of Lord Lothian, (Under Secretary of State for India,) which visited Bombay in March, was greeted with demonstrations at Bhatia Baug. Students of the Bombay University had issued a Bulletin to devote themselves to Congress work and to organise demonstrations against the Franchise Committee. They participated in denouncement of the Round Table Conference Committee and observance of the Dandi March Day on 12 March 1932. A courageous student hoisted the Congress flag on the University Clock Tower, (Police Commissioner to Secretary, Home Dept, 8 March 1932.) which was by all means a heroic action in the face of the officials of the University. A few days later, a flag was hoisted on the Wilson College also. Thus, the students also contributed their might to the freedom movement.

The arrest of the Bombay heroes at Bijapur, namely Nariman, K. M. Munshi and Mrs. Perin Captain on 5 March, and their conviction to rigorous imprisonment and fine aroused public opinion in the city which was demonstrated aptly by a hartal on the 7th. (*Ibid.*) The Dandi March Anniversary was celebrated in a spirited manner. A Congress volunteer hoisted the Congress flag on the new Stock Exchange building. Flag salutation ceremonies were celebrated. There was an impressive hartal. A campaign was launched against postal savings banks, and the people were induced to withdraw their money from the savings banks and not to deposit any money therein. (*Deputy Police Commissioner to Secretary, Home Dept., 12 March 1932.*) Jamnalal Bajaj who had been released a day earlier was again sentenced to rigorous imprisonment.

An interesting episode in the Civil Disobedience Movement in March 1932 was the demonstration of the depressed class persons against separate electorates as well as B. R. Ambedkar and Maulana Shaukat Ali, who were the protagonists of separate electorates. (Police Commissioner to Secretary, Home Dept., 15 March 1932.) The BPCC, through the Congress Bulletins(For example, its issues dated 12 and 18 March 1932.) several times denounced Shaukat Ali as a reactionary stooge of the imperialists and communalists. The bureaucracy was making frantic efforts to encourage a division in the Indian society by wooing the communalists.

Sarojini, who was the only member of the CWC left out of Jail, automatically became Congress president. However, she was also convicted on 23 April 1932 for leaving Bombay without permission of the police. The brave Soli Batliwalla of Bombay was persecuted to a solitary

confinement in Bijapur.

The Congress Resolution of the 47th Congress at Delhi, which was totally banned, was read out in a public meeting on 25 April. (*Police Commissioner to Secretary, Home Dept., 26 April 1932.*) Such was the undaunted spirit of the day.

The Government was all the while trying to alienate the industrialists completely from the Congress. It designed a scheme of Imperialistic Preferences on the promptings of the Governor and other quarters in the country. This scheme accorded a preferential treatment to the goods manufactured in Bombay over the Japanese imports. This was some kind of a palliative to the Bombay industry which was hitherto in the throes of the depression. The industrialists started pressurising the Congressmen to withdraw the movement. Although they were not successful in that direction, the Civil Disobedience Movement became languescent from the middle of 1932.

In the later part of June, efforts were made to hold district political conferences and to revive agitation in anticipation of the expiry of the Ordinances. These attempts met with a good response in Bombay, but they were sternly dealt with by the authorities. Particular attention was devoted to the boycott of British goods and British firms in Congress programme in Bombay. The boycott was directed chiefly against British firms in the Bombay cotton market. To deal with the boycott in the Bombay cotton market, Government introduced the Bombay Cotton Contracts Act, 1932. This measure was designed to regulate dealings in the cotton market, and one of the powers conferred upon Government was that of superseding the Board of Directors of East India Cotton Association or of any other recognised association, by a Board of Control, if that course was considered necessary. The Act was passed in September 1932. (Bombay—1932-33, p. ii.)

The Ordinances were extended in June, and in November a special session of the Bombay Legislative Council enacted the Special Powers Bill incorporating the principal provisions of those Ordinances. The Government arrogated to itself special powers to deal with the Civil Disobedience Movement.

Picketing as an instrument of the boycott movement was universal in Bombay city in spite of Government measures. The foreign cloth shops and, to a lesser extent, the chemists and druggists shops and the Bullion Exchange, were the main targets of attack. Several attempts were also made to picket excise auction sales.

Grave Hindu-Muslim rioting broke out in the middle of May. It subsided for a time, but flared up again towards the end of June, and did not die out until the end of July 1932. As per the Government Report "For some time feelings between the two communities had been strained by the interference of Congress with Mohammedan traders, and with the approach of Mohurrum, any slight incident was sufficient to start an open conflict." (Ibid., p. iii. The present narration is based on this report, although very cautiously.) Probably rumours and misunderstanding was at the root of the trouble. The skirmishes spread to other localities, and took the form of murderous attacks on individuals and looting and arson directed against houses, shops and mosques and temples also. Military

reinforcements were brought in from Deolali and Pune and the Auxiliary Force was put into action. On 18 and 19 May the unrest spread to the mill area, where at one time 46 mills were closed, but extensive patrolling restored normalcy in the mill area gradually.

It was only stein action that could restore peace in the city by 31 May. The troops were gradually withdrawn. During the first fortnight of June isolated cases of assault and injury continued to occur, indicating that the feeling between the two communities was still far from normal. In spite of all precautions rioting revived with greater intensity on 27 June, and the police were forced to open fire on numerous occasions to prevent attacks on temples and mosques. The troops were again called out early in July, but were gradually withdrawn and, with more or less continuous heavy rains from the 5th night, the city gradually quietened. But stray assaults continued until 2 August. Special precautionary police arrangements were maintained for a long time after peace was restored. The rioting took a heavy toll of life in the city. Between 14 May and 2 August 1932, 217 persons were killed and 2,713 injured, while 3,757 were arrested. Over 400 shops were looted and property worth Rs. 24 lakhs was destroyed. (Bombay—1932-33, pp. ii-iv.)

In the third week of September all other issues were relegated to the background by the announcement of Gandhiji's fast over the Communal Award. Before the assumption of the narration of the same, let us review very briefly a few events in the city.

Economic Situation: In the face of the trade depression and the Civil Disobedience Movement, the Government balanced its budget by restricting new expenditure to items of imperative urgency. Establishment costs were reduced by levying a cut in the salaries of government servants and by retrenchment in 1932-33. Bombay's export trade suffered very largely in spite of the continued export of gold. There was a further falling off in the entrepot trade of Bombay, the value thereof declining from Rs. 2.84 crores in 1931-32 to Rs. 1.98 crores in 1932-33. (Ibid., p. v.) The condition of the cotton textile industry was far from satisfactory, and it continued to deteriorate further in 1932-33. Some mills had shut down temporarily due to accumulation of large stocks on account of depression and Japanese competetion, the latter being extremely severe due to continuous depression of the Yen. (Ibid., p. 74.) The Bombay Improvement Trust permanently leased an area of 23 .22 lakh sq. yards of developed land for building purposes in the city, an area of 1,496 lakh sq. yards still remaining un-leased. The work on the Back Bay Reclamation Scheme such as increased protection for the rubble mound under the sea wall at Marine Lines, road building in block No. I, grassing the recreation ground, allotment of cricket, football and hockey fields to clubs on payment, etc., was continued in 1932-33. A portion of the Central Salsette Tramway line from Andheri to Kurla was dismantled and disposed off. The construction of the Juhu Aerodrome commenced on 1930-31 and was completed in 1932-33 at a total cost of just over Rs. 6 lakhs. (Bombay—1932-33, p. 159.)

Yeravada Pact: The announcement of the "Communal Award" embodying the obnoxious provisions of dismemberment of the Harijans from the

Hindu fold by the Prime Minister, on 17 August 1932, was another British step in dividing the Indian society. Gandhiji reacted promptly and announced his intention of a fast unto death from 20 September 1932. A couple of days before the fast was due to commence, eminent members of the Welfare of India League, Bombay, such as Purshottamdas Thakurdas, Chunilal V. Mehta, G. D. Birla, Mathuradas Vassanji, Rustom Masani, etc., tried to avert the catastrophe, and to ask unanimously for the release of Gandhiji and the simultaneous termination of Ordinance rule and civil disobedience. A section of population did not make a secret of their communal hatred and the want of fellow-feeling, undermining the foundations of the unity of Hindu society. While the Hindu diehards were quite vocal about their own stance, a section of minorities was playing into the hands of the English by demanding separate electorates and reservation of seats. Under the circumstances, the above named citizens of Bombay visited Gandhiji in Yeravada prison. They came back to Bombay and convened a conference in the city. They again went to Pune. accompained by Dr. B. R. Ambedkar. Prolonged negotiations ensued. At the end, the leaders including representatives of caste Hindus and untouchables signed an agreed settlement, which has become famous as the Yeravada Pact or the Gandhi-Ambedkar Pact. (It was signed on 24 Sept. 1932 by Dr. Ambedkar, M. C. Rajah (Ambedkar's opponent who also claimed to represent untouchables but favoured joint electroates with Malaviya, lavakar, Sapru, Mehta, Birla, Thakurdas. Rajagopalachari and Rajendra Prasad among others.) The fast was terminated on 26 September after the British Government had accepted the pact, which gave the Harijans much more than what was given to them by the British Prime Minister, without taking them out of the Hindu fold. (They were now getting 148 seats instead of 71 as per the Prime *Minister's award.*)

The great event was greeted with joy in the city. Most of the signatories of the pact returned to Bombay, and a conference of leaders of caste Hindus and untouchables was convened by Madan Mohanji at the Indian Merchants' Chamber hall in the city. The leaders included Tej Bahadur Sapru, M. R. Jayakar, C. Rajagopalachari, Dr. Ambedkar, Dr. Rajendra Prasad, Lallubhai Samaldas, B. S. Kamat, Mrs. Krishnabai Setalvad, Dr. Choithram Gidwani, H. N. Kunzru, Shankarlal Banker, Devdas Gandhi, Purshottamdas Thakurdas. Chunilal Mehta. Mathuradas Walchand Hirachand, Manu Subedar, G. K. Gadgil, G. K. Deodhar, Dr. Munje, M. S. Aney, M. C. Rajah, Amritlal Thakkar, Behram Karanjia, M. C. Ghia, Mrs. Jayashri Raiji, Mrs. Hansa Mehta. Mrs. Urmila Mehta, G. D. Madgaonkar, K. Natarajan, V. L. Napoo, Mrs. Dalvi, Mathuradas V. Khimji, Khaitan, Mathuradas Matani, B. F. Bharucha, Nikalje, Dr. P. D. Solanki, Deorukhkar, T. Prakasam, Rao Bahadur Raja, C. G. Morarji, Jaisukhlal Mehta, Avantikabai Gokhale, P. Baloo, B. N. Rajbhoj, etc.

The conference happily endorsed the pact and passed a resolution drafted by Gandhiji. The untouchables were conferred with the right to select the candidates for the seats and the common electors would vote for them. The pact assured the former untouchables an honoured place in the Hindu society and sought to remove the sense of fear and injustice which haunted their mind for centuries. It also assured them a proper representation in government services which were formerly denied to

them. The conference further resolved that thenceforth no one among Hindus should be regarded as untouchable by virtue of birth, and every one should be accorded equal opportunity and status. A statutory recognition to their rights was to be accorded by the Swaraj Parliament at the first opportunity. Malaviya proposed another resolution urging unrestricted entry for Harijans into all Hindu temples, which was unanimously passed. A fund of Rs. 25 lakhs was decided to be raised for the welfare and advancement of depressed classes. Dr. Ambedkar paid a tribute to Gandhiji and said that Harijans would now be equal to caste Hindus. (K. Gopalswami, op. cit., pp. 281-86.) The pact and Gandhiji's resolution were unanimously ratified by all including the Hindu Mahasabha, and put an end, although seemingly, to a vexatious problem.

The response to Gandhiji's call to devote to the Harijan movement was quick and ample. A penance so pure naturally bore its full result. He entrusted the organisation of Harijan work to trusted nationalist non-Congress workers like G. D. Birla and Amritlal Thakkar. This new field of work was in a way a diversion from the Civil Disobedience Movement. "The public response to Gandhiji's call for the removal of untouchability did doubtless affect the progress of the Civil Disobedience Movement." (Pattabhi Sitaramayya, op. cit., Vol. I, p. 555.) At a public meeting in Bombay on 30 September 1932, an All-India Anti-Untouchability League was formed, with Birla as president and Thakkar as secretary. (J. M. Brown, Gandhi and Civil Disobedience, p. 322.) Birla liberally financed the anti-untouchability and khadi campaigns of Gandhiji, and Willingdon held him responsible for much of the money even behind civil disobedience. (Ibid., p. 290.)

Civil Disobedience Suspended: Meanwhile H. N. Kunzru, Sapru, Jayakar, Kelkar and Thakkar were in favour of manoeuvring a settlement and end the Civil Disobedience Movement. There was a spate of activity in Bombay and Pune, and Gandhiji was receiving so much publicity. It was thought that Gandhiji would have agreed to call off Civil Disobedience to enable his followers to pursue the anti-untouchability campaign. But Lord Willingdon's Government held that there could be no negotiations with Gandhiii and no release unless he called off civil disobedience. They had calculated, in view of the current state of the movement and the assured participation of a fair range of politicians in constitutional discussions, that he could perform no useful function for them except that of ending Civil Disobedience. This belief of the Governor of Bombay and Viceroy was further strengthened by the fact that, although some Congressmen were willing to terminate the movement, Vallabhbhai, Jawaharlal Nehru and Ghaffar Khan might probably have sabotaged any attempt by Gandhiji to abandon the movement. (Ibid., p. 326.) Hence Delhi, in consultation with Bombay Government, decided (October) to refuse all interviews to Gandhiii in Jail at which civil disobedience was likely to be discussed, for fear of giving the impression that Government would negotiate. This was so despite a strong pressure from Samuel Hoare and the Cabinet against this rigid stand and the strong inclination of the Home Government to release Gandhiji. (Samuel Hoare, Secretary of State, felt that keeping Gandhi in Jail until the new constitution came into operation, was unpalatable and impolitic idea in the Indian as well as British context (Hoare to Willingdon, 12 and 26 January 1933, MSS. EUR. 240). Bombay

and Delhi held that Gandhiji's release would serve no purpose and would only generate a demand for a general amnesty. Thus, there was no way of engaging in political discussion with Government. This led to frustration. Many were aggrieved that Gandhiji's emphasis on a social issue (antiuntouchability) was diverting attention from Civil Disobedience. Some felt that the Mahatma had let them down by his stand, and was indifferent to the fate of compatriots in prison. Gandhiji's statement (January 7, 1933.) in this respect was interpreted by the *Congress Bulletin* as a renewed call to Civil Disobedience. The net result was, however, a confusion among Congressmen. There was a growing expression of frustration at the continued conflict, and a wish to call off Civil Disobedience. Ex-civil resisters like Jamnadas Mehta and Rohit Mehta were among those who urged Gandhiji to call off the movement. Undoubtedly Civil Disobedience had lost momentum. Meanwhile the abortive Calcutta Congress session of 31 March 1933, banned by Government, took place when most of the leaders were arrested. Even the acting president, M. S. Aney, was arrested en route to Calcutta. The arrest and the inhuman treatment of Mrs. Motilal Nehru were severely condemned in Bombay. The session did not pave a way out of the political deadlock, and it proved only to be a desperate gesture.

This was followed by an unexpected event in the country. On 8 May 1933 Gandhiji started a self-purificatory fast for 21 days with the object . of increasing the number of workers in the Harijan movement to fulfil their task with a purer and truer spirit of service. When Gandhiji was fasting in jail Dr. Gilder and a battery of doctors from Bombay went to Yeravada to examine him. (K. Gopalswami, op. cit, p. 286.) The press expressed bewilderment and some overt hostility, and a flood of letters and telegrams from appalled associates (Nehru, Malaviya, Syed Mahamud, Ansari, A. K. Azad, Sri Prakash and K. Natarajan protested vigorously, while Rajagopalachari went to Yeravada to persuade the Mahatma away from his self-martyrdom.) poured into Yeravada. The Bombay Government had warned Delhi that Gandhiji would probably not survive a three-week fast, and Delhi decided that the political repercussions of his death in jail outweighed the risk of the impetus to Civil Disobedience due to his release. Hence, he was released the same evening. He advised Aney as Congress president, to suspend the movement for upto six weeks since satvagrahis would' be in a state of terrible suspense' during his fast. He then appealed to Government to release all civil resisters, as unless the members of Congress Working Committee were released, it was not possible to revoke the movement. Aney seized the opportunity and suspended the campaign for six weeks. Government was, however, determined to extract an implicit surrender from the Congress, and issued a communique on 9 May 1933 that it did not intend to negotiate with the Congress for a withdrawal of the movement or of releasing the leaders with a view to arriving at any settlement with them in regard to the unlawful activities. Thus, the Government foiled Gandhiji's attempt to end the deadlock between the Congress and the British.

Meanwhile there was extreme uncertainty and demoralisation among Congressmen, who were looking for a lead from Mahatmaji. Some argued that Civil Disobedience was dead and should be buried forthwith, while there was pressure for a renewed conflict in Bombay. There were people

who argued that civil disobedience had not failed, since it had changed people's mentality dramatically; it was now at a standstill, and people should be given a breathing space before they resumed it. Ordinances had silenced people and the civil service showed no intention of relinquishing. The non-violent and exemplarily heroic fight of the Pathans and their leader Abdul Ghaffar Khan had inspired the Bombay activists. Hence, many thought with Gandhiji that Ghaffar Khan's release was essential to a settlement. (J. M. Brown, Gandhi and Civil Disobedience, p. 342.) The two other most prominent leaders, Vallabh-bhai and Jawaharlalii were still confined to jail. Meanwhile Congressmen convened a conference at Pune on 12 July 1933, which resolved that Civil Disobedience should not be unconditionally withdrawn, but should now take the form of individual civil disobedience; that all secret activities should cease and that Congress organisations, being illegal, should also cease to operate for the time being. Mass Civil Disobedience, thus, became moribund and the 'war councils' ceased to function. The appalling constraints imposed on Gandhiji by Congressmen and the unrelenting Government had forced this decision. Even then the obdurate Willingdon refused to grant an interview to Gandhiji. This was received with deep anguish, dismay and even frustration in Bombay.

Gandhiji even sacrificed what was dearest to him: he disbanded the Sabarmati Ashram on 31 July 1933 because Government repression made it impossible for the ashram to carry on constructive work, and it was no longer the fit instrument to Gandhiji's work.

The programme of individual civil disobedience attracted only partial support. There was an upswing in the number of convictions in August and September. In the city hand-written *Congress Bulletins* were produced and seven Congressmen tried to manufacture salt and to organise a flag salutation ceremony. (*Ibid.*, p. 360.) By and large, it was an unattractive programme except for those who shared Gandhiji's creed or those who shared Jawaharla's determination to keep at least a symbolic conflict going.

Democratic Swaraj Party: The Congress was in search of a programme. There was bewilderment and frustration in the rank and file. A school of thought under Nehru advocated that the struggle for independence accompanied by social and economic freedom for the exploited masses was to continue, with civil disobedience as its main weapon. However, the search for a new programme veered more towards abandoning the movement. Many were clamouring for Council entry. In Bombay, the All-Maharashtra Political Conference was convened on 28 and 29 October 1933 to search for an alternative to civil disobedience. An independent Democratic Swaraj Party was formally inaugurated by the conference, its creed being identical to the Congress but its membership open to non-Congressmen. Its programme was the capture and acceptance of all places of power in the State structure from village panchayat to legislature. It advocated an economic programme to help peasants and industrial workers, and the abandonment of Civil Disobedience. (Ibid., p. 362.) It was the brainchild of Jamnadas Mehta who had opposed Gandhiji's civil disobedience plan even in 1930. Mehta's supporter in this venture was N. C. Kelkar. " This new party was not

only the latest manifestation of long-standing rivalries within and on the peripheries of Congress in western India and a means of forestalling old rivals in the exploitation of the new constitution. It also reflected increasing anxiety on the part of men like Kelkar who shared the Hindu Mahasabha's determination to capture legislative seats and prevent Muslims from dominating the new constitutional structures in alliance with the bureaucracy. It was no coincidence that barely a fortnight earlier the Mahasabha had resolved at its annual session that the Hindu community could ' no longer afford to ignore the various means open, in and out of the constitution, to promote and protect its interests. The Mehta-Kelkar move did not go unchallenged locally; and a manifesto condemning it was issued by 39 Maharashtra Congressmen including D.D. Sathe and G.A. Deshpande." (Ibid., pp. 362-63.) The nationalist Muslim editor of the Bombay Chronicle, S. A. Brelvi, also condemned the Council entry policy as divisive, and urged restoration of Congress activity and political movement by calling off individual civil disobedience.

Although Council entry was growing to be the ultimate aim of Congressmen, they needed to retain the benefits of Gandhiji's continental reputation. While they did not dare to alienate the Mahatma who stood for satyagraha, they strived to escape the predicament. A formidable attempt was made in this direction by one of the most eminent of Bombay Congressmen, K. F. Nariman. His strategy was to secure an AICC meeting as a prelude to a new Congress programme, though he kept off the vexatious path of Council entry. As a CWC member, Nariman told Gandhiji at Wardha (October end) that he intended campaign for a new programme. He held that the present impasse was leading to disintegration and demoralization within the Congress, and inviting the emergence of hostile cliques outside its ranks. His aim was to restore the authority of Congress and convene the AICC to consider the situation in a rational light. Gandhiji redirected him to Nehru, who deplored such infighting. (Ibid., pp. 365-66.) Nariman's efforts were, thus, futile.

Meanwhile Nariman had been soliciting Congressmen's support through a circular and draft programme for consideration. This reiterated the faith of Congress in non-violent resistance as the best means of attaining their goal, but revocation of civil disobedience as a matter of tactical expediency in the present circumstances. Individual civil disobedience was to remain on a personal level, but the official Congress policy would be constructive activities as an economic programme to be settled later. (Ibid., p. 366.) Nehru ascertained from AICC members whether they wanted a meeting. A large proportion of those in favour came from Bombay. (Ibid.) The impasse, however, continued. Nariman, his tactics having failed, now started pressing for a referendum of all members of Congress bodies on the question, but to no results.

K. M. Munshi had been pleading with Gandhiji the need to permit a Council entry group within Congress. But there was no intention to precipitate a conflict, although evidence was accumulating that Congressmen were determined not to remain isolated from the sources of power in legislatures or outside. Even Munshi expressed the futility of Civil Disobedience Movement and desired to revive old constitutional methods of Congress politics.

However, there were many like Brelvi, the editor of the *Bombay Chronicle*, who still maintained that the talk of Council entry was inopportune. In this delicate situation a closed door meeting took place at Delhi with five Bombay men, including Munshi, Nariman and Bhulabhai. It was clear that civil disobedience was dead, but there was disagreement whether formally to end it. The upshot of the meeting was a unanimous decision to revive the Swaraj Party. Its programme was to contest elections and to take up Assembly seats on the issues of abrogating repressive laws and reject the White Paper in favour of a National Demand. (*Ibid., pp. 372-73.*) When the idea was put to Gandhiji in Patna, he announced his decision that Congress should suspend civil disobedience and withdraw the Poona programme, while he alone should pursue the struggle. (*4 April 1934.*) He also expressed his moral support to the protagonists of Council entry.

This was followed by a Government declaration on 1 May to hold elections to the new Assembly in the Autumn. The Swaraj Party was revived in a conference in May to contest the forthcoming elections. Soon Government lifted the ban on Congress organisations. The Congress was reorganised and the Congress Parliamentary Board was formed. The CWC met in Bombay on 17-18 June to evolve a national strategy. The bitterest source of division among Congressmen was the Communal Award. In the CWC meeting Gandhiji attempted to stave off disaffection by the Nationalist Muslims by urging that Congress should neither accept nor reject the Award. He failed, and in August the communal wing, under Malaviya and Aney, broke away and formed a Nationalist Party to fight the elections on this issue. There emerged a small but vocal group of younger Congressmen calling themselves socialists. (The Socialist Party held its first All-India Conference at Patna on 17 May 1934 under Acharya Narendra Dev.) Yusuf Meherally became an active member of the Congress Socialist Party founded by Jayaprakash Nafayan. Many disputes and personal rivalries precipitated a bitter strife when Congressmen began to receive their organisations and to contest elections. The conflicts proved that the priorities of the Congressmen differed radically from those of Gandhiji. (J. M. Brown, Gandhi and Civil Disobedience, pp. 377-79.) He therefore decided to guit the Congress.

CONGRESS SESSION OF 1934

It was against this background that the Congress met in Bombay from 26 to 28 October 1934, under the presidentship of Dr. Rajendra Prasad. K. F. Nariman was the chairman of the Reception Committee. A large camp was formed at Worli which attracted many visitors from the city. The harmony of the proceedings was interrupted by the attempts of communists to force an entry into the pandal. The Congress Socialists formed the principal opposition, but found themselves very much in the minority, while Madan Mohan Malaviya's challenge to the Communal Award suffered an overwhelming defeat. The Congress congratulated the Nation on the heroic sacrifices made and the sufferings undergone by thousands of civil resisters, and placed on record its conviction that "without non-violent, non-co-operation and civil resistance there would never have been the phenomenal mass awakening that has taken place throughout the country". Whilst recognising the desirability and necessity of the suspension of the civil resistance campaign except with reference

to Gandhiji, the Congress reiterated its undying faith in non-violent, non-co-operation and civil resistance "as a better means of achieving Swaraj than methods of violence, which, as experience has abundantly shown, result in terrorism both by the oppressed and the oppressors". (cf. Pattabhi Sitaramayya, op. pit, Vol. I, pp. 591-92.) Another important development was the foundation of the All-India Village Industries Association under Gandhiji's guidance, which, though part of the Congress, was to be an autonomous body. (It was formally started at Wardha on 14 December 1934, although Bombay gave birth to this important activity.) It was to be another organ for pursuit of his own vision of Swaraj and building up his own area of influence, unhampered by Congress politicking. The other resolutions pertained to the Congress Parliamentary Board and its policy and programme, the constructive programme, status of Indian settlers overseas, Swadeshi, etc.

The Bombay session would have been of a humdrum type and devoid of any exciting interest, but for the imminent exit of Gandhiji from the Congress and the arena of politics, and the foreshadowed amendment of the Congress constitution. This was a regular session held after an interval of three and a half years, and at a time when a certain paralysis had overtaken it. (Pattabhi Sitaramayya, op. cit., Vol. I, p. 586.) Hence the tremendous excitement in Bombay. Gandhiji suggested an amendment to the creed of the Congress by replacing the words " peaceful and legitimate means to attain Swaraj " by the words " truthful and nonviolent methods ". The Congress rejected his plea. He asserted that the Congress had become an artificial and corrupt body with an overpowering desire to wrangle. He found no option but to quit.

On the closing day of the Bombay session, an impressive tribute was paid to Gandhiji by the large concourse assembled in the Congress pandal. Pindrop silence prevailed throughout the hour-long speech he delivered in support of his constitutional scheme. The session adopted his propositions even without having a copy of the text of the revised constitution. A resolution was passed on his historic retirement, expressing full confidence in him. (The text of the resolution was as under: "The Congress reiterates its confidence in the leadership of Mahatma Gandhi and is emphatically of opinion that he should reconsider his decision to retire from the Congress. But inasmuch as all efforts to persuade him in that behalf have failed, this Congress, while reluctantly accepting his decision, places on record its deep sense of gratitude for the unique services rendered by him to the Nation and notes with satisfaction his assurance that his advice and guidance will be available to the Congress whenever necessary." It was a stunning news to the press and the public that the Mahatma would not even be a primary member of Congress.)

"The success of the Bombay session was in no small measure due to the tact, energy and circumspection of its President, Babu Rajendra Prasad. His address to the Congress is one of those model addresses which leave an abiding effect on the political situation." (Pattabhi Sitaramayya, op. cit., Vol. I, p. 590.)

By October 1934 Congress was once more a legal organisation on the road to constitutional politics. On his part, Gandhiji was still committed to satyagraha. Hardly had the Bombay session concluded its sittings, the

Nation and the city were plunged into the elections to the Legislative Assembly held in the middle of November.

Starting with a great advantage of being infinitely the best organised political party, the Congress met with a large measure of success in the campaign and secured five out of seven seats in the Legislative Assembly. (Bombay—1934-35, p. i.)

The report of the Parliamentary Joint Select Committee on Indian Constitutional Reforms was published in November 1934, and for some time it was the chief subject of discussion amongst politicians and the Press. Local opinion characterised the report as disappointing and reactionary and its reception was generally hostile. The Congress was disappointed. A Government motion in the Legislative Council that the report be considered, was defeated by 38 votes to 21, Government remaining neutral. (Ibid.)

ECONOMIC CONDITIONS (1933-1939)

Meanwhile the Communists became more militant and started organisation of strikes and struggles against employers and Government. Towards the end of 1933 it was realised by Communists as well as non-Communists that sporadic strikes were futile and that the only remedy was to launch a general strike of millhands. The All-India Textile Workers' Conference, which had its session in the city in January 1934, decided to form a joint strike committee comprising Communists and others. The strike began on 23 April 1934, and encompassed all mills within a couple of days. This was to be an All-India general strike. But in actual fact it took place only in Bombay, Nagpur and Solapur. It involved about a lakh millhands. As the strike advanced, the Communists became more and more militant and insisted on resorting to their adventurist course of action. Naturally the strike committee then split and became incapable of giving a lead to the strikers. (V. B. Karnik, Strikes in India (Manaktalas, Bombay, 1967), p. 257.) Government resorted to repressive measures and arrested a batch of 28 leaders of the strike on 30 April and detained them under the Bombay Special (Emergency) Powers Act of 1932. Some public organisations had tried a settlement, but the obstinacy of both the millowners and the joint strike committee foiled all efforts. After the middle of May, the patience of the workers to withstand the strike began to decline, and it was eventually called off on 23 June. (Bombay-1934-35, p. iv.) The grievance of the workers related to wage cuts and rationalisation.

The militancy of the Communists prompted the Government to declare the Communist Party illegal immediately. The Government also enacted the Bombay Trade Disputes Conciliation Act, 1934, to provide for a speedy machinery for settlement of disputes in mills in Bombay. One of the objects of the legislation was to put an end to Communist domination over the millhands in the city. (V. B. Karnik, op. cit, p. 255.) The Minister in charge of the above Bill, frankly stated in the Legislative Council, " It (the legislation) is an open effort on the part of the Government to prevent Communists and extremists from interfering in the textile affairs of Bombay City.". The Act and the machinery that was set up were stoutly

opposed by Communists as well as other labour leaders. (*Ibid.*) Although the enactment achieved its objective of avoiding strikes by providing an alternative method for ventilation of grievances of workers, it did hamper the growth of independent trade unions. (*Ibid.*, p. 256.)

The account of the troubled days would, by no means, be complete without a reference to movement of the dock workers in the city. The dock workers were until 1930s one of the most exploited and most disorganised sections of the Indian working class. Their earnings were very meagre, hours of work long and employment was intermittent. A large majority of them were employed by contractors. They were gradually organised by Dr. M. R. Shetty and A. N. Shetty under the banner of the Bombay Dock Workers' Union. This organisation mobilised the workers for a strike from 12 March 1932 demanding for improvement in emoluments, stability of employment and abolition of the contract system. It was an unprecedented occurrence among the docks which stirred public opinion also. There were some violent incidents and tense situations during the strike. It was settled on 4 April 1932 through a compromise reached between the Union and the stevedore firms. The workers secured a 25 per cent increase in wages and other pecuniary benefits. (Ibid., pp. 265-66.)

Meanwhile Sir Frederick Sykes adorning the Governorship of Bombay during the troubled times from 9 December 1928, relinquished the office on 9 December 1933, to Lord Brabourne. The members of the Governor's Council, then, were Sir Ghulam Husain Hidayatullah and Robert Duncan Bell, while Sir Rustom Jehangir Vakil, Siddappa Totappa Kambli and D. B. Cooper were the Ministers. The Government enforced rigid economy and retrenchment to ensure improvement in financial position. International trade and the general economic situation in the city continued to be disappointing throughout 1933-34. Japanese imports posed a serious problem to the textile as well as silk industries throughout 1933-34 and 1934-35.

Some deflection of trade from Bombay Port and the poor purchasing power of the masses resulting from the low prices of agricultural produce also contributed to the disappointing economic situation. An appreciable increase in exports was a redeeming feature of the year. (Bombay—1933-34, p.v..) There were large shipments of gold which were really very much against Indian interests. The entrepot trade of Bombay, which had been continuously declining since 1927-28, improved to Rs. 2.16 crores in 1933-34 and to Rs.2.38 crores in 1934-35. (Bombay—1933-34, p. v and Bombay—1934-35, p. vi.) There was partial recovery in the conditions of industry and trade in 1934-35. A protectionist policy did encourage the textile industry, although the net revival was marginal in Bombay.

The Improvement Trust for the city of Bombay was amalgamated with the Bombay Municipal Corporation as per Act XIII of 1933. The property and powers of the Trust were transferred to the Corporation with effect from 1 October 1933. (*Ibid., p. 129.*) Government abolished the non-refundable town duty of one rupee per bale of raw cotton from 1 April 1934, which had severely handicapped the cotton trade and the Port's revenues, since its imposition in 1920. The abolition of this tax, combined with, heavy

reductions in railway freights and Port Trust charges, came as a long sought relief to the cotton trade. (*Ibid.*, p. 134.) The work of extending the Harbour Wall across Arthur Basin was completed in 1933-34.

There was an unusual political peace in 1935. The Congress interested itself in the preparations for election for the new Legislatures. It also devoted to agrarian questions, particularly to agitation for the reduction or remission of land revenue. The campaign for non-payment of taxes affecting the land gathered momentum in the city.

The disastrous Quetta earthquake at the end of May and the drastic measures which had been taken by Government to deal with the situation created an unrest in Bombay. The national leaders were prevented an entry into Baluchistan, and Government assumed the sole responsibility for relief measures. These measures were greeted with verbal attacks on Government and scurrilous articles in many newspapers. (Bombay—1935-36, p. i.)

The Bombay Special (Emergency) Powers Act, 1932, would in ordinary course, have lapsed on 15 December 1935, but the Government wanted to place the provisions of the Act permanently on the Statute book, and a Bill to that effect was introduced in the last session of 1935. Government justification was that the activities of Communist agitators, labour leaders and the terrorists could not be checked effectively by recourse to the ordinary law. Moreover, the resumption of civil disobedience could not be ruled out, and the provisions of the Act were deemed to be essential to cope up with it. The Bill was passed with an amendment that the Act should only remain in force until the end of 1938. (*Ibid.*, pp. i-ii.)

The decision of Government not to hold a public inquiry into the firing at Karachi was vehemently criticised and local sentiment was offended. The Governor mollified the sentiment by a personal contribution of Rs. 5,000 from his discretionary grant for the relief of sufferers. (*Ibid., p. ii.*)

Government arranged the jubilee celebrations in May 1935. However, nationalist public opinion was not favourable to this grandiose extravagance.

Although there was an improvement in the international trade at the other major ports in India in 1935-36, the exports from Bombay decreased and, excluding foreign merchandise, there was a fall in the coasting trade also. The entreport trade of the city, however, improved further to Rs. 2.67 crores during the year. (Ibid., p. iv.) There was also a general improvement in the production of cotton textiles with the introduction of double-shift in many mills. Several new factories were started in the city in the year. They included a weaving mill with a finishing plant for making artificial silk cloth, a glass factory, a motor car tyres retreading unit, a copper sheet rolling mill and many others. The trade depression was definitely arrested by 1935 and economic conditions improved slowly but steadily. The Bombay Development Schemes were pursued rather vigorously. An amount of Rs. 6.76 lakhs was spent on the Back Bay Reclamation Scheme in 1935-36. The road from the south end of Cuffe Parade to the south end of Block V, and the Churchgate Street (present Veer Nariman Road) were completed, while construction of the Marine Drive was undertaken in 1935-36. (Ibid., pp.

The establishment of the Reserve Bank of India on 1 April 1935 was an important landmark in the economic history of Bombay. It was first conceived by the Hilton Young Commission in 1926, which recommended to put an end to the dichotomy of functions of the Imperial Bank of India performing central banking as well as commercial banking functions. The Bill to give effect to the recommendations of the Commission was. however, dropped due to differences of opinion. It was, however, on the strong recommendations of the Indian Central Banking Enquiry Committee (1931) that the issue was taken up during the process of constitutional reforms in India. Ultimately the Bill was introduced into the Legislative Assembly of India on 8 September 1933 and passed on 22 December. The enactment received the Viceroy's assent on 6 March 1934, and gave birth to a central bank for India on the pattern of the central banks in Western countries. (Functions and Working (Reserve Bank of Bombay, 1983). It subsequently became a State-owned undertaking with effect from 1 January 1949.

There was a steady recovery in trade and commerce in 1936-37. (There were 1,774 persons assessed to income tax in Bombay city in the year (Bombay—1936-37 p. xviii) The recovery was most remarkable in exports which increased considerably due to greater industrial activities in foreign manufacturing countries. There was a general rise in the prices of agricultural commodities, whereas the prices of manufactured goods declined. With the repealing of sanctions against Italy, imports from that country gradually revived, and the figures for the closing months of 1936-37 indicated that the trade was assuming normal proportions. The civil war in Spain had also an effect on the trade of Bombay with that country, which was most noticeable in the reduction of her demand of Indian raw cotton. (Bombay—1936-37, p. v.)

An interesting feature of the growing international trade of Bombay in 1936-37 was that, while private imports declined by Rs. 5.2 crores to Rs. 49.33 crores, the total value of exports including re-exports increased from Rs. 33.11 to Rs. 44-41 crores. The increase in exports was quite remarkable despite the fall in gold and silver exports. The decline in gold and silver exports was significant in view of the nationalist agitation against distress sale and foreign shipment of gold. The decline in imports was an indication of the growth of indigenous industry and substitution of indigenous materials for the Bombay industry. The cotton textile industry maintained a steady progress in production by wider introduction of rationalisation and increased double-shift working. The expansion of the foreign markets for textile goods and a fall in the imports of foreign piecegoods into Bombay were quite remarkable in 1936-37.

There was a considerable improvement in the Back Bay development schemes. The Council Hall Building was extended further to provide accommodation for the newly constituted Upper Chamber in 1936-37. (*Ibid., p. 88.*)

Riots: There were severe and prolonged communal disturbances in the city lasting practically from 15 October until the beginning of December 1936. The construction by the Municipal Corporation of a *sabhamandap*

for the temple adjoining a mosque at Byculla was the immediate cause of the trouble. The old mandap having been demolished, the site was acquired for road widening in 1928, and the authorities had undertaken to construct a new *mandap* on the southern side of the temple away from the mosque. The Muslims protested that a *mandap* had never existed and argued that the proposed construction would result in music interfering with the prayers in the mosque. After long discussions, the construction was commenced on 15 October, which led to assaults and skirmishes. The rioting continued intermittently. Military patrols were deployed, and strong action was taken against individuals and newspapers for incitement of communal hatred. The striking feature of these disturbances was the complete absence of trouble in the mill area. Government inferred from the disturbances that there was but little religious feeling behind them, and that they were largely caused by the criminal classes on either side. The unfortunate episode, however, took a toll of 94 lives and 632 injured.(*Ibid., pp. iii-iv.*)

Political Affairs: The Government of India Act, 1935, brought another instalment of constitutional reforms in India. It replaced dyarchy by provincial autonomy. Although it fell short of India's national aspirations, the Congress had decided to give the reforms a trial and to contest elections to the Assembly at the Centre and the Council in the Province. The AICC met in Bombay from 21 to 23 August 1936 and adopted the election manifesto as approved by the CWC. The manifesto repudiated the Government of India Act and pledged to develop internal strength by working in the legislatures. It reiterated the Congress policy of resistance to British Imperialism, Ordinances and repressive measures, and pledged its determination to enforce fundamental rights and a development oriented socialist democratic policy.

The Congress session at Faizpur, the first village Congress (1936), evoked great interest in Bombay. The city organised a *dwaja jyoti* (flaming march) which was started from Gowalia tank, the venue of the first Congress in 1885, and was taken in one-mile relays to Faizpur. It enthused every village all along the route from Bombay to Faizpur. (*K. Gopalswamy, op. cit., p. 304.*)

The Congress having decided to contest the elections prepared for a country-wide campaign. Preparation for the elections under the new Constitution and the organising of election campaigns, were the main feature of the political history of 1936-37. The other parties were less active. The Democratic Swaraj Party decided to contest the elections independently. The Muslim League formed a Parliamentary Board representing the various districts. Dr. Ambedkar announced the formation of a new political party to be called the Independent Labour Party. The nucleus of this party was to be formed by the representatives of the Scheduled Castes. The Democratic Swaraj Party was actively opposing the Congress. Voting for the Upper and Lower Houses was completed on 18 February 1937. The Congress emerged the predominant party in both Houses, but did not secure absolute majority. There was, however, no doubt that the party could command the majority of votes on any issue likely to come before the legislature.

There was, however, a deadlock over the question of the exercise of the special powers of interference by the Governor. But for the assurance by the Governor, the leader of the majority party, B. G. Kher, expressed his inability to form a Ministry. Hence, the Governor invited Sir Dhunjishah B. Cooper, an elected independent from North Satara, to form the interim Ministry. Sir Cooper chose Sir S. T. Kambli, Jamnadas Mehta(*He was leader of the Democratic Swaraj Party.*) and H. M. Rahimtoola for the interim Council of Ministers.

The deadlock over the issue of exericse of the special powers of interference by the Governor was, however, resolved after a clarification of the position by the Viceroy through his statement of 21 June 1937. The CWC at its Wardha meeting of 7 July 1937, hence, decided that Congressmen be permitted to accept office. Accordingly B. G. Kher, the leader of the Congress Party, was invited to form a Council of Ministers, and he became the first Chief Minister (*He was designated Prime Minister, then*) of Bombay Presidency.

COMMUNIST ACTIVITY (1932-1939)

The devastations of the Great Depression and the sordid economic conditions of the working class were yet manifest in Bombay. The cotton textile industry was still in the throes of the Depression, fighting for its own survival. Retrenchment, unemployment and erosion of wages cast shadows of darkness in the ranks of labour. The trade union movement which was expected to be the vanguard of the working class, was itself plagued with disunity and acrimonious recriminations. The split in the All-India Trade Union Congress at Nagpur had further divided the workers into rival camps and led to the shattering of healthy trade union activities. The All-India Trade Union Congress had already lost the allegiance of a substantial section of its adherents as a result of the 1929 split, and a further split at its Calcutta session in July 1931 had completed the debacle.(Trade Union Committee's Report cf. Bombay Police Abstract of Intelligence, 1932, p. 459.) There were three distinct sections of labour leaders with a record of service in the city, namely, the Communists, the Liberal group and the rest. The Communist unions which preached political and economic doctrines inspired by Soviet Russia were insignificant in number. Their membership was meagre. But there was a refreshing candour about their opinions which secured for their leaders a hearing guite out of proportion to their real influence. These leaders accepted no compromise; they recognised no middle course, nor did they tolerate any difference of opinion with their own. Their methods were not acceptable to others as they involved violence and excluded democracy. The gulf which divided the Communists from other unions were not, therefore. bridgeable. (*Ibid.*) The Liberal politicians, who were in control of the unions, affiliated to the All-India Trade Union Federation were out of touch with the current political thought in India. Undoubtedly, theywere in the good boks of the Government. Their members eschewed the politics of the Indian National Congress, while a small section among them were also communalist. The third and the influential group of labour leaders comprised the All-India Trade Union Congress, the All-India Railwaymen's

Federation and scores of unions which were attached to no central labour organisation. They had together the largest following among the workers. The bulk of this third group was strongly nationalistic. After the two splits its ranks had dwindled, but it still provided a nucleus for a central labour organisation. (Bombay Police Secret Abstract, 1932.)

Another pertinent fact was that the eminent Communists from Bombay were still confined to jail in connection with the Meerut Conspiracy trial since 20 March 1929. The following among Communist ranks were left out : B. T. Ranadive, S. G. Patkar, S. G. Sardesai, G. L. Kandalkar, Deshpande, Dr. G. Y. Chitnis, R. K. Bhogale, M. R. Shetty, A. N. Shetty, B. D. Parab, D. K. Bedekar, Usha Dange, V. H. Joshi, Charles Mascarenhas, etc. The Communists had under their domination the Bombay Girni Kamgar Union which itself had two independent factions known as the Deshpande Party and the Kandalkar Party. The Young Workers' League was another amorphous body of Communists. These factions used to celebrate the Meerut Day and the Meerut Week in every March demanding the release of the detenues. Although they advocated the solidarity of the working class, they did so on different platforms. Internal recriminations were at times so acute that even a man of Ranadive's standing was expelled from the Bombay Girni Kamgar Union (Deshpande Party) on 15 April 1932. (Ibid., p. 561.) The Government was highly suspicious of the Communists, and prosecuted several of them throughout 1932.

Disintegration of labour unions, their revival and subsequent decay were rampant in Bombay in 1932. The inevitable concomitance was frustration among the rank and file.

This was the state of affairs despite the All-India Trade Union Congress convention in Bombay on 29 December 1931, with Subhash Chandra Bose as the leading light. The largely attended public meeting of the All-India Trade Union Congress under the presidentship of R. S. Ruikar, had made a fervent appeal for solidarity of the working class. Subhash Babu eulogised the successful role of workers in the national movement, but it was not accepted as widely as it should have been, because the workers did not participate in the struggle in their collective capacity. (*Ibid., pp. 143-44.*)

The Communists like Ranadive and Patkar vehemently criticised Government policy of repression and condemned its action in opening fire on civil disobedience activists including the Red Shirts at Kohat. But Ranadive advocated that the workers and peasants should not join the Civil Disobedience Movement, and ridiculed the Congress activity by saying that the boycott of foreign cloth and picketing of liquor shops would not achieve Independence for India. (*Ibid., p. 145.*) From time to time he advocated that the Congress had done nothing beneficial to the working class, and that it was only the working class revolution that would free the country from the imperialistic yoke.

The Communists as well as left wing labour leaders in Bombay admired the political philosophy of M. N. Roy, and described him as the international labour leader. Under their joint auspices, they condemned the conviction and severe sentence of 12 years' transportation of Roy, in January 1932. The eminent activists on the occasion included V. B. Karnik,

ManibenKara, D. B. Karnik, M. R. Shetty, Usha Dange and V. H. Joshi.

Communists from all parts of India found a congenial home in Bombay. It was a centre for brisk secret activity, and propagation of Communist literature. Several books from Russia, England and France were secretly circulated in the city. A good deal of literature was published in Marathi also. However, the police authorities had always a vigilant eye on such literature, and they lost no time in proscribing it.

The official group of the Bombay Communists (Deshpande Party) inaugurated the Friends of Soviet Union on 3 June 1932 at Bombay with Dr. P. J. Bhatt and Ananta Chari as its first office bearers.

The Bombay Communists did not fail to observe the Lenin Day on every 22nd of January. The occasion was utilised for the condemnation of the Meerut convictions till the prisoners were released, and for propagation of Communism, although the audience was not always large.

A new organisation known as the Hindustani Samyawadi Sangha was formed secretly, towards the end of 1932, in order to provide a common forum for the three most anti-British political groups, viz. the terrorists, the left wing of the Congress and the Communists. They were determined to gain the support of the masses to a militant modus operandi. The police authorities considered this organisation as a potential danger. (Bombay Police Secret Abstract, 1933.) Its activities could, however, not be spotted out. Besides, many other splinter organisations, such as, the Workers'Party newly formed by B.T. Ranadive (Sometime in 1932.) indulged in Communist methodology among the workers in the city. Sardesai. Adhikari and R. M. Jambhekar established the Marxist Vangmaya Pracharak Mandal, in 1932, for propagation of Communist literature in the city. A good many efforts were made by Communists and non-Communists for collection of funds for the Meerut case defence in Bombay in March 1933. Besides Communists, many others including V. L. Mehta, B. F. Bharucha, J.A.G. Naoroji, Karnik, Maniben Kara and J. M. Mehta strived for the collection of funds.

The labour leaders in the city celebrated the acquittal of some of the Meerut prisoners, viz., Jhabwalla, A. A. Alwe, Govind Kasle, G. M. Adhikari, M. G. Desai and H. L. Hutchinson. (Chowpati meeting on 27 August 1933.) Immediately after release Jhabwalla formed the Workers' Political Party in Bombay with Maniben, Karnik and G. Y. Chitnis among others, with the object to unite the workers under one strong central body and to ventilate their grievance in the forthcoming new political constitution of the country. (Bombay Police Secret Abstract, 1933, p. 357.) But the future course of events showed that the party did not make any significant dint on the political life of Bombay. Throughout these events Ranadive's rival unions were an enigmatic problem to the All-India Trade Union Congress. The Bombay Provincial Committee of the All-India Trade Union Congress consisted of Maniben, Karnik, R. J. Gavande, Z. R. Chaudhari, B. S. Gaikwad and A. N. Shetty.

The Meerut prisoners were gradually released, S. V. Deshpande in October, S. S. Mirajkar, K. N. Joglekar, S. V. Ghate and B. F. Bradley in November 1933. They launched attacks on Congress policy and

programme and also stigmatised M. N. Roy's party as wanting in revolutionary spirit. (*Ibid., p. 471.*) They declared that Ranadive's Red Girni Kamgar Union, based on Communist ideology, was the real union.

Throughout 1934 the Communists were busy with fomenting an agitation among the workers for a general strike, and propagating a militant ideology. They organised a strike in the mill industry to protest against the Trade Disputes Conciliation Act which gave birth to an elaborate official machinery for arbitration and conciliation in matters of industrial disputes. The strike, however, ended in a failure for which the Communists were castigated by other labour leaders. This led to mutual recriminations among the Communists, alarge section of whom shifted the blame to Kandalkar and Alwe.

The Congress session at Bombay in October 1934 was a sensational event in the labour quarters in the city on account of the Communist activity to infiltrate the pandal, to demonstrate their strength and to force a hearing from the Congress leaders. There were three parties in the labour areas working for the labour demonstration. The "Official "Communist party was led by Mirajkar, Joglekar and Philip Spratt. The "Roy party was under Maniben Kara and Mascarenhas, while the "Labour " party was led by Kandalkar and Alwe. All the three were suffering from mutual recriminations, and had their own *modus operandi* in achieving the objective. The mill areas were surcharged with excitement and tension on the 26th instant. The Bombay police had to issue prohibitory orders from 26 to 28 October 1934, which had some desired effect. (Bombay Police) Secret Abstract, 1934, p. 604.) A group of 400 workers under Jhabwalla and Kandalkar were allowed by Dr. Rajendra Prasad, the Congress president, to enter the Congress pandal to have a discussion on the labour policy. Rajendra Prasad made a short speech before the demonstrators in the pandal and assured them that the Congress was with them in their demands. He told them to give him some time to consider their demands in consultation with his colleagues. (*Ibid., p. 604.*) The episode was an eve-opener to the Congress as regards its labour policy, and there was a good deal of heart-searching.

Meanwhile the Joint Parliamentary Committee's Report on Indian Constitutional Reform engaged the attention of the National Trade Union Federation under N. M. Joshi, R. R. Bakhale, Sayed Munawar and Raman, by the close of 1934. The leaders branded the proposals in the report as retrograde and reactionary. The scheme as a whole was a virtual repudiation of the demand for Dominion Status for India. It neither provided for self-government nor was it based on democratic principles. It denied adult franchise and made no reference to fundamental rights for the citizens. The representation granted to labour in the legislature was utterly inadequate. (*Ibid., Jan. to June 1935, p. 11.*) The Federation empowered N. M. Joshi to negotiate with the labour leaders in Great Britain for securing an adoption by Parliament of all the amendments suggested by it, during his forthcoming visit to Europe in January 1935, in connection with the International Labour Organisation meeting at Geneva. (*Ibid., p. 13.*)

The Bombay Congress Socialist Party comprising Yusuf J. Meheralli,

Purshottamdas Tricumdas, M. R. Masani, and F. M. Pinto was another platform advocating the cause of labour in the city. The Royists under Maniben Kara and Karnik formed the Girni Kamgar Union (Roy group) in December 1934, (*Ibid., p. 149.*) on the principles of M. N. Roy.

Dange was acquitted from the Meerut case and released in May 1935. (*Ibid., p. 200.*) This occasion was bound to be celebrated with jubilation by all sections of labour in the city. His release raised hopes of growth of the labour movement, although the entire field was plagued with disunity.

An important event in the field of labour in 1936 was the convention of the fifteenth session of the All-India Trade Union Congress in Bombay from 17 May under the presidentship of Maniben. Besides all the eminent labour leaders in the city, it was attended by Jawaharlal Nehru, Jayaprakash Narayan, Achyut S. Patwardhan, Indulal Yajnik and several Congress and labour leaders in India. Over 10,000 people were present. (Bombay Police Secret Abstract, 1936, p. 197.) The session was held at a time when the capitalist offensive of wage-cuts and retrenchment, due to rationalisation, had been the burning question of the day. The All-India Trade Union Congress itself had not yet developed into a genuine national organ of class struggle of the working class, but had simply remained a deliberative body. It was plagued by disunity, and could not stand before the workers as the personification of their class interest and class solidarity. A number of speakers, therefore, exhorted for the collective affiliation of the All-India Trade Union Congress to the Congress Party with a view to bringing about a powerful united front against capitalism and imperialism. The All-India Trade Union Congress in its present session condemned the new Constitution under the Government of India Act of 1935, and assured the Congress leaders of its support in opposing the new Constitution. Jawaharlal Nehru, who attended the session in his capacity as the Congress president, made a fervent plea for the participation of workers in the Congress movement and the struggle for independence. The workers had to bear a double burden. The first was foreign domination and the second was exploitation by the capitalistic system. Hence, national Independence was the only way out. Achyut S. Patwardhan speaking on behalf of the Congress Socialists pleaded for cooperation between the Congress and labour parties.

The Communist Party continued its usual activities and utilised the occasions of Lenin Day, May Day, Russian Revolution Day, Maxim Gorky Day and Karl Marx Day for the furtherance of its objectives throughout the period under review.

M. N. Roy, on his release from the Dehra Dun Jail on 20 November 1936, was accorded a worthy reception in Bombay on 6 December by the Bombay Provincial Congress Committee under S. K. Patil and Nari-man, the All-India Trade Union Congress and several trade unions in the city. (*Ibid., p. 415.*) A public meeting was organised the same day under the joint auspices of the All-India Trade Union Congress and several unions under the presidentship of R. A. Khedgikar. The next day, Roy saw Vallabhbhai and S. K. Patil, and convinced them of his bona fides in joining the Congress and making genuine efforts to bring about closer cooperation between the Congress and labour organisations. (*Ibid.,p.421.*) His activities in Bombay and Maharashtra were closely watched by

Government. He held several meetings in this part of India, and gave a full vent to his revolutionary idealism. He commanded a following among a section of the intelligentsia as well as labour leaders. His followers included Maniben, V. B. Karnik, D. B. Karnik, M. R. Shetty, Charles Mascarenhas, Laxman Shastri Joshi and J. B.H. Wadia.

An interesting feature of the May Day celebration on 1 May 1937 was that, unlike the previous years, the Communists appealed to the workers to join the Congress. This was probably due to the participation of the Bombay Provincial Congress Committee in the celebration. The Bombay (City) Congress Socialist Party, however, did not participate in the celebration on account of the hostile attitude of Roy and his followers to the party.

The mill workers in Bombay had been disorganised since the failure of the general strike in 1934, and continued to be so throughout the period under review. This could be attributed to various reasons, such as Government repression, the threat of unemployment, economic conditions, Communist activity and rivalries in labour unions. The constant wranglings and bickerings among the leaders disgusted the millhands who grew more and more apathetic towards the labour organisations.

Bombay was the cockpit of Communism in 1937. A delicate situation arose over the orders of externment, internment or detention pending against Communist leaders, about twenty in number. (Joglekar, Mirajkar, S. V. Deshpande, Patkar, G. M. Adhikari and S. S. Batliwalla were interned.) The Congress Ministry in Bombay wedded as it was to the policy statements made earlier, had been contemplating the cancellation of some of these orders. But the Governor, Lord Brabourne emphatically turned down the proposal of the Home Minister, K. M. Munshi, in the words "You can do it only on my dead body".(cf. K. M. Munshi, Pilgrimage to Freedom, Vol. I (Bharatiya Vidya Bhavan, Bombay, 1967), p. 49.)

Those were the days when the Communists in Bombay staged lightening strikes without notice and spread of terror in the *chawls* where the mill-hands lived, so as to prevent loyal workers from going to work. The Police Commissioner under instructions from Munshi devised a scheme under which police protection was provided to the loyal workers. Ajoy Kumar Ghosh, the Communist leader, was leading an underground terrorist movement and campaign of lightening strikes in Bombay. He secretly met Munshi on the appointed day about midnight with a view to dissuade the latter from using police force against the revolutionaries in the city. Munshi, however, declined. (*Ibid.*, p. 50) The police soon got a complete grip over the situation, and this enabled Munshi to obtain concurrence of the Governor for the cancellation of orders issued against the Communists.

Labour had become a political factor by this time which all politicians had to take cognizance of. Formation of the Congress Ministry raised many hopes among the millhands about their interests. The Ministry, therefore, made a declaration in regard to its labour policy immediately after assumption of office. (V. B. Karnik, op. cit., p. 278.)

It may be noted that the Factories Department was under control of the Collector of Bombay prior to the creation of a separate office of the Commissioner of Labour on 6 June 1933. The Commissioner's jurisdiction was extended over all matters pertaining to labour, the Steam Boilers and Smoke Nuisances Department, and Registrar of Trade Unions from this date. The workers welcomed the Congress Ministry as their own. Their expectations had already been aroused by the Congress Election Manifesto which had promised a fair deal to labour. The millhands had been particularly hit hard during the protracted economic depression. Their standard of living had declined badly, even over that in 1927. Naturally, therefore, they were clamouring for a better deal at the hands of the popular Government. The Congress Ministry did everything within its powers to improve the lot of labour. The constraints of the economic situation and the unyielding attitude of the Government of India, however, set limits to its generosity to the millhands. In spite of this the Ministry enacted the Bombay Industrial Disputes Act of 1938. Gulzarilal Nanda being its main architect. (Ibid., p, 283.) The Act provided for conciliation and arbitration. The award of the arbitrator was made binding upon both parties. The Act also provided for recognition of unions so that notice could be given and negotiations could be carried on. An authority was also provided with whom workers could register their complaints regarding their grievances and get them redressed. It was the first Industrial Relations Act of its type in India, and it gave birth to the first Industrial Court in the country. The Act was amended from time to time, and was finally replaced by the Bombay Industrial Relations Act in 1946. There has been no departure, however, from the basic principles of the 1938 Act. It was adopted in other Provinces, and became a model for the machinery for settlement of industrial disputes all over the country. (Ibid.)

The Act was, however, opposed by all labour groups, but most vehemently by the Communists who organised a one-day protest strike against it in Bombay. A large number of workers joined the strike. But once the legislation was adopted and a machinery for conciliation and settlement was set up they made ample use of the machinery in spite of all exhortations by the Communists to boycott it. (V. B. Karnik, op. tit, p. 283.)

The Congress Ministry did another important thing to conduct an inquiry into various labour problems. It set up the Textile Labour Enquiry Corimittee under the chairmanship of Jairamdas Daultram, to investigate tne question of adequacy of wages and other related matters. The committee was asked to furnish an interim report which it actually did in February 1938. It recommended an immediate increase of 12.5 per cent, in the wages of textile workers. (Ibid., p. 284. The Committee submitted its final report in 1940, but by that time the Congress was no longer in office.)The millowners complied with the Government directive, and granted the increase. The appointment of the committee and the immediate implementation of its interim recommendations had ah assuaging effect upon the textile workers. Despite the efforts of the Popular Ministry, the Communists continued their militant activities. They organised sporadic strikes. The one-day general strike organised by them in collaboration with Dr. Ambedkar on the Russian Revolution Day on 7 November 1938 deserves a mention. It was mostly confined to the textile

industry in the city. (Bombay—1937-38.) The failure to gain a better support drove the strikers to rowdyism and violence. There was looting and dislocation of traffic. The Bombay Disturbances Enquiry Committee, appointed by Government to investigate these incidents, squarely blamed the Communists, who, by their intensive propaganda, instigated the workers to resort to violence to make the strike a success. (Ibid.) Incidentally, Dr. Ambedkar's Independent Labour Party was also quite active among the mill-hands in Bombay. It formed a new labour union, namely, the Munibai Girni Kamgar Sangh to get a foothold in the labour quarters.

The Communist Party was still illegal. (Many of the Bombay Communists were very active in Solapuf, where they werein league with G. D. Sane, Sardesai, Karadkar, and Minakshi Karadkar.) Gradually, the Congress Ministry released the Communist internees and strove for minimum wages and security to workers. Meanwhile attention was directed towards securing a better deal from the Textile Labour Enquiry Committee which has been referred to above. The labour leaders, particularly the Bombay Girni Kamgar Union (Red Flag) (It was established in 1928.) became very active to put forth their demands. Dange, Joglekar, Nimbkar, Mirajkar, Patkar, Deshpande, Ranadive and the Karnik brothers took an active part in union activity. The periodical Kranti which was moribund for some time was revived by Dange in 1937 as an organ of the Communist Party.

The Communists soon realised in the closing months of 1938 that there was little scope for them to work as a separate organisation, and that they should establish themselves as Congress "Leftists". Accordingly they changed their strategy and participated in a campaign for mass enrolment of workers in the Congress. They professed to fight British imperialism and to safeguard the interest of the working class through the Congress forum. (Bombay Police Secret Abstract, 1938, p. 119,) This paved the way for co-operation on certain issues between the Congress and the Communist Party. But this truce was only a short-lived affair, and they continued the policy of fomentation of strikes and propagation of the spirit of revolution. (Bombay—1938-39, p. iii.) The British bureaucracy which was dismayed by the truce between the Congress and the Communists rejoiced at the parting of their ways.

The year 1939 opened with a stagnation in the mill industry in the city. A few mills were closed, while some closed their night shifts which resulted into considerable retrenchment. This accentuated Communist activity in the labour areas. Communists resorted to extra-constitutional methods. The inevitable consequence was the conviction of many of them at the hands of the Congress Ministry in August 1939. The order for securities had also been issued against certain newspapers. The ban on Communist literature, indigenous as well as foreign, was executed meticulously at the instance of the Government of India.

The Communists did not fail to exhibit their patriotism on the outbreak of the Second World War on 1 September 1939. They expressly condemned the imposition of war on the Indian people, and exhorted the people to resist all war efforts of the Government, although they later changed their stand after Russian involvement in the war. The Bombay Provincial Trade

NARIMAN EPISODE

At the time of formation of the Ministry, there occurred in Bombay what has come to be known as the Nariman Episode. It was concerning K. F. Nariman, president of the Bombay Provincial Congress Committee, a former mayor and a popular Congressman of Bombay who had unearthed the Back Bay scandal. He had become the hero of Bombay by his participation in the Civil Disobedience Movement as well as by the famous Harvey-Nariman case. He fancied himself as the obvious choice for the leadership of the Congress Party in the Bombay legislature, and hence for the Chief Ministership of Bombay Presidency, Actually, however, when the choice was to be finalised, the Parliamentary Board, particularly Vallabhbhai Patel, saw many reasons to doubt the political integrity of Nariman. Fears were expressed whether in a crisis he could be depended upon to fulfil the Congress policy in the spirit and letter and to submit to party discipline. The consensus was, therefore, in favour of a " safer " man, and the choice fell on B. G. Kher, a solicitor of Bombay, who had distinguished himself by guiet constructive work and had sacrificed in the struggle for freedom. " Nariman and his followers were sorely disappointed and voiced their chagrin in a campaign which was not free from vulgarity and vilification. Vallabhbhai was the target of criticism which was given a communal colour. The issue was inevitably referred to Gandhi." (K. Gopalswami, op. tit, p. 306.) The proceedings lasted more than four months.

All the newspapers in the city were full of reports of this controversy, although Gandhiji scrupulously avoided publicity which would have humiliated Nariman. It was reported that Vallabhbhai was in favour of K. M. Munshi for the chief ministership. Nariman started a campaign against both of them and mustered support in a section of the Bombay Provincial Congress Committee. He complained to the Congress Working Committee against Vallabhbhai's 'persecution' of him and asked for an enquiry. The Congress Working Committee referred the matter to a sub-committee consisting of Gandhiji and D. N. Bahadurji, a Parsi known for his probity and impartiality, and a former Advocate General of Bombay.(*Ibid.*) Gandhiji did not want to be the sole arbitrator and, in order to avoid any suspicion of anti-Parsi bias, suggested the name of Bahadurji.

According to T. R. Deogirikar, there were 22 charges against Nariman,

including the withdrawal by him of his nomination in favour of Cowasji Jehangir at the Central Assembly elections of 1934, thereby betraying the Congress. It was also alleged that funds collected for the election campaign of P. Balu, the famous Harijan cricketer and Congress candidate, were diverted by Nariman to himself. (*Ibid.*, p. 306.)

A few leading citizens of Bombay, however, appealed to Gandhiji to have an impartial inquiry into the alleged injustice done to Veer Nariman. (Bombay Samachar, 30 July 1937.) There was a violent excitement over the unfortunate episode. A memorandum signed by more than 20,000 citizens of Bombay was sent to the Congress Working Committee. (K. Gopalswami, op. cit., pp. 308-09.) Gandhiji and D. N. Bahadurji examined all the documents and witnesses which meant extraordinary labours to both of them. They prepared an award running into 14 typed sheets after hectic activity. It was, however, not publicised lest it should give rise to unsavoury situation, and was shown to Nariman himself.

The *Bombay Samachar* announced that Nariman had issued a public statement in which he confessed to his indifference in the elections of 1934 and 1937 and, to atone for this lapse on his part and with a view to regaining the public confidence, he announced, with a willing heart, his decision not to accept any office in the Congress. It was expected that this would mark the end of the episode. Unfortunately, however, Nariman retracted his public statement, probably at the instigation of the hotheaded elements among his followers.

Ultimately the Congress Working Committee, in its Wardha meet, adopted the Gandhiji-Bahadurji report, and resolved that in view of the findings in this report and his acceptance of them and his subsequent recantation, Nariman's conduct had been such as to prove him unworthy of holding any position of trust and responsibility in the Congress organisation. Thence forward, Veer Nariman ceased to figure in the public life of Bombay. His name is, however, commemorated by naming after him the most ultra-modern office complex in the city, namely, the Nariman Point, as well as the Veer Nariman Road which was formerly known as the Churchgate Street.

MINISTRY EXPERIMENT

After the Congress Working Committee decision in favour of acceptance of office, the interim Ministers tendered their resignations to the Governor on 15 July, and B. G. Kher, a son of Bombay and the leader of the Congress Party was invited to form a Ministry. The following gentlemen were thereupon appointed:—

Prime (*The Chief Minister was*

designated Prime Minister under the Government of India Act of 1935.)

Minister.

Mr. K. M. Munshi Home and Law

Mr. A. B. Latthe Finance

Dr. M. D. D. Gilder Public Health and Excise.

Mr. Morarji R.

Mr. B. G. Kher

Desai Revenue

Mr. L. M. Patil Local Self-Government

Mr. M. Y. Nurie Public Works

Six Parliamentary Secretaries were appointed by the Ministry. (*Gulzarilal Nanda, Mrs. Hansa Mehta, B. M. Gupte, M. P Patil, T. R. Nesviand B. S. Hiray were the Parliamentary Secretaries,*) The new Ministry, the first of its kind, assumed office on 19 July 1937. It marked the inauguration of Provincial Autonomy, the most important event in the history of the Province till then.

The Popular Ministry had to present its first budget within less than a month. The budget presented to the Bombay Legislative Assembly on 7 August, attracted a very great attention in Bombay, and it found the echo of popular will in the newspapers and public platform in the city. It provided for drastic reductions in the expenditure on Ministers, the speaker of the Legislative Assembly, the president of the Legislative Council and other political appointments. True to the Congress promises, the budget foreshadowed complete prohibition of liquor, and provided immediate relief for the agricultural population in the form of abolition of grazing fees, remission of land revenue, provision of many lakhs for village water supply. Education was given a due priority, while a special provision was made for the advancement of education among the Harijans. A wide extension of education and reorganisation of the existing system were pursued. A good many schemes were undertaken, dealing with the rural economy, the equitable adjustment of taxation and other measures for the relief of the ryot. (Bombay—1937-38, p. ii)

The Ministry had to its credit many useful and constructive measures of educational, social and economic reforms. It brought forward a number of resolutions, such as (i) condemnation of the Government of India Act of 1935, (ii) opposition to federation, (iii) the policy of re-purchasing, at Government cost, lands of many citizens forfeited and sold in consequence of the Civil Disobedience Movement with a view to restore them to the original holders or their heirs and (iv) advocating the discontinuance of titles.

The new Government was particularly active, on the executive side, in cancelling orders issued under the Bombay Special (Emergency) Powers Act, 1932, and the Indian Criminal Law Amendment Act, 1908, which had been exploited by the earlier regime for infringement of the freedom of individuals and political associations. All such orders were cancelled within three months. Moveable properties forfeited in consequence of the

Civil Disobedience Movement by virtue of orders issued under certain Ordinances and the Criminal Law Amendment Act, 1932, were restored to the owners. Lands captured by Government were handed over to the owners. Certain pensions which had been forfeited were also restored and efforts were made in other directions to remove the hardships which the citizens had suffered for their participation in the freedom movement. Political prisoners were also released.(*Ibid., p. iii.*)

The popular Government continued to translate into practice its programme enunciated in the Congress election manifesto. The Bombay Special (Emergency) Powers Act, 1932, which had virtually been reduced to a dead letter in 1937-38 was formally repealed in 1938-39. It continued to implement its policy of relieving the disabilities suffered by freedom fighters because of their participation in the Civil Disobedience Movement. It issued orders for reinstatement in Government service or the restoration of pension in the cases of several government servants who were victimised for their sympathies to the freedom struggle. The ban on a number of publications which had been declared forfeited was lifted.(Bombay—1938-39, p. ii.)

In its efforts to achieve efficiency in administration, the Government issued instructions to local officers impressing upon them the necessity of closer contact with the public. At the same time it appealed to the citizens to desist from abusive attacks on the public services and to co-operate with officials in carrying on the administration efficiently, impartially and honestly.

Meanwhile the Bombay Provincial Muslim League had launched a tirade against the Popular Ministry. (*Ibid., p. ii.*) The harmony between Hindus and Muslims was marred by a trifling cause in Kamathipura. It developed into serious rioting in May 1937 which was resumed in June taking a toll of eleven lives. (*Ibid.*) Practically every year the city was torn by Hindu-Muslim riots involving heavy casualties and disruption of normal life. The new regime was, therefore, obliged to revise the scheme for maintenance of law and order with the result that the communal riots became less and less frequent. (*K. M. Munshi, op. cit., p. 51,*)

The economy of Bombay city did experience considerable revival in 1937-38. After days of bad fortunes the cotton textile industry entered into an era of prosperity. The total value of trade through the Bombay Port, foreign as well as coasting, increased from Rs. 137.96 crores in 1936-37 to Rs. 150.98 crores (*The value of foreign trade was Rs. 113.90 crores.*) in 1937-38. The increase in import duty collection at the Bombay Custom House from Rs. 15,24.85 lakhs to Rs. 17,51.26 lakhs in 1937-38 was undoubtedly an indication of an immense rise in imports.(*Bombay—1937-38, pp. vi-vii.*) Exports did fall, but the reasons for that were to be found in the economy of the hinterland rather than in the city.

The Bombay Government further extended medical and public health facilities in the city as in the Province. The constitution of the Bombay Municipal Corporation was revised and civic franchise was considerably widened. The system of nomination of Corporators, a vestige of imperialistic policy, was abolished. This was a very important measure in the history of the Corporation as it extended the principle of democracy in

local self-government. The Corporation undertook many development schemes for the benefit of citizens. The Back Bay scheme was vigorously pursued. Educational facilities were further extended. The first city of India lacked a modern cricket stadium upto this time. This lacuna was overcome by the inauguration of the spacious Brabourne Stadium in 1937 on the plot of land given by Government at the Churchgate Reclamation.

The Special Development Fund was created in 1938-39 for schemes of development in education, agriculture and public health by the Ministry. The enforcement of the Bombay Industrial Disputes Act (1938) in 1939 was an outstanding measure as it provided for an elaborate machinery for artibration in industrial disputes,(It has also been referred to earlier under Communist Activity.) reducing the friction between labour and capital. The Government also pursued the policy of extending the scope of existing labour legislation by means of executive orders, particularly by implementation of the Factories Act and the Payment of Wages Act to factories employing ten or more workers. It enacted the Rent Restriction Act (Act No. XVI of 1939) in order to restrict, in consequence of the levy of the urban immoveable property tax, the increase in rents of premises. This was highly in the interest of the middle class as well as labour who were relieved of the threat of increase in house rents. A further advance in social legislation was the enactment of the Shop Assistants and Establishments Act, which provided for the regulation of hours of work in shops and commercial establishments. A Labour Welfare Department was inaugurated on 1 April 1939 for welfare activities, such as, training to social workers, promotion of physical culture and recreational centres, production of literature for the enlightenment of the industrial workers and imparting training for alternative occupations. (Bombay—1939-40, p. vii.)

In its pursuit of the general policy of advancing the economic condition of the masses, the Congress Government created a Special Department in April 1939 to carry out its programme of rural development. Government also set up a Provincial Board of Rural Development to advise and assist officials in executing the several schemes of development. A Provincial Board of Primary Education was appointed in pursuance of the amended Primary Education Act in the year. A good deal of progress was made in general education, basic education and adult education. Considerable effort was made to promote vocational training in secondary schools.(*Ibid., p. 9.*)

The Government took an important step by sanctioning the amalgamation of the greater part of the Bombay Suburban District with Bombay City for police administration in 1939. The suburbs were practically a continuation of the city itself and growing urbanization in the suburbs was accompanied by a serious increase in crime. Hence, a single unified police force for the whole conglomeration had become a necessity. After amalgamation the Bombay City Police became one of the largest police forces in the British Empire, apart from the London Metropolitan Police. (*Ibid., p. xii.*)

The Congress Ministry was functioning well and its progress seemed to be smooth. Gone were the days of civil disobedience and hartals and strikes

against the foreign rulers. The tables were turned and the Congress, instead of provoking and promoting political and industrial strife, became the guardian of law and order. It largely succeeded in this task too. It had to consolidate its position before taking the next step instead of trying to wreck the Government of India Act. It took to constructive work and ameliorative measures, and settled down to hard work. (*Kanji Dwarkadas, Ten Years to Freedom: 1938-1947 (Popular Prakashan, Bombay, 1968), p. 1*)

However, the rift between the Muslim League and the Congress worsened. A good many powerful Muslim leaders were in agreement with the Congress politics in Bombay. Yusuf Meheralli, and Jaffer Abidali were Congress activists in the city. Maulana Abul Kalam Azad, who was soon to become the Congress president, wielded considerable influence over the Muslim public mind in Bombay. However, Mohamed Ali Jinnah, the one time Prince of Bombay, overswayed the Muslims and outwitted the nationalists among them. Jinnah lived in a palatial bungalow on the Mount Pleasant Road with his sister Fatima Jinnah. Although Jinnah's sphere of influence was wider and deeper among the North Indian Muslims, he could and did command the Muslim opinion also in Bombay. The Bombay Provincial Muslim League, drawing its inspiration from Jinnah, organised new branches and propaganda in the city as well as the mofussil areas. It became highly critical of the Congress regime, and widened the gulf between the two parties.

Gandhiji-linnah Talks: In April and May 1938, Gandhiji had two sets of talks with Jinnah in Bombay with a view to arriving at a settlement of the communal problem. The talks were obviously against the background of the acute problem of communal discord in Indian politics. Jinnah, the one time great intellectual of Bombay, now denounced the policies and activities of the Congress, and declared that ' the Muslims can expect neither justice nor fairplay under Congress Government'. He became the undisputed leader of the Muslim League. He strongly held that 'the democratic system of Parliamentary Government on the conception of a homogeneous nation and the method of counting heads ' was not possible in India. It was, therefore, natural that the talks between Gandhiii and Jinnah evinced immense interest in the public mind of Bombay. Although not much was expected to come out of the deliberations, Hindu opinion gravely warned Gandhiji against making any concession, while the Muslim League was obstinate and unrelenting. The talks in April yielded little. The deliberations were resumed in the city in May 1938, Subhash Bose participating as the Congress president. These negotiations were also deadlocked.

The talks were preceded by a serious communal riot from 17 April 1938, costing 14 human lives. The ground for riot seemed to have been carefully prepared by the secret circulation of leaflets and by inflammatory writings in a section of the press. The riots took the usual form of sporadic assaults and stabbings, but prompt action by the authorities soon brought the situation under control. Six communal newspapers were, hence, placed under censorship. (*Bombay—1938-39, p. iv.*)

The agitation of the State Congress in Hyderabad also found its echoes in Bombay. Public opinion was in favour of constitutional reforms in the Nizam territory.

Prohibition Inaugurated: Prohibition was extended to Bombay city and suburbs on 1 August 1939. There was to be no taxation to make up for the loss of revenue entailed. This social reform measure launched at the instance of Gandhiji, inspired some criticism in the legislature by the vested interests. Outside, there was a bitter opposition from a strong, though numerically small, section of the public, consisting mainly of Parsis with large interests in the liquor trade, (*Ibid., p. i.*) and Christians. Homi Mody, Cowasji Jehangir, J. C. Coyajee, Khareghat, Saklatwala and A. D. Shroff represented the case of the opponents to prohibition. S. K. Bole pleaded the case of the toddy tappers who were solely dependent on this occupation. He submitted a memorandum to Gandhiji on behalf of 8,000 Bhandaris. (K. Gopalswami, op. cit,pp. 317-28.) This situation continued until the close of the year, but the Government showed that it was determined to implement the programme. Munshi and Dr. Gilder were enthusiastic with the same, and established a board for prohibition propaganda. Gandhiji himself fought the battle for prohibition in Bombay.(*Ibid., p. 317.*)

It was an interesting coincidence that four Parsis simultaneously held eminent offices in the city in 1939: Dr. Gilder—Minister, Sir Rustom. P. Masani—Vice-Chancellor of the University of Bombay (1939-1942), Behram N. Karanjia—Mayor of Bombay (1939-40), and Dr. Phiroze C. Bharucha—Sheriff of Bombay. About this Gandhiji rightly said, "I do not know that there has been such a happy conjunction before in the history of Bombay." (*Gandhiji defendedt he Bombay Ministry in the matter of criticism against prohibition.*)

After relinquishment of office by the Congress, prohibition was modified by the bureaucracy, following a ruling by a Special Bench of the High Court in July 1940. The Court held that prohibition was *ultra vires* the constitution. In another case, the Court gave a ruling that it was beyond the power of the Provincial Legislature to enact any law prohibiting possession of intoxicants in such a way as to encroach upon the rights of liquor importers and exporters, and such an order would infringe upon the sphere of the Central Government. Hence, prohibition even in the modified form was made inoperative. (*Bombay—1940-41*, *pp. xv-xvi.*) A great measure of social reform cherished by the Popular Ministry was thus set at nought.

The consternation within the Congress, in January 1939, over the issue of the presidentship of the Tripuri Congress, created an inevitable commotion in Bombay. Only once before in 1907, when the Congress had met at Surat, there was a controversy as to who should be the president—Lala Lajpat Rai or Rash Behari Ghosh. Since then there was no real contest. All too unexpectedly the presidentship of Tripuri session became a storm centre. Maulana Abul Kalam Azad was to be the candidate, while Subhash Chandra Bose had also entertained a desire to run a second term after his presidentship at Haripura. Maulana Azad, however, changed his opinion while in Bombay, and decided to withdraw.

Consequently, Dr. B. Pattabhi Sitaramayya was sponsored as an official candidate in place of the Maulana. The contest between Dr. Sitaramayya and Subhash Babu placed the crown of presidentship on the latter's head. On the morrow of the result, Gandhiji came out with his statement that the defeat of Sitaramayya was his own defeat. There was a consternation in the country, a searching of hearts and a revolution of positions. Those who had voted for Subhash Babu came out with a fresh vote of confidence in Gandhiji's leadership. That created an awkward situation to be sure. What was really embarrassing was the reversal of party majorities. Unfortunately the president-elect was in a minority in the All-India Congress Committee. (*Pattabhi Sitaramayya, History of the Indian National Congress, Vol. II (S. Chand & Co., New Delhi, 1946), p. 106.*)

OUTBREAK OF THE WAR

The Congress had been anticipating the outbreak of war for over twelve years, and had been warning the country against rendering any kind or any measure of help to Britain in money, men or munitions. At last the long apprehended war broke out on 1 September 1939, and India was unilaterally declared a belligerent on the 3rd. His Majesty's broadcast was the first to be heard. This was followed by the Viceroy's and the Governor's, and was played back for a couple of days. Lord Linlithgow expressed his confidence that " India will make her contribution on the side of human freedoms as against the rule of force and play a part worthy of her place among the great nations and historical civilization of the world ", a worthy path indeed for a slave to enslave other nations or to emancipate them and yet continue a Cinderella of the nations of the world. An anxious and perhaps inquisitive public began to scan and scrutinize these various loud talks to see if in the range of their war aims, there was any mention of Indian aspirations. But alas! India, the inexhaustible source of food and raw materials, the home of warriors and slaves, was not consulted by Britain as the Dominions were. The Indian Central Legislature was not informed about the serious step taken. (*Ibid.*, p. 125.) A wave of indignation ran through the country, much more so in Bombay.

The Act of 1935 was amended by the Parliament to confer on the Central Government special powers to deal with the emergency. Provincial autonomy was also restricted and circumscribed at the same time. In spite of the repeated declarations of the Congress in regard to war, the British Government had declared India a belligerent country without the consent of the people, and far-reaching measures were hurried through the legislature, and Ordinances were promulgated affecting them vitally and circumscribing the powers of the Provincial Government. The Congress demanded that the Government should state its 'war aims', and India must be declared an independent nation. It further declared that India could not co-operate in the war without the status of an equal partner, but would help Britain if her independence was recognised. On 17 October the Viceroy came out with a declaration of Britain's war aims with regard to India. Unfortunately the Viceregal declaration was profoundly disappointing and showed that the old policy of 'divide and rule' was to continue. The announcement regarding formation of a Consultative Group consisting of representatives elected by the Viceroy

from amongst a panel nominated by different political organisations was nothing but an empty talk as the Group was not to have any power of decision. The much advertised high aims, professed by the British, were crumbled into dust at the first touch of reality.

Meanwhile the National Liberal Federation of India, a reactionary body which had its protagonists in Bombay[^] offered unconditional support to Great Britain. There were also the leaders of some communities and interests such as the Hindu Mahasabha, the Scheduled Castes, Sikhs and Parsis, who instantly made it clear that their views and interests should not be left out of account in the discussions that were in progress. (*Lord Zetland's Statement in the House of Lords, 18 October 1939, cf. March of Events (Bombay Provincial Congress Committee, September 1940).*)

The Congress, however, saw in the Britishers' talk of ' protection of minorities ' an excuse for perpetuating the status quo while it was

minorities ' an excuse for perpetuating the status quo, while it was insisting on a charter of independence to be framed by a Constituent Assembly of representatives selected by universal franchise. Behind all the conciliatory words of Sir Samuel Hoare, there was a clear intention to deny full responsible government, not to speak of independence to India, even at the end of the war. (Dr. Rajendra Prasad on the debate in the House of Commons on 26 October 1939. cf. March of Events, p. 71.) The Congress Working Committee saw the futility in the British talk, and decided against extending any support to Great Britain as it would have amounted to an endorsement of the imperialist policy. As a first step in that direction, it called upon the Congress Ministries to tender their resignations. It also warned Congressmen against any hasty action in the shape of civil disobedience, political strikes and the like. It issued instructions to the Congress Ministries to tender their resignation, while the speakers, deputy speakers and members of the Assemblies, presidents and members of the Councils were expected to retain their offices and seats.

Accordingly on 25 October 1939 the Prime Minister of Bombay, B. G. Kher, moved in the Legislative Assembly the historic resolution expressing regret at India having been made a participant in the war without her people's consent and demanding that she be regarded as an independent nation entitled to frame her own constitution. And the Ministry headed by B. G. Kher relinquished office on 4 November. (*Bombay-1939-40*, *p. i*) It was as if a work of Art erected after half a century of toil and suffering, of negotiations and adjustment, was smashed to smithereens by one incendiary. (*Pattabhi Sitaramayya*, *op. cit, Vol II*, *p. 145.*) The indignation and frustration of the people was, however, more due to Britain's imperialistic design of playing the minorities against the so-called majority, and converting the question into a communal one than the collapse of the edifice.

After relinquishment of power by the Ministry, Sir Roger Lumley, Governor, issued a proclamation under section 93 of the Government of India Act assuming to himself all legislative and administrative powers, and appointing Advisers (*Bombay-1939-40,p.i.*) to assist him in carrying on the administration. The Advisers were : Sir Gilbert Wiles, Janardan Atmaram Madan and Henry Foley Knight, all of them I.C.S. officers.

The relinquishment of office by the Congress was welcomed by Jinnah and his followers, and Jinnah called for celebration of a "Day of Deliverance and Thanksgiving " on 22 December 1939. If Bombay was abounding with an abiding patriotic fervour and support to the Congress, some quarters in the city celebrated the " Day of Deliverance " with jubilation. An irony of fate to be sure. A widening of the gulf between the Hindus and the Muslims.

It is essential to give an account of Lord Linlithgow's speech at the Orient Club, Bombay, on 10 January 1940. It was conceived in a less harsh strain than hithertofore. After recounting the events of previous months and the rapid changes brought about therein, the Viceroy expressed the trust that the interruption in the working of Provincial Autonomy would be temporary and that the re-establishment of the normal working of the Constitution would, before long, be practicable. The Vicerov expressed his regret at their inability to secure the presence of the Ministers at the Centre, the association of the Indian States in a common Government, the representation of all the minorities on duly settled lines and the unity of India. He repeated that "Their objective in India was the attainment of Dominion Status of the Statute of Westminster variety, that they are prepared in the meantime, subject to the local adjustments between the leaders of the great communities as may be necessary to ensure harmonious working, and as an immediate earnest of the intention, to expand the Executive Council of the Governor-General by the inclusion of a small number of political leaders." (cf. Pattabhi Sitaramayya, op. cit., Vol. II, p. 160.) The Viceroy stated bow there were many people who pressed for swifter and more valuable solutions of the problems before us, and asked how often these apparently simple solutions, when more closely investigated, presented unforeseen difficulties and problems of unexpected importance. Once again be harped back to the claims of the minorities, the Muslim minority and the Scheduled Castes. Justice must be done, he said, as between various parties, and His Majesty's Government are determined to see justice done. Presumptuously he asked his friends in the various parties to consider whether they could not get together and reach some agreement between themselves. But so far as the objective was concerned, he gave the assurance that the Government would spare no effort to reduce to the minimum the interval between the existing state of things and the attainment of Dominion Status. The concluding paragraph of the speech was not only exhortative but also pathetic. "The offer is there. The responsibility that falls on the great political parties and their leaders is a heavy one. They have helped me in the p-ast and I ask today that they will help me again and help India, and I ask for their cooperation and their assistance in terminating at as early a date as possible, a state of things which all who have faith in the virtue of constitutional progress, must deplore, a state of things which every lover of India, every one who is concerned to advance her interests must feel today to be a bitter disappointment."

In spite of the mellifluent language and the captivating tone adopted, the core of Linlithgow's speech remains as hard as before. Minorities, Muslims, Scheduled classes, justice between parties and mutual agreement, constituted the burden of the song. The reaction of Dr. Rajendra Prasad (Congress president) came sharply in reply on 14 January

that the Congress goal was independence pure and simple as against the Dominion Status even of the Westminster variety, that the party leaders were not the fully accredited representatives of the whole of the population that they profess to represent, and that under the circumstances it was not without careful consideration that the Congress had put forth the Constituent Assembly as the only solution.(For text of the Viceroy's speech and the Congress President's statement, see March of Events (Bombay Provincial Congress Committee, September 1940), pp. 110-16)

Independence Day: Ever since 1930, January 26 had been regularly observed as the Independence Day and had become a landmark in the struggle for freedom. Owing to the present deep political crisis and the possibility of the struggle being continued in an intenser form, the celebration of this Day in 1940 had a special significance attached to it. There was also the urgent necessity of preparing the country for the struggle that might be forced upon the people in the near future by the attitude of the British Government towards the national demands. The Congress Working Committee, therefore, gave a call for the preparation for fight. This call was incorporated in the exhortation to observe the Independence Day and the pledge to be solemnised anew in public meetings.

The pledge (For text of the pledge, see March of Events, 1940, pp. 109-10.) was a solemn resolution to carry out non-violently the struggle for freedom till purna swaraj was attained. It was an exhortation to keep in readiness and to respond to the call of the Congress. To be sure, it was a harbinger of civil disobedience.

The war continued to cast its shadow over life in Bombay in 1940. The Government was busy meeting defence needs and in dealing with problems caused by the nationalist struggle. Trade and commerce were affected by the developments in the struggle and the increasing demands of the defence services. Despite all this, the war remained a thing remote from the man in the street. It was a year of war in the distance, and of politics at home. Political news often ousted war despatches from the place of prominence in newspapers: there was an endless discussion over India's future constitution, a great controversy as to the extent to which political parties should or should not help the war effort. (Bombay—1940-41, p. i.)

The Ramgarh Congress of March 1940 strongly denounced the declaration of India as a belligerent country, without reference to the people of India. It also disapproved of Indian troops and resources being harnessed for imperialistic ends. (*March of Events, 1940, p. 120.*)

In the post-Ramgarh period satyagraha became inevitable. The Bombay Provincial Congress Committee and the district units in the city bestirred themselves to vigorous activity in pursuance of Gandhiji's directions, and began to function as Satyagraha Committees, enrolling satyagrahis. The reordering of internal affairs and the earnest pursuit of the constructive programme were the duties demanded of them. The scheme of some changes in the administration proposed by the Viceroy, on 8 August 1940, which came to be known as the August Offer, was not only an empty one,

but the Viceroy therein granted a veto to the minorities. This disappointed, the Congress leaders, who withdrew the Poona resolution at the All-India Congress Committee meeting in Bombay on 15 September 1940.

Bombay has always done a good job of arranging for meetings of the Congress as well as the All-India Congress Committee on a grand scale. On this occasion the Reception Committee did not find it easy to have a suitable venue. A place like the Cowasji Jehangir Hall would not have been available for a hostile Congress demonstration. Bhulabhai Desai persuaded the authorities of the Sunderabai Hall to make the same available to the All-India Congress Committee. But they would not allow any flags or portraits. Bhawanji Arjun Khimji, a leading Congressman, did not accept such restrictions. Purshottamdas Thakurdas, president of the East India Cotton Association, however, agreed to Khimji's request not only to allow the All-India Congress Committee to meet in the Cotton Green, but also to house the delegates in the spare rooms. Among those who attended, besides Gandhiji, were Abul Kalam Azad and Vallabhbhai. (K. Gopalswami, op. cit., p. 339.)

It was at this session in Bombay that Gandhiji agreed to assume active leadership of the Congress, after his differences of opinion on the issue of non-violence. Gandhiji was now resuming his old generalship. The atmosphere was tense, but not with fear but with a certain expectation and a certain hope unfolding themselves before the national vision. The All-India Congress Committee reviewed the situation as it developed during the previous two months and declared that the Delhi Resolution confirmed by the All-India Congress Committee at Pune no longer applied. It had lapsed. The Working Committee resolved to suspend civil disobedience to ensure a perfect peace and tranquillity and an atmosphere of non-violence throughout the country before it inaugurated satyagraha. (*Pattabhi Sitaramayya, op. cit., Vol. II, pp. 215-16.*)

Individual Satyagraha: After the Bombay meet, Gandhiji met the Viceroy, but, as was expected, nothing came out of it. The demon of war was spreading his tentacles far and wide in Europe, which instead of softening the heart of Britain towards India, hardened it ever more, Hence, Gandhiii announced his programme of individual satyagraha on the issue of freedom to preach non-co-operation with the Government in its war effort and to make anti-war speeches on 13 October 1940, and chose Vinoba Bhave as its first exponent. Vinoba was not then so well-known, and many in Bombay asked who he was and why he was chosen. (K. Gopalswami, op. cit., p. 352.) But Gandhiji made no secret of his conviction that no one else came up to Vinoba's standard as a satyagrahi. (Vinoba offered satyagraha as the first satyagrahi on 17 October by asserting his freedom of speech through a pledge as under:" It is wrong to help this Britishwar effort with men or money. The only remedy to war is to resist all wars by non-violent resistance.") Vinoba Bhave was followed by Nehru, (Nehru was not arrested for satyagraha, but for some speeches delivered by him.) Azad, Vallabhbhai, Rajendra Prasad, Rajaji, B. G. Kher, Bhulabhai Desai, (Bhulabhai was then the leader of the opposition in the Central Legislature.) Mangaldas Pakvasa and K. M. Munshi, the last four being from Bombay. Once the movement began to take shape, the members of

the Legislatures, ex-Ministers and Congressmen were all detained. Jamnalalji was, after a serious illness, released on medical grounds, some time in the summer of 1941. The movement went on methodically and progressed according to plan. However, public opinion in Bombay, as in India, was sceptical about the efficacy of individual satyagraha. "The selection of one individual to start the campaign for achieving freedom of speech, at the end of which certainly lay independence, appeared to some minds highly intellectual, highly patriotic, highly courageous and highly self-sacrificing as almost bordering on a joke." (*Pattabhi Sitaramayya, op. cit, Vol. II, p. 219.*) Simultaneously with the inauguration of the campaign, the object of which was to establish the freedom of speech and expression, the right of free expression even through writing was snatched away by a special Ordinance promulgated in October 1940. Gandhiji had to give up the publication of his three weeklies because of the ban on publication of news concerning the satyagraha.

The movement assumed the form of shouting anti-war slogans and making anti-war speeches in Bombay. In the beginning, when news of the arrests of important Congressmen was received, vaiious markets were closed and meetings of the Municipal Corporation were adjourned. However, this policy of non-co-operation failed to arouse enthusiasm among the masses.

Towards the end of 1941 all the Congress satyagrahis were released, but Gandhiji was not enthused by this measure. Some Congress adherents broke away to form the Radical Democratic People's Party which advocated support to the war. Other political parties co-operated with the Government, Some voluntary workers in the city came forward to man the auxiliary and Air Raid Precautions Services of Government. Money flowed in a steady stream as gifts to the war funds and as contributions to the defence loans (Bombay—1940-41, p. ii.) by the industrialists and vested interests.

By the middle of April 1940, Hitler's blitzkrieg had descended on Norway and Denmark; Holland, Belgium and France fell in guick succession. By the end of June 1940, West Europe had collapsed, and Germany was poised for an assault on England. The fall of France was certainly a landmark in the development of the war and the fate of the British was hanging in balance. It was, therefore, inevitable that Bombay was surcharged with rumours and panic during the black months of mid-1940. The Nazi victories culminating in the collapse and surrender of France were inevitably reflected in the withdrawal of deposits from post office savings banks, a demand for silver in exchange for currency notes, the hoarding of precious metals, and depression in the markets in the city. Early in July the fear of a scarcity of silver, aggravated by an alarm caused by the temporary closing of the Bombay harbour, spurred a rush on the Reserve Bank in Bombay. The Bank had, therefore, to open small change depots all over the city which helped subside the panic. And, in order to check profiteering in currency notes, orders were issued for the prosecution of all persons refusing to accept currency notes at their full face value. (*Ibid., pp. ii-iii.*)

The Native Share and Stock Brokers' Association, Bombay, closed the

market on 23 May 1940, and next day the Government had to sanction the indefinite closure of the forward market. The Board of the East India Cotton Association, too, decided to ban uncovered short sales in cotton from 8 June, so as to prevent the market from being unduly depressed by attacks. (*Ibid.*, p. iii.)

Meanwhile the Muslim League, at its annual convention in Lahore, in December 1940, passed a resolution which came to be known as the Pakistan Resolution, defining its goal as Pakistan. Soon after, its leaders engineered communal riots wherever they could, and thosfe at Bombay, Ahmedabad and Dacca were the most brutal. These riots were not the usual outbursts of communal tension with which everybody was familiar; they were intended to thrust Pakistan *on* the. country by terrorizing the Hindus through mob violence. (*K. M. Munshi, op. cit., p. 75.*)

The situation obtaining in Bombay was terrible. Against this mounting onslaught of communal frenzy, there arose a consternation and a rage among the Hindus, and even among Congressmen. Several of them including a person like Munshi felt convinced " that communal frenzy against Hindus must be met by force, the only language which the fanatic section of the Muslims was likely to understand".(*Ibid., p. 76.*) They intended to organise resistance in self-defence as a paramount duty. The Mahatma and the Congress, wedded to non-violence, however, would not allow such a move. Hence, some leading loyal Congressmen including Munshi, who had a long record of service and dedication to the party, parted ways with the .Congress. A terribly painful course of action for Munshi! (The entire episode can be studied further from the correspondence between Munshi, Gandhiji and Sardar Patel furnished by Munshi in Pilgrimage to Freedom, Vol. 1, Appendices 52 to 58.) Subsequently he organised the Akhand Hindustan Front "to impress upon the people the necessity of mobilizing public opinion in favour of United India ".

Meanwhile came the startling news that, on 27 January 1941, Subhash Chandra Bose fled from his house in Calcutta in disguise, not withstanding the strict watch on his movements. His friends and admirers in Bombay, who were by no means insignificant, were deeply moved. Moderate Leaders' Conference in Bombay: T. B. Sapru, a persona grata with the Government of India, convened a conference in Bombay in March 1941, while the Congress was at war, a non-violent one, with the British. The conference urged the reconstruction of the Viceroy's Council, so that the whole of it might consist of non-official Indians. The Executive Council should be collectively responsible to the Crown during the war, and the British Government should come out with a declaration promising India full Dominion Status within a specified time-limit after conclusion of the war. Pains were taken by Sapru to prove that the Bombay proposals were almost identical with those of the Pune session of the All-India Congress Committee in July 1940. Sapru talked of a National Government with or without the Congress and the Muslim League. (It was said, "Excluding the League and the Congress, there are millions of people here to be talked to ".) "The weakness of the Bombay session lay in the fact that in the eye of the leaders, Congress was only as much (or as little) as it was to Mr. Amery,—one out of many institutions and utmost, & primus inter pares.'.

(Pattabhi Sitaramayya, op. cit., Vol. II, p. 229.) Furthermore the Bombay Resolution fell short of the Poona Resolution of the All-India Congress Committee in that, while the latter demanded a Provisional National Government responsible to the Central Legislature, the former urged the formation of an expanded, Executive Council responsible to the Crown. There was, therefore, no chance of the Congress favourably reacting to the Bombay decision. As observed by the Congress historian, " The concern of the Bombay Knights was to make the war effort more intensive, more spontaneous and more abundant Their purpose was to help the British people to the fullest extent possible consistently with India's interests." (*Ibid., p. 230.*) The reaction of Jinnah was extraordinary. In a statement he said that the Bombay conference was engineered by the agents of the Congress and the Hindu Mahasabha leaders, and that the prominent leaders remained in the background. He compared it to a Dutch Army " all Generals and no soldiers ". As the Congress historian rightly put it, " Complete independence they would not touch with the longest stick. Dominion Status they would willingly wait for 3 provided the British Government assigned a date for its inception as early after the war as possible. The vigorous promotion of war effort was their objective.".(*Ibid., p. 232.)*

The Secretary of State (*Mr. Amery's speech of 22 April 1941.*) also dismissed Sapru's proposals by stating that the scheme proposed was not a modification of existing Government, but its supersession, a thing beyond the strain and urgency of war, and totally impracticable. They would create internal constitutional problems.

In the meantime, World War II raged with unabated fury. Hitler invaded Russia on 22 June 1941, and on 12 July Britain entered into an agreement with the Soviet, presaging a shift in policy of the Government of India towards the Communist prisoners, in whom they found a new ally. The Communists had earlier denounced and condemned Britain's weir with Germany as 'imperialist'. As soon as Russia became involved they changed overnight and called it a 'people's war'. Bombay, the cockpit of the Communists (in 1937), witnessed a dramatic change in the Communist support to the war effort from July 1941 onwards. They paraded through the labour quarters in the city canvassing for support to the alien Government. How far they were successful, it is difficult to say. Japan entered the war and scored an unbroken series of incredible victories in the Pacific.

Japan bombed Pearl Harbour on 7 December 1941 and smashed the American and British navy in the Pacific. The Germans were perilously near the outskirts of Leningrad. Moscow would hand over to the Germans the possessions of all that Russia had built up and stood for those 20 years in the way of the new social order. While Europe was in this perilous state, war clouds were threatening Asia too. The Japanese captured Singapore on 15 February 1942; Rangoon fell on 7 March; the danger of invasion of India was no longer unreal. Britain's as well as America's might on sea was humbled. Japan's bombers flew over India's east coast and her army did set foot on India's soil. Even these perilous happenings failed to shock the rulers into a realisation of the gravity of the situation. Japan marched from victory to victory. It appeared clear to many that she

would be able to take over India swifly. " The activities of the British supplied ample evidence of a suspicion, held by many of us ", Munshi writes, " that, in the event of Japanese advance into India, the British contemplated a retreat westwards, following a ' scorched earth' policy. This possibility led Gandhiji to write a series of articles in the *Harijan* urging upon Britain to Quit India.". (*K. M. Munshi, op. cit, p. 81*)

It may, however, well be said that the failure of the ill-fated Cripps Mission (Sir Stafford Cripps arrived in India on 25 March 1942.) might have triggered Gandhiji's " Quit India". The Cripps proposals had been rejected by one and all of the political parties in India, although by each of them for its own reasons. The Congress rejected the Cripps offer mainly because the Executive was not to be responsible to the Legislature. It completely failed to satisfy the Congress in terms of the immediate administrative set-up. The freedom of a province to secede from the union, repudiation of the demands of the State peoples and the virtual reservation of Defence and War to the imperialistic authority, were undoubtedly the other reasons. The Muslim League rejected the offer because the freedom of secession as embodied in the offer did not clearly and fully concede the segmentation of India, as desired by it, in its demand for Pakistan. The Hindu Mahasabha rejected it because of the principle of dismemberment of Hindustan. The Sikhs opposed it because their community would be distributed over two countries and they claimed the right to form an autonomous union of their own. Gandhiji had characterized the offer as a post-dated cheque on a crashing bank. Sir Stafford piled up a number of untruths and half-truths which greatly redounded to his discredit, and made his whilom friends and enemies, his sworn enemies. Gandhiji, therefore, began his campaign late in April 1942. "Whatever the consequences, therefore, to India, her real safety and Britain's too, lies in the orderly and timely British withdrawal from India." He felt "convinced that the British presence is the incentive for the Japanese attack." " Leave India to God, and if that be too much, leave her to anarchy. The beauty and the necessity for withdrawal lies in its being immediate.", he said.

The bombing of Cocanada and Vizagapattam took place on 6 April 1942. Madras and other towns along the eastern coast of India were evacuated on account of the bombing and the sighting of the Japanese ships in the waters of the Bay of Bengal. It was taken for granted that India would shortly be invaded by the Japanese. Inevitably there was commotion and panic in Bombay. India as well as the Congress were impaled upon the horns of a dilemma, and could not easily get rid of a difficult situation without taking a'firm and final decision. This situation paved the way for the Working Committee's resolution of 14 July 1942 at Wardha. This resolution met with strong criticism from many quarters, particularly from Sir Sapru, Dr. Ambedkar, Rajaji, Jinnah and Sir Sikandar Hyat Khan. (Kanji Dwarkadas, op. cit., p. 75.)

The trail of events that took place during the interval of two months after the resolution, however, left no alternative to the All-India Congress Committee, in Bombay, but to approve of and endorse the Wardha resolution and pass it virtually in the same language with small amendments in the nature of emphasis and clarification.(*Pattabhi*

The centre of activity shifted to Bombay. Gandhiji arrived in the city early in August. Among many other activities he sent a message to Jinnah through Mr. Meklai, a Muslim businessman in the city, on 4 August. Thereby Gandhiji had offered to Jinnah that the Congress would have no objection to the British Government transferring all the power to the Muslim League on behalf of the whole of India, and that it would even join the Government in running the machinery of the free State with the League. Gandhiji, however, could not pursue the matter further because he was clamped in prison on the morrow of the All-India Congress Committee session in Bombay. (K. Gopalswami, op. cit., pp. 359-60.)

As regards the best slogan for independence, Shantikumar Morarji has recorded that Gandhiji conferred with his colleagues in Bombay. One of them suggested, " Get out ". Gandhiji rejected it as being impolite, Rajagopalachari suggested " Retreat" or " Withdraw ". That too was not acceptable. Yusuf Meherali presented the Mahatma with a bow, bearing the inscription, "Quit India ". Gandhiji said in approval, " Amen! ". (*Ibid., p. 355.)* That is how the historic slogan was selected.

QUIT INDIA MOVEMENT

The historic, indeed, the epoch making session of the AICC began on the 7th of August 1942 in the midst of tremendous tension, both on the part of the members and the public in Bombay. Its venue was on the Gowalia Tank Maidan, now christened August Kranti Maidan, where the Congress was born in 1885. S. K. Patil, the organising genius, chief of the BPCC and the "uncrowned King of Bombay "from 1930 onwards, had made very elaborate and lavish preparations for the mammoth session. The success of the meeting was almost exclusively due to Patil's organisational skill and attention to the minutest detail. (Ibid., p. 370.) The House looked not like a Committee meeting but like a miniature Congress with an audience of well nigh 20,000 with hundreds of delegates, scores of VIPs, and about a hundred Indian and foreign correspondents. Bombay knows no niggardliness and has perhaps made the best reputation for hospitality and minute attention to details. It is interesting to mention that the atmosphere was suddenly changed by the friendly attitude of a leading Muslim, Dr. Abdul Latif of Hyderabad (Deccan) who had formerly been advocating the formation of Pakistan, and who now suddenly came out with the repudiation of the demand for Pakistan. He suggested that instead of demanding Pakistan, the League should address itself to the question of National Government.(Pattabhi Sitaramayya, op. eit, Vol. It, p. *346.*)

How and why Government allowed the AICC to meet, is one of the mysteries of British behaviour. As it is obvious from a confidential circular by Sir Frederick Puckle, Secretary to the Government of India, (*The circular to all Chief Secretaries of the Provincial Governments, 17 July 1942.*) that the British were determined to combat the Congress movement sternly, and had made elaborate preparations well in advance. It could not be that they made a favour, and gave a last chance to the AICC to refuse to endorse the Working Committee's resolution. Perhaps

they thought that the AICC meeting was but a concession to the Congress constitution.

Abul Kalam Azad opened the proceedings by drawing attention to the imminence of foreign aggression and calling upon everyone, particularly the young, to resist aggression, and not to become sullen or downhearted. Gandhiji, who had a little earlier entered the pandal in the midst of an uncontrollable enthusiasm of the people, then gave a piece of his mind to the audience. He dwelt upon the purely non-violent and genuinely democratic struggle for freedom, with malice towards none. (Gandhiji said, "Ours is not a drive for power, but purely a non-violent right for India's independence... The Congress is unconcerned as to who will rule when freedom is attained. The power when it comes, will belong to the people of India, and it will be for them to decide to whom it should be entrusted..... Our quarrel is not with the British people; we fight their imperialism.... It is not a happy position for a big country like India to be merely helping with money and material obtained willy-nilly from her, while the United Nations are conducting the war.".)

Pandit Jawaharlal Nehru then moved the historic resolution drafted by Gandhiji and sponsored by the Working Committee. The resolution emphasised that India's subjection was degrading to her morally, and enfeebling her in her war efforts. The immediate ending of British rule in India was an urgent necessity both for the sake of India and for the success of the United Nations. The possession of Empire was a burden and a curse, and policies based thereon, made failure inherent in them. A.free India would throw all her resources in the struggle for freedom in the world and against the aggression of Nazism and Fascism. Future promises of freedom cannot produce the necessary moral on the masses. On declaration of independence; a Provisional Government with the Constituent Assembly leading to a Federal India would be formed. It would resist aggression together with the allied Powers. A reference was also made to the formation of a world federation. Great Britain was no longer justified in keeping India in bondage. It was, therefore, resolved to sanction, for the vindication of India's freedom, the starting of a nonviolent mass struggle. Three points were added in this resolution. First, the primary function of the Provisional Government must be to defend India with all its might; second, the constitution would be a federal one with autonomy for the federating units, and third the freedom of India should be a symbol of and a prelude to the freedom of Burma, Malaya, Indo-China, Dutch Indies, Iran and Iraq. (Pattabhi Sitaramayya, op. cit, Vol. *II, p. 346.*)

Jawaharlalji explained that the resolution was in no sense a challenge to anyone. The real need of the hour was to shift the emphasis from the physical to the moral plane, from Tanks and Bombers to popular support of the Asiatic and African people, for the present war. The flames that would be kindled by passing the resolution of the day, would illumine the darkened horizon right from the Caucasus to Chungking. The resolution represented the voice of India—the voice of the oppressed humanity. (*Ibid., p. 347.*) Seconding the resolution, Vallabhbhai said England and America cannot fight their enemies from India without Indian cooperation. There were a number of speeches and quite a few

amendments. But most of these amendments were withdrawn except a Communist one which was lost. Before the main resolution was put to vote, Jawaharlalji replied to the debate, and explained how wholly wrong were the Communists. The resolution was adopted almost unanimously, only thirteen voting against, twelve of whom were Communists and the thirteenth the father of a Communist.(*K. Gopalswami, op. cit, p. 370.*) It may be recalled that with the Russian involvement in the war from June, the Indian Communists changed overnight and called it a "people's war". It was, therefore, but expected that the Communists tried in vain to oppose the otherwise unanimous Bombay resolution.

After the resolution was passed, Gandhiji addressed the AICC for over two hours, explaining his plan of action, as a result of which Government decided that action should be taken simultaneously against the leaders in the early morning of 9 August 1942.(Commissioner of Police to Secretary to Government of Bombay, Home Dept., No. 5741/A-320, dated 10 August 1942.) Pattabhi Sitaramayya gives a lyrical description of his speech: " Verily Gandhi spoke like a prophet in a moment of inspiration, full of fire, purifying by its flames, but consuming by its contact, rising from the sordid depths of politics to the sublime heights of humanity, fellowship on earth and of peace and goodwill to mankind-in a word-full of the Spirit Divine. Indeed he spoke as the great leveller up the nations, the friend of the poor, the uplifter of the depressed and the emancipator of the enslaved. He spoke in the spirit of the famous words of Abraham Lincoln: ' With malice towards none, with charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in to do all which may achieve and cherish a just and lasting peace amongst ourselves and with all nations.' Gandhiji spoke really as the chief servant of the Nation and as such appealed to the United Nations not to miss the opportunity of a lifetime. As such, too, he called on all Indians to feel and behave as Free men and had a word to say to the Press and the Princes, to the students and the teachers, to Government servants and the public.".(*Pattabhi Sitaramayya, op. cit., Vol. II, p. 348.*)

Gandhiji gave a clarion call of " Do or Die ". It was to be the biggest struggle for India's freedom, the last fight as he called it. "We shall either free India or die in the attempt; we shall not live to see the perpetuation of our slavery.... Take a pledge, with God and your own conscience as your witness, that you will no longer rest till freedom is achieved and will be prepared to lay down your life in the attempt to achieve it."

Gandhiji declared that Brhain had given India the greatest provocation, but in spite of that" We won't hit below the belt. We have too far progressed in real gentlemanly fashion. We shall not stoop to any such thing."

He dwelt at length upon the Hindu-Muslim problem and said, "I have no mental reservation on the issue of Pakistan. Whatever happens, Pakistan cannot be outside Hindustan. Let all of us strive for the Independence of India. I am very impatient. It is freedom for all and not for any particular community we are striving for. I wholeheartedly endorse the Maulana Saheb's (Azad) offer to the British that India be handed over to any community. I would not be sorry if the authority is transferred to the

Muslim masses, for they are Indians. After all. India is homeland of Indian Muslims. The door is open for the Muslims. They can capture the Congress and change its policy. The Congress is a democratic body. Let the Hindus also know that they will have to fight for all, including minorities. Let them be ready to lay down their lives for saving the lives of the Muslims. It is the first lesson in *Ahimsa*".

He referred to the secret circular issued by Frederick Puckle which contained an open incitement to other organisations in India, to combine together to fight against the Congress. This was not only provocation but a suicidal course as well. Despite the personal bonds of friendship with the Viceroy, Gandhiji said, he would have to resist the might of that empire with the might of the dumb millions with no limit but of non-violence.

"It is going to be a mass struggle. There is nothing secret about our plans. It is an open campaign." He, however, exhorted the audience, "Nevertheless, the actual struggle does not commence this moment. You have only placed all your powers in my hands. I will now wait upon the Viceroy and plead with him for the acceptance of the Congress demand. That process is likely to take two or three weeks." Meanwhile every Congressman was to persevere and to carry out the fourteen-fold constructive programme, and to profess his freedom.

Pre-Dawn Strike: Despite the fact that Gandhiji and the AICC had emphasised the readiness of the Congress to negotiate, Government, not only neglected such assertions, but adopted belligerent measures beyond expectations. Prohibitory orders and ordinances, guns and gunpowder and mighty measures were kept ready, well in advance, to put down the movement which would not be inaugurated. (Sir Frederick Puckle, Secretary to Government of India, to all Chief Secretaries, No. 28/25/42, dated 17 July 1942.) As soon as the Governor of Bombay (Sir Roger Lumley) informed the Viceroy, on telephone, that the "Quit India" Resolution was passed, the Executive Council which was then in continuous session in New Delhi, decided unanimously to arrest the Working Committee members and other Congress leaders all over the country. (Kanji Dwarkadas, op. cit, p. 77.) On the morrow of the session, which was in sitting well upto the midnight of 8/9 August, the Government of India published its resolution which read as under:—

"The Governor-General-in-Council has been aware, for some days past, of the dangerous preparations by the Congress party for unlawful and, in some cases, violent activities directed, among other things, to the interruption of communications and public utility services, organization of strikes, tampering with the loyalty of the Government servants and interference with defence measures including recruitment. The Government of India have waited patiently in the hope that wise counsels might prevail. They have been disappointed in that hope. To a challenge, such as the present, there can be only one answer. The Government of India would regret it as wholly incompatible with their responsibilities to the people of India, and their obligation to the allies, that a demand should be discussed the acceptance of which would plunge India into confusion and anarchy internally, and would paralyse India's efforts in the common cause of human freedom." (*Gazette of India Extraordinary*,

The CWC, the AICC and the Provincial Congress Committees of Bombay, Maharashtra, Gujarat, Karnatak and all other provinces, except the N.W.F.P., were declared unlawful. An order was issued on the 8th of August prohibiting the printing or publication by any agency, of factual news, including speeches, relating to the Mass Movement or to the measures taken by Government to combat the movement, except for the news derived from official sources or news agencies approved by Government. In anticipation, the press gag had been provided earlier by a confidential communication by the Bombay Government to the editors of all newspapers in Bombay, (Hyam S. Israel, Special Press Adviser, P.W.D. Secretariat, Bombay, to all editors, 4 August 1942.) advising them to refrain from giving publicity to statements and articles which would incite support to the threatened movement.

Indeed Government had begun their preparations to stem the rising tide, the moment the first ripples appeared in the waters of political life. This is obvious from what came to be known as the Puckle Circular, dated 17 July 1942, which was issued only three days after the Wardha Resolution. The Government of India Resolution of the 8th instant, referred to above, must, therefore, be deemed to have been kept ready well in advance for publication in the wake of the arrests. The decision that the measures by Government should be in the nature of a blitz, was kept a closely guarded secret. (*Dr. Gilder, however, narrates that on 8 August he got information that all leaders including Gandhiji would be arrested at dawn of the 9th. He sent a word to Gandhiji, but the latter asked him to meet him at 10 a.m. on the 9th. Gilder told the messenger, "There won't be 10 o'clock tomorrow.".)*

A little after 4 a.m. the Commissioner of Police, with a few officers, arrived at Birla House to arrest Gandhiji. The latter was not prepared for this move, but received the same with equanimity. " When are we to leave?" he asked the Commissioner who was visibly nervous in the performance of the unpleasant duty. "At six," he answered.(G. D. Birla's eye-witness account in his book, In the Shadow of the Mahatma.) Gandhiji was driven to Victoria Terminus where a special train had been drawn up. As could be expected, all members of the Working Committee and 50 leading citizens of Bombay, were arrested ((1) M. K. Gandhi, (2) Mahadev Desai, (3) Miss Miraben, (4) Maulana Abul Kalam Azad, (5) Mrs. Sarojini Naidu, (6) Pandit Jawaharlal Nehru, (7) Vallabhbhai Patel, (8) Miss Maniben Patel, (9) J. B. Kripalani, (10) Asaf Ali, (11) Dr. Syed Mohammed, (12) Govind Vallabh Pant, (13) Shankarrao Deo, (14) Dr. Prafulla Chandra Ghosh, (15) Dr. Pattabhi Sitaramayya, (16) Harekrishna Mehtab, (17) Narendra Deo, (18) Morarji Desai, (19) Nagindas Master, (20) M. Y. Nurie, (21) S. K. Patil, (22) Ishwarbhai S. Patel, (23) Jinabhai P. Joshi, (24) Bhawanji Arjun Khimji, (25) Y. J. Meherali, (26) Sunderdas Morarji, (27) G. P. Huthee singh, (28) Manecklal N. Vakharia, (29) Bhawanishankar Oza, (30) Y. K. Parulekar, (31) Ganapatishankar N. Desai, (32) Purshottam Mithaiwalla, (33) Abidalli lafferbhoy, (34) Bhanushankar Yajnik, (35) G. G. Mehta, (36) Ashoka Mehta,(37) Saad Ali, (38) V. R. Modak, (39) Kisan Dhymatkar, (40) S. L. Silam, (41) Vishwanath R. Tulla, (42) B. N. Meheshri, (43) Dr. T. R. Naravne, (44) Mrs. Shantabai Vengasarkar, (45) Mrs. Sophia Khan, (46)

Ratilal Mulji Gandhi, (47) Manilal Jaimal Seth, (48) Mrs. Kasturba Gandhi, (49) Dr. Miss Sushila Nair, (50) Pyarelal Sharma

.Persons arrested and sent to Thane

(1) Ambalal Talokchand, (2) M. D. Dandekar, (3) Keshav Borkar, (4) G. A. Sawant, (5) R. K. Acharekar, (6) S. B. Mahadeshwar, (7) F. M. Wagh, (8) Sardar Pratapsingh, (9) Ramniklal Joshi, (10) Rajaram Trivedi, (11) Kashiprasad Singh, (12) V. M. Kande, (13) Shivaji D. Dongre, (14) R. M. Khandrey.) and put in the special train waiting for its load. The process was so sharp and perhaps even unexpected that some forgot to take with them their spectacles, some their money purses, books and even clothing. But all met as a happy company—the old gang, in the corridors and compartments of the train. The train steamed out at 7-20 a.m.

Gandhiji, Sarojini Naidu, Miraben and Mahadev Desai were detrained at Chinchvad and taken to the Aga-Khan Palace. The Bombay group was detrained at Kirkee and sent to Yeravada. The Working Committee members, including Jawaharlal Nehru, Vallabhbhai Patel, Maulana Azad, J. B. Kripalani, Asaf Ali, G. B. Pant, Pattabhi Sitaramayya, P. C. Ghosh, Dr. Syed Mohammed, Narendra Deo, etc., were taken to Ahmadnagar, where they were lodged in a separate block of spacious halls in the Fort of Chand Bibi. Kasturba Gandhi was allowed an option to accompany Gandhiji. But when she chose to stay back; she was arrested a few hours later and confined to Arthur Road Prison in a stinking dungy cell. She was later taken to Gandhiji's abode after being taken ill.

The Congress House of Bombay, as also the magnificent pandal of the AICG and the Gowalia Tank recreation ground were occupied by the Police. After the arrests of leaders, the first act of aggression of Government on the 9th was to prevent the pre-arranged rally of volunteers in the city, and to prevent the flag salutation ceremony which was scheduled to have been performed by the Congress president. Despite the police warning, a large crowd of some 4,000 persons collected at the Gowalia Tank, (Commissioner of Police to Secretary, Home Department, Bombay, No. 5741/ A-320, 10 August 1942.) and Mrs. Aruna Asaf Ali did hoist the flag and announced the arrests. Tear gas and lathi charge were employed against the impressive rally of volunteers and Desh Sevikas which was held according to schedule. The national flag at the pandal was pulled down, and volunteers who went to its rescue were beaten off. Seventeen persons including an AICC member, M. J. Sheth, were arrested. The dispersal of the crowd at Gowalia Tank, combined with the widespread news of the arrests of Gandhiji and all other leaders, was a signal for the unruly behaviour of crowds at several places such as Prarthana Samaj, Vithalbhai Patel Road, Thakurdwar, Sandhurst Bridge, Lamington Road, Gol Pitha, etc. (*Ibid.*). By afternoon demonstrators had been fired upon. There was brisk rioting, brickbatting, setting fire, assaulting the police and stopping of tram-cars and B.E.S.T. buses by the crowds. These acts alternated with police firing at several places in the city. Vithalbhai Patel Road and Girgaum were the scene of serious disturbances. While considerable damage was done to tram-cars, buses, vehicles, post offices and the police, many Government grain shops were looted.

Kasturba Gandhi, Dr. Sushila Nair and Pyarelal attempted to hold a huge public meeting at the Shivaji Park, even in the midst of Government terrorism. They were, therefore, detained in the Arthur Road Jail.(*Ibid.*) Even then a huge crowd assembled at Shivaji Park in defiance of repeated lathi charges and police firing. A leaflet entitled *Fight for Freedom*, was distributed at Shivaji Park, which exhorted that this was the final struggle for freedom, and students should fight till India is free, and that they shall have to snatch freedom from the imperialist foe. At sunset the first bus was smashed and burnt near the Tilak Bridge. (*March of Events, 1942-45 (Bombay Provincial Congress Committee)*, p. 6.)

A Curfew Order was promulgated under the Code of Criminal Procedure by the Commissioner of Police and Presidency Magistrate, which applied to the localities of Girgaum, Lamington Road, Fanaswadi, Kalbadevi and Sandhurst Roads on Sunday, the 9th instant. The fun of it was that even a police van which was being used to announce the imposition of curfew, was itself held up at Thakurdwar by a bonfire lit in the middle of the road. (Commissioner of Police to Secretary, Home Department, No. 5741/A-300,10 August 1942.) Such was the indomitable courage of the people. The Curfew Order was applied more sternly, and was further extended on the 10th to Mahim, Shivaji Park, Dadar, Naigaum, Wadala, Matunga, Sion, Dharavi, Parel, Elphinstone Road and Prabhadevi, at least till 24 August. (Home Department, Special Branch, File No. 1110 (80), 1942-43, 10 August 1942.)

The carrying of bludgeons, sticks, weapons, stones or other missiles was banned. The Government of Bombay, under rule 56 of the Defence of India Rules, issued orders banning public processions, meetings or assembly in any place without the permission of the Commissioner of Police or the District Magistrate (in case of Districts). This was done in the name of public safety and the efficient prosecution of the war '(Government of Bombay, No. S.D.V./102, 9 August 1942.) None of these stringent prohibitive orders could, however, dismay the invincible spirit of the people of Bombay.

On the very first day of the Great Fight, eight martyrs from Bombay consecrated their lives to the holy fire of India's freedom, while 169 suffered physical injuries and 221 were arrested.(*Commissioner of Police to Secretary, Home Department, Bombay, 10 August 1952.*)

Movement Goes Underground: The lightening swiftness of arrests enraged the masses and left them without a leader, and some of the activities took their own course in the direction of violence as an answer to the leonine violence by Government themselves. Eventually the situation became uncontrollable for a time. Gandhiji issued no instruction regarding the implementation of the "Quit India" resolution. He could not do so, because he was seized and whisked away much before the next day dawned. Everyone of the first rank leaders of the Congress was similarly seized, and there was probably no towering personality to guide the popular movement. The possibility or probability of the situation was not anticipated, which could be a defect of Congress organisation. But then the proposed Mass Civil Disobedience Movement was actually not inaugurated. In the nature of things the people simply became desperate.

There was a spontaneous impressive hartal in the cloth markets, Jhaveri Bazar, Dana Bunder, Girgaum, Bhuleshwar, Kalbadevi, Dadar and Matunga areas, which had all the signs of continuing for several days from 10 August. The situation worsened every hour on the 10th. The community of college students, particularly those belonging to the Grant Medical, Ruia, Khalsa and Wilson Colleges, were in the vanguard. Age was no bar for the expression of patriotism. On the 10th 31 textile mills and 15 silk mills closed down, and there was an intensely riotous situation in the mill quarters of the city. (*Commissioner of Police to Secretary, Home Department No.5778/A-320,11 August 1942.*) An attempt was made to set fire to the B.B. & C.I. Railway station at Dadar, which was prevented by police action.(*Home Department, Special Branch, File No. 1110 (80), 1942-43, p. 769.*)

The modus operandi of the rioting mobs throughout the curfew bound areas in the city, was almost similar. Trees, poles and post boxes were uprooted. Lamp-posts, municipal road sign-boards, B.E.S.T. bus stop boards and water hydrants were uprooted. All this and similar material was utilized for blocking vehicular traffic, particularly for obstruction of police vehicles. Telegraph and electric wires were pulled down and installations damaged. Police chowkis were the favourite targets of attack, burning being preferred. Police were beleagured and deprived of arms, if possible. Traffic was immobilised. Even private cars were not allowed to proceed unless there was a Gandhi cap on the head of at least one of the passengers. Tram-car tracks were filled with finely ground stone which it was not easy to remove. Chains hung at road junctions were released and tied across tramways, and the paths were further obstructed by heavy doors brought from somewhere and fixed across.(Commissioner of Police to Secretary, Home Department, Daily Reports of the Commissioner of Police to Secretary, Home Department, Bombay Government, 11 August 1942.) The operation rampage was not confined only to the mill quarter but also was in full swing at Dadar, Matunga, King's Circle, Kalbadevi, Bhuleshwar, Thakurdwar, Byculla, Kalachowki, Vincent Road (Ambedkar Road), Bhoiwada, Portuguese Church, Saitan Chowki, Mahim, etc.(*Ibid.*)

On 10 August, there was a grave situation at Dadar Railway Station of the B. B. & C. I., presently Western Railway. Huge crowds had assembled on

all the roads around the station, and forced their entry into the station. They placed obstacles on the railway lines and halted traffic quite for some time. Besides, there was brisk looting and incendiarism.(*Ibid.*) This led to complete cessation of all suburban train traffic both on the B. B. & C. I. and G. I. P. Railway lines. The rails of Railways were fully greased with oil so as to prevent the action of brakes suddenly applied. Fires were raging in the centre of Tulsi Pipe Road, while police chowkis near Plaza cinema and Gopal Talao were burnt.(*Ibid.*) The entire Dadar-Mahim area was under operation rampage. Owing to the serious disorder prevailing in the north of the city, the Curfew Order had to be extended to apply there. The disorder was met by Government in no halting a manner. The Commissioner of Police issued instructions to the effect that " whenever stone throwing or arson is encountered and Armed Police are present, they should be used to deal with a crowd. The firing should be undertaken not solely with the intention of dispersing the crowd but of. causing the maximum effect. To this end the firing of one round is insufficient, at least several rounds should be fired, the actual number depending on the situation.".(Commissioner's order, dated 12 August 1942, Daily Reports of Commissioner of Police to Secretary, Home Department.) On 10 August alone, sixteen persons were killed, 114 injured and 238 arrested by the Bombay Police.(Commissioner of Police to Home Department, 11 August 1942.)

There was no appreciable improvement in the situation on 11 August also. The general activities of the freedom fighters were similar to those of the previous day, e.g., immobilisation of traffic, blocking roads, cutting telephone wires, damaging municipal property, attacking the Police and burning Police Chowkis. The overhead electric supply at Matunga station was tampered and the railway cabin was damaged, which adversely affected local trains. The police and the Military were obliged to restore order by opening fire on 13 occasions on the day.(*Ibid., 12 August 1942.*)

The school and college students took a big hand in picketing and incendiarism. They extended their activities to the Fort and Princess Street areas. The Emergency Whipping Act was applied, and several hundred police were drafted into the city from the districts. The Whipping Act enabled whipping to be inflicted as a punishment on anybody convicted of rioting or arson. Troops assisted the police in quelling the disturbances. In spite of these measures demonstrators made strenuous efforts to impede traffic by building barricades in the streets. Rioting in the industrial areas again interfered with the working of mills and factories. (Home Department, Special, File No. 1110 (80), 1942-43, p. 777.) The Kalachowki Police Station area was the main centre of disturbances. It was an open rebellion against the repugnant Government and its broken pledges and artful dissimulation.

The Governor broadcast a warning from the Bombay Station of All-India Radio on 11 August that the outbursts of violence would not deflect Government from its purpose.' The police and the troops, newly brought into the city in considerable numbers, had 'orders to take the sternest and most prompt measures whenever the situation demands.' The warning was particularly addressed to the areas of Girgaum, Bhuleshwar, Dadar, Parel and Matunga.(*Ibid.*)

The Commissioner of Police claimed that there was a distinct improvement in the situation in the city on 12 August, due mainly to, (1) the stern warning by the Governor through the radio broadcast (2) the effective (inhuman?) measures taken against the demonstrators and (3) the realisation of the futility of mob violence. The police opened fire once and the military twice. Ten mills worked night shift while 14 worked during the day. The Indian markets, most of the schools and all the colleges in the city remained closed. The firing incidents occurred at Sewri and Sheikh Memon Street. Students forced their entry into the Secretariat and interfered with railway traffic near Churchgate.

Since the commencement of the movement on the 9th, as many as 34 patriots sacrificed their lives, 385 were injured and 1,296 were arrested in the city till the morning of 13 August 1942.(*Commissioner of Police to Home Department, 13 August 1942.*) Of the 34 killed, 33 succumbed to bullets and one to other kind of injuries. Such was the savagery of the combined police-military action.

In spite of the sudden nature of the movement and disorganisation of the Congress ranks, Congress Bulletins were being circulated in the city right from 10 August. They were issued in defiance of the authorities, and disseminated news about the freedom movement and guidelines to citizens. (Ibid.) As days went by propaganda literature was effectively circulated so as to keep up the spirit of the people. The propaganda was directed towards paralysing the Government administration, immobilisation of traffic and stoppage of manufacturing of war material.

From 15 August onwards a majority of the textile mills, 58 out of 63 as per police reports, the railway workshops and several factories, all engaged in manufacture of war equipment, resumed their work. The sad demise of Mahadev Desai in jail on the 15th, cast a shadow of sorrow all over the city resulting into a hartal. The Stock Exchange, the Cotton Exchange, and the Bullion Exchange were not inclined to start business for several days to come despite Government pressure on them. Attendance at schools and colleges was hardly between 10 and 20 per cent.(*Ibid., 17 August 1942.*) The Wilson College opened for the first time on 20 August.

Immediately after the arrest of Gandhiji, Motilal Setalvad resigned his office as Advocate-General of Bombay, while the Solicitor to Government, C. C. Shah, tendered his resignation on the 17th. There were also rumours that two Judges of the Bombay High Court, Justice Kania and Justice M. C. Chhagla were to renunciate office.(Ibid., 19 August 1942.) Several newspapers stopped publication at Gandhiji's call. They also felt that under the dictation of Government, they could not do justice to their profession. A good deal of contraband propaganda literature, Congress Bulletins, AICC bulletins, leaflets and brochures were openly circulated in the city. The *Times of India* and the *Evening News* were boycotted by the freedom fighters for their malicious and anti-national approach. The target of the contraband literature in Bombay wasiindefinite closure of colleges and the University, postponement of examinations. immobilisation of traffic and stoppage of production of articles utilized for the execution of the World War. Congress workers channelised the student community and the working class (Ibid., 20, 21 and 22 August 1942, and Congress Bulletins.) for achievement of those objectives.

The notable features of the propaganda literature in the city were as under: An elaborate programme was put before students, workers, ladies and the public, and each of these categories were entrusted with distinct tasks. The task before the students was to cultivate Indian culture, educate the illiterates, organise the movement in towns and villages, boycott anti-national papers, paralyse Government services, obstruct military and hardware of the and communications. Workers were charged with the function of halting production of war material and devoting to village industries. The fair sex was expected to devote to constructive programme, to nurse the wounded and to eonduct propaganda and to collect fund for patriots. The public was exhorted to maintain patriots by all possible means, to refuse co-operation with Government including refusal to pay taxes and observe a fixed day in every month as the national strike till Independence. (Compiled from various Congress Bulletins and leaflets issued by BPCC in the period.) Bands of Congress workers were functioning secretly in the city for the fulfilment of these tasks. Many of them fell a prey to the vigilance of the authorities, and were victimised under Rule 26 or 129 of the Defence of India Rules. A majority of such activists were associates of the "uncrowned King of Bombay", S. K. Patil. A proclamation and an attachment order were issued against Purshottamdas Tricumdas and Bimal Sharma, the underground diehards, by the Chief Presidency Magistrate. In consequence, certain property belonging to Tricumdas was attached, while he was underground.(Commissioner of Police to Home Department, 31 August 1942.)

An important event on 24 August was the big demonstration and picketing at the Bombay High Court under the leadership of Mangaldas Pakvasa and N. B. Parulekar. The objective was to throw the working of the High Court into shambles and enlist the support of the advocates to create a deadlock. A huge amount of repressive force was channelised by the authorities to quell the demonstration, and the two leaders, named above, were jailed. (*Ibid., 24 and 25 August 1942.*)

The Government of Bombay observed on 28 August that, although the situation in Bombay city had been almost normal and the public generally had been going about their normal business, a number of students were still absent from colleges and schools. The Government, considered that students should be con fined to their normal vocation, and issued a communique to the effect that the names of students who, without valid reasons, fail to attend from 1 September, should be struck off the rolls of the institutions.(*Home Department, Special, File No. 1110 (80), 1942-43, 28 August 1942, p. 835*) The communique, unprecedented as it was, enraged the student community to go on a protest strike. The atmosphere in the collegian world in Bombay, particularly at the Wilson, was charged with angry protests (*Commissioner of Police to Home Department, 5 September 1942.*) and consternation against the Government.

The Curfew Order which was rescinded on 1 September was reimposed on the 6th in the wake of disturbances and processions by Congress volunteers in the city.(*Commissioner of Police Order of 6 September* Dr. Jivaraj Mehta and Umashankar Dixit were arrested under the D.I.R. on 7 September. (Commissioner of Police to Home Department, 7 September 1942.)

As it could be expected, the first monthly anniversary of the Quit India Movement was celebrated with several processions and rallies, particularly by the Desh Sevikas, and attempts were made to hold a public rally at the Chowpati (9 September). Ladies were in the forefront. But the entire might of the Government was deployed to quell the struggle. The situation was at times tense and menacing, and brutal force was used to crush the patriotic activity and guerilla tactics in the city. The month long struggle for freedom had resulted into the martyrdom of 36 patriots, 429 being injured and 2,324 arrested in the Island City upto 9 September. (Ibid., 11 September 1942.)

The response of the millhands to the movement was rather a mixed one. While the younger among them and a good many among the aged, responded to the call of the nation by disrupting production, the adherents to the Bombay Girni Kamgar Union (Red Flag) clamoured to derive the benefit of higher wages incidental to the war economy. Communists like Dange, Mirajkar, R. K. Bhogle, S. G. Patkar and R. M. Jambhekar advised the workers to continue work and to hoodwink the Congress propaganda. The Bombay Mill Kamgar Union under Ismail Khan, (*Ibid., 12 August 1942.*) also played to the tune of the Muslim League. These contradictory forces did lead to a consternation among the community of millhands on several occasions.

The loyalty of the millhands was rather divided. Undoubtedly most of them attended their work. But this could be attributed to the fact that prior to the World War II, the cotton textile industry in the city had suffered the pangs of the near chronic depression from 1929 to 1938. The workers had fresh in their mind, the bitter memories of the sordid conditions of unemployment and wage cuts over very many years past. They were, therefore, prompted by circumstances to avail of the benefits of wartime boom, higher wages and continuous employment. Their loyalty to management could hardly be attributed to the Communist support to the British.

Although Gandhiji and the Congress had, from time to time, expressed displeasure against burning effigies, Congressmen in the city exhorted the public to celebrate the martyrdom of Babu Genu during the previous Civil Disobedience Movement on 12 December 1930. He had been killed on the Kalbadevi Road.(*Ibid., 14 September 1942.*) The occasion was celebrated at several places in the city, and effigies of Winston Churchill were burnt.(*Congress Bulletin (date not readable).*)

While the Wilsonians had a distinguished record of revolutionary activity, students of the Elphinstone, Grant Medical, Ruia and Khalsa Colleges did not lag behind. The Elphinstonians hoisted the tricolour flag on the college building on 16 September in defiance of the principal's order. The girl Elphinstonians showed an uncommon courage rightly matching to their male counterparts. This example was emulated by the students at

Podar College after about two days. The students of Grant Medical College set fire to the Physiology Theatre in the campus, while their counterparts in the Khalsa College, organised revolutionary activity in the college premises itself. The students of all these colleges were always in the forefront in organising processions and meetings despite prohibitory orders. Observances of the mourning of Mahadevbhai Desai, Which was prohibited by the Police, was another occasion for them to come into conflict with the authorities. Hundreds of them, from all strata of society, girls not lagging behind, forfeited their scholarships, freeships and even education for the noble cause of freedom. The Congress propaganda literature was kept into circulation in the city, mainly by college students. They organised several anti-Government demonstrations as well as 'underground' activity in the city.(*Compiled from the Daily Reports of Commissioner of Police to Home Department andthe Congress Bulletins.*)

The BPCC claimed that the flames of patriotism warmed up the hearts of Indians in the Army and Navy. *H.M.S. Lawrence* and another ship were ordered to proceed to England from the Bombay harbour, but they soon returned to the harbour due to engine trouble. Two other ships caught fire midstream under mysterious circumstances. In the Alexandra Dock three warehouses and two ships were ablaze, but the news was suppressed. These events were attributed to the patriotism of tlie R.I.N. boys.(*Congress Bulletin, 17 September 1942.*)

The atrocities by the police and the black regime of terror at Chimur in Chandrapur district, infuriated the citizens of Bombay in no small measure. A short digression to Chimur may not be irrelevant as the episode ignited fury in the city. Thepolice committed atrocities on a peaceful *Prabhat Pheri* at Chimur, killing innocent children and wounding several men. The otherwise peaceful crowd became violent and attacked the Police station at Dak Bungalow, and killed the three officers and one constable therein. This enraged the police to such an extent that on the third day, 250 police and troops were let loose on the innocent villagers and deployed to massacre, loot and rape. The severity knew no bound. Four machine-guns were also brought, but thanks to the torrential rains, they could not work. The poor villagers had not only to pay a fine of one lakh but had also to pay in countless repression, anguish and suffering. (*Ibid*,)

A secret Congress centre was functioning in a flat on Deodhar Road at Matunga, which: was conducting propaganda and revolutionary activities, particularly in the mill area. It was a highly organised centre which was raided by the Special Branch of the police on 19 September 1942, areesting eight activists, including Haji Javer Gilani and Rohit Manushankar Dave. Twenty thousand propaganda leaflets and other material were seized and the accused were prosecuted.(*Commissioner of Police to Home Department, 21 September 1942.*)

The Cotton Exchange was one of the centres of the freedom fighters. They had the courage to bomb the armed police guard at the junction of Sheikh Memon Street and Kalbadevi Road on 22 September. The police went unhurt, but many passers-by were injured. (*Ibid., 22 September 1942; The BPCC branded it to be provocative of vandalism,*

and reiterated its policy of ahimsa.) There were several occasions of explosives being used by the revolutionaries. There were several explosions in postal articles, college premises and laboratories and railway stations. However, very few of these explosions caused any large damage to life or property. Probably the brains behind them lacked sufficient experience and material of a good quality. Generally they used sulphur gunpowder, phosphorous, potash, petrol and kerosene. Sodawater bottles were profusely used as missiles on the police.

The Stock Exchange, under permission from the BPCC, commenced business for the first time on 23 September after 8 August.(*Ibid., 23 September 1942.*) It was allowed to function for five stipulated dates only to meet outstanding commitments made prior to 9 August in the interest of business integrity. This was allowed on an unequivocal assurance by the Stock Exchange that there will be no new business undertaking or commitments, and that it will remain closed for all transactions, ready and forward alike, for the duration of the freedom struggle.(*Congress Bulletin, 23 September 1942.*) The East India Cotton Exchange was still immobilised. The Bullion Exchange had likewise downed its shutters. The Swadeshi and Mangaldas Markets, Dava Bazar, Jhaveri Bazar and Dana Bunder were opened and closed intermittently. So to say, business in the commercial metropolis was paralysed wholly for most of the days and partially for the rest of the days, since the commencement of the Mass Movement.

The grain merchants in the city responded to the Congress call with their customary loyalty. They put up a cheerful face in the wake of difficulties caused by the hartal. The closure of the grain market for five days in a week did create a grave food situation. But the masses put up with these hardships with a patriotic gesture. The BPCC with the public interest in view, had permitted the wholesale markets in Dana Bunder to keep their shops open on two days in a week. (*Ibid., 23 September 1942. The Commissioner of Police, however, reported to the Home Department on 28 September 1942 that some merchants in the Bullion Exchange, Cotton Exchange and, Stock Exchange, conducted some business secretly in spite of their assurance to the BPCC.*)

The Gandhi Jayanti in 1942 was the most apt occasion for the patriots to demonstrate their disapproval of the repressive measures by Government. A general hartal was observed in the city except Fort area, many mills and factories remaining closed on the first day of the week. Vehicular traffic was immobilised in almost all parts of the city. All cloth markets, the Share, Cotton, Jhaveri and Dava Bazars and the Baflia Bunder were closed during the week. There was a great consternation among the miUhands. The Mazagaon Police Court was completely gutted, while there was an explosion in the New Great Eastern Mill at Byculla.(Commissioner of Police to Home Department, 5 October 1942.) The Worli detention camp was a scene of much disorder wherein the prisoners were agitating against the inhuman conditions in the camp. This outbreak was the second of its type in the camp since the commencement of the Mass Movement.(Ibid., 6 October 1942.)

By the second monthly anniversary of the movement (9 October 1942),

as many as 37 patriots had sacrificed their lives, 502 were injured and 3,450 were arrested in the city.(*Ibid., 10 October 1942.*)

There was a galaxy of underground freedom fighters in the city who evaded the police net for months. To mention only a few of them: Purshottamdas Tricumdas, K. K. Shah, Achyutrao Patwardhan, Dr. M. D. D. Gilder, Purshottam Kanji, Soorji Vallabhdas, Chandulal S..... Shah, Ratansey Chapsey, Dahyabhai Vallabhbhai Patel, B. R. Dhurandhar, Miss Usha Mehta, Chandrakant Baboobhai Javeri, Vithaldas K. Javeri and C. K. Narayanswami.

Secret Congress Radio: Among the several valiant and defiant things which Bombay city did, the secret Congress Radio transmitter deserves special laurels. The Congress Radio, as it termed itself, calling on 42.34 metres, was perhaps the only one and the first of its kind in India. It broadcast the news of underground activity and directed the freedom fighters in their struggle every day. It was located "somewhere in Bombay", and frequently moved about from place to place until it was eventually raided and confiscated by the police. The brain behind this brilliant and brave activity was Miss Usha Mehta, (K. Gopalswami, op. cit., p. 399.) a girl student in Bombay, who later rose to be a distinguished Professor of Politics in the University of Bombay.

The Police Wireless Monitoring Unit kept a ceaseless vigil on the radio broadcasts and recorded the same for information of Government. The Commissioner of Police used to send verbatim reports of the daily broadcasts from, what was called, the Illegal Congress Radio to the Secretary to the Government of Bombay, Home Department, along with his daily reports. The radio gave brilliant messages arousing the enthusiasm of the masses and inspired the " underground " workers to ceaseless dedicated patriotic activity. It gave a call to the people to resist the heinous atrocities and the cruel crime perpetrated by the alien Government against the suffering masses. A call to resist with honour, dignity and self-respect for the sake of India's sons and daughters! This was a, final struggle for Independence and it must be fought out to a decisive conclusion (Police Wireless Monitoring Report on the broadcast by the Illegal Congress Radio on 20 October 1942, forwarded by the Commissioner of Police to Home Department, 21 October 1942.). The radio broadcast news of war, which were otherwise beyond the reach of the Indian people. The Congress Radio broadcasts were all the more important because the news released by the bureaucracy was heavily censored.

The radio educated the people in the modus operandi of the revolution. (*Ibid.*) It exhorted the masses and particularly the workers to desert the city and migrate to their native villages so as to achieve the immobilisation of production and to defeat the imperialistic war efforts of the British. There was already a shortage of essential commodities in the city, as they were diverted *en masse* to the war. Hence the sons of soil should temporarily go back to the village and help production of food articles, so as to achieve self-sufficiency in the rural economy.

The Congress Radio broadcasts from Bombay gave a graphic account of the revolutionary activities from the North Western Frontier Province to Bihar, and from the foothills of the Himalayas to Kanyakumari. The news of the revolutionary activities of the Red Shirts, the Khudai Khidmatgars, the Biharis, the patriots from Uttar Pradesh and the rest of India were broken into Indian houses by the Congress Radio. For example, the brutal atrocities by the military and the police at Chimur in Chandrapur district were first publicized by this radio. The news of the Japanese bombing of Chittagong and East Assam was also broken to Indians by this Radio. (*Ibid., 26 October 1942, Commissioner of Police to Home Department, 27 October 1942*,)

The news presentation and radio talks were all brilliant, inspiring and lucid. They included pre-recorded talks and messages of national leaders, as well as the talks of underground leaders. The Radio enthused the volunteers beyond measure, and kept the citizens well-informed about the national and international situation.

But for occasional interruptions due to operational difficulties, it was regularly on the air, every morning and evening. It used to start with the words, "This is Congress Radio calling on 42.34 metres." The thrust of the propaganda was against the British war machine. This was sought to be achieved through immobilisation of supplies, non-payment of taxes, hindrance to collection of duties and other revenue, and boycott of factories by workers, withdrawal of money from banks, conservation of savings in the form of gold and silver, etc.

A band of dedicated revolutionaries under Miss Usha Mehta manned this activity which helped keeping the torch of the revolution burning. They obtained secret news from Government offices, and broadcast even the most secret circulars and government orders. Undoubtedly they had a network for collection and compilation of news from all over the country despite the strict vigil of the police and military authorities.

This extremely brilliant revolutionary activity was, however, destined to be short-lived. The Special Branch of the Bombay C.I.D. raided a block of rooms on the top floor of a building in Parekh Wadi on Vithalbhai Patel Road on 12 November 1942, and seized a complete Radio Transmitting Apparatus which was being used for the daily Congress Radio broadcasts. The two dedicated revolutionaries, namely, Miss Usha Mehta and Chandrakant Baboobhai Javeri, who were actually operating the transmitter then, were arrested on the spot, while the third Vithaldas K. Javeri was taken into custody the next day.(*Commissioner of Police to Home Dept, 13 November and 14 November 1942.*) The importance of this brief but inspiring revolutionary activity can hardly be over emphasised.

An important question arises as to from where did the Radio Transmitter come in those difficult times. It was Mr. Nanak Motwane, the patriotic proprietor of the Chicago Radio Telephone Company, Bombay, who had provided the equipment for the cause of the nation. Hence he was also arrested six days later. Further investigations of the C.I.D. resulted into seizure of more wireless transmitting equipment consisting of one built up Transmitter and the component parts of a second, and a more powerful Transmitter.(*Ibid., 19 Nov. and 20 Nov. 1942.*) Such were the preparations of the secret Radio activists.

Shortly after the arrest of the Illegal Radio activists, six important secret Congress leaders, who were directing the underground movement in the city, were arrested on 18 November. They included Dr. M. D. D. Gilder (a former Minister), Purshottam Kanji, Soorji Vallabhdas, Chandulal S. Shah, Ratansey Chapsey, Dahyabhai Vallabhbhai Patel (son of Sardar Patel) and J. C. Kumarappa (Secretary of the All-India Village Industries Association).

Purshottamdas; Tricumdas, the head of the Bombay underground Congress organisation, who had been evading the eye of Government since 9 August, was arrested in Bandra by the Suburban Police after the midnight of 19-20 November 1942.(*Ibid., 20 Nov. 1942*) This was really a big catch in the trap of Government.

Another group of secret activists fell into the Government net on 21 and 23 November. They included Naval C. Jerajani, Sanat Kumar Vin, N. J. Dastur and B. R. Dhurandhar. They were all connected with the publication of the *Congress Bulletin (Ibid., 23 Nov. 1942.)* and hence the importance of their Arrest to the Government. Their colleague and the editor of the *Ajmal*, "a nationalist Urdu daily, Mohinuddin Harris was convicted on the 23rd. One C. K. Narayanswami, sub-editor of the *Bombay Chronicle*, who was suspected to edit the English edition of the *Congress Bulletin*, was nabbed by the Police on the 30th morning. These arrests had apparently disorganised the *Congress Bulletin* staff.

While publication of Congress literature was important for conducting the movement, the Government attached special importance to its suppression. In this battle, the seizure of secret printing presses was a victory for the police. In their efforts to save the same, the organisers had to resort to camouflage activity, day in and day out. The fourth such secret Congress press of the treadle type was seized by the police on 9 December 1942 in a building at the junction of Khetwadi Main Road, This had been a shattering blow to the Bombay Congress underground organisation.(*Ibid., 10 Dec. 1942.*) It was seized within one week of its installation.

Response: The response of the mercantile community in Bombay to the movement was quite encouraging. The Share Bazar, the Bullion Exchange and the Cotton Exchange were moribund for over four months since the onset of the Mass Movement. Their closure was intended not only to be a patriotic moral support to the movement, but it was also aimed at hampering the war effort of the Government. It is true that a few among the businessmen supported the closure out of fear. Many of them held up-country traders secretly; Undoubtedlywith however, most of their ranks exhibited a high sense of patriotism in foregoing lucrative business incidental to the war boom. Many of them suffered the life in-jail, while a majority of them contributed to the Congress purse. The Share Bazar, the Bullion Exchange and the Cotton Exchange opened for the first time, after approval by the BPCC, from 7 December 1942. They were allowed to function only for the first four days of the week from this date. This gesture on the part of the BPCC was subject to the proviso that the markets do not transact any business on the remaining three days. (Ibid, 7 Dec. 1942.) The Muiji Jetha Cloth Market which had a tradition of an exemplary support to the Civil Disobedience

Movement of 1930-1932, also showed the same patriotic fervour in the Mass Movement of 1942. After 8 August it opened for the first time on 16 December. Similar was the case with the nearby Lakhmidas Cloth Market. (*Ibid, 16 Dec. 1942.*)

The Parsis of Bombay never lagged behind others in patriotic fervour. Although a bulk of the comrhunity remained aloof from mass violence, many of them sacrificed for the cause of Independence. They never clamoured for any special privileges or constitutional guarantees in the new constitution to corne, which were in the air in those days. Over 600 leading Parsi citizens of Bombay showed their magnanimity by issuing a statement that the Parsis do not claim any safeguards. This was in reply to a misleading pronouncement by Lord Atlee in the House of Commons.

The Hindu Mahasabha, the youngest among the political organisations,(It was in existence since about 1918, and was recognised by the Government of India in a statement of 8 August 1940.) had a different approach. Swatantryaveer Savarkar was almost its permanent president till 1944. It had a band of dedicated and disciplined sainiks in the city. On the day of the arrest of Gandhiji and the Congress leaders, Veer Savarkar's call to the Hindus was one of "nosupport to Congress move". He eloquently expressed his opposition to the Mass Movement, and actually campaigned for recruitment of Hindus into the Indian Army, and support to the war.

The reaction of the Bombay Christians to the August Resolution showed their patriotic fervour. They called upon the Government to make a clear declaration as soon as possible, that India would attain freedom immediately after the war.

GOVERNMENT VERSION OF THE MASS MOVEMENT

(The information is extracted from Secret Files No. 1110(30) 1942 and No. 1110- (30) X 1943 of the Home Department, Special Branch (5), Government of Bombay.)

It would be very interesting and extremely useful to the students of the history of India's struggle for freedom to have a first hand knowledge of the version of the imperialistic alien Government as regards the Mass 'Movement. The importance of the same is tremendously enhanced by the fact that the authentic and authoritative information about Government actions and reactions was by no means accessible to any research scholar or interested person. The same is furnished below.

The Government of India in the Home Department, *vide* their elaborate letter of 5 September 1942, had called for detailed factual reports and views of the Provincial Governments in the form of separate *Appreciations* in certain matters pertaining to Civil Disobedience Movement. (*Letter No. 3/33/42-Poll (I), dated 5 September 1942 from Mr. Richard Tottenham, Addl. Secretary to the Government of India, to all Provincial Governments [File No. 1110 (30), 1942 of Home Dept., Special Branch, Government of Bombay].) The Provincial Governments were called upon <i>vide* para. 2 of the letter to furnish "factual reports giving the fullest possible statistical information " regarding (a) Police action—number of occasions on which firing was resorted to, rounds fired, casualties inflicted, and the resort to

other police measures; (b) General casualty statement; (c) Damage of Government and private property and (d) Special measures, particularly the action taken under the Collective Fines Ordinance and the Penalties Enhancement Ordinance. The Provincial Governments were also required vide para. 3 to furnish their views in the form of separate Appreciations on the following matters:—

- a. What classes of the people participated in the movement, and the influences prompting them to do so.
- b. Disturbance and dislocation of normal life and interruption of communications and supplies.
- c. Communal reactions.
- d. General conduct of the Police force.
- e. General conduct of other public servants
- f. Special measures such as Collective Fines Ordinance and Penalties Enhancement Ordinance adopted and to be adopted in future. In particular, how can the use of the Police forces best be consolidated and economised, in the event of future military aid not being available on the present very large scale?
- g. Railway Protection Schemes and essential special measures.

 Advisability of declaration of railways and adjoining lands as

 "protected areas" and the prohibition of cultivation in these areas.
- h. In the event of greater danger to the Europeans, reappraisal of the existing Keep and Sanctuary Schemes.

The Government of Bombay lost no time in addressing to the Commissioner of Police, Bombay, along with all the District Magistrates to furnish Government with detailed reports on the points mentioned in para. 2 of the overnment of India's letter. The Divisional Commissioners, the Inspector General of Police and the Commissioner of Police (Bombay) were called upon to furnish their independent views in the form of Appreciations on the points mentioned in para. 3 (a) to (h) of the Government of India's letter.(Home Secretary, Bombav. Commissioners of Divisions, I. G. P., Commissioner of Police and all District Magistrates, Endorsement No. S.D.V./704, dated 8 September 1942.)

Accordingly the Commissioner of Police furnished the Government of Bombay with his elaborate report and Appreciation as called for by them. While we may look down upon the Commissioner's Appreciation as being opprobrious, it is of great historical value. Hence it is reproduced below.(Home Department, Special Branch, Government of Bombay, File No. 1110 (30), 1942.)

The report and Appreciation of the District Magistrate of the Bombay Suburban District is not reproduced for the reason that there were no casualties oe serious events in the suburbs comparable to those in Bombay City,till as late as 22 September 1942(*Ibid*)

"SECRET

D.O.69

Head Police Office Bombay 17th September 1942

The Secretary to the Government of Bombay,

Home Department, Bombay. Subject.—*District Information re. Congress Mass Movement.*

With reference to, your Secret and very urgent Endorsement No. S.D.V./ 704 dated the 8th September 1942, I herewith submit my report. The following statistics are given according to the questionnaire in the Government of India's Express letter No. 3/33/42-Poll (I), dated the 5th September 1942.

2. *(a) Police Action*:

(i) Firing was resorted to by the Police as shown as under :—

Date	Number of occasions	Date	Number of occasions
9-8-1942	16	4-9-1942	1
10-8-1942	23	6-9-1942	3
11-8-1942	20	9-9-1942	6
12-8-1942	1		
asht	Total number occasions	of ate C	. 70 Jaze

(ii) The number of rounds fired were 381, as detailed below:—

Date	Number of rounds	Date	Number of rounds
9-8-1942	114	4-9-1942	1
10-8-1942	159	6-9-1942	6
11-8-1942	87	9-9-1942	13
12-8-1942	1		

(iii) The numbers of casualties inflicted upto 10th September 1942, are 34 dead and 145 injured.

- (iv) The numbers of casualties sustained by the Police both fatal and otherwise upto 10-9-1942 are 57 injured and none fatal.
- (v) Tear Smoke was used on the following eight occasions:—

Date	Number of occasions	Date	Number of occasions
9-8-1942	4	6-9-1942	1
11-8-1942	2	9-9-1942	1

The Police wireless system was constantly in use throughout the period* It proved extremely useful, not only as a supplement to the telephones, but also as a speedy means of broadcasting instructions to the Police. For several days, owing to the burning out of a main telephone junction box on Lady Jamshedji Road, this was the only means of communication with Mahim Police Station,

- (b) General Casualty Statement: (i) Total casualties among the public, including those under head (a) (iii) are 36 dead and 429 injured.
- (ii) Total casualties among Government servants including police are 63 injured, none fatal, as detailed below:—

Government servants : Military personnel	3
Telegraph Department	1
Postal Department	1
Civic Guards	1
Police Department	57
Vlaharachtra State	
	6.3

- (c) Damage to Property: (i) No important Police buildings of any description were damaged or destroyed, neither was damage nor destruction done to any other public buildings, except to several Post Offices—the contents of which were damaged by fire, and to a number of grain shops which were broken into d the contents looted.
- (ii) The estimated loss caused in respect of Government and private property is as under :—

Government—	Rs
Police chowkies burnt, traffic signals and constables equipment damaged.	8,200
Government grain shops, A. R. P. Lorries and street signs. <i>Private-</i>	7,500
Bombay Gas Co.Ltd, street lights, portable trollies etc	63,000
B.E.S.&T.Co. Ltd - buses and trams, chowkies, street lighting equipment. Bombay Municipality	96,900 46,000
Total	2,21,600

(d) Information regarding Special Measures taken to deal with the Movement: No particular special measures, in the legal sense, were taken. Actions in quelling the disturbances were confined to the use of the Defence of Indk Rules and the ordinary law—

(i) Nil.

(ii) Nil.

3. (a) Hindus, particularly Guzeraties and Marwaries, took the most prominent part in the Movement which was confined, almost without exception, to the Hindu community. They were undoubtedly influenced by the decision of the A.I.C.C. authorising Gandhi to be the leader of the Movement and also to a great extent by the fact that Congress, and Gandhi in particular, demands the respect and sympathy of leading Hindu businessmen and industrialists, who in turn influence practically the whole of the Hindu commercial community. Students, particularly Hindus, took a very prominent part in the Movement after the first few days during which mob violence was at its height and when the Hindu mayali(?) (The question marks in this letter are ours.) element instigated undoubtedly by their Hindu employers, did most damage. These students instigated undoubtedly by active Congress supporters underground have been instrumental in keeping the Movement going. Whatever hooliganism took place was perpetrated by Hindu Mawalis assisted by Hindu domestic servants of the middle and upper class Hindu families.

Muslims refrained from participating in the movement in obedience to instructions issued by the leader of the Muslim League, M. A. Jinnah. Parsis remained aloof as they are a law abiding community and have no great sympathy with the aims and objects of Congress. The depressed classes also refrained by the influence of Dr. Ambedkar. The greater part of the population was indifferent and showed little desire to become involved in trouble (?). Generally speaking, mill workers, factory workers, dock labourers and labour ke, pt away from the Movement, except in cases in which they were drawn into it by persons interested in bringing about a general strike. On no occasion were all the textile mills not working. From time to time one or two mills struck work but on the whole the Movement failed to make any great impression on the textile workers. Whatever stoppages did occur were undoubtedly brought about by persons who

were paid (?) to do so by the Congress party. The probable reason why mill workers refused to support the Movement was due to the fact that they are in receipt of good wages and with the prevailing high prices did not wish to stop work. In certain factories the strikes which occurred were undoubtedly due to the Rashtriya Girni Kamgar Sangha, a Labour Union run by the Congress party. Even these, however, soon returned to work.

(b)So far as the City was concerned, the disturbances resulted in the enforcement of the Curfew Order, which in itself automatically affects the business and social life in the areas involved. During the first three days of the disorders, trams and buses were stoned and set on fire in the disturbed localities, chiefly Hindu. As a result of this tram and bus traffic in these areas were totally interrupted but were totally unaffected in the Mohammedan areas, Fort area, Malabar and Cumballa Hill areas and the residential areas round about Byculla. Supplies were dislocated due to the wholesale Hindu merchants under Congress influence refusing to do business, thus resulting in depletion of stocks held by retail shopkeepers.

With the exception of the closing of the Cotton Exchange, Stock Exchange, Bullion Exchange and certain cotton markets, and the refusal of the grain and seed merchants to do business, the normal life of the City was not affected to any appreciable extent (?).

(c)There were no communal reactions to the Movement and none were anticipated.

(d)The general conduct of the Police force remains good. This can only be attributed to the innate sense of duty which has sustained the Bombay City Police to widespread disorders in past years. The political aspects of the recent disorders made no difference to their conduct. Considering that over one thousand untrained recruits had to be utilised to supplement bodies of police, the results were more than gratifying. His Excellency the Governor's letter addressed to the Police assuring all ranks that they had behind them Government's full support and that Government had no intention of setting up public enquiries about the conduct of the Police and assuring them that they would receive the support of the great majority of the people of the Province, went a considerable way towards strengthening the morale of all officers and men.

(e)The general conduct of public servants, with the exception of a few lapses on the part of youths employed in the Supply Department offices, gave no cause for complaint. The reason for this is probably that they regarded the Movement as most unwise at the present stage of world affairs (.?). Certain high Government officials appointed by the Congress Ministry resigned their posts, but these resignations had very little, if any, effect on other public servants.

(f) As stated above, the Collective Fines Ordinance and the Penalties Enhancement Ordinance were not employed in Bombay City. It is not understood to what further special measures the Government of India refer. Generally speaking the rapidity with which the situation was brought under control can be attributed to the same measures taken as

on previous occasions in quelling disorders, with the following additional methods employed:—

- 1. The use of Tear Smoke against crowds assembling in defiance of prohibitory orders. This was particularly efficacious where the crowd did not resort to acts of violence, but refused to disperse, and on those occasions when women volunteers participated in the demonstrations.
- 2. Fixing the responsibility of creating road blocks on the inmates of adjacent buildings and forcing them to remove the obstructions placed on the roads.
- 3. Arrest under Rule 129 Defence of India Rules of persons suspected to be implicated in the disorders, and their detention in jail upto the statutory period of fifteen days.

As regards precautions for the future, I have no specific suggestions to make. The disorders in Bombay would not have been so widespread, in my opinion, but for the fact that for a fortnight prior to the arrest of Mr. Gandhi and the A.I.C.C, complete liberty of expression was allowed to these leaders in addressing public meetings in the City. The latitude enjoyed by these persons in attacking Government, challenging Government's capacity to defend the country against outside aggression, and their contemptuous references to past military reverses was the subject of much adverse comment by members of the public. These remarks apply with equal force to the similar latitude given to the Press. If future anti-Government disturbances are to be avoided it is essential, in my opinion, that stronger measure of control should be exercised, in the early stages of any such agitation, over the public utterances of the leaders and to guard against reproduction of extreme anti-Government speeches and criticisms in the majority of newspapers. Leniency in this direction is merely regarded by the man in the street as evidence of Government's timidity in enforcing its authority. Abstruse motives, and problems of major policy, are not understood or appreciated by the bulk of the population.

The question of the best means of utilising the Police force is one, which applies to the Bombay Province rather than to Bombay City. The whole of the City police force was employed on duty in connection with these disorders, and at no stage would it have been possible to divert men to the assistance of District Police.

- (g) Sabotage to the railways in Bombay City was only slight and of a petty nature. No interference with the track was attempted, damage being confined to acts of petty mischief at stations and in running trains. The Railway Protective Scheme, in detail, was not put into force in Bombay City. The necessity for its revision does not, therefore, arise.
- (h) The situation in Bombay never reached the stage where the likelihood of having to vacate Europeans to the Keep had to be given serious consideration. The existing Keep and Sanctuary Schemes are upto date and as far as can be seen are likely to prove effective. I see no particular reason at the moment to suggest that these can be overhauled.

It is noteworthy that the Bombay Government totally and wholly concurred with the Appreciation of the Commissioner of Police as regards the disturbances in Bombay and forwarded the same to the Government of India as it was. (Additional Secretary, Home Bombay to Home Dept., Government of India, vide No. S.D.V./1570, dated 16 October 1942.)

As the Mass Movement protracted further the Secretary of State desired for a comprehensive information regarding the disturbances since August, to meet Parliamentary enquiries in the U.K. The Government of India, therefore, addressed to the Provincial Governments again on 14 December 1942. (Confidential telegram No. 9940, dated 14 December 1942 from Home Dept., New Delhi, File No. 1110 (30)-I,1942-43, Home Dept., Bombay.) Accordingly the Commissioner of Police was called upon to furnish the Government with accurate information on certain points. (Additional Secretary, Home Bombay to the Commissioner of Police and allDistrict Magistrates, vide No. S.D.V./3403, dated 16 December 1942.) The former complied with the Government directive. The Government of Bombay further desired the Commissioner of Police and the District Magistrates to keep up-to-date from 1 December 1942 onwards, the information on all the points referred to them in the letter of 16 December 1942.

The statistical information about the Quit India Movement upto 31 October 1943 as compiled from the reports of the Commissioner of Police and the District Magistrate of the Bombay Suburban District is given below.(Home Dept—Special Branch, File No, 1110 (30)-X, 1943.) The rogressive total of each of the items from 9 August 1942 to 31 October 1943 is furnished separately for Bombay City and Bombay Suburban District.

HOME DEPARTMENT, SPECIAL BRANCH (5) FILE No. 1110 (30)-X, 1943

Statistics in connection with the Congress Disturbances for the period ending 31 October 1943

(A) GOVERNMENT SERVANTS (Excluding those of the Central Government) (1) *Police*

		Progressive Total	
		Bombay City	Suburban District
1	No of occasions on which Police fired	73	1
2	No. of casualties inflicted- Fatal	*34	
3	No of Casualties - Non-fatal	*145	
4	No. of casualties sufferd (by police) Fatal	1	
5	No. of casualties- Non-fatal	118	
6	No.of defections from police	One	
	* By firing only		
	(2) Other Government Servants		
7	No. of attacks on other Government Servants -Fatal	One (British Sailor)	
8	DoNon-fatal		
9	Defections from other Government Services		
	(B)DAMAGE TO PROPERTY		
\vdash		17 (All	
1	No. of Police stations or outposts etc. destroyed	police chowkies)	
2	No of other Government Buildings destroyed or severely damaged	e Gaz	e 6
3	No of public buildings, other than Government Buildings, e.g. Municipal property Schools, Hospitals, etc. destroyed or severely damaged	†3654 (Municipal lamps) †2(Municipal chowkies)	
4	No. of important private		
5	Estimated loss to Government (Rs.)	1,74,500	2,000
6	Estimated loss to other parties (Rs.)	2,76,820	2,000
	† Besides these, street name plates, water hydrants, benches,turnstiles, swings, gauge boxes, etc, were destroyed or damaged		

Г	(C) USE OF EXPLOSIVES		
H	(C) OSE OF EXTEOSIVES		
1	No. of Bomb Explosions	109	18
	No. of Bombs or Explosives discovered without		
2	damage	**221	6
3	No. of casualties to Government servants-fatal	2	
⊢	No. of casualties to Government servants- Non		
4	fatal	41	
F	No. of casualties caused to the public (including	_	
כן	those to Bomb-makers, etc themselves)-Fatal	5	
Г	No. of casualties caused to the public (Inculding		
	those to Bomb-makers, etc themselves)-Non	75	
	fatal		
7	No. of casualties to -		
	(a) Women, and		
	(b) Children - fatal		
	(Out of those included in item 5)		
Г	** In addition to these unexploded bombs, the fo	llowin	g
Γ	material for the man <mark>ufacture of expl</mark> osives was a		
	found:- (1) Sticks o <mark>f phosphorous 9, (2)</mark> Cartridge		
	gelignite 10 Lbs., (3 <mark>) Cartridges of pho</mark> sphorus g		
	5 lbs., (4) Rifle cartridges (live) 14, (5) Explosive	mixtu	re
L	40 1/2 Lbs., (6) Potassium chlorate 38 1/2 Lbs		
	No of casualties caused to -		
P			
H	(a) Women, and	1	
H	(b) Children - Non fatal	1	
H	(Out of those included in item No.6)	7 L L \	
H	(D)CASES OF SABOTAGE		
H	(D)CASES OF SABOTAGE		
	(Other than sabotage on central Government		
	Property or services)		
L			
L	No of cases of cabotage to electric cupply		
11	No. of cases of sabotage to electric supply	14	l 1
Ľ	companies or their apparatus	14	1
2	companies or their apparatus No. of cases of sabotage to roads	14 9	1
2	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals	9	
2 3 4	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above	9	
2 3 4	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above (E) OTHER STATISTICS CONNECTED WITH THE	9	
2 3 4	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above (E) OTHER STATISTICS CONNECTED WITH THE MOVEMENT	9	
2 3 4	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above (E) OTHER STATISTICS CONNECTED WITH THE MOVEMENT No of cases in which Collective Fines imposed	9	
2 3 4 1 2	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above (E) OTHER STATISTICS CONNECTED WITH THE MOVEMENT No of cases in which Collective Fines imposed Amount of Collective Fines imposed	9	
1 2 3 4	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above (E) OTHER STATISTICS CONNECTED WITH THE MOVEMENT No of cases in which Collective Fines imposed Amount of Collective Fines collected	9	18
1 2 3 4	companies or their apparatus No. of cases of sabotage to roads No. of cases of sabotage to canals No. of cases of sabotage other than above (E) OTHER STATISTICS CONNECTED WITH THE MOVEMENT No of cases in which Collective Fines imposed Amount of Collective Fines imposed	9	

5	No. of cases disposed off by these Courts	3	1
6	No. of persons convicted by these Courts	4	3
7	No. of cases disposed of by ordinary Courts	777	201
8	No. of persons convicted by ordinary Courts	995	238
9	No. of death sentences imposed		
10	No. of death sentences confirmed		
11	No. of cases of whipping inflicted		
	No. of arrests made	5,648	364
13	No. of local authorities superseded under Defence Rule 38 B or otherwise		3
	Defence Rule 38 B or otherwise		

THE 21-DAY FAST

The Government with all its material and might sought to crush the Movement down. The machinations of the bureaucratic jargon knew no bounds. The bureaucracy squarely accused Gandhiji and the Congress, for the violence and terrorism by the masses. Although neither the Congress nor Gandhiji had actually inaugurated the movement, they came in for indictment. The worst of it was that the Government did not allow him to refute the false accusations levelled by it against him and the Congress on account of the behaviour of the masses. The indictment became more and more intense. Gandhiji, therefore, had no alternative but to undertake the historical fast from 10 February. (It should be borne in mind that he had made it clear in his letter to the Viceroy that he might terminate the fast earlier, if it became absolutely necessary for saving his life. For he did not want to die.)

Meanwhile, the Government of India issued, on 13 February 1943, a pamphlet entitled *Congress Responsibility for the Disturbances, 1942-43,* with a preface signed by Sir Richard Tottenham, Additional Secretary to the Government of India, Home Department. The pamphlet, published within four days of the commencement of Gandhiji's fast, led to the inference that it was published in expectation of Gandhiji's death, which medical opinion must have considered almost a certainty.

In the nature of things, Gandhiji's fast cast an ominous sign of a national disaster. Bombay along with the entire nation, was stunned and shocked. The twenty-one long days were a period of the most intense anxiety throughout the country. Even people outside India, particularly men of upright conscience like Bernard Shaw, Bertrand Russell and Thomas Paine felt deeply concerned at the attitude of the British. Three members of the Viceroy's Council—Sir H. P. Mody of Bombay, N. R. Sarkar and M. S. Aney resigned office as a mark of their failure to persuade the Viceroy to release Gandhiji, when his life was highly in danger. Callously enough, their resignations were accepted on 17 February. The unrelenting Government of Bombay went a step ahead. It made thorough preparations for Gandhiji's funeral in the detention camp in Aga Khan Palace, and had collected firewood and sandalwood for the cremation. Government had also secretly decided to announce a day of national mourning in anticipation of Gandhiji's death. The rumour is believed to have emanated first from foreign correspondents who had an exclusive meeting with a high official in New Delhi. (Pattabhi Sitaramayya, op. cit., Vol. II, p. 472.) Government had also kept machine-guns ready in Bombay and Pune to quell the probable riots incidental to Gandhiji's death.

Bombay, like every other time, rose to the occasion. While Gandhiji's life was in a quandary, the Bombay Stock Exchange, as apart of the constructive programme so dear to Gandhiji, collected a purse of 50,000 for the relief of the famine-stricken men and animals.(K. Gopalswami, op. cit., p. 401) There were prayers for the Mahatma's life at several places in the city. Minoo Masani organised a *morcha* of youths from Bombay to Pune to storm the Aga Khan Palace, and he himself headed the first batch.(*Ibid*,) Many industrialists from the city played their part in finding a solution to the grim impasse. After 21 days, the Herculean ordeal found its end at 9 a.m. on 3 March 1943. The breaking of the fast should have been an occasion for rejoicing on the part of the patriots. But that was not to be. The unkind Government would not allow the function to be one of direct rejoicing, and it was only to be a solemn ceremony. But the mass mind knows no bounds. The streets of Bombay were actually a scene of rejoicing, while the bureaucracy and the Muslim League did not find favour with it.

While the Congress was suffering humiliation and frustration in jail, non-Congress (*Bhulabhai Desai had participated as a Congressman*) leaders such as Jayakar, H. P. Mody, Ardeshir Dalai, Sapru and Rajaji convened a conference in the city in March 1943. They sought for a reconciliation between Congress and the Government, and exhorted the latter to release Gandhiji as a first step towards seeking a solution of the deadlock. They followed up their efforts with the Viceroy, but to no effect. Even the Federal Court had struck down the arrests under the Defence of India Rules. But the bureaucracy circumvented the Court ruling by issuing an Ordinance and showed its stubborn determination to crush down the movement.

Bad events followed each other. Kasturba Gandhi ended her worldly sojourn (24 February 1944). It was a shock to Bombay and the entire country. This gave rise to anxieties about Gandhiji's life, lonely in the Aga Khan Palace. He demanded that he be transferred to Ahmadnagar Fort. But would the imperialistic Government allow him such a pleasure?

The Mass Movement itself became protracted and languid. Meanwhile Gandhiji was attacked by malaria. His life was in danger. He was therefore, released on 6 May 1944. But the release was not due to any change of heart. Probably the authorities might have felt that, now that Germany had surrendered, Gandhiji's release would not jeopardise the war efforts. There was no generosity whatsoever in it.

After the release, he had a sojourn at Juhu. (He was convalescing in Jehangir P. Patel's cottage for 34 days. Mr. Patel is still living and the cottage is still existing. K. Gopalswami, op. cit., p. 409,) He was, however, thoroughly exhausted, depressed and unhappy.(Kanji Dwarkadas, op. cit., pp. 99-100.) The release had raised hopes, not of a surrender and exit of prisoners, but of putting an end to the stalemate, without humiliation. He was neither happy about his release nor could he withdraw the August Resolution.(Gandhiji's letter to Jayakar, dated 20 May 1944,) There was no provision in the Resolution for withdrawal by him or any other

individual. It had only authorised him to start civil disobedience, if and when it would become necessary. In his speech on 8 August 1942 he had declared his determination to have talks with the Viceroy. Till then there would be no question of civil disobedience. Thus, no civil disobedience was started and there was none to recall. The demonstrations that followed the arrests were no part of any civil disobedience, as Gandhiji had started none. All legal and constitutional experts and even liberal leaders like Srinivasa Sastri, Tej Bahadur Sapru and Jayakar concurred with the view that Gandhiji could not rescind the resolution. By this time the Resolution had become " innocuous "as Jayakar characterised it. Gandhiji strove very hard to lift up the drooping spirit of the people. The citizens felt encouraged and soothed in their plight and despair by his upright refusal to condemn their behaviour without at the same time, denouncing the cruel atrocities committed by Government.

During his sojourn at Juhu, underground Congressmen such as R. R. Diwakar, Achyutrao Patwardhan and Aruna Asaf Ali had parleys with Gandhiji. The latter two were secretly driven to his abode by Mrs. Fatima Ismail (*K. Gopalswami, op. cit, p. 415.*) of Bombay. He advised them all to emerge out of their underground abodes. But they still chose to pursue their path.

It was again in Bombay that Prof. M. L. Dantwala of the University of Bombay, submitted for Gandhiji's consideration, a formula on trusteeship on the part of capitalists. The latter gave it a concrete shape in consultation with G. D. Birla, and instructed him to canvass the support of his fellow-capitalists. Unfortunately, however, nothing emerged out of it due to the lack of response from the capitalists.

While Gandhiji discouraged any revival of civil disobedience, he made an exception in the case of Bombay. On his permission, the city celebrated the second anniversary of the Quit India Day on 9 August 1944. The mayor organised the celebration which was in essence, a simple symbolic exercise of a fundamental right of the citizens. Twenty-five satyagrahis, in batches of five, were to march to the Chowpati and Napoo Gardens and to recite the August Resolution and the flag salutation without drawing any crowds. Accordingly, they wrote to the Commissioner of Police in advance. (March of Events, 1942-45, pp. 204-05,) Even this did not find favour with the police. They arrested all the satyagrahis at Chowpati and denied even such a legitimate right to the people.

GANDHIJI-JINNAH TALKS

This was an event of great national significance, the failure of which meant disastrous consequences to the Indian continent. The talks between the two leaders were held at Jinnah's residence at Mount Pleasant Road, Bombay, from 9 September to 27 September 1944. The Raja-gopalachari formula was the basis of the secret parleys. The Hindu Mahasabha as well as the Sikhs were hostile to the. formula. Different sections of the people reacted differently. Even the Viceroy had uttered a warning that before any concessions could be granted to Indians, there must be an agreement not only between the Hindus and 'Muslims, but also "among all important elements". He did not however, illustrate what these "important elements" were. The bureaucracy on its part did not

want, or at least was sceptical about, the success of the talks.

While the Hindu Mahasabha was apprehensive lest Gandhiji should yield too much to Jinnah, the Khaksars paraded in Bombay to lend support for a settlement. There were definitely some forces among the cultured Muslims of the nationalist bent of mind, that stood four square against reviving, by such talks, the moribund cult of Jinnah. The Sikhs were afraid that Gandhiji might concede Pakistan to Jinnah, hence they started a demand for Sikhistan.(*K. Gopalswami, op. cit., p. 430.*)

Such was the background when one of the most significant, although futile, effort made by Gandhiji began. This exercise was started from 9 September 1944 and was adjourned *sine die* after full 18 days. Gandhiji went day after day from Birla House, where he was staying at the time, (*Ibid.*, p. 431.) to Jinnah's house.

Gandhiji had most painstakingly and conscientiously made every effort to arrive at a solution and to establish a rapport with Jinnah. There was a tremendous amount of speculation in the public, the press and Government circles, about the nature and progress of the secret parleys. (Pyarelal Shah has given the behind scene version of the talks, while D. G. Tendulkar gives a day-to-day account of the talks as they progressed. Pyarelal Shah Mahatma Gandhi; The Last Phase, and D. G. Tendulkar, Mahatma—Life of Mohandas Karamchand Gandhi.)

There were moments of subdued optimism which made room for growing pessimism and ultimately to total disappointment.

The failure of the talks filled the bureaucracy with glee. The situation drifted in the winter of 1944-45, with official vindictiveness let loose on the already depressed people. The authorities took a great pleasure in humiliating the patriotic elements by every possible means. They continued to pursue the beaten track of imperialism.

Miscellaneous Events: Nothing very important in the political field happened during the period except for the individual efforts of Bhulabhai Desai, the leader of the Congress in the Central Assembly. He attempted to arrive at an agreement with Liaqat Ali Khan for the resolution of the deadlock. They proposed a National Government on a certain basis. Naturally this gave rise to tremendous speculation and even confusion about the move. While Bhulabhai did not take the people into confidence,he rank and file among Congressmen, and even the CWC, later, resented Bhulabhai's move. His move was regarded as action behind the back of the CWC, and incurred the displeasure of the Congress high command. It accomplished nothing, except ruining Bhulabhai's brilliant political career.

Meanwhile, the Congressmen of Bombay convened an informal conference of representatives of the four Provincial Congress Committees, viz., Bombay City, Maharashtra, Gujarat and Karnatak. The conference (on 28 and 29 October 1944) expounded the constructive programme at length. (The programme covered communal unity, removal of untouchability, prohibition, khadi, village industries, village sanitation, basic education, adult education, uplift of women, service to the

aboriginals, health education, propagation of Rashtrabhasha, mother tongue as a medium of education, economic equality and organisation of labour, farmers and students.)

In a way the conference reiterated its unswerving faith in the Gandhian programme. It reaffirmed that the August Resolution still remained in force and governed the Congress policy as interpreted by Gandhiji.(*March of Events, 1942-45, pp. 224-31.*)

The next important event was the release of the members of the CWC still under detention (15 June 1945). Accordingly Nehru, Azad, Vallabh-bhai, J.B. Kripalani, Rajendra Prasad, NarendraDeo, Pattabhi Sitaramayya and Shankarrao Deo were released.(*Ibid.*, p. 243)

The CWC met at Bombay on 21 and 22 June for the first time since August 1942, and authorised the president and other Congressmen to attend the Simla conference as per invitation by the Viceroy. The conference was inaugurated on 25 June to consider the so-called Wavell Plan, but it protracted haltingly till the Viceroy announced its failure on 14 July 1945. It was unable to arrive at any agreement about the composition of the Viceroy's Executive Council, and even Lord Wavell's compromise formula was not acceptable to linnah. This gave rise to the guestion as to how to avoid the recriminations between the various parties and how to maintain communal harmony in the face of obstinacy of linnah. As a matter of fact, a large block of the Muslims had nothing to do with the Muslim League,(Abul Kalam Azad said it in a press conference on 14 July 1945 at Simla.) and the number of nationalist Muslims in the BPCC was by no means insignificant. Even then the enigma of linnah and communal diehards overswayed the majority of the Muslims, This state of affairs was witnessed in Bombay city quite conspicuously.

A happy augury in this vexatious situation was the outright victory of the Labour Party, and the accession of Lord Atlee to the Prime Ministership of the U. K. on 26 July 1945. The other changes ensued. Lord Pethick Lawrence was appointed the Secretary of State for India. The Japanese surrendered on 15 August 1945, and the devastating World War ended. This was almost a turning point. And there arose numerous hopes for settlement of the political deadlock in India as the war conditions could no longer be pleaded as an excuse by the British. This optimism found a resounding echo in Bombay.

The city gave a sigh of relief when the Government of Bombay formally rescinded, on 22 August 1945, its orders declaring unlawful the AICC, the BPCC, the GPCC and other bodies. The succeeding day, however, brought the tragic news of the death of Subhash Chandra Bose, on 18 August 1945, announced by the Japanese News Agency.(*March of Events, 1942-45, p. 281.*) The news of the trials and proposed execution of the Indian National Army personnel and some Indian soldiers from the western fronts cast the shadows of sorrow and resentment among the patriots. Even Jinnah pleaded that justice should be tempered with mercy in their case. The people's concern for the INA was almost universal, and there was woeful bitterness. Then came the trial and judgment on the Chimur and Ashti case, wherein 15 patriots were condemned to death collectively. Once again the city was agog; both people and the Press took up the

challenge. "Perhaps never before in history were fifteen men so near and yet so far away from the hangman's noose." (*Ibid., p. 302.*) The proposed hanging was nothing but cold blooded murder under the name of law. It was after Gandhiji's pleadings that Lord Wavell ordered the commutation of death sentence to one of transportation for life. Utter bitterness and a tragic situation was thus averted.

The AICC, once again came to Bombay. It held a three-day session from 21 to 23 September 1945. The venue of the meeting was the same as that of the momentous historic session of 7 and 8 August 1942, viz., the Gowalia Tank Maidan. The memories of the "Quit India" session and the subsequent holocaust were revived. During the three years, a big story of India's national life had passed on. The session was a stupendous success. People once again demonstrated their devotion to the Congress. The pandal was constructed to accommodate 25,000. But it was too insufficient to admit the huge number of delegates and others. The crowds in the environ must have numbered a hundred thousand (*Ibid.*, p. 318.) in spite of rains. Mrs. Sofia Khan and T. R. Naravane were in charge of preservation of order. Gandhiji did not attend the meeting owing to indisposition,(*Mahatma Gandhi in Maha<mark>ras</mark>htra : 1915 to 1946,* Gazetteers Department, Government of Maharashtra, p. 293.) although he participated in the CWC proceedings. The AICC passed all the resolutions placed before it by the CWC, the most important among them dealing with the ensuing elections to [the Central and Provincial legislatures, the Indian National Army, Wavell's broadcast talks, the vexed question of India's Sterling Balances which had accumulated in England during the war, the Indian interests in Burma and Malaya, the questions of China and South-East Asia, the constructive programme and the rights of the States' People.(K. Gopalswami, op. cit., pp. 468-69.) An exhaustive election manifesto was also issued, its central theme being the redemption of the pledge of freedom and independence.

Babubhai Chinai, the treasurer of the Reception Committee of the AICC, collected a sum of nine lakhs of rupees (*Ibid., p. 470.*) for the national cause. The Kasturba Gandhi Memorial Fund and the Harijan Fund also received magnificent response in Bombay. The mercantile community and industrialists once again came forward with munificent contributions. The All-India Women's Conference too, under Hansa Mehta and Rajkumari Amrit Kaur did excellent work in the city.

The general elections to the Central Assembly followed in December 1945, in which the Congress scored a thumping victory, and secured all the open seats, other than Muslim. The Hindu Mahasabha and the Independents were wiped out.

NAVAL MUTINY

The revolt of the Royal Indian Navy opened an altogether new chapter in the history of the armed forces of India.(Jawaharlal Nehru (Speech).) The episode is a saga of the courage and patriotism of the naval ratings. The sufferings of the six years of war and the pent up hatred of 200 years of imperialistic rule found expression in an unprecedented upsurge of the people seeking a break through the stranglehold of imperialism. Many

regard the RIN strike as a logical peak of the mass struggle for freedom, the final assault on the tottering structure of foreign rule.(*File on RIN Uprising—Inside story based on testimonies of victimised ratings(1946), presently with Gazetteers Department, Government of Maharashtra.*) And the people of Bombay rallied them their support.

A large number of crews of ships and shore establishments were involved in the revolt and powerful guns were trained on Bombay city from the harbour. The Congress Socialists, a radical group, who did not want a settlement with Britain on any terms whatsoever, except on the basis of "Quit India", saw in the RIN Revolt an opportunity to recreate the August 1942 atmosphere of sabotage, strikes and disruption.(*Kanji Dwarkadas, op. cit., p. 155.*)

The grim episode began on 18 February 1946 with the ratings of the Signal School of the Navy, *Talwar*, as a protest against the outrageous racial discrimination. As a matter of fact, the resentment against foreign rule was simmering among the personnel of the Indian Army and Air Force. The night before that fateful morning, when the chief of the Royal Indian Navy, a British Admiral, was due to visit the ship and the barracks, Indian sailors splashed the "Quit India " slogan on the ship and the walls of the barracks. This was sacrilege, but the damage was repaired in time. However, the Naval Chief came to know about it and ordered the commanding officer to investigate the matter as he intended to take the sternest action. The commanding officer, Capt. Cole, was forced to resign because he was sober towards Indians, and another officer was appointed in his place to crack the whip. The sailors became furious at the exit of Capt. Cole, for whom they had great regard. When the new commanding officer tried to roughshod them, they came out in open defiance. (S. M. Nanda (Vice-Admiral), quoted by K. Gopalswami, op. cit., pp. 474-75.) The sailors flashed over the wireless network to other ships, the fact that they had gone on strike and that their colleagues too should follow suit.(*Ibid.*) And alas! The agitation spread to many ships. As many as 3,000 personnel of the naval establishments in Bombay staged demonstrations in the harbour area on the 19th instant. Almost all the naval ships were affected the next day, and two of them hoisted the Congress flag. In some of them, the ratings mounted guns and got themselves ready to fight. (V. B. Karnik, Strikes in India (Manaktalas, Bombay, 1967), pp. 318-19.)

The British were aghast. The Navy was the last thing they had imagined would revolt against them.(*S. M. Nanda, op. cit.*) They thought that the impelling force behind was political and not economic, and were determined to crush it in the same way as a mutiny.

The strikers formed a Central Strike Committee for conducting the agitation. It put forth their demands which included, among many others, the withdrawal of Indian troops from Indonesia, where they were deployed as a part of the occupation forces. They attempted to capture the armoury and the ammunition dump inside Bombay Castle Barracks on 21 February. There was a heavy exchange of fire between them and the Army, and it was only after a fierce battle of six hours that the ratings signalled "cease fire ".(V. B. Karnik, op. cit., p. 319)

The agitation spread to the naval establishment at Karachi on the 19th

instant. The *H. M. I. S. Hindustan* lying in the harbour was captured. Heavy fire exchanged with British soldiers. The unprecedented stir received a tremendous response from the naval ratings at Calcutta, Visakhapattam, Cochin, Lonavala and Delhi (Naval Headquarters). They received active sympathy from the personnel in the Royal Air Force as well as the Army. Sympathetic strikes were staged by the men of the Royal Air Force stationed at Sion, Madras, Kanpur and Ambala, a unit of the Royal Indian Army Supply Corps at Kurla, and many units at Calcutta and Karachi. (*Ibid.*) Such was the virulent and vociferous thrust.

The situation in the streets of Bombay became very grave and alarming. Demonstrations turned violent. The workers in railway workshops, cotton mills and factories obstructed vehicular traffic including buses, trams and trains, and set fire to many post offices and Government property. One textile mill, three railway stations and several military trucks were set on fire. The Military and the police had to open fire several times. As could be expected the British soldiers indulged in indiscriminate firing.

The grim episode cost 223 human lives in the city, while 1037 were injured. Five officers and one rating of the RIN were also killed.(*Ibid., p. 320.*)

Meanwhile the Government had mobilised great military might to crush the agitation by treating the same as nothing less than a mutiny.

The entire affair was an exhibition of a distressful unrest, a thoughtless orgy of violence. Europeans became the target of the attackers, churches were attacked and incendiarism was indulged in.

The cease fire was achieved on 23 February 1946 only after Sardar Vallabhbhai Patel rushed to the metropolis, and intervened energetically and prevailed upon the agitators. He told the Socialist leaders that at a time when there were prospects of a friendly settlement with the British, he would not tolerate any disruptive activities and that he would not let them succeed, through the strike of the RIN, in creating panic and confusion in the country. Meanwhile Mrs. Aruna Asaf Ali wired to Jawaharlal Nehru to come to Bombay to help the revolt. Nehru took the first train to Bombay. Vallabhbhai sent a special messenger to Dadar station and asked Nehru to see him at once and not to proceed to the Victoria Terminus where a huge crowd was waiting to receive him.

We have no other evidence to know the truth. But Kanji Dwarkadas writes : " Patel spoke strongly to Nehru and told him of the folly of helping the rioters. Nehru persuaded himself to be converted to Patel's point of view, and after a tame press conference, addressed at Chowpaty a public meeting on the lines suggested by Patel." (*Kanji Dwarkadas, op. cit, p. 156.*)

Colville, Governor of Bombay, was most uncomfortable over this revolt, and he admitted privately that, but for Patel, the Government would have found themselves in a much more difficult situation.(*Ibid.*) This was one of the Sardar's great acts of wisdom.

The Government appreciated the Sardar's wise role and the good gesture

of the ratings. The Commander-in-Chief, General Claude Auchinleck, gave an assurance in a broadcast on 25 February to look into the grievances of the ratings, and to abstain from any collective punishment or vindictive treatment.

The efforts of Patel and other Congress leaders towards achievement' of peace were however, unpalatable to the Communists. They wanted the agitation to take nation-wide dimensions for putting an end to the English rule. They denounced the Congress leaders as stooges of British imperialism. This sounded very strange, particularly because they had supported the British and the war as a "people's war "only till recently. The indomitable Sardar and Jawaharlalji addressed a mammoth meeting in the city to dispel Communist propaganda. They exposed the attempts of the Communists to mislead the people and to resurrect their prestige, which had been tarnished as a result of their whole-hearted co-operation with British imperialism and the Allies during the Quit India Movement.

His Majesty's Government realised the gravity of the situation, and on 19 February 1946, Lord Atlee and Lord Pethick Lawrence made a simultaneous announcement in the two Houses of the British Parliament about the Cabinet Mission to be sent to India. The announcement was to the effect that in view of the paramount importance, not only to India and to the British Commonwealth, but also to the peace in the world, His Majesty's Government has decided to send to India a special mission of Cabinet Ministers (The Mission consisted of Lord Pethick Lawrence (Secretary of State for India), Sir Stafford Cripps (President of the Board of Trade), and A. V. Alexander (First Lord of the Admiralty).) to seek an agreement with the Indian leaders on the principles and procedure relating to the constitutional issue. The Cabinet Mission arrived in New Delhi on 24 March 1946, and began their work. Whether the decision of sending the Cabinet Mission was inspired or hastened by the Naval Mutiny at Bombay, it is difficult to say. It is, however, significant that the earlier Mission of Stafford Cripps was also announced only three days after the fall of Rangoon to Japan in March 1942.

DAWN OF INDEPENDENCE

The period from 1946 upto the dawn of Independence was characterised by protracted parleys and deliberations between the three parties to the transfer of power, namely, the Government, the Congress and the League. While the prospects of Independence were bright, the whole atmosphere was filled with uncertainty and speculation. The exasperating and intransigent attitude of Jinnah cast ominous clouds upon the public mind. Hopes ran high upon arrival of the Cabinet Mission. The RIN mutiny in Bombay had already shaken the British. After prolonged parleys and correspondence with Indian leaders, the Mission made an elaborate statement on 16 May 1946, which has come to be known as the State Paper. It was discussed at various levels, and it gave rise to optimism and pessimism, hopes and dispairs. The Mission, after a busy sojourn of three months in India, left for home on 29 June.

The CWC gave an earnest consideration to the State Paper. Although the proposals in the same fell short of the objectives, the CWC thought that there was sufficient scope for enlarging and strengthening the central

authority, and agreed to the Congress participation in the Constituent Assembly.

About ten days later, the AICC was convened in Bombay to ratify the CWC resolution. Nehru was crowned the Congress president at this meeting; Gandhiji attended the AICC. This was the last time that he was in Bombay. The Socialists including Jayaprakash Narayan, opposed the participation in the Constituent Assembly. The AICC ratified the CWC resolution by a large majority, 204 voting for and 51 against it.(*K. Gopalswami, op. cit., p. 504.*) In July 1946, elections were held to the Constituent Assembly, a mini parliament. The Congress was returned with an overwhelming majority.

At the close of July, Jinnah announced a hostile programme of " direct action " in the Bombay convention of the League. He carried it to its gruesome conclusion—the Calcutta mass killing, its aftermath in Naokhali and its reaction in Bihar. This holocaust did find an expression in Bombay. The Muslim quarter in the city was infuriated to the maximum.

The Interim Government took over the reigns of office on 22 September. The League joined only on 15 October with the declared intention of working for Pakistan. The Constituent Assembly started its work without the League's participation. The latter was brewing troubles, but the former proceeded with its business with circumspection. Events moved swiftly. At this extremely tense and uncertain situation, the British Prime Minister made a momentous declaration on 20 February 1947, expressing the intention of the British Government for transfer of power into 'responsible Indian hands' not later than June 1948. This announcement was greeted with enthusiasm in all circles, except the Muslim League. It once again started 'Direct Action', as a result of which communal riots with arson and violence broke out.

Meanwhile Lord Mountbatten, the man of Destiny, replaced Lord Wavell on 24 March 1947. He issued a plan on 3 June 1947, containing 'the method by which power will be transferred from British to Indian hands'. This plan suggested India's partition which shattered the goal of a united and free India. The Congress had to swallow the bitter pill. It was a *fait accompli*, and the AICC could not but ratify it. Mountbatten pursued the course of events with steadfastness and vigour. Time was the essence of the matter as the mounting communal riots might well wreck the whole scheme, if it was delayed. Events moved inexorably. The target date of June 1948 for transfer of power was advanced to 15 August 1947. This memorable day marked India's deliverance from alien domination. The Tricolour was hoisted on the Secretariat among scenes of jubilance.

The last British troops left for home through the arcade of the Gateway of India. They bade farewell from where they had entered 282 years ago. Bombay, the symbol of generosity, wished them bon voyage, forgetting the bitter memories of the Great Fight. The British made history in Bombay. They gave her birth, nurtured her to bloom into a 'World City' and left her when she no longer needed them.

Many think that Bombay is an Indian city with a western facade. In spite of her determinedly oriental opulence, Bombay is really a 'half-caste offspring of London', largely reared by Europeans in the eighteenth and nineteenth centuries. It was once considered a 'World City', and that it remains to be one. But most of it is a real Indian town. The British entered the city through the Apollo Bunder. But the Gateway of India, a triumphal entry-arch built on the same Apollo Bunder, was also a place of their exit. The Gateway erected belatedly in 1927 to commemorate the visit of George V and his Queen in 1911, was to bid farewell to the last British troops on their way home a mere twenty years later.

The British built Bombay. But it is not the efforts of the Government alone which go into the making of the great city. There were several citizens, who reaped fortunes from the Share Mania and contributed unstintingly in the making of this beautiful city. Lovat Fraser, former editor of the *Times of India*, very aptly wrote in 1911, "Though many distinguished Britons played a great part in the making of Bombay, and though some among them are entitled to a foremost place in the rolls of its famous citizens, the city is essentially the handiwork of the Indian communities also; Hindus and Musalmans, and Parsees and Jews, have in equal measure spent themselves and their wealth in the advancement and embellishment of the Gate of India. To their enterprise and generosity, not less than to the prescient control of capable Englishmen, we owe the magnificent capital of Western India it exists today."

The city offers a more complete and exuberant example of 19th century British townscape than any city in the United Kindom.(*Gillian Tindall, " A Patch of Grace " in the Taj Magazine, Vol. II, No. 2, 1982,Bombay.*) There is a splendid range of buildings, many of them masterpieces of art and architecture incomparable to any other Indian city. Several connoisseurs have clamoured for preservation of the monuments of art and architecture in the city, reminiscent as they are of its past glory. It is, therefore, essential to survey the relics which are now in repose.

Apollo Bunder might appear to be a meaningful name after the Greek sun-god in view of the majesty of the spot. But Apollo Bunder has nothing to do with the sun-god, although Bombay was the 'Heptanesia' to the Greek cosmographer Ptolemy. The name Apollo is a corruption of *Palav*, misheard by British ears, and relates rather to native fishing grounds.(*Gillian Tindall, City of Gold: The Biography of Bombay (Temple Smith, London,*1982), p. 22.) It was then the principal place of operation of the fishermen.

The Gateway to India, the other name for Apollo Bunder since 1927, is a grand archway, something between the Arc de Triomphe in Paris and a segment of a Moorish palace. It was erected on the sea-front at this point to commemorate the visit to India of George V and his Queen in 1911. Aesthetically the appeal of the city has been considerably enhanced by the completion of three prominent landmarks in this century: the Gateway of India, the Marine Drive and the Prince of Wales Museum. The Gateway is a western facade in spite of its determinedly oriental opulence. This last and indeed belated imperial monument, stands on the Apollo Pier, which for hundreds of years, was the spot where passengers

were brought in Bunder boats to disembark, while the ships that had carried them rode at anchor in the bay. It was only after construction of the Ballard Pier, three quarters of a kilometre to the north, that the passenger ships started landing at the Ballard Pier.

Facing the Gateway is the Taj Mahal built on the Yacht Club's pleasure basin. It was the cherished project of Jamshetji Nusserwanji Tata, a grand Parsi of Bbmbay. It is said that J. N. Tata suifered a humiliation of being asked to leave the then best hotel in Bombay, the Watson's Hotel on the Esplanade, on the ground that he was a native. He swore then that he would one day build a hotel of his own which would far exceed Watson's in splendour and comfort.(*Ibid., pp. 26-27.*) His Taj was designed regardless of expense, the like of which India had never seen, the finest in the East, when it was built. It is to Bombay what the Taj Mahal mausoleum is to India. When it was born in 1904 it was one of the wonders of the East. It was completed at a cost of £ 5,00,000, but Jamshetji did not live to preside over the opening ceremony.(*S. K. Kooka, " Times Past Times Remembered ", in the Taj Magazine, 1982*) It provides all the comforts which a tourist cherished, and is still the best in Bombay, eighty years later.

Just adjacent is the Taj Inter-Continental (1972), best described as a Moorish Skyscraper, but in fact one of the rare specimens of modern buildings in Bombay. The Watson's, the then-best, has long ceased to function. For his hotel Watson had imported not only iron, but also bricks from England, and Portland stone and cement from the other side of the world.(Gillian Tindall, City of Gold, p. 236) Today the building stands toothless, tired and ready-to-die. Its present title is Esplanade Mansion which was ironically purchased by the Tatas in 1944.(S. K. Kooka, op. cit.)

Just near the Gateway is the one-time Yacht Club, whose 'mixture of Swiss and Hindu styles' now houses the Atomic Energy Commission. The Yacht Club. Chambers of 1898, then-best in the city, now leads an attenuated existence amid white wickerwork chairs and steel engravings of sailing clippers in Bombay harbour. (Gillian Tindall, op. cit., p. 28.)

The Council Hall, a one-time Sailors' Home, designed by F. W. Stevens in a style described as Byzantine and constructed in the early 1870s (*Ibid., p. 82.*), stands on the graves of Bombay's founders. Before construction of the dockyards this was Mendham's Point, the site of the European cemetery in Bombay.(*Ibid., pp. 28, 81.*) It was enlarged in 1928 when its function was changed.(*Ibid., p. 82.*) It became the edifice of the legislature of the Bombay Presidency, the Bombay State and later Maharashtra in 1960. It was deprived of its status as a house of legislature in 1982 when the State Legislature was shifted to the newly built modern spacious Vidhan Bhavan opposite the Mantralaya. The Vidhan Bhavan is a jewel of ' new Bombay' with its architectural charms and magnificence.

Here is the Prince of Wales Museum with a fine Moorish dome copied in a scholarly way after the Bijapur Mosque in Karnatak, and a genial statue of the Prince himself meditating among the gardens in front.(*Jan Morris, "Bombay—a Victorian Expression", in the Taj Magazine, 1982*) By taking a half-turn right round the back of the Museum, one walks through a ghostly

rampart gate into the Fort area, past the neo-classical Scottish Church, the St. Andrew's Church, built in 1820 and still "a white-washed building of no pretensions, being the most striking object from the sea " (*Emma Roberts, Overland Journey to Bombay (London, 1845).*), but not now visible from the sea.

If any one individual were to be credited for making the greatest contribution to the physical development of Bombay, it must surely be Sir Bartle Frere, under whose Governorship from 1862 to 1867, the dawn of Modern Bombay may be said to have really begun. (Sharda Dwivedi, " Bombay a Patchwork Quilt ", in the Taj Magazine, 1982.) It was the period of the phenomenal growth of cotton trade and the ensuing Share Mania. An ardent townscape reformer, Bartle Frere ordered the demolition of the useless public buildings, obsolete fortifications, and ramparts of the fort. Space thus freed, was laid out in roads, open spaces and public buildings. Reclamations were carried out from Apollo Bunder to Colaba Church and from Custom House to Sewri. On the western side of the island was undertaken the great Back Bay Reclamation extending from Colaba to the foot of Malabar Hill. Work was commenced on new roads such as the Colaba Causeway, the Esplanade, Rampart Row and Hornby Road. Old roads were widened and new ones were constructed. Architectural activity reached its zenith during Bartle's term of office. The best English architects of the time were commissioned to draw up the plans of new buildings, conceived in the highest traditions of Victorian Gothic architecture. The buildings commenced during his tenure, but completed by his successors, were the imposing Secretariat, the University Library and the Rajabai Tower, the Convocation Hall, the High Court, the Telegraph and Post Offices building, all majestically fronting the sea. Other buildings executed in a similar style were the Elphinstone College, the Victoria Museum, the Elphinstone High School, the J. J. School of Arts and the Goculdas Tejpal Hospital.

The Elphinstone College, named after Mountstuart Elphinstone, his Statue now holding majestically at the Asiatic Society of Bombay, today occupies the grand Gothic-Italianate building, usually referred to as Venetian Gothic, (Gillian Tindall, op. cit, pp. 29, 165.) built with the Kurla stone. It was inaugurated in 1889. Next to it, imitating a Romanesque church, is4he little Sassoon Mechanics Institute, unchanged since the day it was opened for the edification of David Sassoon, in mercantile terms; a great industrialist, in the late 1860s. Next to that is the vaguely neo-classical Army and Navy Building, now no longer a posh departmental store, but once a branch of that same enterprise in Victoria Street, London. (Ibid., p. 29.) Arms-in-hand to it is the Watson's Building, now known as Esplanade Mansion, which then housed the Watson's Hotel, but now a ready-to-die building with cast-iron pillars and tiers of wrought-iron galleries. It is reminiscent of French nineteenth century colonial architecture, although it is probably designed after the many-tiered wooden Gujarati houses.

The Gothic Revival buildings began to edge the Esplanade once the old Fort walls had been pulled down, changing the whole aspect of the city. The buildings were mainly in buff or blue stone from Kurla, on the nearby mainland, with detail in Porbunder sandstone or red sandstone from Vasai. " The curious thing is that those admired Bombay building (s) were

not, in the main, built by internationally distinguished architects. Almost the only exception is the Venetian-style University, with its openwork spiral staircases, which was built to designs sent out from England by the prolific George Gilbert Scott, who does not actually seem to have visited the site."(*Ibid., pp. 234-35*) The Gothic University Library (*Ibid., p. 234.*) and the Rajabai Tower built out of the munificence of Premchand Raichand (Rs. 4,00,000) reveals a fascinating tribute to the local stone mason's craft with its detailed ornamentation. The Tower, built in commemoration of Premchand's mother, Rajabai, was for long the highest building in Bombay, and its height was superseded only in recent decades. The Convocation Hall, French in style, donated by Cowasji Jehangir Ready-money, is equally stately. More has been said about these masterpieces and their donors in earlier pages of this book.

The magisterial High Court buildings, opened in 1879, were part of the late 19th century building boom. The pillar-cornices within the Venetianstyle galleries of the High Court, a splendid Gothic pile in blue basalt, are ornamented with apes at play. (*Ibid., p. 238.*) The majestic breadth of its verandahed exterior is remarkably impressive. The Public Works Department building and the handsome Central Telegraph Office in Miscellaneous Gothic were built a few years earlier. The monumental Secretariat, now in turn the old Secretariat, as the still older one in the Fort is forgotten and a newer one stands to the south-west on reclaimed land, was Bartle Frere's first project, completed in 1874. The Venetian edifice was provided with a series of lordly galleries, arcades and balconies, from which the imperial administrators, shaded by gigantic rattan screens, could see their passing subjects.(Jan Morris, " Bombay—A Victorian Expression ", in the Taj Magazine, 1982.) Designed by an engineer of the Royal Engineers of the Public Works Department, it along with the Gothic University Library, the French University Hall, the Venetian Early English High Court and the Miscellaneous Gothic Public Works Department and Central Telegraph building, stood solidly on the sea frontage. The Oval Maidan to which they overlook now came much later on.

The Flora Fountain, named after the Goddess of flowers and beauty, once stood in the centre of the Esplanade and on the site of the Church Gate. It was erected in 1869 in honour to Sir Battle Frere, the Governor responsible for laying out much of the post-1860 ' new Bombay '. A beautiful piece of art, once upon a time it had a grass plot with floral wealth and palm trees as a surround. It was originally intended to be erected in the Victoria Gardens. Facing the Flora Fountain, its official modern name being Hutatma Chowk, and commanding a fork, stands the Oriental Building, an unoriental block with a pitched roof vaguely filched from a French chateau. Up the Dadabhai Naoroji Road, once the Hornby Road, stands the Fort House with a neo-classical pediment and a verandah. Till recently it housed the Handloom House, but-originally it was the mid-nineteenth century town-house of Sir Jamshetji Jijibhai, the first Indian baronet.

But, the jewel of Bombay is the Victoria Terminus Railway Station, avast domed mass of stone fretted with point and column statuary.(*G. W. Stevens, In India (Blackwood and Sons, 1905). (This Stevens was in no*

way connected with F. W. Stevens.) It makes Bombay a proud and comely city. This quaint old building is admired as a great work of art rather than despised as a symbol of imperialism. The gargoyles, the turrets and the delicate peacocks sculptured beneath many eaves are but a few of its charms. With its pointed Gothic pride, with its meticulously carved stone ornamentation and beautiful ironwork, it was designed by F. W. Stevens of the Public Works Department, who was responsible for many delightful buildings of the day in Bombay. The work was executed by the teachers and students of the I. I. School of Art. The supreme memorial of the railway era, it stands magnificently preposterous, part Oriental, part Gothic, but all unmistakably Victorian, carved about with crest and emblems, guarded by a thousand gargoyles.(Jan Morris, op. cit.) The building in the Italian—Gothic style was commenced in May 1878, and completed in May 1888.(S. M. Edwardes, Gazetteer of Bombay City and Island, Vol. III, 1910, pp. 382-83.) It is unfortunate that Queen Victoria has now been retired to a backyard hidden corner of the Gardens originally named after her.

Just across the road, and almost as splendid, is the domed and minaretted Municipal Corporation Building. The building, designed by F. W. Stevens, belongs to the early Gothic style, while the many domes which rise above gabbled roofs, impart an oriental flavour to the design. It was commenced in July 1889 and completed in July 1893. (Ibid., p. 315.) This is British Bombay at its exuberant best, the Saracenic-Gothic 'palaces '(Gillian Tindall, op. cit, p. 32.) admired all the time. The precarious circle of greenery in front of the Terminus (Bhatia Baug), was once the northernmost gate out of the Fort, the Bazar Gate. On the other side is the J. J. School of Art, an institution with the progressive spirit of William Morris and the pre-Raphaelites, where the laureate of the Empire and lover of Bombay, Rudyard Kipling was born in 1865. Esplanade House on Waudby Road owned by the Tatas is a testimony to the time when elegance was a way of life. Its grand facade hints at its distinguished past.

Charles Forjett was the person responsible for turning the central part of the old Bombay Green into Elphinstone Circle as the elegant hub of the Fort with its public garden and its classical circlet of majestic buildings. It is now renamed Horniman Circle after B. G. Horniman, a Gandhian and editor of the *Bombay Chronicle*, which had its office here. The Circle was laid out in the 1860s, and is one of the rare pieces of non-utilitarian town planning in Bombay.(*Ibid.*, p. 87) The Bombay Green once housed the first theatre in Bombay, built in 1776 by public subscription. This was later repaired at the expenses of Charles Forbes's company, but was later abandoned. Nearby is the St. Thomas Cathedral originally founded in the 17th century, and opened by Charles Boone, whose Governorship (1715-22) marked a turning point for Bombay.

The Mint and the Town Hall with their pillars and Grecian porticoes are the old existing examples of British architecture. (*Ibid., p. 163.*) The idea for a worthy building on the Green, a symbol of British civic pride, was first mooted in 1811, when Sir James Mackintosh solaced his dissatisfaction in Bombay by founding the Bombay Literary Society, later metamorphosed into the Asiatic Society. It was completed in 1833 with a pleasant line of

lonic columns along its frontage, out of the funds raised by a lottery public subscriptions and Government contribution, even though the original plans were curtailed.(*Ibid.*, p. 164.)

The old buildings in the northern Fort disappeared in the violent fire of 1803, and some of the buildings which replaced them in Parsi Bazar Street and Borah Bazar Street must be the ones that still stand today. Others, in the southern part of the Fort, were rebuilt after a second serious fire in 1823.

The land bounded by the Mahatma Gandhi and Dadabhai Naoroji Roads (formerly Esplanade and Hornby Roads) was occupied by a complex erection of walls, bastions and ravelins from the early eighteenth to the mid-nineteenth century. When these were demolished by Bartle Frere in the 1860s, the modern roads were laid out on the site on the model of Paris at the same period. (*Ibid.*, p. 29) Even today these roads outline the old Fort, clearly preserving its identity, its internal street pattern, and names such as Rampart Row and Bastion Road. It was not just a fort in the usual sense of the term but a fortified densely populated town. The actual fort, its nucleus, Bombay Castle, guarded the seaward side of it. (*Ibid.*)

The road from Museum to Fort Market (Apollo Street) takes one to the past vestiges of the late 18th century Bombay, some of which are identifiable even now. In Marine Street, facing the walled up gate of the naval dock through which young Nelson entered Bombay in 1775, stands a tall, old house with anchors engraved on it. Just to the south of it near St. Andrew's Church, is Hornby House owned by William Hornby (1771-84), a large stone building, now shabby but once a Governor's House,(The first Governor's house was constructed in the late 17th century out of shell of Garcia da Orta's Manor House in the Heart of Bombay Castle. It was used as Governor's House for about 100 years.) and then the Law Courts. At the junction of Marine and Apollo Streets stands a bow-fronted building whose once elegant verandah has been filled in with shops, but which is still known to Bombayites as the Writers' Building occupied by the clerks of the East India Company two hundred years ago. A little further up Apollo Street, going towards Horniman Circle, stands a house that was formerly the 'old Secretariat' prior to the one overlooking the sea, was completed in 1874. Today it is occupied by small business companies, but its size, its flight of steps and the decorative iron work of its balconies, hint at its distinguished past. Governor Duncan lived and worked there for many years till his death in 1811; during his days the place stood in a garden with mulberry trees. The wooden houses existing in the Bazar Gate Street area now with their projecting galleries and carvings were owned by many founding fathers of the mercantile community.(Gillian Tindall, " A Patch of Grace ", in the Taj Magazine, 1982.) Further up two fragments of the massive granite walls of Fort St. George are existing even today.(Gillian Tindall, City of Gold, pp. 105-06.) The St. George Hospital now stands on the site of the Fort St. George.

The B.B. & C.I. railway line was extended to Churchgate in the mid-1870s inspite of protests from some quarters, who frowned that this would deprive Bombay of a promenade which any seaside place in the world

might have envied. The name perpetuated the memory of the demolished fort ramparts. There it stayed for a while in a countrified little station. It finally made its way to the Cotton Green at Colaba in 1893, where a modestly Gothic terminus was built. The Colaba Station was subsequently demolished as the Cotton Green was shifted to Sewri in 1924. Shortly after the Victoria Terminus, the B.B. & C.I. Company also built its own rival grandiose building near Churchgate, in 1899, which was designed by Stevens again. It is faced with blue basalt stone, and the domes, mouldings, capitals, columns, cornices and carvings are in Kurla and Porbunder stone. It commanded a grand view of Back Bay to the west, the Oval in front and Cross Maidan and Esplanade to the rear.(*Ibid., p. 231, and a photograph of c. 1900.*) In those days the railway tracks ran down the water's edge, a panoramic view.

Cuffe Parade itself was part of a new, grand scheme for Back Bay, put forward by the Bombay Improvement Trust founded in 1898. Marine Drive was first conceived around 1920. A fringe of ground, now occupied by many gymkhanas, was wrested from the beach opposite the old cemeteries, but Marine Drive was not completed till the 1940s. It was the last gift of the British. Other grand plans of the 1920s, such as putting the shoreline railway underground (again) and building a' shopping mall' over it have yet not found the light of the day. (Ibid., pp. 231-32.) It may be recalled that Arthur Crawford, the able minded but extravagant Municipal Commissioner, had an ambitious scheme to dig a tunnel through Malabar Hill, and to reclaim part of the foreshore by the material excavated therefrom so as to relocate the Race Course, then at Byculla. This grandiose plan did not materialise, but the Race Course was shifted from Byculla to Mahalaxmi. The races were held for the first time on the present site in 1878.(*Ibid.,pp. 231-32*) The Byculla Club, after its glorious days as the first club in Bombay, finished its days as a military hospital during the First World War. Today the main State Transport depot occupies the site of the Club itself, (Gillian Tindall, op. cit., p. 241.) but the rather grand houses on the northern side are still reminiscent of the distinguished past.

The physical history of Bombay is the history of what one writer in *The* Times(Date not known.) called in the 1930s, "the great epic of reclamation which has been in process for two-and-a-half centuries and of which the end is not yet in sight". It continued for centuries, and is still merrily going on. The first work of magnitude and the greatest landmark in the building up of Bombay, was under the Governorship of William Hornby (1771-1784), a man of tremendous vision, boundless energy and strong determination.(It may be noted that the Court of Directors had rejected Hornby's proposal as being too extravagant. But this did not shake his determination. He proceeded with the venture with just 18 months left for the expiry of his term of office. The Directors took umbrage and served him with a notice of suspension. Hornby merely pocketed the order and proceeded with the implementation of his dream till he handed over charge to his successor.) He perceived that the first prerequisite for improving sanitary conditions and rendering Bombay habitable, was the necessity of shutting out sea at Breach Candy. The great piece of reclamation, now known as Hornby Vellard (overlooking Haji Ali Dargah), effectively welded the eastern and western shores of the

island into one area, and made available the huge expanses from Haji Ali upto Mazagaon for human habitation and industry. The Vellard, now christened Lala Lajapatrai Road appears to have been completed by 1805. The other works of great magnitude and importance which formed landmarks in the building of the city were the Sion Causeway (1803), the Apollo Bunder called Wellington Pier (1819) the Colaba Causeway (1838), the Mahim Causeway (1845), the Back Bay Reclamation which continues to this day from the days of the Cotton Mania, the Mody Bay Reclamation on the eastern shore, (The building of docks pre-occupied Bombay for the whole of the second half of the 19th century, which was made possible by the Mody Bay Scheme.) the opening up of Mahim Woods and formation of the Shivaji Park (1928) and the Marine Drive (1940).(The Chowpati has provided a congenial home to bhel-puri sellers for 80 years. History records that in 1904 some migrants from Uttar Pradesh started selling bhel-puri on this sea-face. They celebrated the platinum jubilee of their presence on the sands in 1979-80.) The Nariman Point is the latest addition which is a mini-Manhattan with skyscrapers, the pride of ' new' Bombay of the post-Independence era.

The heart of Bombay lies in the intensely crowded area north of Carnac Road (Lokamanya Tilak Road) and Crawford Market. Here are the Cotton Exchange and the covered textile market (the largest in the world), the Great Mosque and old temples. The Gate of Mercy Synagogue, founded in 1796 and rebuilt about 40 years later, still functions in Samuel Street, while the oldest Sephardic Synagogue lies in Forbes Street in Fort.(Gillian Tindall, "A Patch of Grace", in the Taj Magazine, 1982.) The Swami Satya Narayan Temple at Bhuleshwar with an elaborately carved frontage is a visual treat in an otherwise shabby surrounding.

Mazagaon especially has a faded charm, for it was originally a Portuguese township. The mangoes of Mazagaon, fruiting twice a year, were celebrated. They found a place in the dining hall of Shah Jehan, and appear in many records including Thomas Moore's Lallah Rookh written in 1817. Most of the historic mansions have already gone, although one, David Sassoon's house, Sans Souci, exists as Massina Hospital at Byculla, and is one of the last surviving grand houses in the area. The Gloria Church at Byculla, a structure in standard North Oxford Gothic style, was opened in 1913. Its view is now spoiled by the erection of a fly-over directly in front of it. Half a mile away from it once stood the Nossa Senhora de Gloria Church endowed in 1632 but demolished in 1911.(Ibid., City of Gold, p. 54.) The Victoria Gardens, originally laid out in 1861, has a triumphal arch and clock tower built with terracotta ornamental panels imported from England. Here now are congregated the beautiful statues of former British worthies who have been removed from their street locations. Once, Bombay had a number of sudden hillocks, but most of them have been demolished and literally thrown into the sea for reclamation. The foot of the old Dongri Fort, blown up in 1769, and which later became known as Naoroji Hill, was washed by the sea. It yielded ground where the harbour railway line now runs. The Sion Fort, built by Gerald Aungier (1669—1677), still survives on its miniature mountain over-lookingthe oil refineries. The Mahim Fort also built by Aungier, is still reminiscent of its past importance.

The Governor's House, also known as Parel House, still stands, a rare survivor of time and chance; but its surroundings are changed beyond recognition. Formerly the site of a Jesuit monastery, the building looked across the sweep of the Flats to the distant groves of Mahim. Its stone channels and the lake are gone now, but the ballroom, the ancient flooring and an arch, still remain, although the house's fortunes are changed totally. After 1882, when Lady Fergusson died there of cholera, it was used no more; and in 1896 it became a bacteriological laboratory, later christened Haffkine Institute after the illustrious devoted medical scientist. To say the least, the house stands testimony to its past glory as a rare piece of architecture.

The Walkeshwar temple of the tenth century, the Mumbadevi temple of 1753, the Mahalaxmi temple of 1830, the Babulnath temple of 1780, the San Miguel Church built in 1540, the Mahim Dargah and the Mount Mary are but a few of the old places of worship held in high veneration in the city. But the most ancient monument in present Greater Bombay is at Kanheri. It is the most extensive of all Buddhist rock-cut monasteries, and consists of a large group of caves of varying ages and styles. The caves were cut roughly between A. D. 50 and A. D. 200, while the second phase began around A. D. 400. They had been one of the most prosperous and famous of the rock monasteries of the Buddhists surrounded by lush green forests. They bring us to the end of our delightful sojourn through the relics in repose in this ' World City ' of ours.

APPENDIX I LIST OF THE GOVERNORS OF BOMBAY

1.H. Cooke	1665-1666
2. Sir Gervase Lucas	1666-1667
Captain H. Gary <i>Officiating</i>	1667-1668
3. Sir G. Oxenden	1668-1669
4. G. Aungier	1669-1677
5. T.Rolt	1677-1681
6. Sir J.Child, BART	1681-1690
7. B.Harris	1690-1694
8. Sir J.Gayer	1694-1704
9. Sir N.Waite	1704-1708
10.W.Aislabie	1708-1715
11. C.Boone	1715-1722
12.W.Phipps	1722-1729
13. R.Cowan	1729-1734
14. J.Horne	1734-1739
15. S. Law	1739-1742
16. W.Wake	1742-1750
17. R.Bourchier 1750-176	
18. C.Crommelin	1760-1767
19. T.Hodges 1767-177	
20. W.Hornby	1771-1784

21. R.H Boddam	1784-1788	
22.Major-General W.Medows	1788-1790	
23. Colonel Sir R. Abercromby, K.C.B	1790-1792	
24. G.Dick <i>Officiating</i>	1792-1795	
25. J.Duncan	1795-1811	
26. G.Brown <i>Officiating</i>	1811-1812	
27. The Rt. Hon. Sir E. Nepean	1812-1819	
28. The Hon. M. Elphinstone	1819-1827	
29. Major-General Sir J. Malcolm, G.C.B.	1827-1830	
30.Lt. General Sir T. S. Beckwith, K.C.B	1830-1831	
31. The Rt. Hon. The Earl of Clare	1831-1835	
32.Sir R. Grant	1835-1838	
James Farish <i>officiating</i>	1838-1839	
33.Major-General Sir J. Rivett Carnac, BART 18		
34. Lt. Gen. Sir G. Arthur, BART., K.C.H 1842-		
35. Sir G. Russell Clerk, K.C.B. (1st time) 1847-1		
36. The Rt. Hon. Viscount Falkland, G.C.H	1848-1853	
37. The Rt. Hon. Lord Elphinstone, C.B., G.C.H	1853-1860	
38. Sir. G. Russell Clerk, K.C.B. (2nd time) 1860-		
39. Sir H. Bartle Edward Frere, K.C.B. 1862-18		
40. The Hon. W. R. S. V. FitzGerald 1867-1		
41. Sir P. E. Wodehouse, K.C.B. 1872-1		
42. Sir R. Temple, BART., K.C.S.I 1877-18		
43. Sir James Fergusson, BART., K.C.M.G. 1880-18		
44.The Rt. Hon. Lord Reay, G.C.S.I., G.C.I.E. 1885-18		

Maharashtra State Gazetteers

45. The Rt. Hon. Lord Harris, G.C.S.I., G.C.I.E.	1890- 1895
AC The Dr. Here Level Consults week C. C. C. L. C. C. L.	
46. The Rt. Hon. Lord Sandhurst, G.C.S.I., G.C.I.E	
47. The Rt. Hon. Lord Northcote, G.C.I.E., C.B.	1900- 1903
48. The Rt. Hon. Lord Lamington, G.C.M.G., G.C.I.E	1903- 1907
49. Bt. Colonel Sir G. Sydenham Clarke, G.C.M.G.,G.C.I.E	1907- 1913
50.The Rt. Hon. Lord Willingdon of Ratton, G.C.I.E.	
51.Sir George Lloyd, G.C.I.E., D.S.O	
52. The Rt. Hon. Sir Leslie Orme Wilson, P.C., G.C.I.E., C.M.G., D.S.O.	
53. Major-General The Rt. Hon. Sir Frederick Hugh Sykes, P.C., G.C.I.E., G.B.E., K.C.B., C.M.G.	
54. The Rt. Hon. Lord. Brabourne, G.C.I.E., M.C	
55. Sir Roger Lumley, G.C.I.E., T.D	
56 The Rt. Hon. John Colville, P.C., G.C.I.E.	

APPENDIX II GROWTH OF MUNICIPAL GOVERNMENT

The metamorphosis of Bombay from seven isolated islands to a world city of today has been brought about not only by the Government and her enlightened citizens but also by a progressive Municipal Government. The Municipal Corporation which established the best of the traditions in local self-government institutions in India was itself the product of a number of distinguished persons such as Pherozeshah Mehta, V. N. Mandlik, R. M. Sayani, Jagannath Shankarshet, Veer Nariman and S. K. Patil. They guided her destiny and evolved a body with healthy traditions. It is, therefore, essential that a brief history of the evolution of municipal government in Bombay be given as under.

Although some kind of municipal administration was existing prior to 1845, an organised system of dyarchy was introduced in Bombay in that year. A Board of Conservancy known as "Civic Heptarchy "consisting of the Senior Magistrate of Police, Collector of Bombay, and two European and three Indian Justices, was created. A Municipal Fund was constituted. It was administered by the Board, but controlled by the Justices. This dyarchy was replaced in 1858 by a triumvirate of Commissioners, one appointed by the Governor and two by the Justices. This arrangement was also a failure. Jagannath Shankarshet, Bhau Daji and many of their colleagues ventilated feelings against this system. It led to the enactment of the Municipal Act of 1865 which forms an important landmark in the civic governance of Bombay. Shankarshet played a prominent part in giving shape to this Act as a member of the select committee on the Bill

and as member of Legislative Council. This Act placed the power of the purse in the hands of the Justices and the entire executive power in the hands of the Municipal Commissioner, a single official. The Justices were created as a body corporate, but were all appointed by the Government and there was no popular representation in the Corporation. This lacuna of popular control led to further agitation by the enlightened citizens of Bombay such as Pherozeshah Mehta, K. T. Telang, Mandlik, Badruddin Tyabji, etc. This made it imperative to enact the Municipal Act of 1872 by Government. Under this Act rate-payers and wheel tax payers were enfranchised. These along with the fellows of the Bombay University elected 32 members, 16 more were elected by the Justices and the remaining 16 were nominated by the Government. The first meeting of the Corporation constituted under the Act of 1872 was held on 4 a committee comprising K. T. Telang, September 1873. Meanwhile Pherozeshah, Mandlik, Naoroji Furdunji, R. N. Khote, T. Blaney, P. Peterson, R. M. Sayani, J. U. Yajnik, Badruddin Tyabji, Grattan Geary (of *Times of* India) and J. H. Grant, recommended increase in the number of elected members, to reduce Government nominees, and to further extend local self-government.

Lord Ripon's memorable pronouncement on local self-government (1882) had increased the quest of the leaders of society for a larger share in the city administration. The Government could not but introduce a Bill in the Legislative Council on 16 July 1887.

The Bill was drafted by the Legal Remembrancer (Mr. Naylor), and the Municipal Commissioner (Charles Ollivant). It was, however, retrograde in its original shape as it sought to enlarge the authority of the Municipal Commissioner at the cost of the Corporation. It also reserved to Government vast powers of initiative and interference in day-to-day matters, which should be within the jurisdiction of a local body. K. T. Telang and Pherozeshah criticised its retrograde character in the Legislative Council. The Bill was, therefore, referred to a Select Committee comprising the above two leaders, besides a member of the Executive Council, the Advocate General and Kazi Shahabuddin. The Committee did a lot of good work on the Bill. Lord Reay, Governor (1885-90) exhibited his spirit of liberalism and sincere desire to give a practical and progressive piece of legislation. The dominating spirit behind the enactment was, however, the strenuous work done by Pherozeshah and Telang. The Governor also paid rich tributes to the two leaders. The Bill was enacted in 1888.

This enactment guaranteed the rate-payers the greatest security against extravagance. Representatives of the city were responsible for the good governance of the city. A number of duties were imposed on them. The representatives constituted a deliberative assembly for enactment of byelaws and resolutions, the execution of which was left to the administration. They were empowered to control and direct the administration by virtue of their power to sanction funds for certain purposes.

The Act of 1888 gave the citizens of Bombay a charter of local self-government, which proved the most successful, as it had been the first experiment of its kind in India. "It has stood the test of time, and, subject

to a few modifications which experience has rendered necessary, has been found to be an eminently sound and workable measure, which has provided an excellent training ground for the development of administrative capacity." (*Homi Mody, op. cit, pp. 114-15.*) Pherozeshah had observed that it would "add fresh laurels to the municipal fame of this city." The prediction has been fulfilled. The civic body has always added to the city's reputation for political sobriety. Pherozeshah's contribution towards municipal governance is simply inestimable. He dominated the civic stage for more than a generation. When he left the Corporation, a great void was experienced.

The outstanding feature of the Act of 1888 was the creation of three coordinate authorities, namely, Municipal Corporation, Standing Committee and Municipal Commissioner, and the vesting of the entire executive power in the Commissioner subject to a few restrictions. This Act also increased the number of councillors from 64 and 72, of which 36 were elected by rate-payers and graduates from Indian and British Universities. It created for the first time territorial constituencies by dividing the city in seven wards for purposes of election. It also granted special representation to the Bombay University and the Bombay Chamber of Commerce (two seats each). Sixteen councillors were elected by the Justices, while Government nominated 16.

A further constitutional change was effected in 1922 which abolished the representation of the Justices of Peace, and liberalised the franchise of rate-payers. In 1928, four seats were granted to the representatives of trade unions. In 1931, the number of elective seats was increased.

The constitutional changes effected by the Government of India Act of 1935 set the pace for further reforms in local government sphere. In 1936, the franchise was widened by reducing the rental qualification from Rs. 10 to Rs. 5 per month. The Bombay Act XIII of 1938 introduced many changes of a far reaching character. Government nominations, except the Police Commissioner, the Executive Engineer of P.W.D. and the chairman of Bombay Port Trust were done away with.

The first General Election on the basis of adult franchise was held in 1948 and the new Corporation came into office on April 1, 1948. The limits of the Municipal Corporation were extended to merge the Bombay Suburban District in the City by the Act of 1950, with the intention of ensuring coordinated development of the fast growing City. The Bombay Act No. LVIII of 1956 further increased the Corporation limits to cover the Extended Suburbs. The Corporation became a purely elected body from 1952.(

Constitutional History of the Corporation, 1873-1973 {monograph}, Municipal Corporation of Greater Bombay, 1973.)

The evolution of the institution of the Mayor is quite interesting. The Mayor during the earlier days of British rule possessed autocratic powers, particularly judicial. The King approved the establishment of the Mayor's Court which comprised a Mayor, nine aldermen, eight of whom including the Mayor were required to be naturalised subjects of the British Crown and the other two, subjects of any friendly nation. William Henry Draper was the first Mayor of Bombay. The Mayor's Court used to inflict cruel punishments and was never impartial. The Mayor's Court

constituted one of the blackest pages in the history of British rule. It was replaced by a Recorder's Court. The first Recorder was William Syer. In subsequent period Pherozeshah Mehta, Nana Shankarshet, K. T. Telang, Badruddin Tyabji and Dinshaw Wacha fought for rights of the citizens. This bore fruit in the enactment of the Act of 1872, which had been hailed as the Magna Carta of local self-government in Bombay. The presiding authority of the Corporation was called the Chairman, the first Chairman being George F. Henry elected in 1873. Dossabhoy Framji (1875) Was the first Indian Chairman.

The Municipal Act of 1888 changed the designation of the presiding authority from Chairman to President. Sir H. Morland was the first elected President. In 1931-32, the designation was changed to that of "His Worship the Mayor ", J. B. Boman-Behram being the first to hold this position. After Independence the title of "His Worship " was dropped. The list of Mayors of Bombay is given in Appendix III.

The Bombay Municipal Corporation has built up rich traditions of civic administration in the country, and has rightly been held as a model to be followed by other municipal bodies. In the civic hall of the Corporation there is a gallery of great civic and national leaders such as V. N. Mandlik, Pherozeshah Mehta, Rahimtulla Mohamed Sayani, George Cotton, Bhalchandra Bhatwadekar, Ibrahim Rahimtoola, Dinshaw Wacha, Vithaldas Thackersey, Cowasji Jehangir, Homi Mody, Vithalbhai Patel, Joseph Baptista, Vithal Chandavarkar, K. F. Nariman, Jaihnadas Mehta, Yusuf Meherali, Dr. Gilder, M. R. Masani and S. K. Patil.

APPENDIX III MUNICIPAL CORPORATION OF GREATER BOMBAY

A CAVALCADE OF CHAIRMEN, PRESIDENTS AND MAYORS

Year	Chairmen of Bombay Municipal Corporation
1873	Captain George F. Henry
1874	Captain George F. Henry Mr. J. A. Forbes
1875	Mr. J. A. Forbes Mr. Dossabhoy Framji
1876	Mr. Dossabhoy Framji
1877	Col. H. F. Hancock, R.E.
1878	Col. H. F. Hancock, R.E.
1879	Rao Saheb Vishwanath Narayan Mandlik, C.S.I.
1880	Rao Saheb Vishwanath Narayan Mandlik, C.S.I.
1881	Mr. Thomas Blaney
1882-83 (Calendar year 1882 and first quarter of 1883.)	Sir Frank H. Souter, Kt., C.S.I

1883-84	Mr. Raghunath Narayan Khote, C.I.E.	
1884-85	Mr. Pherozeshah Merwanji Mehta, M.A., LL.B.,Barrister-At- Law	
1885-86	Mr. Pherozeshah Merwanji Mehta, M.A., LL.B.,Barrister-At- Law	
1886-87	Deputy Surgeon General H. Cook, M.D., F.R.C.P., F.M.S., F.G.S. Capt. H. Morland, H.M.I.M., F.R.C.S., F.R.A.S., ASSO., C.I.C.E	
	Presidents of Bombay Municipal Corporation	
1887-88	Capt. Sir H. Morland, Kt., H.M.I.M., F.R.C.S., F.R.A.S., ASSO, C.I.C.E.	
1888-89	The Hon'ble Mr. Rahimtulla Mahomed Sayani, M.A., LL.B.	
	Mr. Grattan Geary.	
1890-91	Mr. Muncherji Cowasji Murzban, F.K.I.B.A., ASSO., M.I.C.E.	
1891-92	Mr. George Cotton	
1892-93	Mr. Javerilal Umiashankar Yajnik	
1893-94	Mr. Thomas Blaney, J.P.	
1894-95	Mr. Abdulla Meherali Dharamsi, B.A., LL.B., J.P.	
1895-96	Mr. G. W. Roughton, J.P.	ers
1896-97	Mr. Cowasji Hormusji, G.G.M.C, J.P.	
1897-98	Sir George Cotton, Kt., J.P.	
1898-99	The Hon'ble Mr. Bhalchandra Krishna Bhatwadekar L.M., J.P	
1899- 1900	The Hon'ble Mr. Ibrahim Rahimtoola, J.P.	
1900-01	Mr. C. T. Burke, B.E., M.I.C.E., J.P. Mr. S. Rebsch, M.I.C.E., J.P.	
	Mr. Dinshaw Edulji Wacha, J.P.	
1902-03	Mr. Mulji Bhawanidas Barbhaya, J.P.	
1903-04	Mr. Fazalbhai Vishram, C.I.E., J.P. Mr. James McDonald, J.P.	

1904- 05	Mr. James McDonald, J.P.
1	The Hon'ble Sir Pherozeshah Merwanji Mehta,K.C.I.E. M.A., LL.B., Barrister-At-Law, J.P.
1906- 07	Dr. Accacio G. Viegas, L.M. & S., J.P.
1907- 08	The Hon'ble Mr. Vithaldas Damodar Thackersey, J.P.
	The Hon'ble Mr. G.O.W. Dunn, M. INST. C.E.,M.R. San. Inst. J.P.
1909- 10	Mr. Jaffer Rahimtoola, B.A., Barrister-At-Law, J.P.
1910- 11	Dr. Kawasji Edulji Dadachanji, L.M. & S., J.P.
1	The Hon'ble Sir Pherozeshah Merwanji Mehta, K.C.I.E M.A. LL.B., Barrister-At- <mark>Law, J.P.</mark>
1912- 13	The Hon'ble Mr. Manmohandas Ramji, J.P.
1913- 14	Mr. A. M. Tod, J.P.
1914- 15	Ine Hon ble Sir Fazuibnoy Currimbnoy Ebranim, Kt., J.P.
то	Mr. Phiroze Cursetji Sethna, J.P.
	The Hon'ble Mr. Chunilal Vijbhukandas Mehta,M.A., LL.B., J.P.
1917- 18	Mr. J.A.D. McBain, C.I.E., J.P.
1918- 19	Mr. Rahimtoola Currimbhoy, B.A.
	Mr. Cowasji Jehangir Readymoney, O.B.E., B.A. (Cantab.), J.P.
1920- 21	Mr. Vasantrao Anandrao Dabholkar; O.B.E., J.P.
1921- 22	Sir Sassoon David, BART., J.P.
1922- 23	Mr. Mirza Ali Mahomed Khan, M.A., LL.B., J.P.
1923- 24	Mr. H.P. Mody, M.A.,LL.B.
1924- 25	Mr. Vithalbhai J. Patel, Barrister-At-Law
	Mr. Joseph Baptista, L.C.E. (Bom.), B.A., LL.B.(Cantab.) Barrister-At-Law
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1926- 27	Mr. Rahimtoola Meherally Chinoy, J.P.	
1927- 28	Dr. Shiavax Sorabji Batliwalla, F.C.P.S., L.M. & S.,J.P.	
1928- 29	Dr. G. V. Deshmukh, M.D. (Lond.), F.R.C.S. (Eng.)	
1929- 30	Mr. Meyer Nissim, M.A., J.P.	
1930- 31	Mr. Hooseinbhoy Abdullabhoy Lalljee	
1931- 32	.J. B. Boman-Behram, B.A., LL.B., J.P.	
	Mayors of Bombay Municipal Corporation (President was redesignated as His Worship the Mayor, Bombay Municipal Corporation, from November 1931,)	
1931- 32	Mr. J. B. Boman-Behram, B.A., LL.B., J.P.	
1932- 33	Mr. Vithal Narayan Chandavarkar, B.A. (Cantab.), Barrister- At-Law, J.P.	
1933- 34	Dr. Moreshwar Chintaman Javle, J.P.	
1934- 35	Mr. Hoosenally M. Rahimtoola, B.A., M.L.C., J.P.	ers
1935- 36	Mr. Khurshed Framji Nariman, B.A., LL.B.	
1936- 37	Mr. Jamnadas M. Mehta, M.A., LL.B., Barrister-At-Law, M.L.A.	
1937- 38	Dr. Elijah Moses, M.D., J.P.	
1938- 39	Mr. Sultan M. Chinoy, LP.	
1939- 40	Mr. Behram N. Karanjia, J.P.	
1940- 41	Mr. Mathuradas Tricamji, B.A.	
1941- 42	Dr. J. A. Collaco, L.M. & S., M.L.C.	
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1942- 43	Mr. Yusuf J. Meherali, B.A., LL.B.	
1943-	Dr. Manchershah D. D. Gilder, M. D. (Lond.), F.R.C.S. (Engl.), M.L.A. Mr. Minocheher R. Masani, B.A. (Bom.), LL.B. (Lond.), Barrister-At-Law	
1944- 45	/Ir. Nagindas T. Master, B.A., LL.B., M.L.A.	
1945- 46	Dr. Jos. Alban D'Souza, B.A., L.M. & S.	
1946- 47	Mr. Mohamedbhoy I. M. Rowies	
1947- 78	Mr. A. P. Sabavala, B.A <mark>., Barrister-At-Law</mark>	

APPENDIX IV SUCCESSION LIST OF VICE-CHANCELLORS OF THE UNIVERSITY OF BOMBAY

1857 July	Sir William Yardley, KT.	
1858 August	Sir Henry Davison, KT.	
1860 July	Justice Sir Joseph Arnould, KT., M.A.	
1863 February	Sir Alexander Grant, BART., M.A.	
1864 December	Mr. Justice Alexander Kinloch Forbes, C.S.	
1865 September	Sir Alexander Grant, BART., M.A., LL.D.	
1868 October	Dr. John Wilson, D.D., F.R.S	
1870 March	Mr. Justice James Gibbs, C.S., F.R.C.S.	
1879 March	Mr. Justice Raymond West, C.S., M.A., LL.D., F.R.G.S.	
1879 December	Surgeon-General William Buyer Hunter, M.D.,F.R.C.P.	
1880 April	Mr. Justice Raymond West, C.S., M.A., LL.D.,F.R.G.S.	
1885 January	Mr. James Braithwaite Peile, C.S., M.A., C.S.I.	
1886 October	Mr. Justice Raymond West, C.S., M.A., LL.D.,F.R.G.S.	

Source,—Centenary Souvenir, University of Bombay.

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THE PEOPLE



Maharashtra State Gazetteers

(This Chapter is contributed by Shri T. V. Parvate, a well-known writer in Bombay.)

INTRODUCTION

(For History of the People from Hindu Period refer Gazetteer of Bombay City and Island, Vol.1, 1909, pp. 142-66.)

THE CITY OF BOMBAY, OFFICIALLY DESIGNATED AS GREATER BOMBAY, is one of the 30 districts of Maharashtra State. But what a contrast it is to any other district in the State whether in point of area, population, geographical location, history, economic growth, industry, trade and commerce, education, public life or any other field whatsoever. The composition of Bombay is entirely different from any other urban centre in the State and it is so obvious for any one to see.

The evolution of Bombay from an insignificant fishing village or a group of villages into the capital of an important State in the Indian Union and into the industrial and commercial metropolis of the whole country has all the features of a romance in the current history of India. Originally a collection of small seven islands off the mainland on the West Coast, separated by small shallow creeks, it became a compact body after it was presented to an English King named Charles II by Portugal as dowry when the Portuguese Princess Catherine was married to him. The British sovereign found that the marriage gift was too costly to maintain and he disposed it off to the British East India Company at a nominal annual rent of £ 10. The East India Company's headquarters were then at Surat since 1612 but the company was anxious to free itself from the stranglehold of the Moghal Subedar of Gujarat and establish itself in a more suitable and safer haven. Since the Company came to Bombay its rise and growth have been perennial.

Bombay has been growing and growing to this day and now it is said to have reached a bursting point because its geography has been altogether unsuitable for further expansion. Bombay, before it became Greater Bombay, was a mere strip of land from Mahim to Colaba surrounded by sea water on all sides. But with the New Bombay in the making across its harbour and the Thane Creek, it is now assuming the form of separate and independent and parallel existence, although essentially it is an eastward expansion of Bombay into Thane and Rayagad districts.

No sooner the Englishman found his feet firmly planted in Bombay than he extended a general invitation to all to come and settle down in Bombay and gave the assurance that in their pursuit of life's various avocations, they will not be discriminated against on grounds of race, creed, religion or pigment of the skin. This was an antithesis of what the way of the former masters of Bombay and its precincts, the Portuguese, was. In response to this generous invitation Hindus, Musalmans and Parsees from Gujarat and Maharashtra as also from south Konkan were the earliei or immediate immigrants. It is on record that the population of fishermen, Hindus and Portuguese-converted Catholic Christians, inhabiting the seven small islets was in the neighbourhood of 6,000; but it went up to 60,000. Within ten years of English possession and occupation of Bombay started the inflow of these enterprising immigrants, leading among whom were the Parsees. They became excellent helpmates and collaborators and later junior partners of British traders and businessmen.

Roughly speaking, by the beginning of the eighteenth century, the seven islets went to form what came to be called the island of Bombay. It was a fairly compact area separated from Salsette by the Mahim river, Bandra and Kurla remaining southern most points of Salsette or the future Thane district. From the beginning of the eighteenth century to the end of the nineteenth, Bombay's growth in point of population has been incessant and almost phenomenal. While this was going on there was a constant struggle against the sea to reclaim land from it. This has gone on for three hundred years ceaselessly and it has not stopped still. The Nariman Point area is a living demonstration of it.

During the first hundred years of British occupation of Bombay, there could be no peace and even semblance of order because the struggle against the French, the Siddi of Janjira and the Mahratta armada of the Angria was there; but with the fall of the Mahratta power in 1818, there was comparative peace and what usually follows a peaceful era. There was a time when like almost every other urban area, Bombay depended for its water supply on tanks and wells. With the ever-growing supply of pipe water, the wells and tanks were filled up and only their names like Maharbavdi and Dhobi Talao are still current to show where they were once upon a time. Similarly names of areas like Khetwadi, Ambewadi, Kelewadi, Wadala, etc. must have been paddy fields, mango groves, banana gardens and a collection of banian trees. Now these are all under human habitation.

This transformation was not sudden but gradual and steady, making room for more and more immigrants to live. Once upon a time there were two distinct parts of Bombay, Fort and Black Town. With the demolition of the Fort walls set in the era of assured peace and prosperity. Metalled roads, well-lighted at night became the order. Pipe water supply from distant tanks and conservancy arrangements were here in the nineteenth century, in its later decades. Textile mills and hospitals came into being. The University of Bombay was established in 1857. The Western and Central Railways as they are called now began to function. The Secretariat, the High Court, Rajabai Tower lent Bombay quite a new, dignified and magnificent look. Who will now believe that there were jackals in the Malabar hill jungle, and occasionally even a tiger. The presence of these wild animals was quite normal if the writings of Englishmen residing here about a hundred years ago have to be taken as faithful, as indeed they should be. But wild animals and reptiles have now almost disappeared to make room for more needy humanity.

POPULATION

The population of Greater Bombay District, according to the 1971 Census, is 5,970,575 (Males 3,478,378; females 2,492,197) and is spread over the 15 wards as stated in Table (*Tables are given at the end of this section, while 1981 Census population is given in Table No. 9 at the end of this Chapter.*) No. 1.

The table shows that this population spread over the district area of 603.00 square kilometres(*As reported by Surveyor General of India.*) works out at about 9,901 persons to a square kilometre. The density of population of the district is higher than the State average in 1971.

As regards area, Greater Bombay is the smallest district in the State. It comprises only the area included in the limits of the Greater Bombay Municipal Corporation. Greater Bombay is an urban agglomeration and the commercial metropolis. For revenue purposes, the area is administered as two units, Bombay City and Bombay Suburban district. For all other administrative purposes, it is treated as one district.

Variation: The population of the district and decade variation rates since 1901 are as follows:—

Year	Population	Decade variation	Rate of variation
1901	927,994		
1911	1,148,757	+ 220,763	+23.79
1921	1,380,448	+ 231,691	+20.17
1931	1,397,812	+ 17,364	+1.26
1941	1,801,356	+403,544	+ 28.87
1951	2,994,444	+ 1,193,088	+ 66.23
1961	4,152,056	+ 1,157,612	+ 38.66
1971	5,970,575	+ 1,818,519	+ 43.80
1981	8,243,405	+2,272,830	+ 38.07

Greater Bombay district which is entirely an urban area has shown a phenomenal growth of 543.39 per cent compared to the State urban growth rate of 388.34 per cent. During 1961 to 1971 the largest decadal growth *viz.* 43.80 per cent is seen in Greater Bombay which is the highest rate in the State. This growth is due to the industrial development of the district. The increase in population of Greater Bombay can be attributed more to immigration than to lhe natural growth of population.

Density of Population: The density of population in Greater Bombay district in 1961, 1971 and 1981 is given below:—

Year	Density of Population	Year	Density of Population
1961	24,568 per sq.mile	1981	13,644 per sq.km
1971	9,901 per sq.km		

Urban Population: The following statement gives the number of towns in Greater Bombay since 1901 Census:—

NUMBER OF TOWNS IN GREATER BOMBAY SINCE 1901

Year	Towns	Year	Towns
1901	3	1951	10
1911	4	1961	1
1921	5	1971	1
1931	9	1981	1
1941	9		

The total number of towns had been continuously increasing since 1901. With the redefinition of an urban area in 1961, the entire area within Greater Bombay limits is regarded as a single agglomeration.

Age Groups: Table No. 2 gives the population by age and marital status in Greater Bombay district in 1971.

Sex Ratio: The sex ratio of females per 1,000 males for the city and the State is given below:—

Year	Greater Bombay	Maharashtra	Year	Greater Bombay	Maharashtra
1901	652	978	1951	603	941
1911	570	966	1961	663	936
1921	561	950	1971	716	930
1931	592	947	1981	773	938
1941	616	949			

Households: The following statement gives the persons per occupied census house in 1961 and 1971:—

Year	Persons per occupied census house	Year	Persons Per occupied census home
1961	5.4	1971	5.0

Population by Religion: The distribution of population by religion in Greater Bombay in 1971 is given in Table No. 3.

Table No. 4, gives the statistics of growth-rate and proportion of population of each major religious community in Greater Bombay in 1971.

Scheduled Castes: Table No. 5 gives the statistics of Scheduled Castes classified by literacy in 1971 in Greater Bombay.

The percentage of Scheduled Castes to total population in 1961 and 1971 was 3.37 and 3.53 respectively. It shows an increase in Scheduled Castes percentage in 1971 over 1961.

Scheduled Tribes: Table No. 6 gives the statistics of Scheduled Tribes population classified by literacy in Greater Bombay in 1971.

The percentage of Scheduled Tribes to total population in 1961 and 1971 was 0.62 and 0.50, respectively. The decrease in the percentage of Scheduled Tribes population in 1971 cannot be explained on the basis of any statistical data.

Table No. 7 gives the ward wise Scheduled Castes and Scheduled Tribes population in Greater Bombay in 1971.

Languages: Table No. 8 gives the statistics of distribution of languages (inclusive of mother tongues grouped under each) specified in Schedule VIII to the Constitution of India, in Greater Bombay in 1971.

TABLE No. 1
Ward wise Population of Greater Bombay, 1971

Ward	Area in Km ²		ng institutional an ulation)	institutional and houseless ation)		
		Persons	Males	Females		
Greater Bombay Municipal Corporation.	603.00	5,970,575	3,478,378	2,492,197		
Ward A	11.41	184,104	115,910	68,194		
Ward B	2.46	175,131	106,237	68,894		
Ward C	1.78	312,472	172,580	119,892		
Ward D	6.63	382,742	218,578	164,164		
Ward E	7.41	528,736	322,473	206,263		
Ward F	21.17	662,516	389,227	273,289		
Ward G	17.85	824,677	473,838	330,839		
Ward H	21.05	523,633	291,820	231,813		
Ward K	47.46	573,693	324,447	249,246		
Ward P	64.27	372,335	210,114	162,221		
Ward R	77.56	235,833	131,743	104,090		
Ward L	13.46	273,507	161,107	112,400		
Ward M	54.92	316,371	176,358	140,013		
Ward N	55.44	479,660	274,969	204,691		
Ward T	34.84	125,165	68,977	56,188		

TABLE No. 2 AGE AND MARITAL STATUS,GREATER BOMBAY 1971

Age- group		al Population		Never I	Married	Mar	ried	Wic	lowed		rced or arated	Unspecified Status	
	Persons	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females		les ales
All ages	5,970,575	3,478,378	2,492,197	1,840,988	1,241,577	1,588,578	1,069,250	41,289	175,004	3,801	5,450	3,722	916
0—9	1,343,278	688,832	654,446	688,832	654,446								
10— 14	601,562	319,889	281,673	318,539	278,634	1,160	2,919		10	15	25	175	85
15— 19	569,048	328,295	240,753	308,359	185,279	19,246	54,604	65	155	55	330	570	385
20— 24	712,440	439,546	272,894	311,924	80,890	125,817	189,832	640	1,158	360	834	805	180
25— 29	634,542	387,433	247,109	131,717	19,873	253,397	223,626	1,107	2,715	656	840	556	55
30— 34	512,046	316,497	195,549	38,397	7,905	275,295	180,937	1,935	5,738	560	939	310	30
35— 39	453,606	384,321	169,285	16,536	4,375	264,160	154,363	2,710	9,833	615	684	300	30
40— 44	344,834	223,984	120,850	8,957	3,200	211,096	101,142	3,146	15,834	455	659	330	15
45— 49	262,935	172,896	90,039	5,701	2,221	162,739	68,301	3,946	19,128	295	379	215	10
50— 54	197,202	126,308	70,894	4,369	1,480	116,100	42,645	5,394	26,429	275	325	170	15
55— 59	119,529	73,739	45,790	2,729	980	66,256	23,528	4,474	211,122	190	145	90	15
60— 64	99,685	55,161	44,524	2,236	1,052	46,971	15,394	5,729	27,893	160	145	65	40
65— 69	52,061	27,939	24,122	1,231	466	22,670	6,820	3,923	16,741	65	60	50	35
70 +	67,469	33,313	34,156	1,341	696	23,611	5,118	8,216	28,242	100	85	45	15
Age not stated	338	225	113	120	80	60	21	4	6			41	6

TABLE No. 3
POPULATION BY RELIGION, GREATER BOMBAY, 1971

Religion	Males	Females
Buddhists	157,395	126,908
Christians	200,312	174,953
Hindus	2,427,525	1,683,221
Jains	133,282	111,439
Muslims	501,567	341,791
Sikhs	24,303	18,559
Other religions and persuasions	33,707	35,208
Religion not stated	287	118

TABLE No. 4

GROWTH-RATE AND PROPORTION OF POPULATION OF EACH MAJOR COMMUNITY, GREATER BOMBAY, 1971

Percentage decadal growth-rate 1961-1971—	
Total Population	43.80
Hindus	43.27
Muslims	56.64
Christians	30.29
Sikhs	68.48
Buddhists	47.52
Jains	57.13
Others	16.40
Percentage of each community to total population 1971—	
Hindus	68.85
Muslims	14.12
Christians	6.29

Sikhs	0.72
Buddhists	4.76
Jains	4.10
Others	1.15
Religion not stated	0.01

TABLE No. 5 SCHEDULED CASTES POPULATION CLASSIFIED BY LITERACY IN GREATER BOMBAY, 1971

		Total Population		Illiterates		Literates and educated persons		
		Persons	Males	Females	Males	Females	Males	Females
AII :	Scheduled Castes	210,497	115,343	95,154	51,512	64,925	63,831	30,229
1.	Ager	2,366	1,456	910	531	587	925	323
2.	Bakad	106	81	25	37	6	44	19
3.	Bhangi, Halalkhor	25,658	14,126	11,532	7,641	9,099	6,485	2,433
4.	Chalvadi	95	51	44	31	35	20	9
5.	Chambhar, Mochi	89,572	48,414	41,158	20,537	26,652	27,877	14,506
6.	Chenna Dasar	12	1	11	1	8		3
7.	Dhor, Kakkayya	9,429	4,957	4,472	2,098	2,869	2,859	1,603
8.	Garoda	61	38	23	15	20	23	3
9.	Halsar	9	4	5	2	4	2	1
10.	Holar	1,024	552	472	285	378	267	94
11.	Holaya	59	30	29	20	25	10	4
12.	Lingader	30	17	13	8	7	9	6
13.	Mahar, Taral	17,738	9,673	8,065	3,796	5,217	5,877	2,848
14.	Mahyavanshi	7,037	4,017	3,020	1,289	1,716	2,728	1,304
15.	Mang, Matang	13,845	7,564	6,281	3,914	5,053	3,650	1,228

		Total Population		Illiterates		Literates and educated persons		
		Persons	Males	Females	Males	Females	Males	Females
16.	Mang Garudi [Group (a)]	983	533	450	401	438	132	12
17.	Meghval	16,297	8,322	7,975	3,124	5,005	5,198	2,970
18.	Mukri	27	20	7	15	6	5	1
19.	Nadia	34	22	12	12	7	10	5
20.	Pasi	2,662	2,173	489	1,243	443	930	46
21.	Shenva	32	15	17	7	15	8	2
22.	Tirgar	7	7		5		2	
23.	Turi	131	98	33	48	18	50	15
	Unspecified	23,283	13,172	10,111	6,452	7,317	6,720	2,794

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TABLE No. 6 Scheduled Tribes Population Classified by Literacy in Greater Bombay, 1971

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		Tota	l Popul	ation	Illiterates		Literates and educated persons	
		Persons	Males	Females	Males	Females	Males	Females
All Trib	Scheduled bes	30,016	16,551	13,465	9,597	10,598	6,954	2,867
1.	Barda	10	7	3	1	3	6	
2.	Bavacha	33	14	19	6	12	8	
3.	Bhil [Group (a)]	336	224	112	109	85	115	27
4.	Chodhara	13	10	3	3	2	7	1
5.	Dhanka	130	94	36	57	22	37	14
6.	Dhodia	3,458	1,761	1,697	962	1,352	799	345
7.	Dubla	3,795	2,086	1,709	1,499	1,541	587	168
8.	Gamit	46	34	12	16	7	18	5
9.	Gond [Group (a)]	437	278	159	162	132	116	27
10.	Kathodi	312	136	176	90	160	46	16
11.	Kokna	454	269	185	122	106	147	79
12.	Koli Dhor	5,553	3,134	2,419	1,311	1,680	1,823	739
13.	Naikda	302	177	125	106	103	71	22
14.	Pardhi [Group (a)]	382	194	188	167	170	27	18
15.	Patelia	95	54	41	42	36	12	5
16.	Pomla	10	5	5	4	4	1	1
17.	Rathawa	29	16	13	9	10	7	3
18.	Varli	4,887	2,714	2,173	2,243	2,008	471	165
19.	Vitolia	1		1		1		
	Unspecified	9,733	5,344	4,389	2,688	3,164	2,656	1,225

TABLE No. 7
WARDWISE SCHEDULED CASTES, SCHEDULED TRIBES POPULATION IN GREATER BOMBAY, 1971

Ward	Schedu	led Castes	Scheduled Tribes		
	Males	Females	Males	Females	
Greater Bombay Municipal Corporation	115,343	95,154	16,551	13,465	
Ward A	3,712	2,590	200	110	
Ward B	3,443	2,904	166	129	
Ward C	1,807	1,381	136	70	
Ward D	6,472	5,652	223	133	
Ward E	11,162	9,950	540	341	
Ward F	13,769	10,662	896	779	
Ward G	35,903	29,871	997	592	
Ward H	7,734	6,344	418	320	
Ward K	5,941	4,678	3,633	3,156	
Ward P	3,281	2,669	2,289	1,984	
Ward R	2,293	1,829	3,289	2,858	
WardL	5,395	4,617	430	253	
Ward M	6,469	5,426	379	300	
Ward N	6,535	5,404	1,485	1,086	
Ward T	1,427	1,175	1,470	1,254	

Source.—Census of India, 1971.

TABLE No. 8
DISTRIBUTION OF LANGUAGES (INCLUSIVE OF MOTHER TONGUES GROUPED UNDER EACH)
SPECIFIED IN SCHEDULE VIII TO THE CONSTITUTION OF INDIA, GREATER BOMBAY, 1971

Languages	Number				
	Persons	Males	Females		
(1) Assamese	260	179	81		
(2) Bengali	22,867	14,212	8,655		
(3) Gujarati	10,53,418	5,62,266	4,91,152		
(4) Hindi	5,96,959	4,31,927	1,65,032		
(5) Kannada	1,25,925	74,336	51,589		
(6) Kashmiri	905	592	313		
(7) Malyalam	1,26,374	83,976	42,398		
(8) Marathi	25,07,478	14,36,692	10,70,786		
(9) Oriya	3,501	2,530	971		
(10) Punjabi	88,802	49,653	39,149		
(11) Sanskrit	44	35	9		
(12) Sindhi	1,55,468	78,701	76,767		
(13) Tamil	1,56,628	90,596	66,032		
(14) Telugu	1,28,798	75,867	52,931		
(15) Urdu	6,47,976	3,85,905	2,62,071		

Source.—Social and Cultural Tables, Part II-C (ii) Series, 11, Census of India, 1971.

HINDUISM

Hinduism as it is expressed through the religious practices of the people in Greater Bombay shows various phases of religious thought. In the upper strata of the Hindus, there are the followers of the Vedic observances who call themselves Apastambas and Rigvedis among the Brahmans who have come to Bombay in pursuit of jobs or business from the various districts of Maharashtra. These are generally smartas i.e. followers of Shankaracharya, the apostle of the doctrine that the soul and the universe are one—the Advaita doctrine. There are also the Bhagavatas, followers of the Bhagavata Purana who hold the doctrine that the soul and the universe are distinct. There are some Yajurvedi Brahmans also who follow the Madhyandin branch of Yajurveda. Other higher caste Hindus like the Pathare and Kayastha Prabhu, Sonars or Daivadnya Brahmans and the Chowkalshis and Panchkalshis follow one or other of these Brahman castes. Brahmans from Gujarat and Marwad also belong to some branch of the Rigveda, Yajurveda or Atharwaveda. Hindus and especially Brahmans who have come to Bombay from Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, U. P. Punjab or Bengal are also Advaitis or Dvaitis according to family tradition, and profess to belong to some branch of some Veda or other. But in the case of all it is apocryphal because almost nobody knows anything about the Vedas or the philosophies.

LINGAYATS

A section of the Hindu population belong to the Lingayata sect and they have mostly come from Karnataka. The group is not racial but sectarian. It was the essence of the original faith that any one might embrace it and become a Lingayata. The sect was founded in the twelfth century by Basava, a resident of Kalyan in Karnataka. A Lingayata is required to wear on his body a small silver box containing a stone, phallus, which is a symbol of his faith and the loss of which is equivalent to spiritual death. The emblem is worn by both sexes. Of the Brahmanic trinity— Brahma, Vishnu and Shiva, they acknowledge

only Shiva, whose emblem, the linga, they bear on person. As a doctrine of their sectarian faith, the Lingayatas are not to observe any caste distinction, all wearers of the linga being proclaimed in the eyes of God. This was a vital departure from the doctrine of orthodox Hinduism which recognises the Varnas in practice. The belief in rebirth and consequently the doctrine of Karma was also given up by the Lingayatas. Other important innovations were: prohibition of child marriage; removal of the restrictions on widows marrying again; burial instead of cremation of the dead and abolition of the chief Hindu rites for the removal of ceremonial impurity. It has been asserted that the true test of a Lingayata is the right to receive the full ashtavarna which consists of eight rites known as: (1) Guru, (2) Linga, (3) Vibhuti, (4) Rudraksha, (5) Mantra, (6) Jangam, (7) Tirtha and (8) Prasada. As a result of their doctrinal faith, we see that Lingayatas, both men and women mark their brows with sacred ashes and carry linga. They neither eat flesh nor drink liquor. They do not allow strangers to see their food or the sun to shine over their drinking water. They are very careful to see that no scraps of meal are left unclean. They have no images in their houses. If they pass by any Hindu temple, they bow to the image believing it to be Mahadeo. In the same way, they bow before a mosque or a church believing that every object of worship is Shiva. They profess not to believe in sorcery, witchcraft, soothsaying or consulting oracles. Their religious ceremonies are conducted by Jangams, their priests.

JAINS

The Jains in Greater Bombay have two main sections, the Jains hailing from Gujarat and those hailing from Maharashtra. They do not eat together or intermarry but of late they have started doing so. They take their name from being followers of the 24 Jains (Conquerors), the last two of whom were Parasnath and Mahavira. Parasnath is said to have worn only one garment while Mahavira who confined himself to severe austerities went robeless and had no vessel but his hands. The followers of Parasnath are called *Shwetambaris* (white-robed sect) and those of Mahavira are called *Digambaris* (sky-clad sect).

The Jains reject the Vedas which they pronounce to be apocryphal and corrupt and they oppose their own scriptures as *angas* to them. Great importance is attached to pilgrimages and the Chaturmas (four months of the year) which are given to fasting, reading of the sacred books and meditation. They attach no religious importance to caste, admit no creator and have two classes; Yatis (ascetics) and Shravakas (hearers). According to them, the world is eterral and they deny that anything can have been always perfect. The Jin became perfect but he was not perfect at first. They worship under different names twenty-four lords, each with his sign and his attendant goddess or Shasanadevi. Jains are strict vegetarians, do not use animal food on pain of loss of caste. Every Jain filters the water he uses in drinking or cooking for fear of killing insect life. He also takes his food before sunset, so that he may not destroy any animal life unawares by eating in the dark. Jains in Bombay traditionally pay respect to other Hindu gods, besides their own. *Ahimsa paramo dharmah* is their slogan.

RELIGIOUS PRACTICES (HINDUS)

Whatever their philosophical beliefs may be, all Hindus, in practice are idol-worshippers and adorers of various deities, personification of natural phenomena. This is true of Hindus in Greater Bombay also. In the religious practices of the higher class Hindus, Devayajnya is replaced by *Devapuja i.e.* sacrificial observances by daily worship. The former are now-a-days reserved for special occasions of the various *samskaras* (sacraments). Images of various deities are worshipped daily at home and in temples and on special festive occasions.

In the house of a devout Hindu will be found a godroom or a specially assigned nitch in the wall in which is kept a *devhara* (a handy shrine made of wood or metal) or a *chouranga* (wooden stool) to accommodate the house gods. These are small images of gold, silver, brass, copper and stone usually of Ganapati, Mahadeo, Vishnu, Durga, Surya as also a conch and a small bell. An elaborate and complete form *of devapuja* (image-worship) as prescribed by various religious digests on the subject usually consists of sixteen *upacharas* (ways of service). They are *avahana* (invocation), *asana*, *padya*, *arghya*, *achamana*, *snana*, *vastra*, *yajnopavita*, *anulepana*, *pushpa*, *dhoopa* and *naivedya*. These are the acts of making various offerings such as a seat, water to wash the feet, oblations, water to drink, bath, clothing, sacred thread, anointment, flowers, incense and food. This is followed by a *namaskara* (bow), *pradakshina* (going round from left to right) as a mark of respect, and *visarjana* ceremonial emersion of the deity.

In observing the *upacharas* the worshipper has to follow a number of. intricate rules. For instance, he must not sit on a seat of mode of bamboo or stone or on bare ground, but he should sit on a woollen blanket or silken garment or deerskin. The bathing of images is done with milk, curds, clarified butter, honey and sugar (i.e. *panchamritd*) in the prescribed order, followed by pure water. The water used in bathing the images of gods is regarded as very sacred and it is used for sipping (*achamana*) by the worshipper and members of his family and friends. It is called *tirtha* in a dignified manner. It may also be sprinkled on the worshipper's head. The flowers to be used for worshipping the images differ according to the deity. Vishnu is pleased by an offering of jasmine flowers, basil leaves, while *arka* flowers and *bilva* leaves are liked by Shiva. Ganapati likes red flowers and so on. The flowers offered on a day are removed the next day by a worshipper when he is about to go through the performance next day. Such flowers are called *nirmalya* and great merit is attached to placing such flowers on one's head by way of homage to the deity worshipped. Only the flowers offered to Shiva are not to be used in this way, according to tradition. Lamps are to be fed by ghee or *til* oil. Camphor is burnt before the images. For *naivedya* nothing must be offered that is declared unfit for eating in the *shastras*.

Ganapatipujana: This consists of inviting the presence of the elephant headed god, Ganapati on an areca-nut placed in a handful of rice in a leaf cup or a metal cup and offering worship to the deity. This symbolic worship is observed at the inception of any auspicious religious act with a prayer to the deity to ward off obstacles. All over Greater Bombay, there are a number of temples dedicated to Ganapati, but perhaps most prominent and crowded are those of Siddhivinayaka at Prabhadevi, and the Ganesh temple at Pfaadke Wadi, Vithalbhai Patel Road in Gii gaum. In Maharashtra, eight temples of Ganesh and the one

at Pule in Ratnagiri district are well-known where pilgrimages are frequently held. The eight temples are at Morgaon near Jejuri, Siddhatek about 30 miles from Daund, Madh about four miles from Khopoli, Pali in Raigad district, Theur about 12 miles from Pune, Lenyadri about three miles from Junnar, Ranjangaon, 30 miles from Pune and Ozar near Narayangaon in Pune district. Many of the Hindus in Bombay visit the eight temples of Ganapati. The shrines in these temples are believed to be self-born (swayambhu) and are called ashtavinayakas. Hundreds and thousands of Bombayites frequently pay their respects to the Siddhivinayaka Mahaganapati temple at Titwala, 38 miles from Bombay V.T.

Rama and Krishna: Temples dedicated to the 7th and 8th incarnations of Vishnu, namely Rama and Krishna are numerous. The Rama temple generally has three idols, *viz.* those of Rama, Lafohmana and Seeta and that of Maruti in front as the fourth. Krishna's temples are generally those of Lakshmi-Narayan, Vithoba-Rakhumai or Muralidhara. Viththal temples are quite numerous the chief among them being at Wadala, Shiva temples are also many. Worship of Dattatreya *i.e.* the Hindu trinity is not rare. Reading of *Gurucharitra i.e.* the story of Datta and observance of Thursday as a fasting day in his honour is followed as a cult. Datta temples are particularly believed to have special powers of searing or exorcising spirits and ghosts.

Congregational Prayers: Occasions for Hindus to meet in religious gathering and offer congregational prayers occur many times in a year. The ten-day celebration of Ganesh festival is one such. It is celebrated with great pomp, fan-fare and festivities. The public celebrations at Lalbaug, Parel, Dadar and Girgaum are on a grand scale. The anniversaries of different deities, religious fairs, sacred days like Ekadashi and Shivaratri, holidays like Vijaya Dashami and Makar Samkrant are such occasions. For women who are Suvasinis the worship of Mangalagauri and Mahalakshmi, Haladikunku ceremonies are special occasions to meet in religious gatherings. The *Satyanarayan puja* has of late, become a popular form of congregational worship. It is in its origin a thanksgiving service held in honour of Satyanaiayana in fulfilment of a vow made by the worshipper. But it is celebrated on a community scale by pub;ic contributions also. People gather together to receive *tirtha prasad* and join in singing *bhajans*.

Purana, Katha Pravachana and Kirtana: The religious minded Hindu, particularly when he has taken the *saguna* devotion (idolatry) attaches great religious merit to the uttering and hearing of God's name or of his favourite deity and attending different kinds of religious expositions known as *purana*, *kirtana*, *katha* and *pravachana* delivered by professionals. These are specially trained people.

Puranik: The readers and reciters of sacred books are known as Puraniks. They read the *Ramayana*, the *Mahabharata* and the *Bhagavata* in Sanskrit and expound it in the regional languages. They are sometimes engaged by a temple management or a rich person. At times, a Puranik is engaged by some one who has made a vow to certain holy books or it may happen that a *puranik* voluntarily offers to read and expound trusting that the listeners will remunerate him for his service. These readings take place either in the morning or in the afternoon or at night from eight o'clock to about midnight.

Before the reading begins, one of the chief listeners worships the Puranik, rubbing his brow with sandal-dust, throwing flowers over his head and flower garland around his neck and offering him some fruit or sweetmeats. Other listeners pay what they can in money or grain either before or after the reading. When the Puranik has been worshipped, he begins to read at times illustrating the verses by interesting, humorous or coarse tales to suit the taste of his audience. The Puraniks are often good rhymesters. They often enliven the mythological tales by applying them to local incidents and by humorous touches cause much merriment among his audience. A course of reading generally lasts from a fortnight to four months. During this period, the Puranikis asked to dine or is presented with uncooked food by different listeners on different days. When the course of reading is over some of the chief listeners join in giving the Puranik a substantial dinner, a head-dress, some clothes and money.

Pravachanas: The *pravachanas* are learned religious discourses delivered by *shastris*, well-versed in the knowledge of Hindu scriptures. A *pravachankar* need not be a professional lecturer or puranik. His topic for discourse may be a highly metaphysical one, and as such may interest only a learned audience. Because of its religious nature, a *pravachana* is usually delivered at a temple, the lecturer sitting on a low stool and there is no musical accompaniment.

Kirtana: A *Kirtana* is a musical discourse in which God and religion are described and expounded in prose and poetry. A *Kirtankar* is also known as Haridas or Haradas, a devotee of Vishnu or Shiva. Of the nine forms of *Bhakti* (devotion), *Kirtana* is one, and the objective of a *Kirtankar* is to express his devotion to God, sing his praise and at the same time lead his hearers to the path of faith, devotion and moral living.

Narada is the mythological personage who was a great *kirtankar* and who taught Dhruva and Pralhada this art. In Maharashtra, the tradition of *kirtana* is very old. Dnyaneshwar, Namadev and Bhanudas were the great early *kirtankars*. Ramadas and his disciples also performed *kirtan* but after Namadev, the credit of wide dissemination of the art of *kirtan* goes to the great Marathi Saint Tukaram.

Two schools of *Kirtana* are generally followed at present, the Narada and the Varkari. In the Narada type of *kirtana*, the preacher chooses as his text a Sanskrit verse from the sacred books or a song of a poet saint, makes out a philosophical theme of it in the *purvaranga* or first part and follows it up in the *uttararanga* or second part, expounding the principle by an illustration, usually a story. In the Varkari type of *kirtana*, the distinction of *purvaranga* and *uttararanga* is not observed. There is no continuous story. The preacher quotes themes by way of reciting *abhanga* rhymes and songs of famous poet-saints, one after another and immediately expounds them with illustrations and commentary. Off and on he pauses and starts a *bhajan* in which his accompanists and even the audience join. A *kirtan* is usually performed in a temple, or other places of worship. When a few people have gathered, the preacher stands up holding in his hands a *chipli* (cymbal) and a *vina* (lute). He is accompanied by *tabla* or *mridanga* (drum) and harmonium players and one or two of his disciples who play the accompanists, pick up the refrain and follow up his singing. When the *purvaranga* is over, the preacher who rests awhile is garlanded, *abir*-

bucca (scented powders) are applied to his forehead and his disciples sing a song or two. For the general audience the real inetrest in the kirtana mounts up in the uttararanga (second part) wherein the preacher shows his skill in keeping his audience interested and alert, bringing in a story about some local event, and he is not afraid of cutting jokes and invoking laughter so long as it helps to prevent mental drowsiness in the audience with short breaks of music. A kirtana lasts for two to three hours, at the end of which the preacher cleverly connects the purvaranga with the uttararanga. Quite often the Haridas is well-versed in Hindustani and Karnatak music and among his audience, people are not wanting who are more interested in his musical performance. At the close of the kirtana, most of the audience embrace the preacher, touch his feet and pay iheir contributions by placing coins in the arati (a tray with burning camphor). Some modern kirtankars among whom are to be found a number of women also follow current events with intelligence and in the course of their discourses allude to them in their comments on the verses from religious and devotional woiks. They often select a story from recent history for the uttararanga. The Haridas preachers have undoubtedly contributed to much mass education and cultural uplift of the masses.

VARKARI CULT

The Varkari Sampradaya (Cult) is a socio-religious movement of a standing of centuries, and derives its title from the two words Vari and Kari, meaning, a visit to, and, who undertakes it, respectively. A Varkari has to commit himself to the vow to visit every year the sacred city of Pandharpur in Sholapur district on the Ekadashis in the bright halves of Ashadha and Kartika. He has also to visit the temple of Alandi near Pune on the Ekadashis of the dark halves of these two months.

The cult adopts and preaches the principle of universal brotherhood and yet it keeps within the bounds of Vedic religion. Saints from all sections of the Hindu social hierarchy are known to have been staunch followers and great preachers of the cult which now pervades the whole of Western Maharashtra, Vidarbha, Marathwada and parts of Karnataka too. When exactly the cult came into existence and who was its first sponsor, it is difficult to determine. It will perhaps be more correct to say that it has evolved itself as a devotional movement. The deity that is universally worshipped by the *Varkaris* is Vithoba or Viththal of Pandharpur. Even the Shankaracharya has composed Sanskrit verses to pay homage to the deity. The known tradition of the sect runs through Vitbthalpant (father of Dnyaneshwar), Namadev, Bhanudas, Eknathr Tukaram, Chokhamela, Janabai and Narhari Sonar, all saints of great reputation for piety and devotion. They made it a mission of their lives to inculcate the importance *oibhakti* in the minds of the masses through the vehicle of *kirtana* and *kathas* (religious discourses). After Tukaram, the prestige of the cult is being maintained by the Varkari saints who belong to one of the two persuasions known as Vaskars and Dehukars.

To get himself initiated in this sect, the intending Varkari approaches another experienced Varkari of his choice and puts before him a copy of the Dnyaneshwari (Dnyaneshwari's commentary on the Bhagawadgeeta) and places on it a rosary (string of 108 beads made of dry wood of the tulasi plant) and worships them. The guru, the selected Varkari, administers the oath and the vows which the intending Varkari accepts as binding on him. Then the Guru has to pick up the rosary and put it on his neck while the other assembled Varkaris pronounce Pundalika Varade Hari Viththal No fees are paid to the guru for this; only sweets 'are distributed to all by the new entrant in the cult, which conjoins very stringent vows which are to be practised by every Varkari. He must observe satya (truthfulness), ahimsa (harmlessness), chastity and perfect temperance. A Varkari has to bear on his body twelve mudras (sacred marks) in gopichandana (white earth) and carry with him when on pilgrimage a pataka, flag of light scarlet colour and a pair of cymbals. He must daily woxship the tulasi plant and recite the hymns known as Haripatha. He has to be perfectly tolerant respecting other's deities and actions also.

The Prarthana Samaj in Bombay found much to appreciate and follow in the Varkari cult which the leaders of the Samaj called Bhagkwat Dharma. Men like Ranade, Bhandarkar and Chandavarkar always selected some text from Tukaram, Eknath or Namadev for their Sunday sermons and prayers at the Prarthana Samaj Mandirs in Pune and Bombay.

ANIMISTIC BELIEFS AND SUPERSTITIONS

In the scheme of life of a modern, educated Hindu rites and rituals have no place, unless current law makes it obligatory. Generally speaking he is a God fearing, benevolently inclined human being, tolerant and patient. There are others who are sceptics and even atheists, but that is true only so far as their intellectual leanings are concerned. In practice all are alike. The teachings of Theosophy under the leadership and influence of the late Dr. Mrs. Annie Besant made many Hindus, Gujaratis and Marathas, and even Parsees a tolerant set of people, respecting all religions, their founders and saintly persons from anywhere. The general mass of people is tradition-bound. But in spite of all this, strangely enough, the religious faith of the working class population that has gathered in Bombay in search of jobs from every nook and corner of the country, is a curious mixture of animism and tenets of Hinduism. They follow the Hindu law of inheritance and call themselves Hindus. They will not be able to say whether they are smartas or Bhagawatas. They worship in all temples but their chief objects of blind faith will be Bhairav, Biroba, Jakhai, Janai, Jokhai, Kalkai, Khandoba, Vetal, Mhasoba, Satvai, Vaghoba and such others. They have brought faith in these demi-gods from their native places and it persists.

Even among the so-called high caste or high class Hindus belief in incantations, witchcraft, ghosts, evil spirits, oracles and the evil eye is not altogether absent. If a person is seized with uncommon sickness or suffers from some unexpected calamity it is customary to trace the occurrence to natural causes, displeasure of gods, witchcraft or the evil eye or even an evil spirit. To find out the cause several experiments are made. A flower is stuck to the breast of an idol and its fall on one side or the other determines the cause of the misfortune, if the cause is the evil eye, the mother of the sick child throws salt and red chillis into the fire muttering drishta mishta aligelichi, Bhut-khet papichandalachi. The evil eye is very much fear ad by women Belief in ghosts is also shared by many even in a city like Bombay,

where there are few big trees for the ghosts to reside. Male ghosts are called *Khavisas* or *jhotingas*. The female ghosts are called *jakhins* or *hadals*. Some of these are believed to make their homes in watei and they carry away handsome youths by drowning them while enjoying a swim. There are distinct names for the ghosts of Brahmans, Musalmans and out-castes. A ghost wanders and attacks a living person either because, he was murdered or ill treated or because he hankers after a house, a wife or a treasure. Ghosts are said to live in large trees, lonely places, empty houses, and old wells. They are generally seen or heard at midnight. They take any shape at will. If a person sleeps under a haunted tree or even a branch thereof or defiles the ghost's ruin or old well the person is believed to be seized. The ghosts of the murdered persons are chiefly dangerous to those who murdered them. The ghost takes possession of the culprit, maddens him, destroys his sleep, kills his family and makes him miserable in every way. Many people make a living by appeasing or exorcising these angry spirits. They have their peculiar technique and art and some people do have faith in all this. Such people are not rare in Grreater Bombay and all this is part of their religion and god-fearing nature.

MUSLIMS

Muslims form a fair proportion of the population of Greater Bombay as the Census figures of 1971 amply show. They believe in only one God and one Prophet Mohamed and their only religious book is the *Koran*. Known as followers of Islam in a general way, in practice, there are number of distinctions made between Muslims and Muslims according as the original territory they come from and the language they speak at home. A number of group appellations signifying community of origin, social status and occupational traditions are current among the people and they are used as surnames. There are about fifty trades, callings and professions which they have followed in times gone by and follow even now. Generally the groups among Muslims are classified as (1) Sayyids, (2) Shaikhs, (3) Mughals and (4) Pathans.

These groups follow various professions and have formed a kind of community of their own such as *Attars* (perfumers), *Manyars* (bracelet-sellers), *Tambats* or *Misgars* (utensils makers), *Barudgars* (fireworksmakers), *Kalaigars* (tin-smiths), *Patvegars* (silk tasset-twisters), *Shikalgars* (armourers). Most of these groups are Sunni Muslims of the Hanafi school and religious minded. They generally marry among themselves or with any of the regular Muslim communities and do not follow Un-Islamic customs. Besides these, there are Memons, Bohras and Khojas who have originally come from Cutch-Kathiawad and others from Gujarat districts. They are Shias and each one of them have their community organisations and social codes of conduct. There are also the Tambolis who usually trade in betel-leaves and keep panshops. These groups too generally marry among themselves though there is no impediment of a religious character for mixed marriages.

Food: What the Muslims in Greater Bombay eat differs according to their means and native customs. Rich and well-to-do Memons, Bohras, Khojas and others usually take tea or coffee in the morning with bread and butter and eggs. They have generally two meals a day; lunch at about 12 noon or 1 p.m. and dinner at about 8 p.m. or 9 p.m. They also take tea at about 4 or 5 in the afternoon. They are usually engaged in trade and business and most of them are shopkeepers. Their staple food is wheat, rice and pulses eaten with fish or mutton and occasionally fowl. In the case of poor people, dry fish is a substitute for fresh fish and mutton. For an occasion like the Bakri-Id festival, almost every Muslim manages to procure mutton. Bombay Muslims prefer mutton to beef and pork is of course prohibited on religious ground. When public dinners are held on weddings or other festive occasions, biryani constitutes as a delicacy. It is a dish of rice, mutton, saffron, ghee and spices. Another dish is zarda which is sweet and made of rice, sugar, saffron, almonds, pistachio, nuts and ghee. This is the same as the sakharbhat or kesharibhat of the Hindus. Poorer sections of the Muslims will hold public dinners when khushk halva and pulav will be served. Pulav is made of rice, ghee and mutton. Such dinners are given on occasions of birth, circumcision, initiation, marriages and also on the fortieth day of a death. Men and women do not dine together. Women are served after the men have finished. In the dining hall mats and carpets are spread for guests and on the carpets large sheets of cloth called dastavkhwans are spread in order that the carpets may not be spoiled. At dinner the guests sit in two rows facing each other. A man with an aftaba (water jug) and a chilamdri (basin) comes in and beginning with most aged, most respectable or most learned man pours water over the hand of the guests. The seating arrangements in public dinners are generally without any distinction of caste or creed or status. Several young friends of the host stand between the rows of guests and pass the dishes. When all dishes are served, the host says Bismillah i.e., 'Please begin in the name of Allah' and the guests begin to eat, a group of more than two eating from the same dish. While they dine, a boy or two stand with water pots or glasses ready for serving water to any one who wants it. When the dinner is over the dastavkhwans are neatly rolled and removed and water is poured on the hands of each guest and a tray of pansupari (betel-leaves and other accompaniments or readymade eatable pan) is passed around. The women take their dinner in the same way as men but wait for sometime after the dinner is over. Muslims of higher status and those who have come under the influence of western customs and manners dine at tables and sit on chairs for that purpose. They eat also from separate dishes. Fruits, sweets and some western dishes are also served. Wines and liquors are not altogether absent, but since the Koran has condemned intoxicating beverages, they are generally not served, at least publicly. But at small parties where only intimate friends are invited, service of wines is not uncommon. Tobacco is smoked by many, some chew it also. Snuff too is not quite uncommon.

Dress : Bombay Muslims are generally well-dressed, the turban, the fez, the Kashmiri cap or a head-scarf will necessarily be found on the head of a Muslim, but among the younger poeple now-a-days, the head-wear is disappearing. But till lately, a shirt, a waist-coat and a *sherwani* in different styles used to cover the body of every Muslim when he was outdoors. The transformation of fashions in dress, from the Moghul and the Persian patterns to the Western styles is almost complete in the younger generation. However, some of the older patterns still persist. At the time of prayer, a Muslim may wear a *lungi* (loin-cloth) reaching down to the ankles and a long shirt. The *sherwani* and *pyjama*, a pair of loose trousers and *Salwar* (loose trousers worn by Punjabis and Peshawaris) have an imprint of traditional wear. *Chunidar pyjamas*, tight fitting trousers in the Uttar Pradesh style are also worn by some. Headgears known as *safa* or *pheta* are worn on ceremonial occasions. The *sapha* of the Bohras and Cutchis and

Khojas, has a gold embroidery running on one side of the cloth and is exhibited at every round. A skullcap and a made-up turban is also worn by them. Among Muslim women, there are those who use *pyjama* and shirt and others who wear saris and blouses. Muslim women generally cover their head with one end of the sari and wear a veil called *burqua* whenever they go out in public. Blouses are more in vogue than *cholis*. The Memon and Bohra women wear long *pairhans* and *izars* (trousers) and *odhani* (a loose and thin cloth particularly covering the head and falling on the shoulders up to the waist). The material used for these is expensive and often silk with silver embroidery is used. Almost all Muslim brides receive ornaments and clothing at the time of their marriage. The rich give to their daughters, ornaments of gold and precious stones which consist of earrings, bangles, necklaces, bracelets and rings. These ornaments are of modern designs and are made to order or purchased readymade. The poor Muslims give silver ornaments which often consist of *todas* closely united chain ornaments worn on the ankles, *pazeb*, another ornament work round the ankles and *jahanj*, large silver rings loosely worn below the ankles. Sometimes, *thusi*, a necklace of gold, is given as a mark of better social status. Men usually do not wear any ornaments except marriage or engagement ring of gold or silver.

Birth: After the birth of a male or female child, the father or any male Muslim present there, recites the azam, the prayer call in Arabic, in the ears of the child, the idea being that the first sound that should enter the child's ears must be that of prayer to Allah. For the first three days, the child is given honey and the mother is given wheat gruel prepared in pure ghee. On the sixth day called chhatti the mother and the child are given a full bath, dressed in clean clothes, a dinner as a mark of thanksgiving is also given and alms distributed. The name of the child is also declared on the sixth day. Usually, the name is given on the very first day to the newly born. For forty days, the mother abstains from regular daily prayers, but after forty days, she starts her usual routine after a bath with water in which neem tree leaves are put. Most Muslims teach their children the Koran before the age of ten either by engaging a tutor at home or sending them to a nearby mosque, where the old institution of maqtab, school, exists. There are a number of such magtabs in Greater Bombay which are maintained from the collection of contributions from the Muslims. Sometimes, the kalmas, five fundamental teachings of Islam are taught at home by the parents themselves. All Muslims are careful about circumcising their male children before they are seven or eight years old. They also perform the Bismillah ceremony at the age of five in which the eldest member of the family or the learned among those present makes the child, male or female, recite certain verses from the Koran, generally the first five believed to have been revealed to Prophet Muhammad and after this ceremony either sweets are distributed or a public dinner is given. Poor Muslims distribute only dates on this occasion. This ceremony is supposed to mark the beginning of the educational career of a child, very much akin to the *vratabandha* or thread ceremony of the Hindus.

Marraige: Muslims have no objection to marriage between cousin both parallel and cross, the marriage between first cousins being preferred, but a sister's daughter is under the incest taboo. Polygamy and widow marriages are quite current, though not on a large scale. A widow can marry her deceased husband's brother or relative and similarly a widower women can marry his deceased wife's sister or relative. There is no objection to divorce though it is regarded as a necessary evil and it is resorted to as a last recourse. The offer of a marriage usually comes from the bridegrooms parent. Any courtship before marriage is totally unknown among Muslims, though sometimes a casual view of the bride from a distance may be connived at. Two male witnesses must bear testimony to the celebration of the marriage. The testimony is considered essential. These witnesses directly approach the bride and after repeating the name of the bridegroom and his age ask her whether she is willing to accept him in marriage or not. After hearing personally what the bride has to say, they declare her intention to the public and the marriage is then registered in a special marriage register or the marriage sermon is recited. It is called khutba-e-nikka. The bride's father or vali, the lawful guardian gives away the bride to the bridegroom in marriage. After the marriage ceremony is over, the father-in-law and son-in-law embrace each other and dates or sweets are distributed with cold sweet drinks. A musical entertainment by quawwals (a band of male singers who generally recite verses in Urdu) generally follows. Immediately after the bridegroom leads the bride to his home, the jalwa ceremony is performed. This ceremony acquaints them with each other. They are made to see each other's face in the mirror or to read the Koran together the next day, a dinner is given to the public or near relatives by the bride's father. The custom of inviting friends and relatives for the first five Fridays after marriage still prevails, although there is no religious compulsion in this matter. Muslims do not observe any special ceremony when the girl attains puberty. But at the end of the seventh month of pregnancy, the couple is made to sit together and women-folk sing songs and make merry for a few hours.

Death: When a Muslim is about to breath his last, the Sura-e-Yasin from the Koran is recited in a low voice near the dying man. Kalma or the religious formula, La-ilah-il lallah, Muhammad ur-Rasul- illah is repeated so that the dying man may also repeat it. Drops of honey or water are dropped in his mouth. As soon as life is extinct, the eyes and the mouth are carefully closed and arrangements for the funeral are made without delay. As a rule the burial is not unnecessarily put off. The body of a male is bathed by males and that of a female by females and kafan i.e. an unstitched garment consisting of kafni and a loin cloth is put on the dead body. In the case of a woman, an odhani (scarf) is added to the kafan. Camphor, rose or sandal scent is sprinkled over the kafan. The body is then placed on a bier called janaza (a cot-like wooden structure), always kept in every mosque in the city. The mother generally says, " I withdraw all the claims upon you as a nurse " and if desired the wife and others also withdraw their claims. Then amidst the waiting of the , the janaza is taken on the shoulders of the men who repeat the kalma as they walk and change their shoulders until they reach a mosque where the last prayers on the dead body are offered by keeping the janaza in front, all standing without prostrating. If the body is carried directly to the graveyard the last prayers are offered in the open near the graveyard. At the burial ground the grave is dug and kept ready before the body arrives. The grave is dug in north-south direction and the head is tilted a little to the west so as to face Mecca. After the grave is closed, the learned among the present usually the pesh imam recites portions from the Koran and all present pray for the peace of the soul of the dead person. A pesh imam is a learned man appointed in the mosque to lead the prayers. He is paid out of public contributions. Generally, if the graveyard is not far from the house of the deceased, the mourners come back and console the family members of the deceased and offer departing prayers by reciting portions of the Koran and withdraw. Although not religiously prescribed, a custom of ziyarat on the third day after the death takes place in which relatives and friends sit at home or in a mosque and read the *Koran*. After the recitation, an offering of flowers and scent is carried to the grave. The custom of observing the tenth and fortieth day by giving a dinner to the relatives, friends and the poor is fast getting out of vogue. Once in a year, on a particular day, the Muslims offer prayers, distribute alms to the poor and feed the orphans in the name of the dead person. They also visit the graveyard on that day. No distinction is made between one Muslim and another either in the mosque or at the burial ground. The recitation of prayers at marriage and funeral ceremonies is conducted by any Muslim without any kind of distinction of caste, creed or status. But, often the *pesh imam*, conducts the ceremonies. Where *kazis* are available, they conduct the marriage ceremonies. Very few people attend the mosque five times a day, but most Muslims attend the Friday prayers as well as Ramzan and Bakri-Id prayers. The institutions of state *Kazis*, *Khatibs* i.e. sermon deliverers, and *Pirzadas* i.e. keepers of shrines are fast dying out.

CHRISTIANS

Christians in Greater Bombay include mainly the East Indians *i.e.*, descendants of the converted Hindus and Muslims from Salsette and Vasai. Bombay, Bandra, Kurla, Thane and Vasai were once Portuguese possessions and during that rule, many embraced Christianity either willingly or because they were forced to do so on one pretext or another by their Portuguese overlords. Their ranks have also been reinforced by immigrants from Goa. Thus together they constitute the Roman Catholic Christian community and owe allegiance to the Pope in the Vatican. Among the Christians are also a considerable number of Protestants who are comparatively recent converts and yielded to the blandishments of Protestant missionaries of various schools and cults under the British regime. Christians also include a number of Anglo-Indians and Eurasians.

Indian Christians in Greater Bombay are a considerably educated and cultured community following the liberal professions as well as other callings which are humble enough like cooks, tailors, carpenters, nurses, etc. But they also boast of a number of eminent lawyers, physicians and surgeons, engineers, highly placed Government servants, teachers in schools and colleges and priests. They are also musicians, but very few among them may be in business. The Christians have a happy blend of oriental and occidental culture, with perhaps a greater leaning towards the west. The men generally dress after the western style. The women of higher and lower classes stick to the sari in various styles. Their food is cooked in the Indian way, *i.e.*, highly spiced rice forming the staple cereal. The better off follow western table manners and have similarly adopted many forms of western social life.

The Catholics have their religious rites and ceremonies regulated by the canon and liturgical laws of Roman Catholics all the world over. But for actual government administration, they are under the jurisdiction of the Patriarch of Goa who appoints their pastors. They have a number of Churches all over Greater Bombay. The sermons and non-liturgical services are mostly in Marathi and Konkani. The Protestant Christians also are mainly descendants of the converts from Ahmadnagar district and conform to many of their traditional ways and practices of Hindu origin. Thus they have retained their Hindu names and surnames and dress as also their ancestral language *viz.*, Marathi. They have among them many highly educated and well placed people, but the poorer are employed as ordinary labourers or artisans and are scarcely distinguishable from their Hindu counterparts. A middle class is however rising up which is getting more and more westernized in every way, only the women still refuse to give up the sari.

Various Christian missions, whether Catholic or Protestant have rendered great services to the cause of education and health having run a number of schools, colleges, hospitals, orphanages, poor-houses all over Greater Bombay. They are not necessarily confined to Christians only, though some preference is shown in the matter of benefits to those who are Christians.

BENE ISRAELS

Bene Israels i.e. children of Israel, are also known as Jews, and because the ancestors of those who are now in Greater Bombay used to press oilseeds and produce oil and kept Saturday as a holiday, they were formerly called Shanwar Telis. Hardly any member of this community now follows the avocation of oilpressing. Their origin is doubtful but they came to India from Yemen or from the Persian Gulf. There is no certainty about the date of their arrival, but probably they did so about sixteen hundred years ago. They appear to have landed on the coast of Rayagad district and spread from there to various parts of India. They belong to two endogamous divisions, white and black. According to their story, the white are the descendants of the original immigrants and the black of converts or of the women of this country. The names in common use among them are Abraham, Benjamin, David, Moses, Solomon and Samuel and among the women Leah, Mariam, Rebeca, Rahel etc. The. surnames are village names marking their former settlements e.g., Divekar, Navgaonkar, Thalkar, Kihimkar, Rohekar, Ashtamkar. Ziradkar etc., all from Rayagad. They look more or less like Indians and their complexion is similar to those of natives of Maharashtra and Konkan, but quite many among them are fair especially women, their home language is corrupt Marathi. They say their prayers in Hebrew which many read fluently but few understand. They have some of their men and women in the liberal professions but most educated men and women are clerks. Others are workers.

Bene Israels worship one God and use no idols or images. They have never attempted any conversion of others. Of late many have left the country and settled in Israel. They meet for their congregation in a synagogue which is a building, surrounded by an enclosure inside, it is a square room with windows to the right and left and in front in the westwall is the arch, a cupboard like frame in which are kept the manuscripts of the laws of Moses written on parchment. The minister stands facing the arch in the centre of the synagogue saying prayers and the congregation join in, seated on benches and chairs.

Apart from the staple food usually eaten in the country, the Bene-Israels eat the flesh of animals, fowl and fish as admissible under the levitical law. The community follows a number of ritualistic observances chiefly concerned with such important life incidents as birth, circumcision, marriage and death. There are also occasions for feast. On the eighth day after the birth of a child (male) whether or not it is sabbath,

the child is circumcised by the minister or an operator in the synagogue. The wound is dressed and the child is blessed by the minister and called by a new name chosen from the Old Testament. If the child dies before it is circumcised, the operation is performed after death, but no prayers are offered. There are also ceremonies connected with cradling, purification of the mother on the fortieth day after the birth of a male child or the eightieth day after the birth of a female child shaving and ear boring.

Marriage: The offer of marriage generally comes from the boy's side. For the engagement ceremony both the parties with their guests meet by arrangement at the bride's house and rings are exchanged. The marriage is celebrated on some subsequent Sunday. Presents called basis are taken to the bride's house and exhibited before the bride and her relations. The bridegroom is taken, to the accompaniment of songs, into the synagogue and asked to stand, face ro face to the girl. The minister recites Hebrew texts and the bridegroom, standing in front of the bride, with a silver cup in his hand containing a silver ring and grape juice, looks towards the guests and says, " With your leave I perform the ceremony." The guests say, "with God's leave". The bridegroom goes on, "And with our elders leave, do I perform this ceremony." The guests say, " And for his infinite mercy." The bridegroom says, " May joy increase among the children of Israel." The guests again say, " With God's leave." The bridegroom says, " Praise be to the Lord for His goodness to us." The guests say, " And may it spread in Jerusalem." The bridegroom, after a short prayer, looks towards the girl, calls her by her name and says, " You have been betrothed and married to me by this cup whose wine you shall drink; by the silver in the cup and by all that belongs to me, I wed thee before these witnesses and priest, in accordance with the laws of Moses and of the Israelites ". He then drinks half the wine and says twice over, " By this you are being wed to me " and then bending, pours the rest of wine, not leaving a single drop in the glass, into the bride's right hand and pushing the ring over the tip of her first finger says: " See! you are married to me by this ring according to the law of Moses and the Israelites." After this is repeated three times, he takes a glass tumbler with some wine in it, and a necklace of gold, puts the rest into her mouth, dashes the glass to pieces on the floor. Sometimes, the priest reads the ketuba (written covenant). Before reading the last sentence, he takes the fringes of the four corners of the bridegroom's sisid (veil) and says thrice over, " God commands that he who marriages shall feed his wife well, clothe her and perform the duty of marriage." All these the bridegroom promises to fulfil. Then the guests invoke a blessing, and the bride and the bridegroom sign the paper which sets forth the marriage covenant in the presence of two witnesses and the minister. The bridegroom then delivers the paper to the bride saying "Take this marriage covenant, henceforth all that belongs to me is yours." The minister then blesses the husband and the wife. Next comes the aher, giving of presents. They then proceed to the bride's house. Next day, they go to the bridegroom's house. The marriage covenant is generally rigidly observed. However, in case of violation of the contract, the innocent party is allowed a divorce and the liberty of marrying again.

Death: When a male member of the Bene Israel community passes away, the nearest kinsmen weep and wail, the widow breaks her bangles and necklace of gold. The body is covered with a white sheet and the great toes are tied, together with a thread. Arrangements are made to inform relatives and friends to collect funeral material and dig a grave. Grave clothes are prepared which for a male consist of trousers, two kafni, shirts, one short and one long, a cap, a dupeta (turban) a cloth to tie the hands, a cloth for the eyes, a towel, a loin cloth, mot (sheet) and a sisid i.e. shroud. A woman is dressed in the same way as a man but with a robe or sari in addition. The body is then rubbed with soap and washed twice in warm water. While the minister stands by seven jars of water are poured over it from the head to the feet and dashed on the ground. It is then wiped dry, dressed in the newly made grave clothes, the sisid (surplice) is drawn or a handkerchief and a sabja twig are placed in the right hand and then rotted in a broad sheet and the face left partly open for the mourners to take a last look. By the time the coffin is brought and washed, a white sheet is spread inside and is set in front of the door. The minister asks the mourners to forgive the deceased any faults he might have committed. They answer, they are forgiven. Flakes of cotton wool are laid on the eye lids and a handkerchief is laid over them. The face is covered with a sheet. After the minister has recited a funeral dirge, the body is carried out of the house by four or five men and laid in the coffin. A wooden frame is dropped over the coffin and on the frame a black cloth and flower garlands and sabja leaves are spread. Headed by the priest the deceased's four nearest relations lift the coffin on their shoulders and repeating Hebrew verses, walk to the funeral ground, helped at intervals by other mourners. Entering the graveyard they place the coffin near the grave. The body is lowered into the grave with head to the east, resting on a pillow filled with earth. If any one has dust from Jerusalem, a little of it is put either in the eyes or in the shroud or the pillow case. The mourners and the funeral party stand near and repeat sacred texts, throw a handful of earth into the grave and turn away. The diggers then fill the grave and when it is full, the funeral service is recited by the hazam or the kazi, followed by kaddish by the mourners. The close relatives and friends of the deceased go to the mourner's house and partake of some food. Near the cot where the deceased breathed his last, a mat is spread, and nearby are set a lighted lamp and an earthen pot filled with cold water. The women mourners sit, sleep and dine on the mat day and night for days together, feeding the lamp and keeping it alight. The first seven days are kept strictly as days of mourning. Every morning ten religious-minded men say prayers in the house of mourning. On the morning of the seventh day, the closest relations of the deceased go to the burial ground. The minister says prayers, the mourners say kaddish and go back to their homes. At the deceased house, Ziarat ceremony is held where the jikhir, i.e. David's Psalms are recited, the food blessed by the minister is shared among men and women. At the end of the first month, in the eleventh month and at the end of the 12th month, a ziarat ceremony is held before which the mourners and their relatives and friends visit the graveyard and say prayers for the dead.

PARSEES

(For details refer R.E. Enthoven's, The Tribes and Castes of Bombay, Vol. III 1922)

As a consequence of the fall of the Persian Empire in A.D. 641 at the hands of the Arabs who gave the fireworshipping followers of Zoroaster the two alternatives, the *Koran* or the Sword, a handfull of the subjects of the Persian Empire, ardent devotees of their faith, crossed the Ormaz and went to Diu in Kathiawar in A.D. 766 and at last sailed towards the West Coast of India and landed at Sanjan, in A.D. 785

then in possession of the Jadhav Rana of Sanjan. Several ships came this way and they brought all these refugees who spread to Navsari, Billimora and other places. The Parsees of today numbering a little over a lakh in India and 1,25,000 all over the world are the descendants of these handful of refugees from Iran. During the last 1300 years this infinitesimal minority which has freely joined the mainstream of Indian nationalism has left an enormous impress on the socio-economic make up of India.

Sir James Mackintosh, Recorder of Bombay from 1804 to 1811 says, "The Parsees are a small remnant of one of the mightiest nations of the world, who flying from persecution into India were, for many ages, cast in obscurity and poverty, till at last they met a just government under which they speedily rose to be one of the most popular mercantile bodies in Asia."

Thus we see that after the advent of the British in India, the dormant qualities that lay concealed in the Parsee bosom for several generations obtained free scope. Some indications of this may be cited here. It was a Parsee, Hirjee Readymoney who was the first from India to go to China in 1756 and build up trade connection between that country and this. It was a Parsee, Lowjee Wadia who built the first dockyard in Bombay in 1750 and thus accelerated foreign trade. It was again a Parsee, Dadabhoy Nosherwanjee who first opened a cotton screw in Bombay in 1776 and thereby gave a fillip to the textile industry in Western India. The pioneering Parsees of those days first spread the trade along the Malabar coast, afterwards extended it to China and England and almost all parts of the world and have produced within the last two centuries merchant princes like the Rustomjeas and Banajees, the Jamshetjees and the Camas, the Jejeebhoys and the Petits, the Meherjees and the Patels, the Adenwalas and the Tatas, all names that have elevated the Indian people to the dignity of a commercial nation.

As years rolled on, the Parsees made themselves indispensable to the English, who ever since their arrival in India, looked upon them for support and co-operation. The responsible post of Broker to the East India Company, for instance, was enjoyed by a Parsee who rendered signal services to the beleaguered inhabitants. About a decade earlier, when the English established a mint in Bombay, they were in need of a good coiner. They at once hit upon a Parsee, Ratanji of Surat. During the Anglo-French conflict in ths beginning of the 19th century, the Government of Bombay was in great financial difficulty. A Parsee, Pestonjee Bomanjee Wadia stood by them, helped them at a most critical period and was chiefly responsible for averting a serious crisis.

How the Parsees were pioneers in the domestic and social life in Bombay may also be indicated here. The honour of introducing gas light into India falls to the lot of a Parsee, Ardesar Kharsetji Wadia who for the first time lit his Mazagaon house with gas on February 20,1834. Similarly, the first private residence in Bombay to be installed with a special electric dynamo was that of his grandson, Naorosjee Wadia in 1897. Jamshetji Tata was the first to own an automobile in Bombay in the closing years of the last century. The first cotton textile mill in Bombay was started by Cowasji Nanabhai Davar which led the way to the greatness and prosperity of the city of Bombay. Jamshetji Tata was the founder of the first hydro-electric works and the first iron and steel works. The first printing press and a journal was also started by a Parsee. There are numerous charities of a communal and cosmopolitan character which are also due to the philanthrophy and generosity of several Parsees.

In comparison to their achievements their number in the population of India is astonishingly small. They were only 100,772 (According to the Parsee Panchayat the total population of Parsees in India in 1971 was 91,266. of which Bombay had 64,667.) according to the 1961 Census. Their percentage works out at about 0.02 per cent But as an outstanding community, the Parsees have excelled all others in almost every field of human activity—commerce, industry, agriculture, horticulture, education, politics, public life, social work, scientific achievements, charities etc. They are influential far beyond their numerical importance.

The Parsees are mainly concentrated in Maharashtra and even within Maharashtra, they are mainly confined to Greater Bombay. The proportion of the Parsee population of India residing in Maharashtra is 76.95 per cent, Greater Bombay alone accounting for as much as 69.53 per cent. In the city of Pune they are a little over 3000, in Thane 1100 and in Nasik 750. The only other State having a substantial population of Parsees is Gujarat accounting for 17.58 per cent of the Parsee population of India. In Gujarat, they are mainly agriculturists. The sex ratio of Parsees in Greater Bombay is 1,034 females per 1000 males.

Parsismor Zoroastrianism was founded by Zoroaster (properly Spitaman Zaratushtra) over 2500 years ago and is practised, more or less, in its original form. Zoroaster flourished in such ancient times that sometimes, it has been suggested that he was a mythical personage. The greater part of Zoroastrian scriptures are not in existence today. A large number was destroyed when Alexander the Great invaded and conquered Persia, and the rest by Arab Mussalmans. They are called Zendavesta.

Avesta means the holy text and Zend is its commentary. The language of the scripture is called Avesta which bears an intimate relationship with Sanskrit. Mazda means God. The religion preaches reverence to all the elements, the Sun and Fire, Water, Air and Earth. Fire is kept perpetually alive in many Parsee homes even today. It is enjoined on the Parsees that they must face the Sun or fire when they pray. Their code of ethics is Humata, Hakta and Huvanstha i.e. Good thoughts, Good words and Good deeds. Amongst these kindness to man and animal, liberality and charity are enjoined. Spreading education is highly commended. Miserliness is disapproved. Charity is recommended but it should not be indiscriminate. Public charity is more commendable than private charity.

The religion is primarily a dualism in which the principle is good. Ahur Mazda and the powers of evil and darkness Angre Mainyosh, are opposed in a struggle for cosmos and man. Today the Parsees interpret this dualism in terms of monotheism whereby Ahireman becomes only a creation or a junction of Ahur Mazda. In this struggle which Ahur Mazda would eventually win, man is called upon to fight on his own option actively on the side of the good. At a time when sacrifice and magical rites governed the relationship of man to Gods, Zaratushtra proclaimed that religion has its truth in its moral significance and not in

external practices of imaginary value. Asceticism in any of its forms is inimical to life and is not allowed; injurious creatures such as vermin and snakes are to be destroyed as the embodiment of evil. The contrast to Hinduism and Buddhism is clear in these principles. Herein may be traced the roots of the standard of life and economic ethics of the Parsees which is so much at variance from the environment they live in.

Venerated as revelation is the Holy Book of *Avesta*, a collection of hymns (*Gathas, Yashts*), rituals and provisions of the law (Yasna, Vendidat) and prayers (Khorda Avesta). This canon preserved only in fragments today is attributed to Zaratushtra according to tradition. Mediaeval Iranian literature in *Pehlavi* and correspondence between Indian and Iranian Parsees are of religious and historical interest.

Every child between the ages of seven and eleven must be invested with the *Kusti and Sadra*, visible symbols of the followers of Zoroaster. This is the *Navjot* sacrament. The *Kusti* is a sacred thread gird round the waist. *Sadra* is a shirt of white linen which must always be worn next to the skin. They are worn by both males and females. Use of coconut, vermilion mark on the forehead are borrowed from Hindus. The *Kusti* is a symbol of innocence. It is made from the wool of a sheep. Seventy-two threads are grouped into six parts. The coming of a child is enthusiastically welcomed in every Parsee family. In the seventh month of pregnancy, the pregnant girl receives a new dress from her mother-in-law and the *agharni* ceremony is held. Later she receives a similar new dress from her mother. Full rest is allowed to the mother after delivery.

Marriage: Marriage as ordained by Ahur Mazda must be celebrated in a splendid manner. Loose and flowing garments for the bride and the bridegroom are given. The grqom carries a shawl which is considered an emblem of greatness. Red pigment marks are made on the foreheads of both. The mark is supposed to be a ray of the Sun and the one on the forehead of the bride is a ray of the moon. As the Sun and the moon are eternal helpmates, so have the husband and wife to be helpmates of each other till they live. The bride sits on the left side of the groom. There are two witnesses from either side, best-man and the bride-maid, but they are on the right side of the groom. All witnesses have to be married. The officiating priest blesses the couple in the following words, "May the Creator, the Omniscient Lord grant you progeny of sons and grandsons, heart-ravishing friendship, bodily strength, long life and an existence of 150 years." Marriage oaths are administered which record the free consent of both to be united in wedlock. A Sanskrit translation of the marriage prayer is recited by way of grateful reverence of the desire of the Raja of Sanjan. The prayer in ancient Persian is called *Tandurusti* prayer. This is a form of final benediction.

Funeral: When a Parsee dies, an elaborate but simple funeral ceremony follows. When on his or her death bed, a pated prayer of repentence is recited. The dead body is washed clean and clothed in white. Haoma water is placed in the mouth and the body is shown to a dog. The corpse bearers take the body to the Tower of Silence called Dokhma. It is placed in an iron bier called *gehan*. The largest portion of the rites serve to save man, earth, fire and water from being defiled by Ahriman and the demonic powers. All that is dead is taken to be impure and since neither the earth, nor fire, nor water should be defiled, the dead are cast to the vultures in the Tower of Silence.

Internal Organisation: Concerning the earlier epoch of the Parsees in India little information is available on the internal structure and organisation of the community. Since the Parsees in the civil sphere did not have at their disposal codified laws, matters in dispute such as those concerning inheritance, marriage, etc. were decided by respected priests and reference to and through interpretations of the rules of conduct laid down in *Avesta*. This practice came to an end in Bombay in 1673 with the setting of the Parsee Panchayat which consisted of five members belonging to the distinguished Parsee families in Bombay. Adopting Hindu traditions this institution set itself to two tasks:

- a. In future the civil disputes among Parsees would be decided by this body wherqby judgments, mostly fines and sanctions and in extreme cases ex-communication would be considered as irrevocable and respectfully accepted.
- b. Parsees coming to Bombay from the village communities would be helped by the Panchayat materially and socially.

As a rule the membership of the Panchayat ran hereditarily in rich families which gave to that institution the appearance of plutocracy. The clergy played in these times no prominent part in the Panchayat. It had the greatest authority in the second half of the 18th century which could be attributed essentially to the personal prestige of the members. In 1778, against the objections of the clergy, the Panchayat was confirmed and legitimised in its authority by the English. Since 1830, an increasing loss in the authority of the Panchayat could be observed. It lacked the courage to take strong action against the abuses in the community as well as to enforce its decision. In addition, since 1838, it was desired legitimacy by the Government to represent the community externally. With this the Panchayat became a corporation whose functions increasingly were reduced to that of administration of charities and foundations of general social services.

The decline of the Panchayat created a vacuum in the administration of justice for the elimination of which the Parsee Law Association was founded in 1855. In 1865, it succeeded in putting through the Legislative Council the enactment of the Parsee Marriage and Divorce Act of 1865 and the Parsee Succession Act which are in force even today. The Parsee Panchayat administers today over 1,000 foundations of crores of rupees.(For details see Chapter 18.)

Parsee leaders like Dadabhai Naoroji, Pherozeshah Mehta and Dinshaw Wacha realised that the future of the Parsees cannot be separated from fellow Indians. Accordingly they became prominent leaders in the Indian National Congress and in the civic life of the country, notably in Bombay.(*Refer account of Public Life given in Chapter 18*,)It is quite remarkable that the Indian members of the British Parliament were Parsees *viz.* Dadabhai Naoroji (1892-1895), Muncherji Bhownagree (1895-1906) and Shapurji Saklatvala (1922-1929). What Sir Pherozeshah said in this connection may be cited here. " To ask the Parsees to

isolate themselves and their interests from those of the other natives of this country is to preach something not only equally selfish but a great deal more shortsighted. In our case, it would be almost a suicidal policy. Its ultimate effect would be only to reduce us to insignificance. We are a power in this Presidency as a small but enlightened and enterprising portion of the natives of this country, and as such without common interests, common sympathies, and common co-operation, we might still remain an interesting community but of no account whatsoever in the great march of events moulding the lofty destinies of this magnificent land."

HINDU CUSTOMS

The major part of the customs of the Hindus consists of ritualistic practices related to various religious ceremonies known as *samskaras* (sacraments). These ceremonies which principally consist of purifying rites are conducted under the directions, according to orthodox practice, of a Brahman priest. Regarding the exact number of these *samskaras*, there is a great divergence of views among the *Smriti* writers. According to some, sixteen *samskaras*, as they are *nitya* (usual) must be performed and the rest twenty-four, as they are *naimittik* (special) ones are left to choice. They are observed by almost all castes except the backward class. The chief of these customary rituals are those at birth, thread-girding, marriage, pregnancy and death. The *garbhadhana* (a young bride's coming of age) ceremony which used to be once performed separately and with much pomp as then girls were married at an early age, has now become a part of the marriage rite and receives scant attention.

Pregnancy and Birth: The prospect of child birth is watched with anxiety and eagerness by the family and in her first pregnancy, the young wife is treated with great care and tenderness both at her parents' and at her husband's. Her *dohale* (longings) as they are believed to foreshadow and influence the characteristics and sex of the child are fondly noticed and promptly satisfied by the family elders. She has to observe a number of taboos. Because of her delicate condition, she is considered to be particularly open to attacks of evil spirits and following the current folk lore, she complies with a number of 'do's and 'dbnt's. The *grihyasutras* prescribe for the benefit of the pregnant woman a number of observances of a magico-religious nature such as *pumsavana*, *anavalobhana* or *garbha-rakshana*, *Simantonnayana* and *vishnubali* and those who believe in the efficacy of Vedic *samskaras* follow them to a varying extent

The young wife generally goes to the house of her parents for her first confinement. A majority of the expectant mothers in Bombay are under medical care of the public hospitals or private maternity homes. Almost all of them deliver the child in hospital or maternity homes. Even the foot-path dwellers are no exception to this. Most of the rituals which used to follow immediately after birth in the past are almost extinct. For a month or more mother and child are rubbed daily with oil, bathed and every day, the mother is given a decoction of pepper, dry ginger, cloves and other spices.

Panchavi and Shashthi: The shashthi ceremony is performed on the sixth day by worshipping a small copper pot full of water on which leaves float and whose opening is fixed by a coconut daubed with kumku and turmeric powder. Some plantains and betel-nuts and a red flower are placed by the side of the copper pot which represents Brahma who is believed to come in the guise of an old dame to write on the child's forehead its destiny. A blank sheet of paper, a reed pen, an ink stand, and a penknife are also kept near the offering and the elderly people in the house keep awake the whole night lest any evil should happen.

On the night of the fifth or the sixth day after birth, a ceremony known as the worshipping of the *panchvi* (Mother Fifth) and *shashthi* (Mother Sixth) is observed among all Hindu Communities. It is not a Vedic *samskara*, and as such the configuration worshipped and offerings made differ according to usage. But a common belief exists that those nights are full of danger to the newly born baby. Only by worshipping Mother Fifth and Mother Sixth can the child be saved from evil spirits. With the spread of education, the practice of sending women to hospitals and nursing homes is becoming more and more popular and many of the old customs which used to be observed at home are not observed now. The woman stays in the hospital for ten days, is looked after by qualified doctors and nurses and is generally discharged on the tenth or eleventh day.

But those who still remain at home for confinement have to conform to practices that are traditional. The mother is held impure for ten days and no one except the midwife touches her. The family observes *suher* (ceremonial impurity) for that period. On the eleventh day, the mother and child are given a purificatory bath, their clothes are washed and the whole family goes through a cleansing process.

Naming Ceremony: The Barse or naming ceremony is usually held on the twelfth day from birth. Women neighbours, friends and kinswomen are invited to attend the naming ceremony. Each of them bring some present for the mother and child. In the women's hall, a cradle is hung to the ceiling and a carpet is spread under it. Now-a-days a ready-made cradle is purchased. A small oblong granite stone is rubbed with oil and laid in the cradle and the mother taking her baby in her hand stands on one side of the cradle and says to the woman who stands on the other side, 'Take Govinda and give Gopala.' Then the woman receives the stone and the child is laid in the cradle by the mother or by some matron who takes the child in her arms from the mother. The mother then whispers in the child's ear its name which in common consultation has been settled beforehand. The guests then gently swing the cradle and sing a palana (cradle song) lulling the child to sleep. The ceremony closes with the distribution of boiled gram and sweetmeats to the guests. Some days after the naming ceremony, the mother goes to the well and waving lighted lamps drops into the well* two betelleaves and one nut. This is called the worship of the jaladevata (watergoddess).

Chaula: The chaula or chudakarma (first cutting of the hair on the child's head) ceremony has place in the Hindu samskaras. It is also customary with many backward communities to give ceremonial attention to the first shaving or cutting of hair (javala) of the child, At present, it is only among Brahmans that the rite is usually gone through in the case of boys at the time of the upanayana (thread-girding). Before

performing the ceremony, Ganapati, Varuna and the Matrikas are worshipped and a *homa* offering is performed.

Upanayana or Vratabandha: The thread girding ceremony or *munja* as it is popularly known, is prescribed for all Hindus claiming a place in the first three Varnas, *viz.*, Brahmans, Kshatriyas and Vaishyas. In essence, it is a purificatory rite, initiating a boy to *Brahmacharyashrama*, stage of studenthood. In Greater Bombay, besides Brahman of all subcastes, Pathare and Kayastha Prabhus, Panchkalashis, and Sonars gird their boys by performing their *upanayana*. The *Manusmriti* prescribes that a Brahman boy when he is eight should go through this *samskara*; a Kshatriya boy when he is ten and a Vaishya boy when he is twelve. The proper time (Muhurta) for it occurs in the fair season, in the months of *Magna*, *Phalguna*, *Chaitra*, *Vaishakha* and *Jyeshtha*.

In Bombay it is Usual to perform this ceremony at public places, specially appointed for the *upanayana* and wedding ceremonies known as *Mangala Karyalayas*. These places are decorated with plantain trees, mango twigs and flowers. Invitations to attend the ceremony are sent to friends and relatives. About a fortnight before the thread girding, friends and relations ask the boy and his parents to dinner or lunch and give them presents of clothes and money. This is called *kelvan* or *gadagner*.

First some temple is visited particularly Ganapati's temple and the deity is prayed to be present at the thread ceremony with his two consorts Riddhi and Siddhi. Then the relatives and friends are invited.

Ghana: Early morning of the lucky day, the priest comes and sets up the Ghatika (water clock). This is followed by the ghana ceremony. Two musals (pestles) are tied together with a khan (bodice cloth) and a basket filled with wheat is set before the boy and his parents. Not less than five suvasinis (women with their husbands living) take the pestles in their hands, set them upright in the basket and move them up and down as if to pound the wheat in the basket. They sing songs while music plays. A suvasini takes a handful of corn and grinds it in a hand-mill (jate) to the handle of which a khan (bodice cloth) is tied. This is only customary and it is no part of the proper religious function.

Propitiatory Rites: Prior to the upanayana ceremony, usual propitiatory rites are gone through with the same procedural details as before the performance of any auspicious samskara. Ganapati and the matrikas (mothers) are worshipped, and the punyahavachana (the holy day blessing) is performed. This is the time for near relations and friends to give presents to the boy and his parents. These presents are called aher. After this, 27 areca-nuts representing the guardians of the place of ceremony called Nandis (joy-bringing agents), six areca-nuts representing the mandapa-devatas, are placed in a winnowing fan and worshipped with flowers and Kumkum. The winnowing fan is carried into the house and laid in the family god-room. The ceremony of chaula (shaving the boy's head) follows if it was not performed in childhood. The father takes a razor and in a corner of the mandap scrapes some hair from the boy's head. These hair with sacred grass (kusha) and shami leaves is laid in the mother's hand who puts them on a lump of bullock dung. The barber then sits in front of the boy and shaves his head except some locks and the top knot (shendi). The boy is then bathed and taken to the dining hall. Boys called batus, girt with the sacred thread but not married are served with food. They eat and the boy's mother sitting in front of the boys and setting her son on her lap feeds him and herself eats from the same plate. This is called matribhojana (the mother's meal). It is the last time when the boy and his mother eat from the same plate. As soon as the mother's meal is over the boy is taken to the barber who shaves all the locks that were left on his head except the top-knot. The boy is bathed and made ready for upanayana ceremony.

Mangalashtakas: As the lucky moment draws near, the friends and kins people take their seats. The father sits on a pat (low stool) placed on the Vedi with his face to the east, while the boy stands before him facing west. The priests hold between them a curtain marked with a vermilion swastika. The boy's sister stands behind the boy with a lighted lamp and a coconut in her hands. The priests recite the mangalashtakas (lucky verses) and guests cast akshatas (rice mixed with kumkum) at the boy and his father. At the fixed moment(muhurta) the priests stop chanting, the musicians redouble their notes, the curtain is pulled to the north and the boy lays his head at the feet of his father. The father blesses him and seats him on his right. Pan, perfume and rose water are distributed among the guests who then withdraw usually receiving a present of a coconut each. It is now-a-days getting customary for the guests to make some present to the batu (boy) on this occasion.

Upanayana: The upanayana ritual now begins. The priest and other Brahmans throw akshata over the boy's head and seat him on a pat to the father's right. A sthandila (earthen altar) is traced in front of the father, blades Of darbha (sacred grass) are spread over it and a homa (sacrificial fire) is kindled on it. The priest ties a cotton string round the boy's waist and gives him a langoti (loin cloth) to wear. He then rolls a yellow pancha (short waist cloth) round his waist and a white one round his shoulders. Another cotton string is hung on the left shoulder of the boy in the manner of a sacred thread. Offerings of aj'ya (ghee), sesamum, and seven kinds of samidhas (sacred fuel sticks) are made on the sacrificial fire. The boy is made to pass between the sacrificial fire and his father, sips three achamans and repeats texts. He then goes back between the fire and his father and takes his seat.

The boy folds his hands and approaches the Acharya (preceptor-priest) and makes a request to initiate him into *Brahmacharyashrama*. The Acharya grants his request, hands over to him a consecrated *yajnopavita* (sacred thread) and a *danda* (staff) of *palasha* tree and gives him general instructions as to how to acquire knowledge. The Acharya then takes the boy out to see the Sun and makes him repeat a prayer to the Sun.

The Acharya makes four offerings of samidha (sacred fuel sticks) to the fire and then the kumar makes an offering of one samidha and wipes off his face thrice with words purporting, "I anoint myself with lustre and may Agni and Indra bestow on me insight, offspring and vigour." The Acharya concludes the sacrifice with final oblations and sprinkles sacred water over the head of the kumar and in all directions. The Acharya and the Kumara both then stand and offer prayer to the Yajnadevata (sacrificial god), the kumara bends his knees, embraces the teacher's feet and requests him to recite the Gayatri (sacred verse in

praise of the Sun), and the *Acharya* recites it *pada* by *pada i.e.* syllable by syllable and makes the *Kumara* repeat it after him. The *Acharya* then advises the *Kumara* how to behave in his career of studentship and tells him of the rules and observances to be followed by a Brahmachari. Money presents are then made to the priests who bless the boy and his father.

In the evening, the *bhikshavala*, begging procession goes to the temple of Ganapati. The boy who is attended by the priest bows before the gods and the procession returns home with music and company. On returning home, the boy is seated near the altar, the priest sits near him and places a *rowali* (bamboo basket) or a *sup* (winnowing fan) before him. The mother of the boy comes and stands before him near the altar. The boy says to her in Sanskrit " *Bhavati*, *bhiksham dehi* " (Lady, give me alms) and holds the bamboo basket before her. The mother blesses him and puts sweet balls, rice and coco-kernel into the basket. Other married women follow her example; the boy repeats the same words to each of them and they present him with sweet balls and money. The contents of the bamboo basket go to the priest who gives payt of the sweets to the boy and keeps the rest for himself.

The last rite of the *upanayana* ceremony is *medha janana*. A small square mound is raised and a branch of the *palasha* tree is planted in it. The boy pours water round the plant, prays *Medha*, the goddess of mind, to give him knowledge and wealth.

The *upanayana* ceremony used to be extended over four days, but of late, the whole procedure is wound up in a day. The arecanut Ganapati and the areca-nut Varuna are, as at the beginning of the ceremony, invoked and then bowed out to indicate that the ceremony is over and it is time for friends and kinsmen to leave. The boy is now a *brahmachari*, (an unwed student wedded to learning) and now on for some years, he should learn the Vedas at the feet of his Guru and after completing his studies should undergo the *samavartana* (return) ceremony. But all this is ancient history. According to current practice, the *sodmunj or samavartana* follows immediately after the *upanayana*. The boy discards the *munja* (triple sacred grass waist cord) and his *langoti* (loin cloth), puts on a silk bordered *dhoti*, a coat, a shoulder cloth, a *jari* cap and a pair of shoes, takes an umbrella and sets out on a journey, as if to go to Banaras. The priest or the boy's maternal uncle as may be the custom meets him on the way and promises to give him his daughter in marriage so that the boy may marry and become a *grihastha* (householder).

Marriage: The present day customs and ceremonial practices of Hindu marriages are described hereafter in three broad classes: (1) The traditional Vedic form which is mainly based on rites laid down in the *grihyasutras*, *i.e.* body of rules regulating the performance of certain rites and duties enjoined in the *samskaras* in which vedic *mantras* (sacred texts) are freely used. This is generally used by professional priests for conducting the marriage ceremonies of Brahmans and allied castes. (2) The Pauranika form which more or less excludes Vedic texts and is used by a number of communities, other than Brahmans and allied groups within the Hindu fold, (3) modern forms or variants of the Vedic form preached by the sponsors of such movements of reformiism or revivalism among the Hindus.

Marriage is a samskara, a. sacrament that can be established after going through a number of ceremonial details which have their foundation in the grihyasutras. Mahamahopadhyaya P. V. Kane has drawn up a fairly exhaustive list of these ceremonies from as many grihyasutras as he could read and as such delineates the ambit of the scriptural form of Hindu marriage. Vadhuvaragunapariksha (examining the suitability of a girl or bridegroom); Varapreshana (sending persons to negotiate for the hand of the girl); Vaqdana or Vangnishchaya(settling the marriage); Mandapa-karana (erecting a pandal); Nandishraddha and Punyahavachana (holy day blessing and repeating this is an auspicious day three times at the commencement of most religious ceremonies); Vadhuqrihagamana (bridegroom's going to the bride's house); Madhuparka (reception of the bridegroom at the bride's house); Snapana, Paridhapana and Samvahana (making the bride bathe, put on new clothes and girdling her with a string of darbha), Samanjana (annointing the bride and bridegroom); Pratisara-bandha (tying an amulet string on the bride's hand); Vadhuvarani-shkramana (the coming out into the pandal of the bride and bridegroom from the inner part of the house); Parasparasamiksha (looking at each other); Kanyadana (the gift of the bride); Agnisthapana and Homa (establishing the fire and offering the aj'ya oblation into fire); Panigrahana (taking hold of the bride's hand); Lajahoma (offering of roasted grain into fire by the bride); Agniparinayana (going round the fire); Ashmarohana (making the bride tread on a mill-stone); Saptapadi (taking seven steps together); Murdhabhisheka (sprinkling of holy water on the heads); Suryodikshana (making the bride look towards the Sun); Hridayasparsha (touching the bride's heart with a mantra); Prekshakanumantrana (addressing the spectators); Dakshinadana (gift to the Acharya); Grihapravesha (entering the bridegroom's house); Grihapraveshaniya Homa (sacrifice on entering the bridegroom's house); Dhruvarundhatidarshana (pointing out the Pole Star and Arundhati to the bride); Agneya Sthalipaka (mess of cooked food offered to Agni); Triratra vrata (keeping observances for three nights after).

Certain other rites and ceremonies mentioned in mediaeval digests which are in practice at present are *Seemantapoojana* (honouring the bridegroom and his party on their arrival at the bride's place), now observed before *Vangnishchaya*; *Gauriharapuja* (worship of Shiva and his consort) observed by the bride before *Kanyadana*; *Indrani* or *Shacheepuja* (worship of Indrani or Shachee, consort of God Indra); *Taila Haridraro-pana* (applying of turmeric paste to the bodies of the bride and the bridegroom); *Ardrakshataropana* (showering of rice grains on each other's head by the bride and the bridegroom); *Mangalasutrabandhana* (tying of the auspicious string of beads round the bride's neck); *Uttariyaprantaban-dhana* (tying together ends of garments of the bride and the bridegroom); *Airanidana* (presenting the bridegroom's mother with several gifts); *Devakosthapana* and *Mandapodvasana* (taking leave of the invoked deities and taking down the pandal).

The type of the marriage ceremony followed by the orthodox Hindu conforms to the Brahma form. In olden days the marriage customs and rituals were very elaborate. Now-a-days however many of the rituals are gone through hurriedly, while many of them have become extinct. The following account is therefore mainly of historical interest as it throws a light on the culture of the Hindu society. "The gift of a daughter, after decking her with valuable garments and honouring her with jewels etc., to a man learned in the *Vedas* and of good behaviour whom the father of the girl himself invites." The custom of consulting

and comparing horoscopes while fixing up a match which was strictly observed in the past is gradually falling into disuse as the parents of the couple hold that considerations of dowry or good looks are moie important than the agreement of stars. Social conditions among advanced classes have by now improved to the extent of allowing the boy and the girl, if not to court each other, at least to cultivate acquaintance to be able to make a free choice. This has become possible because the boys and girls are not married as children as before. They are grown up.

As soon as a girl is approved, the fathers of the boy and the girl draw up an agreement regarding what money the father of the girl should pay to the boy and what ornaments and dresses the boy's father should present to the girl. The auspicious day for the wedding is fixed and both families busy themselves with the wedding preparations. Two lists of purchases are made, one of sundry articles and the other of clothes. The list of sundries is headed with *shri* in praise of Ganesha and then starts, with *haladkunku*, turmeric and red-powder, for these are auspicious articles. Arrangements are made for procuring rice, pulses and other provisions. The list of clothes may include silk and cotton waist clothes, robes, bodice cloth, shoulder clothes and such articles of ceremonial dress. The building of the marriage porch is also begun on an auspicious day. But now-a-days most of the marriages are celebrated in halls which are available on rental basis. Decoration and other arrangements in the hall are entrusted to contractors.

Marriage invitations are sent to friends and relations as before a thread girding ceremony and the boy and the girl are feasted by their kinspeople. The formal invitation is known as akshata and with the well to do, it forms an elaborate social ceremony. The head of the family writes a letter asking the house and family gods to be present during the marriage festivities. He marks it with red powder and places it in the devhara (god-house). House to house or personal invitations may be arranged jointly or separately. At both the houses before either party starts, the priest takes two silver cups and fills them with grains of rice mixed with red powder. One cup he hands over to the lady of the family who is to go with the party and the other he keeps in his hands. If it has been so arranged, the girl's party may call at the boy's but not before they lay a few grains of akshata (coloured rice) and a coconut in front of the house gods, bow low to them and ask them to be present at the wedding. They then go to the temple of Ganapati, leave a few grains of akshata near the god and pray him to be present at the marriage booth to ward off danger and trouble. They then visit the houses of kinspeople, friends and acquaintances for extending invitations. Halad Turmeric rubbing): The boy at his house is seated on a chouranga set inside a rangoli square with his feet resting on the ground. His mother mixes in a cup some turmeric powder with scented oil and his sister dips in the turmeric mixture the ends of two mango leaves which she holds, one in each hand and touches the boy's feet with them. The head, knees and shoulders are also touched likewise. This is done five times and four other married women follow suit. The boy is then rubbed with turmeric by one of the women and is bathed ceremoniously near the entrance of the marriage booth while the musicians play on their instruments and drums and women sing haldi songs as they empty a few pots of water on his head, letting the water trickle from the points of mango aves. The boy then goes into the house, puts on a fresh waist-cloth, .rid prepares to join his parents in the propitiatory rites of punyaha-vachana (holy day blessing); devaka-sthapana (guardian enshrining) etc. When the boy's bath is over what remains of the turmeric and oil mixture after being used for him (ushti halad) is put in a sup (winnowing fan) along with a sari and bodice, some rice, red powder, betel-nut, betel leaves and two coconuts, and a servant, accompanied by five married women and music, carries it on his head to the girl's place. The ceremony of applying turmeric ar>d giving bath as at the boy's place is repeated for the girl; the boy's sister presents her with the sari and bodice, rubs her hands with turmeric and her brow with red powder and fills her lap with coconut, betel-nut and grains of rice. The laps of the girl's mother and sister are also filled, turmeric and red powder are exchanged with other married women of the house and the party withdraws. The boy and the girl are now considered sacred. They are called navaradeva, bridal gods, and may not leave the house till the wedding is over.

Propitiatory Rites: On the marriage day or the day previous, as a prelude to the wedding ceremony, a number of propitiatory rites are gone through both at the bride's and the bridegroom's houses. They are punyahavachana, matrikapujana, nandishraddha, grahamukha, mandapadevata pratishtha and devakasthapana.

Vangnishchaya (Betrothal): The boy's father goes to the girl's house with musicians, kinspeople, the family priest and servants carrying plates filled with ornaments and other articles. After the guests are seated in the marriage hall, the officiating priests from both sides exchange coconuts and embrace each other. After the priests, the fathers embrace and then the elder males from both sides exchange coconuts and embrace. A rangoli square is traced in the marriage hall and pats are set in the square. The girl's father sits on one pat. Meanwhile, the girl, on whose brow a flower chaplet has been fastened, with her head covered with a piece of broad cloth called aginpasoda is led by her sister and seated on a pat close to her father. The boy's father sits in front of them, with priests to his left repeating mantras. The girl's father worships Ganapati and Varuna. He marks the brows of their priests with sandal paste and presents them with turbans. The fathers then mark each other's brows with sandal and exchange turbans. Then each of them takes five betel-nuts and five turmeric roots and ties them to the hem of the other's waistcloth. They then hold the two bundles in which turmeric roots and betel-nuts were tied near each other, the priest rubs them with sandal and over them sprinkles, water from the Varuna pot. The contents of both bundles are mixed and made into one heap and distributed among the assembled guests. Next Shachi (Indra's wife) is worshipped. On a leaf plate a pound or two of rice is spread and on the rice, a betel-nut is set and worshipped. At this Ganapati and Varuna worship, the boy's father has to place before the deities double the amount placed by the girl's father. The priest repeats mantra lays on the girl's right palm, a drop of curd, milk, honey and sugar and she sips it. The girl's sister ties a marriage ornament on the girl's brow and the priest tells the girl's mother and her other relations that the boy's people have come to ask for the girl. They agree to let her go. The girl now leaves her place and sits on another pat in front of a picture of the house gods and throws grains of rice over it. The boy's father presents her with ornaments and clothes. She is dressed in the new clothes, the ornaments are put on her and she is seated on a pat. The boy's mother lays before her a plate with rice, a betel-nut and betel-leaves, a coconut, red powder, and a water pot. She or some one on her behalf, washes the girl's feet and rubs turmeric on her hands and face, applies red powder to her brow and sticks rice grains over the red powder. Then, telling the house people that she is filling the girl's lap, she drops into her lap a handful of wheat, a coconut, a vida and some sweetmeat balls. The girl makes over the contents of her lap to someone else close by and walks away. The male guests have their brows marked with sandal, presented with vidas and coconuts and the mendicant priests are paid dakshina and all retire.

After the guests have left, the priest takes a thread of the same length as the height of the girl and adding to it threads as many as the years of the girl's age, makes them into a wick. He then puts the wick into a lamp, lights the lamp before the god *Gaurihara* and feeds it with oil brought by the boy's relations in a brass pot. What remains of the wick after the wedding days are over, is carefully kept and burnt in the lamp at the worship of *Mangalagauri* which the girl performs in the month of Shravana. After the lamp is lighted, the girl's mother is seated near it. The boy's mother begins to wash her and her relations' feet, but as the boy's side is considered higher in prestige than the girl's, the girl's mother objects and the boy's mother desists. The girl's mother's lap is filled with a sari and a bodice piece, some rice and a coconut. The laps of her relations are filled with rice only.

Seemantapujana: The Seemantapujana (a boundary worship) was, it appears, originally performed when the boy crossed the border of the girl's village. When the boy and the girl live in the same village, the boundary worship is performed either in a temple or at the boy's house, either on the marriage day or on the day before marriage. When the ceremony is to be performed at the boy's house at the direction of the priest, an elderly married woman of the girl's family takes bamboo baskets and trays and lays in them a number of usual articles of worship and presentation. The girl's relations, with music and the articles go in procession to the boy's place. There the men are seated on carpets and arranged seats. The girl's priest sets a *chouranga* (high stool) near two pots and covers it with a piece of broad cloth. The boy who is ready dressed, sits on the high stool and the girl's parents sit on thepats in front of him. The grips father, taking a silver or leaf cup, fills it with rice, grains and worships his family priest and presents him with a new turban. The boy is next worshipped. The girl's mother takes the water pot, containing warm water, pours it first on the boy's right foot and then on the left and the girl's father wipes his feet dry, marks his brow with sandal and sticks grains of rice over it. He hands the boy a new turban and the boy gives his older turban to some relation and puts on the new one. He is then handed a sash which he lays on his shoulders. The boy's sister is given a flower chaplet which she ties round the boy's turban. The girl's father lays on the boy's right palm madhuparka, a mixture of milk, curds, butter, honey and sugar. He sips it, flowers and grains of rice are thrown over him and a nosegay is placed in his hands. All the while the family priest repeats devotional mantras. The girl's mother washes the boy's sister's feet and presents her with a bodice cloth. The girl's parents now leave their seats. The mother goes into the women's hall and washes the feet of the boy's mother and his other kinspeople, fills their laps with rice and coconut and presents them with sugar. While this is going on in the women's hall the girl's kinsmen mark the brows of the male quests with sandal and present them with vidas and coconuts and the mendicant priests with copper. Then the girl's kinspeople go home.

Varaprasthana: Next comes yaraprasthana (starting for marriage). The girl's father accompanied by his priest goes to the boy's home. Laying a coconut in the hands of the boy and his priest, makes them a formal invitation to his house to perform the marriage.

In the evening before the marriage the boy is dressed in a new turban and shoulder cloth which were presented to him by the girl's relations. His family priest, who all the time goes on muttering invocatory verses, places a coconut in the boy's hands and leads him before his house gods and the boy lays the coconut before the gods and bows low before them. He is next taken before the elders of the house and bows before each. Then he is led to the house door and curds are laid thrice on his right palm and thrice he sips them and wipes his hand. He is seated on a horse or in a carriage. His relations and friends form a procession to escort him to the girl's place. On the way, to quiet evil spirits, coconuts are broken and thrown away as the procession passes on. When the bridegroom reaches the bride's house, cooked rice, spread all over with red powder is waved over his head and thrown over at some distance in the street. A married woman of the bride's house brings an auspicious earthen jar filled with cold water and spills the water over the horses legs and she is given a bodice piece by the boy's relations. The boy is taken off the horse and a married woman pours over his feet milk and then water and waves a lighted lamp before him. The girl's father leads the boy to the marriage hall and seats him on a chouranga. Meanwhile the priest writes the name of the God Ganesh, the day, date, month and year on a wall. The priest sprinkles grains of rice on the square and installs a ghatikapatra in a bigger water vessel to determine the auspicious time for the marriage. And then while he repeats mantras, he makes both the fathers worship the ghatika. He then draws two patrikas, marriage papers in which are written the names of the bride and the bridegroom, their fathers and the auspicious time, gives them to the fathers to worship, reads the papers and makes them over to the fathers to worship.

Madhuparka: If possible, before the boy and girl are married, otherwise, soon after the marriage, the *madhuparka* (honey mixture) ceremony takes place.

At the Marriage Hall: The bridegroom takes off his turban and coat but keeps the marriage wreaths (mundavali) on his brow. He is made to stand on a pat in the marriage hall with his face to the east. A silk waist-cloth (antarpat) marked in the centre with a red swastika is stretched in front of him and as the auspicious moment draws near, the bride is led by her maternal uncle to the marriage hall and set on a sahanpat (sandal grinding stone) in front of the groom on the other side of the antarpat. The bridegroom's sister stands behind the bridegroom and the bride's sister stands behind the bride as the maids of the pair each with a lighted lamp and a coconut. The bride is given a garland of flowers to hold in her hand and the groom the mangalasutra (auspicious necklace of black beads) or a garland as may be the custom. The priests begin to chant the mangalashtakas (auspicious verses) and the guests shower akshata on the pair at the end of each verse. When the lucky moment is reached, the priests stop chanting and the antarpat is withdrawn to the north. The shingi (horn-blower) sounds a blast and at the signal, the musicians raise a deafening din and outside of the house crackers are fired. The couple who upto this time have been looking at the Swastik garland each other. If it is the mangalasutra in the groom's hand, he fastens it round the bride's neck. The priest gives the groom and the bride a few handfuls of rice and they drop the rice on each other's heads. The priest then tells them to remember their family goddesses and then asks them to sit. The assembled guests are then entertained, each is given flowers, a sprinkle of rose-water, a smear of attar, pan-supari and in some places a single or a pair of coconuts. Then the guests are regaled with spiced milk or sweet drinks. The Brahmans, assisting in the ceremony are paid their usual dakshina for their labour in connection with the auspicious events.

her thumbs with his. Over their hands, the girl's father holds his open palm slanting and the mother pours cold water from a jug on her husband's hand which falls on the hands of the girl and the boy and from them drops into the plate. When this is done, all sit and the girl's parents join their hands, repeating the names of the boy and the girl, their fathers, grandfathers, great grandfathers and families. Those rituals of *Kanyadana* (giving away the daughter) on the part of the bride's parents followed by that of *Kanyapanigrahana* (accepting of the bride) on the part of the bridegroom are accompanied by words of solemn pledges. The two family priests take a plate with water and a silver or preferably a gold coin in it and dipping mango leaves into the water, sprinkle it over the heads of the boy and the girl and chant benedictory *mantras*. This is called *Suvarnabhisheka*. After this the priest proceeds with *Sutraveshtana* and *Kankanabandhana*. He takes two threads and winds one thrice round the necks of the couple and the other thrice down their waist. The thread which was wound round their necks is pulled down over the feet and the thread which was wound round the waists is drawn up over the heads. The threads are next wetted with coco-milk and rubbed with turmeric and the girl's priest winds one round the boy's right wrist and the boy's priest winds the other round the girl's right wrist. These are called *lagna-kankanas* (marriage wristlets).

Vivahahoma: After the completion of the Kanvadana ceremony the bridegroom leads the bride from the marriage hall to the bahule (raised platform) in the marriage pandal. In a sthandila (earthen altar) on the bahule, the priest kindles a sacrificial fire. To the west of the altar is placed a flat stone; to the north are raised seven small heaps of rice in a row running east-west, to the north-east is placed a heap of paddy on which is set an earthen water pot filled with mango leaves and a coconut on the top. To the west of the altar, on two pots, sit the couple facing east, the bride to the right of the groom. On the four sides of the altar is then spread darbha grass and to its north are set four dronas (leaf-cups), mango leaves, darbha grass and a sup (winnowing fan) containing lahyas i.e. parched grain. The sacrificial fire is fed with oblations of ghee, samidha (sacred sticks) and durva grass. A little ghee is sprinkled over the lahyas. The bride's brother comes and seats himself in front of the bride facing her. He puts two handfuls of lahyas in the bride's hands and the bridegroom holding the hands in his left hand covers them with the right. Both the groom and the bride then stand with their hands covered and throw the lahyas over the fire. Then the bridegroom taking the bride's right hand walks with her round the sacrificial fire and the earthen waterpot and then makes her stand on the flat stone. These three acts viz. lajahoma, agniparinayana and ashmarohana are repeated thrice in succession. The groom then throws the remaining lahyas in the fire, pours more ghee on them and this concludes what is known as the vivahahoma.

Saptapadi: After the vivahahoma comes the saptapadi i.e. seven steps rite. The bridegroom and the bride take their seats in front of the altar and the sacrificial fire is rekindled. Both of them leave their seats and thrice the groom takes a handful of rice and throws it into the fire. He then leads the bride to the row of rice-heaps at the north of the sacrificial fire. As he walks by her side the bride puts her right foot on the rice-heaps one by one and at each step, the priest chants a sacred verse. As soon as the seventh heap is stepped on, the priest asks the bridegroom's sister to press down the bride's big toe. The bride then stands on the flat stone and the bridegroom leads her once round the fire. When this turn is finished the bridegroom and the bride again take their seats on the pats and feed the fire with ghee and parched grain. After the seven steps are taken, the boy and the girl are taken outside the house and the priest points to them Dhruvatara, the Pole-star. They look at it, bow to it with joined hands and come back into the house.

With the performance of the rites of panigrahana, going round the vivahahoma and saptapadi, the Hindu marriage is considered to be final and irrevocable. The concluding ceremonies that follow the rite of 'seven steps' are varat (the homeward return of the bride and the bridegroom in a procession), vadhupravesha (the ceremonial home-entering of the newly wed wife into her husband's house) and namakarana (the bride's getting a new name). A ritualistic closure to the marriage ceremony is put with rites whereby the deities that had been invited before the ceremony began are taken leave of and the marriage booth is dismantled. Several noteworthy practices accompany these rites. The bridegroom carries off an image of the goddess Annapurna from the god room of the bride's house while he is there to bow to the gods. When the couple starts for the varat, the bride's sister puts a little curd on the bridegroom's right palm and he sips it. When they reach the bridegroom's house, his parents receive the couple and on the threshold the bridegroom's sister sets a wooden measure of unhusked rice for the bride to overturn it with her feet. The couple then sits on pats set before the house gods and after performing some rites, the bridegroom whispers the bride's new name into her right ear.

Non-Vedic Form: Marriages of the non-Vedic form generally fall into five categories according to the considerations forming part of the marriage settlement. In salankrita Kanyadana, the bride's father besides the ornaments he gives to his daughter, stands the marriage expenses of both sides. He pays for the travelling and reception of the groom and party who come all the way from their place of residence to hold the ceremony at the bride's house. In Kanyadana, the expenses of the bride's father are much restricted. In the Varapaksha-Vadhupaksha form, the parties bear each, their own expenses, and the groom's party gives a feast to all. In the hunda form of marriage, the girl's father pays a price for the bridegroom to the boy's father, while in the dej form, the proposal of the marriage comes from the boy's father who has to pay a dej (bride-price) to the girl's father.

Marriage Rules: Before settling a match, it has to be ascertained that the kuli (sect) and devak (crests of marriage guardians) of the boy's and the girl's fathers are not the same, but are suitably different and by usage not interdictory. Sameness of devak by the mother's side and even of surnames do not bar marriage. The prohibited degrees of kindred for marriage beyond agnates vary according to the custom of the community. As regards cross-cousin unions, except the brother's daughter and the sister's son type, which is tolerated, or even preferred among many, other types are generally disallowed. Marriage with a wife's sister is allowed and a brother may marry his brother's wife's sister. Polygamy which was once allowed and practised is now prohibited by law. There are no social restrictions on widow marriage among many communities, though such a marriage was generally considered disreputable in the past. As a rule only widowers marry widows and their children do not get as large a share of property as those of the first marriage. Divorce is socially allowed among many but the remarriage of a divorced woman is conducted

Reformed Ceremony: A modified version of the traditional marriage ceremony and the attendant ritual has been recommended by the Dharmanirnaya Mandal of Lonavala. This version which omits many of the ritualistic details in the orthodox form, considering them as not being the essence of the sacrament of Hindu marriage, includes the following items in the following order:—

- a. Upakarma: Procedure preparatory to making the samkalpa on the part of the bridegroom.
- b. Samkalpa: The solemn declaration that he intends to enter the householder's state i.e. grihasthashrama.
- c. Punyahavachana: This literally means saying three times " May this be an auspicious day" on the part of the assembled when requested by the bridegroom that they do declare that to be an auspicious day.
- d. Kanyadatu Samkalpadikam: A solemn declaration on the part of the gentleman who gives away the bride that he intends performing the marriage ceremony of the bride with a view to her acquisition of dharma (religious merit), artha (worldly prosperity) and kama (love) after obtaining the position of a householder's wife.
- e. Vadhuvarasdtkara: Honouring of the bride and the bridegroom, in the case of the bride by the bridegroom's party and in the case of the bridegroom by the bride's party.
- f. Kanyadana: The giving away of the bride or offering the hand of the bride to the bridegroom in marriage. At this stage a variant is introduced to suit modern times, where occasionally the boy and the girl choose themselves as partners in life and wish to marry. Instead of the parent saying to the bridegroom " In offer etc." as in the orthodox form of marriage, the bride offers herself to the bridegroom reciting the appropriate formula. The bridegroom then accepts.
- g. Niyamabandha: The binding down of the bridegroom to certain vows in respect of the bride.
- h. Akshataropanam: The placing of unbroken grains of rice on each other's head by the couple.
- i. *Mangalasutrabandhana*: Tying the sacred thread of beads round the neck of the bride by the bridegroom and also garlanding each other.
- j. Panigrahana: The taking of the bride's hand by the bridegroom.
- k. *Homapurvangam*: The introductory offering of oblations to several deities such as the god of fire, the god of creation, god *skanda* etc.
- I. Pradhanahoma: The principal offering of oblations.
- m. Lajahoma, Parinayanam and Ashmaroha: The offering of obla tions consisting of rice flakes; going round the consecrated fire, and making the bride stand on a slab of stone.
- n. *Saptapadi*: The taking of the seven steps together. The technique of this ritual is somewhat elaborate. At each step, the bridegroom recites a formula which is really a mild command and request to the bride.
- o. Homottarangam: The conclusion of the marriage sacrifice.
- p. Sansthajapa: The offering of prayer to the deity of fire by the husband and the wife. At the end of the prayer both ask for a blessing from the deity.
- q. *Abhisheka*: Sprinkling of consecrated water over the head of the priest accompanied by the giving of blessings.
- r. Karmasamapti: The conclusion of the ceremony. Here the father of the bride declares that the ceremony is concluded and prays that God be pleased by this act of performing the sacrament of the daughter's marriage.
- s. Saptarshi Dhruvaprasthanam : Praying to the seven sages with Arundhati and Dhruva (the Polestar).
- t. Ashirvada: Here the father of the girl gives her advice as to how to lead married life, and the assembled guests bless the couple.
- u. *Grihapravesha*: Entering the husband's home. This is accompanied by *mantras* of request from the bridegroom and the bride and of joint resolve to lead a happy married life.

Civil Marriages: A common form of civil marriage for all communities in India was provided by the Special Marriage Act III of 1872. Under this Act, parties willing to get their marriage registered had to declare that they did not profess any of the following religions viz. Christian, Jew, Hindu, Muhammedan, Parsi, Sikh, Buddhist or Jain. This Act was amended by Act XXX of 1923, making it possible for Hindus, Buddhists, Sikhs and Jains (but not Christians, Jews, Parsis and Muhammedans) to declare their religion and yet get their marriages registered. Marriages registered under this Act are legal although they may be against the religious customs of the caste or community of any of the couple. Under the procedure at present prescribed, the parties wishing to get married give a notice to the Registrar of Marriages about their intention to marry within three months from the date of notice and specify each one's condition, rank or profession, age, dwelling-place and length of residence therein. After the expiry of fifteen days, if no valid objection is forthcoming, the Registrar grants a marriage certificate after the couple have signed a declaration form in which each has to affirm that he or she is at the time either unmarried or widower or widow; does not profess any religion or does profess a particular religion; has completed the age of 21 years (if not the guardian has to attest his consent to the marriage); is not related to the other in any prohibitive degree of consanguinity or affinity; and in the case of a minor, the consent of the father or guardian has been given to the marriage and not been revoked. Two witnesses have to attest their signatures to the declaration.

There has been a progressive increase in the incidence of marriages recorded by the Registrar of Marriages, Bombay since 1924. Every marriage, whether civil or ritualistic, has to be registered in the Registrar's office as per law.

Death and Funeral Rites: When an elderly male is on the point of death, a suitable spot in the house is cowdunged, *tulsi* leaves are spread over the spot and a blanket is placed over the leaves. The dying person is laid on the blanket with his feet to the south. A few drops of water from the sacred Ganga are poured into his mouth, a Brahman recites verses from the *Vedas*, another reads the *Bhagawadgeeta*, and his relatives ask him to repeat *Narayan*. His son takes the dying man's head on his lap and comforts him till he draws his last breath. When life becomes extinct, there is lamentation and weeping. If the moment

is found to be unlucky, there has to be a performance of *shanti* to prevent further trouble and calamities. This is done on the eleventh day of the death. The chief mourner and his brothers, if there are any, are bathed one after the other outside the house. The chief mourner takes a blade of kusha grass, touches his brow with it and passing it over his head, throws it behind him. He dresses himself in waist cloth and shoulder cloth. The barber shaves his head except the top knot. The chief mourner is dressed in a new waist cloth and shoulder cloth which is tied to his sacred thread. A blade of kusha grass is tied to his sacred thread and the shoulder cloth, another round his top knot and a third blade of the kusha grass is made into aring and put round his third right finger. The dead body is brought out of the front door by the nearest male relations and is laid on the outer steps of the house on a small wooden plank, the head resting on the steps. Elderly men bathe the body and leave it bare except for a loin-cloth. A piece of gold and emerald are put in the mouth. A few drops of Ganga water are poured in the mouth and sprinkled over the body. The two thumbs and the two great toes are tied together with cloth and the body is laid on the bier and covered from head to foot with cloth. The wife of the deceased breaks her glass bangles and the mangalsutra, rubs off the red mark on her brow, takes off her bodice and puts on a white robe. The custom of shaving the hair of the widow which was current among Brahmins and other high caste Hindus in the past has now practically disappeared and a widow with a tonsured head is now rarely to be seen.

After this the chief mourner starts walking with a fire pot hanging from a string in his hand. The bier is raised and carried by four of the nearest kinsmen. No woman goes to the cremation ground. Half-way to the burning ground, the bier is lowered and without looking back, the bearers change places. When they reach the cremation ground, an earthen altar is made and the fire from the pot is poured over it. A few chips of firewood are thrown over the fire and it is fed wilh ghee. Close to the platform, a spot in the ground is sprinkled with water and sesamum seeds are thrown over it. On this spot, the funeral pile is built by the mourners and round it, blades of kusha grass are strewn. The pile and the bier are sprinkled with water and sesamum seeds; the cloth is pulled off the body; and thrown aside; and the body is laid on the pile with head to the south. Pieces of sandalwood and tulasi leaves are thrown over the body and if the deceased died at an unlucky moment seven dough balls are made and laid on the head, the eyes, the mouth, the breast and the shoulders. Then from a mango leaf, ghee is dropped on the several balls and the loin-cloth is cut so that the body may leave the world in the same state in which it came into the world. The chief mourner lights the pile at the head, if the deceased is a man and at the feet if the deceased is a woman and the other mourners throw the rest of the fire under the pile. The funeral priest all the while repeats mantras. When the skull bursts, *he chief mourner carrying on his left shoulder an earthen pot filled with cold water, takes his stand near where the head of the corpse lay and another of the mourners picking up a pebble, makes with it a small hole in the earthen pot and from the hole, as the chief mourner walks round the pyre, water keeps trickling. At the end of the first round, when the chief mourner comes back to the south, a second hole is made with the stone and a second stream trickles out. After the second round, a third hole is made and when three jets stream out, the chief mourner throws the pot backwards over his shoulders and the water spills over the ashes. All the mourners come together and one of them ties round the pebble with which the pot was broken, a blade of kusha grass and calls it ashma (stone of life). To cool the spirit of the dead, which was heated by the fire, the chief mourner pours water mixed with sesamum on the ashes and to quench the spirit's thirst pouts water over the ashma. All the mourners then start for home.

Obsequies: At the house of mourning, the spot on which the deceased breathed his last is smeared with cowdung and a lighted lamp is set on it. As the mourners come they look at the lamp to cool their eyes which were heated by the fire at the cremation ground and repair to their homes. The chief mourner bathes, puts on a fresh waist-cloth and shoulder cloth. As no fire is kindled in the house, relatives and friends send cooked food. The family of the deceased keeps the mourning for ten days, during which they eat no betel or sugar and drink no milk. They are also not allowed to rub their brows with sandal paste or red powder, to anoint their bodies, to shave their heads or to wear shoes or turbans. For ten days, the Garud Puran is read to the family every evening and the listeners are not allowed to dine until they have seen a star in the sky. Generally on the third day, comes asthisanchayana (gathering of bones) when the chief mourner accompanied by the priest goes to the burning ground with the waist cloth and shoulder cloth he wore at the burning, the ashma, the water pot and the cup and after washing the two clothes spreads them to dry. He bathes, puts on the fresh washed waist-cloth and ties the shoulder cloth along with his sacred thread. He takes a little cow's urine, sprinkles it on the ashes of the dead, picks out the pieces of unburnt bones and throws the ashes into the sea. When he has thrown the ashes into the water, he sits on the spot where the feet of the deceased lay and raises a vedi, a three-cornered altar. He sets an earthen jar in each corner of the altar and one in the middle, fills them with water and throws a few grains of sesamum into each. Close to the jars, he lays the ashma. Near the four earthen jars, he places four small yellow flags and in the mouth of each jar sets a rice-ball. He makes eight dough balls, shaping them like umbrellas and footprints and four cakes which he lays near the jars. The cake near the middle jar and the water in the middle jar are meant to appease the hunger and thirst of the dead, the dough umbrella is made to shade him from the sun and the shoes are to guard his feet from the thorns on the way to heaven. The cakes laid close to the corner jars are offered to Rudra, Yama and the ancestors of the deceased. Many of these rituals are now-a-days gone through hurriedly or are obsolete.

On the morning of the eleventh day, the priest kindles the sacred fire on an earthen altar and heaps firewood over it, feeds the fire with a mixture of *panchagavya* (five gifts of the *cow'viz.*, its urine, dung, milk, curds and butter) in order that all uncleanliness caused by the death may vanish and the chief mourner and bis brothers drink what is left of the *panchagavya*. On the same day, a *shanti* ceremony is performed to turn aside any evil that may befall the family if the deceased died under the constellation called *tripad* or *panchaka*. Various obsequial oblations are offered and allied rites are also performed.

Shraddha: The Sapindishraddha (obsequial sacrifice and feast of the dead in honour of seven generations of ancestors) generally takes place on the morning of the twelfth day after death, though, if necessary it may be delayed for a year. This is a highly complex ritual and is performed under the guidance of a priest. By virtue of this ritual, the deceased who has been a corpse so far changes into a guardian spirit and unites with the mourner's pitamaha (grandfather) and prapitamaha (great grandfather). The pitrus (guardian spirits) are then ceremonially dismissed. The mourner is now free and pure. The priest touches

his brow with sandal paste and blesses him saying, "May you live long and gain as much merit from the ceremony as if it was performed in Gaya itself.". An offering called *patheya shraddha* is also performed on the twelfth day. Commodities like shoes, clothes, an umbrella, food and water are given away to mendicant Brahmans, so that the dead on his journey to heaven may not suffer from want of these amenities.

On the 13th day a feast is held to which the four corpse-bearers are specially asked, but persons whose parents are living do not attend it. Shraddha ceremonies are also performed on the 16th and 27th day and sometimes thereafter on the death day in every month for a year of which the six-monthly and the bharani oblations (i.e. the shraddha performed on the fifth of the dark half of the month of Bhadrapada) are essential. After a year has elapsed, the oblations of the first anniversary day are celebrated with great solemnity. The annual shraddha is performed on the day corresponding to the day of death in the latter half of the month of Bhadrapada. Women dying in the life-time of their husbands have special oblations offered to them during their husband's life time. This takes place on the ninth day of pitru paksha and is called the avidhavanavami day.

Specific Funerals: The funerary rite is modified to meet particular situations. In case a brahmachari (a lad girt with the sacred thread) dies before sod-munj (loosening of the munj waist-band) the sod-munj rites are performed on the dead body before it is carried to the cremation ground. There it is subjected to arkvivaha (marriage with the twig of rui or calotropis gigantea) rites and cremated with the same observances as at the death of a married man. A woman dying while in menses has to be subjected to special purificatory rites before she can be cremated with the sacred ritual. A woman dying in child or birth within ten days after parturition is similarly treated. As the religious law lays down that if a woman dies after the sixth month of pregnancy, it would amount to murder to cremate her with the child, her husband or son has to take out the foetus after performing the necessary operation. If the child be alive, it has to be taken care of, if dead, it is buried. Of late, this practice has been dropped, the chief mourner performing cleansing rites to atone for cremating the pregnant woman with a child in her womb.

If a child dies before it cuts its teeth, it is buried. It is the custom with some to bury a person dying of small-pox, lest with cremation, the smallpox goddess may get irritated. The dead body of a leper also is buried. The dead body of an heirless person is cremated out of charity and the usual death rites are performed by his caste men, such an act being considered highly meritorious.

Non-Vedic Funeral: What has been described so far in regard to funerals applies to high caste Hindu castes like Brahmans and others who follow them. But generally speaking, all Hindus cremate their dead whether with Vedic rites or Pouranik rites. Backward communities burn or bury their dead. The rest of the procedure is very much like the Vedic ritual. However, some of the variants are worth noting. Dhors, Mahars, Mangs and Ramoshis practise burial. Chambhars, Ghisadis and Kunbis wash the dead body with hot water. Among the Govardhans, the dead body when bathed is laid on the bier in a wet waist cloth instead of a new dry one. At the crematory, the body and the bier are dipped in water before they are laid on the pyre. Some communities dress the dead male in new clothes, a turban, waist cloth and coat. Some do not cover the body of a married woman with a shroud but dress her in a yellow robe. If a woman dies before her husband she is dressed in a green robe and bodice, her brow is marked with horizontal stripes of Kunku, her head is decked with flowers, a *vida* is put in her mouth and a *galasari* (necklace of black beads), toe-rings which are emblems of the married state are put on in her honour. Her lap is filled with fruits and flowers.

The dead body, whether of a man or woman is usually covered with a white cloth called *kafan* and carried on a ladder like bamboo bier. Jains dress the dead male in silk waist cloth and the same procedure is followed in the case of a widow's body. Usually the dead male when laid on the bier, is covered all over, except the face with a winding sheet; a widow who is dressed in a robe only is covered entirely by the sheet; no sheet is used to cover a married woman who is dressed in robe and bodice. Among many backward communities parched grain is carried in a new winnowing fan and strewn on the way till the mourners reach the cremation ground. When a woman dies in child birth, *rala* grains are thrown behind her body as it is borne to the cremation ground and a nail is driven into the house to keep her ghost away from coming in. If the dead belongs to the Varkari sect, a *bhajan* party accompanies the funeral procession.

Among all communities, the chief mourner with others visits the spot of cremation and they spiinkle it with water and cow's urine and gather the ashes and bones and throw them into the sea water. Food and water are offered to the soul of the dead. The type of food and the way of offering differs with each community. Among the Kunbis, for instance, the chief mourner makes an earthen linga on the spot, sets round it hollow castor stems and close by fixes yellow coloured flags and earthen pots with milk and water. Through the hollow stems he lets water drop on the ground saying, "Let us give the dead water to drink." When all the mourners have thus poured out water, they burn frankincense and offer cooked food and rice balls to the dead. A caste feast is generally held on the 12th or 13th day of death, when the chief mourner is presented with a turban and then he is free to attend to his usual work.

RELIGIOUS FESTIVALS

The city of Bombay is often described as an epitome of India and rightly. Its population is composed of men and women of all castes, creeds and communities from all States in India and even from foreign countries, though of course the proportion of the foreigners is small. Naturally many languages are spoken by them, many religious and social practices are followed by thetn and their customs and festivals are those of their original territories. Even after a long domicile they have not given up these observances and they speak their mother tongue at home. Whichever the language spoken and whichever the province of origin the population of Bombay is predominantly Hindu and several of their feasts and festivals are common too.

HINDU FESTIVALS

Most of the Hindu festivals have a religious aspect associated with them. There are so many *vratas* inasmuch as, a resolve to adore a particular deity is made and worship with prescribed religious rites has to be offered to the deity in whose honour a particular festival is observed. *Vrata* in its broadest sense means a vow. Vows are observed in religion either as an obligatory performance on specified occasions or performed by an individual for his own benefit to gain particular ends. *Vratas* impose a certain amount of self-restraint as in the case of fasts.

The religious festivals have an element of *vrata* in them in the sense that a person observing the festival has to perform some religious rites, entertaining a resolve to perform them and in that sense all religious festivals are primarily *vratas*. Some *vratas* such as Maha Ekadashi, Mahashivaratri, Vatasavitri, Haratalika, Rishipanchami are, however, observed more as days of dedication and devotion to deities, and so we term them simply as *vratas* as against festivals in which the element of gaiety predominates over the spirit of religious piety.

The common Hindu festivals and *vratas* observed in Bombay by the Hindu population in general are given below.

Gudhi Padva: Chaitra Pratipada, otherwise called Gudhi Padva9 which falls on the first day of Chaitra of the Shalivahana Shaka is celebrated as the New Year day. It is recognised as one of the 3 1/2 muhurtas i.e., auspicious days suitable for making any new beginning or observing any auspicious event. There are many stories that are associated with this festival, all originating from the Puranas but the most popular one connects the festival to Rama's return to Ayodhya after his 14 years banishment in the forests and his victory over Ravana and regaining of Seeta whom Ravana had craftily kidnapped.

In the morning of *Gudhi Padva*, the jground in front of the house is decorated with attractive designs of *rangolis*. All members of the household take a refreshing oil bath early in the morning and put on new clothes. A bamboo staff with a coloured silk cloth at its end and a bright goblet atop is worshipped and a garland attached to it. It is then erected close to the front door amidst rejoicings. This is called *gudhi* and the day is called *Gudhi* Padva. A concoction of tender *neem* leaves flavoured with black pepper, gram pulse and sugar is taken by all as *prasad* on this occasion. It is supposed to put an end to all small bodily complaints.

Ramnavami: This festival falls on the 9th day of Chaitra. It is celebrated in honour of the hero of the Ramayana, Ramchandra. This day is observed as his birthday in all Rama temples and the festival begins with kirtans from Gudhi Padva. The programmes end on the 9th day with the cradling of the image of Rama and recitations venerating the deity. Immediately, thereafter, dried and powdered ginger mixed with sugar, called sunthavada is distributed as prasad. The cradling ceremony of the Divine baby Rama evokes devotion and maternal affection among women who flock to temple to witness the ceremony where the Haridas acts as the nursing mother.

Hanuman Jayanti: Hanuman is popularly known as Maruti and is worshipped alone or in the company of Rama to whom he was singularly devoted. He is said to be the incarnation of Shiva. This day *i.e.* the 15th of Chaitra is celebrated as his birthday. He is regarded as born at sunrise and it is at that time that the birth celebration takes place in every Hanuman temple. There are scores of temples dedicated to him in Bombay of which the temple on Proctor Road near G. T. Hospital is the most prominent. Devotees flock to Hanuman temples on Saturdays and offer the image sweet oil, *udid* seeds and garlands of *rui* leaves for protection from the evil influence of the planet Saturn. Perhaps, he is the most widely worshipped of all Hindu gods by young and old men and women, educated and uneducated alike.

Akshaya-Tritiya: This is one of the most important auspicious days according to the Hindu calendar and is counted as half of the three and half *muhurtas*. It falls in Vaishakh on the 3rd day and marks the beginning of the warm season. It is a day for commemorating one's dead ancestor by making to them offerings of *til*, water and cooked food. Gifts of umbrellas, pots and pans, cows, cash and clothing are made to Brahmans. Offering of a fresh earthen pot of cold water is also made. Any work started or any thing done on this auspicious day is believed to be everlasting.

Naga-Panchami: The 5th day of Shravana is celebrated by worshipping the cobras and serpents, either alive or in the image form. The day is observed as a feast and milk is offered to reptiles. Snake charmers move from place to place carrying cobras with them. They are given small coins and reptiles are fed with milk.

Narali-Pournima: The full-moon day of Shravana is celebrated in Bombay by offering coconuts to the Arabian Sea. The business community and the fishermen take prominent part in these offerings. The offer of coconuts is made to calm the sea and from that day onwards seafaring and fishing in the seas are resumed. To celebrate the festival, the people go in large numbers to the sea and offer a coconut.

The day is also observed as Rakhi Pournima. Sisters tie a *rakhi* made of silk on the wrists of their brothers thus binding them to give their brotherly affection and protection. This has a more social significance than religious.

Janmashtami: This is a popular Hindu festival which is also observed as a *vrata* with a fast on the 8th day of the dark half of Shravana. This is done in commemoration of the birth of Lord Krishna, the eighth incarnation of Vishnu. *Kirtans* are held in the temples of Vishnu and Murlidhar. In Greater Bombay, this day is followed by bands of young men going in processions and dancing in honour of Krishna. Earthen pots filled with curds are held hanging at a considerable height from the ground in different public places or junctions of streets or places of worship and teams of young men break these curd pots after reaching them by forming human pyramids. The onlookers enjoy and share the glee of the dancing young men by pouring vessels full of water on the moving parties. Fruits and currency notes are attached to these pots

and they are received as rewards by these bands of young men.

Ganesh-Chaturthi: This festival is observed in celebration of the birth of God Ganesh on the fourth day of Bhadrapad by installing earthen images of Ganesh in every Hindu household. The fourth day of every month is dedicated to Ganesh whether in the bright half or dark half of a month and many people observe it as a day of devotion and fast. But the fourth day of Bhadrapad is the principal day dedicated to the worship of Ganesh and it is observed on a grand scale. Ganesh is the God of learning, and no religious work or festival in Maharashtra starts without first paying homage to him. The beginners start their learning with an obeisance to him in the terms Shri Ganeshaya Namah. Ganapati is also believed to avert troubles and is therefore invoked as Vighnaharta. At the beginning of any auspicious function or worship of any deity, the worship of Ganapati is obligatory. As in the case of other festivals, all members of the household rise early in the morning and take a refreshing bath and set themselves to the task of making preparations for the worship of the deity which takes place at noon. In this case, it consists of fetching flowers, red varieties being preferred, and tip leaves of all kinds and durva, grass shoots in lots of 21. This number is very important in the worship of this deity. This done, finishing touches are given to the reception hall where the Ganapati image is to be received and installed on a decorated dias surrounded with an ornamental arch, overhung with rows of fruits and flowers. The image of Ganapati is then installed under the guidance of a priest and prayers are offered. The principal food offering of the day, naivedya to the deity, consists of a sweet preparation called modak; 21 such modaks are served to the deity on a plantain leaf plate on which the usual articles of food are also served.

According to family tradition, the Ganapati image is kept in the house for one day, five days, seven days or ten days. After performing *uttarpuja*, farewell worship, images from every lane, street or colony are taken in a procession to the accompaniment of prayer songs and music and amidst shouts of *Ganapati Bappa Morya*, *Pudhalya Varshi Lavkar Ya*, for immersion to the sea-shore. The principal places of Ganapati immersion are Girgaum Chowpati, Dadar Chowpati and Juhu Beach. The shouts exhort the deity to bless all and to return early next year.

Besides the individual worship in every household, several public worships are held in a number of localities and under the auspices of public bodies lasting for ten days. The public Ganapati festival provides entertainment and rejoicing and also offers an opportunity to the people to come together in a common cause. The institution of public Ganesh festivals was introduced purposefully by Lokamanya Tilak in 1893 and it has become an integral part of the cultural life of Bombay. Besides providing entertainment, the festival serves as an educative agency of the young and old through instructive lectures and discourses; dialogues and elocution competitions and playlets on social, religious and political subjects. These public celebrations were introduced originally to create public and political consciousness under the guise of a religious festival. Of late, it serves to encourage fine arts, crafts such as drawing, painting, image making, music, besides serving its traditional aims and objects.

Closely associated with the Ganapati worship is the Gauri worship which is particularly popular among Bombay's fishermen, Agaris, Prabhus, Chowkalshis and Panchkalshis. The Gauri images are immersed with the Ganapati images on the seventh day of Bhadrapada.

Vijayadashami or Dasara: This is one of the few major festivals which are celebrated throughout India. It falls on the tenth day of the bright half of Ashvina and follows the nine hectic days of Navaratra or Durgotsava and is in fact the culminating ceremony thereof. It is one of the three and half *Muhurtas* (auspicious days) selected particularly for new enterprises, and in the past, military campaigns. The distinctive characteristic of the day is the exchange of leaves of *apta* plants, brought from an appointed place, beyond the limits of the town. The leaves are called 'gold' and are exchanged as mark of good feelings. This is called *seemollanghana* or *shilangana* in popular parlance.

After a scented bath and putting on new clothes in the morning, the tools of trade, vehicles, books and accessories of vocations are worshipped. The *zendu* flowers, mango leaves and ears of freshly harvested corn are very much in demand for decoration by way of *torans* and garlands at the top of gates, doorframes, etc. on this day. As it is considered an important day for Saraswati, the goddess of learning, children are initiated in the art of writing the first letters of the alphabet before the deity on this auspicious *muhurta*. Advantage is taken of the *muhurta* for opening any new establishment.

The day is spent in gaiety and hilarity and exchange of *apta* leaves and sweets. Conferences accompanied by entertainment programmes, known as Dasara *sammelans* are held. Formerly, there was a custom of offering to the Devi, the head of a buffalo or a goat by way of sacrifice on this day but that has fallen into disuse. Thousands of persons visit the temple of Mahalaxmi to worship the Goddess. A *darshan* of the Goddess is regarded as a great religious merit on this day.

The celebrations of Vijayadashami or Dasara are preceded by the Navaratra festival from the 1st day of Ashvina to the 9th. During these nine days, Goddess Durga is worshipped by installing *ghatas i.e.*, metal pots filled with water with a coconut placed at the top on mango leaves on the first day of Ashvina. At some places five pots are kept, one upon the other after putting therein articles such as five dried dates, five pebbles, five pieces of dried coconut kernel, etc. around the *ghatas*, grains are sown on the ground and the *ghatas* are worshipped. The *ghatas* so installed are worshipped for nine days. On the tenth day the proceedings are terminated.

Kojagiri Pournima: This is the full-moon day of Ashvina. It is also called Navanna Pournima i.e., new food day, and from this day, the new grain of the recent harvest may be eaten. Since Lakshmi, wife of Vishnu is regarded as the agent of good fortune she is worshipped and propitiated this night, when she is believed to be abroad and a light must be shown outside the house; otherwise she may refuse to pause and give her blessings. For the same reason, every one must keep awake all night lest the careless man who sleeps fails to win her favour. Apart from its religious significance most of the people pass the night in gaiety and drinking of sweet milk.

Diwali or Deepavali: This literally means a row of lights. The festival is not only a row of lights, crackers and sweets, but it is also a row of festivals and followed intermittently by many more. Every Hindu, pauper or prince, man or woman, young or old looks forward to this festival of delightful memories and visions. The festival proper starts with *Dhana Trayodashi* on the 13th day of the dark half of Ashvina and ends with *Yama Dwitiya* or *Bhaubeej* on the second day of the bright half of Kartika. The intervening three days *viz.*, Narak Chaturdashi, Lakshmipoojana and Balipratipada form the core of the festival.

Dhana Trayodashi is dedicated to the poignant memory of an unfortunate young prince who met with an accidental death on the 4th day of his wedding and is intended to propitiate Yama, the God of death, to save one from such a calamity. It is said once Yama called his messengers together and asked them if ever in their gruesome career, they had felt compunction while doing their duty of escorting souls to the domain of the dead. They said that such a thing happened but once in their career. That was when, in the midst of wedding celebrations of the son of a king, the prince was bitten by a serpent on the fourth day of the ceremony and succumed to the fatal bite. It was with great grief and painfu! reluctance that they managed to carry along the soul of the unfortunate prince and they sincerely wished that such a harrowing tragedy should never take place again. God Yama was moved by this account and declared that those who celebrated the five days beginning with Dhana Trayodashi with rows of lights would not be subjected to such a death. As God Yama's abode happens to be in the South, most of the lights on this day are turned southwards. It is also usual on this day to collect for worship coins of gold and silver, probably as a preparation of Lakshmi Poojan.

Narak Chaturdashi: On the 14th day of the dark half of Ashvina, every one wakes up early in the morning and takes a scented oil bath to the accompaniment of lighting of crackers, thereafter the bitter Karita, a diminutive wild cucumber, is crushed under the feet in token of killing Narakasura (*The Bhagawat Purana narrates the story of a demon called Narakasura who became a terror to the three worlds.*) and apply to the forehead the *Kumkum* mixed with oil as representing his blood. After the whole household has had its ceremonial bath, a great variety of refreshments and sweets are served and partaken of in company of friends and relatives. This is of course, followed by the inevitable feast and exchange of presents and greetings. It is customary to call the newly married daughter and her husband for the feast on this day when presents befitting the parents' position and means are made to them.

Apart from the semi-religious aspect, the festival has a social significance which is peculiarly modern. Obviously the festival connotes an unusually fine and powerful allegory on social work. Narakasura means literally the demon of hell whose fortress is the dump of dirt, filth and garbage. It is the accumulation of these and ignorance which makes it possible to carry away thousands of women and children to their untimely death, and what is worse, the continuous sickness and confinement to bed. Although men have a prominent part to play in the campaign for mitigation of this evil, it is mainly the thorough but unobtrusive educative work of women of the type of Satyabhama of old and 'the Lady of the Lamp' of our own times which can effectively attack and subjugate the fortified 'hell' and restore the unfortunate victims to health and happiness through enlightenment. This explains and justifies the presence of Satyabhama on this particular war like opcasion as did the presence of Florence Nightingale on the Crimean war front.

Lakshmipoojana: The worship of Lakshmi, Goddess of wealth, is performed in the evening of the last day of Ashvina by householders and merchants to the accompaniment of lighting, music and refreshments when friends, relatives, guests and customers are treated to *pan-supari* and *prasad* in the form of coriander-seeds and gur.

Bhaubeej: This is the concluding day of the Diwali festival and falls on the second day of Kartika. It is very similar to the Rakshabandhan ritual held on the Narali Pournima day and is observed in honour of the memory of the visit of Yama, the God of Death, to his twin sister Yami who served him a sumptuous feast and was, in return, presented costly ornaments and rich raiment. Every sister looks forward to a visit by her brother on this day or the sister is taken to the brother's house. Where there is no brother, a cousin, however distant or an adopted brother takes his place and vice versa. It is even laid down that one should not, on this day take food, prepared by his wife but only by his sister or cousin as the case may be. There are instances where persons having no sister or cousin have adopted sisters even from other communities in order to fulfil the obligation enjoined by this delightful festival day.

Diwali holidays have, of late, assumed a great social importance and mutual greetings are exchanged on this occasion as during the Christmas holidays.

Makar Sankranta: This is a very important religious observance and festival. It falls on the 14th or 15th of January in the month of Pausha. Sankranti means " the apparent passing of the sun from one rashi i.e. the sign of the Zodiac to the next following " and the rashi in which the sun enters is designated as the Sankranti of the name of that rashi. There are twelve Sankrantis in a year, in one of which the sun appears to pass from the Mithuna to the Karka rashi and in the other he appears to pass from the Dhanu to the Makara Sankranta. Of these two, only the latter is observed with religious rite and exchange of mutual good wishes throughout Bombay. Women with living husbands worship earthen pots called sugads on this day, after putting in them wheat grains, cotton, turmeric, etc. and after worship distribute them among at least five women with husbands living. The day is observed with a feast of sweet dish. In the evening, ladies go round Hindu houses in the neighbourhood where the housewife of the house applies turmeric powder and vermilion to their foreheads, gives them sweet sesamum, speaks sweet and presents them with some articles such as small utensils, mirrors, combs, fruits, etc. These mutual visits continue upto the Ratha Saptami. Men, women and children greet one another with mutual exchanges of goodwill, and exchange sweetened sesamum or sweetened balls of sesamum mixed with groundnuts and cashewnuts. The day following Sankranta is called Kinkranta.

Holi or Hutashani Pournima: This is the last major festival in the Hindu calendar. It falls on the full moon day of Phalguna, though in practice it starts from the 5th day of the bright half and lasts till Rangapanchami i.e., the 5th day of the dark half of Phalguna. It marks the end of everything that is low and

rotten in the passing year by burning and bowling it out and making way for the coming year by colour and songs of the bewitching spring. In Bombay, this festival is observed for two days. The first day is Hutashani Pournima or Holi. On this day in the evening, public bonfires are lit in all Hindu localities by worshipping Holi deity and lighting logs of wood, offering coconuts to it. A sweet dish of *puranpoli* is prepared. The next day is *Dhuhad*. It is spent in rejoicing.

 ${\it Vratas}$: The following are some of the ${\it vratas}$ which are predominantly religious and pious in their conception:

Vata Savitri: This is a vow as distinct from a festival that is observed by married Hindu women in emulation or imitation of the virtuous ancient lady, Sati Savitri who was able to reclaim her husband's life from the God of Death by virtue of her unswerving constancy to her chosen spouse. It is observed on the full moon day of Jyeshtha, supplemented by a fast on the preceding three days.

Married ladies whose husbands are alive observe their vow by bringing sand from the bank of a river or seaside and keeping it in a basket. The basket is wrapped in two pieces of cloth and then idols of Satyavan and Savitri are worshipped in it. Portraits of Savitri, Satyavan and Yama are drawn and worshipped. The <code>sankalpa</code> states that the worship is for the purpose of securing long life and prosperity to the husband, children, grand children of the worshipper accompanied by her own eternal welfare.

As Savitri is supposed to have been under a *vata* tree, when Yama came to take her husband's life, ladies worship this tree on Vata Pournima day and distribute fruits and flowers as *prasad*. The story is well-known all over India. Savitri is cited as the very acme of conjugal fidelity and it is the aim of every Hindu woman to emulate her example.

Ashadhi and Kartiki Ekadashis: Every eleventh day in the bright as well as the dark half of a month is known as Ekadashi, and devout Hindus fast on this day in propitiation of Goddess Ekadashi. Of all the Ekadashis, however, those falling on the 11th day of the bright halves of Ashadha and Kartika are considered most important and are observed by many. Hindus belonging to the Varkari sect observe this fast very piously. Many of them strive to visit the Viththal temple at Pandharpur. However, those who cannot visit Pandharpur make it a point to pay their respects to the Viththal temple at Wadala. About one and a half lakh devotees visit the temple at Wadala on the Ashadhi as well as Kartiki Ekadashis. Vishnu who is specially venerated on Ekadashi is supposed to start his four-month long sleep on the Ashadhi Ekadashi and so it is known as Shayani (sleeping) Ekadashi and the one in the bright half of Kartika is called Prabodhini because he is supposed to wake up on that day. The period between the two Ekadashis is called Chaturmasa, four months' period, in which devout people arrange recitations and discourses on religious themes and certain food items such as onions, garlic, brinjals, etc., are not consumed.

Haratalika: This is purely a vow and is not a festival in any sense. It falls on the third day of the bright half of Bhadrapad and is observed by ladies exclusively. Originally intended for observance by unmarried girls it is now undertaken by married ladies. Even widows observe it with a fast. The peculiarity of the fast is that cooked food and water are a taboo during its continuance. Along with Parvati, her friend Haratalika who helped her to run away from her father's house to observe the *vrata* is given equal prominence and worshipped in the course of the *vrata*.

Rishipanchami: This is a vow observed by ladies by honouring the sages of the ancient past and seeking their protection. This falls on the 5th day of the bright half of Bhadrapad month. Now-a-days this *vrata* is restricted particularly to those whose menses have stopped. Some ladies observe this vow from their childhood. Any food obtained by tilling the ground with the help of oxen is a taboo in the observance of this vow and only such things as wild grains, roots and tubers obtained without tilling the ground have to be consumed, during the observance of this vow. This vow is observed for a minimum of seven years.

This vow has two aspects; one is the need of strict observance of hygienic rules of personal cleanliness, and the other is the honouring of our ancient sages who after austere penance left for us the fruit of their experiences so that we may profit by them. The names of the seven sages are, Kashyapa, Atri, Bharadwaja, Vishwamitra, Gautama, Jamadagni, and Vasisththa.

Mahashivaratra: The Mahashivaralra falling on the 14th day of the dark half of the month of Magha is regarded as an important fasting day. Worship and devotion offered to God Shiva on this day is considered to be effectively ridding one from the worldly worries and troubles.

Those wanting to observe the *vrata* are supposed to take meals on the night of Magha Vad. 13. On the morning of Magha Vad. 14, after bathing they worship Shivalinga devotionally with a *rudrabhishek*. During the worship, if possible, one lakh, one thousand and 108 *bel* leaves are offered to the deity and the whole day is observed as a fast. The night is spent in singing prayers to God Shiva, and the next day the fast is broken.

SINDHI FESTIVALS

The partition of the Indian sub-continent into India and Pakistan meant, among other things, that Sind was to be part of West Pakistan. As a result the Hindus in Sind known as Sindhis migrated to all parts of India. Nearly three lakhs of them came to Maharashtra. Most of them settled down in urban areas and a large majority in Greater Bombay and Thane districts. Besides most of the festivals observed by other Hindus, they have their own peculiar festivals and practices which they have brought with them here.

Cheti Chand: This festival happens to be the New Year Day and is observed on the second day (Bij Tithi) of the bright half of Chaitra which they pronounce as Chet, the first month of the year. It is believed that it happens to coincide with the birth anniversary of the river god. Women observe a fast on this day. In fact all days that are sacred to the river god are observed as fast days by them. The river occupies an important place in the life of the persons of Sindh since it is the source of all life. This day is observed as the anniversary of a great saint known as Uderolal who is said to be an incarnation of Varuna around whom many tales are woven. In the beginning of the 11th Century, Markh whose capital was at Thatta was the

king of Sindh. He was a fanatical Muslim, and Hindus were persecuted by him as well as by his followers. The king wanted that all Hindus should embrace Islam and passed an order to that effect. The Hindus were astonished at this strange order and requested the king to grant them religious freedom. The request was turned down. However, the king gave them a period of three days for consideration. The Hindus gathered at the river and prayed for three days at the end of which a voice was heard from the river saying " after eight days I shall be born at Nasrapur and my name shall be Uderolal ". So the river god, Uderolal was born to Devaki Mata, wife of Ratan Rai Thakur of Arora caste at Nasrapur in the evening on Friday, which happened to be the New Year Day of 1007 of the Vikram era. The river god is also known as Daryalal or Amarlal which is a much more popular name. The newly born child began to speak like a grown-up man after a short time. When the king came to know about the birth of this child, the king and his vazir named Ohio wanted to capture the child who suddenly appeared before them from the river at Thatta. The king wanted to convert him to Islam but failed. The king could not catch him as he changed his form in quick succession. At last Uderolal warned the king about the forcible conversion of Hindus to Islam. The latter ignored this whereupon Amarlal ordered fire to destroy the town. This had its effect and the king repented and granted equal freedom of worship to all. The king was so much awed by the miracles of Uderolal that he revered him as a devotee of God and named him Khvaja Knizir. The Sindhis celebrate this day in gratitude for saving them from tyranny of the Muslim ruler. On this day, Sindhis take out a procession of the Sea God which ultimately ends at a river bank. They carry bahranas (This is a symbol of a temple of river or sea god) by installing a picture of sea god (Lal-Sai) with perpetual light in it. They also sing panjra (five line poems) in praise of the river god to the accompaniment of music. Young men dance to the tune of a wooden stick in their hands. This dance is called chej. On its way, people greet the procession. Sukho and sesa (boiled kabuli gram or boiled beans and sweet water) are distributed. Women offer flowers and coconuts to the bahrana and while the procession moves forward they shout.

Lai Ja Jati, Chou Jhoole-Lal (Oh, Ye traveller of the Sea! May my God swing on water).

When the procession ends at the bank of a river a *puja* is performed and the *bahrana* is assigned to water. It is believed that Uderolal who practised the river cult gave seven things which occupy an important place in the celebration of the festival of Cheti Chand. They are: (1) the lamp, the symbol of Uderolal, (2) priestly dress, (3) a big metal pot in which lice is boiled for distribution, (4) a sword for protection, (5) a water pot, (6) a drum stick for performing *chej* dance and (7) the *darbha* grass.

Since the Cheti Chand happens to coincide with the Gudhi Padva day, the Sindhis of Maharashtra have begun to. celebrate it in a great gusto and enthusiasm.

Chaliho: This festival was celebrated in a grand manner in Sindh. It has lost its importance because of the changed circumstances in which the Sindhi coitimunity is now living in Maharashtra. "The period of inundation is celebrated by the observation of the Chaliho festival or the festival of the 40 days of the flood. It commences on the full moon day of Ashadha which the Sindhis pronounce as Akhar. The women mix rice and turmeric, dry them and then add cloves and cardamoms to it. They make grain oblations to the river deity from it, thrice a day during the inundation period, on the benk of a lake or canal and go through the usual form of worship. On every Friday, or the birth day of the river god victuals aie offered to the water and distributed among the people. The day of the full moon and the new moon and Fridays are sacied to the river god; and when they fall during this period, they are specially celebrated by taking five or seven one or four corner lamps of wheat flour to the adjacent pool or canal where they worship the river deity and distribute the victuals after offering some to the waters.

The last day of the Chaliho festival commences with the putting of forty kinds ot eatables specially fruits in an earthen vessel and mixing with wheat cakes one for each member of the family. The vessel is painted in red with five or seven swastika designs and covered at the top with a coconut. Round about are tied necklaces prepared of cloves, cardamoms and mango leaves. Then the vessel is carried by a woman on her head to the nearest tank or canal accompanied by another woman who carries five or seven four cornered lamps burning with wicks of safflower colour. After taking bath she applies a mark on the forehead with powder of red-oxide. The women thus gathered sing panjra songs in praise of the river god, live in the mid-stream with clothes on and sink the vessel under water. Grain oblations are made to the river deity and flour lamps are floated on water. Then they return and observe the birthday rite (bij) of the river god and distribute victuals (sesa) after offer to water. This festival is observed by some males also by sitting on the bank of a canal or tank for forty days and keeping vessels full of water nearby. They make oblations to the river deity thrice a day and go through the usual form of river worship. The last day of Chaliho celebration is the day of taking leave from water as the floods are now supposed to retreat " (V. T. Thakur, Sindhi Culture, University of Bombay publication (1959), pages 123-24.).

Tijri: This festival which is mostly observed by married women and unmarried girls falls in Shravan, pronounced by Sindhis as Savan, Vad. 3. Four days before the festival women sow wheat or jowar seeds in earthen pots and allow them to sprout. On one day of the festival, they decorate their palms with *mehendi*. They observe a fast on the day and in the afternoon, the earthen pots containing the sprouts of wheat or jowar grain sown earlier, arei kept in a swing. They rock the swings with pots on, singing songs and performing a dance called *jhimir*. They drink flavoured water *(sherbat)*. At night, they worship the moon on its appearance by offering milk, flowers, rice etc. and break the fast.

This festival is observed by married women for long life of their husbands and by unmarried girls for securing a good husband.

Thadari: This festival is observed on two different dates. The first one which is called Nandhi Thadari (lesser Thadari) is observed on Savan Sud. 7. The other is celebrated on Savan Vad. 7. Both the festivals are celebrated in honour of the consort of Shiva or female energy, the mother goddess in the form of Sitala, the small-pox goddess. On the previous day, women prepare sweet cakes called *bhajivans* and also a custard preparation. On the festival day, it is customary not to burn fire and stale food, cooked on the previous day is consumed. The women sing songs, go to a temple and make offerings. The peculiarity of

this festival is that generally even women gamble on this day. The children and grandchildren approach their parents a.nd grandmother demandiiig money. Lakshmi, goddess of wealth, passes through the palm of one who gambles on this day. Married daughters with their children visit their parents' place.

Mahalakshmi: This is one of the festivals which is observed by Sindhis in honour of Goddess Lakshmi. This festival falls on Ashvina Vad. 8. All members of the family tie a thread around their wrist which is called *sagro*. It is made of 16 yellow threads of cotton and has sixteen knots. In the case of unmarried persons, two *sagros* are tied. On the day of Mahalakshmi, people go to the house of a Brahman priest and carry with them sweet cakes and lamps prepared out of flour. They untie the *sagro* and on reaching the Brahmin's place, they hear the story of Raja Mangli who had two queens. After conclusion of the story the persons return home, leaving the sweet cakes, etc. at the Brahmin's place. Some portion of the sweet cakes is taken back home as *prasad*.

Now-a-days the *sagro* is not kept on the wrist for 16 days. They generally tie it on Ashvina Sud 8. and remove it either on the same day or the next.

Guru Nanak's Birthday: One of the peculiarities of the Sindhi culture is that they observe the main festivals of the Sikh religion and amongst them the birthday of Guru Nanak, the first of the ten gurus of Sikhism, is celebrated with much fervour and on a grand scale. This festival falls on Kartik Sud. 15. i.e. full moon day. Sindhis and Sikhs call it Guruprabh, and its celebration commences 48 hours before the actual day when the recitation of akhand path of the Granth Sahib begins at a convenient place. Four or five persons are posted to recite from the holy scripture, turn by turn, for about two hours each. A person is appointed to coordinate the function and look after the comforts of the persons who recite from the Granth Sahib. Dhupias i.e. incense burners burn incense beside the "Sevari of Maharaj" day and night till the bhog ceremony is over. Jyoti, flame, fed with pure ghee is kept burning during the period of akhand path. The entire recitation of the holy book takes 48 hours. After 24 hours have elapsed, the ceremony of madh path i.e. recitation of half of the holy book is performed with the blowing of conch shells and ringing of bells.

After the completion of the recitation of the holy book which is over on the day of the festival, a *kirtan* is held at the same place followed by a *katha*. The life story of Guru Nanak is told by prominent persons. A *kavi durbar* is also held. The *karah prasad* is then distributed to all those who are present. The end of the function is *Guruka langar* (free kitchen) which is open to all persons without any distinction of caste, creed or religion. All the persons sit in the same row and eat the same food which is all vegetarian. It consists of rice, curry, chapatis, *bhaji*, *chatni* and sweet *bundi*. The place where the function takes place is gaily decorated and in the midnight a swing with the photograph of Guru Nanak is brought and rose petals are showered on it.

The Sindhis like other Hindus observe Ram Navmi, *Akhna Tij i.e.* Akshaya Tritiya, Janmashtami, Ganesh Choth, Gopashtami (when the cow is worshipped), Dasara, Diwali, Tirmuri (Sankranta) and Holi in the same way as other Hindus. On Ganesh Choth, women observe a fast and break it after moon-rise. During Diwali on *Lakshmi Pujan* day, models of houses are also worshipped. A peculiar custom among them is that they put milk, gold or silver coins and ornaments in a vessel and dip a finger in it and they apply it to their forehead and mouth. They usually say:—

Diyari Jo Diyo Ditho Nandho Vaddo Chibhand Mitho (After Diwali, the fruit of Chibhand becomes sweet.)

MUSLIM FESTIVALS

The percentage of the Muslim population in Greater Bombay is 17.24. The following are some of the important festivals observed by the Muslims of Bombay and Maharashtra:

Muharram: The name of the first month of the Muslim year is Mahar-ram and the first ten days of the month are known by that name. This festival is in fact a solemn occasion since it is associated with the memory of Hussain, the second son of Fatimah, the Prophet's daughter.

Strictly speaking, this is no occasion for festivity and rejoicing. In fact, several pious Shiah and Sunni Muslims observe fast, recite the *Koran* at home during the ten days and the tenth day is observed as Ashurah *i.e.* mourning day. It is the Muslim belief that the future Qiyamat (destruction of the world) will be on a Friday of these ten days of Muharram. The Shiahs observe this as an occasion of immense pain and sorrow. They weep and wail, beating their breasts during these ten days. Cots are upturned, mats are wound up and the bare floor is made the sleeping place during the period. They wear only black clothes. The highly orthodox Shiahs condemn even processions. Some Muslims go to Karbala, the place of historic battle and offer prayers by reciting the *Koran*.

The 9th and 10th of Muharram are observed by Muslims as Sunnat Roza *i.e.* an optional fast. They do not eat anything from sunrise to sunset. Sunnis prepare sweets and distribute them to the poor, Shiahs do not observe a fast. They offer *fatiah* in *imambara*.

The preparation of the festival starts with the construction of a temporary structure or some large hall called *Ashur Khanah* (literally ten day house). As soon as the new moon appears, people gather together in the various *imambaras* and offer *fatiahs* over some *sherbat* or some sugar in the name of Hussain. The *fatiah* conclude thus: 'O God! grant and reward of this to the Soul of Hussain.' The *sherbat* and sugar are then distributed. The *imambara* is generally a temporary structure or some large hall fitted up for the occasion.

There are no functions for the first six days and the 'Alam-I-Quasim' *i.e.* the *tabut is* taken out in public procession from the seventh to the ninth day. This is to represent the marriage of Quasim, the son of Hassan to the favourite daughter of Hussain just before the latter died. The three days are spent in

enjoyment with fancy dresses of tigers, bears, etc. The Muslims go to the *naziyah* and offer *fatiahs* to *alams*. In the evening before the 10th day which according to the Muslim mode of computing time is the tenth night, the *taziyahas* and the *alams* are taken out in procession. On the following day, the *taziyahas* and *alams* are taken out in procession to a river or a tank, and they are immersed in it after the ornaments are removed.

The 10th day, the Ashura of Muharram is a *sunnat* feast and is observed by all Sunnis. It is considered to be an excellent day, for God is said to have created many things on this day. At about 3 p.m. the Sunnis prepare *sherbat* and *kichara* of seven pulses, and *fatiah* is said in the name of Hussain and of those who were martyred with him at Karbala. On this day, some go to the burial grounds and place flowers on the graves of their friends and *say fatiah*.

Akhiri Chahar Shambal: This feast is held on the last Wednesday of the second Muslim month, Safar. This feast is celebrated to commemorate the fact that the Prophet experienced some mitigation of the disorder which terminated his life in the next month, Rabi-ul-Awwal. Sweet cakes are prepared and fatiahs are said over them in the name of the Prophet. A curious custom which is said to have no religious sanction, in Islam, known as drinking of the 'seven salams" takes place on this day. A plantain leaf or a leaf of mango tree or a piece of paper is taken to a Mulla who writes seven short sentences from the Koran upon it. The writing whilst it is wet is washed off and the mixture is drunk by the person for whom it was intended. The purpose is to ensure peace and happiness for the future. It is, however, learnt from local Muslims that this festival has lost most of its importance.

Milad-un-Nabi: This feast is also known as *Bara Wafat*. It is held on the 12th day of the 3rd Muslim month Rabi-ul-Awwal. This name appears to have derived from *bara i.e.* twelve and *wafat i.e.* death, because many Muslims believe that the Prophet died on the 12th day of Rabi-ul-Awwal.

On the morning of the 12th day, the *Koran* is read in the mosque and in private houses *and fatiah* are said over cooked food and it is distributed among the poor. The story goes that as an orphan Mohammad was fed by Halima, a poor woman. As a baby, he refused milk from the right breast of Halima which was meant for the woman's own son. One day, Gabriel cut the chest of Mohammad, washed the heart with sacred water and prepared him to be a Piophet and a reformer of the world. He also got for him *Koran* from God. As Mohammad started preaching that God was one, he had to leave Mecca and to go to Madina where he acquired 330 disciples in the first instance. He slowly spread his message and regained Mecca and passed away on the 12th day of Rabi-ul-Awwal in the year 1775.

Both in private houses and mosques, meetings are held at which the story of the birth, miracles and death of the Prophet is recited. They keep awake throughout the night and namaz is performed. The Koran is recited in mosques during this night. Some, however, observe this day as the 'Jashan-i-milad-i-sharif' or the feast of the noble birth. They believe that the Prophet was born on this day and as such it is a birth anniversary of the Prophet.

Sahab-i-Barat: This feast signifies the 'night of record' and is observed on the night of the 14th day of the eighth month of Shaban. It is believed that the destiny of man is recorded for the coming year. The word bar at means acquittal. It is said that God, on this night, makes a record of all the actions men are to perform during the ensuing year. Muslims observe a sunnat fast on the 14th and 15th day of the eighth month and keep awake all night and offer prayers for their well-being and also of others. Fatiah are said over cooked food for the benefit of the deceased ancestors and relatives. The Koran is read in the night and there are illuminations.

On this day, they go to the grave-yard and offer prayers to the dead.

Ramzan: Ramzan is observed during the ninth month of the Muslim year, Ramzan. Prophet Mohammed, while he was doing penance in Gharebwara, a cave, in Mecca in his fortieth year is believed to have acquired Koran sent by Allah through Gabriel. The observance of this month is one of the cardinal practices in Islam and express commands regarding it are given in the Koran.

Throughout the entire month, Muslims begin their fast early in the morning to break it only after sunset. All luxuries and also such habits as smoking, chewing and snuffing are avoided during this period and complete fast during day time is observed. During the nights, Maulavis deliver lectures on Islam. In addition to Isha, the night prayer, an additional prayer viz., tara-vi- (20 rakhaths) is offered and a part of the holy Koran is recited. On Badi-Rat or the best night (Shah-e-Kadar) which falls on the 26th or 27th day recitation of the holy book is completed. On the Badi Rat all keep awake till 4 a.m. when the reading of Koran is completed and sweets are distributed. It is believed that if a person offers sincere prayers, repenting for his misdeeds on this night, he is forgiven and his desires, if any, are fulfilled. The last day is Khubda day i.e.. the first day of Shawwal. On this day, the observance culminates with great pomp and show. All wear new clothes and each member in the well to do family distributes among the poOr wheat or rice or other foodgrains to enable the poor to participate in the common namaz. They go for the namaz to the Idgah, open space where a wall is constructed on a raised platform. The distinguishing feature at the time of namaz is that the rich and the poor stand together in a row, shedding the cloak of social status. The namaz at the Idgah is seldom missed by any one. The entire Ramzan month has assumed great religious importance. This festival is also known as Íd-i-Ramzan or Mithi-Id or Id-ul-Fitr. The Muslims who observe roza are named as rozagar and are very particular about offering namaz during this month and spend this month with great piety and sanctity.

Bakri-Id: The feast is also known as Id-i-Qurban or Id-ul-Kabir or Bar-i-Id and Id-ul-Zuha. This festival falls on the 10th day of Zil Hajja, the 12th month of the Muslim year. The feast has a foundation in Chapter XXII of the Koran.

The Prophet's injunction lays down that a Muslim should offer a part of his cattle to God when he benefits. The legend goes that before the birth of the Prophet Mohammad, there was Ibrahim (Abraham) a Prophet who condemned polytheism and animal sacrifice before images. It is he, who constructed the Kaba. He beheaded the minor idols, sacredly placed the sword in the hand of the presiding deity and proclaimed

that the crime was committed by the deity itself. The enraged mob threw him into the fire but the angels and God saved him. God commanded that he should sacrifice his only son, Ismail, begot at the ripe age of eighty. Though Satan tried to dissuade him, Ibrahim executed the Lord's command. However it was only a test and his son was restored to life. An orthodox version is that God desired Ibrahim to sacrifice to him the best he loved. The best he loved was his youngest son, Ismail, who was made to prostrate blind-folded. Ibrahim with his eyes covered, drew his sword across his neck, repeating the words "Bismillah-Allah-Ho-Akbar". In the meanwhile, however, the arch-angel Gabriel snatched Ismail from under the blade and substituted a broad tailed sheep in his stead. Ibrahim found to his surprise when he unfolded his eyes that a sheep was slain and his son was standing behind. Animal sacrifice appears to have come into voque since then.

On the 10th day of Zil Hijja, the festival of Bakri-Id is observed by paying a visit to an *Idgah* and offering *namaz*. It is perfoimed early in the morning. After the morning prayers, the Muslims return home and the head of the family chooses a sheep or a goat and places its head towards Mecca and says, " In tho name of the great God verily my prayers, my sacrifice, my life, my death, belong to God, the Lord of the world. He has no partner; that is what I am bidden; for I am first of those who are resigned. ". And then he slays the animal. The flesh of the animal is divided into three parts, one third being given to relations, one third to the poor, and the remaining third ieserved for the family. It is considered highly meritorious to sacrifice one animal for each member of the family. Apart from its religious aspect, the festival is observed as a great occasion for rejoicing. The festival is celebrated for three days and the time is spent in merry making and rejoicing.

BUDDHIST FESTIVALS

The followers of Buddhism form approximately seven per cent of the population of Greater Bombay, most of them being the followers of the late Dr. B. R. Ambedkar who resolutely embraced Buddhism with his numerous followers, chiefly from the Mahar community in October 1956.

Every full moon day is an auspicious day for the Buddhists. Some specific events have happened on these days and they are celebrated as festivals. The moon is worshipped on her appearance and after worship the fast observed on this day is broken. Non-vegetarian food is strictly avoided on these days. In the same manner, many Buddhists observe every Thursday in memory of Dr. Ambedkar as he died on a Thursday.

Vaishakhi Pournima: The full moon day of the month of Vaishakha is particularly auspicious because Gautam Buddha was born on this day. He also attained perfect knowledge or enlightenment on this day. He died also on this day. All these events have enhanced the importance of Vaishakhi Pournima. The neo-Buddhists honour both Buddha and Ambedkar by garlanding their photographs and taking them in a procession. Fast is observed, prayers are said, meetings are held and speeches delivered on the achievements of Buddha and Ambedkar.

Ambedkar Jayanti: The 14th of April, anniversary of the venerable doctor's birth is observed as a festival. He was born on this day in 1891. A visit to his statue is organised and the statue garlanded. The principal function is organised at venerable Chaityabhoomi on the Dadar Chowpaty. Besides, many programmes are arranged in several localities in the city and suburbs. Prayers are offered in honour of Lord Buddha and Baba-saheb Ambedkar in the presence of Bhiku, a Buddhist priest. Every neo-Buddhist eats sweets on this day.

Nag Panchami: This festival is observed on Shravana Shudha 5 in honour of the Naga people who were devotees of Buddha. It synchronises with the cobra worship of Hindus on this day. The image of Buddha is worshipped, and khir, a sweet dish is offered to him. The day is spent in merry-making and feasting.

Vijaya Dashami: This festival coincides with the Hindu festival of the same name. For Buddhists it is important for two reasons. Firstly, it was on this day that Emperor Ashok announced that he would never use force to win over or conquer people but he would persuade them. The Emperor conquered Kalinga Desha after massacring thousands of people. He was much perturbed over the killings and repented for his act. Secondly, the day is celebrated as a festival because it was on this day in 1956 that many members of the scheduled castes embraced Buddhism following Dr. Ambedkar's lead. They wear white clothes on this day which is called *dharmachakra parivartana*. A huge procession of the pictures of the Buddha and Ambedkar ending in a meeting where homage is paid to both is a feature of the day. Sweet dishes and merry making form part of the day's programme.

Deepavali: The festival is observed on Ashvina Vad. 30. It ends the period of three months during which Buddhist monks are required to stay at one place. Dwelling places are cleaned and whitewashed. In the evening lamps are lit in front of the house. Worship and prayers are offered to the Buddha's image. The festival coincides with the Hindu festival of the same name, but extends over four days.

December 6: This day is celebrated as the death anniversary of Ambedkar who expired on that day in 1956. It is celebrated in a very solemn manner. A total fast is observed by many, but those who cannot do so avoid non-vegetarian food as a rule. Dr. Ambedkar's image is worshipped in every house. The day is called parinirwana din and meetings are held to remember his services to the neo-Buddhists.

Holi: This festival is observed on Phalguna Shuddha 15 and it coincides with the Hindu festival of the same name. After worshipping the image of the Buddha, they exchange pieces of coconut kernel and dates.

Besides all these festivals, the following days are also observed as festivals though they are not celebrated on a grand scale:— $\,$

(i) *Jyeshtha Pournima*: This is observed to commemorate the Buddha's teachings of the Mahasamaya Sutta to the inhabitants of Kapilavastu.

- (ii) Ashadhi Pournima: Lord Buddha preached for the first time the principles of his Dhamma to his five friends which were later on called as Dharmachakra Parivartan. The Buddha Bhikkus stay at one place from Ashadha Pournima. They do not move out for a period of three months.
- (iii) Ashwina Pournima: On this day the Buddha preached in the heaven (Devaloka) to his mother, Mahamaya Devi and other goddesses. He also returned after three months.
- (iv) Vasant Panchami: It is celebrated on Magha Shuda 5. Khir, a sweet dish, and yellow flowers of sarasa are offered to the image of Lord Buddha. The yellow colour is prominent on this day. Even the khir is of saffron colour.

CHRISTIAN FESTIVALS

A major part of the Christian population in Maharashtra State resides in Greater Bombay and Thane districts. Most Christian festivals are observed with rituals which are common around the whole world. The social practices associated with these festivals vary from people to people and country to country. Christians in Maharashtra live mainly on the coastal regions and have mainly been farmers and fishermen. Their festivals bear the marks of these ancestral avocations.

The Christian year is a series of feasts, commemorating the expectation, birth, life, death, resurrection and glory of Christ and is a continual reminder of His teachings. The year is divided into cycles of festivals which are incorporated in the liturgy of the official prayers of the Church, the most important of which is the mass.

The mass is a sacramental representation of the sacrifice of Christ on Calvary and of his last supper and is offered daily by every priest. A large number of people attend the daily mass. The Sunday mass is obligatory on all Catholics and includes a sermon. It is a common sight to see churches crowded on Sundays with worshippers dressed in their best clothes. Sunday mass fosters religious devotion and also offers an opportunity for meetings and social contacts among the people.

The prayers of the mass vary to some extent according to the cycle of feasts and it is through the mass that seasonal festivals are emphasised and celebrated. The main annual cycle of festivals is called the temporal cycle and follows the sequence of the life of Christ. This cycle is divided into three parts: Christmas, Easter and Pentecost. The cycles of these great feasts are divided into three periods, the time before, during and after the feast, their purpose being to prepare for the feasts, to allow them to be celebrated with solemnity and to prolong them for several weeks.

Along with the main cycle of feasts is a lesser one called the sanctoral cycle comprising the feasts of saints.

The Christmas cycle commemorates the incarnation of Christ, that is, his assuming the nature of man. The period of preparation of Christmas, which marks the beginning of the Christian calendar, is a penitential period of four weeks called Advent. Advent represents four millenniums before Christ, during which the particulars and prophets of the Old Testament foretold and awaited the coming of Christ. During these weeks, the liturgy remembers the fall of the first man, the consequent misery of humanity and the longing for the promised Messiah so eloquently expressed in the Old Testament.

The Christmas season starting with Christmas Day, December 25, celebrates the happy event of Christ's birth. Following, upon Advent, it is a season of great joy, because of the gladding of Christ's birth. The Christmas mass is celebrated at midnight; priests wear white vestments, the organ is played and the key note is universal joy.

Correspondingly in every Christian home, Christmas is a joyful family feast. There are prevalent in Maharashtra many western customs such as the exchange of greeting cards, the singing of carols on the nights preceding Christmas and the building of Christmas cribs representing the birth of Christ in a stable at Bethlehem. To the building of such cribs much ingenuity and artistic skill is devoted. One of the customs which may have originated in this country itself is the exchange of choice Christmas sweets, the variety and fineness of which are matters of family pride.

The Christmas festival season extends over two weeks and includes the New Year day on January 1. Though this festival has no religious significance, it has become a joyous practice to hold a midnight service to bring in the New year. On the social plane, dances and parties are held throughout the night to usher in the new year in a jubilant mood.

The sixth of January is Epiphany and marks the visit of the Three Wise Men of the East to the Infant Jesus. Liturgically, Epiphany is of great significance because it is the first manifestation of Christ's Divinity to the world. Some weeks after Christmas begins the annual forty day season of prayer and penance called Lent, to correspond with the forty days fast that Christ undertook before beginning his ministry. Lent starts with Ash Wednesday, usually in February, on which day people are marked with the Cross in ash as a reminder of death that comes to all. Lent begins with this sombre awareness of human destiny and lasts upto Easter Eve.

Lent is the period of contemplation of the teaching s, sufferings and death of Christ and a sharing in them through penance. The churches are crowded during this season and the prayers of the mass are full of reminders to do penance. The last two weeks of Lent are called Parsion Weeks, when the altars are stripped bare and statues draped in purple and no organ is played in Church. With the last Sunday in Lent, Palm Sunday, begins the Holy Week. On this day, blessed palms are distributed and processions are held in remembrance of the entry of Christ into Jerusalem just before his betrayal and death, when he was welcomed by the people with waving palms.

The main events of the Holy Week are on Thursday and Friday. Thursday, called Maundy Thursday, is the

day of Christ's Last Supper when he instituted the Holy Eucharist and of his agony in the garden and betrayal of Judas. The ceremonies in the Church aie mainly devotional dramatisations of the events.

There is the washing of the feet of twelve selected people, usually from among the poor by the priests to represent the washing of the feet of the twelve apostles by Christ before the last supper as an act of humility. The Blessed Sacrament is exposed on Thursday night through Friday and worshippers make frequent visits to the Blessed Sacrament.

Friday called Good Friday, commemorates the death of Christ on the Cross. In the afternoon, from 3 o'clock, to coincide with Christ's agony, on the Cross, there is special adoration of the Cross, after which take place dramatic representations of Christ on the Cross, the taking down of his body from the Cross, the grieving of Mary, his mother over the dead body, the procession to the grave and burial. All these ceremonies of Holy Week are conducted with much solemnity and seriousness. People wear mourning dress, white or black. Bell and music are stilled; only a harsh wooden clapper is used to call attention to the chief parts of the ceremonies.

Easter Sunday marks the end of Lent and commemorates the joyful resurrection of Christ from the grave. It is liturgically, the principal feast of the year and all the movable feasts are dated from it. It occurs on the first Sunday after the full moon after the spring equinox and thus correspondent to the ancient festival of spring. It also coincides with the old Jewish festival of Passover or release from Egyptian bondage.

The ceremonies of Easter Sunday, like those of Maundy Thursday and Good Friday are lengthy and solemn. Easter Sunday liturgy starts well before midnight on Holy Saturday with the blessing of holy water. During the service, the sorrow of Holy Week is dramatically replaced by the joy of Easter with the pealing of bells, the playing of the organs and the chanting of the old Jewish hymn of praise, Alleluia. A significant symbol of Easter is the Paschal candle, a specially blessed candle that marks the victory of Christ over the darkness of sin and death. This candle is kept lighted in the Churches on all the Sundays of the Easter season.

Socially, Easter is second only to Christmas in importance. It is also a family festival. In the days immediately after Easter, the priest visits every house in his parish and blesses the houses with the newly blessed holy water. In Bombay, this rite is quickly gone through but in towns and villages, it is a very special occasion. However, the houses are painted and kept in repairs for it and all the home members make it a point to be present for the occasion.

Since the solemnising of weddings is not allowed during Lent, Easter brings in the wedding season. Weddings among Christians are celebrated with much pomp and gaiety and this adds to the joyousness of the Easter season.

Forty days after Easter is the feast of Ascension of Christ into Heaven. Ten days after is Pentecost Sunday, as important as Easter, for it marks the descent of the Holy Ghost on the apostles and the gift of the tongues to them, and consequently it is the birthday of the Church. For it was on Pentecost Sunday that the apostles began their first converts.

Pentecost is almost the last of the great feasts connected with the life and death of Christ. A few days after, is the feast of Corpus Christi or of the Blessed Sacrament which is celebrated now because the actual day of its institution, Maundy Thursday, comes in a season of penance and mourning. The feast of Corpus Christi is kept up in different churches on different Sundays with a day-long adoration and processions and its celebration becomes the annual parish or church feast.

The Friday of the week after Corpus Christi is the feast of the Sacred Heart, the feast of the love and providence showed to men by Christ, God and man, Redeemer and Sanctifier. Then after a period of Sundays, the cycle comes full circle with the beginning of Advent. Side by side with the main cycle of feasts relating to Christ himself, is the annual calendar of saints' feasts.

The most important of these are the various feasts of Mary, St. Joseph, the apostles, the angels, important saints and saints held in local veneration.

The principal feasts of Mary, mother of Christ, are connected with the main events of her life, beginning with the immaculate conception or her conception free from the taint of original sin, on December 8. The other feasts of Mary are her Nativity on September 8, the Annunciation or the day when the future birth of Christ was revealed to her, the feast of her sorrows when she shared in the passion of her son and her Assumption when after death, she was assumed into heaven, this last feast coinciding with the day of India's Independence, August 15.

Besides these feasts of the Calendar, the month of May is especially dedicated to Mary and in the evenings of this month, people and especially children, gather for devotion to Mary, Our Lady of Perpetual Succour, every Wednesday at St. Michael's Church, Mahim, which is attended by several thousands, week after week, all round the year.

The most popular of these feasts is the feast of Mary's Nativity on September 8 which coincides with the feast of the famous shrine of Our Lady of the Mount in Bandra. Here, the feast is kept up for a week and there is a constant stream of devotees and pilgrims at the shrine with offerings and petitions. A fair is also held below the mount at the time of the feast. Several hundred thousand people visit this famous mount near the sea to venerate the ancient statue that is held to be miraculous.

On November 1, is the feast of all Saints, followed the next day by the feast of All Souls, a day of prayers and remembrance of the dead. In the month of May is yet another special devotion to the Holy Cross, specially in Salsette and Vasai. The countryside in these predominantly Christian areas is dotted with crosses erected on roadsides, or on hillsides or on the seashore, some built into special shrines and

chapels and all tended with care. During May, for the feast of the Holy Cross occurs in this month, people of the nearby villages gather at the cross every evening for prayers and after the service, the gathering remains as a social meeting, reinforcing friendship.

At the end of June is the feast of St. Peter, the chief apostle of the first Pope. Peter was a fisherman and so to the Christian fishermen in Greater Bombay, this day is a patronal feast and is celebrated with much verve and pomp.

Among the local festivals aie the feasts of St. Gonsalo Garcia, February 5, the first Indian born saint, chiefly venerated in Vasai, and the older and more wide spread feast of St. Francis Xavier, the great apostle of the East and the patron saint of India whose body is venerated in Goa and whose feast is celebrated with much enthusiasm in Bombay on December 3.

ZOROASTRIAN FESTIVALS

Not more than a hundred thousand in all, the Parsees form a small but a very important community in India. A heavy concentration of them is to be found in Greater Bombay. Their festivals are called Jashans. The Parsee year according to present reckoning has 365 days. There are twelve months of 30 days each and extra five days are added at the end of the 12th month. Each day as well as each month is dedicated to a presiding deity the Creator Ahura Mazda (later Hormazd), the omniscient Lord or His spiritual Beings and named accordingly after presiding deity. The last additional five days of the year are dedicated to the deities presiding over the five *gathas* or the hymns composed by the Prophet Zoroaster, and they are named accordingly.

The Parsee year begins with the first day Hormazd of the first month, Farvardin and ends with the *last gatha* day, *viz.*, Vashishtoist. The Jashans or the festivals of the Parsees have religious, seasonal and historical importance. They are divided into three groups. It is, however, difficult to divide the Jashans in exclusive groups. Religious importance permeates all Jashans, *e.g.*, Jashan of the birthday of the Prophet has historical as well as religious importance. Similarly the seasonal festivals are also religious festivals. The Jashans are celebrated on solemn as well as festive occasions. On the solemn occasions, the Parsees rise early, take bath and spend time in prayer and ceremony and in attending the fire temple and religious congregation. On the Jashans of festive occasions the Parsees rise early, decorate their houses with flowers and *rangoli* prints, a sign of good omen. They celebrate the seasonal festivals known as Gahambars

In their prayers and ceremonies, Parsees offer homage to Ahura Mazda, Amesha Spentas and Yazatas. They offer thanksgiving and invoke blessing of God for spiritual and material welfare of all mankind, the country, the community and the family. In the formula of Articles of Faith, Parsees pledge themselves to follow the path of piety and virtue, to put into practice the principle of good thought, good word and good deed, taught by the Prophet.

On the Jashan or festival days generally, the Jashan ceremony is performed in the fire temple or in private houses where there are facilities for the same. In the Zoroastrian ceremonies, the fire plays an important part. It is regarded as representative of God, and as such, presence of fire in Zoroastrian ceremonies is absolutely necessary. Other requisites are water, fruits, flowers and milk. Prayers of thanks giving are offered and blessings are invoked. After prayers and ceremonies on festive occasions, Parsees spend time in rejoicing. They prepare special dishes on the occasion. Besides the ordinary dishes, they prepare special sweet dishes of *sev* (vermicelli), *ravo*, *a.* sweet dish made of wheat flour, ghee, sugar and milk and curd, *dhan* (rice), and dal patio, a dish of fish.

The principal festivals observed by Parsees are given below: (Although this narrative is of great interest for studying the traditional customs of Zoroastrians, very few of the festivals are celebrated by the Parsees of Bombay who are a highly urbanised section.)

1.Navroz: This is the New Year Day celebrated on the 1st day Hormazd. It is also known as Pateti wrongly pronounced as Papeti. It is a day of repentance, because this is the day on which Parsees take stock of what was done in the preceding year and recite prayers of repentance. On this day, they pray, invoke blessings of God, send good wishes to relatives, friends and acquaintances. They greet each other and do hamazor (united in strength) by joining both hands with those of others and by wishing sal mubarak, may new year be auspicious. Parsee women also greet in the same manner. Often they embrace each other in affection while pronouncing the words of greetings, blessings and good wishes. On this day, Parsees send presents to relatives, friends, subordinates and dependents. They perform acts of charity, particularly by giving alms to the poor in cash or kind and also to the sick and the needy.

2. Rapithvin: It means mid-day and is celebrated on the 3rd day, Ardibehesht. This was the festival in ancient Iran and it announced the advent of the hot season. According to Parsee reckoning, a day is generally divided into five gahs or watches. Rapithvin is the second watch beginning with noon or midday and extending upto 3 p.m. It is, therefore, the hottest part of the day.

The prayer of Rapithvin *gah* is recited only in the first seven months and not in the last five months of the year. The Rapithvin Jashan is celebrated to mark the return of the Rapithvin *gah*. Strictly speaking, the prayer for Rapithvin *gah* is recited from the first day of the month Farvardin, but it is officially celebrated on the 3rd day, Ardibehesht because, the 3rd day is dedicated to Ardibehesht Amshaspand who presides over the 2nd watch of the day and also over heat and fire.

3.Khordad Sal: This means the year beginning with day Khordad. This is observed, as the name implies, on the sixth day, Khordad. This day is observed as birthday of the Prophet Zoroaster. The recorded birthday of the Prophet is the first day Hormazd of the first month Farvardin; but it appears that the first day Hormazd of the Eastern provinces of Iran corresponded with the sixth day, Khordad of the western provinces. This Jashan of the day Khordad was also known in ancient Iran as "Navrozi Buzurg" the great new year day. Many events of religious and historical importance are stated to have taken place on this

day Khordad of the month Farvardin.

- 4. Farwardagan Jashan: This means Jashan of Farohar or the guardian spirits. It is celebrated on the 19th day, Farvardin. This is the Jashan of the solemn occasion of remembering the soul and guardian spirits of the departed Zoroastrians particularly of those who departed during the preceding year. On this day, the Parsees generally visit the fire temple, near the Tower of Silence and ceremonies in honour of the souls and Farohars of the departed persons are performed there.
- 5.Ardibehesht Jashan: This is celebrated on the 3rd day Ardibehesht in honour of Ardibehesht Amshaspand.
- 6.Maidyozarem Gahambar: This is celebrated on any one or all of the five days from the 11th day, Khorshed, to the 15th day, Daepmeher. This was the festival of mid-spring in ancient Iran when the creations of Nature are full of sap and milk.
- 7.Khordad Jashan : Jashan of Khordad is celebrated on the 6th day, Khordad, in honour of Khordad Amshaspand.
- 8. Tiryan Jashan: Jashan of Tir celebrated on the 13thday. Tir, in honour of Tishtrya (Tir Yazat) who presides over rain and brings rain water and prosperity to the country.
- 9.Mydyoshem Gahambar: This is a seasonal festival of mid-summer. This is celebrated on any one or all of the five days from the 11th day, Khorshed to the 15th day Daepmeher. This was the festival of the season of cutting grass in ancient Iran.
- 10.Amardad Jashan: Jashan of Amardad is celebrated on the 7th day. Amardad, in honour of Amardad of Amshaspand presiding over immortality and vegetation.
- 11. Shaharewar Jashan: Jashan of Shaharewar is celebrated on the 4th day Shaharewar in honour of Shaharewar Amshaspand presiding over holy kingdom of God and metals.
- 12. Paitishahem Gahambar: This is the festival of the harvesting season. The Jashan is celebrated on any one or all of the five days from the 26th day, Astad to the 30th day Aneran. This was the festival of the season of harvesting foodgrains in ancient Iran.
- 13.Mehragan Jashan: This is Jashan of Meher and is celebrated on the 16th day Meher. Meher (Avesta Mithra, Vedic Mitra) is the Yazata presiding over sunlight, truth and justice. The Jashan in honour of Meher was celebrated in ancient times with great pomp and rejoicing. This was the festival of the Sun. In ancient times, Iranian sun-worship had spread in Asia Minor, Greece, Rome and also in other countries of Europe. In ancient times, the first day Hormazd of the 7th Month Meher was the day of autumnal equinox; but it appears that the Jashan was celebrated on the 16th day Meher. In pre-historic times, the Iranian year began with autumnal equinox.
- 14. Jamshedi Navroz: This is new year day of King Jamshed. It is celebrated on the 21st of March of the Christian calendar. This Jashan is popularly observed in recent times in Iran and the adjacent countries. It was instituted primarily for revenue purposes in 1099 A.C. by Sultan Jalal-ud-in Malikshah, the King of Persia on the advice of his Grand Vazir Omar Khayyam. It is tied down to the Gregorian Christian calendar and the new year (Jamshedi Navroz) is fixed on the 21st of March. As stated above, members of the Fasli sect of Parsees celebrate their Navroz or New Year day on March 21 and other festivals accordingly.
- 15. Ayathrem Gahambar: This is the festival of the season of returning to winter residence. It is celebrated on any one or all the five days from the 26th day of Asad to the 30th day Aneran. In ancient times, this was the festival of the season of returning, of the cattle to winter residence and of the mating season of the animals.
- 16.Avan Jashan: This festival of Avan is celebrated on the 10th day Avan. This Jashan is in honour of Avan, the Yazata presiding over celestial waters and beneficient currents of Nature. On this day, the Parsees generally go to the nearest sea or river and offer prayers to Avan Yazat. They offer flowers, sugar, milk and coconut to the waters of the sea or of the river or of the well.
- 17. Adargan Jashan: This Jashan of Adar is celebrated on the 9th day, Adar. Adar or Atar Yazat presides over the fire. Particularly on this day, the Parsees go to the fire temple and offer homage to the holy fire.
- 18. Farvardin Jashan: This is a Jashan in honour of Farohar or the guardian spirits and is celebrated on the 19th day Farvardin. From the 5th century of the Christian era up to the 11th century in intercalated year the fire epagomaenae (the Gatha days) were kept after the month Avan. Hence the Adar was the first month of intercalated year; and as such it had the same importance as the first month Farvardin of the non-intercalated year. The 19th day, Farvardin is, therefore, celebrated as the Farvardagan Jashan which is celebrated on the 19th day Farvardin of the first month Farvardin.
- 19.Dae Dadar Jashan: Jashan of Dae Dadar is celebrated on the 1st day, Hormazd, 8th Day Daepadar, 15th day Daepmeher, 23rd day Daepdin or any one of these days. The Jashan is celebrated in honour of the Creator, Ahura Mazda.
- 20.Jashan-i-Sadeh: This is the festival of the 100th day celebrated on the 10th day Avan. Traditionally, this festival was instituted by the Iranian King Hoshang of the Peshdadian dynasty in pre-historic times. Tradition says that King Hoshang accidentally discovered fire and instituted this Jashan in thanksgiving for this divine gift of God and in commemoration of that event. It appears that in ancient Iran this festival marked the approach of winter. According to Bundahishn, the approach of winter was announced by igniting fires on the 9th day Adar of the 10th month, Dae. It appears that the Jashan was celebrated on the next day i.e., on the 10th day Avan. It is called the festival of the 100th day, because the 10th day

Avan of the tenth month Dae is the 100th day after the first day. Hormazd of the 7th month Meher which was in ancient times, the day of autumnal equinox, which was the day of new year's day in Iran in prehistoric times, as noted above (see *Mehragan Jashan*).

- 21. Disa Jashan: Jashan of the day of death of Zoroaster is celebrated on the 11th day, Khorshed. This day is traditionally observed as the day of passing away of the Prophet Zoroaster though the recorded day of his death is the 11th day, Khorshed of the 2nd month Ardibehesht. Jashan and other ceremonies are performed in the fire temples and in the houses of Zoroastrians. Prayers are offered, public meetings are held and lectures are delivered on the life and religion of the Prophet.
- 22. *Maidyarem Gahambar*: This is the seasonal festival of midwinter. It is celebrated on any one or all of the five days from the 16th day Meher to the 20th day Behram. This is a festival of winter.
- 23.Bahman Jashan: Jashan of Bahman is celebrated on the 2nd day Bahman. The Jashan ceremony is performed in honour of Bahman,the Amshaspand, presiding over animal kindgom. Throughout this month, particularly on the second day Bahman, the 12th day Mohor, the 14th day Gosh and the 21st day Ram, the Zoroastrians abstain from taking flesh. They make special arrangements to give fodder to animals and to give in charity for the welfare of animals.
- 24. Aspandarmad Jashan: The Jashan of Aspandarmad is celebrated on the 5th day, Aspandarmad. The Jashan ceremony is performed in honour of Aspandarmad who presides over the earth. This Jashan is also known as Jashan-i-Burzi-garan, the festival of the cultivators. Cultivation of land is an act of merit in the Zoroastrian religion. It is stated that one who cultivates land cultivates holiness and promotes religious virtue and industry. This is the Jashan of the deity presiding over the earth and hence it is a special festival of the farmers and cultivators of land.
- 25. Farvardagan Jashan: This is a festival in honour of Farohars, It is celebrated during the last ten days of the year from the 26th day, Astad to the 30th day Aneran (the five lesser days) and the five gatha days (the five greater days).

The last ten days of the Parsee year are specially dedicated to the Farohars (Avesta *fravashi* or the guardian spirits of the departed Zoroastrians). The ceremonies are performed in honour of Farohars. According to the Zoroastrian belief, the Farohars of the departed Zoroastrians visit their family residence in this world during the last ten days of the year. These days of Farvardagan are, therefore, celebrated with religious zeal and fervour. The houses are cleaned and whitewashed. A place is set apart for keeping vases and vessels containing holy water and flowers, the emblem of the Farohars. The days are spent in prayers, ceremonies and acts of charity.

These ten days are also known as *muktad* holidays. This word *muktad* is a corrupt form of the Sanskrit *muktaatman* which is Sanskrit translation of Avesta *ashamnam*, the first word of the prayer specially recited in honour and remembrance of the Farohars.

The last day of the year *viz.*, the fifth *gatha* day is popularly called Navroz but in ancient writings, it is correctly called the night of Navroz, in other words the new year's eve, which it really is.

26.Hamaspathmaedem Gahambar: This is the seasonal festival of approaching spring. It is celebrated on any one or all the five *gatha* days. This is the seasonal festival marking the end of winter and approaching spring. It is also the time set apart for performing religious duties and meritorious deeds.

SIKH FESTIVALS

There are quite a good number of Sikhs in Bombay. Most of them have migrated to Bombay in pursuit of industry, trade, and other jobs. They hold *gurparbs* to commemorate the Gurus. Famous among the *gurparbs* are those connected with birthdays of Guru Nanak and Guru Gobind Singh, and martyrdom of Guru Arjun Dev and Guru Teg Bahadur.

1. Guru Nanak's Birthday: This festival, 'Gurparb' as it is called, falls on Katak (Kartik) Sud 15 i.e., the full moon day and is celebrated in honour of the great saint, Guru Nanak, the first of the ten gurus of the Sikh religion. The day is celebrated as the birth anniversary of Guru Nanak who was born in 1469.

The celebrations commence some 48 hours before the actual day when the recitation of *akhandpath* of *Granth Sahib* begins at a convenient place or at the Gurudwara. Four to five *granthis* are posted to recite the holy scripture turn by turn for two hours each. A *sevadar* (attendant), is appointed to co-ordinate the function and look after the comforts of the persons who recite the *Granth Sahib*. *Dhupias* (incense-burners) burn incense beside the *Swari of Maharaj i.e.*, the throne where the holy book is recited, day and night till the *bhog* ceremony is over. *A jyoti* (flame) fed with pure ghee is kept burning during the period of the *akhand path*. It takes 48 hours to complete the recitation of the holy book.

After the completion of the recitation of the *Granth Sahib* (which is over on the actual day of celebration *i.e.*, Katak Sud 15), a *kirtan* is held at the same place followed by a *katha*, an explanation of the holy word of the *guru* from the holy book. The life story of Guru Nanak is told by prominent people. A *kavi darbar* and singing of orders are held thereafter. The *karah parshad* is then distributed among all those Who are present at the time. The end of the function is the *guru ka langar* (free kitchen) which is open to all persons without any distinction of caste, race, creed, sex, etc. All the persons rich and poor sit in one row and eat the food cooked in the same kitchen. It is all vegetarian. The devotees offer cash, flour, pulses, sugar, etc. for the *langar*.

A procession of the photograph of Guru Nanak is also taken out on this festival. It is attended by many Sikhs.

2. Baisakhi: This is another important festival of the Sikhs and falls always on the 13th of April of every year. It is an important festival for the Sikhs for the simple reason that on this day, Guru Gobind Singh

gave a militant aspect to the followers of Guru Nanak and raised an army of saint sepoys to fight the brutalities of the Moghul Emperors. When Guru Teg Bahadur was beheaded in Delhi, Guru Gobind Singh took up the cudgels against the mighty Moghul Empire with supreme courage and determination. He realised that a strong mass and a band of faithful, selfless volunteers, sparked with patriotism and vigour were needed to defend the *Dharma*.

On the Baisakhi day, Guru Gobind Singh and his Five Beloved ones, fully dressed in military uniforms were seated on a raised platform. Explaining the purpose of the meeting, the Guru told them that he wanted to form an organisation of men who would profess unflinching devotion to the Khalsa *i.e.*, one who is pure and whose code of conduct would be marked by self-abnegation and self-immolation. Their duty will be to protect the weak from tyranny and cheerfully lay down their lives to protect their *Dharma*. They will observe perfect equality among all without making any distinction on the basis of caste, creed, religion, sex etc. Guru Gobind Singh, therefore, instituted the custom of baptism by water stirred with a *khanda*, a double-edged sword. He replaced the old institution of "Charan Panhal" (*i.e.*, drinking the water with which the Guru had taken bath) which was in vogue ever since the time of Nanak. Sons of the sword, the Sikhs, were from henceforth given the name of 'Singhs' or lions.

The Baisakhi day is celebrated in Bombay on two days, *viz.*, 12th and 13th April. The former is called Baisakhi-Di-Raat and the latter as Baisakhi-Da-Mela when many cultural and other entertaining programmes such as folk songs, *dogri* songs, *bhangra*, etc. are arranged in the evening at spacious places like the Vallabhbhai Patel Stadium. It is also celebrated in the Gurudwara in the same manner as the celebration of Guru Nanak's birthday. The *amrit chakhna* (baptism ceremony) is also performed on the same day. Baisakhi happens to be also the New Year's day.

3.Hola Mohalla: This is an important festival of the Sikh community and it synchronises with the Hindu festival of Holi which is celebrated on *Phalgun Sud.* 15. The Hola Mohalla festival is, however, celebrated for three days *viz.*, *Phalgun Sud.* 14, *Sud.* 15 and *Chaitra Vad.* 1.

The religious part of the festival is the same as described in respect of the festival on account of the birthday of Guru Nanak, and it is celebrated with great pomp and vigour at Anandpur in the Punjab. The day's celebrations begin 48 hours before the main day *i.e., Chaitra Vad.* 1. On this day, a procession is carried out and arms are prominently displayed. Even 'mock' battles are arranged with a view to imparting training to the younger ones in the use of arms. This was essential in the early history of the Sikh religion since they had to give a tough fight against the Muslim invaders. The offensive attack thus arranged in the mock manoeuvre is called halla, a severe offensive attack. This festival is typically celebrated by the Sikh community at Nanded.

4. Guru Arjun's Martyrdom Day: This is the day on which Guru Arjun Dev was done to death by the then Muslim ruler of North India. He was the fifth Guru of the Sikhs. He became a guru on the death of Guru Ram Dass, his father, in 1581 A.D. Guru Arjun Dev used to preach the teachings of Guru Nanak and in his era, many non-Sikhs were drawn to Sikhism voluntarily. Even some of the Muslims accepted Sikhism. This was not tolerated by the Moghul Emperor. The Guru was summoned to Lahore and was made a prisoner and was handed over to Murtuza Khan who was told that the Guru should be made to embrace Islam or else tortured to death. Since Murtuza Khan failed to convert him to Islam, he handed him over to a Hindu Minister, Chandulal, who had developed enmity with the Guru ever since the latter had disagreed to the marriage proposal between the Guru's son Har Gobind and his daughter. The Guru was tortured in many ways. It is said that he was made to sit on a red hot iron plate, burning sand was poured over his body, etc. He could not withstand all these tortures and ultimately died in 1606 A.D. This^happened on Jyeshtha Sud. 4 and the day is celebrated as the martyrdom day of Guru Arjun Dev, the first martyr of the Sikhs. He was a gifted poet and compiled the Adi Granth (the nucleus of the Granth Sahib) in 1604 and he was the first Guru to introduce a new type of dress for the Guru.

5. Guru Nanak's Death Anniversary: Since Guru Nanak happens to be the first Guru of the Sikhs, he occupies an important place in the Sikh religion. The passing away of Guru Nanak is, therefore, celebrated as a solemn day. It is held on Ashwin (Assoo) Vad. 10 and on this day, the life and teachings of Guru Nanak are preached to the audience. A procession of a portrait of Nanak is taken out from the main parts of the city and it ends either at a Gurudwara or at a public place where a pandal is constructed. Like the birthday of the great Guru these celebrations also commence 48 hours before the main day i.e., on Asoo Vad. 8. The celebrations end with a Guru Ka langar.

6. Guru Teg Bahadur's Martyrdom Day: The martyrdom day of Guru Teg Bahadur, the 9th Guru of the Sikhs is observed on Maghar (Marga-shirsha Sud. 5). On the death of Guru Har Krishna, he became the ninth guru of the Sikhs in 1664. During his tenure, the community was divided into many factions. Nevertheless, he could carry out the work of spreading the Sikh religion. He loved peace and quietude. In order to protest against the tyranny of the Muslims, he personally went to Delhi to tell Aurangzeb about converting to Islam by force. He was encouraged in his mission by his only son Govind Rai who subsequently became the tenth and last guru. His son at that time was a child of eight years. He was persuaded to accept the creed of Islam. However, Aurangzeb's efforts bore no fruits. The Guru was slain and was cut into four pieces and the fragments were hung on the four gates of Delhi. The place where the Guru was sacrificed bears the name Sis Gunj and is situated in Chandani Chowk in Delhi. This happened on Margashirsha (Maghar) Sud. 5 which is observed as a martyrdom day of Teg Bahadur.

7. Guru Gobind Singh's Birthday: This is observed on Paush (Poh) Sud.7. Guru Gobind Singh was the last guru of the Sikhs and it was he who established the Khalsa. It was founded in order to give a united and strong fight to the Muslims who were persecuting the Hindus and others perpetually. He also discontinued the practice of successions of gurus and in their place, the Granth Sahib was installed.

Gobind Singh became a Guru of the Sikhs at the tender age of 9. He was a man of the noble character, selfless devotion and so he occupies a unique place in the Sikh religion. The way of celebrating the birth anniversary of Guru Gobind Singh is the same as that of Guru Nanak.

8.Basant Panchami: The festival falls on Magh Sud. 5 and is celebrated to commemorate the day on which Guru Har Gobind (the 6th Guru) liberated the 52 captives from the Gwalior Fort. The yellow colour occupies a prominent place in this festival probably because the rabi crop of mustard is ripe at this time and it takes a yellow colour. On this day, the Sikhs usually wear yellow clothes and even in the preparation of certain dishes, the yellow colour is used. It is a very charming scene to see yellow colour all around.

9. Prakash Din: This festival is observed on Bhadan (Bhadrapad) Sud. 1 when the Grantha Sahib was first read over. It is celebrated to commemorate the compilation of the holy Grantha Sahib. The manner of celebrating this festival is the same as of other festivals.

All the Sikh festivals are celebrated in one set fashion. The celebration of the festival begins 48 hours prior to the festival day when the continuous recitation of the holy *Grantha Sahib* begins. It is concluded on the day of the festival when a *kirtan* is held. It is followed by lectures on the life of the Guru in whose honour the festival is held and a *kavi darbar*. The *ardas* is said and the distribution of *karah prasad* marks the conclusion of the function. The day's functions end with the *Guruka langar*, the free kitchen, which is open to all irrespective of caste, creed, religion, etc.

JAIN FESTIVALS

The Jains form only 1.5 per cent of the total population of Maharashtra, but in Greater Bombay they are 32.07 per cent of the total population. They belong to two groups *viz.*, Murti-pujaka and Sthanakvasi. The former are again divided into Shwetambara and Digambara sects. The theory of the origin of the two sects is that Parasnath, the 23rd Tirthankara, wore clothes while Mahavira, the 24th, did not, and the two sects follow their respective examples. The Digambaras now wear ochre coloured and the Shwetambaras wear white clothes. The principal difference at present is that the images in Digambara temples are naked and bare while those of the Shwetambaras are clothed and also decorated with ornaments and jewellery.

Pandit Sukhalaji, a renouned Jain scholar states, "It is a distinguishing character of the Jain festivals that none of them, however, small or big, celebrates or extols a desire for acquisition or self-gratification or a feeling of fear, temptation or astonishment. Whatever the occasion for the festival, a landmark in the life of the Tirthankaras or something else, the sole objective of the relevant celebrations is knowledge and the purification and perfection of character."

The following are some of the important festivals observed by the Jain community:—

- a. New Year Day {Veer Samvat): This is celebrated on Kartika Sud. 1 on which day, the Veer Samvat begins, It is believed that the first Gandara (disciple) -Gautama achieved the ultimate knowledge of omniscience (kevaladnyana) at the dawn of this day when he overcame his attachment to his guru, Lord Mahavira, the last and 24th Tirthankara who attained nirvana on the previous day which is observed as Diwali day.
- b. *Dnyana Panchami*: This festival falls on the 5th day of the bright half of Kartika. On this day, the Jains are considered to acquire spiritual knowledge in the uplift of the soul. There is a legend about this festival which is connected with Prince Varadatta. Religious books are to be worshipped on this day. Incense sticks are to be burnt before them and a design of *swastika* is to be drawn with five types of grains, rice and flowers. Sweet dishes should be offered and a lamp of five is to be lighted. By observing the austerities, Varadatta and Gunamanjari were cured of their diseases and became happy. Those who are unable to celebrate the fifth day of the bright half of every month in this manner can celebrate the fifth day of the bright half of Kartika. They offer special worship and pay respects to *sadhus* and *sadhvis* and attempt to acquire more knowledge. A similar festival called *Shuta Panchami* is observed by Digambara Jains on Jyeshtha *Sud.* 5 on which day their saints Pushdanta and Bhutabali completed the writing of the sacred book, *Shatakhandagama* which is worshipped by all Jains.
- c. Chaturmasi Chaturdashi: This festival falls on Kartika Sud. 14 which is the last day of chaturmasa (the months of rainy season) which begins with Ashadha Sud. 14. During this period free movements of Jain monks are prescribed with a view to avoiding the possible destruction of germs, vegetation, etc. They ate ordained to stay at one place during this period. Even pilgrimages to holy places such as Shatrunjaya hills near Palitana are prohibited.
- d. Kartika Pournima: This is the day on which the austerities of chaturmasa undertaken by Jain ascetics are ended. The day has a special significance. The austerities of chaturmasa undertaken by Jains are ended on this day and prohibited food can be taken from this day after observance of quarterly pratikramana. On the occasion of pratikramana, Jains observe fast for two days on 14th and 15th of Kartika which is called chhath. Sadhus who are prohibited from moving from one place to another during the period of chaturrnasa, are free to start on their journeys. Mount Shatrunjaya, one of the holiest places of Jain pilgrimage, which remains closed during the chaturrnasa period is opened on this day and many people go on a pilgrimage to that city of temples. Some of the Jains who cannot afford to visit this place, visit other nearby Jain tirthas. Others celebrate the function at home when the paintings of Shatrunjaya on cloth called pat are exhibited at the outskirts of the town. Devout Jains take darshan of the pat and refreshment of sweet drink is sometimes freely distributed amongst them.
- e. Mauna Ekadashi : This is observed on Margashirsha Sud. 11; mauna (silence) according to Jainism is a means of self-purification which gives mental peace to those who observe it. 150 kalyanaks, the holy days of the anniversaries of birth, nirvana, etc. of the Tirthankaras fall on this day which is regarded as very sacred. The anniversary of the birth, diksha and kevaladnyana of Mallinath, the 19th Tirthankara, also falls on this day.
- f. Paush Dashami: This festival is celebrated on the occasion of the anniversary of Lord Parshwanath, the 23rd Tirthankara on Margashirsha Vad. 10 called Paush Dashami. This is celebrated by chanting mantras with the observance of complete fast on the 10th and the partial fast on both, the preceding and succeeding days of Margashirsha Vad. 10. The use of luxurious articles, including soft

bed etc., is avoided on this day. It is believed that those who observe this fast for ten years and ten months are blessed with moral> material and spiritual happiness.

- g. *Meru Trayodashi*: This festival is observed on Paush Vad. 13 in commemoration of the birth anniversary of Lord Adishwarji or Rishabh-dev, the first Tirthankara of the Jains. Special worship is offered on this day at temples where seven silver pots are placed one above the other in the form of a conical pile which is locally called *meru* and decorated with flags from all sides. A fast is also observed on this day in the usual manner.
- h. Rohini Vrata: This vrata is observed with a fast every year by Jain females in honour of Rohini, the queen of Ashoka, on the occasion of the nakshatra known as Rohini. The legend of king Ashoka and queen Rohini is narrated in this connection. With a view to receiving timely help from Paramatma like the queen, Jain females, observe this vrata for seven years and seven months.
- i. Aayambila Vrata: This vrata is observed from Chaitra Sud. 7 to 15 by devout Jains who take only one meal in a day in one sitting. The food which is without fat or oil, spices and sometimes salt is consumed during this period. Shripal Rasa is read in the Upashraya and other religious rites are also performed during the period.
- j. Mahavira Jayanti: This is celebrated by all sections of Jains with pomp and show on Chaitra Sud. 13 in commemoration of the birth of Lord Mahavira, the24th and last Tirthankara of the Jains. King Siddhartha and his wife Trishala who were devout followers of Parasnath, 23rd Jain Tirthankara gave birth to a child named as Vardhamana in 599 B.C. in Videha. After the birth of the child, the family gained much wealth and prosperity and so the child was named as Vardhamana who was later on known as Lord Mahavira. When he was twenty years old, his parents died and after two years, he succeeded in obtaining the permission of his elder brother and other relatives for adopting the ascetic way of life which was started on Kartika Vad. 10. He passed the next twelve years of his life in deep meditation and severe penance with hardships. Thus at the age of 42, he earned omniscience and attained the highest knowledge and kevaladnyana on Vaishakh Sud. 10 on the bank of the river Rujupati under a sal tree. In the next thirty years, he visited various places, including Mithila, Rajagriha, etc. and preached many vows. He attained nirvana in Ashwin (Aaso) Vad 30 in 527 B.C. at Parapuri.

On the day of Mahavira Jayanti, Jains go to the temple of Mahavira or any other temple and perform religious ceremonies at shrines. Besides, morning processions are taken out with the idol of Mahavira and discourses on the life of Mahavira and his teachings are given with other religious and cultural programmes. Jains of the Digambara sect celebrate Veerashasana Jayanti on Shravan Vad. 1 on which day, Lord Mahavira after achieving omniscience gave his first religious sermons on Mount Vipulachala.

- k. Chaitra Pournima: On Chaitra Sud. 15, Jains visit the temples and offer prayers before a photographic chart of the Shatrunjaya hills. Those who can afford to visit the hills go on a pilgrimage there. The other celebrations are the same as those gone through on Kartika Pournima.
- I. Akshaya Tritiya: Akshaya Tritiya is considered as one of the most auspicious days of Jains. It is celebrated on Vaishakh Sud. 3. On this day, Rishabhdev, the first Tirthankara of Jains, broke his continuous fast undertaken for six months by accepting sugarcane juice from Shreyans, the king of Hastinapur. The idol of Rishabhdev is bathed with sugarcane juice and worshipped on this day.

The *varsi tap* observed from Phalguna Vad. 8 to Vaishakh *Sud.* 3 of the following year by the Jains is terminated on this day. The *vrata* starts with a fast on Phalguna Vad. 8 and 9 and thereafter the fast is observed for alternate days. They have to observe fast on the 8th and 14th days of each lunar fortnight in spite of non-fasting days according to their turns. The fast observed for a year is terminated on this day by accepting sugarcane juice in small pots from relatives.

m. Paryushana Parva: This is the most sacred festival among all festivals celebrated by Jains which provides an opportunity to observe continuous religious activities. Those who do not observe any religious activities on other days also perform religious acts at least during paryushana. Jains of both sects viz., Shvetambara and Digambara celebrate it with strict austerities though the period of celebration is altogether different.

Shvetambaras observe this *parva* from Shravan *Vad.* 12 to Bhadrapad *Sud.* 4, especially for self-purification and is regarded as a *mahan parva* by Jains who observe complete or partial fast by taking only one meal in a day during the period of these eight days. *Kalpasutra*, an important Jain scripture written in Prakrit, narrates the lives of the first and last *Tirthankaras* and of other ancient saints and the preaching of the *Tirthankaras* is read out. At some places, the life stories concerning the important events in the lives of Lord Mahavira and the other prominent *Tirthankaras viz.*, Rishabhdev, Parshwanath, Neminath etc., are read and explained to the gathering by monks and nuns.

The samvatsari or the annual pratikramana which is the last of the five periodical pratikramanas or expiation of sins directed to be performed during Paryushana is celebrated on Bhadrapad Sud. 4 by the Jains who observe fast on this day. Greeting cards are exchanged amongst relatives and friends and each person asks forgiveness of his relatives, elders and friends for any verbal, mental or physical injury that he might have caused directly or indirectly in the last year.

Though the birthday of Mahavira really falls on Chaitra *Sud.* 13, it is conveniently celebrated on the fifth day of this *parva i.e.*, on Bhadrapad *Sud.* 1 on which day the metal idol of the *Tirthankara*, which is kept on a silver dish in a chariot specially decorated for this occasion is taken out in procession. Before starting the procession the devotees make bids for the priority of leading the procession. The highest bidder sits by the side of the idol in the chariot with men in front of it and women follow the chariot and sing songs in praise of Lord Mahavira. The procession terminates at the house of the highest bidder where the idol is kept for a day, is taken out through the main streets. Then, it is returned to the temple.

The fast observed for eight days is broken on Bhadrapad Sud. 5. On this day, a procession of monks,

nuns and devotees who observe fast is taken out which terminates at the temple.

The Jains of the Digambara sect observe paryushana known as Dasalakshana parva from Bhadrapad Sud. 5 to 14 every year. In the mornings of these days, the eight-fold worship is offered and the gathering in the temple is explained, one of the ten dharmas contained in the Tatvarthasutra which is one of the holy scriptures of Jains. Most of the Jains observe complete fast on all these days, while some observe a partial fast by taking one meal a day. Anant Chaturdashi which falls on Bhadrapad Sud. 14 is the last day of this parva. It is considered a sacred day on which a fast is generally observed by all. Paryushana is one of the most important festivals of the Jains and so it is observed by all, poor and rich who also give donations for charitable purposes.

n. *Diwali*: Jains celebrate Diwali as *nirvana din* or the day of emancipation of Lord Mahavira. This is a common festival to Jains as well as Hindus. The *nirvana* of Lord Mahavira took place at the age of 72 in 527 B.C. which is known as the commencement of the Jain era, *Veer Nirvana Samvat*.

The *nirvana* of Lord Mahavira took place in the night of Diwali *i.e.*, Ashwin *Vad.* 30 (*amas*). When Gautam Swami, the great saint who was away from the place came to know about the event, he was overwhelmed with grief and began to mourn. Afterwards, the supreme truth dawned on him and he attained *kevaladnyana*, on the day of Kartika *Sud.* 1, which is celebrated as a festival day. Diwali is also celebrated as the festival of light by illuminating houses with a number of lamps.

Lord Mahavira is worshipped at midnight and early in the morning next day and *mantras* are chanted in honour of Lord Mahavira and Gautam Swami. The Jains meet their relatives and friends and the new year's greetings are exchanged. Though the ceremonies like *lakshmipujana* have no place in the Jain religion, they are performed at some places. Bhau Beej which falls on Kartika *Sud. 2* is also celebrated by Jains as Sunanda, sister of Lord Mahavira hosted her other brother Nandivardhana with a view to comforting him in his grief at the *nirvana* of the Tirthankara. Thus, the festivals of Diwali, New Year and Bhau Beej are generally celebrated in a similar manner to Hindus but with some different religious backgrounds.

JEWISH FESTIVALS

Most of the Jewish population in Maharashtra is concentrated in Bombay, Raigad, Thane and Pune districts. Except for a very small number of Jews of Iraqi or European origin in Greater Bombay, the bulk belongs to a single homogeneous section known as Bene Israel. This section adopted Marathi as its mother tongue. So far as religious ritual goes, there is little variation from the observations of Jews from other parts of the world but there are distinctive native features so far as social usages are concerned. In particular the Bene Israels have adopted their own Marathi names for their festivals and these names are still in frequent use, though their Hebrew or English equivalent tend progressively to replace them.

As the Jewish day commences and ends at sunset each festival begins at sunset of the preceding day and ends at sunset. Thus the Sabbath, which is observed on Saturday each week, actually commences at simset of Friday of our ordinary calendar and ends at sunset on Saturday. The Jews, Bene Israels as they are called in Maharashtra, observe the following important festivals and fasts during a year.

1.Rosh Hashanah: The First of Tishri or New Year's day. Jewish New Year's day used to be called *navyacha san* in the past. According to Jewish tradition, the first of Tishri ushers in the Days of Awe, known in Hebrew as the 'Yommim Noroim". It is an occasion on which every Jew must strive to reconcile himself with the Almighty and with his fellowmen. Prayers are offered at the synagogue, the Jewish place of worship. On return from the synagogue on the New Year's Eve, a service is held in the evening when the seven things *viz.*, sweetened apple (*i.e.* apple and honey), green garlic (with roots and leaves), beet root, dates, white pumpkin, fish and head of lamb or goat are kept on the table. After prayers the articles are shared by all those who are present. The meals are taken after this function.

The Rosh Hashanah is marked by much rejoicing among the Jews. A feast is held where mutton or sweets, in two or more varieties are highlights of the dinner. Family reunions are a special feature, sons, daughters and sons-in-law coming from far and near. New clothes and ornaments are worn. Fruits and home-made delicacies are sent after the midday meal to relatives and friends. Presents are given to married daughters and sons-in-law in the first year of their marriage.

This festival is also known by three different names and each name has a special meaning attached to it. It is known as the day of judgement when God, the King of kings judges the deeds of the people done during the last year. It is also called the day of remembrance *i.e.*, it has a reference to the days when Abraham prepared to sacrifice his son at God's command. The other name given to the New Year's Day is the day of blowing the *shofar*. The blowing of a *shofar* is an important feature of the day's celebration. The *shojar* is a musical instrument made out of a ram's horn by flattening it by heat. In the old days, the blowing of *shofar* served many purposes *viz.*, heralding the New Year, the crowning of the king, etc. When the *shofar* is blown on the New Year's Day, it means that a day of peace, prosperity and happiness will be ushered in. The festival promotes the solidarity of home life and contributes to the well-being of the family and the community. The first of Tishri always falls on Monday or Saturday.

- 2. Fast of Gedaliah: This fast which is observed on the 3rd of Tishri is one of the four fasts of community mourning. It is observed in memory of the murder of Gedaliah, the governor of the Jews. He was appointed by Nebuchadnezzar. His assassination brought great hardships to the Jewish people. The fast is called Gedaliahcha upavas. It is broken by consuming khir, a sort of pudding made of rice, coconut milk, sugar etc; and because of this custom, it appears that the day is known as khiricha san. A prayer is offered for the relief of the souls of dead relatives.
- 3.Yom Kippur: This is called kippurcha upavas among the local Bene Israels. A fast is observed on this festival which occurs on the 10th day of Tishri. Since the Jewish day begins at sunset, the fast of Yom

Kippur starts from the sunset of the 9th of Tishri and ends at the sunset of the 10th of Tishri. As the Jewish calendar is arranged, the fast can commence only on Tuesday, Friday or Sunday at sunset. This festival is also known as the Day of Atonement and the 9th of Tishri is called the eve of Atonement. It is the great day of reconciliation between man and man and God. As a fast day, it is spent in a solemn manner. The Jews offer prayers for the forgiveness of sins which they might have committed and they solemnly resolve to abide by the law of God.

On the 9th of Tishri which is also called 'Malma' by Bene Israels, they go to the synagogue and offer prayers with the congregation. While going to the synagogue, they wear white clothes. They take their meals in the morning and again at about 5 p.m. on 9th of Tishri and fast till the evening of the next day.

The old custom of closing doors, keeping aloof from others etc., is not followed so strictly now. Now-a-days, they go to the synagogue and offer prayers and observe a fast for a period of 24 hours. The fast is broken after the customary prayer is said by consuming *sharbat* made of black grapes, putis, etc. They greet each other by performing *hat boshi i.e.* joining of the palms. A light supper is cooked after sunset. It consists of rice cooked in coconut milk and a curry of mutton, foul or fish.

The next day *i.e.*, the 11th of Tishri called *shila san* or Simbat Gohen is wholly spent in merriment and, entertaining relatives and friends in each other's homes. A special dinner is cooked and served. All wear their best clothes. Alms are given to the poor.

4.Feast of Tabernades: The festival of Sukkoth or Tabernades is known in Marathi as mandvacha san. It is celebrated for eight days from the 15th of Tishri to the 23rd. This festival which is known by different names has a historical and agricultural background. The feast of Tabernades reminds the Jews of ancient times when their ancestors were wandering from place to place to escape the wrath of the Egyptians. During their journey, they stayed in tents or booths and the protection offered in this way would have been insufficient but for the help of God. The Bible says "The fifteenth day of this seventh month shall be the feast of Tabernades for seven days unto the Lord". "Ye shall dwell in booths for seven days; that your generations may know that I made the children of Israel to dwell in booths when I brought them out of the land of Egypt."

In former days a *sukkoth* or booth used to be built with the help of leaves of the trees near the house. However due to changed times, a booth is constructed now-a-days near the synagogue where the local Jews congregate to offer prayers. Some also pass the night in the Succa. The other name given to the festival of Sukkoth is feast of ingathering. In the land of the ancestors of Jews, the month of Tishri is the harvest period of crops. The agricultuial aspect of this festival is given an expression in a custom followed by the Jews. When they go to the synagogue to offer prayers on this festival day, they carry invariably four different things wrapped together. These four things are citron, branch of a palm tree, myrtle branch and willow of the brook.

These four items represent the different kinds of Jews in this world. Citron has good taste and sweet smell. So there are Jews in this world who are learned and good. The palm tree has taste but no smell and hence represents Jews who are learned but not good. The myrtle which has smell but no taste reminds us of Jews who are good but not learned. The last *i.e.*, the willow of the brook has neither smell nor taste. There are Jews who are neither good nor learned. Thus we must live with ail kinds of people.

The last two days of the festival are known as Shemini Azeret (22nd of Tishri) and Simath Torah (23rd of Tishri). Simath Torah marks the end of this festival when a great feast is held known as the Feast of the Rejoicing of Torah. Simath Torah marks the completion of the readings from Torah or the laws as recorded in the Bible at the synagogue services and the commencement of a new cycle. It can never fall on a Saturday.

5. Feast of Hannuccah: This is called the festival of lights and resembles to some extent the Diwali festival of the Hindus. It is observed for eight days from the 25th of Kislev to the 2nd or 3rd of Tebet, according asKislevhas 30 or 29 days. It is celebrated with much enthusiasm and fervour. It is dedicated to the idealism and heroism of the Jewish people as exemplified by the struggle and sufferings of the Maccabens.

When Jerusalem was recaptured by Judas Maccabens, they went to the temple. The priests started preparation for the ceremonies of rededication, but could not find oil for the temple *memoram* (lamps). They found only one small cruse of oil which was sufficient for burning the light for one day. But a miracle took place and the oil burned for eight days. These eight days are days of rejoicing and praise and on every night of these eight days, lights are lit near the door of the houses in order to display and reveal the miracle that was performed for Israel in olden days. It is customary to light Hannuccah lights on this festival. It is a stand made of metal or wood where eight small tiny glasses are either kept on or fixed to the stand to enable to hold the candles or oil in them. There is an additional tiny lamp glass known as "Sammesh" lamp. The time of lighting them is immediately at the appearance of the stars.

The lights are lit at a height of about five feet from the ground in a frame specially provided for the purpose against the interior wall to the right as we get out of the front door. These lights are required to be stationed in such a way that their light should fall on the mezuza at the front door. The festival is spent in merry-making and in a most joyous way. Now-a-days, there are public functions for eight days when various items of entertainment are staged *e.g.*, fancy dress competition, lyrics singing competition, debates, etc. Sweets and presents are distributed to children.

6.Fast of Tebet: This fast which is observed on the 10th day of Tebet is called *tebetcha upavas* in Marathi. It is one of the four fasts of community mourning and is known in Biblical phraseology as the Fast of Tenth Month. This fast was not observed by the Bene Israels of Maharashtra in olden days but was introduced among them by David Rahabi. This fast might have been instituted to commemorate the first siege of Jerusalem by Nebuchadnezzar, king of Babylon in the sixth century B.C.

7. New Year's Day of the Trees: On the 15th of Shebat, the Bene Israels of Maharashtra celebrate a festival which is called by them *eliyahu hannabicha oorus* but in fact is observed as Rosh Hashana Leilanoth i.e. New Year's Day for the trees. It is also called *vanaspaticha divas* in Marathi. It is said that Elijah, the Prophet appeared to some Bene Israels at a village Khandala in Alibag taluka of Raigad district and then ascended to heaven. On this day, the Bene Israels purchase various kinds of fruits and place them in a plate along with *malida i.e.*, a composition made of bread of rice flour besmeared with sweets. New fruits are purchased by Jews since it is a season of harvest of fruits in the land of their forefathers. The plate is placed on a clean, white sheet. They invoke Elijah, the prophet, and say *Veitenlekha i.e.*, the verses of blessing prayers in gratitude are offered to the Almighty who has given so graciously every thing for man's use and benefit. After the prayers, the contents of the plate are distributed among the members of the family. By observing this festival, the debt which mankind owes to the trees and forests is remembered. Trees give us not only shade and fruits but are useful in many other ways and this is emphasised in the festival.

8. Fast of Esther and Feast of Purim: These two festivals are observed on the 13th and 14th day of Adar respectively (Adar II or Ve-Adar in a year with an additional month). A fast is observed on the 13th and a feast on the 14th. It generally coincides with the Hindu festival of Holi. Historically this festival goes back to the ancient days following the dispersion of 586 B.C.E. when a large Jewish community developed in the Persian Empire. Esther whose other name was Hadassab was the Queen of Persia. She was a Jewess. At that time Hamaa was the king's prijne minister who was all powerful. Esther's cousin Mordecai was somehow not in the good books of Haman. He decided to kill Mordecai. This, however, was not sufficient. Haman wanted to exterminate all Jews. At last, he obtained an order from the king to destroy all Jews and 13th of Adar was selected for the massacre. This news however, reached Mordecai and through him Esther whose timely intervention saved the lives of the Jews. Haman was exposed and ultimately hanged.

This fast commemorates the day that Haman had chosen for killing the Jews. It also recalls the fast that Esther had ordained upon the Jews an appeal to God to help her to save them. The feast of Purim is also known as the feast of lots. Haman wanted to make his plot of annihilation of Jews successful and accordingly, he had cast lots to decide the best day on which Jews could be killed. In Persian ' lots' are called ' Purim'. This gives the explanation for the feast being called Feast of Purim.

On the 14th of Adar *i.e.*, on the feast of Purim presents of sweetmeats prepared at home are sent by one family to another. Generally on the festival of Purim, the dish of puranpoli is prepared.

9. Feast of Passover: This festival is also known as Pesach. The Jews abstain from using sour liquid as well as any leaven during the period of the feast. It is also called *valhandancha son* in Marathi. This festival commences on the 15th of Nisan and lasts for eight days. The festival of passover has many beautiful symbols and observances and most significant of all is the seder service held at home for the first two evenings of the holiday. It is in the nature of a historical drama enacted at the festal table around which are gathered members of the family. The head of the family leads in the narration of the story of the Exodus from Egypt and the family, particularly the little children take an active part. This holiday is celebrated in memory of the deliverance of the ancestors of the Jews from Egyptian bondage. For eight days from the 15th of Nisan to 22nd the Bene Israels eat unleavened bread. It is also called *bhakricha son* in Marathi.

This feast is one of the pilgrim feasts, the other two [being that of Sukkoth and Shabouth. These three pilgrim feasts have agricultural as well as historical background. The Passover Festival marks the beginning of liberty of Israel and the end of Egyptian bondage. A great marvel is connected with this festival. When the Egyptian king was persecuting the Jews prior to their liberation he was told not to harass them. However, the pleadings had no effect.

The task of liberating a host of men in bondage was assigned to Moses, the towering figure of the Old Testament. When Moses saw an Egyptian beat a Hebrew, he killed the former and had to flee to Midian where God gave Moses his divine mission to "bring forth my children, the sons of Israel out of Egypt". Moses approached Pharaoh and asked him to liberate Hebrews, but Pharaoh refused and God struck Egypt with nine plagues, such as infestations of frogs, flies, insects, sky-darkening, sand storms, etc. Still there was no change in Pharaoh's heart but the 10th plague, the destruction of the first born children of Egypt had the desired effect and Pharaoh at last allowed the Jews to go.

10. Feast of Pentecost or Shabouth: The festival which falls on the 6th of Sivan and lasts for two days was not originally observed by the Bene Israels in India. It has a historical importance for Jews. It commemorates the giving of Torah *i.e.*, the Mosaic Law, by the Almighty from Mount Sinai. It thus marks the spiritual birth of Israel. By virtue of Torah, Israel has been a spiritualised force in the world and bears a profound message for our times. This festival has no local name.

It is also called the Feast of Weeks. This festival has an agricultural, religious and national significance in Jewish history. In Biblical times this festival was mainly an agricultural feast. It is known in the Bible as the feast of the harvest and also as the day of the first fruits.

11. Fast of Tammuz: This fast which falls on 17th of the tenth month, Tammuz is one of the four fasts of community mourning, the other three being, the Fast of Tebet, the Fast of Ab and the Fast of Tishri. In Biblical phrase, the fast is called the fast of the Fourth Month. It has historical importance. In the days of the first Temple, the Babylonian army, besieging Jerusalem breached the walls on the 9th of Tammuz. Almost five centuries later, the Romans breached the walls on the 17th of Tammuz. Since the second destruction of the temple was of more lasting effect, the fast was decreed for the 17th of Tammuz which is observed in the most solemn manner. The period between the 17th of Tammuz and the 15th of Ab is given a special treatment in the sense that all auspicious functions like marriage, etc. or purchase of clothes are not undertaken. They are, as it were, inauspicious days.

12. Fast of Ab: This is an important fast among the Jews. This fast which falls on the 9th of the month of Ab is also one of the four fasts of community mourning. According to the Biblical mode of expression, it is

called the "Fast of the Fifth Month". It is also called *birdiacha san* in Marathi by the Bene Israel. It is so named because, this fast is broken on the evening of the ninth of Ab by consuming rice with curry of *birdi* (wal), one of the pulses grown in Thane and Raigad districts. Wals are kept in water for a day and night till they sprout. The outer skin is removed and then they are cooked with spices, etc. A legend is told about this festival. The forefathers of Bene Israel of India were survivors of a shipwreck when only seven couples could reach safely the shore. They landed at Navgaon village in Raigad district. Since they were hungry, they ate wal in a raw state. The day on which they landed at Navgaon was 15th of Ab and hence on this day Bene Israels even now consume wal curry or some other preparation of it. This version, however, is not accepted by some Jews who think that the consumptions of wal in raw state is done to commemorate the memory of their forefathers who were compelled to eat anything that was available during their hardships.

The food which is consumed on the 8th of Ab is served on banana leaves to symbolise the fact that the Israelis had no household utensils from which to partake of food at the time of the loss of their dominion and power. During the preceding eight days the Jews abstain from consuming meat, wearing of new clothes, celebrating marriages, etc.

The fast has historical Mportance. It is a major fast day in Jewish tradition. It commemorates the destruction of the first and second temples, the two events, though almost 500 years apart, took place on the same day *i.e.*, 9th of Ab. That is an occasion of immense pain and sorrow. Jews squat on the floor without any footware and offer prayers bewailing the destruction of the temple.

In the month of Elul *i.e.*, the last month of the year, many devout Bene Israels observe fasts for forty days, beginning with the 2nd of Elul to the 10th day of Tishri on which day the fast of Yom Kippur is observed. The fasts are observed on all days except Sabhath *i.e.*, Saturday and the two days of Rosh Harshanah *i.e.*, New Year's Day.

The month of Elul precedes the month of Tishri and because many festivals and fasts are observed in the month of Tishri, the month of Elul gets a special significance.

Those who are unable to observe the fast for forty days are said to observe them at least on Mondays and Thursdays. While fasting they take their meals only once a day after sunset.

FAIRS

In Greater Bombay, ten fairs are held in a year where there are more than 25,000 visitors. Most of the persons attending, are from the City itself or the neighbouring towns. As the city is a great centre of retail and wholesale trade, people attend these fairs mainly with a religious motive or for enjoying the fun of a get-together. The account of the main fairs in Bombay is given below.

Mahashivaratri Fair at Kanheri Caves, Borivli: The fair is held on Magh Vad. 14 which is believed to be the favourite day of Lord Shiva and lasts for one day only. The site of the fair is at Kanheri Caves, eight miles to the north of Borivli railway station. The distance from Borivli to the caves can be covered by bus. Persons belonging to the Kamathi community who are generally construction workers mainly visit the fair. They offer worship to Bheema, second of the Pandavas who according to the belief among them once lived in one of the caves there. There is neither a regular temple nor any image of Lord Shiva at the caves, though there are many images of Buddha and his disciples. People arrive at the caves in the morning, offer fried gram, parched rice, coconuts, flowers, etc. at the main entrance to the caves and return home the same evening.

Mahalakshmi Fair at Mahalakshmi, Bombay: The fair is held in honour of Goddess Mahalakshmi twice a year, viz., from Ashwin sud. 1 to Ashwin sud. 10 i.e., navaratra and from Chaitra sud. 1 to Chaitra sud. 10. The fair held in navaratra is more important and is called mahayatra. On an average two lakhs of pilgrims from city and suburbs attend the fair held in navaratra. The inner shrine of the temple is well decorated with ornamental designs and legendary figures. On both sides of the image of Goddess Mahalakshmi there are the images of Goddesses Mahakali and Mahasaraswati. The temple of Mahalakshmi is situated in an area named after Goddess Mahalakshmi, on a hillock at the extreme west of Bombay Island. The temple is at a distance of about one mile from Mahalakshmi station on the Western Railway. It can be reached by BEST buses.

It is said that in the middle of the 18th Century, the construction of Worli causeway was undertaken by Government but the work could not be completed for many reasons. One day, the contractor, Prabhu by caste, had a dream in which he was told by the goddesses that they were lying at the bottom of the sea and desired that they should be taken out and installed in the temple to be constructed on a nearby hill, and if that was done the construction of Worli causeway would be smooth because of their blessings. According to the advice of the goddesses, the images were taken out of the sea, and installed in the temple which was later built on the hill in 1830. The present images of the goddesses, it is said, are the same as those salvaged from the sea.

In course of time it was decided by prominent persons to hold an annual fair in the month of *Ashwin sud*. 1 to *Ashwin sud*. 10, which are auspicious days for the worship of the deities. The main entrance of the temple faces the east. A flight of stone steps leads to the *mahadwara* of the temple. Drums are kept at the top of the *mahadwara* which are sounded twice a day, early in the morning and in the evening. Inside the *mahadwara* to the left is a lamp-pillar which is approximately 15 feet high. The hereditary Bhopis of the temple reside in the houses constructed on the left of the main gate. The open space in front of their houses is occupied by shops selling materials of worship such as coconuts, incense-sticks, flower garlands, etc.

The temple is opened at 5 a.m. every morning when the images are bathed with water and scent etc., and clothes, ornaments and flowers and flower garlands are put on them. Kumkum is also applied to their foreheads. A learned acharya is appointed by the trustees on a part-time basis for reciting the sapt-shati

patha daily in the morning. Arati is performed at about 7 a.m. and mahanaivedya of rice, cakes of wheat flour, sweets and vegetables is offered. Kirtans, pravachans etc., are also arranged. It measures about 25' x 15' and its floor is paved with marble stones. The Sabhamandap is open on all sides and at the centre of it, facing the deities, an image of a wooden lion is installed on a stone pillar, both covered with silver plates. The pillar is erected on a stone platform measuring 2.5'x2.5' and four feet high. At the entrance of the sabhamandap, a pit for lighting sacred fire (yajna kunda) 2.5' x 2.5' and two feet deep is provided which is used for performing havan during the period of the fair and on such other occasions. Images of several saints are inscribed of the top of the sabhamandap, on three sides viz., north, south and east. A hall, 35' x 25' constructed behind the shrine is used as a dharmashala.

The image of Mahalakshmi is in the centre of the platform and those of Mahakali and Mahasaraswati are to her right and left, respectively. In front of these images, three small stools made of silver are placed. A gold plated mask of Goddess Annapoorna is installed on the middle stool. Silver footprints of a goddess are placed on another, stool and the third stool is used for keeping worship utensils. *Dhuparati* is performed at sunset and *shayana arti* is performed at about 10-30 p.m. After this the temple is closed. During the period of the fair, on festival days and on other special occasions, the temple is kept open upto midnight.

Devotees in large numbers flock to the temple for *darshan* of the goddesses on Tuesdays, Fridays, Sundays as these days are considered to be more auspicious for their worship. It is customary to make vows to the deities for getting a child, prosperity, for regaining eye sight, etc. On fulfilment of their desires, devotees offer cradles, small umbrellas, artificial limbs like eyes etc., made of silver and some offer cloth, coconuts, bangles, combs, mirrors, etc. Some also distribute sweets or sugar as *prasad*.

The mahayatra starts on Ashwin sud. 1, and ends on Ashwin sud, 10. As the temple is situated on a hill and as there is no sufficient space around to accommodate shops and stalls in the compound of the temple the fair is held at the foot of the hill. The duration of the fair is of ten days but no special programmes except bhajans, kirtans and pravachans are arranged in the temple from the 2nd to the 9th of Ashwin.

Ashwin sud. 1, being the first day of the fair, a ghata (metal pot) is installed in the temple early in the morning and special worship is offered to the deities. An abhisheka is also performed.

On Ashwin sud. 9, the most important day of the fair, the *ghata* is removed and a sacred fire (homo) is lighted in the *yadnya kunda* and a large number of devotees gather for the *purnahuti* and offer coconuts, incense-sticks, *dhup*, etc. to the *homa*. In the evening of Ashwin 10, most pilgrims offer leaves of the *apta* tree to the deities as a token offering of gold.

The second or *Chaitra* fair starts on *Gudhi Padwa* day on *Chaitra sud.* 1 and lasts till *Chaitra sud.* 9, programmes *oibhajan*, *kirtan* and *pravachan* are arranged during this period. On *Chaitra sud.* 1, a *ghata* is installed in the temple and a flag is hoisted on a pole just adjacent to the entrance of the *sabhamandap*. On *Chaitra sud.* 9, the *ghata* is removed and the sacred fire *(homa)* is lighted. Thousands of pilgrims attend this fair every day.

An adequate number of policemen are deployed for maintaining law and order at both the fairs. Volunteers of local associations also provide minor amenities to pilgrims at the temple as well as at the fair. The temple trust is registered under the Bombay Public Trusts Act, 1950. The board of trustees includes prominent citizens.

Shri Lakshminarayan Fair, Gowalia Tank: This fair is held from Ashwin sud. 12 to Ashwin vad. 6 in honour of God Narayan and Goddess Lakshmi to commemorate the inception day of the deities at Gowalia Tank. It lasts for ten days and during this period about 1,20,000 pilgrims attend it.

The deities are draped in rich clothes which are changed according to various seasons and festivals. The daily worship of the deities is performed according to what is known as the Pushti Marga Sampradaya as laid down by Vallabhacharya, founder of the Sampradaya. Though the period of the fair is ten days the first day of the fair *i.e.*, Ashwin sud. 12 is the most important day and patotsava is celebrated on this day. On other days, no special programmes are arranged except bhajan, kirtan, pravachana. On the first day of the fair, a special worship (panchamrita abhisheka) is performed on the deities lasting for half an hour.

After this a sacrificial offering is made. After completion of the special worship, *raj bhog* is offered to the deities. The *patotsava* ceremony is performed under the supervision of one of the trustees. On this day, the temple is kept open from morning to 22-30 at night except during the *Bhog* period. The fair is held on the Gowalia Tank *maidan* which is adjacent to the temple. Pilgrims of all castes and creeds visit the temple to worship the deities and attend the fair everyday. About 1,20,000 pilgrims from Bombay city and its suburbs attend the fair during these ten days.

In addition to the fair, the festivals such as *Makar Sankranti, Ram navmi, Rang Panchami, Vasant Panchami, Gokul Ashtami* are also celebrated in the temple. On *Kartik sud.* 1, an *annakot* is offered to the deities and the *prasad* is distributed amongst devotees. The affairs of the temple are managed by Seth Gokuldas Tejpal Charities Trust which has been registered under the Bombay Public Trusts Act, 1950.

Shri Vithoba Fair, Vadala: The fair is held at Vadala (west) in honour of God Vithoba in the month of Ashadh every year. The temple of Vithoba is situated on Katrak Road near Vithoba market. One can approach the temple from Vadala Road railway station on the harbour branch of the suburban line of the Central Railway. The fair is held from Ashadh sud. 10 to 12, the important day of the fair being Ashadh sud. 11. It is said that a guru of the Varkari sect and a great devotee of God Vithoba was living about 150 years ago at the place where the present temple is situated. He was a regular visitor to Pandharpur and went on foot for the Ashadhi Ekadashi. In one of his visits to Pandharpur he expressed inability to go there to his fellowmen in the following year due to old age. One of his followers said to the guru, " you are a devotee of God Vithoba; so you may pray him to come to Bombay. "The guru said, " Let us hope so; after

all it depends upon the mercy of God Vithoba. " The same year, the *guru* and his followers took the palanquin procession to Pandharpur as usual. While bathing in the river Chandrabhaga, they were surprised to find that one of the followers of the *guru* had found an image of God Vithoba. The *guru* and his followers were happy and brought the said image to Bombay and installed it in the *guru*'s hut on *Chaitra sud*. 13. The followers of the *Varkari* sect then discontinued the practice of carrying a palanquin to Pandharpur from the next year.

Images of God Vithoba and Goddess Rakhumai in their traditional posture of hands on their waist are installed in the shrine of the main temple on a platform of marble stones. The image of Rakhumai is to the left of Vithoba at a distance of about 1.5'. The height of the image of Vithoba is 3.5' and that of Rakhumai is 3'. The images are made of black stone. Small images of Vithoba and Rakhumai made of silver are kept behind the main images in a *devhara*. A silk turban, a *dhoti*, an upper garment and a shoulder cloth of cotton are put on the image of God Vithoba while the image of Rakhumai is draped in a saree and a blouse of cotton. During the fair and on special occasions, rich clothes of silk are put on the deities" A nose-ring, a necklace of black beads and silver bangles are the ornaments of daily wear of Rakhumai. During the period of fair and on special occasions, precious ornaments, such as lockets and chain of gold and earrings and crown both of silver are put on the image of Vithoba; and bangles, necklace, a nose ring, all of gold, a waist belt and a *painjan*, all of silver, are put on the image of Rakhumai.

The shrine of the deity is opened at 4-30 a.m. every day to perform *kakad arati* at 5 a.m. which is followed by an *abhisheka*. Thereafter the deities are bathed with cold water. Scented oil is then applied to the images and clothes and ornaments are put on them. After application of sandalwood paste and *kumkum* on the forehead and other parts of the body, garlands of flowers are put on them. The images of Ganapati, *Shivalinga* and other deities are also worshipped in a similar manner, accompanied by chanting of the *mantras*. The *arati* is performed in the main temple from 6.30 a.m. to 7 a.m. and the same is afterwards waved before other images. *Tirtha* (holy water) and *prasad* are distributed amongst devotees present at the time of the *arati*. It is customary to offer a *naivedya* of cooked food to the deities daily except on days of fasts. The temple is closed for *darshan* from 12 noon to 3-30 p.m. when it is again opened and garlands of flowers and *tulsi* leaves are offered to the deities. The evening *arati* is performed at 7 p.m. *and prasad is* distributed amongst the devotees present. The temple is closed for the night at 10 p.m. after performing the night *arati*.

There is a general practice of making vows to the deity for getting a child, prosperity in business, relief from bodily or mental ailments. On fulfilment of the vows, clothes, ornaments etc, are offered. Some also distribute *gur*, sugar, etc. according to means. The annual fair starts on *Ashadh sud.* 10 and lasts for three days *i.e.*, up to *Ashadh* 12. On *Ashadh sud.* 10, a special worship called *maha abhisheka* is performed by a prominent person. The pilgrims attend the fair from this day and worship the deities with *kumkum*, flowers and leaves of the *tulsi* plant. On *Ashadh sud.* 11, which is the important day of the fair, pilgrims from all walks of life attend the fair. They worship the deities by offering flowers and coins before them and praying for mercy. The pilgrims in groups called *dindis* reciting *bhajans* visit the temple throughout the day from all parts of Bombay.

The programmes of *bhajans*, *kirtans* and *pravachan* are also arranged. To enable the pilgrims to have *darshan* of Vithoba and Rakhumai, the temple is kept open throughout the day and up to 3 a.m. on the following day. There is no programme on *Ashadh sud*. 12. Those persons who could not take *darshan* during the earlier two days, visit the temple to pay homage to the deities. Besides the annual fair there is a programme of palanquin procession (*palkhi*) of a portrait of Vithoba and Rakhumai at about 10 a.m. on *Chaitra sud*. 13, the day of inception of the deities, taken round the adjacent locality. This is attended by about 3,000 persons. *Maha abhisheka* is also performed in the temple on certain festival days *viz.*, *Ashwin sud*. 10 (Dasara), *Ramnavmi*, and *Gokul Ashtami*. These are celebrated in the traditional way.

Mankeshwar Fair, Reay Road: Fairs in honour of God Mankeshwar (Lord Shiva) are held in the months of Shravana, Ashvina and Magha of which the fair held in the month of Shravana is considered to be the most important. On an average three lakh pilgrims attend this fair. Women are not allowed to enter the shrine. The pindi (spout) of Lord Shiva is installed in the temple which was lying buried under a tree. One of the forefathers of the present owner of the temple had a dream in which Lord Shiva said to him, "I am in the earth under a tree; take me out from there and build a temple ". Accordingly the pindi was unearthed and installed at the place where it was found and a temple was built.

The temple is situated at Reay Road. The nearest railway station is Dockyard Road. The main fair is held from *Shravana vad.* 5 to *Shravana vad.* 9, both days inclusive. The other fairs are held on *Ashwin sud.* 15 (*Kojagiri*) and *Magh vad.* 14 (*Mahashivratri*). The temple is said to be about 600 years old. Its renovation was carried out over 100 years ago. It is a stone structure measuring 60' x 40'. A passage about 8' wide and 325' in length paved with stones, connects the temple entrance to Reay Road. The shrine is to the left of the *sabhamandap* (auditorium). The floors of both the shrine and the *sabhamandap* are paved with marble stones. The door of the shrine is plated with silver sheets, both from inside and outside. The new built *kalash* at the top of the dome of the shrine is said to have been built by the present owner in 1942.

The spout, *linga*, of Lord Shiva in the shrine is said to be *swayambhu* linga. It is installed in south-north direction. It is covered with a silver image of a hooded cobra. The image of *nandi* made of stone is installed at the entrance to the shrine in the *sabhamandap*. There are also stone images of Ganapati, Kalabhairava, Shitala Devi and Hanuman in the temple. In a small room in the southwest corner of the *sabhamandap* silver images of Shiva, Parvati and Ganapati are installed.

On Ashwin vad. 14, Ashwin vad. 30, Kartika sud. and Chaitra sud. 1, the deity is draped with a pagdi (turban) of jari cloth, shela, pitambar and adorned with a mukhavata (mask) of silver plated with gold. On Ashwin sud. 15 rich clothes and precious ornaments are put on the deity. Cooked food is offered daily. Special naivedya of panchapakvanna is offered to the deity on festive days.

It is customary to make vows to the deity for getting a child, prosperity, etc., and it is believed that the deity is capable of fulfilling the desires of its devotees. On fulfilment of their desires, the devotees offer puja (worship) to deity with coconut and distribute sweets, sugar or gur as prasad. Some also offer clothes and ornaments. Three days of the fair from Shravana vad. 7 to Shravana vad. 9 are regarded as very important. On Shravana vad. 5 and 6, there are no special programmes, in the temple except bhajan, kirtan and pravachan arranged in the sabhamandap of the temple. At midnight on Shravana vad. 7, the images of Lord Shiva, Parvati and Ganapati of about two and a half feet in height prepared out of sandalwood paste are installed on the wooden platform specially erected over the Shiva-pindi. After installation of these images, no one is allowed to enter the shrine. The image of panchamukhi Mahadeo is kept at the door of the shrine to enable devotees to worship. The sandalwood paste images installed in the shrine are kept for three days, up to the morning of Shravana vad. 9, when the images are taken out of the shrine and are kept in the sabhamandap on big wooden stools (chowrangas) to enable the devotees to have darshan. At about 1 p.m. a special puja is performed by the owner of the temple and the images are then kept in decorated chariot. It starts from the temple followed by large congregations of devotees, musicians, bhajan groups etc., through the main streets of Bombay and it terminates at Bhaucha Dhakka (Ferry Wharf). At this place, the images are transhipped to a big country boat after worship. The boat is taken out two miles in the sea, accompanied by about 300 to 400 people and the images are immersed ceremoniously in the sea. The whole ceremony is conducted with great pomp and

The second fair is held on *Ashwin sud*. 15. A *mahapuja* of the deity is performed between 9 a.m. to 12 noon and decorated with costly dress and precious ornaments. A *naivedya* of *panchapakvanna* is offered to the deity. No one is allowed to enter the shrine during the performance of the *puja*. At night at about 8-30 p.m. *apalkhi* procession of the image of *panchamukhi* Mahadeo made of silver is taken out from the temple through the main streets of Mazagaon locality and it returns to the temple at about 11-30 p.m. The image of *panchamukhi* Mahadeo is again worshipped and *prasad is* distributed. On an average 1,000 devotees attend the procession. The third fair is held on *Magh vad*. 14. On this day, the devotees visit the temple and offer flowers and leaves of *bel* tree to the deity. On an average, 4,000 to 5,000 devotees attend the fair. On this day *laghu rudra* is performed at night from 9 p.m. to 3 a.m. by eleven Brahmans at a time. At 6-30 a.m. next morning the *puja* of the deity is performed by the priest of the temple and *naivedya* consisting of cooked rice and curds is offered.

Pir Syed Ahmed Ali Shah Kadri Urus, Dongri: This urus is held annually in honour of the great saint, Pir Sayed Ahmed Ali Shah Kadri on 6th, 7th and 8th of Rajab. The present dargah, it is said, was constructed about 100 years ago, and stands on a stone platform, and measures about 25' x 25' with a circular shape at the back i.e., the eastern side of the platform. The tombs of Pir Sayed Ahmed Ali Shah Kadri and his mujavar are in the shrine. Both the tombs are made of bricks and lime and measure 6' x 3'. The tombs are worshipped in the morning by offering flowers and burning incense sticks etc. The evening worship of the tombs is carried out by the mujavar of the dargah. The tombs are given a bath every Thursday morning with rose and other scented water.

It is believed that the saint and the *mujavar* in whose honour the *urus* is held are capable of fulfilling one's desires and therefore many devotees offer vows in order to get a child, relief from bodily or mental afflictions, etc. On fulfilment of their desires, they offer the things promised.

On the first day of the *urus*, the procession of sandalwood paste called *sandal* is carried out at about 2 p.m. This procession attended by large numbers of persons moves through Dongri, Paydhoni, Nagpada areas and returns to the *dargah* in the evening. The sandalwood paste is then applied to the tombs. This ceremony is called *sandal chadhana*. On the second day of the *urns*, the programme of *Kawwalis*, *gazals*, etc., are held.

On the last day there is yet another procession of the sandal (i.e., sandalwood paste and galaf) from the dargah at about 1 p.m. It moves through important parts round about the dargah and returns to it by about 8 p.m. The sandalwood paste is applied to the tombs and the galafs and flower-nets are spread over them. Prayers are offered and fatihah, milad, and kurankhani (reading of the Koran) also take place. The pilgrims are mostly Muslims.

Hajrat Makhdoom Fakih Ali Saheb Urus, Mahim: This urus is held in honour of the great saint, Hajrat Makhdoom Fakih Ali Shah and is generally celebrated on the full moon day in December and lasts for ten days. The dargah is situated on the western side of Cadell Road and the main entrance known as Buland darwaja faces the east. The dargah has five huge domes on the top. Besides the tomb of the saint, there are other tombs also including those of Bibi Fatima, the mother of the saint. The maid servant and the she-goat of the saint were buried near the dargah. It is said that the saint performd many miracles in his life time and had brought back to life a dead she-goat which he loved very much.

The *dargah* is opened in the early hours of the morning and thousands of devotees attend it throughout the day and it is closed after the night prayers are offered. Devotees visiting the *dargah* carry with them flowers, incense sticks and sweets which are offered to the saint's tomb.

It is believed that the saint is capable of fulfilling one's desires and those who come to the *dargah* generally make vows before it in order to get a child, success, and on fulfilment of their desires offer sweetmeats to the *dargah*. On the first day of the *urus* on the full-moon day in December, the *sandal* (i.e., sandalwood paste and *galaf*) is brought in a procession on behalf of the Dargah Sharif Trust. The paste is applied to the various tombs and a new *galaf* is spread over the tomb of the saint and his mother. The holy *Koran* is read and prayers offered.

On the remaining nine days also processions from different parts of the city terminate at the *dargah*, carrying with them sandalwood paste and *galafs* which are offered to the tombs of the saint and his mother. The pilgrims are mostly from the city and besides Muslims, there are many people of other denominations among them.

Shaikh Misry Urus, Vadala: The urus of Shaikh Misry is held every year at Antop Hill in Vadala (East). It lasts for four days i.e., from a day prior to the full-moon day in November and up to two days after the full-moon day. The most important day of the urus however is*the full-moon day. It is held to commemorate the death anniversary of the great Muslim Saint Sheikh Misry who died on the 16th of Rajab some seven hundred years ago.

The dargah which was built about two hundred yeais ago measures 100' X 100'. However the main Shrine measuring 60' x 70' is constructed of marble stones. The dargah is opened after the morning prayers are held at the nearby mosque and the tomb of the saint which is inside the dargah and just below the central dome is worshipped by burning incense sticks and lubhan. The prayers are offered and holy passages from the Koran are read. It is believed that the great saint is capable of fulfilling one's desires of getting a child, prosperity, and as such the devotees promise many things to the saint. On the fulfilment of their they desires, offer galaf, sweets and cooked food to the saint.

On the second day of the *urus* the *sandal* is taken out in procession and after it reaches the *dargah*, the sandalwood paste is applied to the tomb and a new *galaf* is removed. Flowers are offered and incense sticks are burnt. On 16th of *Rajab* the tomb is washed with rose water and prayers are offered. The functions on the other days of *urus* are those of prayers, reading holy passages from the *Koran*, etc. The persons attending the *urus* are mostly from Greatei Bombay and belong to various religions, though Muslims aie in a majority. It is said that the saint was an inhabitant of Egypt and was on a mission to India to spiead Islam. He died while engaged in this work about seven hundred years ago. The *urus* is held in his memory.

Mount Mary Fair, Bandra: The fair is held in honour of Mary, the mother of Jesus Christ, and is celebrated during the Octave (Sunday to Sunday) following the feast on the 8th of September. The shrine of Our Lady of the Mount, popularly known as Mount Mary, is one of the most famous Christian shrines in India. Situated on a verdant hill-top, opposite Mahim causeway and overlooking the sea, the church with its twin spires soaring into the sky, presents a picturesque landmark to all who cross the Mahim creek.

The shrine is a modest little hermitage. It was founded by Jesuits about the years 1568 to 1570. This was the cradle of Christianity in Bandra. In 1640, the hermitage was enlarged into a chapel and it is said that in 1679, it had become a famous place of pilgrimage, frequented by Christians and non-Christians. When the Marathas overran Salsette in 1739, the chapel was destroyed by the Portuguese authorities at the instance of the English in order to prevent its strategic position from falling into the hands of the victorious Marathas. On this occasion, the popularly venerated image of the Blessed Virgin was ferried across the creek for safe custody to St. Michael's Mahim, whence it was brought back for re-installing it in the chapel built nearby in 1761.

The present edifice was built in 1904 and is a fine example of Gothic architecture. The auditorium is about 125 ' x 40' and is paved with marble slabs. The altar is of pure marble. The statue of Our Lady is about 5' high and holds an image of the Child Jesus in her right hand. In 1954, the church was raised to the status of a minor Basilica. The statue is coverd with a veil. It is adorned with a necklace and bangles and crowned with gold guilt silver crown. A beautiful rosary hangs from the right hand side. The walls are covered with paintings, depicting the life of the Blessed Virgin Mary.

The Basilica is in charge of a rector. He is assisted by a committee of wardens. Divine services in the form of masses are conducted daily. Devotees come to pray and ask for favour and make their thanksgiving in coins or offering consisting of candles or wax images. Most of the pilgrims to this shrine are from Greater Bombay and the neighbouring Thane district.

Mount Poisar Feast {Fair}, Borivli: The fair and the feast of Our Lady of the Immaculate Conception is celebrated in honour of the Mother of God, Mary who was conceived without the stain of Adam's sin. The fair is held at the Church of Mount Poisar on the Sunday following the 8th December every year and lasts for a day.

The church of Our lady of the Immaculate Conception is situated on a hillock at the village Mandapeshwar, now merged in the municipal area of Borivli which is 32 kilometres from Churchgate railway station. Buses ply between Borivli railway station and the church, the distance being about a mile.

The church of Our Lady of Immaculate Conception was built by Fr. Antonio de Porto in 1544 by orders of King D. Joao III of Portugal. It underwent major repairs from time to time. At present, it is said to be one of the oldest among the existing churches in Greater Bombay.

Though the present structure of the church is plain and simple it presents a beautiful appearance. The roofs of the sanctuary and the side chapels are high arched roofs of finely carved stone in ornamental compartments. An exquisite statue facing the west in standing position with folded hands of Out Lady of the Immaculate Conception is installed on the main altar with statues of Jesus Christ and St. Joseph on either side. The side altars are dedicated to St. Francis of Assisi and St. Francis Xavier who visited this church three times between 1544 and 1548. At the other end of the Church, there are two statues of St. Teresa and St. Anthony with Jesus Christ in his arms. A candle stand is kept in front of both the statues which is used by devotees to burn candles. The side walls of the church are decorated by hanging 14 wall plaques, seven on each side, which depict various important events in the life of Jesus Christ.

The statue of Our Lady of Immaculate Conception is adorned with only a crown and a veil. The morning and evening masses are offered on Sundays and feast days, masses are also offered on an octave day which falls on the 8th day from the day of feast.

On an average 25,000 to 30,000 devotees mostly from Bombay city and suburbs attend the feast. The devotees belong to other religions also, though Catholic Christians predominate.

The devotees attend the morning mass, offer coins, wax candles etc., and pray for blessings of Our Lady

of the Immaculate Conception. It is customary to make vows to the deity for getting a child, an eye-sight etc.; and on fulfilment of their vows, devotees offer artificial limbs made of wax candles etc. to the deity.

Besides the major fairs described so far, there are more than 80 minor fairs held in Greater Bombay. There are about 66 fairs with an estimated congregation of about 5,000.(*Information about some of the fairs is given in Chapter-19 in Vol. III of this Gazetteer.*)

FOOD

The dietary and food habits of the inhabitants of Greater Bombay should have ordinarily been those of the people of the coastal districts of Maharashtra, because Bombay forms part of the Konkan coast, but that is not so, because of the peculiar position of Bombay in the economy of the State and the country. The people of Bombay means the conglomeration of peoples from all parts of the country and they have brought with them to Bombay the peculiar habits. Thus while the Panjabees and Sikhs from the Panjab and the migrants from Uttar Pradesh have wheat as their staple food, those from Kerala, Tamil Nadu and Andhra Pradesh stick to rice and preparations from rice as their staple food. The main division of all, however is that while some are vegetarians, others are non-vegetarians. There are many other sects and castes such as Varkari, Swaminarayan Panthi, Lewa Patidars, Malis, Brahmans, Jains, etc. which abstain from meat. Many others generally speaking may be described as non-vegetarians, though that only means that they do not refrain from eating meat and fish whenever they can.

Among the well-to-do vegetarians, rice is the staple food but it is supplemented by wheat and its preparations. Jowar and Bajari find place in the dietary whenever wheat could be dispensed with. Light meals are taken in the morning by all those who have to attend offices, factories and schools and it is usual for them to carry with them tiffin boxes to have lunch in afternoon. The other meal is taken at night. Rice is usually accompanied by a spoonful or two of ghee, a curry, onions, spices and tamarind or *kokam* dressing, plus some vegetables fried in edible oil, spiced and preferably added with some fresh cocoanut scrapping. Butter milk or curds is mixed with a little rice and usually eaten at the end of the meal. *Chatnis, Koshimbirs, papads* etc. are the usual adjuncts to a full meal. Tea or coffee as soon as they leave their bed has become a diehard habit. Some eat biscuits or slices of bread with it.

The culinary art of the people as expressed in their daily food, feast menus and holiday dishes, has its own peculiarities, every caste group claiming some distinguishing features. Rice being the main food item, various types of preparations are made therefrom. Rice is used in two forms. *Ukda* (parboiled) and *surai* made without boiling the paddy. In the preparation of boiled rice two processes are followed: one known as *bethabhat* is prepared by boiling the lice (cleaned and washed) in about twice the quantity of water till it swells soft, for the other kind known as *velnabhat*, the rice is boiled in an excess quantity of water and then strained dry when the grains get sufficiently soft. The strained rice-water may be salted to taste and drunk as *pej*. The rice is eaten with different kinds of curries. *Tur* split pulse is generally preferred though some prefer the *mug* split pulse. The pulse is boiled, spiced and a *phodni of jire* (cumin seed) and asafoetida is used as dressing. Gur and tamarind or *kokam* are its necessary adjuncts. Its variation, *sambar* is thicker. It is prepared from a variety of pulses and hot spices, onion, scraped cocoanut all fried in oil and pasted on a curry stone, are its special ingredients.

Several special dishes are prepared from rice-flour. Ayate, ghavan and pole are pan-cakes each prepared according to its kind, after mixing the flour in water, milk or butter milk and adding to it a little salt and gur, scraped coconut kernel, chopped green chillies, coriander leaves, onion, etc. The mixture thus prepared is spread over heated ghee or oil in a pan and fried. Amboli is a similar pan-cake thicker in kind and prepared from rice and udid flour and methi mixed together in water and fermented over night. Of the same mixture are prepared idalis by steaming them in small dishes in a closed vessel. Vade, gharge and unde are cakes made from dough of rice and udid pulse flour and fried in deep oil. Vades are flat and round like puris; gharge are similar to vade but the dough is sweetened with gur and pumpkin, cucumber etc. boiled soft. Undes are globular in size. Patolya is another preparation made especially on the Dasara day. About an ounce of kneaded rice flour dough is spread on a green turmeric leaf to a particular thickness; an ounce of scraped coconut kernel sweetened with jaggery is laid on the dough, the leaf is folded double and such patolyas are steamed in a number.

Shevaya i.e. vermicelli made of wheat flour are eaten with gur or sugar. Sandhans are made of rice-flour (granules), coconut milk and juice of ripe mangoes or jack-fruit; they are cooked in steam like pudding. Modaks are balls stuffed with coconut kernel, cashewnut pieces, sesame, sugar, etc., in a rice or wheat flour covering and steam boiled, particularly prepared to propitiate Lord Ganesh. Popular holiday dishes arepuranpoli, shrikhanda, basundi, khir, dudhpak and very many other dishes that sweatmeat makers sell ready-made. Milk and its products play a major part in such dishes, the other important ingredient being wheat. All these preparations are peculiar to vegetarian Hindus, whatever their original State may be.

Non-vegetarians even among Hindus form a big majority, but this does not mean that meat or fish is a necessary part of their daily diet. But certain communities among Hindus do take fish almost daily and meat occasionally once a week or so and on festive occasions. The most common form of meat is *mutton*. Hindus will not touch beef and Muslims will not touch pork. But Christians and Parsees and Jews have no objection to consume either besides fish and mutton. Eggs form part of the daily diet of almost all non-vegetarians.

Food habits of all inhabitants of Greater Bombay have undergone many changes. Quite many people have started taking the midday meal in hotels. This has become necessary owing to living conditions more than out of willingness to do so. Quite a large number of people have to travel long distances from their homes to their work places and back everyday and have therefore to miss their morning meal. This has also led to taking to such food as they can get and that is not always in keeping with their traditional food. Consumption of fruit, particularly bananas is noticeable on a much larger scale than before among Bombaites. Similarly wheat and its various preparations have also found an important place in the daily

diet of the Bombaites. Chapatis of wheat are a common diet in most households whether of the vegetarians or the non-vegetarians. Some people replace chapatis by puris which are really small chapatis fried in oil or ghee or vanaspati. They are more in vogue in hotels and restaurants. Wheat is consumed in various other forms. Shira made from rava gleaned from wheat flour is a favourite dish. It is made with the addition of ghee and sugar. Vanaspati has replaced ghee in most kitchens after World War II. Quite many sweet dishes are prepared from wheat with the addition of sugar and ghee for festive occasions prominent among them being jilebi, gheevar, balushai, chirote, karanj'ya and others. Names of all these articles may not be the same in Gujarati, Kannada, Telugu, Tamil, Malyalam, Punjabee and Bengalee.

Sweetmeats from other provinces like *Rasagulla* and *Sandesh* from Bengal and *halwas* from Delhi are freely available in sweetmeat shops of Bombay. Non-vegetarian items of food are egg-omlettes, mutton-cutlets, *kababs*, *khima*, *kurma*, *pulava*, etc.

Time was when no two Brahmans touched each other while taking food on low wooden stools. Taking meal even was a religious rite. Each plate had to be encircled with water to the accompaniment of Sanskrit mantras and a little oblation had to be made to various deities before starting the meal. The low wooden stools are fast disappearing from households and food is now taken on tables. Chairs and tables have become necessary furniture in most kitchens, even in quite small apartments and flats. For saving space, there are folding chairs and tables, but they are there. , Service by women of the household, taking their meals after men have finished, has almost disappeared. Food is served on the table by servants and waiters or every one helps himself by the aid of spoons, forks and knives. This is done in imitation of the western table manners, perhaps without due attention to whether it is convenient or not. In public places such as restaurants and hotels, tables and chairs, plates, spoons, forks and crockery have become quite fashionable and they have come to stay permanently. Except in costly hotels and restaurants however, the standard of cleanliness and hygienic considerations do not get their due place. While coffee or desserts have come in as the last food items, beer or wines have not yet become quite fashionable, though they are not altogether absent on occasions and at some places. Westernisation in respect of food is not yet so general as it is in respect of dress of the males of all castes and communities.

DRESS

Time was when quite a variety of apparel and head wear was noticeable in the streets and houses of Bombay and one could easily tell from mere appearance of a person to which caste, community or religion the person belonged. But at present there is such a uniformity in the dress of at least males that it is not possible to name the province, caste, community or a religion of any one from mere appearance. The intonation of the person speaking English or any other language may alone betray it. The only head dress that is prominently noticeable is the turban of the Sikh while most others go bare headed. Trousers and bush shirts plus sandles or shoes form the ensemble of the male dress. Some people are seen in full European suits with a collar and a neck-tie but they are far and few between.

This is mostly true about younger persons of any community, caste or creed. Some distinguishing marks are still to be found in the case of the elder people of any community, particularly, the Muslims among whom are included the Khojas, Bohras and their sub-sects. They still use long coats akin to *sherwanis* or *achkans* of North India and loose or tight pyjamas and also golden turbans of their communities. Some use what is known as the Jinnah cap of fur. The white turbans of people from the Southern States or the various coloured Brahman, Prabhu, Surati, Kathiawadi or Baroda turbans are conspicuous by their absence and could perhaps be seen in the museum. This state of things need not be regretted at all; perhaps it contributes, in its own small way, to the promotion of the feeling of one Indian nationhood.

Still the dress of people at home has not ceased to conform to traditional patterns. The *dhotar* worn by middle class Hindus from Maharashtra still holds its own. This is equally true of Gujarati Hindus and Hindus from the Southern States, though the manner of wearing it differs in the case of every one. The *uparna*, upper cloth, of Hindus from Maharashtra has practically disappeared and its silk or gold-borderd variety is to be seen only in ceremonies like the wedding or the *upanayana*. Underwears which were nearly unknown fifty years ago have now firmly come into vogue. Under the pants there is necessarily a short or long underwear and under the shirt there will be a vest or *mul sadra*. But until a few years ago, an upper class or middle class Hindu was generally clad in a *dhotar* and a *sadra* while indoors; outdoors he wore a *dhoti*, a coat, a cap or a *rumal* or handwear and sandals. He also wore an *uparane*, a shoulder cloth. On important occasions, he wore his usual clothes, a *rumal* with a *jari* border or a silk piece, a long coat of white satin or yellow silk. The Brahman turban or *pagadi* has become almost extinct. Since the days of non-co-operation, a long shirt called Nehru shirt, a Gandhi cap with *dhotar* or *pyjama* became fashionable, but even that has fallen into disuse at present. Some young men don the *sherwani* and *survar* after the Delhi or Lucknow style and wear shoes called *chadhao*.

The chief item in a Hindu woman's dressware is the sari and the *choli* The nine yard sari is now worn by only old women from Hindu community. This is from 45 to 48 inches in width and is more generally known as a *lugade*. These are more often woven on handlooms and power-looms but some mills also manufacture them. *Cholis* used to be made from similar cloth-piece called *khans*. These *lugadis* and *khans* are manufactured all over Maharashtra and some in Karnatak and Tamil Nadu and such distant places as Indore, Maheshwar, Madurai and others. But these are going or have gone out of fashion. Young girls and even women are taking more and more to the five or six yard sari and blouse made out of various kinds of mill cloth. Saris whether nine yards in length or six, have borders of some colour and a *padar* at the two ends of which one is more decorative than the other. Mostly these are of cotton but for festive occasions there are silk saris or with *jari* borders. They are called *shalus* also and are known as *Paithani* or *Banarasi* after the names of the places where they are made. Among Bombay's Marathi speaking women, particularly among the Pathare Prabhu women, it was fashionable to wear a shawl over the body while going out and this was followed by others too, but this fashion no longer obtains even among the Prabhus who set the fashion.

The mode of wearing the *lugade* or nine yard sari among all Hindu women is with the hind pleats tucked into the waist at the back centre. This mode of wearing the sari is known as *sakacch nesane* as opposed to *gol nesane* the round or cylindrical mode of wear. The latter is popular among young girls and women. This is the mode followed by all women from Gujarat and North India but not those from the Southern States. The old fashioned *choli* has now almost disappeared. Its place has been taken by brassiers and blouses. Once upon a time, the *polkas* covered the whole back and hands. Then the hands became shorter and now a days the blouse worn over a brassier and the *cholis* have such low cut necks and more than half the back and belly bare that it is for all practical purposes a reversion to the *cholis* of the elderly women. Frocks in the western style or blouse and skirt are fashionable only among girls or Christian women and some Parsee women too.

Children have naturally a dress of their own. The swaddling clothes, *baloti* for the child consist of a triangular piece of cloth which can be tied round the child's waist so as to cover the buttocks and the front. The traditional wear for the baby, whether a boy or a girl are the *topade*, *kunchi* and *angade* or *zable*.

In the case of people who have come to Bombay from other States, this description of female and child dress generally holds good with certain variations. Thus women coming from Uttar Pradesh, Rajasthan, Panjab and Kashmir use *salwar* and *kameej* with an *odhni* while those from the Southern States wear their saris differently. But even in the case of all these and those hailing from Gujarat, the wearing of sari tends to be uniform on the pattern of the cylindrical sari in the Maharashtra style.

ORNAMENTS

Ornaments are almost a necessity to all classes of people, particularly their women and a considerable amount of capital is thus unproductively locked up. Ornaments differ according to community and economic status as also on the basis whether they are worn by men and boys or women and girls. They are worn on the hands, in the ears, on the nose, on the neck, across the short dress on the arms, on the wrists, on the fingers, round the waist, on the legs and on the toes. A person with a complete set of ornaments may not wear them all at the same time. It is no more a fashion now for men to wear ornaments extensively. Gold earrings, bhikbalis, finger rings, and necklaces like kanthi and goph, a kade on the wrist and a dandakade on the upper arm are still found in use among the rich. There is often the silver or gold waist belt called kargota. A boy's ornaments in a rich family are gold wristlets, bindlya, hades and todes, a waist chain called sankli silver anklets, valas. But no boy when he is seven or eight will wear all these except the waist chain. A young man following modern fashions takes a fancy to wear round his neck a gold chain with or without a central locket. Buttons, studs, collar pins, tie pins, wrist watches made of precious metals and set with precious stones and rings with jewels set in gold are in the use of modern young men.

Women's ornaments used to be too numerous to mention once upon a time. From top to toe there were ornaments and ornaments. But that is out of fashion now. Now-a-days women prefer practically to have no ornaments for the head and the hair except for the bride at the time of wedding. They are content with a flower string or a single flower in the hair. But formerly, women among the well-to-do used to wear for the head, rnuda, rakhadi, kegada, phul, gulabache phul and chandrakora, for the neck thushi, galasari, Putalyachi mal; and tika; for the ears bugadi, karaba; kudi, kapa and ghuma; for the nose, nath, phuli, moti; for the upper arm vaki and bajubanda; for the wrist bangadis, goth and patalya and for the ankles todes. A middle class woman wore all the ornaments worn by the rich and a poor woman only a gold or silver gilt nose-ring, a necklace of gold and glass beads strung in a silk cord, galasari, a pair of gold or gilt earrings or bugadi. Other ornaments used to be added if funds permitted such as toe-rings jodvis, silver armlets, vaki, strings of gold coins such as putalyachi mal and the gold hair ornament ketki.

But ornaments of females have undergone considerable changes particularly among the rich. Diamond necklaces and bracelets, pearl necklaces, earrings and bangles are preferred to golden ones. Ornaments used to be heavy and often lacked any workmanship. Ornaments were looked upon more as investment and insurance against a bad day than a taste for aesthetics. The tendency now is to wear ornaments that are lighter, fewer and artistically better shaped. Head ornaments have gone out of fashion. Ear ornaments like *kudi* and *choukada* of diamonds or pearls or some times a single pearl or a precious stone decorates the ears of a young woman. *Mangalsutras* have become necklaces and of various types,the black beads being stringed together in different patterns. There are also *chandrahara*, *chaplahara*, *bakulihara*, *pushpahara*, *Mohana-mala*, *ekdani*, *kolhapuri saj*; collars made of gold have taken the place of *thushi* and *sari*. Similarly *goth* and *putalya* and *todas* are fast disappearing to yield place to bangles and bracelets of various delicate and decorative patterns.

All this holds good in the case of Gujarati and South Indian women residing in Bombay and even in the case of Muslim, Parsee and Christian women. Inferior stones are quite popular among women of low income group families. Girls follow their mothers or often they set the fashion for mothers.

GAMES, SPORTS AND AMUSEMENTS

Greater Bombay population is so varied and so representative of practically all States of the Indian Union and all religious and social groups that it is rightly called the epitome of India. The games, sports and amusements indulged in by men and women and children are, therefore so numerous that any attempt to make an exhaustive list of them is certain to be futile. There are of course some games and sports and amusements that are common to all as for instance Cricket and Bridge, the Cinema and Television are of interest to all of them. Games played by children of all communities and nationalities will also be found to be the same or similar with slight variations. In the early play activities of the children could be marked a number of games of the imitative or make believe type wherein various roles like that of a cartman, horse driver, engine driver, music-player, palanquin-bearer are performed with close loyalty to real life. Ghodaghoda (horse), Gadi-gadi (cart), Ag-gadi (railway train), Palkhi (palanquin) are games of the sort played

with no set rules but, with a good team spirit, every player having some part to perform. *Bhatukli* is the game of house keeping often played very enthusiastically by girls in which only secondary roles are assigned to boys. Doll's marriage is very often part of this popular play or as an independent game by itself when planned on a somewhat grand scale.

In the case of games of more or less organised types, the method of counting out and choosing players is by itself an interesting process. One player in the group, generally the leader does the counting out. He repeats a rhyme or gingle, touches one player on the chest or head for each accent of the formula, always beginning from himself and then touching the one on the left and so on all around the group in a regular order. The player on whom falls the last accent is 'out' *i.e.* he is eliminated from the succeeding counts. The procedure is repeated until one player is left out who becomes the 'It'. The toss up or *oli-suki* (wet and dry) is a very simple and well known method of choosing players.

Shivashivi (ordinary tag): The players scatter over the playing area and one player is chosen as the 'It' who chases the rest in an attempt to touch one. Any player tagged by the 'It' becomes 'It' and the old 'It' joins the other runners. The players add to the zest of the game by venturing as close as possible to the 'It' and tempting him with their proximity and suddenly dodging away. A number of variations are noticeable in the tag game. Chhapapani is a tag game with the restriction that the 'It' cannot touch any player that squats and the player who squats cannot get up unless touched by some other player who is on his feet. Andhali Koshimbir (Blind man's buff) is a game in which one player is selected for making him blind-folded and is made to stand in the centre. Other players circle round him. The blind-folded player tries to catch any of them and when a player is caught it is his turn to be blind-folded.

Lapandav is the game of hide and seek. There must be some hiding places in the playing area. The 'It' is chosen and he is blind-folded. The players run and hide somewhere. One of them signals with a short to declare that all of them have hidden themselves. Now the 'It' unfolds his eyes and starts searching the hidden players who rush to the spot and touch an object previously agreed on before the 'It' can touch them. The player touched by the 'It' before he is able to touch the object becomes the next 'It'.

In Vagh-Bakri i.e., the tiger and the goats, all players but one become goats and file behind the leader who becomes the dhanagar i.e., shepherd. Each player holds the one in front by the waist. The extra player who becomes vagh or tiger moves from side to side in front of the shepherd and tries to touch any one of the goats, the shepherd protecting them by moving himself as the tiger moves. The goat touched by the tiger becomes the new tiger and the old one joins the goats.

Abadabi is a game in which a soft ball either of rags or rubber is tossed up in the air for all to catch and the player who succeeds in doing so hits with the ball any other player who tries to dodge him. The game can continue indefinitely, the players running about either to get the ball or to avoid being hit by it.

Khamb-Khambolya is a game which can be played in a place where there are a number of pillars as for instance a temple hall. The number of players is one more than the number of pillars or posts. Each player is allotted a pillar except the 'It' who has no pillar. Each of the players holds his pillar fast while the 'It' goes from one pillar to another saying Khamb khambolya dere ambolya which means 'Oh pillar, please give me a cake' and the players so addressed ask him to go to the next door neighbour. Meanwhile, other players exchange signals among themselves and while the attention of the 'It' is attracted in some other direction, dash across to exchange places. The 'It' who is on the watch for a vacant pillar dashes for one and makes the pillarless player the next 'It'.

Major Games: A number of major games, both Western and Indian are played by the people. Characteristically, Indian major games require small playing area and practically no equipment. Of the major Indian games the well-known are Atyapatya, Kho-kho, Hututu (Kabaddi), Langadi, Viti-dandu and Lagorya.

Atyapatya is a game of feints, played between two teams, each of nine players. The playfield consists of eight breadthwise strips known as patis or trenches, each 23 feet long and 13 inches wide and laid out one after another equidistantly at 11 feet. The first pati is called the kapal-pati and the last one the lona pati. The sur-pati (central trench) 89 feet long and 13 inches wide intersects the eight patis in the middle to form on both of its sides 14 squares. The space between two consecutive patis is called kondi. The game begins with the 'attackers' who first stand outside the court near the kapal pati, trying to dodge and slip through the kondis by crossing the patis without getting tagged by the defenders, who move to and from kapal pati each on his designated pati. If any of the' attackers' successfully crosses all the pati from kapal pati to lona pati and makes a return trip from the lona pati to the kapal pati, a lona or game is scored and the game starts afresh. This way, they proceed till the time of seven minutes is over. Then the defenders' become the attackers.

Kho-kho is a game of chase played between two contesting teams, each of nine players. There is a rectangular playfield of $101' \times 51'$ with a centrally located lengthwise strip of $81' \times 1'$ with two wooden posts, each four feet high fixed at two ends. By toss, the teams decide to be chasers or the runners. Eight of the chasers sit in a row on the mid-strip between the posts equidistantly and with no consecutive of them facing the same direction; the ninth player is an active chaser. At a time three runners get into the fair field to play and when they are out, the next group of three immediately enters the field and the active chaser moves from post to post along the lengthwise strip in chase of the runner whom he tries to tag. While chasing he can give a *kho* signal by a touch of hand on the backside of any of the sitting chasers and make the latter an active chaser and himself sit in the latter's place. If *khos* are given in quick succession, it becomes difficult for a runner to escape being tagged. A tagged runner is out.

Hututu is an outdoor game contested by two teams of nine players each within a rectangular field of 40' x 30' divided by a central line into two equal halves. Eight feet away from the central line on both sides are two parallel lines crossing the entire width of the field. Two lobbies, each 3 feet wide run along the lengthwise sides. Each team alternately sends a raider into the opponents court to tag or touch the

opposite players. The game starts with the raider crossing the central line to enter the opponent's court giving out a continuous *hututu* without taking fresh breath. He tries to tag as many opposite players as he could without losing breath in the opponents' court. The opposite players struggle to detain the raider until he loses breath while he is in their court. If they succeed the raider is out, but if the raider successfully struggles his way to his court without losing breath all the opposite players that were in touch with him during the struggle are put out.

Langadi, for a long time this game was being played by boys and girls alike, like an ordinary tag game only with the change that the 'It' instead of running used to hop while tagging the other players. In 1935, the Akhil Maharashtra Sharirik Shikshan Mandal framed rules and regulations for the game and gave it a standard form. Two contesting teams each of nine players decide by toss who should be the defendants and the attackers. The game is played in a circular field of 15 to 20 feet in radius according to the age or height of the players. One player from the attacking side, enters the field hopping through a marked entrance and tries to touch and put out the defenders who run or dodge within the boundary. Only three defenders enter the field at a time. The hopping chaser must not while in the field touch the ground with any part of the body except the hopping foot. The game consists of two innings on each side and each inning is of seven minutes duration. This game is played in most of the schools in Bombay.

Vitidandu is a game contested between two learns, each of nine players, the number of players often depending upon the local variations of the game within different parts of Greater Bombay. It is played with two playing implements a *dandu*, a stick of solid wood and a *viti 2.5* inches thickness and parabola shaped.

Lagorya is a game contested between two teams of players—attackers and fielders, the one trying to knock from a distance a pile of *lagoryas*, seven conically arranged discs, by an overhead throw of a soft ball, and the others trying to catch the ball in fly either direct or after the first bounce. Points are scored according to the success of knocking the *lagoryas* and fielding the ball.

Dances: Various types of dances, generally of the nature of folk dances are current among the people. Some devotional dances are presented by professionals while a few are danced for the mere joy of rhythmic movements.

Bhondala: Hadga or Bhondala is a typical rain dance performed by girls, unmarried or newly married, daily during the period (13 to 16 days) the sun is in the 13th constellation of the zodiac called hasta or elephant. A paper drawing of the lotus-seated goddess, Lakshmi with elephants on two sides facing each other with garlands in their trunks and with men and women dressed as kings and queens in cars on their backs is pasted on a wall in the house. On the ground in its front, is placed on a pat with a drawing of an elephant in rangoli. A string of flowers, garlanding the goddess, and another with green fruits and vegetables like the guava, pomegranate, chilli, bhendi etc., hanging are stretched and tied to two pegs in the wall to the right and left of the picture. The girls bathe in the morning, offer turmeric and red powder to the goddess and in the afternoon dance in ring formation with arms interlocked round the pat with the elephant drawing and sing especially composed songs of the hadga. On invitation they go from house to house where there is a hadga worship, repeat the songs and dance and retire after accepting khirapat (light refreshment). For each of the days of dance period, there is one more string of flowers hung and one more song sung and on the last day takes place a complete rehearsal of dance and songs, a grand khirapat and the ceremonial immersion of the deity and the flower strings in a pond or sea.

Mahalakshmi: On the 8th of the bright half of the month of Ashwina, during the first five years after her wedding, the young wife, as is the family custom, has to worship Mahalakshmi. Married girls who are asked to the house, meet and worship at noon an embossed image of Annapoorna goddess, and in the evening an idol of Mahalakshmi prepared from cooked flour of rice is given a human shape adorned with ornaments and dressed in a gorgeous sari, flowers, turmeric and red powder and food are laid before the goddess. Each worshipper offers silk threads to the goddess and is required to blow an empty ghagar, waterpot, there at least five times. During the night each of the girls holds a ghagar in her hands, make a rhythmic musical sound by blowing across the mouth of the ghagar and starts dancing in a circle before the goddess. During the dance one of the girls starts blowing and dancing with greater animation than the rest, a sure sign that the goddess has entered into her. She presently sways her hands and is seized with the power of the goddess. Her friends ply her with questions which the goddess in her is believed to answer. After a while the goddess leaves her and the girl falls in a swoon. The idol is immersed next morning in a nearby well or tank without much ceremony.

Gondhal: Among some Hindu communities, it is customary to have performed a gondhal dance on the occasion of a thread-girding or marriage ceremony as a ritual of thanksgiving to the family goddesses who are generally Ambabai, Bhavani and Durga. Only *gondhalis* who are professional dancers and devotees of the deities, can give the dance. The dance always takes place at night. At night the dancers bring their musical instruments, a divti, (torch) and the dress of the chief dancer. In the largest room of the house, on a wooden stool, they spread a cholkhan, (bodice-cloth) and on it lay 36 pinches of rice and sprinkle on it turmeric and red powder. In the middle of these pinches of rice is set a tambya, (waterpot) filled with milk and water and lines of sandal are drawn over the pot. On the stool in front of the pot are laid betel-nuts, bananas, dates and lemons. With the help of the chief Gondhali, the head of the family worships the pot as goddess Tuljabhavani, offering it flowers and rice, waving before it a lighted lamp fed with ghee, burning camphor and frankincense. Five male members of the family light five torches and go five times round the goddess, shouting the words Aee Bhavani Jagadamba (Mother Bhavani, Mother of the World). The head dancer dressed in along white lily coat, reaching his ankles and wearing cowri-shell necklaces and gingling bell anklets takes his stand in front of the goddess. A second of the troupe stands to the right of the headman holding a lighted torch and three others stand behind him playing on a drum, a fiddle and cymbals. On either side of the Gondhali troupe, sit the members of the family, men on one side, women on the other. The head dancer touches the lighted torch with sandal paste, bows low before it and says " Khandoba of Jejuri, come to the gondhala, Tukai Yamai, mother Bhavani come to the gondhala". He begins singing and dancing going forwards and backwards. The musicians play their drum, fiddle and cymbals and the torch-bearer serves as a butt for the dancer's jokes. The chief, after dancing at a slow pace, without turning round and with little movement of the feet, repeats a story from the Ramayana and explains its meaning. The performance lasts for several hours and sometimes is kept up with frantic enthusiasm till day-break. Occasionally one of the guests becomes possessed and a spirit in him says why it has entered his body. At the end of the dance, a lighted lamp is waved round the goddess and the dancers retire after receiving a suitable present.

Kadak Lakshmi is the devotee of the goddess Ambabai of Kolhapur, The dance is always performed by two, a woman and a man. The man is dressed like a woman, has long hair, no beard but keeps moustaches. With the percussion sound of the drum, the woman starts dancing. She has on her head a box like thing in which an image of the goddess Amba is kept. With a bunch of peacock feathers in her right hand, she starts from one direction towards the opposite direction and making a sort of obeisance by crossing arms over her breasts, she stands marking time asifinatrance.

The male then takes a whip in his hand and with a yell takes a round and then starts whipping himself. After repeating this performance of chastising himself for a number of times and pretending that the goddess is not still satisfied with the penalty he has imposed on himself, takes out a pock-needle and tying his biceps muscles with a string pierces the needle and blood oozes out. While whipping and piercing, he trembles as if he is possessed. The movements, expression and the yells coupled with taking out blood, tend to create an atmosphere of a supernatural phenomenon and an average person is easily led to believe that the dancers are really possessed.

The *Phugadi* dance is usually played by girls in pairs. Two girls stand facing each other, keep their feet together with a distance of two or three inches between the toes, cross arms, keep them straight and hold each other's hands, balance the body backwards and each time, stepping the right foot a few inches to the right and sliding the left along with it, start an anti-clockwise movement. As the footwork quickens, the movement gathers in tempo till the dancers get swung in a whirl. The dancers sing out recriminatory couplets and blow rhythmic breathing sounds with the mouth known as *pakwa* to keep time and zest to the dance.

There are various types of *phugadis*. *Ekahatachi phugdi* is danced while holding only the right hands, the left hands being kept resting on the hips. In *Gahana phugadi*, the players bend the legs and hold the great toes and then start rolling on the back and then sit. In *bhui phugadi*, the dancers start with a full squatting position and arms resting on knees and then scrape the feet alternately in oblique kicks balancing the steps with backward and forward movements of the arms.

Jhimmas as dances fall in the same category of phugadi with this difference that they could be danced individually and there are no whirling movements done in pairs. In a way, they are calisthenic movements repeated with rhythm of songs and pakwa. Acted in pairs and groups they lead to a competitive zest.

Taking into consideration the enormous population of Bombay which is packed in a compact area of a few square miles, one cannot but deplore the meagre facilities that are there for outdoor games and physical exercises. Inevitably outdoor activities in games like cricket, football, hockey are confined to members of such well-to-do sections of society as can afford it, both from the point of view of the necessary leisure and material means. People enjoying a somewhat affluent status enjoy such outdoor amenities like swimming, boating, horse-racing, etc. There are richly endowed clubs of such people and their membership too is quite considerable. Tennis and badminton must also be considered as the close preserves of the more lucky sections of society (Information about various Gymkhanas is given in Chapter 18 in Vol. III of this Gazetteer.). However, the various gymkhanas in the city and the suburbs, as also the college and school gymkhanas and playgrounds provide for outdoor physical games to young members of the general public and meet to a certain extent, albeit to a very small extent, the need for play and sports.

The craze for cricket among school boys is limitless and their enthusiasm for this game finds expression in many improvisations in the verandahs and terraces of old and new residential buildings to the immense annoyance of the inhabitants. If there is a road under repairs young boys turn it into a cricket field. If the streets and by-lanes are inundated by storm water and waist-deep pools are formed, they enjoy bathing and swimming in them. Such is the pitiable condition of thousands of boys and girls in Greater Bombay for lack of enough paiks and playgrounds and swimming pools.

A place like the Chowpatty sands and the Mahim Bay used to be once upon a time, the venue for boys to indulge in Indian games like *kho-kho* and *atyapatya*, but nowhere is this scene to be witnessed now-adays. But here too schools make some arrangements for cultivating physical build up by organising plays like *kabaddi*, *kho-kho* etc. These cost little or nothing and teams of boys as well as girls are known to attain proficiency in them.

Among the indoor games, playing cards occupy an important place. There are numerous private clubs in which people enjoy playing at cards. Bridge and rummy and patience are quite notorious as means of killing time; the old game of *ganjpha* and *songatya* are now almost forgotten. But chess has attained well deserved prominence. Similarly carom holds an honourable place in many homes, probably because young and elderly people alike can participate in it at one and the same time.

But, all these hardly enjoy the prestige that football, hockey, cricket and hard court tennis enjoy not only in this city or country but all over the world. Institutions like the Bombay Cricket Association, Cricket Club of India, Indian Hockey Federation, Western India Football Association, Indian Football League, Bombay Provincial Hockey Association etc., in this city constitute ample evidence of this fact. Players belonging to all communities have distinguished themselves in all these games as not only all India, but also world champions.

TABLE No. 9
SECTIONWISE POPULATION FOR GREATER BOMBAY MUNCIPAL CORPORATION - 1981

Name of section	Area in Km ²	Institutio	oulation (in onal and Hoppulation	ouseless		duled Ca pulation		Scheduled Tribe Population			
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	
1	2	3	4	5	6	7	8	9	10	11	
All Sections	*429.89	8,243,405	4,652,646	3,590,759	399,076	216,081	182,995	84,073	46,140	37,933	
1 Upper Colaba	2.45	35,692	20,019	15,673	1,792	1,021	771	139	88	51	
2 Middle and Lower Colaba	3.20	53,735	29,881	23,854	2,296	1,290	1,006	2,467	1,305	1,162	
3 Fort South	1.83	17,459	11,702	5,757	575	343	232	66	61	5	
4 Fort North	0.36	24,384	14,368	10,016	825	435	390	30	17	13	
5 Esplanade	2.62	36,953	21,762	15,191	1,481	851	630	161	105	56	
6 Mandvi	0.69	31,972	20,653	11,319	612	404	208	681	365	316	
7 Chakala	0.18	21,020	12,108	8,912	90	89	1				
8 Umerkhadi	0.38	61,974	34,591	27,383	1,199	568	631	284	152	132	
9 Dongri	1.19	32,347	18,151	14,196	3,352	1,648	1,704	214	139	75	
10 KharaTalao	0.23	28,351	15,567	12,784	360	179	181	7	7		
11 Kumbharwada	0.17	40,204	24,816	15,388	1,250	652	598	64	43	21	
12 Bhuleshwar	0.17	67,109	42,625	24,484	662	425	237	240	162	78	
13 Market	0.33	35,920	22,810	13,110	318	169	149	6	5	1	
14 DhobiTalao	0.46	53,608	31,350	22,258	1,238	712	526	326	179	147	
15 Fanaswadi	0.41	45,513	25,968	19,545	202	109	93	109	61	48	
16 Khetwadi	0.62	69,974	38,771	31,203	1,667	830	837	86	52	34	
17 Tardeo	0.59	61,356	34,623	26,733	4,906	2,565	2,341	174	95	79	
18 Girgaum	0.46	56,564	31,533	25,031	287	163	124	12	9	3	
19 Chaupaty	0.43	25,863	14,296	11,567	197	93	104	47	32	15	
20 Walkeshwar	2.36	85,380	46,612	38,768	774	434	340	121	71	50	
21 Mahalaxmi	2.75	146,256	80,175	66,081	11,635	6,079	5,556	537	280	257	
22 Mazagaon	2.20	81,051	49,763	31,288	3,131	1,772	1,359	678	422	256	
23 Tadwadi	1.45	72,393	44,485	27,908	2,257	1,215	1,042	139	85	54	
24 1st Nagpada	0.38	24,947	13,559	11,388	5,406	2,770	2,636	290	172	118	

25 2nd Nagpada	0.35	40,679	23,169	17,510	636	363	273	5	5	
26 Kamathipura	0.24	51,755	28,769	22,986	4,143	1,685	2,458	698	356	3
27 Byculla	2.17	184,886	111,317	73,569	7,721	4,228	3,493	347	213	
28 Parel	2.26	156,850	90,403	66,447	6,566	3,612	2,954	620	374	1
29 Sewri	4.57	193,829	114,181	79,648	8,031	4,662	3,369	2,588	1,441	1
30 Naigaum	1.72	135,039	77,826	57,213	10,986	5,935	5,051	610	358	1
31 Matunga	1.57	63,294	34,196	29,098	1,489	762	727	80	52	H
32 Sion	11.03	265,691	148,595	117,096	11,123	6,108	5,015	2,735	1,536	1,
33 Dadar	5.87	343,878	194,380	149,498	43,291		19,904		· ·	_
34 Mahim	1.50	102,075	54,093	47,982	1,067	572	495	191	116	L
35 Prabhadevi	1.98	147,474	87,645	59,829	13,985	7,828	6,157	782	481	-
36 Worli	3.70	191,754	111,866	79,888	14,835	8,245			2,215	
37 Chinchpokli	1.93 2.87	134,896	87,383 36,000	47,513 26,915	16,521 3,879	8,696 2.112	7,825 1,767	479 245	317 143]
38 Lovegrove 39 Slaughter House	0.35	62,915 32,645	17,299	15,346	633	350	283	57	38	H
40 Colwda and Bandra Hill	1.25	24,447	12,330	12,117	113	72	41	47	27	┢
41 Pali hill	1.64	41,011	20,457	20.554	814	439	375	143	67	Н
42 Danda	0.28	20,371	10,721	9,650	697	362	335		1,248	
43 Khar Scheme	2.89	139,718	78,240	61,478	7,385	3,963	3,422	323	192	1
44 Khar and Pali	0.77	29,665	15,214	14,451	331	164	167	55	33	Т
45 Hill Road and Turner Road	2.04	139,557	76,576	62,981	10,471	5,578	4,893	762	467	2
46 Santacruz West	1.50	50,753	26,981	23,772	575	307	268	466	264	2
47 Santacruz Central	0.79	32,524	17,508	15,016	457	253	204	216	132	
48 Santacruz East	8.05	196,14 <mark>7</mark>	109,721	86,426	6,989	3,865			669	_ 5
49 Vile Parle East	7.44	126,988	68,492	58,496	4,679	2,486		1,016	529	4
50 Vile Parle West	1.35	54,661	28,899	25,762	906	488	418	341	185]
51Juhu	4.27	43,177	23,209	19,968	1,171	644	527	443	225	2
52 Andheri West 53 Versova	4.94 4.20	197,07 <mark>5</mark> 42,363	104,839 22,204	92,236 20,159	7,402 834	3,882 466	3,520 368	1,347 2,827	695 1,411	1,
54 Madh	1.50	5,680	3,199	2,481	2	2	300	159	79	1 .
55 Andheri East	12.99	244,172	139,082	105,090	5,286	2,927	2,359			
56 Jogeshwari East	3.16	158,084	89,842	68,242	5,206	2.840	2.366	800	438	3
57 Jogeshwari West	7.38	53,482	32,640	20,842	2,538	1,458		514	322	1
58 Goregaon & Village Maroshi	7.67	17,678	10,957	6,721	840	480	360	54	33	
59 Aarey	4.66	34,559	20,107	14,452	1,753	960	793	2,072	1,062	1,
60 Eksar Pakhadi	8.89	243,838	134,838	109,000	7,736	4,226	3,510	2,261	1,239	1,
61 Erangal & Daroli	5.65	2,712	1,436	1,276	15	9	6	238	125	_1
62 Malad West	4.18	109,126	58,501	50,625	1,886	1,012	874	1,251] 5
63 Malad East	7.78	105,739	58,068	47,671	2,118	1,132	986	1,775		5
64 Kurad, Dindoshi, Chincholi and Vadhwan 65 Valnai, Malavani,Akse	5.70	76,997	45,231	31,766	3,577	1,968		1,381		- 3
& Marve 66 Manori Island	4.68	69,381 3,686	37,682 1,880	31,699 1,806	2,693	1,463	1,230	640 229	335 126]
67 Kandivali and Charkop	9.69	106,206	58,126	48,080	2,296	1,308	988		1,133	-
68 Poisar and Akurli	11.50	66,629	38,211	28,412	4,284	2,311		1,007	546	2
69 Borivali and Shimpoli	6.19	97,353	52,125	45,228	2,376	1,236		1,281		5
70 Eksar and Mandapeshwar	6.11	70,013	37,527	32,486	1,415	745	670	1,180	608	_5
71 Gorai and Kulvem	14.18	2,537	1,338	1,206		1			-	L
72 Kanehri	1.12	83,281	47,001	36,280	2,613		1,137			1.5
73 Magathane	17.64	73,521	42,598	30,923	2,501		1,131			_
74 Dahisar	10.21	62,376	34,785	27,591	1,849	1,023	826	1,704		7
75 New Mills, Kurla 76 Station Takia, Kurla	9.36	84,936 23,219	48,954 14,209	35,982 9,010	5,972 1,026	3,207 569	2,765 457	502 37	305 19]
77 Swadeshi Mills, Chunabhatti, Khajuribhatti	2.18	123,006	68,397	54,609	6,947	3,762		397	232]
and Kasaiwada. 78 Bazar Church Hall, Naupada & Seven villages	9.11	202.846	118,824	84,022	10,281	5,619	4,662	1,795	1,066	7
79 Chembur Proper	7.36	256.851	140,282	116,569	20,765	11 220	9,436	1 060	622	_
80 Mahul, Trombay,	46.92	308,919	173,126	135,793	17,261	9,498		3,899		
Govandi, Nadavali, Borla, Mankhurd and Mandala	.0.52] 550,519	1,3,120	133,733	11,201	3,430	',,,],033	_,191	

81 Ghatkopar	13.93	150,710	81,070	69,640	6,454	3,496	2,958	1,199	693	506
82 Kirol, Ghatkopar	1.71	46,815	25,601	21,214	1,388	691	697	236	133	103
83 Panjirapol	6.02	186,027	104,097	81,930	9,402	5,007	4,395	1,949	1,117	832
			120,088							
85 Bhandup	15.97	278,461	160,013	118,448	10,393	5,798	4,595	4,124	2,333	1,791
86 Mulund East	8.26	55,747	30,046	25,701	2,041	1,156	855	1,563	857	706
87 Mulund West			79,544							
88 Nahur, Tulsi, Gundgaon, Vihar, Sai and Klerobad	21.83	18,654	10,521	8,133	730	401	329	901	491	410

^{*} The figure 429.89 kms². constitutes the total of the areas communicated by the Greater Bombay Municipal Corporation for the 88 sections. The Municipal Corporation are is coterminous with that of Greater Bombay District, for which the area reported by Surveyor General of INdia is 603.00 km.²



Maharashtra State Gazetteers

MAHARASHTRA STATE GAZETTEERS



Sobernment of Maharashtra

GREATER BOMBAY DISTRICT

VOLUME II: 1987

PREFACE

I am very glad to bring out the E-book edition (CD version) of the Greater Bombay District Gazetteer published by the Gazetteers Department This CD version is a part: of a scheme of preparing compact discs of earlier published District Gazetteers.

Greater Bombay District Gazetteer was published in 1986-1987 in three volumes. It contains authentic and useful information on several aspects of the district and is considered to be of great value to administrators, scholars and general readers. The copies of this edition are now out of stock. Considering its utility, therefore, need was felt to preserve this treasure of knowledge, In this age of modernization Information and Technology have become key words. To keep pace with the changing need of hour, I have decided to bring out CD version of this edition that comprises of all the three volumes, with little statistical supplementary and some photographs, I am sure, scholars and studious persons across the world will find this CD immensely beneficial.

I are thankful to the Honorable Minister, Shri. Ashokrao Chavan (Industries and Mines, Cultural Affairs and Protocol), and the Minister of State, Shri. Rana Jagjitsinh Patil (Agriculture, Industries;-and Cultural Affairs), Shri. Bhaushan Gagrani, (Secretary, Cultural Affairs) and Government of Maharashtra for being constant source of inspiration.

Place, Mumbai

Dr. Arunchandra S. Pathak

Executive Editor and Secretary

January 2007

AGRICULTURE AND IRRIGATION



Maharashtra State Gazetteers

INTRODUCTION

BOMBAY THE HEPTANESIA OF THE GREEK COSMOGRAPHER, PTOLEMY, is now a bustling city, the commercial capital of India and the most industrialised city in the sub-continent. However, the Bombay Island and parts of the Salsette presently in Bombay had many rural characteristics in the period upto the beginning of the nineteenth century. There was a good amount of agricultural cultivation in the South Salsette now christened Bombay Suburban District, even upto the dawn of the present century. Cocoanuts, rice, mangoes and other fruits and vegetables were cultivated in the Bombay Island and in the Bombay Suburban District. When the Island came under the British (1665) and was then leased to the East India Company (1668), the Company encouraged agricultural cultivation. The extension of cultivated area at any rate was one of the objectives of the local officials of the East India Company. In 1679 they urged upon the Council at Surat the necessity of improving a considerable quantity of ground on each side of the Company's garden. They also demanded that the uncultivated area should be surveyed, drained and rendered fit for agriculture. By the close of the seventeenth century a certain amount of progress was discernible. People had been encouraged to settle and cultivate the soil. The mangoes of Bombay, which had been very carefully nurtured by the Portuguese, maintained their standard of excellence.

At the dawn of the eighteenth century a good amount of land which was formerly under inundation, was brought under cultivation. By 1725 the number of palms in the island was estimated at 1,10,000.

Mr. Grose stated in 1750 that the bulk of the proprietors and cultivators in Bombay were Roman Catholic Mestizos and Canarins. He further wrote that agricultural land was chiefly employed in cocoanut groves or oarts, rice fields and onion grounds.

During the early years of the nineteenth century the expansion of the town commenced to set a limit upon the progress of cultivation. Mr. Heber found in 1838 that the area of rice land was still considerable, but it gradually dwindled between 1835 and 1850 from 1,67,435 burgas to 1,65,000 burgas (a burga=60 square yards). Garden cultivation still maintained its popularity. Brinjals and other vegetables were grown in plenty. The economic advancement of the town, however, eventually curtailed the area of garden land, much of which was absorbed during the latter half of the nineteenth century by railways, roads and buildings.

Rice was the staple crop of the island, while cocoanut plantation was rampant between Sion and Mahim on the east of the railway, and also in Dadar, Mahim and Worli at the dawn of the twentieth century. However, the mammoth growth of factories, trade and commerce and the consequent urbanization encroached upon agriculture at a faster rate. The encroachment continues to this day. Still many patches of agricultural land have survived the ravages of urbanization, and hence, a narration of agricultural cultivation and allied matters is given in this chapter.

Since land reclamation has some bearing on agriculture in this island, a very brief account of the same is given below, while details are given in Chapter 1 of this *Gazetteer* (Vol. I). The account of tenancy and tenures in this chapter, although it no longer holds good, is furnished as a matter of historical interest.

Although the chapter bears the heading "Agriculture and Irrigation" as per the pattern of contents in all *Gazetteers*, no account of irrigation is given below because there is not much of "irrigation" as we understand it today.

LAND RECLAMATION

The physical history of Bombay is a story of land reclamation. The idea of reclaiming submerged grounds dated from a very early period. In the middle of the sixteenth century the Portuguese authorities had advised their king to substitute for the grant of villages to deserving individuals the allotment of submerged lands in perpetuity to those who drained and reclaimed them. After taking possession of the Bombay Island by the British, the Court of Directors of the East India Company ordered their representatives in Bombay to encourage the stoppage of breaches where the sea over-flowed the island. The reclaimed land was granted, free of rent but reserving a small guit-rent for the Company, to individuals. Nevertheless, with the exception of small patches of reclamation here and there, no serious attempt was made for about a century after Bombay came under the British. The first work of great magnitude in this direction was the construction of the Vellard between Mahalaxmi and Worli during the Governorship of William Hornby (1771-84). It is noteworthy that some efforts were made to build the Vellard earlier in the century. But the work could not withstand the ravages of the sea waves. William Hornby appreciated the importance of stopping the flow of sea water from the Great Breach (Breach Candy) upto Mazagaon in the east and upto the Mahim Creek in the north. He framed a proposal for construction of the causeway, but it was rejected by the Court of Directors on the ground that it was nothing but extravagance. Hornby, however, undertook the scheme in the face of opposition from the Court of Directors, while there were only 18 months left till the expiry of his tenure of office. The causeway was completed in 1805 and was later named after him as Hornby Vellard. It is now known as Lala Lajpatrai Road.

No sooner was the Vellard completed than the central portions of the island and the Flats became available for the reclamation which was gradually carried out during the nineteenth century. A huge area from Mahalaxmi upto Mazagaon in the east and upto the Mahim Creek in the north was gradually reclaimed. As soon as the Flats were reclaimed, the land was brought under cultivation; rice, cocoanuts and vegetables were grown on considerable areas. The Bellasis Road from west to east then passed through rice fields on both sides.

The economic boom incidental to the Share Mania (1861-65) which was by itself due to the American Civil War of 1861-65 initiated a series of reclamations. The prosperity and money born of the boom were

harnessed to the cause of land reclamation. While a large portion of the reclaimed land was utilised for urban planning and development, a good amount of land was brought under cultivation.

There are many localities in the city which bear the names such as Kele Wadi, Tad Wadi, Phanas Wadi, Ambe Wadi, Naral Wadi, Kande Wadi, which were once garden lands growing fruits and vegetables. The area formerly known as Mahim Woods was a congenial home for garden lands which grew cocoanuts, mangoes, many other fruits and vegetables as well as paddy.

The mangoes of Mazagaon were very famous in the seventeenth and eighteenth centuries. Thomas Cooke's *Lullah Rookh* speaks highly about them. The Mazagaon mangoes were relished in the dining hall of Emperor Shah Jahan. They were harvested twice a year, once in May and then during December. Even at the dawn of the twentieth century two mango trees of the same rich variety of the seventeenth and eighteenth centuries were found to be existing in a garden around a private bungalow at Mazagaon. (Gillian Tindall, City of Gold (TempleSmith, London, 1982).)

LAND USE

Before analysing the existing pattern of land use in Greater Bombay with particular reference to agricultural activity, it is necessary to give the history of formation of the present Greater Bombay District.

Prior to 1920 Bombay comprised only the Island City. In 1920, the Salsette taluka of Thane district was divided into North Salsette and South Salsette. South Salsette taluka consisting of 86 villages was separated from Thane district to constitute the newly created Bombay Suburban District. This district was constituted of two talukas viz., Borivali with 33 villages and Andheri with 53 villages. In 1945, 33 villages from this district were transferred back to Thane district. In 1946, 14 villages of these 33 were returned back to Bombay Suburban District for the development of the Aarey Milk Colony. The municipal limits of Bombay were extended in 1950 to include the Andheri taluka of the Bombay Suburban District as Suburban Bombay. It was on 1st February 1957 that the Borivali taluka together with villages transferred from Thane district was also appended to Bombay when the Municipal Corporation limits were further extended. Thus the present Greater Bombay district comprising the city proper and suburbs came into existence since 1st February 1957.

Upto the end of the nineteenth century a considerable area of Bombay Island and Salsette was under agriculture. With the growth of industrialisation and urbanization land under agriculture dwindled progressively. The following tables Nos. 1 and 2 give the statistics about the land use in Bombay since 1918-19 to 1980-81. It may be noted that the statistics pertain to the area of the city which existed in the respective years:—

Maharashtra State Gazetteers

TABLE No. 1 CULTIVATED AND UNCULTIVATED AREA IN BOMBAY SUBURBAN DISTRICT

(Area in hectares)

	Type of Area	1922-23	1930-31	1940-41	1947-48
(1)	No. of villages	81	93	86	39
(2)	Total area cultivated and uncultivated	33,487	39,702	36,832	23,166
(3)	Area under cultivation-				
	Net Cropped	11,486	13,299	11,585	3,881
	Fallows	8,626	8,422	7,676	2,878
	Total	20,112	21,721	19,261	6,759
(4)	Uncultivated area—				
	Other uncultivated area excluding fallows.	1,597	5,680	6,050	120
	Area not available for cultivation	11,778	12,301	11,521	16,287
	Total—Uncultivated area	13,375	17,981	17,571	16,407

Source.—Statistical Atlas ofiBombay State, 1925 and 1950.

TABLE No. 2 LAND UTILIZATION IN GREATER BOMBAY FROM 1950-51 TO 1980-81

(Area in '00' hectares)

		1950-51	1960-61	1970-71	1980-81*
1.	Geographical area by village papers	170	380	380	380
2.	Forests	1	14	15	15
3.	Barren and uncultivated land	39	45	61	74
4.	Land put to non-agricultural uses	13	95	156	193
5.	Cultivable waste	27	49	6	9
6.	Land under miscellaneous trees, crops and groves.		4		
7.	Permanent pastures, grazing groves		35	12	6
8.	Current fallows		15	8	3
9.	Other fallows	37	36	52	18
10.	Net area sown	53	87	70	62
11.	Area sown more than once	3	5	2	7
12.	Gross cropped area	53	91	72	69

* figure for 1980-81 are provisional Source—Statistical Abstract of Maharashtra State, 1950-51 to 1980-81.

In 1980-81 the net area sown in Bombay was only 16.3 per cent of the total geographical area. Out of the net area sown most of the area was under paddy, fruits and vegetables.

AGRICULTURAL POPULATION

It is seen from the old *Gazetteer of Thana District* (1882) that the agricultural population in Salsette which is now in Greater Bombay included Kolis, Sonkolis, Christians, Kunbis and Agris. The following statement shows the agricultural population in Greater Bombay as per the 1961,1971 and 1981 censuses:—

Category	1961		19	971	1981		
	Males	Females	Males	Females	Males	Females	
Cultivators	2,944	1,896	2,292	380	2,777	400	
Agricultural labourers	1,156	793	2,393	565	1,984	483	

RAINFALL

Greater Bombay receives rains from the south-west monsoons, which commence usually in the first fortnight of June and last till the end of September, Ante-monsoon showers visit in May. Occasionally,

north-east monsoon showers occur in October-November, but rarely more than twice in the entire rainy season. The rainfall ranges from 1788.4 mm to 2791.5 mm in 72 to 84 rainy days at Colaba and 1959.0 mm to 2493.5 mm in 69 to 76 rainy days at Borivali.

The account of rainfall is furnished in Chapter 1 of this *Gazetteer* (Vol. I). It may, however, be of some interest to give some additional information from the *Gazetteer of Bombay City and Island*, Vol. I, 1909 (pp. 88-89).

"Rainfall is registered at several places in Bombay and the falls are often found to vary considerably. The vicinity of small hills to the north of the island especially the high hill of Trombay, must affect to no slight extent the amount of precipitation. On an average it is somewhat greater in the north-east part of the island than at Colaba in the south/The average annual fall at Colaba is 71.15 inches. The maximum fall recorded during the period was 114.89 inches in the year 1849, the record minimum falls being 33.42, 33.66 and 35.90 in 1904, 1905 and 1899, respectively, the last being a noted year of famine. Among all climatic elements the fluctuations of annual total rainfall show the greatest departures from the mean, which must have a reflex action to a marked degree upon the general condition of the atmosphere, determining the climate of any particular year. Out of 60 years only 2 years registered annual total falls more than 100 inches; 12 registered between 80 and 100; as many as 36 between 60 and 80; 7 between 40 and 60; and 3 between 30 and 40 inches. The average departure from the mean is 12.40 inches or one-sixth of the total fall."

Table No. 3 gives the statistics of number of rainy days and rainfall in Greater Bombay since 1951 to 1980.

TABLE, No. 3
Rainfall in Greater Bombay since 1951 to 1980

	Bombay	(Colaba)	В	orivali
Year	No. of rainy days	Rainfall (mm)	No. of rainy days	Rainfall (mm)
1951	72	1,788.4	N.A.	N.A,
1955	N.A.	2,251.4	N.A	N.A.
1960	78	2,116.0	N.A.	N.A.
1965	67	2,024.1	76	2,493.5
1970	80	2,625.6	N.A.	N.A.
1975	84	2,791.5	N.A.	N.A.
1980	74	1,923.1	69	N.A.

Source.—Statistical Atlas of Maharashtra State, 1951-52 to 1980-81.

CROPS

Rice, fruits and vegetables, and cocoanuts are the crops grown in Greater Bombay. Table No. 4 gives the statistics of area under crops, gross cropped and net cropped area in Bombay since 1922-23 to 1982-83.

TABLE No. 4 Area under Food and Non-Food Crops in Greater Bombay since1922-23* to 1982-83 (Area in hectares)

Year	Rice	Total cereals	Fruits	Vegetables	Total fruits and vegetables	Total food crops	Oil- seeds	Fibres
1	2	3	4	5	6	7	8	9
1922- 23	6,482.26	6,510.59	328.61	820.71	1,149.32	6,510.59	7.28	
1930- 31	5,875.23	5,893.04		842.56	842.56	5,893.04	310.80	0.81
1940- 41	5,042.44	5,042.44		971.25	971.25	5,042.44	313.22	
1950- 51	1,699.68	1,699.68	404.69	242.81	647.50	1,699.68	161.87	
1960- 61	2,900.00	2,900.00	1,300.00	1,100.00	2,400.00	2,900.00	700.00	
1970- 71	1,200.00	1,200.00	300.00	200.00	500.00	1,200.00	200.00	
1982- 83	900.00	900.00				900.00		_

•	•	

Year	Condiments and spices	Guinea grass	Other misc. non-food crops	Total non-food crops	Gross cropped area	Area sown more than once	Net cropped area
1	10	11	12	13	14	15	16
1922-23	7.28		7,381.88	7,400.49	15,065.34	110.88	14,945.46
1930-31	29.14		6,653.44	6,694.19	13,636.70	60.30	13,657.34
1940-41	12.55		5,323.64	5,649.42	11,663.05	58.28	11,604.78
1950-51			3,075.61	3,237.49	5,584.72	323.75	7,689.11
1960-61			12,200.00	13,000.00	22,600.00	1,200.00	21,400.00
1970-71		5,100.00	100.00	5,400.00	7,100.00	100.00	7,000.00
1982-83					900.00		

Rice: Rice is the main crop grown in Bombay and occupied 900 hectares of area in 1982-83. It is grown only as a *kharif crop*.

The figures of production and average yield per hectare of rice in Greater Bombay in 1960-61,1970-71,1980-81 and 1982-83 are given below:-

Year	Production (Metric tonnes)	Average yield per hectare (kg)
1960-61	3,900	1,325
1970-71	2,100	1,750
1980-81	1,600	1,600
1982-83	1,500	1,667

The method of cultivation of this crop is the same as is in vogue in Thane district.

The Gazetteer of Bombay City and Island published in 1909 mentions that the total area under rice* in Bombay Island in the year 1909 was about 140 hectares. "Rice is the staple crop of the Island and is grown in such areas as are still unoccupied by houses or cocoanut plantations, namely between Sion and Matunga on the east of the railway, and in the Dadar, Varli and Mahim sections. Two modes of rice growing prevail in Bombay, the lavani and rohachi lagvad. The former and commoner method consists in the transplantation of seedlings, the latter in sowing seeds that have sprouted. The soil and seasons are well-suited to the crop, but its cultivation is not regarded with as much favour as the cultivation of cocoanut palms, being more expensive and in the end much less profitable than the latter. Artificial irrigation of rice is unknown in the Island. Some rice lands are for tending vegetables in dry season. The garden lands are mostly in Sion, Matunga, Sewri and Parel. (Gazetteer of BombayCity and Island, Vol. 1 (1909), pp. 121-22)

The improved varieties of paddy grown in Salsette include the early Kolamba-184, Zinya-31, Kolamba-540 and Kolamba-42. They are all sown in the first week of June. Kolamba is harvested in the last week of September, and this is a very fine variety. Zinya-31 is harvested in October, Kolamba-540 in the third week of October and Kolamba-42 in the last week of November.

Cocoanut: In the year 1909, there were approximately 1,00,000 cocoanut trees in Bombay Island. The area under palms was 352 hectares during the same year. These trees were also cultivated in the gardens of former Salsette. The total area under cocoanut in Bombay Suburban District in the year 1947-48 was 143 hectares. (*Dr. S. Soloman, Crops of Bombay State, Their Cultivation and Statistics,* p. 101) The mode of its cultivation is the same as is in vogue in Thane district.

Fruits: Fruits grown in Bombay occupied 500 hectares of area during 1975-76, and in 1979-80 the area under fruits and vegetables was 400 hectares. Mango is the main fruit crop grown in the city.

Mango: Mango, amba (Mangifera indicd) is grown to a considerable extent roundabout Trombay. The Portuguese were fond of the mangoes grown in Trombay. (Fryer's Account) The mangoes at Mazagaon were very famous in the seventeenth and eighteenth centuries. They found an honoured place not only in the aristocracy in the city but also in the dining hall of Emperor Shah Jahan.

The area under mangoes in Bombay Suburban District was about 324 hectares in 1950-51 and 500 hectares in 1975-76. It is grown as a commercial crop. The method of mango cultivation in Greater Bombay is the same as is in vogue in Thane district.

Bombay provides a congenial ground for mango plantation. Manure is applied when the plants are young to achieve quick growth. The plants start yielding fruits after about six years. Good yield is obtained from the 10th year onwards.

VEGETABLES

Green vegetables are grown in the garden lands as well as in the land near the railway lines of the Western Railway and Central Railway. They are grown on a very small scale and occupied an area of about 200 hectares during 1975-76. Vegetables include carrot, tomato, brinjal, bhendi, cabbage, dudhya, kakdi, ghosale, alu, chakvat, coriander, methi, palak, radish and onion.

There is no cultivation of pulses, drugs and narcotics, sugarcane and fibres in Bombay.

LIVE-STOCK

The Gazetteer of Bombay City and Island gives the following account about live-stock (Gazetteer of Bombay City and Island, Vol. I (1909), pp. 128-35) in the past.

"Bullocks are yearly imported to the number of about 5,000 come principally from the Deccan and Berar and are used for draught purposes. The average price of a first class bullock ranged from Rs. 50 to 100. The price varied according to breed i.e. Deccan bullock Rs. 50, Khandesh bullock Rs. 80, Mysore bullock Rs. 100 and Gujarat bullock Rs. 150.

"There are two *buffalo-davnis* and one *bullock-davni* in the city, the former being situated in Falkland Road and DeLisle Road, and the latter at Haines Road. In these places the cattle-bazar is held daily, the animal being brought and sold by brokers and the owners of the *davnis* receiving a commission on the sale price.

"Horses: Anderson notes in his English in Western India that several attempts were made during the seventeenth and eighteenth centuries to introduce a breed of English horses into Bombay but the efforts failed owing to the difficulty of keeping the animals alive during the long voyage to India. By 1,800 the importation of horses from the Persian Gulf had become a recognised item in the trade of port, and auction sales, at which big prices were paid, were often held under the Tamarind tree on the old Bombay Green. The horses now imported into Bombay are mostly Arab, Australian and Persian, with a certain number of English, and the very large trade is carried on within the city. In the middle of last century most of the horses required for the army in Bombay and Bengal were purchased in the Arab stables of Bombay. The importation of Australian horses dates from about the year 1847. These horses are imported practically all the year round while the import of Arab horses lasts only from October to February in each year. The Arab horses are imported to the number of about 3,000 every year and reach Bombay via Bagdad and Basra. Small batches of country bred horses from Kathiawar, Marwar, the Deccan, the Punjab and Baluchistan are some times seen in Bombay. About 45 per cent of all the horses imported into Bombay are sold for private domestic use, from 5 to 10 per cent of Arabs and a smaller percentage of walers are sold for racing purposes, and the remainder aretaken by the Government Department and by Native States. The export trade in horses is small.

"Other Animals: A few goats of common breed are privately kept in the city, but most of the sheep, which come from Marwar, Ahmedabad and the Deccan as also the small and inferior kinds of cattle are only imported for slaughter. Dogs are imported from England, Japan and China. No cattle shows are held in Bombay, but a horse and dog show is held annually upon the Oval in the month of February."

Table No. 5 gives the statistics of agricultural stock including live-stock since 1925 to 1948 in Greater Bombay.

TABLE No. 5
AGRICULTURAL STOCK IN BOMBAY SUBURBAN DISTRICT AND BOMBAY CITY FROM 1925 TO 1948

	Вс	ombay S	uburba	an	Bombay City					
	1925	1935	1945	1948	1925	1935	1945	1948		
For Plough:										
Oxen	6,432	7,117	5,942	2,419	101	7,765	6,503	4,979		
He-buffaloes	718	856	321	104	20	163	15	17		
For breeding:										
Bulls	266	98	197	18	160	90	48	44		
He-buffaloes	60	149	475	134	125	153	102	159		

For other purpose:								
Oxen	2,238	17	278	18	22,270	45	40	19
He-buffaloes	282	4	108	153	317	5	2	1
Female Stock above 3 years								
Cows	3,800	5,053	108	1,566	3,345	2,179	2,055	2,399
She-buffaloes	5,547	12,444	24,601	19,524	17,831	22,764	19,070	18,108
Young stock:								
Calves	3,289	4,865	3,082	1,260	2,089	1,517	1,447	1,747
Buffalo Calves	1,574	2,535	2,131	2,648	2,996	3,451	3,136	2,637
Total bovine population	24,245	33,138	41,055	27,844	49,254	38,032	32,418	30,040
Horses and ponies	447	538	275		8,224	4,527	5,822	
Sheep	212	106	1,905	111	715	291	256	312
Goats	4,179	6,528	5,365	2,387	24,335	19,577	11,517	11,704
Ploughs:*	tra	S	ta	te	G	az	et	:e
Small	2,731	2,408	1,758		32	44	32	
Large	4	4	38			1		
Carts :								
For Passengers	629	397				2,166	57	
For Goods	2,920	1,982	1,680		16,599	3,340	2,768	

Source.—Statistical Atlas of Bombay State, 1925 and 1950. * Some iron ploughs were shown under small ploughs in 1925.

Table No. 6 gives the live-stock population as per the live-stock census of 1951, 1956, 1961, 1966, 1972 and 1978 in Greater Bombay District.

TABLE No. 6
LIVE-STOCK IN GREATER BOMBAY AS PER 1951, 1956, 1961, 1966, 1972 AND 1978 LIVE-STOCK
CENSUS

	1951	1956	1961	1966	1972	1978
Cattle	17,415	17,386	14,260	13,241	11,849	8,217
Buffaloes	47,492	76,464	87,401	91,116	91,543	73,822
Sheep	1,777	8,175	8,526	2,571	6,678	3,078
Goats	26,475	22,615	27,106	13,145	26,002	19,634
Horses and ponies	3,657	2,843	2,268	1,158	995	1,187
Other live-stock	4,394	7,169	10,394	4,560	7,792	8,615
Total Live-stock	1,01,210	1,34,652	1,49,955	1,25,791	1,44,859	1,14,553
Poultry	1,00,703	1,46,507	1,96,039	<mark>2,29</mark> ,820	2,59,528	2,69,501

Source.—Statistical Atlas of Bombay State, 1925 and 1950.

Bullocks are now used for pulling of cart, by the cartmen, while cows and she-buffaloes are mainly kept for the purpose of breeding and milk production. Catties found in the city belong mainly to the imported varieties. The most important among them are the *Dongri* and the *Khilar*, besides some local non-descript varieties. Among the buffaloes, the *Surati* and the *Delhi* varieties are most commonly found. Generally the buffaloes are kept by persons from U.P., called *Bhayyas*, in their cattle stables (*gothas* or *tabelas*). In addition to the bovines, the city has a large number of ovines usually kept for skin and flesh. Goats are more numerous than sheep, probably because the latter do not acclimatize to this region. Goats fetch better prices for their flesh in the market. Horses were kept for pulling carriages and tongas, while the best horses are at Mahalaxmi Race Course.

The pigs of exotic breed of Yorkshire are reared on a planned and systematic basis at the regional pig breeding farm nearby, and are distributed as breeding stock to the cultivators on co-operative lines. They sale pigs to the Bacon Factory at Borivali.

DAIRY ACTIVITIES AND MILK SUPPLY

Greater Bombay Milk Scheme: The population of Greater Bombay has been multiplying over the last 100 years. The growth of population accompanied by improvement in the standard of living of the people has led to a tremendous increase in the demand for milk. In fact the demand for milk has almost been insatiable. The conditions of milk supply in the pre-Independence days were totally unsatisfactory. During the Second World War, a kind of milk. famine ensued in the city. The Bombay Government took some concrete steps to avert the situation of milk scarcity. Stable owners in Bombay were permitted to import from outside the equivalent of dry cattle becoming non-milchy every year. The Government set-up salvage farms at Jamner and Palghar for the protection of dry buffaloes. The Government made arrangement for distribution of milk at cheaper and concessional rates to the consumers. A scheme of Rs. 3.6 crores was operated for implementing this programme during the war time. Mr. M. D. Bhat, who was the Municipal Commissioner in those days, was appointed the fiist Milk Commissioner and his jurisdiction was confined to Greater Bombay alone.

After Independence the State Government undertook a scheme for procurement and distribution of milk and purchased 1,295 hectares of land at Goregaon, and established the Aarey Milk Colony with a full-fledged milk dairy in 1950. This public sector undertaking was a great boon to the Bombay man who was hitherto the victim of unwholesome, impure and adulterated milk supplied by milkmen. This undertaking could not cope-up with the increasing demand for milk, and hence a large section of the population had to depend upon private unwholesome milk supply. This prompted the Government of Maharashtra to establish more milk processing and supplying dairies in the city. In 1958 the post of Milk Commissioner was replaced by the Commissioner of Dairy Development. The Dairy Development Department of the State Government established two more dairies, at Worli in 1962 and at Kurla in 1975.

The Government Milk Scheme, thus, comprises three dairy plants in Bombay. Besides, the Government accorded sanction for establishment of the fourth dairy owned by the MAFCO at Goregaon in the public sector (29th October 1976). The work of construction of this dairy was commenced in 1978 by the

National Dairy Development Board. Later on this dairy project was amalgamated with Maharashtra Rajya Sahakari Dudh Mahasangh Mary adit on 27th June 1983. The dairy is now named as Mahanand Dairy. The actual milk collection and distribution of milk by this dairy was started from 18th August 1983. Now the milk requirements of consumers in Bombay are met from the Aarey, Worli, Kurla and Mahanand dairies as also from private traders.

Milk is supplied to the Greater Bombay Milk Scheme from Chalisgaon, Chiplun, Dhule, Khalapur, Kolhapur, Mahad, Miraj, Nashik, Palghar, Shahapur, Solapur, Jalgaon, Pune, Aurangabad, Nanded, Udgir, Akola, Amravati and Nagpur. Some quantity of milk is produced at the Aarey Milk Colony where a number of stables are located.

About 88 per cent of the milk procured in the State is distributed in Greater Bombay and nearby towns like Thane, Dombivali, Kalyan, Ulhasnagar, Bhiwandi and Vashi. A major quantity of this milk is distributed in Greater Bombay alone. The dairy distribution of milk rose to 12.45 lakh litres in 1983-84 as against 2 lakh litres in 1960-61. During 1984-85 the quantity of fresh milk received by the Greater Bombay Milk Scheme amounted to 36,51 lakh litres, valued at Rs. 1,44,51 lakhs.

Milk brought from various centres is transported in insulated trucks, vans and tankers. It is received at the dairies at Aarey, Worli and Kurla. It is pasteurised in modern plants. The pasteurised milk at Aarey and Worli dairies is stored in big insulated tanks. Thereafter the milk is bottled, sealed and stored in cold storage at a temperature below 12.77°C. The Milk pasteurised at Kurla Dairy is supplied to consumers in prepacked polythene bags of one litre capacity and distributed through private transport agencies as also Government tankers.

The quantity of whole, cow, standardised, double toned and full cream-milk distributed during the year 1984-85 amounted to 37,22.96 lakh litres, valued at Rs. 1,68,92.21 lakhs. The quantity and value of other products distributed during 1984-85 are given below :—

	Product	Quantity in lakhs	Value (Rs in lakhs)
1.	Energee Milk (No. of bottles of 200 ml.)	179.96	323.93
2.	Ghee (kg.)	15.19	683.56
3.	Paneer (kg.)	0.26	7.21
4.	Table Butter (kg.)	4.10	155.66
5.	Cheese	0.15	5.87
6.	Shrikhand (kg.)	0.28	6.83
7.	Ice Cream (cup)	0.96	2.40
8.	Masala Milk (No. of bottles of 200 ml.)	0.70	2.09
9.	Cream	3.58	66.53
10.	White Butter (kg.)	0.69	23.23

Statistics of Milk Distribution Centres in 1984-85

	Type of Milk Centre	Nos.
1.	Ex-Dairy Parlour (Aarey Sarita)	22
2.	Government Centres	2,368
3.	Ex-Dairy Centres	1,606
4.	Aarey Dairy Parlours	12
5.	Z Centres	286
	Total	4,294

The other information of the three dairies is given below:—

Dairy	Year of establishment	Original value of machinery as on 31-3-1985 (Rs. in lakhs provisional)	Installed capacity per day (lakh litres)	
Aarey	1950	141.89	2.5	
Worli	1962	341.80	4.5	
Kurla	1975	330.52	4.0	

Mahanand Dairy: The Mahanand Dairy set up in the co-operative sector with an installed capacity of 4 lakh litres per day receives its milk supply mainly from the district milk unions at Jalgaon and Kolhapur. Additional supplies are also obtained from other unions when necessary. The value of plant and machinery, and building during the first phase of the dairy is Rs. 5.33 crores. The milk procured by the Mahanand Dairy from Jalgaon, Kolhapur and other unions in 1984-85 amounted to 2,85,38,783 litres, valued at Rs. 9,17,59,296. The quantity of whole, toned and skim milk distributed by this dairy during 1984-85 amounted to 9,12,934, 3,08,73,344 and 74,199 litres, respectively, valued at Rs. 11,63,55,508.

These dairies are equipped with scientific equipment and qualified personnel. The Dairy Development Department has also provided research and training facilities in milk technology. There is a Dairy Science Institute at Aarey which admits 30 students every year for a two years course for Indian Dairy Diploma (Dairy Technology). The diploma is awarded by the Indian Council of Agricultural Research (I.C.A.R.) Sub-Committee on dairy education, Karnal. The Dairy Science Institute also conducts courses of six and three weeks duration for the benefit of the secretaries of milk co-operative societies, live-stock supervisors and for the dairy farmers. Four Sunday training programmes on dairy husbandry, fodder farming, dairy technology and poultry keeping were also conducted for interested social workers. The New Zealand Hostel at Aarey is constructed from donation given by the Government of New Zealand. It commands a panoramic view of the Borivali forest and shallow ravines nearby.

TENURES AND TENANCY

Agriculture occupies a very miner position in the economy of Bombay at present. The study of tenures and tenancy of agricultural land in Bombay is, therefore, mainly of historical interest. *The Gazetteer of Bombay City and Island* of 1909 and the *Thana District Gazetteer* of 1882 give a vivid and exhaustive account of the systems of land tenures prevailing in the past. It may be of great interest to refer to these *Gazetteer* volumes for detailed study. What is given in the subsequent paragraphs is a summary of the systems of land tenure in the past.

Pension and Tax Tenure: This tenure appears to have been prevailing since the days of the Portuguese occupation of Bombay. No rates and assessment were fixed for lands held under the Pension and Tax Tenure, nor were then the measurements of lands held under this tenure recorded prior to Col. Laughton's Survey. The rents were "lump sums" bearing no uniform proportion to the quantity or value of the land for which the rent was paid. The term "Pension" takes its origin from the Portuguese word *Pencao* which means, when applied to the estates, a payment for enjoyment of land, the bonus or the premium paid for the fee-simple on the compromise of doubtful tenure. It was not a quit-rent. It was only a royalty rent acknowledging the Government as lords paramount. The payment of the "pension" dated

from the Aungier's Agreement of 1672.

The "Tax" of 10 per cent on the produce of landed estates was introduced from 1758 to meet prodigious expenses, to build fortification and other works for the security of the inhabitants. A notification was issued requiring all the Fazindars in Bombay and Mahim to render the Collector an account of the annual produce of their land in order to enable him to levy the tax laid on them. In the beginning the Fazindars objected to the proposal. A few months afterwards the accounts were submitted by the Fazindars, but in the enquiry the Collector found that the estates were under-valued and he directed the Vereadores and some of the private Fazindars to inspect and consider these accounts carefully and to deliver their opinions thereon. This they did on the 19th and 22nd January 1759. The Collector reported to the Government that according to the Vereadores' account, the estates were estimated at Rs. 77,000, and the tax should be levied on this estimate. On the Collector's report the Board passed the orders that the tax of 10 per cent be collected.

In 1774, the inhabitants prayed that this "Tax" might be relinquished, which was imposed in 1758 by the then Governor for raising money for maintaining the war with the French and promised to relieve the same as soon as the war was over. But it remained until the first decade of this century. Some lands under this tenure paid only Pension, some only tax.lt is difficult at this distance of time to assign a reason for such a distinction. Lands used for charitable purposes had been exempted from Pension or Tax. The free-hold nature of lands held under the Pension and Tax tenure and their non-liability to enhanced assessment had always been recognised by Government. The land held under this tenure was found in the Fort, Girgaum, Malabar Hill, Colaba and in the Mahim Woods. Its area at the date of Colonel Laughton's Survey was 2,251 acres and 2,225 square yards.

Fazindari Tenure: It was a kind of sub-tenure, closely associated with the Pension and Tax Tenure. It was a sub-tenure between a private proprietor and his tenant. It is not known how and when it originated, but it is unquestionably of long standing. The owner of the land under Government was known as Fazindar. Land under this tenure was let for building purposes, without in most cases any formal agreement, and subject to a low annual ground rent. The earliest record of this tenure found in the Collector's Office was a report by the Vereadores of the 14th December 1782. But long prescription, according to the report, appeared to have changed the nature of this tenure. The Fazindar of subsequent period had no interest in the land beyond the annual rent, and this had been recognized in numerous compensation cases under the Land Acquisition Act, in which the invariable practice was to award the Fazindar no more than the capitalized value of the rent.

Quit and Ground Rent Tenure: Quit-rent originally implied freedom from liability to military service. From 1718, many strangers were invited to settle on the island. Up to 1718, the new tenants-at-will were probably under an implied engagement to afford military service whenever required. The tax was imposed on all the inhabitants residing within the town walls. The imposition of their tax changed the ancient constitution of the island by commuting military services (*But if Aungier's convention reserved personal service of the tenants in every part of the island, it is not apparent how the introduction of the quit-rent on lands in the Fort alone redeemed it. Possibly the levy of this rent in the Fort was sufficient to raise a militia in times of war) for a quit-rent. In 1720 a petition was presented to the Board by the principal inhabitants, setting forth that the quit-rent was neavy tax on them and desiring to be relieved from the same. On the 30th September 1720 the quit-rent was reduced to one-half by a resolution of the Council. The exact principle on which this tax or quit-rent was based is not known. In 1731 an attempt was made to equalize this quit rent. In 1732 the Bombay Government suggested to the Court that all the quit-rents should be remitted, and indeed they were discontinued until 1734, when the Court of Directors replied that they could not agree to take off or abate any of the taxes whatsoever.*

After the fire of 1803 the Company's Council was consulted as to the measures which should be adopted for ascertaining in future the Company's right to the property and "whether it might not be proper and desirable to have a full and accurate plan of the whole island distinguishing the Company's property from others in order that they might be at liberty to raise the rates of such property possessed by the tenants-at-will or others, where the present state of value of land would bear it". Mr. Thriepland, the Advocate General, however, had suggested a general survey of the island for the purpose of increasing the revenues derived from it.

The plan for re-building the Town was determined upon, but the most wealthy of the natives formed a combination to resist by legal means any mode of lining out the new streets which should tend to intersect the old foundations or to prevent their re-building on them. The Town Committee expressed a decided opinion that the plan should be adhered to and pursued with firmness, vigour and expedition but subsequently moderated their views and in consideration of the losses by fire sustained by the people, suggested that the assessed proprietors should be given full compensation for their lands except for the portions required for widening the streets. The efforts of the Town Committee to carry their plans into effect entirely failed. The natives ultimately succeeded in their opposition and in their desire to rebuild on the old foundation.

Another kind of tenure, also styled quit and ground rent, but distinct in its nature, originated with the New Town. While the inhabitants in the Fort and the Old Town were offering every kind of opposition to the improvement of the portion destroyed by the late fire, matters were taking a different turn in another part of the island. On the 17th February 1804 the Collector reported that he had resumed and delivered over the land to the Town Committee. The allotments made by the Town Committee formed what was known as the New Town. The lands so resumed formed a part of those which had been recovered from the sea and had become known as Salt Batty Grounds. The lands in the New Town appear to have been allotted on the same terms as those given oat in the Old Town. Until in 1878-79 the lands in the New Town were amalgamated with those in the Old Town and had since then officially recognised as falling under Quit and Ground Rent Tenure.

In 1813 Captain Dickinson completed his survey of the Fort and submitted his report, in which he

classified the different tenures under which the lands in the Fort were held. Mr. Warden, Chief Secretary to Government, examined Dickinson's report on the land tenures in Bombay. Mr. Warden in his report of 20th August 1814 thoroughly reviewed the subject and differed in opinion from Dickinson as to the right of the Company to resume possession of any portion of the groundwithin the walls of the Fort excepting such as might be held on special leases.

In 1818 the Collector and the Revenue Surveyor brought to notice the rights of Government. In May 1822, the Advocate General, Wodehouse, made the classification of these lands and considered the lands of the first class as inheritable property and those of the second as lands let to hire, and of course resumable at the pleasure of the Company. The Committee of 1837 thought that the Government had the power of altering the rent on these lands. Mr. Showell writing in 1860, proposed a building rate of 6 pies (12 1/2 reas) per square yard. In 1872 Colonel Laughton suggested that the rate of 6 pies per square yard should be applied to all lands covered with buildings, no matter under what tenure the land might be held.

The power of Government to raise the rents on these lands seems always to have been a vexed question. The Government had recognised the equitable rights of the holders in case of lands held under this tenure. They had placed these lands on the same footing as Pension and Tax lands by extending to them the right of redemption on payment of 30 times the amount of the rent of the holdings pay less than Rs.10.

Quit and Ground rent land was situated in the Fort, Old Town, New Town and in Colaba, the portions benefited by the fortifications for which the tax was mainly raised. The area covered by this tenure, according to Colonel Laughton, was 973 acres and 682 square yards.

Toka Tenure: The word "toka" means a share of the produce, and the assessment on " toka " lands was formerly paid in kind. Toka lands were also described as " Sweet Batty " grounds and " the greater part of the Company's original nine villages, *viz.* Parel, Bomnolly Coltem, Naigaum, Wadala, Matunga, Sion, Dharavi, Cassabay of Mahim and Worli". *Toka* lands were situated on the north-east of the island from Sion to Sewri and comprised area of 1,489 acres and 764 square yards. The early history of these lands shows that the Kunbis or tenants who cultivated the lands could be removed at the pleasure of Government. A considerable portion to the sweet batty grounds came into the possession of the Company by confiscation after the Sidi War in 1677. The Jesuits' lands and Rama Kamati's property also devolved upon the Company in 1692 and 1720, respectively. In 1733, some of the cultivators of Company's batty grounds deserted the island and fled to Salsette, in consequence of being forbidden at the instance of the Court of Directors to manure their lands with *kuta* or fish manure. The Company in consequence experienced considerable difficulty in getting tenants, and in 1734 they complained to the Court of Directors of want of husbandmen on the island. Then the Court allowed the use of *kuta*. In 1751 the Board considered that the batty lands would produce larger annual rents if thye were farmed out in open market. The lands were auctioned accordingly and let as follows:—

Batty grounds in —
(1) Parel .. Rs. 2,605 (2) Sion .. Rs.1,300
(3) Dharavi .. Rs. 273 (4) Matunga .. Rs.1,965
(5) Wadala .. Rs. 1,761 (6)Naigaum .. Rs. 982
(7) Bomnolly .. Rs. 530 (8) Mahim and Worli Rs. 144

This farming system did not work well. Though it brought a little more revenue to the Company, it kept the Kunbis or actual cultivators at variance with the farmers who were never known to relax their demands even in times of scarcity. However the farming system was eventually abolished in April 1800, from which date the Kunbis paid their dues direct into the Collector's Office. The effects of the farming system were far more disastrous to the Compan^ than might at first be supposed.

After the abolition of the farming system in 1800, the original system of paying in kind appears to have relaxed by this time and the Kunbis had the option of paying their *toka* either in kind or in money, the commutation being made every year at the market price determined by the Governor in Council. The collection of the *toka* varied from Rs. 23 per *muda* and upwards. Once in the year 1803 it rose to Rs. 45. Rent Committee of 1837 thought that the *toka* lands were subject to as heavy a tax as they could afford to pay without driving them out of cultivation. The option of the tenant to pay in kind was annulled and all payments since that year were invariably in money.

In 1876 the Collector, Mr. Arbuthnot, reviewed the state of these lands and revived the right of Government to an increase of assessment. The rates of assessment he proposed were (1) one pie per square yard on lands at Parel, Naigaum and Bomnolly, half a pie on lands at Matunga and Wadala and one-third on lands at Sion and Dharavi. "It is impossible ", he added," in Bombay to charge different rates for rice land, garden land, building land, grazing land". His rates were guaranteed for 50 years from that date. The guarantee expired in 1929 when a general revision of these *toka* lands was to take place.

Foras Toka Tenure: This kind of tenure appears to have originated during the administration of the Portuguese Government which, with a view to encourage industry and agriculture, allotted to the cultivators of the *toka* batty grounds, certain pieces of land of an inferior quality subject to the payment of a very small rent denominated "Foras". This species of land was therefore, usually styled by the natives *Tokache Foras* that is *Foras* grounds attached to *toka* batty grounds. The distribution of these spots was usually left to the Vereadores and Mhataras. The *Foras toka* lands came to be alienated from the *toka* by the tenants disposing of them to others at higher rates of rent, and to such an extent that after a time the relation between the two tenures became hardly perceptible.

There was no proper detailed survey of these lands, neither was there any measurement of them. It is suspected that a large quantity of this land had been included in the Foras lands referred to in subsequent pages and had thus been enfranchised as freehold under the Foras Act. The remaining Foras-Toka lands were after Colonel Laughton's Survey of 1872, amalgamated by Mr. Arbuthnot in 1876 with the

toka lands and have since then shared their fate.

Kurleet Tenure: There was in some parts of the Mahim District another description of ground called *Kurleet* which paid a "petty tribute" to Government. It consisted chiefly of high and rocky ground, such as could not be cultivated with batty. One-third generally of the produce of this ground was the tax levied upon it. The cultivators of this kind of land were always in the habit of changing their plots, creating thereby a corresponding fluctuation in the branch of the revenue under this head. These lands were also in course of time merged in *toka* lands.

Foras Tenure: The lands designated "Foras" play a very important part in the history of land tenures in Bombay. They are also known as "Salt Batty" grounds, a term expressive of their origin as having been reclaimed from the sea which traversed the island in different directions, finding outlets for itself at Back Bay, Mazagaon and other parts, and dividing Bombay into a cluster of islands. *Foras* from the Portuguese word *foro*, the meaning of which is 'rent' but in this island it appears to have denoted the particular rent.

The old salt batty grounds were recovered from the sea by means of the Vellard between Sion and Mahim. while the new salt batty grounds were recovered by means of the Hornby Vellard. The recovery of these lands from the sea took place in the early part of the eighteenth century. In 1738, on the expiration of the leases under which the lands were held free of rent, a resolution to re-let the properties was adopted. In 1740, a publication was issued, giving notice that the Company were willing to receive proposals for farming the same in parcels or in whole and offering ground for cultivation at the low rate. In 1744 the rent was increased, and in 1748 a new measurement had taken place. Some time in the year following (1790), Mr. Smyth, the Collector, laid before Government a report on the subject of these lands, their origin and tenures, and the encroachments. To ascertain and protect the Company's rights, Mr. Smyth recommended an immediate survey of all the lands. The encroachments continued upto 1804. In 1805 the question of the respective right of the Government and the holders of these lands was for the first time put to a legal test. The question of raising the rent on the salt batty grounds was taken up in 1812. The Government issued a notification on 1st November 1813 that "The Right Honourable the Governor in Council adverting to the very low rents which have hitherto been paid to the Honourable Company by their tenants-at-will of the new and old salt batty grounds, the last augmentation having been from 6 to 9 reas the square burga only, has resolved to increase the same in a nearer proportion to the value of the grounds. It is hereby therefore notified that one-third of the produce of the above lands will henceforth be annually collected by Government, commencing with the crop of 1814 and such tenants as refuse to comply with the above resolution of Government will be turned out of possession".

But the holders of these grounds strongly resisted, and in a memorial not only stated their objections at length, but denied the right of the Government to make the increase and revived the old question of the Company's right to anything more than the then existing rent. The case was submitted to Mr. Mocklin, Advocate-General for opinion. Mr. Mocklin's answer to these questions was in the negative. He was clearly of the opinion that Government had not the right either to increase the rent or to resume the lands at their pleasure. In consequence of this opinion, the measure for increasing the rents was suspended, and the matter referred to the Court of Directors in 1815. The Court replied that "the possessors have a fair pretention to consider themselves as owners of the inheritance, subject to the rents they now pay and also subject to the burthen of keeping vellards erected for their defence against the sea in thorough repairs. We cannot but presume that the present possessors will gladly accept the recognition of their titles upon this condition, and we authorise you to set their minds at rest by making grants accordingly in perpetuity". Difficulties appear to have occurred in carrying into the effect these directions due to lack of survey of this property and hence the arrangement was postponed until completion of the survey of the island.

A survey was made of this description of property by Mr. Tate in 1827, but it was a general one only and was not effectual for this purpose. From that date upto 1836 no measures were adopted for the same but in 1836 when the Grant Road was projected, the lands., on which it was constructed being "Foras", the question of the Government's right of resuming them was revived. The Rent Committee replied on this question in 1837, that such a right as also the right of ownership still appertains to the Company with respect to all Foras grounds in the Island of Bombay. Again several times this question was preferred to the Rent Committee for opinion. In 1851, Foras Act VI confirming the holders in their possessions subject to the rents then payable, was passed by the Legislative Council of India and a Committee was appointed to carry out the provisions of the Foras Act, which fixed different rates to be paid as compensation according to locality. The Foras lands were situated at Byculla, Parel, Worli, Upper and Lower Mahim, Dadar and Matunga with an area of 3,408 acres and 3,266 square yards.

Inami Tenure: The lands in Bombay which fell under this tenure were situated mainly at Naigaum, Parel, north-east of Sion, Fort and a small portion near Dadar and Dharavi. Inam lands pay no assessment to Government nor *judi* or cess of any kind. The area was roughly 5,714,940 square yards. The grants were made to the Lowji (Wadia) family in 1783, 1821 and 1885 on account of the excellent services they rendered as shipbuilders to the Company. The Inam lands at Sion comprised in the grant of 1821 were exchanged with certain lands in the Thane district in 1885.

Leasehold Tenure: Farming of leases was common in early years but regular leases began to be executed in 1758. Leasehold land is held under various conditions and for terms varying from 21 to 999 years. Leases may be divided into old leases and new leases, the old leases, being those granted prior to the year 1894 and the new leases, subsequent to that year. Old leases may be classified under (a) Byculla (Mazagaon) leases, (b) Colaba leases, (c) Kamathipura leases, (d) Leases on the verge of the Esplanade, (e) Esplanade leases, (f) Bombay leases and (g) Port Trust leases.

Old Leases: The Mazagaon or Byculla leases were granted between the years 1758 and 1796 and were all for a term of 99 years. Some were renewable while others were not. The Colaba leases were introduced in 1824. Kamathipura leases appear to have had their origin in a Government letter to the Collector, dated 24th July 1844, prohibiting the issue of sanads. The lands were put up to public anction

and leased to the highest bidders. Leases on the verge of the Esplanade were granted in 1855. The Esplanade leases were the only proper building leases in existence in Bombay. They run for 999 years and not renewable. They were framed between the years 1863 and 1865 on the model of London leases. Bombay leases related to lands in various parts of the island and were granted for terms varying from 21 to 99 years. These were granted in payment of the market value of the occupancy right as ascertained by auction sales together with a nominal yearly rental. They are renewable either on payment of fine or on revision of the yearly rental. These are not building leases. Port Trust leases were leases of lands on the Mody Bay, Elphinstone Estate and the Apollo Reclamations. They are leases for a term of 50 years, renewable at the close of the terms for such further period and at such yearly rent as may be than agreed between lessors and lessee.

New and Renewed Leases: In 1889, Mr. Charles, the then Collector of Land Revenue, pointed out to Government the general inadequacy of the rents levied on lands in Bombay and suggested an increase wherever possible in the assessment so as to bear some proportion to the increased value of the land. To give effect to his proposals and to settle the policy as regards the future assessments or new grants of Government land, Government appointed in 1891 a Committee to study the terms of lease and the principles for ground rent determination. The recommendations of the Committee were approved by the Government with the modification that the amount of annual rent per square yard should not be less than one-third and not more than two-thirds of the estimated value as this would give a safe rental and would leave a sufficient margin for competition. The forms prepared for the same were approved by Government in 1894. They were the basis of the new leases granted subsequent to the year 1894 and were in use in the Collector's Office.

Newly Assessed: This tenure has its origin in Bombay Act II of 1876. The Revenue Survey of 1872 discovered numerous encroachments on Government lands, more especially on land contiguous to the Inam lands granted to the Wadia family. When the Act was passed these encroachments were all assessed by the Collector under section 8 and converted into lands newly assessed. This tenure also comprises land granted from time to time to private individuals, after the passing of the Act. The circumstances of all grants, however, do not appear to be alike. The land situated in such localities as Mahim, Dharavi, Sion, Matunga and Naigaum were assessed and granted on payment of an annual assessment. In other cases the right of occupancy was sold by public auction and on payment of a yearly rent, while in other cases lands were assessed and converted from leasehold to newly assessed. In 1889 proposals were for the first time submitted to Government by the Collector for enhancement of assessment upon these lands. These proposals were referred to the Advocate-General for opinion who declared that there should not be any specific limit to assessment in the case of these lands. The area covered by this tenure was 3,06,810 square yards.

Tenancy-at-Will: The term tenancy-at-will denotes a tenancy whether under a formal agreement or not, which can be terminated by one month's notice on either side. The tenancies-at-will commenced as far back as 1850. The lands were granted to individuals without any agreement but the formal agreements were made in the year 1870. Most of these lands, were situated at Mahim, Kamathipura and Chowpati. In 1889, Mr. Charles had prepared a statement about the area of the land covered by this species of tenure to be 1,52,518 square yards. He proposed that the rental should be increased but the proposal could not be accepted. Mr. Spence, who succeeded Mr. Charles proposed to terminate the tenancy and then offer the tenant an option of a 21 years lease at such rate as might be settled by the Collector with the sanction of Government. His proposal was approved by Government in 1890, Mr. Monteath, who had taken Mr. Spence's place, suggested 99 years as the period for the lease and 4 per cent as the basis for rent. The question of the term of the lease and the rate of the ground rent remained undecided until 1898. Mr. Morison again approached Government on this subject and proposed to treat the tenancies-atwill as follows: (a) where buildings had been erected on the lands, to issue notices terminating the tenancy but giving the occupant the option of having his tenancy renewed on a 30 years lease in outlying and 50 years lease in central localities at a rental fixed on the 4 per cent basis and (b) where no buildings had been erected, the tenancy to be terminated and the occupancies sold by auction on some specific terms. The sanction of Government to the course proposed under this tenure was accorded in some uses. The area of Government lands held under tenancy-at-will was 74,512 square yards.

Sanadi: The sanads of Bombay covered a period of 40 years from 1814 to 1854 during which 828 sanads were issued by the Collector. They relate to portions of ground mostly in the New Town and issued to individuals for building-sites. They were mostly of three different types, with exception of a few specially made for some specific purposes. The first of these types under which the grantee was a mere tenant-at-will at the mercy of the Government was in use from 1815 to 1823. This type was modified by the Government in 1823. In consequence of this the grantee felt greater security in his tenancy and could hope for a more equitable return for the loss of his occupancy and for the value of improvements made by him. The type was in use until the issue of Sanads was countermanded by Government in 1844. The third type was only used in the case of the grants of land in Colaba. The(Colaba) Sanads which were 188 in number were all granted between May and December 1815. The issue of Sanads was countermanded by Government order in July 1844, when Government ordered that no Government ground should be given except under lease for a certain period of years. No separate rent-rolls about the exact nature of the Sanads were prepared, the lands having been entered in the rent rolls for the quit and ground rent lands and receipt bills issued under that tenure. It was not till 1903 that the long forgotten Sanads were brought to light. The Sanads were thereafter very carefully indexed and in May 1904, Government offered the holders of Sanadi lands a more permanent tenancy of a 50 years lease. The rent for these lands was fixed according to the types. These orders were subsequently modified in April 1906 and again in 1908 by a further offer of conversion into quit and ground rent tenure on payment by a holder. (Gazetteer of Bombay City and Island, Vol II (1909), pp. 335-414)

Leasehold Villages in Salsette: "The term khot or revenue farmer is incorrectly applied to eighteen holders of large estates, comprising fifty-three villages in Salsette. These estates have in all cases been granted by the British Government."

"In almost all of these leases the rental is specified in *mudas*, or rice measures, and not in cash. This *muda* calculation was made according to a system peculiar to Salsette, called the *tijai* or one-third. Under this system the 'Government rental' is found by multiplying the quantity of *dhep* by two, dividing it by three, and multiplying the quotient by twenty the number of rupees at which each *muda* of land is assessed.

"Except the Kurla and Malad estates, which were given in exchange for land in Bombay, the estates were granted to encourage the investment of capital in land, the increase of population, and the growth of better crops. Except the Kurla, Malad, Pavai and Goregaon estates, which are held in free simple or freehold, these leased villages were charged fairly high rentals, and in most cases were subject to the following conditions. Lands occupied at the time of the lease on the shilotri, or according to some deeds, on the suti tenure, were not to become the lessee's unless he satisfied or bought out the incumbents. The happiness and prosperity of the people were to be promoted, and the lessee was to protect and befriend them. The lessee was to build reservoirs and embankments, to sink wells, and to grow the better class of crops. The rates of assessment were not to be raised, and no innovation was to be introduced without express sanction. The lessee was to continue all village charitable and religious allowances. Waste land was granted free for forty years. On the forty-first year all land except what was totally unfit for tillage was to be assessed. The lessee was to recover and pay into the treasury, over and above the amount mentioned in his lease, all amounts due on leases granted in the estate. The village was not to change hands without Government leave. The lessee was to possess and exercise the authority of a farmer under Chapter VI of Regulation XVII of 1827. But he was to exercise no magisterial or judicial authority, unless it was duly conferred on him. He was not to make or sell opium, poisonous substances, tobacco, or hemp flowers. The Collector was to have power to inspect the village, and examine what improvement and progress were made. Suits regarding the lease were to be brought in the District Court. Any new system of revenue introduced by Government in other villages of the district was to be applicable to these grant

" Although these leaseholders style themselves proprietors, they cannot claim the ownership of the soil, for the Court of Directors were most reluctant to part with the ownership of the soil and its alienation was jealously watched....."

"Another large estate of 3,688 acres, exclusive of salt marsh, was granted by deed dated 1870 to Ramachandra Lakshmanji of Bombay, on a lease of 999 years, in the villages of Ghodbandar, Bhayandar and Mira. This estate was granted because the villagers refused to keep the large Bhayandar embankments in repair.

"The conditions attaching to the grant were that the lessee should pay a yearly rent of £ 679 (Rs. 6,790); that he should keep the embankments, dams and sluices in repair; that he should demand no rent from inamdars; that he should demand only survey rates for suti and varkas lands; that he should keep boundary marks in repair; that he should pay patils and hereditary officers claims and allowances; that he should not interfere with rights of way; that he should surrender land free of cost for the Bhayandar railway station; that he should give notice of the assignment of lands; that he should not assign lands without leave; and that the salt marsh lands were liable to resumption if not reclaimed within twenty years." (Thane District Gazetteer (Revised Edition), Government of Maharashtra, 1982, pp. 428-29)

This system underwent some changes from time to time, and ultimately, the Khoti system was abolished in accordance with the progressive land legislation after Independence.

INDUSTRIES



Maharashtra State Gazetteers

BACKGROUND

BOMBAY IS THE INDUSTRIAL AND COMMERCIAL METROPOLIS OF INDIA, and it would be very much realistic to say that Bombay is miniature India. It has now expanded into a very large industrial complex strung out along a sea-board, and is heavily settled throughout its length and breadth by industries and commercial activities on a mammoth scale. In fact it has assumed the character of the industrial and commercial nerve centre of the entire country. It has been a leading centre of the cotton textile industry for a century and quarter, and more recently of the machinery and chemicals industries. The cotton textile industry is the prime industry which has contributed to its economic prosperity. The history of the textile industry is, in fact, the history of economic growth of Western India. This pioneering industry accelerated the growth of other industries, and provided an impetus to the growth of commercial concerns and financial institutions. The Bombay Stock Exchange was once dominated by cotton textiles.

The mammoth growth of industries is attributable to the industrial infrastructure facilities in this city. Bombay may be said to owe all its prosperity and importance to the immense advantage accruing from its excellent natural harbour." In fact, it is inconceivable that, in the absence of the harbour, a city could have emerged in Bombay." (C. Rajagopalan, The Greater Bombay, 1962, p. 39) The harbour and Airport of Bombay provide the main link between London and the Far East, which lent it advantages of easy international communication. Internally, it is connected to other parts of India, by the network of two major railway systems, namely, the Central Railway and the Western Railway, which have their headquarters in Bombay. It is brought into close proximity to other Indian cities by the air services of the Indian Airlines. The Bombay Port Trust has also contributed towards the commercial and industrial growth of this city.

Bombay enjoys the benefit of a developed capital market and the headquarters of many financial institutions and banking system. The share market and network of banks have contributed to the availability of industrial finance right from the last quarter of the previous century. The Imperial Bank of India, and its successor, the State Bank of India, as also the Reserve Bank of India have played an important role in the making of Bombay's industries. The Life Insurance Corporation of India, with its headquarters in the city did not lag behind in this process.

The city owes its industrial oppulence to a class of enterprising and enlightened entrepreneurs, a few of whom are mentioned in the history of cotton textile industry. These men of vision, Parsis, Gujaratis, Maha-rashtrians, Marwadis and Muslims strived for the development of industry. A due credit should also be given to a number of Europeans who not only pioneered some industries but also manned them. The growth of education with the establishment of the Elphinstone College, the Wilson College and the Bombay University, and later, the VJ.T.I. facilitated the availability of educated and trained personnel for industry and commerce.

The cheap hydro-electric energy made available by the generating stations at Khopoli, Bhira and Bhivpuri by the Tatas in the tens of this century also contributed to the immense growth of industries in Bombay. Hydroelectric porwer generated at the very door of Bombay in the hey-days of industrial growth was really a great boon.

From the very beginning of British administration, Bombay emerged as the industrial nerve centre. It became the gateway of India for Western traders, and in a short period developed as the best port on the Arabian Sea coast, the most important centre of commerce, the seat of government, the locus of higher educational institutions, and the major centre of textile industry.

Although cotton textile continues to be the major industry of Bombay, the chemicals and chemical products industry overtook it in the past few years. As at present, the invested capital, output and value added on manufacture in the chemicals and chemical products industry are very much higher than in the cotton textile industry. This point is elaborated in the relevant sections in this chapter on the basis of statistics from the Annual Survey of Industries. Cotton Textile is now suffering from several ailments, a number of units falling ' sick'. The phenomenal growth of the metal products industry, machinery manufacturing and electrical machinery industry ever since the Second World War has added to the importance of Bombay in the country. The petroleum industry, the Bombay High oil exploration project and the petrochemicals complex in Bombay have however elevated the industrial status of Bombay in the Indian economy. These vital industries have attained a unique position for the city in the country's economy.

Like any other human creation there is a black side of a spectacular progress also. The location of industries in Bombay is very defective, and the city is now suffering from many socio-economic ailments, the cures for which are not easy. Industrialisation and urbanisation which are so closely interlinked have bred sordid and squalid conditions of living.

Though the industries are scattered all over the Island, there is a greater degree of concentration in the north. The actual industrial quarter may, roughly be defined as the area enclosed by Victoria road in the South, Reay road and Sewri road in the East, Tilak road in the North and by Gokhale Road (North), Worli road and Haines road in the West and includes sections like Worli, Byculla, Nagpada, Tadwadi, Mazagaon, Sewri, Lalbaug, Parel, Naigaum, and Chinchpokli. The industrial zone so defined is located almost in the geographical centre of the City.

" The location of the industrial zone in the centre of the city has proved to be highly undesirable." (C. Rajagopalan, op. cit., p. 48)

Dr. P. S. Lokanathan observes, "Bombay city is fast ceasing to occupy that predominant position in the cotton industry which it once held and 'deglomerating' tendencies such as high rents, high rates of wages and relatively high cost of transporting goods to distant inland markets are counteracting the former tendency towards concentration." (Dr. P. S. Lokanathan, Industrial Organisation in India) This is however too extreme a view, and has to be taken at a discount.

Greater Bombay as a separate area unit came into existence in April 1950, when the Suburban District was merged with Bombay city for purpose of municipal administration. Its boundaries were further extended over the Salsette in 1957 upto Dahisar on the Western Railway and upto Mulund on the Central Railway. It now embraces an area of about 603 square kilometres.

A few words about origin of industrialisation in Salsette which now is covered by the Bombay Suburbs. The first industry in the modern sense of the term to be established in Salsette was cotton textiles. In 1910, there were reported to be several mills in Kurla, engaged in the manufacturing of cotton cloth and woollen cloth in steam factories. Kurla is still an important centre of mill industry. In 1929, as many as 148 factories were functioning in Salsette, of which three were cotton mills.

Industrialisation in the real sense may be said to have commenced only after 1930. The variety of industries in Salsette multiplied between 1930 and 1941. There was a rapid increase in the number and variety of industries during the Second World War. According to the records of the Chief Inspector of Factories, there were 926 factories in Salsette in June, 1958.

A few observations are made below on the location of industries in the suburbs, formerly styled as Salsette. The observations are based on personal investigations.

Between Kurla and Mulund several new industries have developed during the last about 30 years. Kurla-Ghatkopar-

Vikhroli and Bhandup is mainly an automobile, metal products and machinery industries zone. Further beyond upto Mulund is a zone of chemicals and drugs industries, paints and inks. These two zones have housed several large factories, some of them with foreign collaboration and with giant plants. Chembur and Trombay is restricted industrial area with a cluster of petroleum refineries, a petrochemicals complex, a giant fertilizer plant, a thermal power station and the Bhabha Atomic Research Centre.

Between the Eastern and Western suburbs, a large industrial zone was developed during the fifties and sixties. Unlike the industrial core in the city the industries here are mostly medium sized or small sized, and are located in several industrial estates at Saki Naka, Marol, Powai, etc. It is largely a metal products, machinery, machine tool and electrical machinery zone. A good many chemical products factories and film industry are also located in this area. There are also many giant factories located in this zone. Large machinery and machine tool units and pharmaceuticals have developed along the Kurla-Andheri Road, and particularly at Powai, Marol and Saki. Film industry is localised along the fringe of this zone.

Kurla-Ghatkopar-Vikhroli-Bhandup is however the largest industrial zone in the suburbs. North of the Kurla textile zone, several electrical and engineering factories are located. A relatively cheaper land and nearness to water and power mains have enabled rapid expansion of the suburbs. These newer industrial areas show a greater degree of differentiation according to type and their association with auxiliary industries.

The residential Western suburbs have mainly food processing industries like confectioneries and drinks. However huge plants have been established in recent years at Goregaon, Kandivli, Malad and Dahisar. It is only during the last decade that some big units have been started along the Western Express Highway beyond the Santacruz Airport.

Many of the suburban industries are the result of post-war expansion of the old industrial units in the Island City. Many others have diversified their production, while a majority of them have entered into new avenues of production. There are also many ancillary industries.

This chapter is divided into sections with the objective of furnishing a cohesive and cogent review of industrial growth in Bombay. The first section deals with Industrial Development in Bombay prior to First World War. The second section gives a, narrative of Industrial Development between the First World War and the year 1957. The narrative in this section has been brought right upto 1957, in view of the pattern of data available. The year 1957 is significant also because the present territorial jurisdiction of Bombay came into existence in that year.

In the rest of the chapter is given a detailed account of the major irjdustries, followed by their various segments. An attempt is made to classify the industries on the pattern adopted by the Annual Survey of Industries, 1973-74 and 1975-77, conducted by the Government of India. An account of the segments of the major industries is given after that of the major industries. The classification, in a few cases, does not coincide with that of the Annual Survey. The narrative of the industries is attempted to be given in a historical perspective. The Annual Survey statistics cover the census and sample sectors, and represent annual averages during the respective survey periods. Although the analysis of the structure of the various industries is quite exhaustive, the conclusions attempted at some places are by no means claimed to be accurate

INDUSTRIAL DEVELOPMENT PRIOR TO WORLD WAR I

The momentous growth of this industrial metropolis of India has a very long history. The first industry in Bombay, in the proper sense of the term, was established by the East India Company in 1676 under patent by the British Crown to the Company on 15th October 1676. The Cotton Textile Industry is however the most important organised industry with the longest history which can be traced to the last quarter of the seventeenth century. Cotton goods constituted one of the oldest exports of India as they formed a large part of the business transacted by the East India Company. In connection with encouragement of cotton and silk weaving in the island of Bombay a letter from the Surat Office of the Company to the Bombay authorities, dated 4th November 1676, directed the latter authorities to invite and encourage weavers from the Deccan to settle in Bombay so as to increase the manufacture of calicos for exports. The Sural Office also desired the Bombay Office to handle this affair very seriously and earnestly by supplying yarn and necessary equipment. (For text of the letter refer Gazetteer of Bombay City and Island, Vol. I, 1909, pp. 461-62. The letter gives clear directives to the Bombay authorities how, they should encourage weaving industry in Bombay and what industry and ingenuity they should employ in that affair which would be well esteemed by the East India Company) By 1676 a regular industry had been established. The Company imported silk and cotton and distributed it to the weavers who worked under a mukadam. In 1683 it was decided to establish a manufactory of knitted stocking. By 1735 the Bombay cloth had earned a considerable reputation. The Council at Surat was directed by the Company in 1735 to further pursuade weavers from Gujarat to settle in Bombay, by giving them incentives of monetary advances and housing. It was in 1758 that the authorities arranged for the immigration of certain Bassein weavers, who were to manufacture goods for Jeddah and other western ports.

The exports of cotton manufactures from Bombay, as also from India, to England began to decline and became quite insignificant soon after the opening of the nineteenth century. This was because England began to manufacture her own cloth and owing to the use of machinery she went rapidly ahead of India. About 1813 the ports of India were thrown open to English merchant adventurers, but protective duties of 70 to 80 per cent were imposed in Great Britain on cotton and silk manufactures from India while some items were totally excluded. This was motivated by exclusive protection to the English industry against Indian goods. English cotton goods now began to be imported into India. The growth of the mill industry in India, especially in Bombay, tended to check its advance to some extent. The first cotton mill in Bombay was projected in 1851 by Mr. Cowasji Nanabhai Davar and commenced work in 1854 (*The year of establishment is also mentioned as 1856 in some* sources.) as a joint-stock company under the name of the Bombay Spinning and Weaving Company. (*The first cotton mill in India was erected on the banks of the Hughli in 1818 near Calcutta*.)

By about 1909 the city had nearly 100 cotton mills, and thousands of workers found daily employment in them. But the handmade manufacture of cloth had yet not been wholly extinguished. Cotton-weaving was a recognised hand industry, especially among the Julahas, who generally wove coloured *saris* for Indian women. Silk cloth was also manufactured on a considerable scale. The various kinds of brocade known as *kincobs*, *hirnrus*, *masrus*, *lapas* and *tas* were worked into *saris*, *cholis*, waistcoats, shoulder cloth, *pagadis*, *kamarbands*, etc.

The weaving artisans were mainly concentrated in Duncan Road, near Byculla and in the vicinity of Babula Tank (Near J. J. Hospital). Reliable estimates showed that handlooms still used much of the yarn imported into this country and that a large quantity of cheap of cotton goods of various sorts were turned out by the Bombay weavers, both Hindu and Muslims, who were enumerated at 7,471 by the Census of 1901.

A large part of the cloth manufactured by the Bombay mills was dyed and processed locally and exported to the Deccan and Konkan region. The dyers (*Rangaris*) were mostly Muhammadans from Satara, Kathiawar, Gujarat and neighbouring districts. The Census of 1901 enumerated about 1,200 dyers, including silk dyers in Bombay. Some raw material for

dyeing was imported from China. The process of dyeing cotton cloth or thread in various colours was very elaborate. The colours were very fast and exhibited aesthetic sense of the artisan. Naturally, the processed cloth was a choice of the connoisseur. There was a wide range of dyeing processes, such as, *kusumba* dyeing, yellow dyeing, purple dyeing, green dyeing, black dyeing and indigo dyeing.

Printing of cloth was yet another hand-industry in Bombay, *chindari* or knotted design, also called knot-dyeing or *bandhani* was a beautiful method of decorating cotton and silk goods. It closely resembled printing, and it could be inferred that it had its origin in Gujarat, Cutch and Sind. A large number of *chindari* workers were found in Bombay, their central place of business being near Nail Bazar, though the work was carried on in other parts of the city also.

SALT MANUFACTURE

Salt making is one of the most important and the oldest industries of Bombay. Its geographical condition lends it a natural advantage for the development of this industry. Though the industry has declined and dwindled progressively with the human encroachment on the creeks and estuaries of old Bombay during the last century and a quarter, it was once a prosperous industry in the past. The original Bombay of seven islands had produced considerable quantities of salt which was exported not only to upper India but also in considerable quantities to foreign countries.

The salt-works of the island of Bombay, by the beginning of this century, were situated in a compact group in the northeast corner between Sewri and Sion on the borders of the Bombay and Mahul creeks. In 1872, when the Bombay Salt Department was reorganised, the 21 salt works produced an average of 6,50,000 maunds of salt per annum. In 1889, two new private works were opened, and in 1890 a third, the Wadia Mahal, which was regarded as one of the most important sea-salt works in the Bombay Presidency. About 263 acres of land was granted by Government in perpetuity and rent free for this salt work to Khan Bahadur Jamsetji Dhunjibhoy Wadia in recognition of his long and meritorious service in the Government Dockyard.

In 1908 there were 23 salt-works which constituted the so called Matunga taluka. With the exception of five government salt-works which were farmed, the Matunga works were the property of private persons with limited rights. These persons, 79 in number, were called as *Shilotris* who belonged to the Prabhu, Parsi, Muhammadan and Indian Christian communities, some of them being wealthy capitalists. The actual workers at the salt pans comprised Agris, Kolis and Indian Christians from Bombay as also Dublas and Kharvas from Surat, who used to come to Matunga during the fair season. (For details of Salt industry refer to the Gazetteer of Bomby City and Island, Vol. I, 1909, pp. 481-84 and to Thana Gazetteer, Vol XIII, Part I,1882, pp. 363-78.)

The salt produced at Matunga was largely exported to Central Provinces, Berar, Bengal, Mysore and the Nizam's Dominions, the bulk of it being consigned by railway from Dadar Station. It was also in much demand in Nasik, Khandesh and Ahmadnagar districts, to a lesser extent in Belgaum, Dharwar and parts of Karnataka. Salt was transported in carts while that destined for Calcutta and the Malabar Coast was transported in boats and steamers with a capacity of 1,000 to 2,000 maunds.

GOLD AND SILVER THREAD MANUFACTURING

Bombay had once a prosperous industry of gold and silver thread manufacturing. There were about 1,000 embroiderers and lace and muslin makers in the city as per the Census of 1901.

OIL PRESSING

Oil pressing in primitive oil presses is an old industry. Bombay contained some years ago a few large oil pressing establishments. The industry was mainly confined to pressing of sesamum seed, coconuts and groundnut. At the beginning of this century there was only one oil-mill worked by machinery.

SUGAR REFINING

Sugar refining was a small industry with 25 factories licensed by the municipality in 1909. Refined sugar was mainly imported from Mauritius. But the Bombay sugar was sent to Baroda, Surat, Bhavnagar, Ahmedabad, Zanzibar and even to China.

BIDI AND SNUFF MANUFACTURING

Tobacco and snuff manufacturers and sellers in Bombay numbered about 2,800 according to the Census of 1901. It was a very prosperous industry employing mainly Kamathi women. It was mainly concentrated in Kamathipura, Falkland road, Duncan road, Grant road, Kalbadevi road and Girgaum. The tobacco was mainly imported from Gujarat, Deccan and Madras.

IRON WORK

Though Bombay had to import all her iron as well as copper from England, great progress had been made in the iron industry. There was hardly any description of iron work which could not be manufactured in Bombay in 1909. The import of kerosene oil had given rise to the new industry of iron foundries, the account of which is given afterwards in this chapter.

WOOD CARVING AND FURNITURE MAKING

This industry was celebrated for the manufacture of carved blackwood furniture which was carried on in Bombay by the artisans from Surat and other places. Screens, teapoys, writing desks, flower-stands and cupboards manufactured in Bombay were of a very elegant appearance and often of exquisite design.

INLAID WORK

Inlaid work, for which Bombay had long been famous, was probably introduced about 1800 a.d. from Hyderabad (Sind). It might also have its origin in the Punjab as it was familiarly known as ' Multan Work'. The industry provided employment to several hundreds of workmen in Bombay. The chief articles made were paper-knives, work-boxes, writing desks, watch-stands and several articles with beautiful patterns. The patterns in common use in Bombay were the circle, the hexagon, the *tinkoma* gul, compounded of wire, ebony, ivory and stained horn, the *gul*; and for borders the *gandiris*, compounded of all the materials, the row of beads, the *sankru hansio* and the *poro hansio*. The manufacturers of inlaid work dealt largerly in carved sandalwood boxes from Kanara and Gujarat, and sometimes themselves employed wood-carvers.

COACH FACTORIES

Bombay found a congenial home for coach factories, the first factory being established in 1808 by Pallonji Bomanji

Palkhiwalla at Dhobi Talao(He took his surname from the trade in which he was engaged.). There were about three hundred coach factories in Bombay in 1909. (The industry was very flourishing, each palanquin being worth about Rs. 400 to Rs. 600 depending on the quality of decoration. The palanquins were followed by other modes of coaches such as shigram, canoe-shaped phaeton, buggy, landau, brougham, vitcoria and the landaulette.)

The carriages were exported to Kabul, Persia, Singapore, Baroda, Kathiawar and other parts of India. The introduction of motor cars caused a decline in this industry which is hardly surviving today.

LIME KILNS AND BRICK AND TILE MAKING

It may appear fictitious to-day that Bombay had several lime kilns. But it is a fact. There were three kinds of lime kilns in Bombay. One was used for manufacturing lime for whitewashing purposes, another for making lime for masonry works, and the third for lime intended for eating. The lime for eating was prepared from Muscat stone. Whitewashing lime was prepared from oyster-shells from Ratnagiri and masonry lime from scraps of marble and Porbunder stone.

Bricks and tiles were made in Bombay on a large scale. The Bombay, Brick and Tile manufactory, situated at Sewri, supplied very good tiles and earthen blocks suitable for building purposes. The brick and tile industry provided employment to 800 persons, while the lime kilns engaged 420 in 1901.

POTTERIES

The first noteworthy pottery was opened at the hands of the Governor of Bombay in 1877 at Naigaum road and was known as the Pherozshah Pottery Works, white clay was obtained from Cutch-Bhuj and Jabalpur, and red clay from Kurla. Pottery was manufactured at about 20 places in the north of the island in 1909. The J. J. School of Art Pottery which was made from Santa Cruz and Cutch clay was regarded to possess a high order of merit. The industry provided employment to about 750 workers in 1901.

MARBLE WORK

The pioneers of marble(Though India abounds in marbles of various kinds and shades, most of the marble was imported to Bombay from Italy and other parts of Europe and America in the form of blocks or slabs. The masons of Porbandar have adorned many of the beautiful facades in the city.) industry in Bombay were Messrs. F. Mureglia & Co., Italian by birth, who owned a shop in Fort area. The majority of marble carvers in Bombay were Christians as Hindus believed super-stitiously that this work portends calamities. Marble industry provided employment to 850 persons in 1901.

SOAP MANUFACTURING

The first soap factory was opened at Mahim in about 1879, the same being taken over by a Parsi subsequently. There were 19 soap factories in Bombay in 1909. The principal raw materials comprised castor oil, cocoanut, *mhowra* seed and caustic soda. Castor oil was used for soft soap supplied to the mills for sizing purposes and also for manufacturing Turkey red oil. Marine soap was manufactured from cocoanut oil, toilet soap was prepared from *mhowra* seed oil, while tallow was added to give aroma to the soap.

LEATHER INDUSTRY

It is one of the oldest cottage industries, which employed 5,500 workers in Bombay in 1901. Good quality shoes, saddles, bags and oil jars (called *dabaro*) were made in the European fashion by the city artisans. In earlier times army accoutrements, manufactured in Bombay were supplied to the British troops. Mr. Tanner of Bombay is said to have made a large fortune in this business during the Mutiny of 1857.

Sir Adamji Peerbhoy opened a large tannery and factory, worked (It was named as Western India Boot and Equipment Factory.) by machinery near Dharavi in 1887 which turned out excellent work. A considerable quantity of tanned leather was exported to Europe and Africa. The chief articles manufactured included saddlery, boots, shoes, belts, trunks, bags and various smaller articles. The factory was managed by European supervisors, and provided employment to 1,000 workers. The leather used was mainly harness leather, bridle leather, hog-skins, calf patent leather, sheep skin, bag hide and gaiter hide. A very little Russian leather was used as the Bombay climate was not suitable for the same. American leather was imported from London.

Besides the industries narrated above, there were several small industries which may appear insignificant in the context of the mammoth industrial growth of this industrial city of today. But they were of immense significance in those times when industrialisation was only in its infancy. Most of them combined industry and artisanship with aesthetic value. Their products were not only useful but were also artistic. A mention must be made of the manufacture of sweetmeats with very rich tastes and flavours. Besides the usual ingredients, the sweetmeats contained almonds, pistachios, saffron, cardamom, nutmegs, rosewater, etc., which can hardly be dreamt of today. The Bombay sweets were exported to Europe, Africa, China as also to all parts of India. While sweetmeats makers numbered 350, the sellers numbered 1,400 in 1901in Bombay.

Bakers numbered 1,400 in Bombay in 1901. One of the best known bakeries of old times was established by a Goanese in Old Hanuman Cross Lane in the first decade of the nineteenth century. Besides Goanese, Mughals, Muhammadans and later Parsis, dominated this industry. The *Jariwalas* engaged in the recovery of gold and silver from old embroidery had a thriving industry in Bombay. They had a perfect technique of extracting the valuable metals from old *jari* clothes.

Brass and copper craftsmen produced household utensils, lamps, *chattis* of all shapes and sizes and water pots and *lotas* of all descriptions. The copper bazar opposite Mumbadevi Tank, was the busiest street in the city in those times as it is today. There were about 4,000 brassworkers and coppersmiths and 5,000 blacksmiths ia Bombay in 1901.

Though sculpture could not be said to be an industry, stone-carving was carried on in the form of architectural ornamentation on a large scale in Bombay. Stone carving was also taught as a subject of studies in the Sir J. J. School of Art.

Then there were three candle manufactories which manufactured pure wax candles for the use of churches, and two others which prepared parafin candles by machinery. Some other industries were engaged in wire-drawing for embroidery and lace work and electro-plating and silver-plating of trays. Their products were valued for the aesthetic sense of the craftsmen. Bombay had also quite a few expert Chinese caneworkers whose products were in demand from the European community in India and the Par si gentry of the city.

FACTORY INDUSTRIES

As stated earlier the history of factory industries in Bombay can be traced to 1676 when the Mint of the East India Company was established. This was followed by establishment of a cotton pressing factory in 1694, which was in the nature of machinery for screwing loose bales of cotton into size suitable for export. These presses were then known as

screwing houses, and the machine themselves consisted, in 1809, of a square wooden frame in which cotton was placed surmounted by a beam of great weight which was fixed to the end of a powerful screw. This screw was worked by a capstan in a chamber above to each bar of which there were often 30 men. They turned the screw with great swiftness at first shouting the whole time, the shouts ending in something like loud groans as the labour became heavier. Bombay city contained 13 cotton presses in 1868. This industry however declined mainly because much of the cotton pressing was done in the cotton growing districts of the Bombay Presidency to save the cost of transport to Bombay. In 1909 there were only seven cotton presses employing 600 operatives.

In 1725 Bombay contained a wind mill for the grinding of wheat, situated on the Esplanade. It existed quite for long but found its closure in 1808.

Industrialisation in Bombay gathered momentum in the latter half of the nineteenth century. The factories gradually eclipsed the handicrafts for which the city was famous at one time.

The period between 1860 and 1865 was one of feverish activity in Bombay, and was marked by progress in every respect. The railway communication of the island advanced noticeably with the opening of the Bhor Ghat on 21 April 1863. The opening of the first section of the Bombay, Baroda and Central India Railway in 1860 encouraged the growth of trade and industry in Bombay. Further encouragement was afforded by the institution of regular service of coasting steamers and by the opening of the Suez Canal. The latter development in 1869 effected a complete revolution in the carrying trade of Bombay, which had upto that date been restricted by a lengthy voyage round the Cape of Good Hope.

The third fundamental cause of the growth of Bombay was the enormous increase in the cotton trade and the subsequent Share Mania(For details of the upheavals which accompanied the Share Mania, see Gazetteer of Bombay City'and Island, Vol. II, 1909, pp. 163-69.) of the years 1861-65. The out-break of the Civil War in America, which at once cut off the supply of American staples gave unprecedented spurt to the export demand for cotton, piece goods and other articles. So sudden was the demand, so high the range of prices, so vast the profits, that a boom set in which gave rise to what was called the Share Mania. Adventurers from all parts were attracted to Bombay, all sorts of ingenious schemes were devised for putting the newly acquired wealth to use. Apart from making a good fortune on the Stock Exchange a good amount of money was invested in establishment of joint-stock companies.

By 1865, there were ten mills working with 2,50,000 spindles and 3,380 looms. They provided employment to 6,600 workers and consumed about 42,000 bales of cotton.

With the rapid growth of industries the Factory Act (*The Factory Act originally appears to be applicable to factories employing more than 50 workers*) was enacted in 1881 for the first time and it was amended in 1891 to meet the requirements of proper control and direction of industries. In 1908 the total number of factories falling within the scope of the Factory Act was 166 of which half were cotton mills. Most of these factories worked throughout the year and provided employment to 107,739 men, 23,767 women and 4,157 children. (It appears that child labour was not forbidden under the Factory Act of 1881)

The following table shows the classwise total number of factories in Bombay city in 1892, 1896, 1901 and 1908:—

Maharashtra State Gazetteers

	1892	1896	1901	1908
Cotton mills	64	68	76	85
Silk mills	1	2	2	2
Woollen mills	2	2	1	3
Hosieries	3	2	2	2
Cotton presses and gins	11	9	8	7
Dye works	2	2	2	4
Flour mills	3	5	5	5
Oil mills	2	2	1	1
Tannery		1	1	1
Saw mills and timber works	1	2	2	2
Iron Works and Fou <mark>ndrie</mark> s	8	8	8	15
Locks and cutlery works			1	1
Metal works				2
Tin works			1	3
Paper mills				1
Workshops	6	6	1	9
Art manufacture	1	1	7	1
Gasworks	1	2	2	2
Gun carriage factory	1	1	1	
Arsenal	1	1	1	1
Mint	1	1	1	1
Dockyards	4	4	3	3
Printing Presses	7	9	10	16
Power generator*				1
Bone mill				1
Total	119	128	138	166

textiles, followed by printing presses, iron works and foundries and workshops. The number of cotton textile mills increased from 64 in 1892 to 85 in 1908 providing an average daily employment to about 101,536 persons. The number of iron works and foundries increased from eight in 1892 to 15 in 1908, and the number of printing presses from seven in 1892 to 16 in 1908. Most of the workshops belonged to the railways. Among the notable iron works was the Byculla Iron Works now known as Richardson Cruddas. Godrej Boyce and Company was the foremost. The Bombay Gas Company came into existence in 1863 and gas light was introduced in Bombay in 1866. These obviously excluded the factories which were not within the purview of the Factory Act as they were working with less than 50 operatives and many of them were without power-driven machinery. Among this category were Sugar factories (8 in number), Rope factory (1), Grain Crushing Mills (6), Carriage Factories (6), Mechanical and Iron Works, Iron and Brass Foundries and Smithies (68), Soda Water Factories (22), Ice Factories (5), Oil Factories (3), Flour Mills (8), Woollen and Cotton Cleaning Factories (6), Saw Mills (4), Printing Presses (39), Lithographic Presses (5), Chemical Works (3), Button Factory (1), Dyeing Works (7) and Miscellaneous (10).

Cotton Textile Mills(*Detailed history is given subsequently in this chapter.*): The manufacture of yarn and cloth by machinery is the prime industry of Bombay city ever since the dawn of industrialization. Although to Bengal belongs the honour of opening the first factory for spinning cotton by steam power in India, it is Bombay which has been a home of the industry. The first cotton mill was erected on the banks of the Hughli in Bengal in 1818. The first mill in Bombay was projected by Mr. Cowasji Nanabhai Davar in 1851 under the name of Bombay Spinning and Weaving Company. It commenced work in 1854 (1856 according to some source.) as a joint-stock company. The Oriental Spinning and Weaving Company was opened in 1858 with a capital of Rs. 25 lakhs. By 1865 there were altogether ten mills in the city. They provided employment to 6,600 persons and consumed about 42,000 bales of cotton annually. The industry suffered a temporary glut in 1865-66 mainly due to the abnormal price of raw cotton and also due to the agents and directors of companies having taken large advances from banks at exhorbitant rates of interest and due to lack of demand on account of financial crash after the boom. This was however a very short-lived phase and the demand started picking up in the domestic and European markets from 1867. This could be attributed to the fact that the Bombay goods were durable than the finer and heavily processed cloth produced in England.

Seventeen new mills had been established between 1870 and 1875, thus making a total of 27, working with 7,52,634 spindles, 7,781 looms, the capital investment in the industry being Rs. 2,24 lakhs. It was from 1875 that the cotton industry in Bombay registered a rising trend upto 1898 in which year the number of mills stood at 82. Between 1892 and 1898 the total number of factories in the island rose from 119 to 136, the increase being almost entirely due to the opening of new cotton mills. It is remarkable that this increase was inspite of the belief that a fall in price of silver had a depressing impact upon trade and despite the fact that there was a rapid glut in Chinese market, which was a principal buyer of Bombay yarn. (The severe epidemic of plague and famine in 1896 exercised a most depressing impact upon the industry for many years. The epidemic resulted into a flight of factory workers from the city who migrated to their native places due to the fear of death due to plague. There was thus an acute shortage of workers for a couple of years)

The condition of the industry was described as' most critical' in 1899; and by the end of that year nearly all the mills were closed for three days in a week while some were wholly stagnant. The number of mills was reduced to 79 in 1904. It was from 1903 that the condition of the industry began to improve and by 1905 and 1906 the industry experienced conditions of revival.

The demand for cloth had increased and the general condition of growth was quite satisfactory. In 1908, there were 85 mills, with 2,734,863 spindles and 35,967 looms. They provided an average daily employment to 101,536 workers, and consumed 1,200,000 bales of cotton.

The Bombay mill-owners had many advantages over their western counterparts. The labour was cheap and abundant. Though the cost of erecting machinery was comparatively high and the quality of raw cotton low, the Bombay cotton had definite advantages.

The Bombay mills produced about 360 million pounds of yarn in the year ending with March 1909. The yarn was partly consumed in the local mills and was partly exported to other parts of India and to China. The total exports to China were about 6,80,000 bales per annum.

The cloth produced in Bombay amounted to about 110 million lbs. The principal varieties manufactured being shirting, long cloth, T-cloth, domestic, sheeting's, chadars, *dhoties*, drills, jeans and tent cloth. Coloured piece-goods were also woven. The cotton weaving industry was just emerging by the first decade of this century. It had to face keen competition with imported Manchester goods of a superior quality. But the *Swadeshi* movement which had taken roots at the beginning of this century had given a distinct impetus to Bombay mills. Before the outbreak of first World War, Bombay cloth was exported to Arabia, Mozambiqe, Zanzibar, Abyssinia (Ethiopia) and Turkey. The Bombay mills, with the exception of a few belonging to private owners, were limited liability, companies, governed under the provisions of the Companies Act of 1866 and 1882. Their affairs were supervised by Boards of Directors and managed by a Secretary or a firm of agents.

The total amount of paid-up capital of the Bombay cotton mills was Rs. 6.5 crores, besides loans and debentures which approximated to an equal amount in 1909. There was a good demand for their shares and financial position quite sound. The mill owners belonged to the Vani, Bhatia, Parsi, Muhammadan and Jew communities. In 1909 the Bombay cotton mills provided employment to about 98,000 workers, most of them were from the Konkan region. Some of the managers and skilled officers, such as weaving and spinning masters were Europeans, while the affairs of many mills were managed by Indians. Occasions of strikes were extremely rare. Hours of york and other conditions were governed under the Indian Factories Act XV of 1881 (as amended by Act XI of 1891).

Silk Mills: Prior to World War I there were two silk mills in Bombay. The Sassoon and Alliance Mill, (It was formerly known as Sassoon Silk Mill, but was then renamed due to amalgamation of Alliance Silk Mill in 1883.) established in 1875 near Victoria Gardens was the largest mill in the Bombay Presidency manufacturing silk yarn and cloth for the Indian and Burma markets. It was a joint-stock concern with a capital investment of Rs.10 lakhs. Its annual production was about 70,000 lbs. and provided employment to 490 workers in 1908-09.

The silk industry had to face competition from Japan. Raw material was mainly imported from China and Bengal. The chief fabrics were *saris*, skirts, headgear, satin goods, jackets, handkerchiefs, scarves and other dress lengths. Even gold thread was used for costly *saris* while printing in various colours and designs was also done in these mills.

Woollen Mills: The first woollen mill known as the Bombay Woollen Manufacturing Company was established in 1888 with a capital of Rs. 4 lakhs. It was followed by the Sohrab Woollen and Cotton Mill in the same year. It however shifted to manufacturing of only cotton goods. Prior to the World War I there were only two woollen mills in Bombay, one producing its own worsted yarn from Australian wool and wove woollen blankets etc., while another knitted jerseys and caps from imported worsted yarn.

Hosiery Industry: Hosiery was manufactured in five cotton mills, as well as in two separate hosiery factories. They together manufactured about 3,82,000 lbs. of hosiery goods per annum. The industry however was faced with keen

competition from Japanese and European imports. The obsolete machinery was another handicap which halted growth.

Dyeing Industry: There were four dyeing factories in Bombay which dyed cotton yarn from local mills for export to various parts of India and Burma. They provided employment to a large number of workers, the Khatau Makanji Dye Works being the largest factory in Bombay.

Foundries and Metal Works: The history of foundries in Bombay can be traced to the year 1857 when the Byculla Iron Works and Metal Mart was established by Mr. N. C. Richardson. There ware 15 foundries in Bombay in 1909. They provided employment to nearly 5,900 operatives. Richardson and Cruddas was the largest engineering works in India, affording employment to 2,000 persons. It had two workshops, each containing foundries capable of dealing with the heaviest casting required in trade, patterns shops, smithshops, fitting and machine-shops and a large structural steel boiler department. It turned out steel and other work for the Indian Railways and roof trusses of various types for government offices. The products of this firm were sent to all parts of India, Burma, East Africa and the Straits Settlements.

There were six metal, cutlery and tin works in Bombay, the major among them being Asiatic Petroleum Oil Works, Burma Oil Works and the Godrej, Boyce & Co. The first two factories were mainly tin works while the third one was engaged in black-smithy, cutlery and safe making The six factories provided employment to about 1,210 workers.

Engineering Workshops: There were nine engineering workshops in 1909 including the two workshops of the Great Indian Peninsula Railway and one of the Bombay, Baroda and Central India Railway. The rest of six workshops were owned by the Bombay Port Trust, Bombay Electric Supply & Tramway Co., Municipal Corporation, Bombay Steam Navigation Co., Bombay Electric Co., and Vulcan Works. The nine workshops provided employment to 13,533 workers.

The original locomotive works of the G.I.P. Railway were opened at Byculla about 1854. The workshop was however shifted to a spacious place to Parel in 1878 for expansion, where it is situated even to the present day. With further expansion of railway operations the carriage and wagon shops of the railways were shifted to Matunga by the end of the first decade of the century. The Matunga railway workshop has lived up to its reputation for renovation and even building up of special carriages even up to the present day (1982). The G.I.P. Railway Company's workshops employed more than 7,500 workers in 1909. They were mainly engaged in repair of carriages and wagons, and other railway accessories.

The Parel workshops of the B.B. & C.I. Railway were opened in 1868 after abandonment of the original works at Amroli. The Parel workshops provided employment to 4,062 workers in 1909. They were mainly engaged in repairing the railway company's rolling stock and in building carriages and wagons of every description. Locomotives were imported from England and fitted up in the workshops. (For details see Gazetteer of Bombay City and Island, Vol. I, 1909, pp. 502-04.)

Paper Industry: The Girgaum Paper Mill, the oldest in India, was established in Bombay in 1862. It was also the only paper mill in Bombay. Its production was to the tune of 250 tons in 1908. It produced various classes of paper and employed about 50 hands. It however suffered from the competition of the Bengal and Poona Paper.

Gas Work: The Bombay Gas Company commenced the erection of its works in Parel (now in Lalbaug) in 1863. The gas light was introduced in 1866. The machinery was initially of a crude type, and there were no arrangements for purifying the gas. Originally the works contained two gas-holders with a capacity of 1,50,000 cubic feet apiece, and both telescopic with two lifts.

In 1892 a new holder was erected with a capacity of 2,40,000 cubic feet. The bulk of the coal used was Australian and Indian, with an occasional English consignment.

There were 700 public lamps in 1868 which increased to 4,000 in 1894. They were furnished with incandescent burners in 1894 instead of the former flat flame burners. The main pipe from the main works was 24 inches in diameter. The original gas pipes were of lead but were substituted by wrought iron pipes due to frequent damages. The mains were of cast iron with lead joints. The Bombay gas afforded not only the modernisation but also gave fillip to industrial growth in the city.

This was the stage of industrialisation of this great city of India on the eve of the First World War. Though it was not comparable to the state of industrialisation of the principal cities in England and Europe, Bombay laid the foundations of the future growth of industrialisation in India by providing a definite base, and by training technical personnel and skilled workers. The Bombay industry also encouraged the development of a class of entrepreneurs and a capital market which fostered the development not only of the city but also of the country as a whole.

It would therefore, be most pertinent to give a very brief account of the registered companies and their capital during the gestation period of industrial growth in Bombay. The following statement shows the number of registered companies in Bombay and their position of capital during the four decades ending 1905-06 and in 1908-09:—

Year	No. of Companies	Nominal Capital in Lakhs of Rs.	Paid up Capital in Lakhs of Rs.	Average number of Companies registered annually
1875-76	75	859	356	
1885-86	147	1028	802	14
1895-96	191	1322	880	14
1905-06	241	1889	1303	14
1908-09	308	2940	1864	

It would be evident from the above statement that the number of registered companies which was 75 in 1875-76 increased to 308 in 1908-09, thus recording an increase of slightly less than 320 per cent during the period of 33 years.

It means that the number of companies increased by about 10 per cent per annum during this period. The greatest increase took place during the period of 10 years from 1875 to 1886 which was to the extent of 96 per cent. This was nothing but spectacular. Corresponding to the increase in companies during this period (320 per cent) the nominal capital increased by 243 per cent and the paid-up capital increased by 248 per cent *i.e.* virtually of the same order from 1886 onwards.

The distribution of these companies, industry-wise, at the close of the year 1908-09 was as under:—



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Classification of companies	No. of companies	Nominal capital (Rs.)	Paid-up capital (Rs.)
1	2	3	4
(I) Banking, Loans and Insurance	18	4,84,05,000	1,38,51,703
(1) Banking and Loan	9	3,36,95,000	1,26,77,693
(2) Insurance	9	1,47,10,600	11,74,010
(II) Trading	97	7,01,84,000	4,59,30,746
(3) Navigation	4	1,27,50,000	78,72,338
(4) Railways and Tramways	9	2,46,00,000	1,87,76,198
(5) Co-operative Association	2	3,50,000	91,940
(6) Printing, Publishing and Stationer:	10	17,90,000	4,47,910
(7) Others	72	3,06,94,000	1,87,42,360
(III) Mills and Presses	169	13,63,04,625	10,77,15,596
(8) Cotton Mills	100	11,43,61,200	9,14,69,011
(9) Mills for Wool, Silk hemp, etc.	6	47,25,000	46,37,000
(10) Cotton and Jute Screws and Presse	52	11,54,84,425	95,97,230
(11) Flour Mills	3	14,70,000	10,06,200
(12) Saw and Timber Mills	1	8,00,000	5,00,000
(13) Other Mills and Presses	7	34,00,000	5,06,155
(IV) Tea and other Planting Companies	1	50,000	38,950
(V) Mining and Quarrying	7	2,56,75,000	76,25,380
(14) Coal	1	3,00,000	2,03,240
(15) Others	6	2,53,75,000	74,22,140
(VI) Land and Building	8	1,22,80,000	1,01,81,635
(VII) Ice Manufacturing .	2	9,77,600	7,06,075
(VIII) Sugar Manufacture	3	9,00,000	2,91,535
(IX) Others	3	1,00,000	96,000
Total	308	29,48,76,625	18,64,37,620

It would be evident from the above table that the largest number of companies were under the category of mills and presses accounting for about 55 per cent of the total number of companies, followed by trading companies which constituted about 33 per cent of the total number of companies. The mills and presses accounted for slightly more than 44 per cent of the nominal capital and slightly more than 50 per cent of the paid-up capital. Trading companies followed the mills and presses in respect of nominal and paid-up capital.

The industrial growth which took place in the first decade of this century was very rapid as compared to the earlier period. That was why the late Justice M. G. Ranade was tempted to describe this industrial progress as industrial revolution. It was obviously the spirit of *Swadeshi* and awareness of the necessity of the economic growth of the country which promoted slowly this measure of industrial growth by the beginning of this century.

INDUSTRIAL GROWTH AFTER WORLD WAR I

Three factors contributed to speed up, even though slow in nature, the industrial growth of the country subsequent to the declaration and end of the First World War. These were political, economic and social.

Though the British Government was responsible for the introduction of the system of education, it did not provide enough employment opportunities to the educated people. They, therefore, began to examine the causes of the country's poverty and obviously held foreign rule responsible for economic backwardness. The victory of Japan over Russia further gave stimulus to the thought that if a small Asian power could defeat Russia, it should not be difficult for a country like India to achieve a position of eminence. The Government also wanted the co-operation of the rising capitalist class in India for the effective protection of the British rule. Moreover, the war thoroughly exposed the industrial backwardness of India. To appease the public opinion, the government declared "responsible Government" as an objective of political policy and industrialisation as an objective of its economic policy. With this aim in view, the Government appointed an Indian Munition Board. Its main task was to suggest suitable measures required for the effective handling of the war. The object of the appointment of the Industrial Commission was to explore the possibilities of development of industries in India. The Government accepted, as a token of this policy, the principle of fiscal autonomy convention, and subsequently appointed the Fiscal Commission to consider the ways and means of suggesting the type of protections to be given to Indian industries for their development. The Fiscal Commission recommended the policy of "discriminating protection". As a result of the recommendations of the Fiscal Commission, the Tariff Board was appointed to consider the cases of award of protection to Indian industries. It was under the stimulus of protection that some measures of industrialization took place. The Fiscal Commission did not take an integrated view of the entire industrial development of the country. It considered the case of each and every industry separately. However, whatever might be the limitations of the policy of protection, it

The commencement of First World War in 1914 had an adverse impact on the growth of new cotton mills in Bombay. The stoppage of machinery shipments from Lancashire to India created difficulties in mill industry in Bombay for many years, and even after restoration of peace in 1918 the high increase in the cost of land and building prevented the construction of new mills. However large extensions to existing plants and machinery were made during this period. (S. M. Rutnagur, Bombay Industries: Cotton Mills, 1927.) A number of private concerns were converted into joint-stock companies. This led to increase in the paid-up capital of many companies to a great extent.

An important event in the industrial sector of Bombay in 1915 was that the cotton mills commenced working with electric power supply from the Tata Hydro-Electric works which was registered in 1910. The boom period for Bombay mills started in 1918 which laid to extensions in existing mills in the next year. The year 1919 witnessed the formation of the Bombay European Textile Association by Europeans engaged in the management of the cotton textile mills in Bombay to protect their mutual interests and to advance prospects of the industry. The textile experts from Lancashire and other parts of Europe had been instrumental in educating Indians in spinning, weaving and finishing of cotton goods. The organisation promoted research work relating to the industry and protected the interest of the personnel.

The first trade union of textile workers in Bombay, *viz.* the *Girni Kamgar Sangh*, was established in 1919. A good deal of work in the interest of the working class was done by the Bombay Social Service League which came into existence at the inspiration of Mr. Gopal Krishna Gokhale. The League was managed with praiseworthy energy and ability by Mr. N. M. Joshi, a prominent member of the Servants of India Society. Till about 1920, the Social Service League was the pioneer of the interest and welfare of mill workers, and it carried on its work in many mills with the co-operation of the millowners.

The year 1920 was marked by strikes in the textile mills. The strikers enjoyed the sympathies of the leaders of national freedom movement. The incidence of strikes led to the appointment of a Labour DisputeCommittee in Bombay in 1921. Prior to 1925, textile trade unions were not organised properly. They had hardly any sound basis. In 1925, there were five associations. The most important among them was the Bombay Textile Labour Union, while each of the remaining four was called the *Girni Kamgar Mahamandalas* The four *Mahamandals* were specified by their localities, *viz.*, Chinchpokli, Prabhadevi, Colaba and Gholapdeo. The Girni Kamgar Sangh (1919) which was brought to life in 1923 was renamed as Mahamandal. The formation of the Bombay Textile Labour Union in 1926 was an important event in the history of trade unionism in Bombay.

The regulation of cotton trade in the city was in the hands of many commercial associations until 1917. A single agency for control of trade was introduced by appointment of the Cotton Contracts Committee which was replaced by the Cotton Contracts Board. It was in 1922 that the East India Cotton Association was established after an enactment in the Bombay Legislative Council for the control of Cotton trade of Bombay. The New Cotton Exchange building was opened in December 1925 for proper handling of cotton trade. The institution of a Clearing House in 1918 was another important innovation which had done a lot of good for cotton trade and industry. It was organised on the model of the Liverpool Clearing House. The total amounts handled by the Bombay Clearing House were as under:—

Year	Rupees*	Year	Rupees*
1921-22	12,98,94,566	1923-24	9,16,95,270
1922-23	7,69,37,399	1924-25	3,18,59,196

(S. M. Rutnagur, op. cit.)

The cotton market in Bombay was then the largest in Asia.

The Indian Factories Act was amended in 1922, while the Smoke Nuisance Committee was also appointed in the same year in Bombay.

The Bombay textile industry was in the grip of a depression in 1923 and there was a decline in profits. The speculative

activities coupled with banking difficulties of mill Agents necessitated further changes in the mill Agencies. The constitution and management of mills in Bombay was much different in 1925 than the pre-war years. There was a trail of strikes in 1923, 1924 and 1925. The strike in cotton mills in Bombay in 1925 was the longest in history upto that year. These events led to the appointment of the Bonus Dispute Committee in 1923, and enactment of the Workmen's Compensation Act in 1925.

Separation of the Bombay Millowners' Association from the Bombay Chamber of Commerce in 1923 was also an important event in the city. The Bombay Millowners' Mutual Insurance Association and the Indian Central Cotton Committee were established in 1923. Excise duty which hampered the interests of the Indian textile industry was repealed in 1925.

The most important events in Bombay industries in 1926-27 were the appointment of the Tariff Board to enquire into the causes of the depression in the Bombay cotton mill industry and the resolution of the Government of India on the report of the Tariff Board. The Board conducted an inquiry in Bombay and Ahmedabad as regards the causes of depression, the competition from Japan and England, the need for protection to cotton industry and the general condition of the industry. The depression was found to be more acute in Bombay than in other centres. The competition from Japan yarn had a depressing effect on the Bombay industry which lost a big market in China. The depreciation of the Japanese Exchange also stimulated exports from Japan to India which was a blow to the indigenous industry. The recommendations of the Board were however deemed to be meagre in regard to the ailments and problems of the industry which needed a more adequate measure of protection than recommended by the Board. The Conference of Millowners, held at Bombay on June 20, 1927 pointed out that the reasons advanced by Government for withholding protection were absolutely untenable and strongly urged for adequate protection to the Indian Textile industry.

The Government of India reconsidered its earlier decision in certain respects and granted some protection to the textile industry. While the plea for imposition of import duty on imports of piece-goods was rejected by the Government, the removal of the imports duty on machinery and materials of the industry as recommended by the Fiscal Commission was accepted. The latter measure was beneficial for the Bombay industry. This encouraged growth and buoyancy in the industry, which continued till 1938. The textile industry had a set-back for a short interval in 1939-40 during which some of the mills preferred to switch over to other avenues of production. Throughout the span of World War II, the cotton textile industry in Bombay experienced buoyancy which could mainly be attributed to the unprecedented demand for told the domestic market as imports were virtually restricted to meet the necessities of the war. There was a huge demand from the British Government to meet the requirements of the British Army. In short, the World War provided an unprecedented impetus to the cotton textile industry of Bombay.

Another important industry which grew in Bombay after the First World War was the pharmaceutical industry. It received encouragement during the First World War due to a steep increase in demand and a virtual stoppage of imports. The cessation of the war sharpened the competition from imports which gave a blow to the infant industry. It was however after 1930 that many new medicinal preparations were manufactured in Bombay, and the industry maintained a steady pace of growth upto the outbreak of the World War II. Many companies of British, German and American origin undertook production in Bombay. A number of new preparations came to be manufactured. The industry enjoyed an unprecedented boom during the war of 1939-45. The country became virtually self-sufficient in the production of vaccines and sera. It was by 1943 that the indigenous producers could meet about 70 per cent of the demand for medicines in the Indian market.

The outbreak of the Second World War encouraged the emergence of two very important industries in Bombay, viz. automobile manufacuring and machine tool production. Both of them are highly sophisticated and developed industries which gave a fillip to the growth, of other ancillary industries. Till the beginning of the war all automobiles, parts thereof and machine tools were imported. During the war it was felt necessary to manufacture these vital products to meet the demands of civilians and the armed forces. The Government of India also encouraged the development of these industries by placing orders with Indian manufacturers and by inviting technical experts from England to guide the Indian entrepreneurs. Firms like Godrej and Boyce and others took benefit of this encouragement and undertook production with technical foreign collaboration. The emergence of the Premier Automobiles at Bombay in 1944 was an important event as it pioneered the growth of the automobile industry in Bombay. However the plans of the Indian manufacturers were mainly confined to assembling as imported products dominated the market upto the dawn of Independence.

The food products industry developed on an organised scale during the inter-war period. With 16 working factories in 1923, the industry made very rapid progress and had 90 factories in 1940 in Bombay. The controls and rationing of food articles during the war and post-war periods gave an impetus to this industry. This can further be elaborated by the fact that due to rationing and controls, the processed foods and canned articles were increasingly used as substitutes for wheat flour and rice. The development of the industry in Bombay during the war was also due to the conditions of boom created by the demand on account of the war and considerable supplies of processed foods. There was some decline in the industry after the cessation of hostilities. It is also noteworthy that although the number of factories increased from 1945 to 1950 by about 80 per cent, there was a decline in employment as also in the percentage share of this industry in the total factory employment in Bombay. This might be due to the post-war stagnation, a higher degree of mechanisation and labour saving methods of production. The resettlement of displaced persons from Pakistan after partition of India, in Bombay, the employment picture in this industry changed. The displaced persons, popularly known as Sindhis, took up to this industry on a large scale and started many very small establishments in the city, but in larger numbers in the suburbs. Over a period of 35 years from 1923 to 1957, the number of factories increased seventeen times and employment by nine times.

The overwhelming importance of the manufacturing sector in the economy of Bombay has always remained a unique feature of the city. It is therefore necessary to study the changes in the number of factories, volume of factory employment, pattern of variations in factory employment, structure of factory employment and size of factories from 1923 to 1957, for which period the data is uniformly available.

It is however necessary to caution that a broad picture of the evolution of the organised employment can be obtained from 1934 to 1957, while the data prior to 1923 reveals a trend of development of factory employment. This is mainly because the factories were governed by the Factories Act of 1881 (as amended in 1891 and other years) before 1934. Upto that year the Factories Act was applicable to factories employing 20 or more persons and using power. The local authorities had however the discretion to extend the scope of the Act to cover factories employing 10 or more persons and working with or without power. This discretionary power does not, however, appear to have created much impression on the employment picture. In 1938, 287 factories covered under the discretionary powers of the local authorities employed only 5,065 persons as against the total of 881 factories providing employment to 2,40,511 workers.

The Factories Act of 1948 was made applicable to units employing 10 or more workers and using power and also to those employing 20 or more without using power. Even this extension in coverage of the Act made a difference of only 3,088 workers out of a total of 3,77,056 workers *i.e.* less than one per cent in 1949. The employment data over the entire period is therefore broadly comparable. (This analysis is based on the in-depth study of Bombay by Prof. D. T.

Lakdawala, Prof. V. N. Kothari, Prof. Sandesara and Prof. P. A. Nair in Work, Wages and Well-being in an Indian Metropolis, 1963, University of Bombay)

As regards the individual industry groups, the classification adopted from 1950 onwards is different from that adopted during the previous years. Naturally the data relating to specific industry groups is incomparable. An attempt is made here to rearrange the data relating to some of the industries in earlier years and present the same in a comparable form with the prevailing classification.

It is noteworthy that the period of 35 years which is reviewed is characterised by events of great economic significance. The wild prosperity of the early twenties of this century, the Great Depression of 1929-30 which had a world-wide impact, and the subsequent economic revival which characterised the period upto 1939 are all reflected in the employment figures. Then ensued the fateful Second World War and the subsequent boom, and the period of economic planning after Indian Independence.

(I) NUMBER OF FACTORIES

The number of working factories and the factory employment during the period 1923-57 are given in Table No. 1. The number of factories increased from 324 in 1923 to 3,400 in 1957. This meant an increase of more than ten times, which can be rated as an impressive growth in the economy of the city. Except for short-lived aberrations in some years such as, 1927, 1931, 1932, 1946, 1953 and 1954, the rise in number was continuous. Attention may however be drawn to the almost continued increase in the number of factories during 1928-36, when the level of employment was throughout lower than that prevailing in any previous year. Employment provided by factories suffered a decline from 2,10,215 in 1927 to 1,81,265 in 1928 which meant a fall by about 13.8 per cent. This was however accompanied by an increase in the number of factories from 384 in 1927 to 404 in 1928. The Factory employment reached the lowest level of 1,56,914 in 1933 which was lower by about 18.5 per cent as compared to the previous year. Even this decline in employment was accompanied by a rise in the number of factories from 411 to 425. The number of factories in Bombay increased from 472 in 1935 to 515 in 1936, although total employment actually fell from 1,95,696 to 1,87,869. Usually the periods of decline are characterised by decline in employment, particularly in unprofitable concerns. The paradoxical situation however was that employment declined while number of factories increased. The paradox could be explained by the fall in employment in the cotton textile mills in the face of increase in the number of factories in other industries. Actually the employment in cotton textiles declined by 17.3 per cent as compared to only 4.3 per cent in other industries. The employment provided by cotton mills in 1933 was lower by about a quarter as compared to that in 1932. The other industries were however able to maintain a *status quo* in employment.

The employment in textile factories dwindled by 4.9 per cent in 1936 over that in 1935. The corresponding fall in other industries was very small, *viz.* 1.6 per cent. The intensity of fall in the textile and non-textile industries was thus very different in Bombay. The fact however remains that there was a decline in the non-textile factories during 1928-36 over that in 1926-27. The number of units in the non-textile sector which was 293 in 1927 increased to 310 in 1928 and to 414 in 1936. Thus the paradox of rise in number of factories in the face of decline in employment still remains to be explained.

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TABLE No. 1
Working Factories and Factory Employment in Greater Bombay by Selected Industry Groups, 1923-1957

	Textile	Industries		d Engineering lustries		, Publishing ed Industries		and Chemical oducts	Fo		dustries Severages		All Industries		
Year	No. of working factories	Employ- ment in reporting factories	No. of working factories	Employment in reporting factories	No. of working factories	Employment in reporting factories	No. of working facto- ries	Employ ment in reporting factories	wor	. of king ories	wor repo	ment in king rting ories	No. of facto- ries	Employ- ment in reporting Emplo- factories	Index of yment 1923= 100
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(1	.0)	(1	1)	(12)	(13)	(14)
1923	92	1,52,488	92	30,204	35	5,115	9	759	1	.6	1,0		324	2,03,418	100
1924	92	(75.0) 1,53,069	91	(14.8) 27,237	47	(2.5) 6,117	17	(0.4) 3,123	2	2	(0 1,3	.5)	361	2,03,641	100
		(75.2)		(13.4)		(3.0)		(1.5)			(0	.7)			
1925	93	1,54,364	102	32,861	58	5,866	20	5,471	2	!9		189	387	2,07,998	102
1926	92	(74.2) 1,54,784	104	(15.8) 33,676	59	(2.8) 5,802	21	(2.6) 6,580	2	19		.7)	393	2,12,571	104
1320	32	(72.8)	104	(15.8)	33	(2.7)		(3.1)				.8)	333	2,12,371	104
1927	91	1,53,531	97	32,438	55	5,734	19	6,660	2	27		328	384	2,102,15	103
		(73.0)		(15.4)		(2.7)		(3.2)			(0	.9)			
1928	91	1,27,003	101	30,516	59	6,047	22	6,129	2	26		996	401	1,81,265	89
		(70.1) 1,26,632		(16.8) 30,818		(3.3)		(3.4)				.1)			
1929	89	(69.9) 1,34,482	111	(17.0)	55	5,783 (3.2)	21	6,235 (3.4)		27		. (1.0)	404	1,81,109	89
1930	89	(72.7)	112	(14.3)	58	5,531 (3.0)	22	6,289 (3.4)	2	19	1,957	(1.1)	419	1,85,064	91
1931	86	1,31,700 (73.9)	108	23,617 (13.3)	59	5,632 (3.2)	20	4,879 (2.7)	2	9	1,801	(1.0)	411	1,78,106	88
1932	85	1,47,180 (76.5)	103	21,789 (11.3)	58	5,614 (2.9)	22	5,151 (2.7)	3	80	1,926	(1.0)	411	1,92,418	95
1933	88	1,11,667 (71.2)	117	22,342 (14.2)	60	5,681 (3.6)	23	4,848 (3.1)	2	9	1,756	5 (11)	425	1,56,914	77
1934	82	1,16,723 (70.4)	122	23,763(04.3)	61	<mark>6,2</mark> 46 (3.8)	28	5,969 (3.6)	31	1,89	92 (1.1)	43	2	1,65,863	82
1935	94	1,41,913 (72.5)	132	25,130 (12.8)	62	6,297 (3.2)	30	6,464 (3.3)	33	2,19	92 (1.1)	47	2	1,95,696	96
1936	101	1,34,945 (71.8)	148	25,102 (13.4)	72	6,528 (3.5)	30	5,163 (2.7)	31	2,0	14 (1.1)	51	5	1,87,869	92
1937	107	1,57,260 (73.3)	175	26,014 (12.1)	86	7,129 (3.3)	31	3,426 (1.6)	31	2,73	31 (1.3)	58	5	2,14,406	105
1938	136	1,76,723 (73.5)	267	29,096 (12.1)	183	8,603 (3.6)	29	4,097 (1.7)	82	3,82	22 (1.6)	88	1	2,40,511	118
1939	130	1,54,197 (69.7)	277	30,672 (13.9)	197	8,660 (3.9)	29	3,292 (1.5)	84	4,3	56 (2.0)	939	(1)	2,21,376	109
1940	136	1,53,264 (66.8)	298	30,089 (13.1)	193	8,464 (3.7)	36	3,535 (1.5)	90	4,4	10 (1.9)	998	(4)	2,29,267	113
1941	145	2,04,307 (65.1)	329	46,780 (14.9)	194	8,833 (2.8)	46	4,505 (1.4)	73	6,03	31 (1.9)	1,010	(8)	3,14,045	154
1942	139	2,02,785 (60.2)	362	59,650 (17.7)	196	8,698 (2.6)	51	5,164 (1.5)	95	7,1	75 (2.1)	1,147	(7)	3,36,975	166
1943	153	2,21,752 (59.1)	394	75,224 (20.0)	185	9,237 (2.5)	63	6,782 (1.8)	94	8,00	06 (2.1)	1,251	. (1)	3,75,502	185
1944	165	2,24,308 (57.2)	434	77,852 (19.8)	198	9,393 (2.4)	68	7,606 (2.0)	97	8,49	92 (2.2)	1,387	(7)	3,92,453	193
1945	175	2,25,222 (57.6) 2,14,586	465	77,220 (19.7) 64,040	207	10,156 (2.6)	75	57,61 (1.9)	99	9,1	15 (2.3)	1,481	(1)	3,91,081	192
1946	184	(59.8) 2,19,244	477	(17.9)	210	10,697 (3.0)	75	7,510 (2.1)	94	8,3	40 (2.3)	1,475	(6)	3,58,658	176
1947	192	(61.0) 2,29,594	489	(18.9) 72,025	223	12,147 (3.4)	72	8,123 (2.3)	108		03 (2.1)	1,502		3,59,380	177
1948	215	(60.7)	573	(19.0) 73,903	250	12,771 (3.4)	104	8,366 (2.2)	115	8,03	34 (2.1)	1,811		3,78,440	186
1949	274 439	(59.5)	743	(19.6) 78,693	321	13,935 (3.7)	152	12,429 (3.3)	10/		49 (2.5)	2,309		3,77,056	185
1950	(55) 427	(60.4) 2,34,818	799 (91) 802	(20.9) 73,031		13,253 (3.5)		11,465 (3.0)	(33)		33 (2.1)	2,356		3,76,072	185
1951	(68)	(61.0)	(110)	(19.0) 70,443		13,970 (3.6)		13,467 (3.5)	(35)		94 (2.1)	2,532		3,84,840	189
1952	(92)	(61.6)	(155)	(18.7)	294 (54)			12,460 (3.3)	(34) 173		21 (2.3)	2,571		3,77,460	186
1953	(169)	(63.6) 2,35,052	(229)	(17.5)		12,959 (3.5)		13,129 (3.6)	(68) 215	-	58 (2.1)	2,231		3,66,936	180
1954	430 (70)	(62.2)	784 (95)	(19.1)	299 (25)	13,814 (3.7)	184 (16)	13,216 (3.5)	(28)	8,2	08 (2.2)	2,561	(353)	3,78,055	186
1955	464 (72)	2,50,197 (60.8)	845 (87)	80,041 (195)	307 (23)	14,594 (3.5)	191 (18)	14,275 (3.5)	(42)	8,79	98 (2.1)	2,751	(358)	4,11,395	202
1956	473 (73)	2,46,950 (58.7)	869 (79)	(20.4)	315 (27)	15,051 (3.6)	190 (10)	14,936 (3.5)	(30)		13 (2.4)	2,905	(323)	4,20,991	207
1957	458 (88)	2,43,645 (57.4)	919 (115)	91,405 (21.5)	317 (40)	14,739 (3.5)	195 (15)	15,855 (3.7)	275 (34)	9,99	97 (2.4)	2,960	(440)	4,24,706	209

Notes.—(1) Figures in brackets in column Nos. 2, 4, 6, 8, 10 and 12 refer to non-reporting factories. The total of reporting and non-reporting factories will give the total number of working factories. For the years 1950 onwards information in regard to closed factories is also available. The number of closed factories was as follows: 1950-68; 1951-45; 1952-103; 1953-19; 1954-185; 1955-173; 1956-68; 1957-138. By adding the number of working factories to the number of closed factories, we can arrive at the number of registered factories.

(2) Figures in brackets in column Nos. 3, 5, 7, 9 and 11 refer to the percentage of employment in each industry to total factory employment in each year.

It is noteworthy that the policy of discriminating protection might have changed the condition of several industries. Excluding the employment in government and semi-government factories, railway workshops, gas production, electricity generation, etc., which were mainly public utilities, we find that in the residual non-textile industrial sector, there was

actually an increase in employment from 29,438 in 1927 to 30,385 in 1929, to 33,071 in 1934, and to 35,913 in 1935, with a nominal decline in 1936. The level of employment was at its lowest in 1931. Thus, the period 1927-30 was one of comparative stagnation in the residual non-textile industries. The year 1931 was however the worst. There was some revival in 1932. The employment position was static in 1933 though the number of non-textile factories increased to 302. From 1934, the employment in residual non-textile industrial sector revived rapidly, viz. 33,071 in 1934 to 35,913 in 1935 with a corresponding rise in factories from 315 to 342, respectively. The number of units in this sector increased by 35, though the employment therein fell by 718. The year 1937 witnessed a growth in employment to 38,479 accompanied by rise in number of factories to 438. "It will thus be observed that the overall employment figures conceal the divergent changes that were occurring in various industries. The increase in the number of units in the face of an overall decline in employment was really in response to mildly expansionary tendencies prevailing in certain industrial sectors of the city."(D. T, Lakadawala, op. cit., p. 624)

(II) VOLUME OF FACTORY EMPLOYMENT

Factory employment registered a growth of more than 100 per cent over the period of 35 years from 1923 to 1957. It rose from 2,03,418 in 1923 to 4,24,706 in 1957. Besides 20,089 workers were estimated to be employed in the non-reporting factories in 1957. Thus actual factory employment was 4,44,795 in 1957 which meant an increase by 118.7 per cent over that in 1923. It is however noteworthy that since the level of employment was at its peak during the war, the level of employment in 1957 was higher by only 13.3 per cent over that in 1944.

The period of 1923-37 was characterised by conditions of near-stagnation in the Bombay industries. There was a nominal increase in employment in 1926. The index of employment in 1926 stood at 104 with 1923 as the base year. It was from 1927 that industrial employment suffered a decline which was at its bottom in 1933. The index slumped down to 89 in 1928 without any change in 1929. There was some revival in 1930 which was short-lived. The index which had touched the 88 mark in 1931 registered another revival to 95 in 1932. The level of employment was the lowest in 1933 with the index number falling to 77 and actual employment falling by 46,504 over that in 1923. Though the fall in employment was not uniform in all the industries, the cotton textile industry was the worst hit. The variations in the general index were highly sensitive to the cotton textile industry as it provided the largest size of employment as compared to other industries.

There was marked improvement in the employment situation in 1934 and 1935, the index rising to 95 in 1935. It slumped to 92 in 1936. Thus, during the period 1927-36 the level could never rise over the 1926 level. The year 1937 witnessed a rise to 105 which reached the high mark of 11.8 in 1938. There was however a fall to 109 in 1939. The upheavals in employment were directly related to those in employment in cotton textile.

The Great World War accelerated the growth of employment and the insteadiness in the earlier period was converted into a consistently rising trend. The index of employment which was 113 in 1940 rose steeply to 154 in 1941. This was definitely the highest rate of growth during the period of 35 years under study. In absolute terms, employment rose by 84,778 in 1941 over that in 1940, which meant an escalation by 36.7 per cent in a single year. The upward trend continued till 1944 when the index attained the peak level of 193. It remained unsurpassed for many years to come. Factory employment stood at 3,92,453 in 1944 which was higher by 78,408 or 25 per cent as compared to the level in 1941. Thus, employment in Bombay increased at the rate of about 40,000 per annum over the four year period of 1941 to 1944. There was a very small decrease in the index (192) in 1945, the subsequent year recorded a sudden slump in the index to 176. In absolute terms, employment slumped by 33,795 in 1946 over that in 1944. The situation was almost similar in 1947. This stagnation in industry and employment was a natural corrollary of the cessation of the war. There was a sudden collapse in the cotton textile industry in 1946, which threw about 11,000 workers out of employment therein, while the number of mills was reduced by nine.

The index numbers of factory employment in 1948 and 1949 increased to 186 and 185, respectively. Employment in reporting factories was 3,76,072 in 1950 which was higher by 1,46,805 or 64 per cent as compared to 1940. The tremendous increase in the population of Bombay during the decade 1941-51, *viz.* from 16,95,168 to 28,39,270, is attributable to the increase in migration of workers to Bombay in search of employment.

The employment picture in the period 1950-53 lacks in clarity because a larger number of factories did not furnish reports. The situation from 1955 to 1957 can be assessed better because the Chief Inspector of Factories prepared estimates of probable employment in the non-responding factories from 1954 onwards. On the basis of the estimates of the Chief Inspector of Factories for the years 1954 to 1957, the employment in non-responding factories has been computed for the entire period of 1950-57, as under (D.T.Lakadawala,op.cit):—

Year	Employment in reporting factories	Estimated employment in non- reporting factories	Total	Index of employment 1923=100	Index of employment 1950=100
1	2	3	4	5	6
1950	3,76,072	12,753	3,88,825	191	100
1951	3,84,840	16,809	4,01,649	197	103
1952	3,77,460	20,553	3,98,013	196	102
1953	3,66,936	31,005	3,97,941	196	102
1954	3,78,055	16,758	3,94,813	196	102
1955	4,11,395	11,785	4,23,180	208	109
1956	4,20,991	8,656	4,29,647	211	110
1957	4,24,706	20,089	4,44,795	219	114

It is evident from the above statistics that the index number of employment surpassed the 1944 level only in 1951. It however declined by one count and remained stable in 1952 to 1954. In 1955, it gained a height of 208, and further rose to 211 in 1956 and to 219 in 1957. However the rate of growth in the period 1950 to 1957 though impressive, compared rather unfavourably with that during 1940-50. It should be admitted that the acceleration in employment during the war period was an uncommon phenomenon. The growth in employment from 1954 to 1957 was characterised by consistency and steadiness.

(III) PATTERN OF VARIATION IN FACTORY EMPLOYMENT IN BOMBAY, 1923-57

The statistics of variations in employment in textile industries; metal and engineering industries; printing, publishing and allied industries; chemicals and chemical products; food industries and total factory employment in Bombay furnished earlier in this chapter are self-evident. It is however of great interest to furnish some remarks on three broad periods, namely, the war-time expansion, the post-war decline and the period from 1953 to 1957.

As stated earlier, the factory employment in Bombay increased by 84,778 in 1941. The share of the textile industry was as much as 51,043 in this increase, while employment in other industries increased by about 33,000 *i.e.* from 76,003 in 1940 to 1,09,738 in 1941. Thus, while the textile industry registered an increase of 33 per cent, the non-textile sector expanded by 44 per cent. Factory employment increased further by 78,408 during 1942-44. The contribution of the textile industry to this increase was only 20,001, while the employment in the non-textile sector increased by 58,407. This represents a growth of 53 per cent in 1942-44 period over that in 1941. Employment in the non-textile industries thus increased from about 67,000 in 1939 to 1,68,000 in 1944. It appears that the metal and engineering industries exhibited rapid growth in this period, which is evident from the fact that employment therein increased from 30,672 in 1939 to 77,852 in 1944. This was really an impressive rate of growth from any standards. Although the impetus of growth on account of war-time boom ceased in 1945, the metal and engineering industries had firmly established themselves as one of the major industrial sectors in Bombay. The employment provided in the chemical industrial sector which was still in its infancy increased from 3,292 in 1939 to 7,706 in 1944. The factories engaged in army clothing the ordnance factories and the dockyards, which were defence oriented industries, also registered substantial advance. In fact, the industries in other sectors also contributed to the expansionary phase.

In the nature of things, there was a sudden recession in factory employment, by 32,423, in 1946 which could be attributed to the stagnation after the war. The stagnation was more marked in the metal and engineering industries as the employment therein receded by 13,180. The fall in employment in cotton mills was comparatively less severe, *viz.* by 10,636. The recession in the metal and engineering sector continued till 1949. In 1950, there was a short-lived revival and the size of employment therein exceeded the 1944 level. But it was followed by a relapse, and it was only in 1955 that employment exceeded the 1944 and 1950 level. This sector of industries has been steadily progressing since then.

The third period from 1953 to 1957 witnessed fluctuations in the textile industry which was fraught with inherent problems due to lack of modernisation and replacement of machinery. The chemical industries showed a slowly rising trend, while employment in metal and engineering advanced from 72,000 in 1954 to 91,000 in 1957.

(IV) STRUCTURE OF FACTORY EMPLOYMENT, 1923-57

The constraints of changes in classification of industries from time to time make it rather difficult to compare the structure of employment in one period with that in another. A broad comparison is however possible by rearranging the data relating to earlier years from some of the industries with the 1950 classification. The comparative data from 1923 to 1957 for the five major groups of industries in Bombay, namely, textile industries, metal and engineering industries, printing and publishing industries, chemical and chemical products, and food industries, except beverages, are furnished in Table No. 1.

These five groups of industries which accounted for 93.2 per cent of total factory employment in 1923, employed about 88.5 per cent of factory workers in 1957. It can be deduced that the miscellaneous industries progressed more during

the period.

The textile industry continued to be the largest single industrial sector throughout the period under review. It however tended to decline in importance; though Bombay is still regarded as the home of the cotton textile industry. It provided employment to about 75 per cent of the industrial labour in 1923, which percentage declined to 70 per cent in 1939, to 60 per cent in 1946 and to about 57.4 per cent in 1957. It is interesting to note that though it enjoyed buoyancy during the war period, its share in the industrial employment in Bombay declined during the same period.

The importance of the other groups of industries increased relatively, the principal recipient being the group of metal and engineering which provided employment to 21.5 per cent of the industrial labour in 1957 as against 14.8 per cent in 1923. "Their rise was principally a war and post-war phenomenon." Its share in industrial employment was 19.8 per cent in 1944, and though the cessation of war gave it a blow, it progressed in subsequent years. It accounted for more than 21.5 per cent of the industrial employment and ranked the second largest industrial sector in 1957 in Bombay.

The printing and publishing industry employed 3.5 per cent of the workers in 1957 as against 2.5 per cent in 1933. The growth of this industry in terms of percentage growth in employment, *viz.* by one per cent, over a period of 35 years is by no means impressive. Chemicals and chemical products showed much greater progress. The food industries except beverages improved their position from less than one per cent at the beginning of the period to 2.4 per cent in 1957. "It may be concluded that the old established industries such as textiles were relatively declining while the non-textile industries in general were growing in importance." (*D. T. Lakadawala, op. cit., p. 634.*)

(V) SIZE OF FACTORIES

The average size of a factory as per the employment criterion is an important aspect in the study of industries. As per this criterion, every factory provided employment to 143 persons on an average in Bombay in 1957. A factory in the metal and engineering industry provided employment to 100 persons on an average. The changes in the pattern in this respect from 1951 to 1957 are given below:—

Size of Reporting Factories and Employment in them, 1951 and 1957

	1951	-	1957	
Size-Group	Reporting factor	ies	Reporting facto	ries
	No. Employment		No.	Employment
1	2	3	4	5
Less than 10	307 (12.1)	2,082 (0.5)	306 (10.3)	2,324 (0.5)
10-19	713 (28.2)	10,058 (2.6)	957 (32.3)	13,358 (3.1)
20-49	707 (27.9)	22,272 (5.8)	872 (29.5)	27,799 (6.5)
50-99	361 (14.3)	24,139 (6.3)	363 (12.3)	25,146 (5.9)
100-499	319 (12.6)	63,571 (16.5)	347 (11.7)	72,978 (17.2)
500-999	57 (2.3)	52,231 (13.6)	34 (1.1)	24,186 (5.7)
1,000-4,999	61 (2.4)	1,67,557 (43.5)	70 (2.4)	1,82,462 (43.0)
5,000 and above	7 (0.3)	42,930 (11.2)	11 (0.4)	76,453 (18.0)
Total	2,532 (100.0)	3,84,840 (100.0)	2,960 (100.0)	4,24,706 (100.0)

It is evident from the above statistics that the proportion of small-sized factories (i.e. those employing less than 100 persons) had remained almost unchanged, with a marginal increase from 82.5 per cent in 1951 to 84.4 per cent in 1957. The proportion of medium-sized factories (employing 100 to 999 workers) declined from 14.9 per cent to 12.8 per cent. The proportion of large-sized factories employing 1,000 and above remained unchanged. It must however be noted that the proportion of employment in large-sized factories increased from 54.7 per cent in 1951 to 61 per cent in 1957. This increase was at the cost of the medium-sized factories wherein the proportion of employment declined from 30.1 per cent to 22.9 per cent.

Besides the factories registered under the Factories Act, there was a considerable number of small units which were registered under the Bombay Shops and Establishments Act. A large proportion of these units were engaged either in production of consumer goods and ancillary parts required by factories. In the nature of things, this was essentially a self-employing sector and the average size of the unit was rather small.

WARD-WISE DISTRIBUTION OF FACTORIES AND EMPLOYMENT

Location of industries in a metropolis like Bombay is an important aspect in the study of industrial development and related problems of the city. The pattern of location of industries in Bombay is very defective. The city appears to be the result of blind growth with no control on the location of industry in the past. Consequently it is found that in

predominantly residential areas about one-fourth of the buildings are of non-residential type. (C. Rajagopalan, op. cit.)The location of the industrial zone in the centre of the city has proved to be highly undesirable. The most important residential areas of the city are situated immediately to the north and south of the industrial quarter. Since the predominant character of the wind in Bombay is north-north-east and south-south west-west, the smokes, fumes and vapours emanating from these industries tend to exert a deleterious effect on the health of the residents on either sides. (Ibid.)

There has been a wide realization that the haphazard growth of this city has to be stopped and that a strategy of scientific town planning has to be launched. The gravity of the situation demands a purposeful strategy for relieving the congestion and prevention of further haphazard growth. It is therefore of great interest to study the existing pattern of ward-wise location of factories and to measure the degree of concentration of industries in various wards. With this purpose in view, we have based our narrative of ward-wise distribution of factories on the study by the Bombay University School of Economics. (D. T. Lakadawala, op. cit.) This is quite an indepth study and there is no parallel to it, particularly for the period covered by it (1956). The ward-wise distribution of factories and employment were worked out on the basis of addresses of factories as in the registers of the Chief Inspector of Factories in the year 1956. The classification of wards was as under:—

Ward	Areas
Α	 Colaba, Fort, Esplanade.
В	 Mandvi, Chakla, Umbarkhadi, Dongri.
C	 Khara Talao, Kumbharwada, Bhuleshwar, Crawford Market, Dhobi Talao, Fanaswadi.
D	 Khetwadi, Girgaum, Chowpati, Walkesliwar, Mahalaxmi.
E	 Tardeo, Mazagaon, Tarwadi, Nagpada, Kamathipura, Byculla.
F	 Parel, Sewri, Naigaum, Matunga, Sion.
G	 Dadar, Mahiin, Prabhadevi, Worli, Chinchpokli, Love Grove.

Ward-wise Distribution of Factories and Factory Employment, 1956

Ward		No. of Factories	Employment
А		211	14,750
		(6.5)	(3.4)
В		162	6,634
		(5.0)	(1.6)
С		231	4,591
		(7.2)	(1.1)
D	as	489	23,016
		(15.2)	(5.4)
E		656	91,548
		(20.4)	(21.3)
F		326	1,00,994
		(10.1)	(23.4)
G		408	1,27,289
		(12.7)	(29.6)
	Suburbs	745	60,825
		(23.0)	(14.2)
	Grand Total	3,228	4,29,647
		(100)	(100)

The data refer to the working factories i.e. reporting as well as non-reporting factories. Employment data are inclusive of estimated employment in non-reporting factories.

(I) NUMBER OF FACTORIES

Of the 3,228 working factories in Bombay, 2,483 or about 77 per cent were distributed in the seven wards of the city and island and 745 or 23 per cent were located in the suburbs. The highest concentration of the factories in the city area was in the E ward where 656 or 20.4 per cent of the total factories were localised. F and G wards housed 326 and 408 factories or 10.1 and 12.7 per cent of the factories, respectively. Factories did not find a congenial home in A, B and C wards. Of these A ward housed mainly offices of government and commercial firms and banks, while B and C Wards had a number of shops and establishments. These three wards accounted for only 18.7 per cent of the factories. The average size of a factory in A, B and C wards was much smaller as compared to E, F and G wards. Thus in A, B and C wards the factories were not only fewer but also smaller. This is attributable to the fact that these wards are typically office, shop and commercial areas where the industrial units found it extremely difficult to obtain the required space at competitive rates. The chief industrial centres of Bombay were the D, E, F and G wards where as many as 1879 factories were concentrated. They accounted for about 60 per cent of the factories in Bombay. Among these wards, the highest concentration of industries was in E ward with 656 factories.

"This overall pattern of location held true for almost all industries, taken individually. Conspicuous exceptions were however provided by the tobacco, rubber and rubber products, non-metallic mineral products and cinema studios, where more than half of whose units were located in the suburbs. Printing, publishing and allied industries were another exception. About 60 per cent of the units in this group were equally distributed between A and D wards. Of 211 factories situated in A ward, as many as 104 or nearly half of the factories were printing, publishing and allied industrial units. Thus the typical industry of A ward was printing, publishing, etc. This different pattern of concentration of the printing and publishing industry may be explained largely by the fact that proximity to offices and trading concerns which are its chief customers is an important factor in the locational pattern of this industry and that many important offices and trading concerns were mainly located in A ward. Units engaged in leather and leather products and the products of petroleum and coal were mostly located in F ward. The miscellaneous industrial units were fairly well distributed among the various wards of the city, but showed a good deal of concentration in the suburbs where 35.5 per cent of the units were situated. Suburbs also claimed a fair share of the textile units amounting to 32.6 per cent or 178 of the total 546 textile factories. Lastly, we may draw attention to an almost complete absence (in 1956) of gins and presses, footwear and other wearing apparel group of industries, printing presses, leather and leather products industries and laundries in the suburbs. This then is the broad pattern of distribution of industrial units in Greater Bombay. However, in order to obtain the true picture of concentration, it is necessary to examine the distribution of factory employment as between various areas." (D. T. Lakadawala, op. cit.p 668)

(II) FACTORY EMPLOYMENT

It can be observed that the pattern of distribution of employment differed from that of the factories. The areas of concentration of factories were not necessarily the areas of concentration of employment and vice versa. The lack of corelation between the distribution of factories and employment will necessitate a rather detailed study of the size of factories in various areas of Bombay which will be taken up subsequently. The broad features of the distribution of employment reveal some interesting facts. The suburbs which were not highly industrialized in 1956 as they are today, had 23 per cent of the factories providing employment to 60,825 or 14 per cent of the total factory employment in Bombay (viz. 4,29,647). It is evident from this fact that the factories in the suburbs must be comparatively small in size. The suburbs housed mainly factories engaged in the manufacture of chemicals and chemical products, small textile units, basic metal industries and miscellaneous industries. Most of these units were established either during or after the World War II. Of the industries in the suburbs, the textile units provided employment to 17,382 workers, which were followed by transport, the equipment manufacturing factories with 6,753 workers; non-metallic mineral products units employing 5,808 workers; metal products (except machinery) units with 4,721 workers and machinery units with 4,596 workers in 1956. The other factories in the suburbs were very small in size.

In the city island, the largest proportion of factory employment was found in the G ward where as many as 1,27,000 or 29.6 per cent of the factory workers were employed. It may be recalled that only 12.7 per cent of the factories were located in the G ward. It is thus obvious that the factories in G ward were of a larger size. This is attributable to the fact that this ward comprising Dadar, Mahim, Prabhadevi, Worli, Chinchpokli and Love Grove housed a large number of cotton textile mills which employ a large number of workers. The 111 textile units ward provided employment to 1,00,535 workers. The textile units were followed by those engaged in manufacture of transport equipment, which were 12 in number employing 7,872 workers. The higher proportion of employment per factory in the G ward was attributable mainly to the preponderance of cotton textile mills and transport equipment factories. It is clarified that the development of drugs and pharmaceutical factories in this ward was mainly in the years subsequent to 1956.

In regard to the magnitude and the proportion of factory employment therein, the E and F wards were also important centres of industrial activity. The E ward comprising Tardeo, Mazagaon, Tarwadi, Nagpada, Kamathipura and Byculla housed 656 or 20.4 per cent of the factories in Bombay. They provided employment to 91,548 or 21.3 per cent of the factory workers in Bombay. This ward had 115 textile factories employing 59,601 workers. It was the textile sector which immensely contributed to the importance of this ward as a centre of industry. The textile sector was followed by 13 factories of transport equipment which provided employment to 6,260 workers.

As between the E and F wards, the F ward exhibited a higher degree of industrialization in regard to factory employment, though not in regard to number of factories. The F ward comprising Parel, Sewri, Naigaum, Matunga and Sion had 326 or 10.1 per cent of the total number of factories which provided employment to 1,00,994 or 23.4 per cent of total factory workers. Besides being a highly industrialized ward, the average size of factories in these localities was higher than that in E ward, and almost equal to that in G ward. The average employment per factory in F and G wards was to the extent of 311. The higher percentage of employment in F and G wards was mainly due to the preponderance of cotton textile mills in these areas. The F ward contained 46 textile units which provided employment to 61,535 workers. It is obvious that the textile units were large sized ones. They were followed by factories manufacturing transport equipment which, though six in number, employed 12,358 workers.

The highest concentration of industries was in E, F and G wards which accounted for nearly 75 per cent of the total factory employment, though they had only 43 per cent of the total number of factories. These areas provided a congenial home to 1,380 factories providing employment to 3,19,831 workers. Thus, 3,19,831 workers of the total factory workers in Greater Bombay (4,29,647), were in the industries in these three wards.

A, B, C and D wards were comparatively unimportant adding only 11.5 per cent of the total. Among these four wards D ward was slightly important as it accounted for only 5 per cent of the total factory employment, although 15 per cent of the factories were located in that area. Almost all the industries were fairly well represented in D ward. There I was, thus, a lack of correspondence between the proportion of factories and employment. This was still more striking in case of C

ward, where 7.2 per cent of the factories accounted for the insignificant proportion of total employment amounting to only 1.1 per cent.

It is noteworthy that the overall pattern of distribution of factory employment was affected by the location of the textile mills which accounted for 58 per cent of the total employment. A remarkable feature of the study of location of industries in Bombay is the heavy concentration of textile employment in E, F and G wards which accounted for nearly 90 per cent of the textile employment in 1956. G ward alone accounted for 40 per cent of the textile employment. It was mainly a textile area as nearly 80 per cent of the factory workers employed therein were working in textile factories. Industries other than textiles showed a much less concentration, although even therein E, F and G wards accounted for slightly-more than 50 per cent of the employment. The suburbs had nearly 25 per cent of the employment in non-textile

In E, F and G wards a majority of the workers were employed in textile industries, while in the other areas of the city a majority of the workers were employed in non-textile industries. The share of textile employment in A, B and C wards was insignificant. It may therefore be concluded, "that the disproportion between the distribution of factories and factory employment as between various areas which we noted earlier must be the consequence of distribution of textile industries which are essentially large-scale in nature "(D. T. Lakadawala, op; cit, p. 668)

(III) AVERAGE SIZE OF FACTORIES

Judged from the criterion of employment, an average factory in the city island having 148 workers was much larger in size than its counterpart in the suburbs employing 82 workers. The average factory in Greater Bombay employed 133 persons in 1956. The difference in regard to textile factories was particularly striking whereas the city factory was nearly six times in size in comparison to the textile factory in suburbs. This can be explained by the fact that most of the oldest cotton mills which had a scope for gradual expansion were concentrated in the city. In contrast to textile factories the size of metal and engineering, food and other factories was larger in the suburbs.

In the city area, an average factory in F and G wards employed the largest number of workers, namely 310 and 312, respectively. The smallest averages of 20, 41 and 47 were found in C, B and D wards, respectively. It is also interesting to note that the highest averages in almost all industries except printing and publishing were found in F and G wards. It can therefore be deduced that larger sized factories found a more convenient location in these areas, possibly due to availability of cheaper and ampler space, particularly in the initial stages of development of industries in Bombay.

In 1941; the industrial structure of Salsette was comprised of the following industries:—-

Bandra .. Cigarette factory, Dyeing works, Chemical works and Tanneries.

Andheri Stone quarrying, Biscuit and Peppermint factory, Button factory, Soap factory, Tobacco factory, Canvas shoe factory, Match factory and manufacture of moulded ware.

Chakala Stone quarrying and Fire works.

Malad ... Manufacture of rubber toys,

Kandivli Manufacture of umbrella handles.

Kanheri Hosiery works. .. Bhayandar Salt manufacturer

kurla .. Spinning and Weaving mills, Match factory and manufacture of carpets. Ghatkopar Canvas belt factory, Photo litho art press and Camphor factory. .. Machinery repairing works, Paper and board mills and Metal works. Hariyali

Photo litho and metal printing works, Grinding and machinery works and Cement works. Mulund

Kopri Stone quarrying. Naupada Match factory.

In the course of less than two decades following 1941, both the number and variety of industries in Salsette had grown remarkably. According to the records of the Chief Inspector of Factories, there were in all 926 factories in Salsette in June, 1958. Of these 28 factories had been closed down and 187 did not respond. The total number of responding factories for which employment data are available, therefore, worked out to 711. These 711 factories employed, on an average, 65,000 workers daily.

The rapid increase in the number and variety of industries can be ascribed to the effects of the Second World War. In spite of the large area of Salsette, its industries scarcely amounted to three-tenth of that of the City, while the industrial workers formed a still smaller proportion.

As regards the relative importance of the different industries, the highest percentage of industries and industrial workers, viz. 20.7 per cent and 26.2 per cent respectively, belonged to the textile group. Next in order of descending importance ranked non-metallic mineral products (except products of petroleum and coal), transport equipment, chemicals and chemical products, metal products (except machinery and transport equipment), basic metal industries, machinery (except electrical machinery), products of petroleum and coal, food except beverages, electrical machinery, apparatus, appliances and supplies, rubber and rubber products, which together accounted for 58 per cent of the industries as well as of industrial workers.

The two industries, viz. processes allied to agriculture and tobacco were absent in Salsette. Factories of beverages, furniture and fixtures, leather and leather products (except footwear), water and sanitary services and personal services were a few in number. They were hardly one per cent of the total industries and industrial workers.

Thus the most important industries of the Salsette were textiles, chemicals, rubber, minerals, metals, machinery and transport equipment. These industries are usually classified as heavy industries, as they are noisy, noxious and as a rule require large ground space. Since these heavy industries accounted for as much as 80 per cent of the total industrial establishments and five per cent more of the industrial workers, the general complexion of Salsette's industrial structure could be said to be predominantly heavy.

TABLE No. 2 NUMBER OF INDUSTRIES AND WORKERS IN SALSETTE, 1958

Classification	No. of factories	No. of employees	Average size of a factory.
Processes allied to agriculture			
Food (except beverages)	41	2,170	53
Beverages	2	58	29
Tobacco			
Textiles	147	16,906	115
Footwear, wearing apparel and made-up textile goods	4	106	26
Wood and cork (except furniture)	13	736	56
Furniture and fixtures	2	49	24
Paper and paper products	6	608	101
Printing, publishing and allied industries	9	280	31
Leather and leather products (except footwear)	2	61	30
Rubber and rubber products	31	1,439	46
Chemicals and chemical products	79	4,989	63
Products of petroleum and coal	9	2,418	268
Non-metallic mineral products (except products of petroleum and coal)	99	7,975	81
Basic metal industries	31	3,651	118
Metal products (except machinery and transport equipment)	32	4,054	127
Machinery (except electrical machinery)	33	3,309	100
Electrical machinery, apparatus, appliances and supplies.	20	1,887	94
Transport and transport equipment)	20	6,083	304
Miscellaneous industries	25	1,488	59
Electricity, gas and steam	3	145	48

Classification	No. of factories	No. of employees	Average size of a factory.
Water and sanitary services	1	26	26
Recreation services (cinema studios)	14	1,334	95
Personal services (laundries, dyeing and cleaning).	1	30	30
Unclassified	87	5,176	59
Total	711	64,978	91

Source.-Office of the Chief Inspector of Factories, Bombay.

PICTURE OF INDUSTRIAL GROWTH

As stated earlier Bombay is the industrial and commercial metropolis of India. It occupies a unique place in the industrial economy of India as diverse industries have grown and expanded here. The genesis of many industries in India is traceable in this city. A major sector of industries in Maharashtra is concentrated the metropolis, while the growth in the peripheral areas and in Pune belt is mainly an expansion of the growth pole in, Bombay, It is therefore very interesting to study the growth of industrialisation in this city. The Annual Survey of Industries conducted by the Government of India which is the most authoritative source of data enables us to analyse the important characteristics of industries. As per these statistics there are about 6,048 factories registered under the Factories Act which provide employment to 6,21,495 persons in Greater Bombay. The total value of their output is as high as Rs. 43,49,58.02 lakhs, the value added on manufacture beingn Rs.9,42,11.69 lakhs. The important characteristics of industries in Greater Bombay district as per the Annual Survey of Industries, 1973-74 and 1975-77 are given below. (The statistics are supplied the Directorate of Economies and Statistics, Government of Maharashtra) The figures reveal the annual averages in the respective survey periods.

Maharashtra State Gazetteers

TABLE No. 3 IMPORTANT CHARACTERISTICS OF INDUSTRIES (ESTIMATED) IN GREATER BOMBAY AS PER THE ANNUAL SURVEY OF INDUSTRIES, 1973-74 AND 1975-77

(Figures of Rs. in lakhs)

ltem	1973-74	1975-77
1. No. of estimated factories	5,874	6,048
2. Fixed capital (Rs.)	11,32,43.89	8,24,35.32
3. Working capital (Rs.)	6,89,58.14	6,84,82.80
4. Capital investment (Rs.)	20,51,28.74	18,80,89.37
5. Outstanding loans (Rs.)	N.A.	9,86,40.96
6. Man-days worked (No.)	N-A.	19,00,58,453
7. All workers (No.)	5,53,418	4,80,970
8. All employees (No.)	6,74,797	6,21,495
9. Wages to workers (Rs.)	2,61,60.19	3,10,36.43
10. Total emoluments (Rs.)	405,41.29	5,15,14.43
11. Fuel consumed (Rs.)	N;A.	1,85,52.71
12. Material consumed (Rs.)	N.A.	25,77,44.33
13. Other inputs (Rs.)	N.A.	5,61,85.49
14. Total inputs (Rs.)	22,81,19.97	33,24,82.53
15. Plant & Machinery (Rs)	N.A.	13,02,44.83
16. Value of products (Rs.)	N.A.	37,29,14.83
17. Other output (Rs.)	N.A.	6,20,43.19
18. Total output (Rs.)	32,00,09.79	43,49,58.02
19. Depreciation (Rs.)	N-A.	82,63.80
20. Value added (Rs.)	8,29,77.42	9,42,11.69
21. Factory payment (Rs.)	N.A.	1,50,57.19
22. Net Income (Rs.)	NA.	7,91,54.50

COTTON TEXTILE INDUSTRY

The cotton textile industry is the prime industry of Bombay which has contributed immensely to the economic prosperity and social advancement of this metropolitan city of India. The enormous expansion of Bombay's industry and trade and her prosperity have mainly been dependent upon the spinning and weaving factories and on their impact on the economic welfare of her inhabitants. The history of the textile industry of Bombay is, in fact, the history of economic growth of Western India, and her prosperity.

The mill industry in Bombay ever since its inception about 130 years ago has remained the foremost indigenous industry

of India. It provides employment to about two and a half lakhs of persons in the city, at present. Bombay alone employs a little less than half of the industrial workers employed in the cotton mill industry of India. Besides its potentialities as regards employment, it encouraged the growth of many ancillary industries, such as textile machinery manufacture, engineering workshops, packaging units, manufacture of dye-stuffs and chemicals and many others. Its role in the development of this city is more or less of a pioneering one, which has accelerated the growth of many other industries It also provides an impetus to the establishment of many commercial concerns, managing agents and financial institutions. The Bombay Stock Exchange was once highly dominated by this industry. According to one estimate, the cotton textile industry, accounts for nearly 20 per cent of the value of industrial production in Bombay.

The factors contributing to the localisation of the cotton textile industry in Bombay are economic, geographic, as also social. Bombay, a fine natural harbour oh the western sea-board, afforded excellent marine transport facilities to other ports in India and those in African, Asian and European countries. The important factor which helped the initial concentration of the industry in Bombay was that the city enjoyed excellent transport relations both in regard to raw materials kind consumers markets." Owing to its insular position it enjoyed the advantages of cheap sea-freights on import of machinerymill stores and other accessories. Besides, being the important junction of trunk railways. Bombay Was connected well with the interior markets of raw cotton and piece goods; The policy of the; railways to charge lower rates of freight from and/to the ports increased the transport advantages of Bombay over, other inland towns, In the early days of the cotton mill industry the to yarn with China offered additional incentive for concentration of the industry in the city.

The growth of the industry in Bombay also owes immensely to a pioneering class of men with amazing commercial carrier, vast financial resources and considerable experience of business management and organisation. Men like Cowasji Davar, Maneckji Petit, Din shaw Petit, Jamshetji Tata, Khatau Makanji, Morarjee Goculdas and a galaxy of wealthy Parsis and Bhatias ventured on mill building with conspicuous success. (Most of the promoters of the industry did not have higher University education. But they had an enterprising career and most of them took part in public affairs and municipal government.) A number of indigenous bankers and banking institutions have played an important role in the growth of the industry. The infrastructure which was so very abundant in Bombay was not easily available at other centres. Technical and professional services too were easily available, as also plentiful supply of cheap and skilled labour from neighbouring districts of Konkan, Satara and Sholapur. The humid climate of Bombay offered yet another advantage as in spinning and weaving processes the fibre becomes more tenacious due to moisture. The availability of raw cotton from the hinterland in Maharashtra and Gujarat also helped growth of the industry. A fortutious combination of all these factors led to the phenomenal development of the industry in Bombay till the twenties of this century.

A study of the locational trends in the industry in India reveals the relative decline in the predominant position of Bombay and the relative spreading out of industrial activity in more and more interior regions. The reasons for the dispersal of the cotton textile industry are as under. The initial dispersal of the industry was mainly due to the development of means of transport in the interior regions. It was only after a network of railways that many new centres sprang up. Some of the new centres were also more favourably located in regard to raw materials and consumers' markets, than the original centre like Bombay. The cotton mills, therefore sprang up in many new centres. Another contributory factor was the shift of the industry from high to low labour costs. The development of hydro-electric resources in the country particularly Tamil Nadu, Kamatak and Punjab has given considerable impetus to cotton manufacturing in those areas. The high cost of labour at Bombay is a discouraging factor for future expansion of the industry. Since 1925, certain tendencies are operating which show that the industry is gradually shifting from old centres like Bombay to centres of low wage rates. The other deglomerating tendencies began as a result of, (i) increase in land values and rents, (ii) rise in cost of living, (iii) increase in internal cost of transport, and (iv) increase in taxes and water rates. In Bombay the number of mills declined from 82 in 1925 to 65 in 1958. (Mr. M. Mehta, Structure of Indian Industries.) The operation of deglomerating tendencies has, by increasing the cost of production, considerably weakened the competitive position of Bombay. The industry has tended to move to more favourable locations.

The history of the organised cotton textile industry in Bombay is traceable to the year 1851 wherein Mr. Cowasji Nanabhai Davar, an enterprising Parsi, projected a cotton spinning factory. The Bombay Spinning and Weaving Mill, as it was called, was erected at Tardeo, now in the heart of the city and was inaugurated on February 22nd, 1854. (Another date of the inauguration of the Mill is given as February 7,1856.) The enterprise proved a great success and Mr. Davar felt encouraged to establish another mill in proximity to the first one. The second venture, known as the Bombay Throstle Mill, was undertaken in 1857, (It went into production in 1859.) and was later renamed as Alliance Mill in 1864. The success of this undertaking induced Mr. Maneckji N. Petit to erect the Oriental Mill in 1858 with 30,000 spindles. The third venture was so prosperous that it was converted into a joint-stock company and considerably expanded with new machinery including 50,000 spindles and 1,000 looms. It was in 1860 that the foundations of the managing agency system in cotton textile industry in Bombay were laid. The Oriental Mill was the first enterprise to introduce the managing agency system.

Another stalwart in Bombay's business was Sir Dinshaw Maneckji Petit who floated the Maneckji Petit mill in 1860 with 60,000 spindles and 1,000 looms. This venture also yielded handsome returns which induced further industrial enterprise not only among the Parsi community but also among the wealthy Bhatias who undertook mill establishment with good success. The next years witnessed the projection of nearly a dozen mills, and the industry spreaded to other parts of Bombay Presidency. Sir Dinshaw Petit himself started another mill *viz.*, the Victoria Mill in 1860, which was a spinning mill. The other mills started during this period were as under:—

Royal Mill (1860), Coorla Mill (1860), Bombay United (1860), Great Eastern (1860), Arkwright (1863), Albert (Parel) (1867), Alexandra (1869) and Morarjee (1870). The thirteen mills mentioned in above paras employed about 8,100 workers and had 2,91,000 spindles and 4,100 looms.

The enterprise of the Bombay men of amazing commercial career initiated enormous growth in the industry and trade of not only the Presidency but also of the country. For this India is highly indebted to the early pioneers of the industry. (A few of them may be mentioned as: Davar, Maneckji Petit, Dinshaw Petit, Nusserwanji Petit, Bomanji Wadia, Dharamsey Punjabhoy, Merwanji Pandey, Jamshetji Tata, Tapidas Varajdas, Keshawji Naik, Khatau Makanji, Mangaldas Nathubhai, James Greaves, George Cotton, Morarjee Goculdas, Muncherji Banaji, Moolji Jetha, Thackersey Moolji and many others.) The demand for the Bombay cloth and yarn was increasing mainly because of its cheapness as compared to the Lancashire industry. The cheapness of the products was attributable to lower wages, cheap raw cotton from the hinterland, abundance of coal and plenty of capital with the Bombay businessmen.

The progress of the mill industry in Bombay was temporarily arrested in 1861 which condition continued for nearly ten years. This was mainly on account of the American Civil War which broke out in April 1861, and due to the abnormal demand for Indian cotton and the fabulous prices it fetched in England. The civil war interrupted supply of raw cotton to England from America which resulted into unprecedented spurt in cotton trade in Bombay. The traders in the city invested all their capital in cotton exports. The value of cotton exports increased from 5.25 millions in 1860 to 80 millions in 1865. The American Civil War and its aftermath convulsed the commercial life of Bombay with an unprecedented intensity. The super abundance of wealth due to, what was termed the Share Mania stimulated wilder enterprises in other directions, such as, backing, financial associations, shipping, land and building business, etc. The Back Bay Reclamation Project beat every other venture.

The end of the civil war in 1865 however initiated the most widespread economic ruin and general disaster in the history of the city. It was a period of near stagnation for cotton mills. The prices of cotton fell with an appalling rapidity, and securities dropped heavily. It was only by the end of 1870 that normal conditions returned, and the textile industry experienced conditions of revival. Large concerns like the; Alexandra and the Morarjee Goculdas Mills were started about this period. They were followed by 15 mills during the next five years. (The history of cotton mills upto 1927 is based on Bombay Industries: Cotton Mills, 1927 by Mr. S. M. Rutnagur)

It was also this time that Jamshetji Tata emerged as an enterprising progressive industrialist who had a tremendous influence on the growth of the mill industry and the economical working of factories. He started the Alexandra Mill in 1869 and later the Central India Spinning and Weaving Company. The Alexandra Mill soon became one of the most efficient units in Western India, and was sold at a large profit.

Mr. Tata was the first Indian industrialist to introduce a system of fair deal to labour in this industry. He was the first to introduce bonus and provident fund for his employees, besides other labour welfare measures. In course of time, he set up more mills in Western India. To set aside chronology for the time being, he started the Swadeshi Mill in Bombay in 1886 for production of finer varieties of textile with long staple cotton. The Tatas established another famous mill, viz., the Tata Mills, in 1915 after Jamshetji Tata's death.

Morarjee Goculdas established a cotton mill after his name in 1870. This was followed by many mills. Thackersey Moolji floated the Hindoostan Spinning and Weaving Mill Company in 1873 with an authorised capital of Rs. 12,00,000. The Sassoon Spinning and Weaving Mill was started in 1874 by David Sassoon and Company. The Khatau Makanji spinning and Weaving Mill, another well-known unit in Bombay was established in 1875. It is no small tribute to the sagacity and, foresight of the founders of these enterprise that some of the houses like the Thackerseys and the Khataus have not only completed one hunted years of their productive existence but have also remained under the same management. The Morarjee Mill and the Coorla Mills also celebrated their birth centenaries, although their management has changed hands since incorporation.

In those days, initiative, desire and integrity marked the development of textile industry in Bombay. The mill-owners made profits but did so by fair means and hard work.

The progress of the industry in Bombay during the first twenty years of its existence (upto December 1875), was as under:—

Period	No. of . mills	Spindles	Looms	Employment	Paid up Capital
1855-4870 1870-1875	13 15	2,91,000 4,61,600		8,100 5,450	NA 3,38,58,000
Total in 1875	28	7,52,600	7,780	13,550	3,38,58,000

PROGRESS BETWEEN 1875 AND 1885

The progress of the industry in this period was particularly rapid, there being 21 new mills by the end of 1885, The third group of new mills comprised the spinning factories Started by Greaves, Cotton and Co., which were the first in Bombay to be managed on the basis of a commission on profits for the Agents. They were quite profitable for the investors. Binshaw Maieckji Petit's firm made further additions to their mills in this period, while Thackersey Moolji and Co. started two new factories which elevated them to the status of the largest millowners in the Hindu Community.

In all 23 new mills were projected between 1875 and 1885, while two were closed. The city thus possessed a total of 49 mills in 1885 as under:--

	Mills	Spindles	Looms	Employment	Paid-up capital
In 1875 1875-85	28 21	7,52,600 5,94,800	7,780 4,230	13,550 28,000	3,38,58,000 1,41,04,060
Total in 1885	49	13,47,400	12,010	41,550	4,79,62,000

PROGRESS FROM 1885 TO 1895: THE ADVENT OF RING SPINNING

The Bombay mills used to do spinning on the mule or fly throstle hitherto. However, introduction of the Ring spinning frame in this period was a revolutionary measure in the industry in respect of economy of costs. The Greaves, Cotton and Co., which took initiative in this respect was followed by many new mills which adopted this system, while some of the older mills also replaced the mules or throstles. These included the Empress, New Empress, Connaught, Howard and Bullough, Imperial, James Greaves, and Leopold with a total of 283,000 ring spindles which brought handsome returns.

It was during this period that the Revolving Flat Card was being perfected to supersede the Roller Card. Many other innovations introduced in Lancashire encouraged Bombay millowners to renew their plants, while new mills were projected under fresh enterprise. Consequently, the third period in the history of mills in Bombay 1885-95, brought in further addition of 21 mills, making 70 in all with an aggregate of 2,124,000 spindles, 20,220 looms and 75,750 workers. These new mills included those floated by Currimbhoy Ebrahim and Sons, Sassoon J. David and Co. and E. D. Sassoon and Co., which worked with marked success.

SLOW PROGRESS BETWEEN 1895 AND 1905

The progress of the industry was retarded by acute financial depression, as also by plague and famine. The companies which were not managed economically and efficiently either went into liquidation or changed the Agents. The bubonic plague of 1896-98 frightened the workers who migrated to their native place to escape the havoc of the epidemic. The famine which ensued added to the adverse conditions. The industry however showed conditions of revival in 1903. This period of ten years was marked by the establishment of some mills which have lived up to their reputation to the

present day which include Gold Mohur (1896), Globe (1896), Kohinoor (1896) and Century (1898). Though 16 new mills including the ones mentioned above were started, four old mills were closed during this period, leaving a total of 82 mills in Bombay in 1905. The industry could not escape the ravages of the international depression in textile industry from 1900 to 1905.

JAPANESE COMPETITION: 1905-1915

The unpalatable memories of the plague and depression in the industry deferred the entrepreneurs from venturing in cotton mill building between 1905 and 1915. Japan, which had undertaken establishment of mills from 1900, began competing with Indian yarn in Chinese markets. This had an adverse impact on the Bombay textile industry. Investment was channelised for improvement of existing machinery rather than for establishment of new mills. Though eight new mills were started in this period, four old ones were closed, leaving 86 mills in existence in 1915. The honourable additions to the mills in this period were as under: Finlay (1906), Spring (1908), Pearl (1913), Simplex (1915) and Tata (1915).

BETWEEN 1915 AND 1925

The outbreak of the First World War in 1914 and the stoppage of imports of machinery from Lancashire to India prevented establishment of new mills in Bombay for many years. The conditions for establishment of new mills remained adverse even after cessation of hostilities in 1918. The cost of land and construction was exhorbitant. There was also a demand recession after 1918. While Bombay was exporting yarn to China on a very large scale upto 1914, the exports fell rapidly on account of Japanese competition. Surprisingly enough, Japanese yarn and piece-goods were imported in Bombay.

As per the Administration Report of the Bombay Presidency for 1923-24, " Since 1917, China has been practically a closed market for Indian piece-goods owing mainly to the expansion of the indigenous textile industry and to the rigour of Japanese competition."

The Premier mills projected by Cuirimbhoy and Sons in 1921 were the only addition to Bombay mills in this period. Five of the old mills were closed during this period. At the same time large extensions to existing plants were made which accounted for the heavy increase in the number of spindles and looms. The considerable rise in the paid-up capital in this period was due to conversion of private concerns into joint-stock companies and to the transfer of existing factories at enhanced capital cost during the boom period of 1920-22.

POSITION IN 1925

During the span of 70 years from 1855, 97 cotton mills were started in Bombay city. But many of them were destroyed by fire and closed, while in others the machinery was sold, leaving a total of 82 spinning and weaving mills in Bombay city including Coorla mill.

The summary of the progress during period of ten years is given below :—

It is noteworthy that there was an enormous increase in machinery in the mills after 1905. Large extensions were made in existing factories during 1915-25. There was a huge rise in spindles and weaving machinery. Competition from Japan and other trade conditions compelled Bombay millowners to search new markets and spin higher counts and weave a greater variety of cloth. Quality of the cloth was improved by bleaching, finishing and dyeing.

The old mills which faced a disadvantage due to paucity of weaving and other machinery were also renovated with looms, finishing plants and modern improvements and processes. The Bombay cotton mills, in 1925, were in no way inferior to the Lancashire textile factories in their general equipment and manufacturing resources. (S. M. Rutnagur, op. cit)

As a matter of fact 97 mills had been established up to 1925, though there were only 8 surviving units. This was because many of them had been destroyed by fire or closed and dismantled. Excepting a few, the pioneering units turned out to be successful. However, the plague of 1896-98 and the famine which ensued depressed the industry miserably. The concerns not managed with efficiency and economy were the worst hit. The industry lost the Chinese markets on account of keen competition from Japan, which affected profits. The situation was aggravated by mismanagement and even corruption. The protests from shareholders and financial difficulties of the Agents compelled the closure or reconstruction of many undertakings. The loss of the Chinese market however brought about a material change in the character of the textile industry, which was hitherto a predominantly coarse yarn spinning industry. More looms were installed to turn out the excess yarn into cloth.

A mention must be made of the activities of the Bombay Millowners' Association, founded in 1875. It was actively concerned with the interests of the textile industry. The British Government recognising its importance and influence had allotted some seats to it in the Legislative Assembly, the Legislative Council and other corporate bodies in Bombay. It took an active part in the legislative and other measures connected with the working of the cotton mills.

The Bombay mills had to face prolonged strike from September 15, 1925 to December 1, 1925. Every mill was affected, a huge labour force of nearly 1.5 lakh striking work.

The Bombay Millowners' Association experienced very anxious periods during the trade depression of 1924-25. It directed itself to intensive efforts for the removal of the cotton excise duty which was repealed after 18 months of agitation. The industry was faced with competition of Japan, and the Association did a great deal of work by pleading its case for protection. The consequent gain for the industry was the appointment of the Textile Tariff Board by the Government of India in July 1926.

The Association pointed out to the Board the handicaps of the industry on account of exchange rates and employment of female labour in Japanese mills. The Indian industry, as advocated by the Association, required additional protection equivalent to 13 per cent and further additional protection to enable the Bombay mills to make the necessary allowances for depreciation to plant and machinery. The efforts of the Association bore some fruits though the basic problems were not solved by the Tariff Board.

It is very pertinent to mention a few characteristics of the Japanese competition in the third decade of this century. The Japanese selected particular types of goods which were manufactured in Bombay, and lowered their prices. The exchange rates of rupee *vis-a-vis* China and Japan put the Indian exports at a great disadvantage in 1924-25 gradually depreciating Japanese exchange coupled with the appreciation of the rupee exchange enabled the Japanese to compete with the Bombay mills successfully. The economical cost of production of Japanese cloth was also detrimental to the Bombay industry.

The Great Depression of 1929-30 which had a devastating impact on the industry and trade in almost all western countries and the British Empire however did not have had an adverse effect on the cotton textile industry of Bombay. Though one mill was closed in 1929, there was no appreciable fall in regard to number of spindles installed. In fact there

was rise in the dumber of looms and quantum of raw cotton consumed by the mills in 1929, 1930 and 1931 over that in 1928. The industry appears to have enjoyed better conditions in 1927. But the depression did not appear to have slumped cotton mills even in comparison to 1930. The year 1934 appears to be adverse in the history of the industry in regard to fall in number of spindles, looms and consumption of cotton. The Bombay mills had made a loss of about Rs. 237 lakhs in 1930 due to competition by Japanese goods. The Bombay Millowners' Association suggested, in July 1932, an immediate increase in both the specific and *ad valorem* duty on grey cotton goods imported from Japan, and an *ad valorem* duty on all other classes of Japanese cotton goods as measures for according protection to the industry. The Government of India accepted these suggestions in 1933.

The industry in Bombay showed a declining trend in 1939 in regard to the number of mills in operation, which declined to 68 in that year, to 65 in 1940 and 64 in 1941. Some of the mills preferred to switch over to other productive avenues and closed while others were destroyed by fire. This was however not a real decline in the growth of the industry. Except for some aberrations in 1940, the cotton textile industry experienced buoyancy throughout the period of the Great World War of 1939-45. There was an unprecedented demand for cloth in the Indian market as imports had virtually been restricted to meet the needs of the war effort. Huge orders were placed by the Government to clothe the armed forces of the Indian Army. The industry geared itself to help the British Government and to reap the harvest of profits. Consumption of raw cotton increased immensely, though imports of long staple cotton virtually ceased, due to the war. The consumption of cotton by mills in Bombay increased from 8.13 lakh bales (of 392 lbs.) in 1940 to 11.48 lakh bales in 1941; 13.10 lakh bales in 1942; 14.84 lakh bales in 1943; 14.52 lakh bales in 1944 and to 14.93 lakh bales in 1945. The installed capacity of the mills was fully utilised. The cessation of hostilities in 1945 however retarded the growth of the industry and there was a sharp decline. With the recession in demand production was curtailed and installed capacity was under-utilised. The inherent structural drawbacks of the cotton textile industry in Bombay were exposed immediately after the war. It was mainly a labour intensive industry. There was hardly any research and development project. The machinery was out-dated, while replacement was virtually impossible during the buoyancy in the war period. Due to lack of replacement, they showed signs of ageing, over-utilised as it was during the listlessness of the war

The ailments of the old cotton mills of Bombay were conspicuously experienced after the war. This trail of events reached its culmination in 1951, resulting in a heavy decline in production and employment. The partition of India in 1947 was another great blow to the industry, as indeed it was to the Indian economy as a whole. From times immemorial, India had enjoyed the advantage of self-sufficiency in cotton, except a small quantity of long staple varieties. With partition of India, the supply of raw cotton of good quality was adversely affected.

While it was clear that the relatively weak and marginal units required an accelerated pace of modernisation, the financial constraints made it impossible for them to undertake the desired modernisation. (Final Report of the Task Force on Textile Industries, Planning Commission of India, 1972.) Besides, financial constraints, the modernisation and replacement programme was handicapped by shortage of textile machinery from domestic sources. "While the availability of finances with the mills and with the lending institutions represents one of the limiting factors affecting the size of a practicable modernisation programme for the industry, the other constraint of machinery supply is perhaps even more important." (Ibid.)

The inevitable result was that a number of old cotton mills which were not managed efficiently with due care for rationalisation and replacement of machinery fell 'sick' after Independence. The ailment of obsolete and relatively inefficient machinery made them 'sick'.

In the period 1955 to 1959 and again 1964 to 1971, the cotton textile industry passed through a difficult phase on account of the shortage of raw material, power and some recession in demand. The lower capacity utilisation on account of inadequate supply of cotton and difficult working capital position, coupled with low machine productivity resulted in the closure of a large number of mills. (*Ibid.*)

In view of the large scale unemployment and decline in production, Government was obliged to take over the management of mills which were closed or were facing imminent closure under the Industries (Development and Regulation) Act, 1951. The incidence of sicknessand closure was more after 1964-65. This made it imperative on the part of the Government of India to establish the National Textile Corporation in 1968 to undertake management of the ailing factories. The first task of the management in the public sector was to undertake a thorough measure of renovation and replacement of obsolete machinery and nationalisation of production. The following mills in Bombay were nationalised under the Sick Textile Undertakings (Nationalisation) Act, 1974. The amount of compensation payable in respect of them is mentioned against them:—

Mills Amount Rs.

 1. Digvijay Spg. and Wvg. Mills
 ... 75,65,000

 2. Edward Mill
 ... 65,28,000

 3. India United Mills (six units and one dye work)
 ... 12,40,000

 4. New Kaiser Hind Mill
 ... 48,70,000

5.Seksaria Cotton Mill .. 49,67,000

"Most of the sick mills have an excessive labour force which has contributed to higher labour cost per unit of output of yarn and cloth. The question of retrenchment of surplus labour is evidently a difficult one in view of the scarcity of employment opportunities in the economy." (Report of the Task Force on Textile Industries)

The textile mills remained by far the biggest employer of labour in manufacturing, accounting for half of all working force in manufacturing in 1961. Its pre-eminence was more conspicuous in earlier times. "During the sixties, the relative decline of cotton mill employment turned into an absolute decline. There was stagnation in output as well as replacement of men (and especially women) by machinery." (Heather Joshi and Vijay Joshi, Surplus Labour and the City, p. 63)

The statistics given below for changes in the average levels of outputs and inputs of the Bombay cotton mills between 1958-60 and 1968-70 indicate that the ratios of capital and material inputs in relation to labour have increased. (Bombay Millowners' Association, Annual Report, 1971)

Cotton Mills in Bombay : Index of Inputs and Output, 1968-70 (1958-1960 = 100)

Average Daily working Spindles	Looms	Cotton Consumption. (Bales)	Daily Employment	Yarn (tons)	Cloth (metres)
108	95	96	89	93	84

The quality of output of cloth improved between 1961 and 1970. This is evident from following figures of qualities of cloth produced by Bombay cotton mills:—

	1961	1970	1961	1970
Quality	(Thousand	metres)	(Percentage of Total)	
All	1,371	1,120	100	100
Coarse	241	136	18	12
Medium	990	674	72	60
Fine and superfine	140	311	10	28

The latter phenomenon, known as rationalisation, is probably in part a case of pure factor substitution in response to higher wage costs, but probably it also reflects changes in technique in response to changing product-mix and also technical advancement. Improved techniques tend to involve increase in capital intensity and so do new types of cloth, synthetics and blended fabrics, as well as better quality cotton textiles.

While the cotton industry of the country as a whole was loosing ground on the world market, the decline in textile employment was "more pronounced in Bombay than in the rest of the country. This was presumably because of the greater weight of high quality cloth in the output of Bombay cotton mills and because of the high level of wages in Bombay in relation to other parts of the country." (Heather Joshi and Vijay Joshi, op. cit) The growth of employment was much faster in a newer industry like chemicals and pharmaceuticals. Other branches of manufacturing expanded employment at a rate comparable with other sectors of production. "It should be pointed out that the skill-intensity of expanding industries such as petrochemicals, pharmaceuticals and electronics is probably significantly higher than that of the older, stagnating textile sector." (Ibid)

A significant feature of the cotton mill industry of Bombay has been the fall in the employment of women from about 11,000 in 1961 to 6,500 in 1971 which means a decline by about 41 per cent. The women employed in the mills were mainly unskilled and illiterate reelers and winders, which jobs were becoming increasingly automatic. Women's jobs are not only confined to a few occupations, but they also find it difficult to compete with men. (Ibid)

TREND IN SIZE OF COTTON MILLS IN BOMBAY

A study in the recent trends in the size of industrial units in the cotton mill industry of Bombay over the period 1905 to 1959 by Dr. M. M. Mehta reveals many interesting features. According to this study there was a preponderance of smaller units and a comparative absence of bigger spinning units in the earlier period. In 1905, 54 out of 73 units had less than 40,000 spindles. Thereafter there was a fall in the number of these smaller units having less than 40,000 spindles. Many of them were either scrapped, dismantled or absorbed by bigger units. The period of decadence of smaller units coincided with the period of Great Depression. "There has been a relative spreading out of units into somewhat larger dimensions." The average size of spinning section increased from 32,000 spindles in 1905 to 58,000 in 1959.

There is a tendency on the part of the units to grow out of their humble beginnings and to expand as the financial resources permit. The periods of rapid expansion generally coincided with periods of great industrial activity, and *vice versa*. The large expansion in the size of units from 1951 to 1959 is partly accounted for by the various development programmes under the five year plans, and partly by large concessions, protective duties, ban on imports, increase in demand and an assured home market.

In regard to the weaving section of the cotton mill industry of Bombay during 1905-59 period Dr. Mehta's study reveals that there was preponderance of the smaller units and a comparative absence of bigger units in earlier years. In subsequent years the smaller units saw extinction while the bigger ones expanded. During the early period, it was the expansion of spinning that brought about expansion of weaving. In subsequent period, the expansion of weaving section of textile industry brought about an expansion of the spinning section. The tempo of expansion is higher in the case of weaving than in the case of spinning. This is because of firstly, the changing character of the Bombay cotton industry from a predominantly spinning to combined spinning and weaving type, and secondly, the changes in the character of output and diversification of production, which required a higher proportion of loomage to spindleage.

Dr. Mehta's study of the trends in size of combined spinning-weaving factories during the period 1906-59 suggests that "a tendency is operating, though indistinctly, in the earlier period and more marked in the later years, for spindles and looms to combine within a certain range of ratios. The ratio of 40 spindles to one loom is becoming more and more pronounced though it will, in individual cases, vary according to the degree of specialization and the character of output. Production of finer varieties will involve a higher proportion of spindleage to loomage than production of inferior varieties."

"The movement towards specialization, has not made any appreciable progress during the last fifty years. Most of the units still operate on quite a wide range of counts and weave many varieties of cloth to meet the diverse requirements

of the Indian market. The average ratio between spindleage and loomage in each individual unit, therefore, exhibits narrow range of variation. This feature one would hardly observe in case of Lancashire industry where each individual unit specializes in the production of particular counts of yarn and particular varieties of cloth." (M. M. Mehta, op. cit, pp. 38-39.)

The typical mill in Bombay had 500 to 1,000 looms and 20,000 to 40,000 spmdles in 1921. By 1959, the size of the typical unit expanded considerably. In 1959, the typical spinning-weaving mill in the city had a range of 750 to 1,250 looms and 30,000 to 60,000 spindles. The expansionist tendency is thus clearly observable.

Variation in Profit Rates: It is interesting to observe the existence of the disparity in the inter-unit rates of profits. The inter-unit variations are of considerable dimensions in Bombay textile industry. The average rates of profit declared during the period 1938-57 varied from 4.72 in the case of the Colaba mill to 22.65 in the case of the Simplex mill, the majority of the mills having declared profits at the average rates varying from 5 to 20 per cent. The variations in rates of profits in some of the cotton mills in Bombay during the period 1938-55 are given below (M. M. Mehta, op. cit.):—

Mill	Average rate of profit declared, 1938-55		Mill	Average rate of profit declared, 1938-55	
1. Colaba	4.72	12.	Phoenix	17.31	
2. India United	6.16	13.	Bombay Dyeing	17.36	
3. Elphinstone	7.38	14.	Gold Mohur	17.81	
4. Edward Textiles	8.87	15.	Western India	18.17	
5. Coorla	9.02	16.	Morarjee Goculdas .	18.37	
6. New Great	11.37	17.	Swan	19.12	
7. Apollo	11.40	18.	Indian Manufacturing	19.80	
8. New City	13.10	19.	Hindoostan	20.25	
9. Dawn	15.33	20.	Century	20.68	
10. Finlay	15.48	21.	Kohinoor	21.69	
11. Swadeshi	16.88	22.	Simplex	22.65	

It is noteworthy that the Kohinoor and Century Mills were then of exceptionally large size with more than 95,000 spindles. The disadvantages arising from their locations could be more than off-set by the countervailing economies arising from the expansion in the scale of output, greater efficiency and management, and the degree of financial, managerial and administrative integrations. These factors important as they are contributed very substantially in sustaining the competitive power and efficiency of the Bombay industry. It therefore follows that the endurance, tenacity and competitive power of less favourably situated units depend, in the long run, on their ability to counteract some of the diseconomies arising out of less favourable locations by superior organising ability. (M. M. Mehta, op. cit.)

Besides inter-unit variations in profit rates, there were wide interregional variations as between Bombay and other centres of the cotton textile industry in India. A detailed study of these various centres is not intended here. It suffices to say that the mills in Bombay fared comparatively better than those in other regions.

Variation in Costs: The nature and extent of inter-regional differences in the cost structure of the cotton industry is a very important aspect which can throw a light on the propensity to shift manufacturing activity to some centres with low costs of production. The Indian Tariff Board Report on Cotton Textile Industry, 1932, (For details see the Report,) has attempted to give the percentage of the component items of manufacturing costs like labour, fuel and power, water, stores, etc. to the cost of production in some important centres of the cotton mill industry in India. The Report of the Board did not take into account the cost of raw material as also the "margin of profit". The explanation furnished by the Tariff Board in excluding the cost of raw cotton was that the prices of raw cotton varied from time to time, and that the individual mills mixed the different varieties of cotton in different proportions.

Dr. Mehta has compiled the percentage of each component item of cost like raw materials, wages, stores, power and fuel etc., to the total value of goods sold, thus taking into account both the distributive costs as also the margin of profit. The results of compilation pertaining to Bombay, Sholapur and Nagpur are given below:—

TABLE No. 4 REGIONAL VARIATION OF COSTS IN THE COTTON MILL INDUSTRY OF MAHARASHTRA, 1948

	Bombay	Sholapur	Nagpur
Number of units examined	3	2	2
ltems	%	%	%
Raw Materials	36.20	36.20	41.50
Stores	9.73	5.65	6.90
Power and Fuel	1.77	2.90	2.85
Wages and Salaries	31.50	32.15	28.65
Interest	1.33	0.10	0.55
Depreciation	1.63	1.05	1.65
Managing Agents' Allowances and Commission.	0.50	1.15	1.20
Selling Expenses	5.90	0.45	1.60
Other Expenses		5.95	4.05
Total Costs	88.56	85.60	88.95
Profit	11.44	14.40	11.05
Total Sales	100.00	100.00	100.00

Broadly speaking, it can be said that the balance of advantage in respect of the supplies of raw cotton is against Bombay. It should however be remembered that these differences are not solely due to the locational advantages or disadvantages of different centres in regard to supplies of raw cotton, but to the differences in the character and quality of output, and the proportion in which several varieties of cotton are mixed in order to produce the desired quality of output. Indeed, the data available for study would not admit of any definitive inference or conclusion. (M. M. Mehta, op. cit.)

The concluding remarks of the Indian Tariff Board are worthy of consideration. "Our examination of the cost of production in various centres shows that for the greatest disability from which Bombay suffers is its high cost of labour. It is also under substantial disadvantages in regard to cost of fuel and power, cost of water and higher local taxation, but these are rather more than off-set by advantages in regard to the cost of stores, of insurance and of office expenses. So far as costs of production are concerned, it is in labour costs that is to be found the main reason why the depression in the industry has been felt so much more acutely in Bombay than it has elsewhere." (Indian Tariff Board Report on the Cotton Textile Industry, 1927, p. 123).

The progress of the cotton textile industry which is not only the oldest but also the largest and the most important industry of Bombay is reviewed from 1885 to 1975, in tables Nos. 5, 6, 7 and 8.

The position of the cotton textile mill companies in Bombay in regard to their total amount of paid-up capital, number of spindles installed, average number of spindles at work in the first shift, doubling spindles installed, number of looms installed, average number of looms at work in the first shift, approximate quantity of cotton consumed, average number of workers employed daily in all shifts and total number of working days can be assessed from table No.5.

TABLE No. 5 Cotton Mills in Bombay since 1885

				Average number of	Approximate quantity o cotton consumed		
Year	Mills	Spindles	Looms	hands employed daily	Cwts. (Bales of 112 lbs.)	Bales (392 lbs.)	
1	2	3	4	5	6	7	
1885	49	13,47,390	12,011	41,545	13,73,743	3,92,498	
1890	70	18,95,660	13,785	59,139	22,26,819	6,36,234	
1895	69	21,23,892	20,217	75,740	28,53,879	8,15,394	
1900	82	25,36,891	22,215	72,914	26,06,800	7,44,800	
1905	81	25,60,916	28,073	92,924	37,53,582	10,72,452	
1910	89	28,24,046	41,931	1,04,550	34,44,203	9,84,058	
1915	86	29,94,367	51,846	1,11,924	35,91,175	10,26,050	
1920	83	29,64,526	60,634	1,40,208	33,50,025	9,57,150	
1925	82	34,56,233	72,266	1,53,009	34,81,562	8,94,732	
1930	81	34,30,733	76,697	N.A.	30,71,222	8,77,492	
1935	74	29,90,088	68,385	N.A.	30,98,382	8,85,252	
1940	65	27,48,644	65,177	N.A.	28,47,075	8,13,450	
1941	64	27,89,080	65,292	NA.	40,17,888	11,47,968	
1942	66	28,19,832	66,120	N.A.	45,85,119	13,10,034	
1943	66	28,31,328	66,269	N.A.	51,95,617	14,84,462	
1944	65	28,34,052	66,179	N.A.	51,81,930	14,51,930	
1945	65	28,03,406	66,164	N.A.	52,26,340	14,93,240	
1946	65	28,32,530	65,948	1,90,795	47,68,701	13,62,486	
1947	65	28,50,870	65,836	2,11,347	39,44,724	11,27,064	
1948	65	28,66,150	65,880	2,01,083	43,03,040	12,29,440	
1949	65	29,04,138	65,238	2,09,508	41,80,442	11,94,412	
1950	65	29,27,162	65,163	2,00,135	35,21,455	10,06,130	
1951	65	29,39,162	65,384	1,96,363	32,39,761	9,25,646	
1952	65	29,20,509	65,379	1,97,900	36,46,685	10,41,910	

V	Year Mills		Laama	Average number of	Approximate cotton co	
fear	Milis	Spindles	Looms	hands employed daily	Cwts. (Bales of 112 lbs.)	Bales (392 lbs.)
1	2	3	4	5	6	7
1953	65	30,17,049	65,628	2,04,274	43,53,643	12,43,898
1954	65	30,26,044	65,671	2,07,179	44,09,587	12,59,882
1955	66	31,01,672	65,904	2,03,391	44,49,557	12,71,302
1956	66	31,13,620	64,467	2,12,762	44,41,297	12,68,942
1957	66	31,60,954	64,134	2,12,608	46,71,086	13,34,596
1958	65	32,12,650	64,426	2,00,446	43,83,295	12,52,370
1959	65	31,69,777	64,335	1,91,335	43,47,742	12,42,212
1960	65	31,93,699	63,407	1,94,398	42,55,349	12,15,814
1961	63	32,25,441	62,880	1,97,404	44,45,952	12,70,272
1962	62	32,09,560	61,720	1,97,922	46,79,262	13,36,932
1963	62	32,35,928	62,186	1,93,303	44,87,049	12,82,014
1964	62	33,54,872	63,273	1,97,269	47,26,008	13,50,288
1965	62	34,29,491	63,255	1,92,786	46,82,167	13,37,962
1966	62	35,21,411	63,713	1,86,915	43,01,983	12,29,138
1967	59	35,60,730	64,134	1,85,601	41,33,472	11,80,992
1968	59	*35,53,790	62,909	1,74,975	42,38,573	12,11,020
1969	59	*35,56,702	63,057	1,70,766	41,33,990	11,66,717
1970	59	*35,10,578	62,450	1,74,167	42,36,996	12,10,570
1971	59	*35,35,114	62,897	1,72,208	38,70,734	11,05,924
1972	59	*35,81,220	62,961	1,74,666	42,00,786	12,00,225
1973	58	*35,46,488	62,066	1,78,236	43,52,675	12,43,622
1974	58	*35,17,962	62,093	1,75,138	40,79,783	11,65,652
1975	58	*35,52,754	62,564	1,67,819	39,08,700	11,16,691

^{*}Excludes doubling spindles but includes waste spindles,

TABLE No. 6 Progress of Cotton Textile Mill Industry in Bombay

Year	Average wo (1st S	rking daily hift)	Cotton consumed bales of 392	Production of		Average Number of hands employed daily
	Spindles	Looms	lbs			all shifts
				Yarn (000kgs)	Cloth (million meters)	
1	2	3	4	5	6	7
	Year ending 31s	st August		Year ending 31st D	ecember	Year ending 31st August
1941	2,465,515	62,688	1,147,968	206,083	1,372	
1942	2,457,782	61,141	1,310,034	207,644	1,257	
1943	2,578,875	63,171	1,484,462	232,071	1,470	
1944	2,633,694	63,863	1,451,980	230,354	1,545	
1945	2,587,850	65,390	1,493,240	229,686	1,475	
1946	2,625,770	62,312	1,362,486	185,837	1,238	190,795
1947	2,646,600	60,968	1,127,064	170,426	1,138	211,347
1948	2,682,245	61,452	1,229,440	194,965	1,342	201,083
1949	2,574,850	60,096	1,194,412	175,577	1,182	209,508
1950	2,667,556	61,209	1,006,130	134,125	959	200,135
1951	2,655,637	60,874	925,646	165,253	1,253	196,363
1952	2,688,330	61,690	1,041,910	173,777	1,297	197,900
1953	2,758,193	62,645	1,243,898	193,147	1,431	204,274
1954	2,800,581	62,405	1,259,882	192,445	1,438	207,179
1955	2,779,397	62,074	1,271,302	199,910	1,459	203,319
1956	2,867,952	61,693	1,268,942	196,290	1,469	212,762
1957	2,872,308	60,745	1,334,596	208,985	1,508	212,608
1958	2,802,895	59,497	1,252,370	189,767	1,370	200,446
1959	2,804,418	58,531	1,242,212	192,627	1,344	191,335
1960	2,877,061	58,442	1,215,814	189,475	1,347	194,398
1961	2,934,480	58,703	1,270,272	206,844	1,371	197,404
1962	2,978,221	58,464	1,336,932	200,844	1,304	197,922
1963	2,947,675	57,880	1,282,014	201,832	1,271	193,303

1964	3,056,452	59,333	1,350,288	205,755	1,288	197,269
1965	3,057,566	58,751	1,337,762	195,474	1,243	192,786
1966	3,057,605	57,756	1,229,138	184,556	1,143	186,915
1967	3,173,630	58,545	1,180,992	171,226	1,085	185,601
1968	3,024,682	55,946	1,196,287	182,340	1,168	174,975
1969	2,986,147	55,520	1,166,717	175,518	1,137	170,766
1970	3,115,153	57,128	1,210,570	171,389	1,120	174,167
1971	3,079,294	56,513	1,159,523	159,523	1,120	172,208
1972	3,068,943	56,114	1,200,224	178,610	1,203	174,666
1973	3,133,531	57,038	1,243,622	182,732	1,169	178,236
1974	2,964,009	54,861	1,165,652	166,229	1,125	175,138
1975	2,696,889	52,869	1,116,691	160,889	1,074	167,819
1976	2,874,811	52,298	1,232,539	169,169	1,069	174,027
1977	2,902,790	54,386	1,086,175	138,466	896	170,286
1978	7,868,288	54,855	1,013,490	153,471	928	167,273
1979	2,756,909	53,152	1,056,081	148,801	863	164,187
1980	2,765,038	54,119	1,177,158	166,120	899	165,126

Note.—Columns 1, 2, 3 and 6—Figures taken from the Association's Mill Statements. Columns 4 and 5—Figures of production of yarn and cloth taken from" Indian Textile Bulletin " published by the Office of the Textile Commissioner, Bombay.

Production was at a standstill in all the mills in Bombay City and Island for about 2 months from 14th August to 2nd week of October in 1950 and for 41 days, from 30th December 1973 to 9th February 1974.

TABLE No. 7
Production of Cloth by Textile Mills in Bombay City

(Figures in million metres)

Year	Conver	Med	ium	Fina	Super	Tatal		
fear	Coarse	Lower	Lower Higher		Lower Higher		Fine	Total
1	2	3 4		5	6	7		
1967	165	213	459	46	202	1,085		
	(15.2)	(19.7)	(42.3)	(4.2)	(18.6)	(100.0)		
1968	171	248	467	58	224	1,168		

		Med	ium		Super	
Year	Coarse	Lower	Higher	Fine	Fine	Total
1	2	3	4	5	6	7
	(14.6)	(21.2)	(40.0)	(5.0)	(19.2)	(100.0)
1969	136	208	542	52	199	1,137
	(12.0)	(18.3)	(47.7)	(4.5)	(17.5)	(100.0)
1970	135	174	500	67	244	1,120
	(12.1)	(15.5)	(44.6)	(6.0)	(21.8)	(100.0)
1971	123	204	472	72	249	1,120
	(11.0)	(18.2)	(42.1)	(6.4)	(22.3)	(100.0)
1972	155	259	528	53	208	1,203
	(12.9)	(21.5)	(43.9)	(4.4)	(17.3)	(100.0)
1973	172	278	416	91	212	1,169
	(14.7)	(23.8)	(35.6)	(7.8)	(18.1)	(100.0)
1974	143	256	499	75	153	1,125
oro	(12.6)	(22.7)	(44.4)	(6.7)	(13.6)	(100.0)
1975	143	249	448	64	170	1,074
	(13.3)	(23.2)	(41.7)	(6.0)	(15.8)	(100.0)
1976	155	252	446	67	149	1,069
	(14.5)	(23.6)	(41.7)	(7.3)	(13.9)	(100.0)
1977	219	293	560	44	172	1,288
	(17.0)	(22.7)	(43.5)	(3.4)	(13.4)	(100.0)
1978	129	221	462	48	68	928
	(13.9)	(23.8)	(49.7)	(5.2)	(7.4)	(100.0)
1979	126	230	406	40	61	863
	(14.6)	(26.6)	(47.0)	(4.6)	(7.2)	(100.0)



TABLE No. 8 Cotton Mills in Bombay, 1975

	Name of Mill	Paid-up capital (Rs in lakhs)	No of spindles installed (Total)	Average No of spindles at work	Doubling spindles installed	No of looms installed (Total)	looms in the sh	je No of at work e fir£t nift 7	Approximate quantity of Cotton consumed (Bales of 180 Kgs) 8	Average No of workers employed daily(AH shifts)	Total No of days worked from 1st Sept 74 to 31st Aug 1975
1	Jupiter Mills No 2* (formerly Hind Mills No I)		82,292	53,869	7,628	1,325		185	21,474	3,440	288
2	Apollo Mills*		51,276	31,095	3,488	902	6:	38	13,583	2,034	286
3	Bombay Dyeing and Mfg Co (Spring Mills)	433.69	1,34,368	1,22,047	12,912	2,160	2,1	105	57,668	5,477	301
4	Bombay Dyeing and Mfg (Textile Mills)		15,232 71,688	2,213 61,917	23,280	1,610	1,1	169	25,422	6,792	303
5	Bradbury Mills	35.00	48,912	35,268	2,316	840	6:	23	13,319	2,275	344
6	Century Spinning and Manufacturing	709.76	1,44,444	1,23,380	7,336	3,042	2,9	933	77,980	9,899	345
7	Coorla Spinning and Weaving	65.00	36,228	31,473	1,424	654	6	05	17,067	2,148	298
8	Crown Spinning and Manufacturing Co (formerly Dhun Mills)	50.00	59,396	38,450	6,868	1,141	91	05	15,047	2,411	346
9	Dakshe Pvt Ltd *									,	
10	Dawn Mills Company	42.00	54,836	49,851	14,120				11,826	1,323	335
11	Digvijay Spinning & Weaving Mills *(formerly Dinshaw Petit Mills)		44,064	32,073	2,336	885	8.5	54	13,423	2,281	290
12	Edward Textiles Mills* (formerly Edward Sassoon Mills Limited)		50,992	30,314	2,140	932	5	86	12,285	1,817	296
13	(a)Elphinstone Spinning and Weaving Mills Co Unit No 1 (b) Elphinstone Spinning and Weaving Mills Co Unit No 2 (formerly Moon Mills)	55.00	51,956	38,509	2,688	935	74	49	13,723	2,380	302
14	Finlay Mills	120.00	72,224	44,413	4,672	958	8-	44	10,824	3,511	300
15	Gold Mohur Mills	120. 00	66,844	47,386	2,312	1,142	1,0	022	12,966	2,602	301
16	Hindoostan Spinning and Weaving Mills Co	145.80	1,18,624	78,358	7,700	2,489	1,9	950	49,267	5692	348
17	India United Mills No 1* (formerly Jacob Mills)		1,08,516	75,783		2,13	30	1,858	29,305	5,245	293
18	(a) India United Mills No 2* (formerly Alexandra Mill)		34,264	23,120	4,310	73:	3	605	44,190	2,203	295
	(6) India United Mills No 3* (formerly E D Sassoon Mill)		95,548	63,336		75:	2	648		2,434	295
19	India United Mills No 4* (formerly Rachel Mill)					1,78	39	1,705		2,190	268
20	India United Mills No 5* (formerly Manchester Mill)		30,420	26,589	352	684	4	623	9,167	1,495	268
21	Jam Manufacturing Co	27.51	49,784	36,011	1,220	1,08	34	981	14,997	2,536	293
22	Kamala Mills (formerly Ebra- himbhoy Pabaney Mills)	54. 50	62,176	51,091	4,240	1,03	31	916	18,881	2,681	306
23	Khatau Makanji Spng and Weaving Co	254. 36	1,31,080	1,16,262	19,916	1,49	94	1,112	17,440	5,376	300
24	Kohinoor Mills Co (No I & 2)	113. 40	1,30,208	1,05,027	34,084	1,56	52	1,373	33,126	5,951	300
25	Kohinoor Mills Co (No 3)				6,456	39	8	306		973	301
26	Mafatlal Fine Spng and Mfg Co Unit No 2 (formerly Sassoon Spng and Weaving Mills)		62,728	54,962	6,404	1,24	10	1,053	40,903	2,893	306

	Name of Mill	Paid-up capital (Rs in lakhs)	No of spindles installed (Total)	Average No of spindles at work	Doubling spindles installed	No of looms installed (Total)	Average No of looms at work in the fir£t shift	qu Cotto	oroximate antity of n consumed of 180 Kgs)	Average No of workers employed daily(AH shifts)	Total No of days worked from 1st Sept 74 to 31st Aug 1975
	1	2	3	4	5	6	7		8	9	10
	Mafatlal Fine Spng and Mfg Co Unit No 3 (formerly New Union Mill)		34,096	32,835	1,460	871	801		17,019	1,846	306
28 29		108 41	61,196	55,836	7,324	836	717		12,696	2,135	300
	Modern Mills, Mill No 2 Morarjee Goculdas Spng and										
30	Weaving Co	204 13	1,03,416	80,577	17,348	1,848	1,576		40,654	4,725	345
31	National Cotton Products*										
32	New City of Bombay Mfg Co	54 00	56,124	46,664	4,080	614	512		22,203	1,680	344
	New Great Eastern Spng and Weaving Co	43 00	52,688	40,721		1,008	834		22,430	2,238	348
	New Kaiser-I-Hind Spng and Weaving Mills *		54,424	42,275	5,040	1,199	912		12,470	2,342	291
	Phoenix Mills (formerly Britannia Mills)	72 00	98,032	82,338	22,744	1,218	897		30,200	4,889	349
36	Piramal Spinning and Weaving Mills	56 00	56,528	47,680	5,624	1,021	907		13,899	2,517	348
37	Podar Mills (formerly Toyo Podar Cotton Mills)	160 00	49,116	44,876		930	921		31,646	2,369	348
38	Prakash Cotton Mills (formerly Seksaria Cotton Mills No 2)	49 47	62,636	48,348	3,560	830	733		23,474	2,686	340
39	Raghuvanshi Mills (formerly Kilachand Mills)	45.00	48,452	38,706	5,968				7,139	1,153	298
40	Rajesh Textile Mills (formerly Sayaji Mill No 2)	50.00	53,964	44,625	5,088	984	971		16,130	2,712	302
41	Ruby Mills (formerly Sorab Mills)	32.00	31,810	18,652	2,992	524	444		6,486	1,116	304
42	Sayaji Mills No 2 * (formerly NewPrahlad Mills)	57.93	47,672	35,298	628	1,022	902		13,754	2,232	305
43	Seksaria Cotton Mills * (formerly Currimbhoy and Mohammed-bhoy Mills)		81,036	45,331	4,420	1,154	927		15,975	3,065	292
44	Shree Madhusudan Mills	100.00	89,868	64,983	2,996	1,534	1,449		21,193	3,811	302
	(a) Shree Mukesh Textile Mills (formerly Colaba Textile Mills) (6) Mukesh Textile Mills (formerly Jehangir Wadia Mill)	110.00	19,436	17,797	1,612	676	587		7,343	1,466	306
46	Shreeniwas Cotton Mills (formerly Fazulbhoy Mills)	114.80	1,03,828	75,171	5,150	1,578	1,505		20,638	5,025	346
47	Shree Ram Mills (formerly Crecscent Mills Ltd)	200.00	1,22,576	90,358	26,492	1,449	1,223		18,266	4,755	305
48	(a) Shree Sitaram Mills (for merly Sir Shapurji Broacha Mills) (Connaught Mill), (b) Shree Sitaram Mills (New Empress Mill)	60. 00	61,788	42,541	1,848	1,155	1,006		19,048	3,520	302
49	Shree Textiles*										
50	Simplex Mills Co	149 69	50,392	30,686	7,432	792	691	\dashv	21,432	2,325	346
51	Standard Mills Co	412 00	52,028	44,786	6,096	1,619	1,041	\neg	23,461	3,435	346
	Standard Mills (New Chinay Mills) J Swadeshi Mills	136 00	51,104 91,048	46,691 54,973	11,360 5,040	781 2,252	686 1,62	5	9,415 25,513	1,444 3,946	351 301
54	Swan Mills	96 00	49,388	41,454	5,788	628	582	\neg	10,649	2,311	301
55	Tata Mills	150 23	84,512	66,573	9,970	1,939	1,617	\dashv	28,798	5,086	305
56	Victoria Mills	57 28	56,972	28,107	1,852	1,030	773	\neg	14,833	2,261	302
57	Western India Mill	60 00	23,524	17,210	1,368	1,160	672	\neg	13,717	2,314	306
	Total	4804. 02	35,52,754,	25,96,889	3,49,782	62,564	52,869		11,03,184	1,67,819	

The cotton textile industry of Bombay comprises principal and subsidiary industries, such as, (a) cotton spinning, weaving, shrinking, sanforising, mercerising and finishing of cotton textiles; (b) printing, dyeing and bleaching of cotton textiles; (c) cotton ginning, cleaning and baling; and (d) weaving and finishing of cotton textiles in powerlooms. It would be interesting to analyse the structure of the cotton textile industry as a whole and its subsidiary groups on the basis of the Annual Survey of Industries conducted by the Government of India in the years 1973-74 and 1975-77. The statistics presented below cover the census as well as the sample sectors of the Annual Survey of Industries.

It is attempted to analyse the principal characteristics of the cotton textile industry in Bombay and its place in Maharashtra, as per the Annual Survey of Industries in 1975-77. There were 197 registered factories in Bombay which formed 19.78 per cent of the factories in the State. They provided employment to 1,95,318 persons which formed 65.04 per cent of the textile employment in Maharashtra. It may be pointed out that the Annual Survey of Industries might have underestimated the employment in textile industry in Bombay. This might be due to the method of classification adopted. As per the reports of the Bombay Millowners Association and other authorities, the industry provides employment to about 2.5 lakh persons. This latter figure appears to be more plausible.

The capital invested in the factories in Bombay was computed at Rs.3,00,21 lakhs which constituted 73.20 per cent of the Maharashtra cotton mills. The value of output of the Bombay mills was computed at Rs.6,91,87 lakhs or 77.60 per cent of that in Maharashtra. The value added on manufacture by the mills in this city was as high as Rs.1,92,06 lakhs or 82.82 per cent of that in the mills in the State.

This analysis brings home the conclusion that Bombay accounts for more than three-fourth of the cotton textile industry in Maharashtra. Though the percentage number of factories in Bombay is not so high, the percentage employment, investment, output and value added on manufacture is very high. It can therefore be safely deduced that the factories in Bombay are very large in size as compared to those elsewhere in the State.

It can be observed that the value of output was about 230 per cent of the invested capital in Bombay.

The figures given represent the annual averages for the respective survey periods.

There were 257 registered factories in Bombay in 1973-74 which declined to 197 in 1975-77. The decline might be due to closure of the marginal units and to the switching over to other products by some units during the period. We shall subsequently observe that in spite of a decline in number, there was no real decline in the industry. The factories provided employment to 1,89,846 persons including 1,86,489 workers in 1973-74 and to 1,95,318 persons including 1,69,828 workers in 1975-77. Thus the total employment showed an increase in spite of a decline in number of units. The figures of employment show the preponderance of workers in total employees. The factories worked for 6,26,32,890 man-days per annum in 1975-77 period.

The position regarding capital of the factories in Bombay is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	85,09.56	1,11,61.92
Working capital	81,36.89	92,52.96
Invested capital	2,50,61.44	3,00,20.87
Outstanding loans	1,33,35.13	1,74,59.07

The outstanding loans were, thus, very much higher than either the fixed capital or working capital. This shows the financial position of the industry.

The structure of costs of production is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Wages to workers	82,35.32	1,13,34.94
Total emoluments	1,01,44.49	1,47,17.87
Fuel consumption	23,37.29	57,66.79
Material consumed	2,40,74.19	3,69,71.19
Other inputs	N.A.	59,14.98
Total inputs	3,08,59.16	4,86,52.96

The wage bill and emoluments might have increased over the period under study due to the rise in cost of living index, the dearness allowance to be paid being linked with the cost of living index. The rise in the value of fuel consumption can be attributed to the enormous rise in the prices of furnace oil. The power cut and several restrictions on use of

energy had required the mills to resort to costlier self-generated means of power. The rise in costs of materials can be accounted for by the rising cost of raw cotton, the hike in the price of long staple cotton and the price of viscose fibre. The increase in railway freight and in the prices of dyes, chemicals, stores, spare parts and packing material appear to have contributed to the tremendous rise in the value of inputs in the Bombay industry. (Bombay Millowners' Association (information supplied by it).)

The value of plant and machinery was enumerated at Rs.2,03,57.11 lakhs and Rs. 2,22,75.16 lakhs, respectively in,1973-74 and 1975-77. The structure of output of the industry is analysed below:— (Rs. in lakhs)

Item	1973-74	1975-77
Value of products	4,73,20.63	6,10,73.60
Value of other output	N.A.	81,13.16
Total output	5,03,18.92	6,91,86.76
Depreciation	12,07.47	13,27.58
Value added on manufacture	1,82,52.82	1,92,06.22

There was, thus, an all-round rise in the value of products and output over the years under reference. Though a part of the rise could be accounted for by the rise in prices, there appears to be a rise in the output of the industry. The Annual Survey of 1975-77 computed the factory payments at Rs. 28,34.70 lakhs and net income at 1,63,71.52 lakhs per annum.

The above analysis leads us to some deductions. Emoluments comprise a large share of the total cost of production in this industry. It is a labour intensive industry unlike chemicals industry or electrical machinery industry. The value of output was about one and a half times the total inputs. The net income of the Bombay mills was much more than 50 per cent of their capital investment.

It may be useful to elucidate some of the other aspects of the industry.

The sector of mills engaged in cotton spinning, weaving, shrinking, sanforising, mercerising and finishing of cotton textiles is by far the biggest and the most important one among the other sectors of the cotton textile industry from all points of view. It provides employment to about 1.82 lakh persons out of a total of about 1.95 lakhs in the entire industry. The employment in this sector has also registered a rise of about 4,000 in the period 1975-77 over that in 1973-74. Though this rise in employment may not appear to be sizeable, it is significant in view of the measures of rationalisation of production and capital intensive methods of production adopted by some of the mills. The capital investment in this sector of the industry amounts to about Rs. 2,87.25 crores as against the investment of Rs. 3,00.21 crores in the entire industry. The capital investment has also registered a significant rise in 1975-77 over that in 1973-74. Even after granting allowance for rise due to rise in prices, 104 there appears to be real rise in capital investment, fixed capital and working capital during the period of comparison. The value of inputs of this sector also forms a very sizeable proportion of the value of inputs in the entire cotton industry, for example Rs. 4,40.89 crores as against Rs. 4,86.52 crores. The value of products of the cotton spinning, shrinking, weaving, sanforising, mercerising and finishing industry forms almost about 97 per cent of the value of products of the total industry. In respect of the value added on manufacture which is one of the most important aspects in the study of industries, this sector accounts for about 92.65 per cent of the value added on manufacture in the entire cotton textile industry.

It is thus evident that the spinning, weaving, shrinking, sanforising, mercerising and finishing sector of the cotton textile industry is the core sector of the industry.

The next sector second in importance is the one engaged in printing, dyeing and bleaching of cotton textiles. This sector of the industry is comparatively of later origin than the cotton spinning and weaving sector. It received encouragement for growth mainly after Independence of India. Its progress after Independence is attributable to the ban on imports of highly processed and finer qualities of cloth from abroad, and also to the development of technical know-how in the country. The factories in this sector are smaller in size, some of the units being very small in comparison to the spinning and weaving mills. It may roughly said to be an ancillary industry to the cotton textile industry.

In the very nature of things the cotton ginning, cleaning and baling factories form a minor sector of the cotton textile industry. A major proportion of the raw cotton required by Bombay textile mills is processed, ginned and baled in the centres of production of cotton in the districts of Maharashtra and Gujarat. If is more economical for the mills to purchase the ginned and processed raw cotton from outside the city. It is however a historical accident that 14 ginning and baling factories are still in existance in this crowded city where no space is available for location of more composite units warranting a higher degree of technocracy.

Weaving and finishing of cotton textiles in powerlooms is also a very small sector of the cotton textile industry in Bombay. A majority of the units are in the small scale sector and managed on a proprietorship basis. In the last about 20 years, handlooms have been yielding ground to powerlooms on account of the higher productivity, economic viability and the better quality of powerloom cloth. The powerloom sector, though a minor one in Bombay, accounts for a good amount of production, as it enjoys a number of incentives from government as also substantial excise concessions which are denied to the cotton mill industry.

In 1977 there were 24 powerloom factories with a capital investment of Rs. 29.40 lakhs and working capital of Rs. 27.24 lakhs. Though they provided employment to only 595 persons, the value of their out-put was Rs. 2,91.82 lakhs, which meant quite a high per capita out-put per worker. The value added on manufacture, viz., Rs. 48.62 lakhs in 1977, also meant a sizeable value added per capita. The industry however suffers from under-utilisation of installed capacity which is sometime, due to financial constraints, marketability of cloth or inadequate power supply. There were 12,196 authorised powei looms in cotton weaving and 12,800 for art silk weaving in Bombay in 1978.

As per report received from the Bombay Millowners Association, (Officially received on 25th February 1982.) there are 44 cotton spinning and weaving mills owned by 36 mill companies, in the private sector in Bombay, besides the mills

controlled by government. Besides, there are eight processing factories, three woollen mills and two art-silk factories, in

the private sector which are members of the Association. The Bombay cotton textile mills provide employment to about two and a half lakh persons. The paid-up capital of the mills amounts to about Rs. 70 crores. They produce cloth of every description, both pure cotton and blended fabrics and man-made fibres. The value of production of the cotton mills in the city is estimated at Rs. 15,00 crores per annum, of which products worth about Rs. 250 crores are exported to foreign countries. The Bombay cloth exports are destined to almost all continents of the world. The Bombay cloth enjoys a wide market all over the country.

The Bombay mills obtain raw cotton from Maharashtra as also from the adjoining States of Gujarat, Karnatak and Andhra Pradesh. The mills combine man-made fibres with cotton for production of certain categories of cloth.

The consumption of raw cotton and production of cloth and yarn by the Bombay mills is given below (Notes and News, December, 1981, Millowners Association):—

	Cotton consumed		Production of			
Year	('000 bales)	Yarn (in million kgs.)	Cloth (in million metres)			
1976	1,246	168	1,069			
1977	1,048	138	896			
1978	1,126	153	927			
1979	1,078	148	863			
1980	1,196	167	971			

STATEMENT SHOWING CLOTH PROCESSED BY COTTON TEXTILE MILLS IN BOMBAY CITY

(The Indian Textile Bulletin, Textile Commissioner, Bombay.)

(Figures in million metres)

Year	Bleached	Piece Dyed	Printed	Mercerised	Sanforised	Other Chemically processed	Total processed	Total Production of Cloth
1971	553	300	249	293	111	21	1,392	1,120
1972	567	326	780	257	104	32	1,566	1,243
1973	506	284	250	257	120	34	1,451	1,169
1974	510	225	221	222	80	23	1,281	1,125
1975	497	254	321	257	94	23	1,448	1,074
1976	510	217	281	309	133	23	1,474	1,069
1977	591	273	295	387	100	52	1,798	1,896
1978	623	313	305	410	221	55	1,927	928
1979	585	265	286	329	222	41	1,759	865

Problems of Cotton Textile Industry: The Cotton Textile industry of Bombay, as of India, is facing ominous conditions of stagflation at present. It has a twin problem of rising cost of production and falling demand for cloth. The industry is also facing the problem of consumer resistance. The escalating prices of crude and petroleum products has been a powerful catalyst of the cost hike. The rising cost of raw cotton and the uncertainty of supply have contributed to the rise in production cost of cloth. Though the rise in price of long staple cotton was only 20 per cent in 1979-80, the price of medium staple varieties increased very steeply. The price of viscose fibre which is combined with cotton fibre increased from Rs. 12.72 in 1978-79 to Rs. 18.42 per kg. in 1981.

The industry is suffering from infrastructural deficiencies as well. Power cuts continue to plague the mills which are required to resort to costlier self-generated means of power. The price of furnace oil escalated by 79 per cent in 1981 (Rs. 2,344 per kilolitre in December 1981.) over 1979. Besides the increase in railway freight, the industry is subjected to a rise in prices of dyes, chemicals, stores, spare parts and packing materials. Wages in the industry registered a considerable rise, by about 24 per cent from 1979 to 1981, (As per Millowners' Association,) which have added to the

spiral of rising costs.

As per the Millowners' Association, the cost of production of cloth by the Bombay mills has increased by about 30 per cent in 1981 over that in 1979.

The industry is reported to be facing resistance from the consumer who is already oppressed by escalating prices and falling purchasing power of money. Even the Market Research Wing of the Textiles Committee has admitted that any rise in the prices of cloth would adversely affect the off-take of cotton textiles. This oldest organised industry which is also the mainstay of about 2.50 lakh persons is in the grip of a stagflation.

A mention of the role of the Bombay Millowners' Association would not be out of place. It is one of the oldest trade organisations in the country, established on 1st February 1875. It represents 120 cotton mills, eight dyeing and processing factories and three woollen mills from all over the country. All the mills in the private sector in Bombay, viz., 44 cotton spinning and weaving mills, eight processing mills, three woollen mills and two art silk mills, are its members. The Association advocates the cause of the industry in regard to its advancement, safeguarding of interests and arbitration with the government in matters of commercial and fiscal policies relating to the industry. Its services to the Indian cotton industry were quite illustrious in the pre-Independence period when the mills particularly needed protection against cut-throat competition from Japan and England. The textile mills in Bombay owed a lot to this organisation in those days of alien rule.

The role of the Association during the post-Independence era has been more in the nature of establishment of amicable relations among the members, safeguarding their interest, settlement of disputes, advocating the cause of the industry as regards fiscal measures, import and export policies and improvement of infrastructure facilities to the industry.

ART SILK AND MAN-MADE FABRICS

At the beginning of this century there were only two silk mills in Bombay, viz., the Sassoon and Alliance Mill and the Chhoi Silk Manufacturing Mill. The former was situated at Byculla near the Victoria Garden and was established in 1875. It was a joint-stock concern, working with a capital of Rs. 10 lakhs. It was the largest mill in the Bombay Presidency manufacturing silk yprn and cloth for the Indian and Burma Markets. Its annual production was about 70,000 lbs. The progress of this mill was hampered by Japanese competition which captured the Burma and Indian markets. The latter mill was situated at Parel and was established in 1895, and was working with a capital of Rs.5 lakhs. During the subsequent years conditions of depression and the Japanese competition had affected the production of these mills and they were closed.

The industry in Bombay has made considerable progress after the sixties. During the period 1975-77 as many as 209 factories in Bombay were engaged in spinning, weaving and finishing of man-made fabrics.

The genesis of manmade textile industry in India was due to protective measures given to the cotton textile industry by the Government of India. About three and a half decades ago the Government of India imposed a levy on rayon fabrics imported into the country to curb the severe competition faced by the cotton textile industry through imports of rayon fabrics from Japan. Such tariff imposts on rayon fabrics indirectly induced the importers of such fabrics to import rayon yarn and manufacture the fabrics in the country itself. Thus the beginning of man-made textile industry in India was marked by the setting up of weaving units around the years 1935-37.

The idea of manufacturing rayon in India was first mooted in 1940, when the question was considered by the Board of Scientific and Industrial Research established by the Government of India. The Second World War gave impetus to the development owing to the stoppage of supplies of foreign rayon yarn. In 1944, the Board of Scientific and Industrial Research investigated the project with the object of selecting suitable sites with certain facilities for the erection of rayon plants. After surveying the resources of the country, the Board found that there was considerable scope for establishing such an industry in India.

The first commercial production of viscose rayon filament yarn in the country commenced in July 1950 when a plant was set up by Messrs. Travancore Rayons Ltd. in Kerala. In March 1951 another rayon plant, namely the National Rayon Corporation Ltd. went into production on the outskirts of Bombay with an annual capacity of 2.54 million kg. The Century Rayon, the third viscose rayon plant, went into production in October 1956 near Bombay, with a capacity of 1.82 million kg. per annum.

Besides, the production of viscose tyre cord yarn required for manufacture of vehicular rubber tyres and other industrial products has also commenced.

At the beginning of the Third Five Year-Plan, there was no production of synthetic fibres like nylon or polyester in the country. During this period new units of nylon filament yarn and polyester filament yarn were set up. Of them, the Nirlon Synthetic Fibres and Chemicals Ltd. with a capacity of 0.7 million kg. and the Chemicals and Fibres of India Ltd. with a production capacity of two million kg. of polyester staple fibre per annum were set up during the Third Five-Year Plan in Bombay. The Nirlon Synthetic Fibres and Chemicals Company has a factory at Goregaon, while the plant of the Chemicals and Fibres of India is in Thane district. The Nirlon Fibres and Chemicals Ltd. has an installed capacity to produce 3,528 tonnes of nylon yarn, 922 tonnes of polyester, 2,190 tonnes of tyre cord and 1,200 tonnes of nylon conveyor belts. The sales turnover of this pioneer concern was as high as Rs. 60.12 crores in 1978-79 and Rs. 71.75 in 1979-80. (Centre for Monitoring Indian Economy, Bombay, A State-wise Picture of Large Scale Industrial Activity, 1981.) The Chemicals and Fibres of India Ltd. which is producing polyester staple fibre has an expanded capacity of 4.5 million kg. per annum.

According to the Final Report of the Task Force on Textile Industries, cellulosic fibres accounted for almost 75 per cent of the total production during the Fourth Plan. These fabrics are much cheaper and, to an increasing extent, are based on indigenous rayon grade wood pulp. On the other hand, synthetic fabrics made from nylon and polyester fibre/ filament varn have been based on imported raw materials such as D.M.T. and caprolactum.

Urban consumers have shown a definite preference for the elegant, economic and easy care man-made fibre fabrics, either in the pure form or in blends, and their use is spreading into the rural areas also. Man-made fibres are being increasingly used for industrial as well as household uses. However, a much more distinct picture of end-uses will emerge when man-made fibres become available in much larger quantities.

Most of the cotton textile mills in Bombay manufacture man-made fabrics besides cotton cloth. The growing popularity of synthetic fabrics, has encouraged the mills to undertake the production of these fabrics. Production of pure silk fabrics is now a very minor section of industry. And there is no sericulture in Bombay. Many of the factories engaged in man-made fabrics produce art silk goods also. The following analysis is aimed only at the synthetic and man-made fabrics industry.

The spinning, weaving and finishing of synthetic fibres, rayons, nylons, etc. has emerged as an important industry during

the last about two decades. It is an organised industry with 209 registered factories providing employment to about 20,267 employees. The structure of the industry in Bombay can be studied from the statistics based on the Annual Survey of Industries during 1973-74 and 1975-77 given in Table No. 9.

Though there are many units in Bombay, information about only a few is available. The Orkey Silk Mills at Saki Naka in Bombay produced and sold cloth worth Rs. 36 crores in 1979-80. The L.D. Textile Industries with a plant at Vikhroli is another producer of synthetic fabrics, polyester and blended yam and knitted fabrics. The turnover of its sales was to the tune of Rs. 7.15 crores in 1979-80. The Beekay Textile Mills in Bombay had a sales turnover of Rs. 5 crores in 1978-79. The other reputed manufacturers in Bombay are the Shakti Mills at Mahalaxmi, Ambika Mills at Mahalaxmi and the Kamala Mills at Lower Parel. (A State-wise Picture of Large Scale Industrial Activity 1981)



Maharashtra State Gazetteers

TABLE NO. 9

SPINNING, WEAVING AND FINISHING OF SYNTHETIC FIBRES, RAYONS, NYLONS, GREATER BOMBAY, 1973-74 AND 1975-77

(Figures of Rs. in lakhs)

Item	1973-74	1975-77
1. No. of estimated factories (Nos.)	180	209
2. Fixed capital	24,97.28	13,89.88
3. Working capital	25,04.15	12,50.92
4. Capital investment	67,99.50	47,70.97
5. Outstanding loans	37,25.12	38,11.33
6. Mandays worked (Nos.)	N.A.	61,19,181
7. All workers (Nos.)	16,338	16,759
8. All employees (Nos.)	20,025	20,267
9. Wages to workers	7,32.27	9,29.12
10. Total emoluments	10,69.94	12,90.70
11. Fuel consumed	2,51.21	5,05.20
12. Material consumed	84,00.89	96,50.51
13. Other inputs	N.A.	3,00.80
14. Total inputs	95,45.27	1,31,58.51
15. Plant and machinery	31,10.51	27,64.95
16. Value of Products	1,12,97.70	1,29,92.45
17. Value of other output	N.A.	27,38.71
18. Total output	1,19,89.21	1,57,31.16
19. Depreciation	3,85.17	2,64.58
20. Value added on Manufacture	20,58.76	23,08.07
21. Factory payments	N.A.	5,97.97
22. Net income	N.A.	17,10.10

WOOLLEN MILLS

The first woollen mill known as the Bombay Woollen Manufacturing Company was established in 1888 with a nominal capital of Rs. 4 lakhs. In the same year the Sohrab Woollen and Cotton mill was established with a capital of Rs. 7.5 lakhs. The latter contained 60 looms and 2,160 spindles, and produced blankets, broadcloth, and gray Oxford clothing for army and police. The outturn was nearly two lakh pounds. In 1898, the mill removed its machinery for spinning and weaving of wool, and replaced the same by machinery for cotton. In 1909, there were two woollen mills, namely Bombay Woollen Mill and Coronation Woollen Mill. The Duxbury Wdollen Mill, established in 1901, went into liquidation in 1909. The Bombay Woollen Mill produced worsted yarn from Australian wool and wove blankets, serges for army clothing. The

Coronation Woollen Mill knitted jerseys and caps from imported worsted yarn.

At present there are 11 woollen mills in Bombay of which three are large. The three large mills are members of the Bombay Millowners Association, and they together account for the major share of production of woollen garments, rugs, blankets and other products.

As per the Annual Survey of Industries there were 9 wool spinning, weaving and finishing mills in Bombay in 1973-74 and 11 mills in 1975-77. They provided employment to 2,473 and 2,373 persons in 1973-74 and 1975-77, respectively. The mills worked for 6,98,949 man-days per annum during the 1975-77 survey period. The position about capital of these companies is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	1,71.04	1,64.02
Working Capital	1,91.52	1,27.11
Capital invested	5,70.99	6,47.37
Outstanding loans	4,59.90	4,55.59.

The structure of costs of production in the industry in Bombay is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Total emoluments	2,33.87	1,32.51
Fuel consumed	24.46	32.09
Material consumed	5,29.57	6,13.83
Other inputs	N.A.	1,68.41
Total inputs	6,58.79	8,14.33

Emoluments appear to form a small proportion of total inputs while raw materials account for 75 per cent of the total inputs. The value of plant and machinery of the mills was estimated at Rs. 2,10.79 lakhs and Rs. 2,62.29 lakhs in 1973-74 and 1975-77, respectively.

The structure of output of the Bombay woollen industry is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Value of products	8,39.90	9,90.81
Value of other output	N. A.	74.97
Total output	8,67.09	10,65.78
Depreciation	21.57	21.68
Value added on manufacture	1,86.72	2,29.77

The above figures show that there was a conspicuous rise in production, though there was a fall in employment and emoluments paid. The value of output was a little over 125 per cent of inputs. The value added was over one-fourth of the value of total inputs.

The factory payments by the mills were computed at Rs.83.55 lakhs and net income at Rs.1,46.22 lakhs per annum in 1975-77.

Besides the wool spinning, weaving and finishing mills for which the analysis is given above, there were several units engaged in dyeing and bleaching of woollen textiles (27); wool cleaning, baling and pressing (2); wool spinning and weaving other than in mills (3); and other processes (5). The figures in brackets show the number of units as per the Annual Survey of Industries in 1973-74. The dyeing and bleaching of woollen textile units provided employment to 2,106 persons in the same year.

TEXTILE PRODUCTS

The textile products industry of Bombay is an important segment of manufacturing activity, as it satisfies consumerneeds and provides employment to more than 22,717 persons. There is also a good amount of caitalp investment in the industry. The value of production and value added on manufacture in this industry make it essential to deal with it separately. This industry is conceived to include manufacture of textile products, such as, knitted apparel; threads, cordage, ropes, twines, nets; embroidery and making of crapes, laces and fringes, carpets, rugs; ready-made garments; rain coats and hats; curtains and mosquiio nets; oil cloth and tarpaulin; coir products, and linoleum, pading and upholstering textiles.

The history of this industry in Bombay is traceable to the last quarters of the previous century. At the beginning of this century hosiery was manufactured by five cotton mills and two separate hosiery factories. They together manufactured about 3,82,000 lbs. of hosiery goods per annum. In 1892 there were three hosiery factories, one of which was closed. In 1896, there were two factories which remained constant even in 1909. The industry in Bombay suffered from keen competition from Japanese and European imports in those days. The obsolete machinery was another handicap which retarded its growth. (S. M. Edwardes' Gazetteer of Bombay City and Island, 1909.)

The industry received growth stimulus during the First World War when imports were practically halted. The real impetus to growth was however provided by the Second World War during which foreign supplies were curtailed and there was an immense demand from the defence services. The demand for the products, such as, ready-made garments and hosiery, grew very rapidly with growing urbanisation and increasing incomes.

The Dawn Mills in Bombay is a reputed concern producing banians, briefs, vests, jerseys and many other hosiery articles. The industry however comprises many small units. A number of small units making ready-made garments have come into existence. They employ master-tailors and other skilled personnel for stitching garments. They cater to domestic demand and also export a considerable quantity of garments to the countries in Africa, the middle-east, south-east Asia and South America. It is evident from enquiries that many of the units are dependent for their sustained growth on the conditions in the export markets. A good amount of hosiery articles are also exported by the producers in Bombay.

As per the Annual Survey of Industries, there were 201 registered factories in 1973-74, and 375 in 1975-77 in Bombay. These units provided employment to 13,925 persons (including 11,352 workers) and 22,717 persons (including 18,475 workers), respectively in the two survey periods. The factories worked for 64,99,849 man-days per annum in 1975-77. The position of capital of the industry in Bombay is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	5,68.61	11,27.68
Working capital	7,51.48	10,52.81
Capital invested	1,803.24	31,86.77
Outstanding loans	19,56.84	34,47.08

The above figures show a tremendous progress over a span of 2/3 years. Making allowance for a rise due to higher prices, there must be a considerable rise in real investment.

The structure of costs of production of the units can be studied from the following figures:—

(Rs. in lakhs)

Item	1973-74	1975-77
Wages to workers	3,59.91	6,85.12
Total emoluments	5,17.42	10,11.71
Fuel consumed	56.64	1,60.57
Material consumed	35,08.09	73,03.83
Other inputs	N.A.	25,59.38
Total inputs	42,23.58	1,00,23.78

The above statistics, self-evident as they are, show a huge increase ranging from 200 to 250 per cent. This increase is quite commensurate with the increase in number of factories, employment and capital investment over the period under reference.

The value of plant and machinery was estimated at Rs.8,88.81 lakhs in 1973-74 and Rs.17,05.54 lakhs in 1975-77. The structure of production by the factories is analysed below:—

Item	1973-74	1975-77
Value of products	49,08.70	99,15.69
Value of other output	N.A.	22,23.62
Total output	52,23.20	1,21,39.31
Depreciation	77.68	1,58.09
Value added on manufacture	9,21.93	19,57.44

Even after making allowance for rise due to rising prices, there was thus a real growth in production by the factories in Bombay. It was quite commensurate with the increase in costs of inputs, employment, capital and number of factories.

The factory payments were computed at Rs. 5,07.23 lakhs and the net income at Rs. 14,50.21 lakhs per annum as per the 1975-77 survey.

The above analysis lead us to some conclusions. Wages constitute a smaller share of the costs of production. The value of output was about 121 per cent of the inputs. This reveals the profitability in the industry. The value added on manufacture was about one-fifth of the inputs, and about 60 per cent of the capital invested in the industry. The net income was about 40 per cent of the capital invested. These factors reveal the high rate of returns on capital.

As per the Annual Survey of Industries separate statistics are available for manufacture of all types of textile garments. The same are included in the analysis of the main industry given above. It may however be stated that manufacture of garments is the major sector of the textile products industry. There were 209 factories providing employment to 13,720 persons in this sector in 1975-77. The production in this sector was also quite large, e.g. Rs. 50,73.40 lakhs per annum during the survey period.

The next in importance are the knitting mills, for which only the 1973-74 Annual Survey compiled separate statistics. There were 44 knitting mills which provided employment to 2902 persons in Bombay in 1973-74. Their production was computed at Rs. 13,59.37 lakhs in the same year.

HANDLOOM WEAVING

Handloom weaving is net a very important industry in Bombay. Though there was a large class of weaver craftsmen upto the middle of the nineteenth century (For details refer earlier pages in this chapter.) the craft has decayed fast with the growth of the mill industry. Another limiting factor has been the paucity of accommodation and the exorbitant cost thereof. The government has however granted protection and patronage for this industry after Independence. The handloom weavers are new recipient of very soft loans, fiscal concessions and marketing aid, through institutional agencies.

There were 391 handloom weaving establishments in the city with a total of 858 looms, of which 773 were in working condition in 1976. (*Growth of Industries in Maharashtra, Govt, of Maharashtra.*) All these looms were engaged in cotton weaving. They provided employment to 1,627 persons in the pre-weaving (854) and weaving process (773). Of the total number of handlooms *viz.*, 858, only 444 were in the co-operative sector, the rest (414) being in the private sector. Of the functioning looms (773), 263 were working for co-operative societies and 510 were working independently.

CHEMICALS AND CHEMICAL PRODUCTS

The chemicals manufacturing industry is a multi-product and multiprocess industry. From a wide range of basic raw materials it manufactures several heterogeneous products for diverse consumers in many sectors of the economy. Very often, within the industry the products of some factories form the raw material for others. There are also a number of cross linkages. A wide range of inorganic chemicals, such as sulphuric acid, hydrochloric acid, soda ash and caustic soda are used in bulk quantity as process chemicals by other industries, such as, iron and steel, cement, paper, cotton textiles, synthetic textiles, soaps and detergents. The industry is of vital importance to all sectors of the economy. It contributes to general economic development in diverse directions, such as, fertilisers and pesticides for agrarian progress, drugs and pharmaceuticals for life saving, basic chemicals and petro-chemicals for industrial growth, paints and dyestuffs for varied uses, soaps and cosmetics to meet consumer necessities.

The chemical industry is of recent origin. Though it started in a modest way in the early decades of this century, it was only after Independence that there was real growth. A sulphuric acid plant established in 1913 in Bombay was a forerunner in the field. The chemical industry however registered a faster growth in Bombay after 1961. The first petrochemical unit was started in 1966, and over the years, there has been a steady growth of this industry.

Although of recent growth, the Indian chemical industry has been one of the fastest growing sectors of the Indian economy, with an overall growth rate of 17 to 18 per cent per annum. This growth rate is spectacular in comparison to the rate of general industrial growth which is estimated to be about 7 to 8 per cent.

Today this industry ranks fourth in India after textile, iron and steel and engineering in terms of output. It contributes as much as 7.4 per cent of the total gross output and 8 per cent of the net output turned out by all manufacturing industries in the country. Though it is not a labour intensive industry it provides employment to 1.30 lakh workers.

To review the growth of the industry in the past, the Tariff Board of 1928 described the chemical industry as a key industry. Prior to the outbreak of the First World War, most of the chemicals and products were imported. There was some expansion during the period preceding Second World War. The war provided a considerable stimulus to its growth. There was a three-fold increase in the production of miscellaneous heavy chemicals too during the war period. It is noteworthy that the British Government did not encourage its growth by any kind of incentives or assistance. After Independence the industry set on the path of progress. The real stimulus to growth of the chemical industry came from the implementation of the five-year plans which gave it a big boost, as also from the growing demand for chemical

products from other sectors of industry. It experienced an accelerated growth rate during the sixties, and has now become an important foreign exchange earner. The establishment of oil refineries and steel plants in the country facilitated supply of bye-products which are useful for the growth of chemical industry. Thus benzene and other bye-products from coke ovens, naphtha from refineries, and ethyl alcohol from sugar factories, became the important raw materials for the chemical factories. The growth of petrochemicals gave a further impetus to this industry.

The early units were mainly based on alcohol as feedstock in some cases, and imported penultimates in the case of dyestuffs and pharmaceuticals. When the petroleum refineries based on imported crude were established, their bye-products provided aromatics as feedstock. They gave an impetus to the growth of organic chemical industry, and hence, several large factories, such as, National Organic Chemical Industries Ltd. (NOCIL), Union Carbide, Herdillia Chemicals and Hindustan Organic Chemicals (HOC) were established in Bombay and its periphery.

The major portion of the chemicals industry in India is situated in Maharashtra and Gujarat. The Bombay and Thane industrial complex has been a congenial ground for its growth. The reasons for the present localisation of the industry as above are: (i) availability of raw materials, (ii) nearness to refineries, (iii) infrastructure facilities, (iv) an established market for pharmaceuticals, dyestuffs, chemicals and plastics, and (v) availability of a cadre of technicians and technocrats. The two crude oil refineries, and other companies such as NOCIL, HOC, Union Carbide, Herdillia, several caustic soda, chlorine and sulphuric acid plants, Rashtriya Chemicals and Fertilizers Limited, Colour Chem, Amar Dye Chem, IDI, and several other plants in Bombay and its environs have contributed massively to the growth of this industry therein. The exploration of the Bombay High oil and gas fields has opened up fresh opportunities for a very accelerated growth in the near future. The gas separation plant at Uran and the proposed petrochemical complex in the area nearby will further open fresh opportunities for the growth of the industry. (The Indian Textile Journal, December, 1981 (New Vistas in Organic Chemical Industry).

The chemical industry of Bombay comprises the manufacture of a wide variety of chemicals and products thereof, which can conveniently be divided into various groups, such as, inorganic chemicals, organic chemicals, petrochemicals, agricultural chemicals, drugs and pharmaceuticals, dyestuffs, spirits, liquor preparations, etc. The industry is highly heterogeneous in the sense that it includes large volume low-cost products, such as heavy chemicals, low volume high-cost products such as drugs and pharmaceuticals, and fine chemicals. It can generally be characterised as science-based ajad technology oriented, liable to a high rate of obsolescence, and highly capital intensive. It is in no way a labour intensive industry like the cotton textile industry. The element of entrepreneurial risk is by no means small. Another characteristic of this industry is environmental pollution which is also a major problem for Bombay.

The first Chemical factory in Bombay viz., the Kemp and Company was established in the year 1868 which started manufacturing drugs and pharmaceuticals. It was followed, as per available record, by the Zandu Pharmaceutical Works in 1910, which undertook production of ayurvedic and allopathic preparations. The Tata Oil Mills, which has now a number of factories in India was established in 1917 in Bombay for the manufacture of soaps and oils.

The Brumer, Mond and Company incorporated in 1923 as a private company, for the manufacture of chemicals and a wide range of textile auxiliaries, gave an important lead to the chemical industry in Bombay. This company was changed in 1929 to Imperial Chemical Industries (India) Limited, and in 1964 to I.C.I. (India) Private Limited. In March 1978 it was converted into a public limited company, and was renamed as Crescent Dyes and Chemicals Limited. It was followed by incorporation of the H. J. Foster and Company in 1924 as a private company, which was subsequently renamed as Glaxo Laboratories in July 1968 which became a public limited company. It is now one of the leading manufacturers of a wide range of medicinal preparations, sophisticated antibiotics, life-saving drugs, vitamin preparations, infant foods, basic drugs, laboratory chemicals, veterinary products, etc. The May and Baker was incorporated in 1928. It is another celebrated company engaged in the manufacture of basic drugs, a wide range of pharmaceuticals, photographic specialities and other chemicals. Being initially incorporated as a private company in 1928, it was converted into a public limited company in 1979. The other pioneering concerns in the chemical industry of Bombay were the Hindustan Lever which was incorporated as a private limited company in October 1933, and the Indian Oxygen which was founded initially in Bengal in 1935. The Chemical, Industrial and Pharmaceuticals Laboratories established in 1935 in Bombay also belongs to the category of pioneering concerns. It manufactures drugs, pharmaceuticals, fine chemical steroids, hormones, alkaloids and natural products.

From these beginnings, the industry has made tremendous progress, with plants springing up right in the heart of the city as also in the suburbs, covering practically all its major branches. The development of this industry has directly contributed to the all-round progress of industrialisation not only of this city but also of the entire country.

The progress of the industry has been particularly remarkable since the last two decades. Some of the segments within the industry are not only undergoing a process of self-propelling growth, but also have a potentiality to export the products on a considerable scale. With the fast growth of the petrochemicals industry and the growing demand for modern chemicals, drugs and pharmaceuticals, the industry's future indeed looks very bright.*

As stated earlier the growth of the chemicals and chemical products industry in Bombay is mainly marked from 1923. It received tremendous encouragement during the Second World War and the post-war era. The spurt in industrial growth and acceleration of demand for chemicals and drugs by other industries gave an impetus to this industry from 1943 onwards. The difficulties in imports of the chemical products on account of the World War also made it imperative on the part of the Government to encourage the growth of the chemical industry indigenously. Thus, the increase in effective demand for chemical products from other industries and consumers, in the face of shortage of supply due to war, initiated a process of self-propelling growth of the industry in cities like Bombay and Calcutta.

The stage of the Bombay chemical products industry is such that the city now possesses technocrats of high quality who can man chemical enterprises in diverse fields of pharmaceuticals, fertilizers, petrochemical down-stream plants, designing of alcohol-based industries as well as in technologies for plant protection chemicals.

The growth of the industry from 1923 to 1957 in Bombay is shown in the statement given below. Figures in brackets show percentage of employment in chemicals and chemical products industries to total factory employment in each respective year:—

Chemical Industry in India, 1976-77

Source.—Kothari's Economic and Industrial Guide of India, 1980-81.

1. No. of Factories	4,52
2. Investment (Rs. lakhs)	30,28,17
3. Employment	3,73,314
4. Inputs (Rs. lakhs)	31,88,34
5. Output (Rs. lakhs)	42,63,07
6. Value added on manufacture (Rs. lakhs)	8,88,83
7. Net income generated (Rs. lakhs)	7,31,20

Growth-rate of Chemical Industry During 1951-73

Period	Compound Growth fate of Chemical Industry	Compound Growth rate for all Industries
1951-55	9.1	7.3
1956-60	10.7	6.6
1961-65	9.0	9.0
1966-73	8.9	4.5

employment in chemicals products industries to total factory employment in each respective year:-

Factories in chemicals and chemical products Industry and Employment, Greater Bombay, 1923-1957 (D, T. Lokadawala op. cit.)

Year	No. of working factories	Employment in reporting factories
1923	9 10	759 (0.4)
1925	20	5,471 (2.6)
1930	22	6,289 (3.4)
1935	30	5,163 (2.7)
1940	36	3,535 (1.5)
1945	75	7,561 (1.9)
1950	146 (16)	11,465 (3.0)
1955	191 (18)	14,275 (3.5)
1957	195 (15)	15,855 (3.7)

The principal products of the chemical industry in Bombay are listed below:—

Dyes of Naphthal series, fast bases, stabilized azoices, beta naph-thal, BON acid, dyestuff intermediaries, auxiliary chemicals for plastics, textile, leather and other industries; metal chemicals, oxygen, acetylene and nitrogen gases;

stabilizers and additives for P.V.C. and other polymers, leather auxiliaries, and polyester/polymeric type of plasticizers; toilet goods; P.V.C. films and sheet laminates, entruded acrylic and high impact polystyrene sheets and a wide range of art paper and chrome paper; alkaloides and natural products; fine chemicals, synthetic organic dyes, plastic moulding powders, and industrial resins; basic chemicals, an extensive range of textile auxiliaries and heat treatment salts; agrochemicals; Fluoro-chloro-methane gases, Hydrofluoric acid, aluminium flouride; pesticides, fungicides, fumigants, veterinary products; ethylene oxide, condensalts, sulphonated products, ammonium compounds, emulsifiers for insecticides and pesticides; soaps, detergents, edible fats, glycerine, cattle and poultry feeds, nickel catalyst, fine chemicals; poly-ninyl acetate dispersions; industrial and medical gases, such as, oxygen, nitrous oxide, nitrogen, argon, dissolved acytelene, high altitude oxygen pure gases, liquid oxygen explosives, electrodes, anasthetic and analgesic oxygen therapy equipment, and medical pipeline accessories, air separation gas plants and associated cryogenic equipment; photographic chemicals, rubber chemicals and rubber chemical intermediates; hydrogen peroxide and sodium perborate; glucose powders, calcium gluconate, ferrous gluconate; nylon filaments yarn, polyester filament yarn, nylon tyrecord and tyre fabrics, organic and inorganic hormones, rectifiers, breweries, spirits, liquors, wines; polystyrene plastic moulding material, styrene monomer, ethyl benzene, industrial alcohol, potable liquors; synthetic rubbers, solid P.V.C. conveyor belting; paints, varnishes, synthetic enamel, red oxide, decorative paints and a number of other organic and inorganic chemical products. The above list is by no means complete.

The pharmaceutical and drugs wing of the industry in Bombay manufactures all kinds of pharmaceutical preparations, insulin injections, anti-dysentery drugs, anti-rheumatic drugs, vitamin preparations, antihistamine drugs, antacids, infant foods, basic drugs, laboratory chemicals. Many of the companies manufacture the most sophisticated of broad spectrum antibiotics, oxytetracycline, anti-diabetics, chloropropamide, anti-T.B. drugs; protein hydrolysate, tranquilisers, steroids, ammo-acids, and a wide range of life-saving drugs. The Bombay industry is not behind in ayurvedic and homoeopathic medical preparations.

In view of the importance of the drugs and pharmaceutical industry, it is dealt with separately in this chapter.

The Annual Survey of Industries which is the most authoritative data on the structure of the chemicals and chemical products industry in Bombay furnishes a two-digit data for the manufacture of chemicals and chemical products (except products of petroleum and coal). The A.S.I. also furnishes three-digit data for seven sectors of the industry as under:-

- 1. Manufacture of industrial organic and inorganic chemicals and goods such as acids, alkalies and their salts, gases like acetylene, oxygen, nitrogen, etc.
- 2. Manufacture of fertilisers and pesticides.
- 3. Manufacture of paints, varnishes and lacquers.
- 4. Manufacture of drugs and medicines.
- 5. Manufacture of perfumes, cosmetics, lotions, hair dressing, tooth paste, soaps in various forms such as synthetic, detergent, shampoos, shaving products, cleaners, washing and scouring products and other toilet preparations.

 6. Manufacture of turpentine, synthetic resins, plastic materials and synthetic fibres like nylons, teryelene except
- 7. Manufacture of chemical products not elsewhere classified (including photo-chemicals, sensitised films and

The A.S.I, statistics for the chemicals and chemical products industry and its seven various sectors for the survey periods of 1973-74 and 1975-77 which are given in Table No. 10 are self-evident and need no particular comments. It may be clarified that the statistics for the survey periods are annual averages within the periods.

It may be very interesting to analyse the principal characteristics of the chemicals and chemical products industry in Bombay on the basis of the Annual Survey of Industries of 1975-77.

The chemicals and chemical products industry in Bombay comprised 454 registered factories which formed 49.02 per cent of those in Maharashtra in 1975-77 survey period. They provided employment to 53,479 persons which constituted 51.24 per cent of the employment in the industry in State. The invested capital in the factories in Bombay was to the tune of Rs. 4,09,17 lakhs or 47.20 per cent of that in Maharashtra. It is noteworthy that the capital investment in this industry in Bombay was about 135 per cent of that in the cotton textile industry, and was very much higher than that in any of the seven major sectors of industry in Bombay. This brings home the fact that it is a highly capital intensive industry requiring very sophisticated machinery.

What is true as regards capital investment is also true about the output and value added on manufacture in this industry. The output of the Bombay industry was computed at Rs. 8,60,37 lakhs or 53.25 per cent of that in the State. The value of output of this industry was higher than that of any other major sector of industry in the city. The value of output was about 125 per cent of that of the cotton textile industry; about 200 per cent of the rubber, plastic, petroleum and coal products industry; about 400 per cent of the basic metal and alloys industry; about 400 per cent of the metal products industry; about 375per cent of the machinery and machine tools industry; about 312 per cent of the electrical machinery, apparatus and appliances industry and about 500 per cent of the transport equipment industry in Bombay.

The value added on manufacture in this industry was computed at Rs. 2,02,76 lakhs or 53.32 per cent of that in Maharashtra. It was higher by Rs. 10,76 lakhs than that in the cotton textile industry. As compared

TABLE No. 10 CHEMICALS AND CHEMICAL PRODUCTS (EXCEPT PRODUCTS OF PETROLEUM AND COAL), GREATER BOMBAY

		Chemicals and Chemical products Basic industrial organic and inorganic chemicals		Fertilizers a	Fertilizers and Pesticides		Paints, Varnishes and Lacquers	
	Item	(except products of		and goods such as acids, alkalies and their salts, gases like acetylene, oxygen, nitrogen, etc		1975-77	1973-74	1975-77
		1975-77	1973-74	1975-77				
1	No of estimated factories	454	44	48	44	19	65	66
2	Fixed capital (Rs)	1,91,62,53,000	6,51,25,000	9,46,09,000	32,52,77,600	76,06,32,000	4,79,31,100	5,29,77,000
3	Working capital (Rs)	1,84,72,66,000	5,59,40,300	10,09,94,000	10,14,66,300	28,50,35,000	10,52,20,000	11,59,50,000
4	Capital Investment (Rs)	4,09,17,33,000	11,68,46,100	19,06,09,000	49,07,17,600	1,05,76,44,000	18,02,04,800	20,29,77,000
5	Outstanding Loans (Rs)	1,61,86,52,000	5,92,63,200	7,76,76,000	10,69,32,400	17,81,62,000	10,95,04,600	11,02,21,000
6	Man-days worked	1,63,24,323	NA	13,69,082	NA	10,62,653	NA	14,44,556
7	All workers	33,615	2,652	2,648	2,272	1,733	3,517	2,870
8	All employees	55,479	4,191	4,172	3,363	3,102	5,670	4,750
9	Wages to workers (Rs)	32,56,74,000	1,40,86,600	2,23,38,000	1,12,80,100	1,57,93,000	1,76,54,000	4,67,62,000
10	Total emoluments (Rs)	74,84,17,000	3,00,57,800	5,45,64,000	2,43,98,200	3,98,47,000	4,64,13,500	11,74,64,000
11	Fuel consumed (Rs)	39,91,14,000	2,43,14,300	6,02,59,000	4,74,08,000	12,19,24,000	53,95,700	1,04,13,000
12.	Material consumed (Rs.).	4,68,74,75,000	13,24,6 <mark>0,100</mark>	25,61,52,000	40,95,33,200	<mark>5</mark> 3,39,49,000	36,64,54,900 '	43,85,08,000
13.	Other inputs (Rs.)	1,30,82,16,000	N.A.	3,40,57,000	N.A.	<mark>9</mark> ,29,62,000	N.A.	15,68,99,000
14.	Total inputs (Rs.)	6,39,48,05,003	16,85,53,800	35,04,69,000	48,37,11,700	74,88,35,000	38,79,35,300	60,58,20,000
15.	Plant andmachinery (Rs.).	4,31,19,71,000	11,49,40,500	2,34,70,62,000	1,62,89,300	<mark>57,</mark> 93,17,000	6,44,45,400	5,80,58,000
16.	Value of products (Rs.)	7,59,93,43,033	25,44,74,700	50,80,93,000	65,51,11,200	90,22,91,000	48,18,92,700	61,03,13,000
17.	Value of other output (Rs.).	1,00,43,11,000	N.A.	1,65,73,000	N.A.	4,40,11,000	N.A.	13,76,83,000
18.	Total output (Rs.)	8,60,36,51,000	27,15,03,100	52,46,66,000	66,42,26,900	94,63,02,000	48,62,42,700	64,79,96,000
19.	Depreciation (Rs.)	18,12,92,000	89,56,800	2,20,47,000	7,56,98,200	3,15,29,000	66,35,900	79,61,000
20.	Value added on manufacture (Rs.).	2,02,75,55,000	9,39,92,600	15,21,50,000	10,48,17,000	16,59,38,000	9,16,71,500	13,42,14,000
21.	Factory payments (Rs.)	22,82,05,000	N.A.	1,17,91,000	N.A.	2,36,03,000	N.A.	1,91,83,000
22.	Net income (Rs.)	1,79,93,50,000	N.A.	14,03,58,000	N.A.	14,23,35,000	N.A.	11,50,30,000
I	I	I		1	I	l	I	I

TABLE NO.10 - contd.

	Item	Manufacture of Drugs and Medicines		perfumes,cosmetics,lotions,hair anufacture of Drugs and dressing,tooth paste, soaps in edicines any form, synthetic detergent, shampoos, shaving products and		Manufacture of turpentine,synthetic resins, plastic materials and synthetic fibers like nylns, teryelene except glass		Manufacture of Chemical produce not elsewhere to classified (including pho chemicals sensitiesed films & papers)	
		1973-74	1973-74	1975-77	1973-74	1973-74	1975-77	1973-74	1975-77
1	No of estimated factories	129	162	41	40	129	229	103	84
2	Fixed capital (Rs)	31,39,28,100	38,25,90,000	20,00,68,100	28,54,41,000	29,49,90,200	25,41,89,000	6,81,98,100	7,43,49,000
3	Working capital (Rs)	53,37,07,800	61,14,72,00	28,40,19,500	30,53,31,000	38,16,35,200	26,77,95,000	10,96,56,500	15,52,22,000
4	Capital Investment (Rs)	87,45,70,300	1,06,84,13,00	53,82,72,900	82,54,41,000	56,02,73,000	50,84,65,000	16,26,32,500	19,91,60,000
5	Outstanding Loans (Rs)	29,87,58,300	43,37,84,000	20,42,19,100	56,29,95,000	16,53,17,500	9,72,16,000	12,88,50,400	13,45,09,000
6	Man-days worked	N.A	68,68,686	NA	26,97,609	NA	14,84,371	NA	11,98,882
7	All workers	15,045	14,204	6,373	6,242	4,992	2,847	3,012	2,570
8	All employees	21,013	24,380	8,293	8,112	6,826	4,304	4,380	4,057
9	Wages to workers (Rs)	10,43,06,900	13,31,46,000	5,71,94,700	6,03,16,000	2,64,49,100	2,72,03,000	1,30,73,900	1,65,71,000
10	Total emoluments (Rs)	21,21,73,300	32,05,81,000	10,00,18,400	11,14,38,000	5,78,66,100	5,95,87,000	2,83,73,100	4,00,32,000
11	Fuel consumed (Rs)	2,16,44,700	4,40,34,000	2,44,14,200	6,38,34,000	5,18,63,000	8,01,05,000	60,73,500	1,27,84,000
12.	Material consumed (Rs.).	94,48,97,100	1,29,03,59,000	1,34,74,14,000	55,24,00,300	45,22,24,000	19,81,04,900	32,13,72,000	32,13,72,000
13.	Other inputs (Rs.)	N.A	36,50,78,00	N.A.	22,98,15,00	N.A.	8,85,237,000	N.A.	23,17,19,000
14.	Total inputs (Rs.)	1,07,61,06,900	1,69,94,71,000	<mark>1,19,11,50,200</mark>	1,64,10,63,000	68,63,49,500	62,08,55,000	48,87,58,500	56,58,75,000
15.	Plant andmachinery (Rs.).	34,75,90,100	41,07,07,000	22,91,09,200	28,41,88,000	1,80,98,98,500	53,74,23,000	6,23,40,400	8,34,82,000
16.	Value of products (Rs.)	1,59,22,63,400	2,23,07,85,000	1,4 2,07,06,900	2,06,04,86,000	1,05,29,17,800	77,37,89,000	55,77,80,300	46,58,68,000
17.	Value of other output (Rs.).	N.A	26,14,24,000	N.A.	12,33,96,00	N.A.	5,03,22,000	N.A.	23,92,08,000
18.	Total output (Rs.)	1,63,60,11,000	2,49,22,10,000	1,43,98,60,100	2,18,38,82,000	1,07,76,83,400	82,41,11,000	59,01,30,300	70,50,76,000
19.	Depreciation (Rs.)	3,74,24,800	4,26,31,000	1,82,17,900	2,30,52,000	4,91,42,300	4,44,69,000	69,03,800	83,96,000
20.	Value added on manufacture (Rs.).	52,24,79,300	75,01,08,000	23,04,92,000	51,97,68,000	34,21,91,600	15,87,87,000	9,44,68,000	13,08,06,000
21.	Factory payments (Rs.)	N.A	8,68,91,000	N.A.	4,47,91,000	N.A.	2,43,82,000	N.A.	1,60,59,000
22.	Net income (Rs.)	N.A	66,32,17,000	N.A.	47,49,77,000	N.A.	13,44,05,000	N.A.	11,47,46,000

to the six other major sectors of industries, the value added in this industry was approximately three to five times.

It can therefore be deduced that although the cotton textile industry is the largest industry by virtue of the higher employment provided by it, the chemicals and chemical products industry is the largest in Bombay as regards number of registered factories, invested capital, value of output and value added on manufacture. It is thus the most important sector of manufacturing activity.

It is borne out by the reports of many companies that the rate of returns on capital in this industry are very high, and that it is a prosperous avenue of producion. It may be interesting to give an account of the various sectors of the industry, separately. It is attempted to furnish the history of growth of each sector, products, importance in the industrial economy, problems of growth and an account of a few large scale manufacturing companies, the information for which is readily available. It is clarified that all the principal manufacturers are not mentioned simply because of constraints of information about them. The account is also by no means exhaustive. (The names of units for which information is readily available are given)

The chemicals and chemical products industry can broadly be classified into two classes, namely, heavy chemicals and fine chemicals. Among heavy chemicals, sulphuric acid and the chemicals based on it constitute an important group from the industrial point of view. Another group is composed of alkalies, such as various forms of soda and the compounds based on it. It is attempted below to give an account of the growth of the various sectors of the chemical industry in Bombay *vis-a-vis* the growth of the industry in India. An attempt is also made to trace the history of the various industry sectors in Bombay. As far as possible the names of the pioneering units are given. (*Ibid*)

SULPHURIC ACID

The production of sulphuric acid is usually regarded as a barometer of industrial progress. This was the first branch of the heavy chemical industry in Bombay. It is a basic heavy chemical of great industrial and economic importance. Its economic significance lies in the fact that large quantities of sulphuric acid are essential in the manufacturing of important products such as fertilizers, various acids, explosives, dyestuffs, artificial silk, petroleum refining, rayon, staple

fibres and numerous industrial operations. It is therefore a sine qua non for the growth of industrialisation.

The history of the sulphuric acid industry in India can be traced to the year 1853 when a plant was established in Bengal. The history of the industry in Bombay city commences with the incorporation of the Eastern Chemical Company, Bombay, in 1913, just on the eve of the First World War. The industry passed through an era of difficulties in the inter-war period, particularly due to shortage of sulphur. The industry grew rapidly during and after the Second World War. The war efforts of the Government and growing industrialisation provided the stimulus. It expanded further at the end of the First Five-Year Plan. Production was handicapped to some extent due to non-availability of sulphur which is entirely imported. The expansion of fertilizers and rayon industries during the first two plans made it imperative to take measures for expansion of this industry. The Fertilizer Corporation of India, Trombay (now known as Rashtriya Chemicals and Fertilizers) was granted an additional capacity for production of sulphuric acid at Bombay during the Third Plan. A unit in the private sector in Bombay was licensed for fabrication of sulphuric acid plants by the Government of India during the Third Plan (Handbook of Commercial Information, 1963, Department of Commercial Intelligence and Statistics, Government of India.) The Fertilizer Corporation of India is now one of the important manufacturers of sulphuric acid. The demand from rayon units in the vicinity of Bombay is required to be met from the Bombay units as also outside manufacturers.

CAUSTIC SODA

Caustic soda constitutes an essential raw material in the manufacturing of soap, rayon, paper, cotton textiles, rubber and vegetable oils. The caustic soda industry is comparatively of recent origin. It originated in India at Mettur in Tamilnadu State in 1941. The pioneer in this industry in Bombay was the Calico Mills Chemical Division which was established during the Second Five-Year Plan. At the time of its establishment, this firm was one of eight units in the country which produced caustic soda for sale.

The demand for this industry's products grew very high during the Third Plan period. In order to meet the growing demand, additional capacities were granted during the Third Plan. The protective duties in force upto May 1951 were withdrawn by Government. (*Ibid.*)

CALCIUM CARBIDE

Calcium Carbide is another important chemical of industrial significance. The Calico Mills Chemical Division, Trombay was a pioneering enterprise in the production of Calcium Carbide in Bombay as of caustic soda. The unit started production in the first quarter of 1961 with an annual capacity of 6,705 tonnes of calcium carbide.

The principal raw materials for production of calcium carbide are lime-stone and coke. Though these materials are amply available, their quality is much below the mark in India. This adversely affects the quantity of production. Recently however this deficiency is removed by using petroleum coke which is available in the requisite quantity from the petroleum refineries at Trombay. The availability of petroleum coke at Bombay has brightened the prospects of the industry in Bombay.

HYDROCHLORIC ACID AND NITRIC ACID

Next to sulphuric acid, hydrochloric acid and nitric acid are considered the most useful for industrial purposes. In the initial stages of development of the modern chemical industry in India, these acids were manufactured by the producers of sulphuric acid. The dependence on sulphuric acid in the standard process and the limited supply of sulphuric acid in comparison to demand were a great constraint in the manufacture of hydrochloric and nitric acids. The problem of chlorine utilisation in alkali manufacture was another handicap. These handicaps led to the gradual adoption of the synthetic method of manufacture of hydrochloric acid. The consumption of this acid rose with its increasing use as a substitute for sulphuric acid in the fertilizer and other chemical industries. The Fertilizer Corporation of India, Trombay, plant was included in the Third Plan for the manufacture of nitric acid and nitro products. This plant is now a large producer in this field in Bombay.

PHOSPHORIC ACID

There was absolutely no production of phosphoric acid in India, prior to the Second World War and it was wholly imported. The Star Chemicals of Bombay was a pioneering concern in India which undertook production, of phosphoric acid in 1943 under assistance of the Directorate General of Supply, Government of India. The chemical was very essential for the defence forces, but its supply from foreign sources was stopped due to the war. Hence, the importance of the production of the Bombay firm, which was able to meet the requirements of the acid at that time. After the cessation of the war the unit found it difficult to withstand foreign competition, and applied to the Government of India for tariff protection. The Government granted tariff protection to the industry by converting revenue duty into a specific protective duty in April 1947. The protection was however withdrawn in 1949 after review of the economic condition of the industry. (Handbook of Commercial Information, 1963).

BICHROMATES

Sodium and Potassium bichromates are utilised as raw materials in cotton textile dyeing and chrome tanning of. leather. The bichromates manufacturing industry in India originated only during the Second World War, prior to which these chemicals were imported from Western countries.

The war gave a great impetus to this industry. After the war, however, the demand for bichromates declined, and the industry was faced with the problem of surplus production capacity. The Government of India helped survival of the industry by granting tariff protection in December 1946 which was continued for long and was subsequently withdrawn from January, 1959.

In 1961, there were three units in Bombay manufacturing bichromates, namely, Hindustan Chemical Works, Golden Chemical Works and Pioneer Cbromate Works. These units were the pioneers in the field in Bombay. (*Ibid*).

HYDROGEN PEROXIDE

Besides the pharmaceutical industry, hydrogen peroxide forms an important auxiliary chemical in the modern textile industry as a bleaching agent and oxidising agent for chemical reactions. It was entirely imported upto as late as 1955-56. The National Peroxide Limited, Bombay, incorporated in 1953, was the first firm to manufacture this chemical in India. It started production for the first time in India in 1956 with technical and financial collaboration with a British firm. The annual production capacity of the plant was 720 tonnes at the time of its inception, which was expanded to 3,046 tonnes per annum at the end of 1961. (*Ibid*). The same concern started a new plant for production of hydrogen peroxide by another process during the Third Plan.

MAGNESIUM CARBORATE

Magnesium carborate production is of very recent origin in India. Although the pioneer in the industry is not known, one firm in Bombay was licensed for the manufacture of magnesium carborate with a production capacity of 6,000 tonnes per year during the Third Plan. (*Ibid*).

BUTYL ACETATE

This chemical is largely used as a solvent for natural gums and synthetic resins. The demand for it was met entirely from imports. The Union Carbide India Limited, a celebrated petro-chemicals manufacturing concern in Bombay, established for the first time in 1961, a unit in Bombay with an installed production capacity of 1,256 tonnes of butyl acetate. The unit produced 252 tonnes of the product in 1961 initially. (*Ibid*).

ETHYL ACETATE

This is an important acid from the industrial point of view, and it is used mainly as a solvent in paints, varnishes and lacquer industries. The Excel Industries, Jogeshwari in Bombay (1941) undertook its production during the Second Five-Year Plan. In 1961, the Union Carbide India also emerged in the field of ethyl acetate in Bombay. (*Ibid*). The growth of the automobile industry and other industry sectors requiring paints and lacquers gave an impetus to this industry during the last about 20 years.

HYDROQUINONE

In India, this chemical is mainly used in the film industry and in photography, although it has diverse uses in the developed countries. Formerly it was entirely imported from foreign countries. Commercial production of hydroquinone was started in the country for the first time in Bombay in 1949. The annual production capacity of the sole unit, namely, Kesar Sugar Works, Bombay, was 15 tonnes in 1950, while its actual production was 3.4 tonnes in the same year. Realising the difficulties of the industry the Government of India granted tariff protection to this industry in 1951 which was discontinued from January 1960. (Ibid).

STEARIC ACID AND OLEIC ACID

These fatty acids have attained considerable commercial importance because of their use as raw material in several industries, such as, rubber and rubber products, cotton textiles, cosmetics and soaps, grease, lubricants, paints and automobiles. Although the name of the pioneering concern in this industry is not known, there were three firms in Bombay which manufactured these acids on a small-scale during period of the Second World War. In order to encourage development of the industry the Government of India granted it tariff protection in 1948 which was later on withdrawn from 1963. (*Ibid*). It appears that one of the units went out of production in about 1949-50 for which no information is available. Later a large concern in Bombay mainly engaged in the manufacturing of toilet goods and vegetable oils, also undertook the production of stearic acid and oleic acid on a small-scale in the mid-fifties.

BUTYL ALCOHOL

Butyl Alcohol is an important petrochemical belonging to the organic intermediates group. It is used in the manufacture of esters, and as a solvent for resins, lacquers and varnishes. The production of butyl alcohol was undertaken for the first time in India by the Union Carbide India in Bombay in 1961. The annual installed capacity of this pioneering enterprise was 684 tonnes, while the actual output was 152 tonnes of butyl alcohol in 1961. (*Ibid*). With this modest beginning the production by the concern expanded considerably in subsequent years.

METHYL ALCOHOL

Methyl alcohol also known as methanol is another important petrochemical belonging to the organic intermediates group. From the industrial and commercial point of view this is a very important petrochemical which is essential in the manufacturing of acrylic resins, terylene and other chloromethanes, as well as many pharmaceutical preparations. It is also used in substantial quantity as an auxiliary in jet and turbine aircraft fuel. It has its utility in industry as a solvent, and as a denaturant for rectified spirit. The Petrochemical Committee of the Government of India in its report of 1963 considered that in view of the prospective demand for this chemical it would be desirable to set up two new units, each with a production capacity of 60 tonnes per day, located near the main consumption centres of Bombay and Calcutta. (Ibid).

PHTHALIC ANYHYDRADE

This is also an important petrochemical belonging to the organic intermediates group. A rapid rise in demand for this industrial chemical is anticipated in view of the accelerated development of plastics, dyestuffs, and allied resin industries in and around Bombay. The industry is of very recent origin in India, and there was not a single unit in the country, prior to 1961.

Besides a unit in Bombay, there was only one other unit in the country *viz.*, the Durgapur Steel Plani in the public sector, licensed for the production of phthalic anyhydrade. This fact establishes the pioneering nature of the unit in Bombay.

Phthalic plasticisers were produced for the first time in the country in 1961 by the Indo-Nippon Chemicals Limited, Bombay. The annual installed capacity of this unit was 900 tonnes, while its actual production was 139 in 1961, the year of its inception. (*Ibid*).

POWER ALCOHOL AND INDUSTRIAL ALCOHOL

In recent years, substantial development of the alcohol based industries has taken place throughout the world. A chemical, known as industrial alcohol, is now widely used as a basic material for the manufacture of diverse organic chemical products, particularly drugs and pharmaceuticals, dyestuffs, high polymers, solvents, insecticides and synthetic rubber.

Modern distilleries for potable alcohol were established in the country in the last century. The industry developed more rapidly in the United Provinces, present U.P. and Bihar.

Production of industrial and power alcohols in India commenced after the indigenous sugar industry came into being in 1932. Starting primarily as a rectified spirit industry, it made steady progress when alcohol found wide ranging applications. Acute scarcity of petrol during the Second World War, due to the requirements of the defence services and curtailment from producer countries on account of war, stimulated the use of alcohol as a motor fuel, even without the admixture with petrol. This has always been a scarce commodity in relation to demand for it. And hence, the stimulus for its growth in the post-war period.

According to the Report of the Committee on Industrial and Power Alcohol appointed by the Government of India (1956), the manufacturing of polyethylene based on alcohol had already been taken up by two firms, one in Bombay city and another in Calcutta. (*Ibid*).

Now more than 60 per cent of the total production of alcohol in India is used for industrial purposes. It is an important industrial raw material, chiefly because the country does not have enough petroleum crude. More attention has come to be focussed on it in recent days as a probable substitute for motor gas. It has the advantage of easy-obtainability through a simple and low energy technology, *viz.* fermentation. Ethyl alcohol is readily convertible into ethylene and acetaldehyde both of which are important starting points for synthetic chemicals. Utilisation of alcohol therefore enjoys considerable preference.

The Polychem Ltd., with factories at Goregaon and Chembur in Bombay and at Nira in Pune, is a large producer of alcohols, potable liquors, polystron, styrene and monomer. The sales of this concern were of the tune of Rs. 19.82 crores in 1978-79. (A State-wise Picture of Large Scale Industrial Activity, 1981.)

ORGANIC CHEMICALS

Much of the development of the organic chemical industry has come about in the last 50 years. "The growth has been particularly rapid since 1960, catalysed by the establishment of the steel plants in the country. Production of benzene, butyl acetate, diethylene glycol, ethylene, mono-ethylene glycol and polyethylene glycol registered over hundred per cent increases in the period 1970-78. The industry also expanded into new avenues and production of D. M. T., pare-xylene, ortho-xylene, vinyl chloride and caprolactum, started in the last decade and has since gained momentum." (Kothari's Economic and Industrial Guide, 1980-81.)

The Hoechst, Dyes and Chemicals, incorporated in 1958 as a private limited company and later converted into a public limited company in 1961, has been a large producer of polyninyl acetate dispersions, dyestuffs and organic and inorganic chemicals. Its Mulund plant had a turnover of Rs. 51.88 crores in 1980.

CRUDE COAL-TAR

Coal carbonisation was introduced in India about 125 years ago by the two gas companies in Bombay and Calcutta for supply of town gas. The Bombay Gas Company which went into production in 1866 started coal carbonisation. The Bombay gas works is one of the few principal sources of coal-tar in India. The Bombay Gas Company is said, by the *Manufacturers' Directory* (1962), to be the only producer of cresols in India. Cresol is a tar acid which has an industrial application, which is required to be imported from abroad because of its very small production in Bombay.

PHENOL

This petrochemical constitutes an important raw material in the pharmaceutical, dyestuffs, explosives, and insecticide manufacturing industries. The synthetic resin industry is the main consumer of phenol. Precise information about production of phenol is not available. According to the book *Chemical Industrial Undertakings Licensed* (1962), issued by the Indian Chemical Manufacturers Association, Calcutta, two firms in Bombay city were granted licences towards the end of the Second Plan for the production of phenol.

PETROCHEMICALS INDUSTRY

The petrochemicals industry has emerged as the principal supplier of chemicals of vital economic significance which have a bright future in enrichment of the country. Although petrochemicals began to be manufactured in India in 1961, the petrochemicals industry emerged in the country as an important sector after the mid-sixties only. The first integrated petrochemical complex started functioning at Trombay in Bombay in 1966 under management of the Union Carbide India Ltd., a private sector enterprise. This pioneering concern has established a Naphtha plant at Trombay with an annual consumption of 60 thousand tonnes of Naphtha. It also manufactures carbons, midget electrodes, industrial chemicals, dry cells and batteries for radio and telecommunication purposes. The lead given by the Union Carbide was followed by a giant plant by the National Organic Chemical Industries Ltd. in the Thane-Belapur Complex, which was started in January, 1968. This concern with its office in Bombay and the plant on the outskirts of the city has an average annual intake of 225 thousand tonnes of Naphtha. It is one of the biggest petrochemicals manufacturers. The Indian Petrochemical Corporation Limited at Baroda, by far the biggest petrochemicals complex, was another celebrated enterprise in the field of petrochemicals. The available capacities for what is called, the building blocks in these three units by 1977 are given below:—

(Thousand MTPA)

Item		IPCL	NOCIL	NCIL	Total
1.	Naphtha Input	450	225	80	755
2.	Ethylene	130	60	22	212
3.	Propylene	78	35	6	119
4.	Butadiene	22	7		29
5.	Benzene	23	14	6	43

Petrochemical based products have truly redeemed the scarcity of traditional raw materials required for food, clothing, medicines, household utilities and shelter for man. No other industry has opened up newer vistas for the welfare and prosperity of the people as the petrochemicals industry in view of the diverse products, and it is indeed, contributing a great deal to the growth of industrial potential and national wealth. This industry occupies a vital position in the industrial development of the country in view of the employment potential and the contribution to the gross national product. It has opened up large opportunities for employment. The sectors that benefit most from the indirect generation of employment by the petrochemical industries are textiles, plastics, other consumer good industries, pharmaceuticals, transport, engineering, rubber products, agriculture, etc.

The traditional measure for evaluating the growth of the petrochemicals industry in any country, is the rate of growth of

ethylene production. The compound annual rate of growth of ethylene production in India between 1970 and 1978 had been around 8.2 per cent against the 5 per cent rate recorded by the manufacturing sector as a whole. (*Petrochemicals from Bombay High, Maharashtra Economic Development Council.*). The rate of growth of petrochemicals depends largely upon the growth of capacities and production in the industries which utilise petrochemicals as feed stocks. The major determinants for market demand are plastic pipes, plastics for agricultural applications, plastic packaging, PVC sheets, plastic cables, plastic footwear, thermosetting polymers, expanded polystyrene, synthetic rubber, rubber chemicals, synthetic fibres, drugs and pharmaceuticals, dyestuffs, paints, synthetic detergents and pesticides. In view of the fact that the petrochemical industry was established only in the late sixties, the growth of the final products industries was limited. Secondly according to some experts, the applications of petrochemicals have mainly centred around the urban areas because of paucity and high prices of petrochemicals. This is especially true in the case of synthetic fibres and yarn. The industry is also heavily taxed. Considering all these limitations the growth rate recorded by the industry in the seventies is quite significant. (*Ibid.*)

As a result of this growth and the versatility of petrochemicals, the demand for petrochemicals has been steadily increasing despite limitations. In fact, the demand outstripped production by 1977. (*Ibid.*)

The ultimate importance of petrochemicals and their derivatives to the economy lies in their backward and forward linkages, the additional investment they generate and the consumer needs they help to satisfy. It is, therefore, instructive to know their end uses. Styrene-butadiene rubber is used in the manufacture of tyres and tubes, footwear, moulded and extruded goods, etc. Polystyrene is used in packaging consumer durables, household and stationery articles. Expanded polystyrene is used in industrial insulation, cold storage, construction and defence sectors. LDPE is used in agriculture, mouldings, wires, cables and pipes manufacture. PVC is used to manufacture pipes, fittings footwear, cables and sheets. Ethylene oxide is used in the manufacture of ethylene glycol, emulsifiers, rubber chemicals and pharmaceuticals. Isopropyl alcohol is used in pharmaceuticals, pesticides, refining of special oils and chemical auxiliaries. Acetone is used in pharmaceuticals, cellulose acetate yarn and fibre, rubber chemicals, paints, thinners, resins, explosives and chemical auxiliaries. Polypropylene finds its use in manufacture of consumer and industrial articles, staple fibre, pipes. Acrylonirrile is used in acrylic fibre, nitrile rubber. Phenol is used in resins, pharmaceuticals, wire enamels, pesticides and synthetic tanning agents. Phthalic anhydride is used in plasticizers, dyestuffs and resins.

Petrochemicals industries are thus intimately connected with plastics processing and ancillary industries, synthetic fibre industry, synthetic rubber industry, rubber chemicals, pesticides, drugs and pharmaceuticals, dyestuffs, paints and synthetic detergents industries. Besides, the setting up of petrochemicals plants and down-stream units generates investment in capital goods and intermediate goods industries connected with design and engineering, equipment, construction, etc. This versatile nature of the petrochemicals industry provided a powerful stimulus behind its rapid growth.

The raw materials, known as feed stocks, in this industry comprise Ethane, Propane, Naphtha and Gas Oil. These can be obtained from petroleum, coal, alcohol and other hydro-carbon resources. It may be noted that petrochemicals can be produced even from non-petroleum sources. In India the raw material used is Naphtha which is obtained after refining crude petroleum. As a result of repeated price hikes of crude oil by the OPEC countries, however, the Government of India raised the price of Naphtha which has resulted into high costs of production of petrochemicals. Naphtha is also used as a major feedstock for fertilizer industry which is a priority industry. Hence, the supply of Naphtha to the petrochemicals industry is restricted. It is in this context that the fortunate discovery of oil and associated gas at Bombay High and oil and free gas at Bassein oil fields, assume tremendous economic significance. The petrochemicals industry is, therefore, very anxious to augment its supplies of feedstocks from this alternative source.

The new situation emerging from the discovery of domestic crude oil and natural gas in the Bombay High and Bassein fields enables an almost autonomous development of petrochemicals, with a little competition between the petrochemical industry and other industries in the supply of suitable hydrocarbons. There is not only an abundant availability of a wide variety of hydrocarbon raw materials their are well suited for a much more diversified petrochemical industry, but also a wide variety of natural products that integrate with petrochemicals to yield a comprehensive range of chemicals that can profoundly affect almost every sector of the economy.

Presently, Bombay High is producing crude oil at the rate of 6 million tonnes per year and is due to reach the peak rates of 12 million tonnes after 1983. Drilling is continuing and hopes are high also for the Bassein field and in the Tapi structures. It is estimated that a daily production of over 20 million cubic metres of gas per day is possible for nearly 30 years. (For details see Petroleum Industry.) Based on these discoveries plans are being made to set up two gas crackers in the vicinity of Bombay and in Gujarat.

The crude oil reserves at Bombay High are estimated to be of the order of over 750 million tonnes spread over an area of about 1,500 sq. km. From *the* oil fields Associated gas is also available which is at present being consumed by the Fertilizer Plant at Trombay and by the Tata Thermal Power Station. It has opened up opportunities to have petroleum feedstocks in sufficient quantity to support a large-scale economic and viable petrochemicals industry, utilising optimum technology and product mix.

Though Naphtha is a good feedstock for petrochemicals, its rising cost, supply constraints and its utilisation for the fertilizer manufacturing industry have inflicted constraints on its utilisation as an economic feedstock. All hopes for future petrochemical projects, therefore, centre on the use of Associated gas and Natural gas from Bombay High and Bassein fields. The gas has the following potential uses in order of priorities. (D.N Daruwala, "Petrochemicals-Opportunities and Challenges" (articles).

- 1. Feedstock for fertilizers.
- 2. Feedstock for petrochemicals.
- 3. Production of LPG domestic fuel.
- 4. Fuel for power generation.

Of the above uses, Government has already completed the project for recovering the butane-propane fraction for LPG production at Uran in the environs of Bombay. The methane fraction of the gas is being piped to Bombay for fertilizer manufacture and to the giant power generation project of the Tatas at Trombay. The ethane and higher fractions are not being utilised as yet. It has been suggested by many committees of experts that optimal utilisation of the Associated gas should be planned to lead to the highest economic benefit. If the gas is utilised for the production of petrochemicals, the value additions would become very high and would have a high multiplier effect on other downstream activities.

The Government of India has formulated plans for utilisation of the gas for the production of fertilizers, LPG and petrochemicals. The Petroleum Ministry has planned to construct 11 fertilizer plants of which two would be in Maharashtra, three in Gujarat, and two each in Madhya Pradesh, Rajasthan and U.P. All the ten plants will use the Bombay High Gas transported through pipelines. The LPG plant using some four million cubic metre of Associated Gas from Bombay High is being incorporated at Uran. If India can set up petrochemical plants based on gas, she would save considerable foreign exchange now spent on imports of petrochemicals. The Bombay High crude is highly rich in aromatics and the gas is ideal for production of petrochemicals. A as cracker unit is proposed to be established in the

environs of Bombay. This unit is proposed to crack about 5 lakh tonnes of ethane-propane mixture to produce 3 lakh tonnes of ethylene and 40 thousand tonnes of propylene per year. (D. N. Daruwala, op. cit.)

As a result of the opportunities opened up by the Bombay High, the private sector petrochemicals manufacturers in Maharashtra (particularly in Bombay) have applied for expansion of their existing manufacturing facilities. Since a petrochemicals complex, even if sanctioned by Government, would take at least 6 years for commissioning, during which period the Associated gas waste may continue unabated, they have put up an interim proposal for effective utilisation of the Usar complex, (The Usar petrochemicals complex is expected to cost about Rs. 900 crores.) near Alibag is commissioned. The State Government has supported the proposal.

The interim proposal envisages a marginal modification of the separation and LPG plant of ONGC at Uran to enable separation of about one lakh tonnes of ethane-propane gas per annum which would be supplied to the existing gas cracker of Union Carbide India Ltd., at Trombay. According to the proposal the Union Carbide Plant can be readily adopted to switch back from cracking one lakh tonnes of Naphtha to cracking one lakh tonnes of ethane-propane fraction from the Associated gas. This can be done at an estimated cost of Rs. 25 crores. This cracker would be in a position to produce about 55 thousand tonnes of ethylene per annum. The ethylene would be supplied to the other existing manufacturers of LDPE and HDPE to enable them increase their existing production capacity. The proposal involves an investment of only Rs. 6 crores by ONGC in the public sector, and the rest of the investment would come from the private sector. This proposal, it is claimed, would not only reduce the period of sub-optimal use of Bombay High Gas, but also would substitute existing imports and generate revenue to the public exchequer to the tune of Rs. 26 crores per annum. The increase in the GNP as a result of implementation of this proposal is estimated around Rs. 80 crores per annum.

The proposal is under consideration of the Government of India. The present plans of the Government are to set up a 4 million cubic metres per day capacity gas fractionation plant at Usar with LPG extraction facilities. (Petrochemicals from Bombay High, Maharashtra Economic Development Council, Bombay.)

ALKALI INDUSTRY

The alkali industry is a basic industry as it provides industrial raw materials for other industries. The growth of this industry in India is of recent origin. Caustic soda manufacturing which is an adjunct of the alkali industry had its first footing in India in 1941. The industry is essentially a product of the Second World War. There were 32 caustic soda plants in the country in 1974 of which one was located in Bombay. Till 1967 indigenous production of caustic soda was not sufficient to cater fully to the domestic demand, and imports had to be resorted. Since 1970 however there had been practically no imports as indigenous production was sufficient to meet the internal demand.

Besides caustic soda, the alkali industrial unit in Bombay, manufactures chlorine, caustic acid, hydrochloric acid and other chemicals. Since all these chemicals are industrial raw materials, the demand for them is naturally dependent upon the progress in the consuming sectors. The industry presents serious problems in regard to location, choice of process, fuel and raw material supplies. It is a capital intensive industry.

Till recently the industry had to import a substantial part of the machinery and equipment. The extent of dependence on imports has however diminished progressively with the establishment of indigenous fabrication facilities, and at present only about 20 per cent of the equipment is required to be imported. Salt, mercury, graphite anodes, etc., are the main raw materials required for the industry.

The installed capacity of production of caustic soda in Bombay was 28,950 tonnes in December 1973, while the actual production was 14,100 tonnes in 1971: 26,900 in 1972 and 27,000 in 1973. The major handicaps faced by the industry are the increase in power tariffs and shortage of power which result in decrease in production. The Alkali Manufacturers' Association of India, formed in 1960, helps the firms in all matters connected with the development of the Industry as well as its day-to-day problems.

DYESTUFF INDUSTRY

Dyestuffs are essential raw materials for cotton, silk, art silk and woollen industries. A well established dyestuff industry is a pre-requisite for the development of chemical industries and textiles. It acts as an important link in the chain of other essential chemical industries such as, inorganic chemical industry and coal-tar industry on the one hand, and the fine chemical and pharmaceutical industry, explosives, synthetic resins, plastics, etc., on the other. This industry can be diverted to the production of some defence materials in times of war.

The production of dyestuffs and their intermediaries in India is mainly a development of the post-independence period. Earlier these products were almost entirely imported from the U.K., Germany, Switzerland and the U.S.A. The foundation of the organised Indian dyestuff industry was laid in 1940 by the establishment of a small-scale plant by M/s. Associated Research Laboratory at Bhatghar near Pune. The British Government of India appointed a committee to prepare a plan for development of dyestuff industry in India. It was not however until 1952 that the production of dyestuffs started on a large scale when M/s. Atul Products Ltd. commissioned their plant at Atul for production of dyes and sulphur black in small-scale concerns, some of them with foreign collaboration for the manufacture of a variety of dyestuffs and their intermediaries.

The growth of this industry in India during the last 25 years appears to be spectacular as compared to many other industries during this period. The growth of the Indian industry compares better with that in the other developing countries

At present most of the dyestuff and intermediate plants are located in Maharashtra and Gujarat. This is attributable to the fact that the necessary basic chemicals, such as acids and alkalis are produced in this area and the major consuming industry, namely, textile is also located in this area. The other buyers of dyestuffs, *viz.*, pharmaceutical and plastic factories are also located in this area.

The prospects of growth of this industry in Bombay city were however not very bright. This is mainly because dyestuff plants cause air and water pollution as they eject very strong effluents and gases. The Government have, therefore, decided to encourage dispersal of this industry from Bombay. The Kalyan industrial complex has however attracted very big dyestuff plants which could be attributed to the availability of infrastructure and nearness to Bombay. The Amar Dye Chem and Indian Dyestuffs Industries are located in this region. The registered offices of these concerns are in Bombay.

The industry was granted tariff protection in 1954 which helped its further development. Indian dyestuffs are now exported to many countries in the world except probably China and East European Countries.

The data based on Annual Survey of Industries are not separately available for dyestuffs industry. The data constraint forbids from analysing the structure of this important industry.

PESTICIDES

Pesticides began to be used on a large scale only after Independence. The first unit for manufacturing BHC was set up in 1952. India is however now one of the two largest producers of pest control chemicals in Asia. A majority of the pesticide manufacturing units are in the small-scale sector which produce formulations, such as, dusting powders, wettable powders and emulsified concentrates. The production of these essential chemicals in the country is much less than the demand, as the consumption has increased considerably. The use of pesticides in the field of agriculture began slowly with the realisation that expansion of production depends to a large extent on the prevention of loss due to pest and disease infestation. It was only during the Second Five Year Plan that the use of pesticides was given importance. The propagation of high yielding varieties and hybrid varieties, however, brought new pest problems hitherto of no economic significance. This increased the demand for pesticides. Realising their importance in the country's agricultural economy, the public sector also has taken a considerable interest in development of this industry.

The growth of this industry in India in terms of average production in tonnes was 7 per cent per annum from 1970-71 to 1975-76, while the rate of consumption of pesticides rose by 29 per cent per annum during the same period. (Dr. P. K. Narayanswamy "Pesticides Industry".)

Many of the raw materials like benzene, chlorine, methyl and ethyl alcohol, methylamine, phosphorous, pentasulphide, etc. are available locally though not in adequate quantities. Further growth of the petrochemical industry in and around Bombay and Baroda will increase availability of raw materials.

The Excel Industries with its factories at Jogeshwari and Amboli in Bombay and at Roha in Raigad district is a large manufacturing concern. It manufactures a variety of pesticides and fungicides. Another famous name in this industry is the Rallis India with plants at Bombay and Belapur (Thane district) on the outskirts of Bombay. The Muller and Phipps, a foreign collaboration concern, manufactures some kinds of insecticides in its plant at Vile Parle. It is a large-scale manufacturer.

As per the *Wealth of India*, the Bombay Chemicals Private Ltd., Bombay, had an annual production capacity of 96 thousand gallons of 2 per cent pyrethrum extract, an important pesticide. The Standard Chemicals and Pharmaceuticals Company at Bombay is another producer of insecticides. As per the book *Chemical Industrial Undertakings Licensed* (1962), a firm in Bombay was licensed to produce sulphuric insecticides with a production capacity of 1016 tonnes, divided equally into colloidal sulphur and wettable sulphur. Further details of the firm are not available.

The pesticides and fungicides manufacturing industry in and around Bombay awaits a good future. The propagation of improved agrarian techniques, intensive methods of cultivation and changing crop pattern with an emphasis on commercial crops are bound to accentuate the demand for these products. In fact the wide propagation of hybrid crops warrants a regular use of pesticides on a large scale. These factors will further strengthen the demand for the products of this industry. The expanding growth of petro-chemicals in and around Bombay will supply the necessary raw materials for this industry on a rising scale at cheaper rates.

FERTILIZERS

Commercial fertilizers are categorised into straight fertilizers and mixed fertilizers. Straight fertilizers are sub-divided broadly into Nitrogen fertilizers, Phosphate fertilizers and Potash fertilizers. The first Indian super-phosphate factory was set up in 1906 in Madras State. In 1924 another super-phosphate factory was set up in Bombay (Handbook of Commercial Information, 1963). The total production and consumption of fertilizers was very meagre according to Western Standards. The conservative peasant who is inherently very slow in adoption of scientific cultivation could hardly be persuaded to utilise fertilizers. Naturally there was no impetus to the growth of the industry. The apathetic attitude of the British Indian Government also did not provide any encouragement. It was only after Independence that there was a wide realisation of the importance of fertilizers. The progressive Government after Indian Independence provided the necessary impetus to the growth of the industry and for popularising fertilizer use.

The decade ending 1961 had been a period of intensive efforts to plan the production, distribution and utilisation of fertilizers. Expert Committees were appointed by the Government of India, and experts were invited from abroad to advise on the problems of the industry. The fertilizer industry to-day constitutes a major public sector enterprise in India. At present there is an acute shortage of both nitrogenous and phos-phatic fertilizers, and efforts are being made in the public and private sectors to step up their production.

At the commencement of the First Plan (1951-52), there were two principal units manufacturing ammonium sulphate in the country, one of which was located in Mysore and another in Kerala. (*Ibid*) Single superphosphate prepared from imported rock phosphate was the principal source of phosphatic fertilizers in India prior to the First Plan period. Of the 14 plants manufacturing super-phosphate, seven were located in the former Bombay State in 1951. (*Handbook of Commercial Information*, 1963.)

It was in the Third Five-Year Plan that a giant fertilizer plant was established at Trombay in Bombay which was intended to produce mainly urea and nitrophosphate in addition to ammonium sulphate. The Rashtriya Chemicals and Fertilizers at Trombay, an undertaking of the Government of India, is now one of the few giant projects of its kind in India. It has an installed capacity to produce 99,000 tonnes of urea per annum. It however, exceeded its installed capacity and manufactured about 103,959 tonnes in a latest year. Its installed capacity as regards production of complex fertilizers is three lakh tonnes, its actual production amounting to about 255,510 tonnes in a latest year. The enterprise has an installed capacity to produce 3.61 lakh tonnes of ANP, the actual production being about 199,558 tonnes. The value of sales amounted to Rs. 95.80 crores in 1978-79 and to Rs.174.10 crores in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981) Formerly known as the Fertilizers Corporation of India, the Rashtriya Chemicals and Fertilizers is ideally situated as regards availability of feedstocks, sources of energy, transport facilities, etc. In recent years it ha.s diversified its production. Besides, fertilizers, it produces a good amount of sulphuric acid, elemental sulphur and many other basic chemicals which are so very essential for other industries. The importance of sulphuric acid lies in the fact that its transport is hazardous, and it is required in bulk in Bombay. Elemental sulphur is not available as a mineral in India.

The discovery and explorations of the Bombay High have illuminated the hopes and aspirations of the Indian nation. The Bombay High enabled the Government to review the entire feedstock policy for fertilizers. The nitrogenous fertilizer plants in the country are based on a variety of feedsotcks, such as, natural gas, Naphtha, fuel oil, coal and coke oven gas. The initial development of nitrogenous capacity in the country was based primarily on indigenous feedstocks like coke, wood, etc. With the availability of surplus Naphtha in the local refineries and discovery of natural gas, production capacity was augmented in the sixties. After discovery of the Bombay High Oil and gas, the Government could review the entire feedstock policy, and formulated guidelines in this respect. Accordingly Naphtha is used sparingly only on considerations of exigencies and economies, while use of fuel oils is being restricted. Primarily gas is to be used as a fertilizer feedstock, as it is most economical. It has been estimated that on the basis of availability of associated gas from Bassein, about 11 fertilizer plants, each with a capacity of 1,350 t.p.d. (tonnes per day), can be established. (Petrochemicals from Bombay High, Maharashtra Economic Development Council, Bombay)

The expansion programmes of the Trombay Fertilizer Plant and the proposed Thai Vaishet Fertilizer Project are sanctioned on the basis of Bombay High and Bassein resources only. (*Ibid*)

The explorations at Bombay High, thus, promise a very bright future for the expansion of the Trombay Fertilizer Plant and development of the Thai Vaishet Project near Bombay. The original authors of the Trombay Plant, though might not have visualised the promises of the Bombay High, now deserve national compliments.

The Maharashtra Agro Industries Corporation which is a Government undertaking is also engaged in fertilizers production in Bombay besides other centres in Maharashtra.

As per the Annual Survey of Industries in 1975-77 there were 19 registered factories in Bombay engaged in the manufacture of fertilizers and pesticides. They provided employment to 3,102 employees including 1,733 workers. The capital invested in the industry was Rs. 1,05,76.44 lakhs. The value of total inputs of the industry was to the tune of Rs. 74,88.35 lakhs, while the value of total output was Rs. 94,63.02 lakhs. The value of products of the industry stood at Rs. 90,22.91 lakhs, the value added on manufacture being Rs. 16,59.38 lakhs.

The detailed statistics of the fertilizer and pesticides industry, the two sectors being grouped together, are furnished in Table No. 10.

The data enable us to study the structure of this industry in Bombay.

AGRO-INDUSTRIES

Agro-industries are an important sector from the point of growth of the national economy. Besides providing employment, their importance lies in providing a valuable infrastructure for agricultural economy, but for which the latter is bound to stagnate. Though agriculture is the oldest industry in this country, the growth of agro-industries is only of recent origin. They started developing only after Independence. These industries are mainly engaged in manufacture of chemical fertilisers, pesticides, insecticides, fungicides, agricultural implements and a variety of equipments.

The Rallis India Limited manufactures a range of pesticides, solid as well as liquid, and has an installed capacity to manufacture about 28,260 tonnes of pesticides per annum. Unfortunately however this is a declining industry in Bombay. As per a government study, (Growth of Industries in Maharashtra, Directorate of Industries, Maharashtra State) the number of factories in this sector in Bombay declined from 966 in 1961 to 544 in 1976. This meant a decline by 43.7 per cent over a period of about 16 years. The employment in agro-industries also declined from 2,62,957 in 1961 to 2,06,954 in 1976, which meant a decline by 21.3 per cent.

PHARMACEUTICAL INDUSTRY

The pharmaceutical industry is a vital sector of the national economy, and its products and services are an essential input in our programme of health-care. It has a record of achievements unmatched by very few other industries in India. Measured in terms of quantity and quality of growth, the pharmaceutical industry is in the front rank of India's science-based industries. It is today a vertically integrated manufacturing sector producing almost all essential drugs, and meeting the country's requirements of formulations in full and of bulk drugs very substantially. It is pertinent to note that among the developing countries, India has the distinction of having the largest and the most modern pharmaceutical industry. It has now reached a stage which signifies a level of operation comparable to international standards of production, technology, management and quality.

The industry is mainly concentrated in the western region, particularly in Bombay and Baroda. The principal reason for the quicker growth of this industry in this region is that the development of the chemicals and petrochemicals industries took place in the last about twenty years, and hence the basic raw materials became available nearby for the manufacture of medical preparations. The development of petrochemical complexes at Bombay and Baroda has made available basic raw materials required for organic intermediates like ethylene, propylene, Benzene, toluene, xylene etc. Most of the raw materials needed for the production of antibiotics by fermentation processes are available nearby. Synthetic drugs need quite a number of basic organic chemicals which are used in the manufacture of organic intermediates. These are made available by the petrochemical complexes around Bombay and Baroda in a great measure.

Independent India inherited, in August 1947, a pharmaceutical industry which had not come of age; The industry had behind it a chequered history since its establishment in the early years of this century. Alternating periods of growth and recession, of advance and setback constituted that history.

But it was also a history which had an enterprising beginning, in that the industry owed its establishment to the vision and efforts of three dedicated persons, Acharya P. C. Ray in Calcutta, and Mr. T. K. Gajjar and Rajmitra B. D. Amin in Western India (Baroda). They struggled against odds in the same way as the pioneers of shipping and steel industries did in the initial stages. In particular, the pioneers of the pharmaceutical industry had to overcome such difficulties as public prejudice towards allopathic medicine, lack of government patronage, foreign competition and non-availability of component raw materials. All the same, the use of chemo-therapeutic agents for the control and treatment of diseases was firmly established, thanks to the efforts of organic chemists who discovered drugs like aspirin and barbiturates. Other significant developments at about the same time, such as establishment of the Haffkine Institute and King's Institute in 1904, Central Research Institute in 1905 and Pasteur Institute in 1907, and commencement by British scientists in India of research in tropical diseases like malaria, cholera, smallpox and typhoid, fostered a climate favourable for the growth of the nascent pharmaceutical industry in its first decade of existence.

Fillip given by World Wars: The industry received a fillip during World War I as the local demand for allopathic medicines increased steeply and imports were almost completely cut off. Production of caffein from tea dust and of surgical dressings was established during this period which also witnessed increased manufacture of galenicals. But imports of pharmaceutical products were resumed immediately after the War. Consequently competition sharpened and the infant industry received a setback during the twenties. This adverse situation notwithstanding, the industry undertook, by 1930, the manufacture of biological products like sera and vaccines, anaesthetics like ether and chloroform and coal-tar distillation products like naphthalene and cresol. In 1930, again. manufacture of Tetanus anti-toxin was taken up for the first time; The industry's progress during the thirties, in the face of foreign competition, was slow but steady. By 1939 at was able to meet 13 per cent of the country's medicinal requirements.

The outbreak of World War II in 1939 proved to be a shot in arm for the industry. In 1941, manufacture of an anti-dysenteric drug, lodochlor/Di-iodohydroxy-quinoline, was taken up for the first time in the country. Manufacture of a number of alkaloids like ephedrine, santonin, strychnine, morphine, emetine, atropine and codeine was undertaken by the industry during this period. At the same time, production of chemotherapeutic drugs such as arsenicals. anti-leprotic drugs and colloidal preparations of calcium, silver, manganese, iodine, etc. was also established. Besides, manufacture of glandular products like liver extracts, pituitary extracts and adrenaline solutions was commenced during the war period. The country became virtually self-sufficient in the production of sera and vaccines. By and large, by 1943, the Indian producers were in a position to meet upto 70 per cent of the then medicinal requirements of the country.

The fact nevertheless remained that the industry's activities in the field of fine chemicals and synthetic drugs were mainly confined to processing and manufacture of compounded preparations. They did not extend to the production of such pharmaceuticals starting from the basic chemicals. The industry's development during the war years was thus uneven.

In the immediate post-war years (1945-47), the world-wide shortage of drugs and pharmaceuticals continued. The Indian industry had, therefore, no difficulty in maintaining its tempo of growth and even in developing export markets for galenicals, alkaloids etc., though the total value of its production, consisting mostly of formulations was only of the order of Rs.10 crores in 1947. But this favourable situation did not last long, for the Indian pharmaceutical industry could not keep pace with the war-time developments leading to the replacement of many familiar drugs by a number of new chemotherapeutic products and antibiotics.

In the immediate post-Independence years from 1948 to 1953, several reputed international companies set up processing facilities in Bombay, Calcutta and parts of Western India. These companies, with their well equipped establishments in India, were able to keep abreast of the new discoveries in medicine and thus to issue new preparations. They had an assured supply of bulk pharmaceuticals from their principals, and they had established markets in India for their products.

Of the 75 large-scale units in the country in 1952, as many as 35 were in the then Bombay State, 25 in West Bengal and only 15 units were located in other States. The State-wise distribution of small-scale units also presented a similar picture with Bombay accounting for 556 units of a total of 1,568 units in the entire country. West Bengal ranked second with 539 units. These two States thus accounted for 1,095 small-scale units. The following table illustrates this:—

	Number of Units in 1952				
	Large-s	cale	Smal	l-scale	
Bombay	35	(47%)	556	(35%)	
West Bengal	25	(33%)	539	(34%)	
Other States	States 15		473	(31%)	
	75	(100%)	1,568	(100%)	

Both the Central and State Governments were active participants in the industry in the then State of Bombay in the initial stages. Among the Government factories were, (i) the Medical Stores Depot at Bombay, (ii) the Indian Penicillin Bottling Plant at Pimpri, (iii) the Shark Liver Oil Factory at Sassoon Dock, Bombay and (iv) the Haffkine Institute at Parel, Bombay.

The following statement gives the capital invested, value of raw materials consumed, total sales and labour employed in the Central and State Government factories in Bombay State in 1952:—

Name of factory		Capital invested	Sales	Value of Raw Material Comsumped (Rs. in lakhs)		Labour employed		
		(Rs. in la		Indigenous	Imported	Technical	Non- technical	Total
	Indian Penicillin Bottling Plant, Pimpri.	44.50	30.61	1.23	14.70	5	80	85
	Government Shark Liver Oil Factory, Bombay	2.10	3.00	1.09		3	11	14
	Government Medical Stores Depot, Bombay	2.40	10.00	7.00		13	57	70
4.	Haffkine Institute, Bombay	48.25	20.00	N.A.	N.A.	70	500	570
	Total	97.25	63.61	9.32	14.70	91	648	739

Pharmaceutical and Drug Industry in Maharashtra

No. of Units Large-scale 65 Small-scale 1,327 1,392

Production	Bulk Drugs	Finished Products (Formulations)	
	(Rupees in crores)		
Organised Sector	16.50(29.4%)	198.80(66%)	
Small-scale Sector	2.15(41.3%)	43.00(62.3%)	
Total	18.65(30.4%)	241.80(65.4%)	

Figures in brackets indicate percentage of the total pharmaceutical industry in Maharashtra to that in India.

The history of the pharmaceutical industry in Bombay can be traced back to 1868 when the Kemp and Company was established to manufacture pharmaceuticals. It was followed by the Zandu Pharmaceutical Works in 1910 which produced ayurvedic and allopathic medicines. Establishment of the H. J. Foster and Co. in 1924 was an important addilion to the industry. This company was subsequently renamed as Glaxo Laboratories in July 1968 which became a public limited company. It was followed by the May and Baker in 1928 and the Chemical, Industrial and Pharmaceutical Laboratories in 1935, in Bombay.

With these pioneers, the industry developed progressively, particularly in the post-Independence period. The earlier concerns have their plants mainly in the Worli, Prabhadevi, Dadar and Parel areas of Bombay, while comparatively new factories found a home in Andheri-Kurla region, Bhandup, Jogeshwari and Mulund regions. There are about 43 large-scale manufacturing concerns in Bombay at present. The rapid development of the industry in this city during the past about 25 years gave a great impetus to the growth of a very large number of units in the medium and small scale sectors in Bombay. The development of pharmaceuticals also encouraged growth of a large number of small scale units manufacturing containers, packing material an,d other ancillary industries in Bombay.

The industrial skyline of Bombay has, over the past 15 years changed very considerably from the smoking chimneys of leading textile mills to the neatly designed, modern sophisticated plants of complex chemical based industries with the pharmaceutical industry topping the list. The textile industry, undoubtedly, still dominates the industrial economy of Bombay in terms of employment, but with textiles already having become a " sick " industry, chemical-based industries, including pharmaceuticals, now head the list of industries in the Bombay-Pune industrial belt.

Contrary to the trend of development of pharmaceutical industry in West Bengal, Bombay's growth in this vital sector has been on more modern and scientific lines. New units were set up not only with the latest technology available from the advanced countries but also with foreign capital participation. The post-Second World War boom in the pharmaceutical industry witnessed the opening in Bombay of the sales and jacketing offices of some leading pharmaceutical companies in the world. This coupled with the excellent infrastructure facilities available at Bombay and its environs stimulated the growth of the pharmaceutical industry in and around Bombay.

The initial free flow of international technology and know-how helped the nascent pharmaceutical industry to attain a degree of development and complexity that took double that time for many other developed countries to accomplish. In this endeavour almost all the major countries having a well developed pharmaceutical industry have contributed in one way or another. Thus, we have in Bombay region today pharmaceutical companies with British, American, Swiss, German, Japanese and Dutch collaboration.

This tie-up with leading foreign manufacturers has also given an impetus to research and development in this industry. Two of the country's best drug research laboratories are located in Bombay. The two research laboratories in Bombay, viz. CIBA-GEIGY Research Centre and Hoechst Research Centre have contributed immensely to technological advancement in the field. Another important consequence of this international co-operation in this most innovative, technology-based enterprise is that the industry today encompasses the whole spectrum of pharmaceutical operations, research and development, production, marketing, rigid quality control, personnel development and professional management. These factors have not only generated within the country the technological capability to produce drugs of the highest standards and quality but it has also put India firmly on the World map for pharmaceutical exports.

The statistics of by Annual Survey of Industries for 1973-74 and 1975-77 reveal immense development of the drugs and pharmaceutical industry in Greater Bombay. According to this survey there were 129 factories in 1973-74 which increased to 162(As per the Director General of Technical Development, Government of India, there are 43 large-scale factories in Bombay out of the total of 120 large-scale units in India.) in 1975-77. They provided employment to 21,013 persons including 15,045 workers in 1973-74 which increased to 24,380 persons including 14,204 workers in 1975-77. The capital investment in this industry increased from about Rs. 87.46 crores in 1973-74 to about Rs. 1,06.84 crores in 1975-77. The fixed capital of the factories was Rs.31,39,28,100 in 1973-74 and Rs. 38,25,90,000 in 1975-77. The working capital was increased from Rs.53,37,07,800 in 1973-74 to Rs.61,14,72,000 in 1975-77. This is a highly capital intensive industry requiring modern equipment.

The industry worked for 68,68,686 man-days, while its wage bill amounted to Rs. 32,05,81,000 per annum during the A. S. I. period of 1975-77. The factories had paid a wage bill of Rs. 21,21,73,300 in 1973-74. Fuel consumption of the factories was worth Rs. 2,16,44,700 in 1973-74 and Rs. 4,40,34,000 per annum in 1975-77. The value of raw material utilised was Rs. 94,48,97,100 in 1973-74 which increased to Rs. 12,90,359,000 per annum in 1975-77. The total value of inputs of the Bombay pharmaceutical industry was Rs. 1,07,61,06,900 in 1973-74 which stood at Rs. 1,69,94,71,000 in 1975-77. The total output of the factories increased from Rs. 1,63,60,11,000 to Rs. 2,49,22,10,000 per annum during 1975-77. The value of drugs and medicines produced increased from Rs. 1,59,22,63,400 in 1973-74 to Rs. 2,23,07,85,000 in the period 1975-77. The value added on manufacture was Rs. 52,24,79,300 in 1973-74 which increased to an impressive figure of Rs. 75,01,08,000 per annum during 1975-77. The value of plant and machinery increased from Rs. 34,75,90,100 to Rs. 41,07,07,000 during the period of comparison. The net income of the factories was as high as Rs. 66,32,17,000 per annum during the Annual Survey of Industries of 1975-77.

The above statistics lead us to the conclusion that the industry registered a steady progress over the period of comparison. This highly capital intensive industry contributes significantly to the gross national product, besides providing employment to 24,380 persons. This is also a highly paid industry which assures good returns on capital. In fact, it is one of the most prosperous and developing industries. It has hardly suffered from stagnation or any other development problems which are peculiar to many other industries in the country. With the growing health consciousness and medical services available, the industry never suffered from demand recession also.

The large-scale pharmaceutical companies in Bombay are found to distribute very high rates of dividend on shares. The units in this city are reported to export medicinal products worth more than Rs. 20 crores per annum. It is thus an important industry from the point of view of exports. Though the development of the pharmaceutical industry in Bombay, as that in India, is yet to match, in some respects, with that in the advanced countries in the world, it is nevertheless preeminent among the developing countries in this field. As the UNIDO Expert Group put it, the level of operations of this industry, which is comparable to international standards in production technology and quality of products, had been reached after many years of experience with international collaboration. Some of the multi-national companies have undertaken an intensive research and development programme so as to reach advanced international standards. Their progress in the production of the most complex synthetic drugs, antibiotics and a wide range of therapeutic and prophylactic medicines have also contributed to raising the standard of medical care in the country.

In view of the crucial life-saving products of this industry, Government have been devoting considerable attention to its needs and regulating its working. Recently the Government of India, on the basis of the Hathi Committee Report, has decided to allocate priority to the public sector; to regulate the equity participation of multi-national companies to 40 per cent in case of those not engaged in bulk drugs involving high technology and to rationalise price structure in the case of many drugs. These measures are in the best interest of the country, and are not likely to hamper the progress of the industry in Bombay.

COSMETICS, SOAPS AND DETERGENTS

This segment of industry is conceived, for purposes of this analysis, to include manufacturing perfumes, cosmetics, lotions, hair dressing materials, tooth pastes, soaps, synthetic detergents, shampoos, shaving products, cleaners, washing and scouring products and other toilet preparations. The industry thus covers a wide range of chemical-based goods of household use. This classification of the industry accords with the grouping adopted by the Annual Survey of Industries, the detailed statistics according to which are furnished in Table No. 10 in this chapter. As per the Annual Survey of 1975-77, there were 40 registered factories engaged in this industry in Bombay which provided employment to 8,112 employees including 6,242 workers. The fixed capital in the factories in Bombay was Rs. 28,54.41 lakhs, the working capital Rs. 30,53.31 lakhs, while the invested capital was Rs. 82,54.41 lakhs. The outstanding loans of the companies were very high at Rs. 56,29.95 lakhs which were a little less than the fixed and working capital taken together. The industry worked for 26,97,609 man-days per annum. The total emoluments paid to employees were Rs. 11,14.38 lakhs while the share of wages to workers was comparatively lower, viz., Rs. 6,03.16 lakhs. This shows the preponderance of technically qualified personnel over workers.

The raw material consumption of the factories was to the order of Rs. 1,34,74.14 lakhs, the other inputs being worth Rs. 22,98.15 lakhs per annum. The value of plant and machinery in the industry was Rs. 28,41.88 lakhs. The value of total inputs was computed at Rs. 1,64,10.63 lakhs as against the total output of Rs. 2,18,38.82 lakhs per year during the survey period. The value of products was to the tune of Rs. 2,06,04.86 lakhs. The value added on manufacture by the industry was computed at Rs. 51,97.68 lakhs. The net income of the factories in Bombay was enumerated at Rs. 47,49.77 lakhs.

These statistics bring home some conclusions about the industry. The outstanding loans are quite high. The ratio of output to inputs is very high which means high profitability in the industry in Bombay. The value added is also considerably high. The total output is about 260 per cent of the invested capital. It means higher returns on capital.

Though attempts were made as early as 1879 to manufacture soap on western lines at Meerut, the first soap factory in India on modern lines was established as a private enterprise by the Tatas at Cochin. This was followed by manufacture of soap by the Godrej and Boyce in Bombay, which was the first factory in Bombay and second in India. When the Tatas and the Godrej entered the field, India was importing soap. But the swadeshi movement launched by nationalist leaders gave a great fillip to the indigenous industry to strive. By about 1930, several big and medium sized factories started operation by trained personnel, and about 85 per cent of the material could be obtained in India. But soon the industry had to face foreign competition. With a view to organise the industry on an All India basis, the All India Soap Manufacturers' Association came into existence in 1934 at Calcutta. The establishment of soap factories by the Lever Brothers, now called Hindustan Lever, in 1933-34 gave new dimensions to the industry, with which imports of soap fell down. The Second World War provided an impetus to the Indian industry as there was a drastic curtailment of foreign supplies. (Kothari's Investor's Encyclopaedia) Since the Second War there was a gradual growth of small-scale soap factories. The industry in the cottage industry sector received encouragement from the cult of Khadi and Swadeshi, particularly from the Khadi and Village Industries Commission, which has a big centre at Borivli in Bombay, known as Kora Gramodyog Kendra.

Synthetic detergents now occupy an important place in soaps and cleaning media. Synthetic detergents were not manufactured in India before the Second Five-Year Plan, though their usefulness in washing costly fabrics like rayon, silk and nylon had already made them popular. The Swastik Oil Mills of Bombay went into production of synthetic detergents for the first time in India in 1957. In the following year another unit, namely, Hindustan Lever, Bombay, took up production of synthetic detergents. The combined annual capacity of the two units was 7,315 tonnes in 1961. Additional production capacity amounting to 5,304 tonnes was licensed to new units in Maharashtra and one in West Bengal. (Handbook of Commercial Information, 1963)

Besides the numerous small manufacturers of soap and detergents in Bombay, the principal companies which deserve mention are as under. The Godrej Soaps, the oldest in Bombay, has a factory at Vikhroli. It has an installed capacity to produce 13,860 tonnes of soaps and 20,000 tonnes of fatty acids. The sales turnover of the unit in respect of soaps was Rs. 8.49 crores in 1978-79 and Rs. 11.51 crores in 1979-80. The total turnover was worth Rs. 81.36 crores and Rs. 1,05.93 crores in the two years, respectively. The Tata Oil Mills with a factory at Sewri and another one in the city produces a wide range of soaps and vegetable oils as under(*A state-wise Picture of Large Scale Industrial Activity, 1981*)

Item	Installed capacity (Tonnes)	Sales	Turnover	
		1978-79	1979-80	
Soaps	51,300			
Synthetic detergents	11,698	1,19.57		
Toilet preparations	1,690	1,01.51 (Including units.)	other	
Vegetable oils	10,913			

The Hindustan Lever, established in 1933-34, is another giant manufacturer of popular soaps, detergents, toilet preparations glycerine and vanaspati. The Johnson and Johnson with plants at Mulund manufactures perfumes, cosmetics and other toilet preparations and baby soaps. The Muller and Phipps(India) Ltd. with a factory at Vile Parle produces talcum powder (900 tonnes), detergents (288 tonnes) and soaps, medical preparations and insecticides (2.50 lakh litres). The figures in brackets indicate installed capacity. The total sales turnover of the company was worth Rs. 5.25 crores and Rs. 6.10 crores, respectively in 1978-79 and 1979-80. (Ibid.)

In the field of perfumes, cosmetics and toilet preparations, the principal manufacturers include, the Lakme Ltd. (1952) and the Colgate Palmolive Ltd., Burroughs Wellcome and Co. (1912), Ciba-Geigy of India, Duphar Interfran, Geoffrey Manners (1943), Glaxo Laboratories, Herbertsons Ltd. (1936), Industrial Perfumes (1957), Johnson and Johnson (1957), and Kelkar and Company (Mulund). The years of establishment are given in brackets wherever available, as per the Bombay Chamber of Commerce Directory. The tooth-pastes manufactured by the Hindustan Lever, Colgate Palmolive, Ciba-Geigy and Vicco Laboratories in Bombay find a good market, though there are other companies out of Bombay which also share the market. Tooth-brushes are manufactured in Bombay by the Colgate Palmolive, Ciba-Geigy, the Aryan Ltd. and many others.

PLASTIC MATERIALS, SYNTHETIC RESINS AND FIBRES AND TURPENTINE

This sector of chemical industry is conceived to comprise manufacture of turpentine, synthetic resins, plastic materials and synthetic fibres like nylon, teryelene except glass. This is also the classification adopted by the Annual Survey of Industries, the statistics according to which are furnished in Table No. 10 under Chemicals and Chemical Products industry. According to the Annual Survey there were 129 factories in this industry in Bombay in 1973-74 which provided employment to 6,828 employees including 4,992 workers. The number of factories declined to 29 in 1975-77 which provided employment to 4,304 employees including 2,847 workers. The capital investment in the industry was valued at Rs. 56,02.73 lakhs in 1973-74 and Rs. 50,84.65 lakhs in 1975-77. The factories consumed raw material worth Rs. 55,24.00 lakhs and Rs. 45,22.24 lakhs, respectively in 1973-74 and 1975-77. The value of products of the factories was of the order of Rs. 1,05,29.17 lakhs in 1973-74 and Rs. 77,37.89 lakhs per annum in 1975-77. The total output of the industry in Bombay was computed at Rs. 1,07,76.83 lakhs in 1973-74 and at Rs. 82,41.11 lakhs in 1975-77. The value of total inputs was computed at Rs. 68,63.49 lakhs and Rs. 62,08.55 lakhs, respectively in the above mentioned years. The value added on manufacture in the years under reference was enumerated at Rs. 34,21.91 lakhs and Rs. 15,87.87 lakhs in 1973-74 and 1975-77, respectively.

It can safely be deduced from the above statistics that there was an all-round decline in the industry in Bombay over the period of study. The decline was in respect of all aspects including number of factories, employment, capital, consumption of raw material, production, inputs, output as well as value added on manufacture. The decline might, however be a transitory stage in the period studied. The high ratio of output to inputs and a large quantity of value added on manufacture show the profitability of the industry. It is not a labour-intensive industry, while it requires highly sophisticated machinery. The manufacture of plastic chemicals and synthetic fibres involves the use of the latest type of machinery and advanced technology.

Plastic now forms an integral part of modern life and finds a place everywhere in industry and at home. It is closely linked with the development of basic chemicals in the country, and the development of this industry is due to its versatile application. The flexibility with which plastic materials can be worked makes them simple and cheaper than metals, wood, stone or ceramics. Their properties can be altered to meet specific needs. The lightness of plastic in weight, its resistance to corrosion, easy formability, thermal and electric resistance, and complete colour range makes it useful in a wide range of consumers goods as well as electric goods and industrial uses.

The development of the plastic industry in India as in other countries, assumed special significance with the development of some basic chemical industries., The growth of the chemical industries in the country during the Second Five-Year Plan encouraged the growth of the plastic industry. (Kothari's Investor's Encyclopaedia.)

The plastic industry hardly existed in India before the Second World War. Government encouragement, war-time demand, and needs of growing industrialisation provided a stimulus to this industry. Its growth was both supplementary to other industries and substituting to the products of glass and metal industries.

The fabrication of end products from imported plastic materials marked the beginning of the plastic industry, while the manufacture of plastic chemicals commenced much later. The beginning of the Indian plastics industry could be traced to the moulding of celluloid articles from imported celluloid sheets and rods during the thirties of this century. The articles produced by the pioneering units were combs, soap boxes, ash trays and similar domestic articles. The manufacture of combs was started at Jessore, now in Bangla Desh, in 1926. (Handbook of Commercial Information, 1963.) Over the years the plastic industry has grown into a major industry producing hundreds of items apart from articles like leather cloth, PVC sheeting, phenolic laminates, polyethelene films and tubes.

Tariff protection to the industry started with the protective levy on phenol formaldehyde moulding powder and electrical accessories in 1950. (*Ibid*). The protection was extended from time to time upto December 1959. The protection was particularly liberal to the section engaged in the manufacture of phenol formaldehyde moulding powder and plastic buttons.

The indigenous industry was centred mainly in Bombay and Calcutta, though it has decentralised to many other centres in the country. The Indian Plastics Ltd. founded in 1944 is a pioneering manufacturer in Bombay. It has a factory at Kandivli which manufactures plastic articles in a very big range, electrical accessories, PF moulding powders, UP and MF moulding powders and synthetic resins. Its production capacity and actual production in a latest year are given below(A State-wise Picture of Large Scale Industrial Activity, 1981.):—

Item	Installed capacity	Production (Tonnes)	Sales Turnover 1978-79 1979- 80
PF moulding powder	2,400	1,603	
UP and MF moulding powder	1,050	481	(Rs. in crores) 5.51 5.38
Synthetic resins	1,000	266	

This company is setting up a joint venture chemical project in Indonesia the approval to which is granted by the Government of India. The Plastic Extruders, Bombay, were manufacturing lay-flat tubing's. The manufacture of PVC sheets was started in 1954 by the Plastic and Industrial Corporation, Bombay. This firm also took up the production of long-playing phonograph records. (Kothari's Investor's Encyclopaedia.) The Polychem Ltd., Bombay, founded in 1957 has one factory at Goregaon and another at Chembur. It manufactures a number of chemicals, cellulosic plastics, polystyrene styrene monomers, and other thermosetting, thermoplastic materials. It has collaboration agreement with an international company.

The Caprihans India Ltd., a foreign company, has a plant in Sewri, besides other plants at Thane, Nashik and Roha. It manufactures PVC sheets, acrylic sheets, laminates and clay coated paper. The sales turnover of all the units of the company amounted to Rs. 20.78 crores in 1978-79 and Rs. 25.27 crores in 1979-80. It is expanding its production capacity of rigid and flexible PVC films and sheets to 7,680 tonnes per annum. (A State-wisa Picture of Large Scale Industrial Activity, 1981.) The Exomet Plastics with works in Bombay and Taloje (Raigad district) is another manufacturer of high density polyethelene pipes, etc.

Synthetic fibres have revolutionised the entire textile industry. They have several economic advantages over cotton and other natural fibres. Synthetics are more durable, bright and can be manufactured in a wide range of colours and sheds. They are wrinkle-proof and do not require frequent ironing as in the case of natural fibres. It is therefore natural that synthetic fibres should replace natural fibres in the wearing apparel as in other uses.

The growth of the synthetic fibre industry is of very recent origin. The manufacture of nylon and teryelene fabrics started on a commercial scale in the mid-fifties. Nylon garments preceded teryelene and acrylic fabrics in the markets. In the initial stages the fibres were imported in bulk. The Nirlon Synthetic Fibres and Chemicals Ltd., established in Bombay, in 1958 has a factory at Goregaon (East). It manufactures nylon textile yarn, polyester yarn and nylon tyre cord.

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The Garware Plastics Ltd., Bombay, established in 1947, is a large-scale manufacturer of all kinds of plastic items like rigid PVC pipes, conduits and sheets, flexible PVC tubes, sheets and films, polyester films, industrial moulding, electrical conduits etc. It also produces high impact polystyrene sheets for refrigerators and vacuum forming industries as also injection moulding of highly sophisticated items like cabinets of transistor radios, television sets, tape recorders, cassettes, battery containers, and helmets used in defence services and mines. It also manufactures nylon tyres for conveyor systems and other kinds of custom moulded applications involving high degree of accuracy and precision. It's associate company, the Garware Nylons at Pune manufactures nylon filament yarn and polyester filament yarn. The Garware Synthetics produces nylon bristles, fishing twine and a number of synthetic items. (Bombay Chamber of Commerce Directory, 1976).

The Bhor Industries established in 1943 has two factories in Bombay, *viz.* at Prabhadevi and Borivli which manufacture PVC films and sheets, PVC foam leather cloth, PVC adhesive tapes, PVC asbestos flooring tiles, coated wall paper and a variety of sheets and films. The Blow Plast established in 1965 has a factory at Bhandup besides the one at Nashik. It manufactures PVC footwear also.

The machinery installed by the industry is imported in some measure. A few engineering concerns in Bombay and Calcutta are now manufacturing some machinery. Though some concerns have setup tool rooms and production of moulds for compression and dies for extrusion, the complicated moulds are imported.

It was mainly in the sixties of this century that the industry made rapid progress on account of the establishment of the petrochemical complexes in and around Bombay. The plastic industry has been facilitated by the development of the petrochemical units which made available petroethylene to produce PVC and polyethylene. Its growth was accelerated also by the rise of plastic machinery manufacture and the availability of technical know-how.

PAINTS, ENAMELS, VARNISHES AND PIGMENTS

This is an important industry which is mainly localised in Bombay and Calcutta. Being the cheaper protective agent, for durable articles of industrial use the functions of the paint industry are similar to those of packing and storage in the marketing of goods. The important consumers of this industry are the railways, transport companies, automobiles, ships, aeroplanes, building operations, and electrical equipment and appliances.

The first production of Indian paints commenced on a small scale in 1890 near Calcutta. (*Dr. H. Trivedi*, "Indian Paint and Varnish Industry".) The first large-scale unit was incorporated in 1902 also near Calcutta. Till the end of the First World War, the latter was the only unit engaged in the manufacture of paints on a large scale in the country. In the initial stages, the indigenous industry which was managed by British firms supplied marine finishes and general structural paints, while the needs of the paints of high quality were met by imports. With the increasing demand for paints during the First World War, Indian industrialists turned their attention to this field, and thus some of the prominent paint manufacturing concerns in India came into existence. During the inter-war years many small units also commenced production of paints. During the Second World War, a large demand for paints and varnishes coupled with scarcity of imported materials provided a stimulus to the indigenous industry. The rapid growth of the paints consuming industries after Independence offered a further stimulus to the development of the paint industry.

Prior to the First Plan period there were 50 major organised units and about 200 small units engaged in manufacturing of paints, varnishes and enamels in the country. Of the major units, 16 were in Maharashtra and 18 in West Bengal. Of the total production capacity in the industry which was estimated at 65,000 tonnes in the country in 1951, 46,000 tonnes

was accounted for by the firms in Maharashtra and West Bengal. Most of the units in Maharashtra were from Bombay.

The production of paints, varnishes, enamels and lacquers failed to hit the target during the Second Plan. Nevertheless, production increased substantially during that period. There was considerable improvement in quality surface quoting materials, such as aluminium paints, natural and synthetic enamels, healed varnishes and insulating varnishes after about 1960-61. New items like super synthetic enamels for coating of copper wire, finishes for bakelite, luminous paints, lacquer finishes, cold cure epikote finishes, hot dip protective coatings, level indicating paints, paints capable of withstanding temperature of the order of 1500 F. Food can lacquers, special adhesives for layer batteries, gasolene finding paste, synthetic iron oxide pigments and pigment dyestuffs were also being manufactured after 1960-61.

The development of synthetic paints also known as latex paints was started mainly after 1960-61. These paints are generally based on polymers such as styrene butadiene, vinyl acetate, and polyacrylates. The paint industry was brought within the purview of the Industries (Development and Regulation) Act of 1951 from 1957.

There were 34 factories engaged in the manufacturing of paints, enamels, varnishes and pigments in Bombay in 1970, of which two were established during the decade 1910-20; three duting 1931-40; nine during 1941-50; fifteen during 1951-60 and five during 1961-70. (*Prospects of Co-operative Movement in the Paint Industry, Indian Paints and Allied Industries Association*). The various phases of the growth of the industry can be judged from these figures.

The Asian Paints with two factories, one in Bombay and another at Taloje near Bombay is one of the famous paint manufacturers in Bombay. The value of its sales was computed at Rs. 34.60 crores in 1978-79. The Goodlass Nerolac Paints, a foreign concern has a factory at Lower Parel besides a unit at Thane. The sales turnover of this company was to the extent of Rs. 19.59 crores in 1978-79 and Rs. 26.57 crores in 1979-80. The third reputed company at Chembur, viz., the Bombay Paints and Allied Products has an installed capacity to produce about 12,000 tonnes of paints, enamels, varnishes, etc. Its sales turnover amounted to Rs. 6.30 crores in 1979-80.(A state-wise Picture of Large Scale Industrial Activity,1981.)

RUBBER, PLASTIC, PETROLEUM AND COAL PRODUCTS INDUSTRY

The manufacture of rubber, plastic, petroleum and coal products is one of most important industries of Bombay. This sector of industries is comparatively very young in age, the first rubber factory being started only in 1921 in Bengal. Production of natural rubber in the country and a vast potential market have contributed to the growth of rubber industry. It attracted some foreign as well as Indian pioneers to enter this industry. The Second World War provided the impetus to its growth which received further encouragement with development planning after 1950-51. The industry made tremendous progress since the mid-fifties.

The industry manufactures a wide range of products from heavy duty automotive tyres to tiny articles like balloons, including innumerable types of specialised industrial and mechanical products required by various industries like the automobile, aircraft, railways, shipping, textiles, pharmaceuticals, sports goods, engineering as also agricultural goods. It also caters to the needs of defence forces of the country.

The rubber, plastic, petroleum and coal products industry of Bombay is a highly modernised and sophisticated industrial sector. The industry is characterised by a high degree of rationalisation and advanced technology which are a *sine qua non* for its development. It is managed by technocrats of high merit and experience. A number of chemical technologists and technocrats are available in Bombay.

The rubber and rubber products industry of Bombay comprised 50 registered factories which provided employment to 4,518 workers in 1956. It was still a very young industry in the city which expanded in subsequent years. The petroleum and coal industry was also in its infancy in 1956 when it comprised 14 factories providing employment to 5,358 persons. Of the 50 rubber and rubber products factories, 36 were in the suburbs, the rest being in the city. Of the 14 factories engaged in petroleum and coal products, 8 were in F Ward while only two were in the suburbs. The subsequent development of both these industries was in the suburbs of Bombay.

According to the All India Rubber Industries Association there were over 200 rubber goods manufacturing units in Greater Bombay, of which 45 were its members in 1977. However, these 45 units accounted for 80 per cent of the total consumption of raw rubber. Most of the factories which are not members of this association are in the small-scale or cottage industry sector. The rubber industry, according to the association, provided employment to about 12,000 workers in Bombay in 1977.

The industry is a capital intensive one with exception of a few sectors which are labour intensive. The industry's total turnover is estimated to exceed Rs. 750 crores, and employment over a lakh of persons (in India). (All India Rubber Industries Association (Information received).) The industry's average annual growth rate during the Post-Independence period has been of the order of 8.8 per cent. This growth can be attributed to factors such as, (i) vast internal market, (ii) rapid industrialisation in the country, (iii) improvement in standard of living of the people, and (iv) availability of raw materials. Maharashtra accounts for about 23 per cent of the country's total consumption of raw rubber.

The industry caters to most of the needs of the Indian market. Besides, it has also emerged as an exchange earner (The total exports from Maharashtra were worth about Rs. 3.84 crores in 1975-76.). In the matter of quality, Indian rubber products are comparable to those of industrially developed countries.

In the paras that follow the important rubber products industries are dealt with individually.

The Annual Survey of Industries has grouped the tyre and tube industry and petroleum refineries under the category of manufacture of rubber, plastic, petroleum and coal products. In the nature of things, Bombay ranks first in Maharashtra as regards the development of this industry, while Bombay's share in the production of the goods is very high as compared to the production in India also. As per the Annual Survey of Industries (1975-77), there were 538 factories in this segment in Bombay which accounted for 73.30 per cent of the total number of factories engaged in the manufacture of rubber, plastic, petroleum and coal products in Maharashtra State. The invested capital of the factories in Bombay was as high as Rs. 1,37,55 lakhs which formed 75.58 per cent of the invested capital of all factories, in this category in Maharashtra. The factory employment in this sector in Bombay was to the order of 24,691 or 71.88 per cent of the total employment in this sector in the State. The value of output of this industry in Bombay was Rs. 4,67,51 lakhs which accounted for 84.32 per cent of the total output in Maharashtra. this clearly indicates the spectacular share of Bombay in the output of these products in Maharashtra. The value added manufacture by the sector of industry in Bombay which was worth Rs. 45 34 lakhs or 73.24 per cent of the total for Maharashtra also shows the eminence of the city in't this field as in others.

The structure of the rubber, plastic, petroleum and coal products industry in Bombay can be studied from the statistics of Annual Survey of Industries in 1973-74 and 1975-77 as furnished in Table No. 11.

TABLE No. 11 Manufacture of Rubber, Plastic, Petroleum and Coal Products, Greater Bombay

(Figures of Rs. in lakhs)

	ltem	Rubber, Plastic, Petroleum and Coal products		Tyre and Tube industry		Petroleum Refineries	
		1973-74	1975-77	1973- 74	1975-77	1973- 74	1975-77
1	2	3	4	5	6	7	8
1.	No. of estimated factories.	464	538	28	21	6	7
2.	Fixed capital (Rs.)	66,88.63	62,67.53	8,67.11	11,11.27	40,51.96	35,35.34
3.	Working capital (Rs.)	50,60.17	52,64.58	10,35.19	10,42.61	21,97.56	26,88.63
4.	Capital investment (Rs.)	1, 20,11.50	1,37,55.14	21,89.05	28,03.02	55,21.82	74,25.79
5.	Outstanding Loans (Rs.)	<mark>47</mark> ,52.07	51,68.17	7,24.81	15,83.40	16,88.75	8,67.78
6.	Mandays worked	N.A.	71 ,68,265	N.A.	15,84,585	N.A.	6,21,822
7.	All workers	20,964	18,281	4,218	3,905	1,499	1,209
8.	All employees	27,046	24,691	5,650	5,378	2,222	1,786
9	Wages to workers (Rs.)	9,88.26	11,28.54	3,49.12	3,96.63	1,86.95	2,18.12
10.	Total emoluments (Rs.)	17,44.29	22,11.11	5,99.29	7,94.57	414.39	4,84.69
11.	Fuel consumed (Rs.)	7,32.27	13,15.67	1,40.02	3,20.39	4,41.37	6,87.59
12.	Material consumed (Rs.)	1,5643.59	3,63,18.81	29,40.82	68,03.78	68,82.09	2,36,51.47
13.	Other inputs (Rs.)	N.A.	37,77.07	N.A.	515.30	N.A.	13,27.59
14.	Total inputs (Rs.)	1,90,74.03	4,14,11.55	42,19.50	76,39.47	80,31.24	2,56,66.65
15.	Plant and Machinery (Rs.)	N.A.	97,43.95	13,71.22	17,38.87	51,54.38	56,19.22
16.	Value of products (Rs.)	2,02,29.62	4,26,25,27	36,48.30	90,30.19	82,78.19	2,50,71.55
17.	Value of other output (Rs.)	N.A.	41,26.13	N.A.	3,17,32	N.A.	21,36.93
18.	Total output (Rs.)	2,40,64.78	4,67,51.40	56,14.28	93,47.51	99,25.26	2,72,08.48
19.	Depreciation (Rs.)	6,44.48	8,05.70	1,24.95	1,57.55	3,18.39	3,46.31
20,	Value added on manu- facture (Rs.)	43,46.26	45,34.16	12,69.81	15,50.48	15,75.62	11,95.52
21.	Factory payment (Rs.)	N.A.	7,99.07	N.A.	2,49.08	N.A.	1,51.68
22.	Net income (Rs.)	N.A.	37,35.09	N.A.	13,01.40	N.A.	10,43.84

TYRES AND TUBES

The tyre and tube industry is an important sector of the rubber industry. This sector of industry in India is about 45 years old. In 1936, the Firestone Rubber Tyre Co. and the Dunlop Tyre Co. started manufacture of tyres and tubes. This was however a modest beginning as the number of automobile vehicles was extremely limited and a bulk of the demand was met from imported goods. With the expansion of the automobile industry and acceleration of demand for passenger cars and commercial vehicles after 1955, the demand for tyres and tubes increased immensely. Consequently, the industry received encouragement in the early sixties of this century. There are at present (1980-81) 16 factories engaged in the manufacture of automobile tyres and tubes with an installed capacity of about 79.29 lakh tyres and tubes per annum. Production of automobile tyres showed an increase of nearly 8.5 per cent (compound rate) in the last two decades, while the corresponding figure for tubes is also an impressive one, viz. 7 per cent.

The unprecedented spurt in prices of petroleum products which affected automobile production, have had an adverse impact on the demand for tyres and tubes. This was however not a very significant factor, because despite the rise in prices, the demand for automobile vehicles has ever been on the increase. The government and public sector undertakings are acquiring vehicles on a very increasing scale. Besides, manufacture of tyres and tubes is a defence oriented industry, as the demand for heavy armoured vehicles, medium vehicles and light vehicles for the army, navy and air force of India has been multiplying. In fact, Government is a major single buyer of tyres and tubes.

The development of this industry indigenously has reduced the necessity of import of the goods during the last about a decade or more. It is thus an important industry from the point of view of import substitution. At present tyres and tubes of only aircrafts (both civil and air force) and tractors are imported. On the other hand, the growth of exports of tyres and tubes to foreign countries has been phenomenal after 1970. The major items of exports are truck and bus tyres and tubes which constituted nearly half the total value of exports of tyres and tubes.

Two of the large manufacturers of automotive tyres and tubes have their plants in Bombay. The account of these giant companies is given below :—

The Ceat Tyres of India incorporated in 1958 is one of the most eminent tyre and tube manufacturers in India. This concern with collaboration with Ceat International S. A., Switzerland, manufactures different kinds of rubber tyres, tubes, flaps and tread rubber in its factory at Bhandup (Bombay) and in its branch factory at Nasik. The authorised capital of this concern is Rs. 12 crores of which Rs. 4.45 crores is subscribed. The analysis of its working is given briefly below:—

(Rs.	in	lal	k	hs)

100	1979	1978
Total Current Assets	3370.04	2980.49
Total Assets	4332.92	3862.25
Total Current Liabilities	1896.89	1473.07
Total Liabilities and Net Worth	4332.92	3862.25
Sales	10333.88	8658.01

The company has obtained a licence for production of additional 1.6 lakh automotive tyres and tubes, each per annum at its Bhandup plant. The total licensed capacity of the company is to manufacture 10.1 lakh automotive tyres.

The raw materials used by the company include natural and synthetic rubber, carbon black, rayon and nylon tyre cord. (The major consumption of rubber is by the automotive tyre and tube industry which is around 50 per cent of the rubber consumption in the country. Thus, there is a link between price of rubber and that of tyres.)

The Bombay Tyres International, formerly known as Firestone Tyre and Rubber Company of India, is another principal manufacturer of tyres from small scooter tyres to giant earthmover tyres in Bombay. It also manufactures tubes, flaps, compound stocks, retread and repair materials. The company was incorporated as a private limited concern in 1930 under the name Firestone Tyre and Rubber Company, and was renamed as at present afterwards. It was converted into a public limited company in 1979. Its authorised capital is Rs. 6 crores, while subscribed paid up capital is Rs. 3.33 crores. It comes under the F. E. R. A. Act. The Bombay Tyres International has a licensed capacity to manufacture 6.72 lakh automotive tyres per annum. It has a factory at Sewri, the sales of which amounted to about Rs. 57.73 crores in 1979-80.

As per the Annual Survey of Industries there were 28 tyres and tubes factories in Bombay in 1973-74 which declined to 21 in 1975-77. The decline in number of factories was followed by a decline only in employment. There was however an all-round rise in capital, inputs, output, and value added on manufacture and practically all other aspects. The detailed statistics are given in Table No.11.

Over a decade ago, the industry had to depend entirely on import of most of its major raw materials including synthetic rubber, carbon black, rubber chemicals, etc. This position has changed considerably and most of the raw materials required by the industry are now being manufactured within the country and a major portion of the industry's needs is met with from indigenous sources. Natural rubber is obtained from Kerala, Tamilnadu and Karnatak. Natural rubber has however its own limitations and it may not be able to meet the growing demand of the fast expanding rubber industry. This coupled with advancing technology, need for sophisticated rubber products and rapid industrialisation have necessitated production of synthetic rubbers with certain properties. Thus synthetic rubber has an edge over natural rubber. Synthetic rubber is obtained from Bareilly (U.P.) and other sources in the country as it is not manufactured in Bombay. The prices of indigenously manufactured synthetic rubber are higher than those in international markets. This is mainly due to shortage of raw material, coal, power supply etc. The Government of India is alive to this aspect of the industry and is taking measures for redressal. Some quantity of synthetic rubber is imported. The third variety of rubber, namely, reclaim rubber is indigenously available. Some quantity of reclaim rubber is also exported.

Carbon Black is an essential raw material of the rubber industry which was entirely imported upto 1963. At present there are two companies manufacturing carbon black in the country, one of which is in Bombay. The Union Carbon India Limited at Bombay was commissioned into production in October 1966 with a licensed capacity of 30 million lbs. The

present capacity of this unit is 35,700 tonnes per annum. With the incorporation of this unit, this essential raw material is readily available in Bombay. The quality of the carbon black manufactured by the Bombay factory is satisfactory, and it is also exported in some quantity to foreign markets.

Tyre Cord is the most important raw material of the automotive tyre industry. There are three types of tyre cords, viz. cotton .tyre cord, rayon cord, and nylon tyre cord. The use of cotton tyre cord in the automotive tyre industry is very negligible, while rayon cord and nylon cord are used in bulk quantity. Rayon cord is manufactured by the National Rayon and the Century Rayon on the outskirts of Bombay, while nylon cord is manufactured by the Nirlon Synthetic Fibres and Chemicals Ltd. at Goregaon in Bombay. The manufacture of nylon cord and rayon cord has revolutionised the automotive tyre industry not only in Bombay but also in India.

Rubber Chemicals: Rubber chemicals are a sine qua non for the growth of rubber industry. The Bayer (India) Ltd. and the Mindia Chemicals Ltd. with their plants in Bombay are two of the three large-scale manufacturers of rubber chemicals in India. They produce such chemicals in bulk quantity, and have contributed to the growth of the rubber industry. There are a few other units in the small-scale sector manufacturing rubber chemicals. The quality of the rubber chemicals produced by the above referred companies as also,, the Alkali and Chemical Corporation of India, Calcutta, is of international standards.

Besides the main raw materials mentioned above, there are several other raw materials going into the manufacture of rubber products, the important among them being textiles, sulphur, titanium dioxide, zinc oxide, stearic acid, colours, etc. Most of these materials, with the exception of sulphur which is imported, are available in the vicinity of Bombay though a few of them are obtained from other parts of the country. As' for titanium dioxide, there is only one unit manufacturing this product in the country at present. (N. K. Patel, Indian Rubber Industry (booklet))

CYCLE TYRES AND TUBES

Another important sector of the industry next to automotive tyres is cycle tyre and tube sector accounting for about 13 per cent of the industry's total rubber consumption. Formerly cycle tyres and tubes were manufactured by the large automotive tyre manufacturing companies. Since the reservation of cycle tyre manufacture for small-scale sector by Government a few years back, many small-scale units have entered the field. Some of the automotive tyre manufacturing units which were licensed earlier for manufacture of cycle tyres, but had lower installed capacity, have also started producing them with increasing demand from the upcountry.

The figures for production of cycle tyres and tubes in Bombay are not separately available. The estimated production of types was five crores (No.) and of tubes also five crores in India in 1978-79. (N. K. Patel, Indian Rubber Industry) This industry is steadily progressing and holds out good potential due to ever-increasing use of bicycles by the country's vast population.

RUBBER FOOTWEAR

The rubber footwear industry ranks third in the rubber industry, accounting for about 9:8 per cent of the total rubber consumption. The industry manufactures a large variety of footwear including all rubber, canvas/leather uppers and rubber soles, sports shoes, gum-boots, combat-boots for defence forces, ladies and children footwear in different shapes and fashions.

The Carona Sahu Company established in Bombay in 1953 is one of the most important manufacturers of rubber footwear not only in Bombay but also in India. The account of this company is given under leather industry in this Chapter. Besides, there are a number of small-scale factories and cottage units engaged in this industry. In fact small-scale and cottage sector in this industry accounts for a major part of the production of footwear.

As per the Task Force Report, about ten crores pairs of rubber footwear were manufactured in India in 1978-79. Production figures for Bombay are not readily available.

It is noteworthy that while the total demand for footwear has always been on the increase, the in-roads made by the PVC footwear have adversely affected the rubber footwear industry during the past years.

As per the Annual Survey of Industries of 1973-74, there were 25 registered factories manufacturing rubber and plastic footwear which provided employment to 2,200 employees including 1,865 workers in Bombay. The capital invested in the industry was Rs. 3,55.90 lakhs. The total output and total inputs were computed at Rs. 6,43.79 lakhs and Rs. 5,43.78 lakhs, respectively. The value added was computed at Rs. 77.12 lakhs in 1973-74. The ratio of output to inputs shows the high productivity and profitability of the industry in Bombay.

GENERAL RUBBER GOODS

Production of various rubber goods like industrial and mechanical products such as beltings-transmission, conveyor, V-belts, etc. hose pipes-radiator, vacuum brake, and components and parts required by railways, defence forces as well as by various industries like textiles, surgical and pharmaceuticals, automobiles, aircraft and a number of other engineering industries, as also of rubberised fabrics and latex goods, is fast increasing in view of the rapid industrialisation in the country. The demand for agricultural rubber products like hose-pipes, rubber products for sprayers and dusters, tube well pumps and parts for tractors, is also growing owing to expanding agricultural operations.

PETROLEUM INDUSTRY

The Petroleum industry is by far the most vital sector of the national economy. The pace of industrialisation and economic growth of the country is conditioned by the availability of petroleum products which are so very scarce. The oil explorations in the rich Bombay High Oil fields have redeemed the national economy and raised very high hopes on availability of the vital source of energy to the country. The Bombay High is a saga of the Indian effort towards economic prosperity and self-sufficiency. It is also a challenge to the Government and experts, according to whom no other project taken up during the last 30 years in the country has thrown up so many challenges as Bombay High. It is however a fatefull landmark in the economic history of India, a little short of a tryst with destiny, and an occasion for national jubilation.

The history of oil exploration in India is traceable to the 19th century when the Assam Oil Company and Burmah Oil Company and their associates started oil exploration in the upper Assam region. From 1949 to 1960, the Standard Vacuum Oil Company explored the West Bengal basin first whose efforts were shared subsequently by the Government of India under the Indo-Stanvac Petroleum Project. The project however, did not succeed, although it produced valuable data which was extremely useful for further projects. Till May 1976, crude in commercial quantities was produced only in Assam and Gujarat. The Bombay High Oil-fields, 686 square kilometres in area, were commissioned in 1976. Currently, the average rate of production from these oil-fields is 1,20,000 barrels or 16,000 tonnes of oil per day. The annual production of oil will go upto 12 million tonnes after 1983. This will constitute about 40 per cent of the total production in

India.

The account of the Bombay High and the oil production by the Oil and Natural Gas Commission (ONGC) (The Oil and Natural Gas Commission is the only public sector undertaking engaged in exploration of crude oil and natural gas resources in various sedimentary bases of the country both offshore and inland. It was set up by the Government of India in 1956 in order to develop the oil exploration industry in India. The ONGC began drilling for oil in the Bombay High structure in 1973. By the end of January 1979, of the 32 structures drilled, 30 structures were tested and 12 were oil and gas bearing.) therein is given below.

Bombay High (Based on Petrochemicals from Bombay High, Maharashtra Economic Development Council.): The oil field known as Bombay High covers approximately an area of 686 square kilometres in the Arabian sea, about 200 kilometres north-west of Bombay. Crude Oil and associated gas were discovered in these off-shore fields in 1974 and production from them started in 1976. The fields provide both oil and gas. However, the gas is co-produced with oil and hence it is not a free gas but associated gas. Production or exploration for more production from Bombay High is, however, a difficult task. The offshore oil-exploration technology is extremely complex and, even production and transport problems are formidable. Most of the off-shore oil exploration in the world has been so far carried out in twenty to thirty metres of water. Only recently, attempts were made to dig an exploratory well in 1,500 metres of water. For drilling operations in respect of wells, the drilling rig has to be mounted on a ship. This ship itself is required to be kept dynamically positioned by various control systems, so that it remains exactly over a fixed spot on the ocean floor. Once oil is found, the development of the field involves construction of costly platforms. In the typical conditions of Bombay High, it is possible to have only four wells originating from each platform. From these constructed platforms, the crude has to be transported to a process platform. Here oil and gas are separated, the crude is conditioned and the gas is dried. Both are then sent on shore. A massive processing and pumping platform had to be constructed at Bombay High North for this purpose. This platform, known as BHN is to be equipped with pumping facilities for handling the large quantity of oil and gas before it is transported through the submarine pipeline to the shore terminal at Uran near Bombay. Global tenders had to be invited for construction of this platform, in view of the magnitude of the task involved. The weight of the involved structures itself is 6,250 tonnes and the height of the platform above water upto its helicopter deck is 41 metres. The pile penetration for the platform involved reaching a depth of 91 metres below seabed. Another platform called platform F, with comprehensive treatment facilities for oil and gas required construction. The F platform and BHN platform will get connected by a cross-bridge.

The Bombay High indigenous crude has a high wax content in the diesel oil atmospheric residue range. The diesel oil yield gets limited by a property known as "pour point" and the atmospheric residue solidifies at ambient temperatures. The Bombay High crude has a high "pour point "of 29 degrees centigrade while the sea-bed temperature is 24 degrees centigrade and this difference causes the crude to congeal. Special heating arrangements are, therefore, necessary for its handling, storage and transport. A "pour point "depresser is, therefore, required on platform F to reduce the viscosity of crude and prevent it from congealing. The F platform also dehydrates the gas to remove the water mingled with gas. This is necessary to prevent internal damage to the gas pipeline. The proper embedding of submarine pipelines is also, a complicated task. A multipurpose support vessel equipped with fire-fighting and antipollution equipment is necessary for maintenance in respect of the platform installations and the submarine pipelines.

The terminal facilities at Uran will provide for the removal of salt content from oft-shore oil. The crude also needs to be stabilised. The other plant required to be set up is a 'fractionation plant, which will separate the gas into different constituents. This gives a brief idea of what is Bombay High.

The Government of India has, therefore, thought it fit recently to invite interested foreign parties to participate in the exploration work and the development of hydrocarbons in the selected blacks of Bombay High. It has also approved the phase IV development programme of Bombay High. The outlay involved is Rs. 365.4 crores.

Oil: The 686 sq. km. Bombay High Oil field commissioned in 1976 has eleven platforms. Currently, the average rate of production from the oil field is 1,20,000 barrels or 16,000 tonnes of oil per day. The current production of 6 million tonnes per annum was stepped upto 7 million tonnes per annum by January 1981. The annual production will go upto 12 million tonnes from 1983. This will constitute about 40 per cent of the total production in the country.

Naphtha: The crude after processing yields Naphtha. The Naphtha from Bombay High has a high aromatic content in the range of 22-24 per cent by volume and has about 25 per cent Naphthalene: It is an excellent feedstock for catalytic reforming. The reformate can be used as a high octane component for motor spirit blending or for the production of aromatics. The high aromatic content is considered a serious disadvantage when this is used in fertiliser production or in Naphtha crackers. The cracking of Naphtha yields Olefins. An aromatics complex based on the Aromatic Naphtha proposed by the Bharat Petroleum Corporation Ltd. is sanctioned by the Government of India.

Associated Gas: The associated gas from Bombay High is currently available at the rate of about 2.5 million cubic metres a day. When the oil production will be stabilised at 12 million tonnes per annum after 1983, the availability of associated gas will go up to about 4 million cubic metres per day. The associated gas contains methane, ethane, propane, butane and pentane.

All components of this gas can be used for fertiliser production and power generation. Ethane and propane fractions are used by the petrochemicals industry. Liquefied Petroleum Gas (LPG) or the commonly known cooking gas is made; up of propane and butane.

Bassein Fields: Various proposals for utilisation of the Bombay High associated gas take into account the availability of gas from Bassein fields also. Oil and gas were recently discovered in North Bassein and South Bassein fields and these fields were commissioned recently. North Bassein field is estimated to produce 2 million tonnes of oil per annum and about one million cubic metres of associated gas per day. South Bassein field is estimated to produce about 21 million cubic metres of free gas per day.

Utilisation of Bombay High Gas: At present some quantity of the associated gas is used by the Rashtriya Chemicals and Fertilizers Corporation and Tata Thermal Power Station at Trombay and the rest is flared up m Bombay High. The quantity used being suboptimal, the associated gas is being literally wasted. Effective plans for its utilisation ought to have been finalised as soon as the Bombay High Oil field production had started and, the necessary plants should have become operational by now. The Oil and Natural Gas Commission installed a plant at Uran to extract LPG from Bombay High Gas. It started commercial production in 1981-82, and a total of 73,055 MT was produced against a target of 75,334 MT.

The Ministry of Petroleum, Chemicals and Fertilisers set up a Working Group for studying the utilisation of this associated gas. It is reported to have observed that 5 f 5 million cubic metres per day of lean gas would be necessary by 1984-85 to feed the present fertiliser plants at Trombay I, II and V as also the two giant fertiliser plants of 1,350 tpd. ammonia capacity at Thai Vaishet in addition to town gas supply and supply to the textile mills. This requirement obviously cannot be met only from Bombay High, and additional supply of free gas to the tune of 3 million cubic metres a day was considered necessary. About 7 million cubic metres of the combination of free and associated gas would produce 5.5 million cubic metres of lean gas mentioned by the Working Group.

In the meanwhile, a group of private sector petrochemicals manufacturers in Maharashtra put forward an interim proposal for prevention of the waste of this gas. This proposal was supported by the Government of Maharashtra. The proposal involves cracking of ethane/propane at the mother cracker of the Union Carbide India Ltd. at Trombay, and requires modifications to its existing facilities. This proposal is, however, dependent on the availability of the C2, C3 fractions from the ONGC fractionation plant. The manufacturers also put up proposals for expansion and modernisation of their chemical manufacturing facilities based on the feedstock available from Bombay High.

The Government of Maharashtra set up the Sethna Committee in 1978 to advise it on all aspects of a gas based petrochemicals complex including its location and also to advise on the setting up of the Aromatics complex by Bharat Petroleum Corporation Ltd. based on Aromatic Naphtha. It also made out a case for setting up giant fertiliser plants based on the associated gas in Maharashtra.

The Sethna Committee recommendations included, seating up of the proposed Aromatics complex by the Bharat Petroleum Corporation Ltd. at its existing refinery premises at Mahul near Chembur; setting up of a petrochemicals complex in the joint sector at Usar in Raigad district of Maharashtra; setting up a State level Petrochemicals Corporation; and conditional support to the proposals of existing petrochemicals manufacturers in Trans-Thane Creek and Trombay areas for expansion and modernisation of some of their chemical manufacturing facilities. On the basis of these recommendations the State Government strongly urged the Government of India for the setting up of a petrochemicals complex at Usar.

The Maharashtra State Electricity Board also examined the possibility of utilising the associated gas for power generation and proposed the setting up of big gas turbine units. The total gas requirement for these units is estimated at 1.84 million cubic metres per day. The Government of India has already exempted customs duty fcr import of these sets and also made available rupee facility to finance the foreign exchange components of these sets. There is, however, no firm commitment from the Government of India regarding supply of associated gas. In the meanwhile the Maharashtra State Electricity Board, in the context of current and future heavy shortages of power, is reported to have proposed installation of four more gas turbine units of 60 MW each to tide over future shortages.

The Government of India constituted a Committee in 1979 under the Chairmanship of Dr. T. R. Satischandran, Adviser (Energy), Planning Commission, for studying the allocation of gas for various purposes in detail. The Committee is reported to have recommended that gas should not be used for fuel purposes and, primary use of gas should be as fertiliser feedstock. It estimated that the fertiliser demand in the country would rise rapidly and it would be necessary to set up and commission a 1,350 tpd. ammonia capacity fertiliser plant by 1985, along with balanced urea production facilities. It proposed that there should be a total of eleven such units; two at Thal-Vaishet in Maharashtra, three in Gujarat and two each in Rajasthan, Madhya Pradesh and Uttar Pradesh. Its recommendation is for supply of a total quantity of 5 million cubic metres a day of methane and, of this, the supply recommended to Thai and Trombay fertiliser units is of the order of 4.7 million cubic metres a day. This proposal also requires augmentation of Bombay High gas by South Bassein gas.

Present Position: The gas fractionation plant of the ONGC is under implementation. The Government of India has approved the Thal-Vaishet fertiliser project involving an outlay of Rs. 511.34 crores including a foreign exchange component of Rs. 230 crores. The oU exploration activities at Bombay High have been intensified and the World Bank has sanctioned 400 million dollars for this purpose. The Government of India has sanctioned setting up of an Aromatics complex by Bharat Petroleum Corporation Ltd. in Maharashtra. It has also approved setting up of petrochemicals complexes consisting of gas crackers and downstream units at User near Alibag and Kavas in Gujarat. The Government has also announced, on the basis of available production of LPG from Mathura and Koyali refineries and from Bombay High associated gas, that about 12 lakh new domestic customers in the country would be given LPG connections beginning from the first quarter of 1981 to March 1982 and that at least 8 lakh new customers would be given connections in subsequent years upto 1984.

Petroleum Refineries: Of the five oil companies engaged in the refining and marketing of Petroleum Products in India, three are in Greater Bombay. Of the three oil companies in the city, the Bharat Petroleum Corporation Ltd. and the Hindustan Petroleum Corporation Ltd., both of which are in the public sector, have their refineries at Trombay. The third oil company, the Indian Oil Corporation Ltd. (IOC), has its registered office, Marketing Division and other establishments in Bombay. This Division is responsible for distribution of petroleum products produced by the four refineries of the IOC and two other public sector refineries at Cochin and Madras. It also handles crude imports as well as import of finished products. The IOC, established in 1960, has four refineries, one each at Gauhati (Assam), Barauni (Bihar), Koyali (Gujarat) and Halda (West Bengal), while its giant refinery at Mathura (U.P.) is under construction. The IOC's participation in the marketing of petroleum products in 1977-78 stood at 61.8 per cent of the sales in India. However, since its refineries are located outside Bombay, detailed account of its operations is not attempted here.

The Bharat Petroleum Corporation and the Hindustan Petroleum Corporation have their giant refineries and other establishments at Trombay. Besides the fuels Refinery, the Hindustan Petroleum has a Lube Refinery at Trombay. The account of the operations of the two corporations is narrated below.

Prior to the resumption of the narration of operations of the two oil companies, it may be noted that the statistics about the petroleum refineries in Bombay as per the Annual Survey of Industries in 1973-74 and 1975-77 are furnished in Table No 11. The statistics include the operations of the companies and their associates in Greater Bombay.

Bharat Petroleum Corporation Ltd (Information supplied by the Bharat Petroleum Corporation (20th April 1982). : The Bharat Petroleum Corporation is now a wholly public sector undertaking of the Government of India with a huge petroleum refinery at Trombay in Bombay. The Bharat Petroleum has acquired complete ownership of the former Burmah Shell Refineries Ltd. with its refineries, in Bombay and commercial interests in India in January 1976. The Bharat Petroleum is the second largest refinery in India with a 5.25 million tonnes per annum capacity and a nationwide marketing organisation. The Company's refinery went on steam. on 30th January 1955 with an initial oil processing capacity of 2.2 million tonnes of Kuwait crude oil per annum.

The oil refining company of the former Burmah Shell Refineries, which was the private sector predecessor of the present Bharat Petroleum Corporation, was set up as a result of the agreement signed by the Government of India with the Anglo-Saxon Petroleum Company Ltd. (later replaced by the Shell Petroleum Company Ltd.) and the Burmah Oil Company on 3rd November 1952. It was subsequently converted into a public limited company on 26th August 1954. General construction work of the refinery commenced in February 1953 and the crude distillation unit came on stream on 30th January 1955. The refinery at Trombay was formally inaugurated in March 1955.

The important highlights pertaining to Burmah Shell Refinery, significant as they are from the point of view of the economic history of Bombay, are worth recording (Information supplied by the Burmah Shell Refineries Ltd. in 1974.). These highlights throw a side light on the development of this vital sector of the economy not only of Bombay but also of India. In 1955, the Burmah Shell processed 1.83 million tonnes of crude oil starting with the main bulk refined products. Bitumen was produced for the first time in June 1955. It commenced manufacturing liquid petroleum gas (LPG) and Motor Spirit MT 80 in 1956, and surrendered duty protection on motor spirit as a good gesture towards national interests. The commencement of manufacture of aviation turbine fuel in 1957 was a very important phenomenon in the context of

import substitution for the vital source of energy which is so very essential for civil aviation and the Air Force. The company surrendered duty protection on high speed diesel oil, light diesel oil, furnace oil and bitumen in 1959, which was in the interest of the national exchequer. It commenced jute batching oil manufacture in 1961. The exploration of oil in the Ankaleshwar belt was an important event in the development of the national economy. The Burmah Shell commenced processing of Ankaleshwar crude together with Iranian light oil in 1962. The oil refining capacity of this concern was increased in 1963, and it processed 3.75 million tonnes of crude in the year. It commenced refinery gas supply to the Fertilizer Corporation of India and the production' of SBP 55/115 and motor spirit 93 octane in 1965. It further diversified its production by undertaking manufacture of carbon black feedstock, mineral turpentine and SBP 64/69 in 1966, which are important products from the point of view of industrialisation. Its crude throughout crossed the 4 million tonnes mark in that year. This oil refinery further helped the petrochemicals industry in the environs of Bombay by commencing deliveries of Naphtha to the National Organic Chemical Industries Ltd. by road lorries in 1967. It also started supply of hot heavy stock by pipeline to the Tata Thermal Station at Trombay in the year. In the next year it started supplying Naphtha to the National Organic Chemical Industries by pipeline. This facilitated cheaper supply of Naphtha to the petrochemicals industry.

The refinery achieved a refining capability of 5.25 million tonnes per annum in 1969. It achieved the highest fver middle distillate yield of 50.2 per cent weight on crude in conformity with the national interest in 1972. It commenced the processing of Indian Oil Corporation (IOC) crudes and achieved the highest ever refinery intake of 4.48 million tonnes in 1973. It was in 1974 that the Burmah Shell attained a refining capability of 5.5 million tonnes per annum.

Starting with only six major products, over the span of about 20 years, the refinery added 15 other products to its range. These products are required in various vital sectors of the national economy and defence services of the country. The refinery was the first in India to produce aviation turbine fuel, liquefied, petroleum gas (popularly known as Burshane), bulk bitumen, and motor spirit 80 MT which is so very essential for the Indian Army. The yield pattern, it is claimed, had always been in consonance with the national requirements. The total foreign exchange savings, due to this company resulting from crude replacing product imports, amounted to about Rs. 254 crores upto the end of 1973. It also earned foreign exchange, which was so very essential for the national economy, to the extent of about Rs. 28 crores by exporting, some petroleum products from its inception upto the end of 1973.

The Burmah Shell contributed its might towards import substitution and export promotion. In 1969, the refinery pioneered the formation of a Technical Development Committee for Indigenous Materials with a view to developing indigenous manufacture of a wide range of engineering materials, spares, and equipment to replace their imports. Import substitution achieved through this developmental activity saved foreign exchange of the order of Rs. 3 crores per annum to the member industries of the Burmah Shell alone in 1974. Foreign exchange saving to the national economy as a whole was much higher.

The refinery undertook an export promotion programme by exporting some products in 1972, and it was granted an "Export House" status in May 1974. Its exports comprised a wide range of products, for which the refinery acted as a bridge between the Indian manufacturers and its associate oil companies and other traders abroad.

The Burmah Shell Refineries Ltd. was linked with the Burmah Shell Oil Storage and Distributing Company of India Ltd. (Burmah Shell Marketing Company) through common shareholders. The Burmah Shell Refineries functioned as a Service Company to the Marketing Company whose crude it processed for a refining fee, and the entire production of refined products was marketed by the Marketing Company all over the country.

The refinery provided employment to 1,905 persons in 1960; 1,338 persons in 1970 and 1,204 in 1973. The approximate value of its production amounted to Rs. 35 crores in 1960 which increased to Rs. 58 crores in 1970 and to Rs. 1,07 crores in 1973.

The products of the Burmah Shell Refinery in 1974 comprised refinery gas, liquefied petroleum gas (LPG), Naphtha, motor spirits, special boiling point spirits, mineral turpentine, aviation turbine fuel, superior kerosene, high speed diesel oil, light diesel oil, fuel oil, jute batching oil, carbon black feedstock, hot heavy stock, bitumen and cutbacks.

Under permits of the Government of India and an agreement with the Indian Oil Company (IOC) the Burmah Shell obtained crude oil by imports from Iran, Iraq and Arabia.

The Burmah Shell Refineries with all its industrial and commercial interests in India was taken over by the Government of India by constituting the Bharat Petroleum Corporation Ltd. in January 1976, The latter is an autonomous commercial corporation under control of the Ministry of Petroleum, Chemicals and Fertilizers, Government of India. The account of its operations is given in the following paragraphs. (Information supplied by the Bharat Petroleum Corporation Ltd., on 20th April 1982)

The company's Refinery under aegis of the Burmah Shell went on stream on 30th January 1955 with an initial processing capacity of 2.2 million tonnes of Kuwait crude per annum. The crude processing capacity has since then been gradually increased to 5.25 million tonnes per annum. However, the maximum crude actually processed in a year was 5.01 million tonnes in 1979.

The refinery has made substantial technological advancements over its lifetime, resulting not only in increased processing capacity and flexibility, but also in improved product yields as well as reduced fuel consumption and loss. There is, as a consequence, considerable technological flexibility, which enables this refinery to process a variety of Middle Eastern and indigenous crudes. In 1980-81, twelve different crudes were processed which included Sirri crude from Iran, El Morgan from Egypt and Romashkinskaya from Russia for the first time.

The refinery was also the first to process offshore Bombay High crude in 1976, and the share of Bombay High crude in the crude mix has risen from 61 per cent (2.87 million tonnes) in 1978-79 to 74 per cent (3.60 million tonnes) in 1980-81.

Besides Trombay, the Bharat Petroleum Corporation has six other main installations in India, namely, Kandla, Cochin, Madras, Calcutta, Shakurbasti (Delhi) and Bayappanahalli (Bangalore). The last two installations are inland, while the rest of them are ports. The Corporation operates 52 depots in various parts of the country. The company operates 150 tank-lorries, while it has licensed 987 tank-lorries owned by contractors. It has 3,315 retail outlets in various parts of the country. It employed 6,257 persons in September 1981.

The statistics of volume of trade and financial results of the BPC (Bharat Petroleum Corporation) are shown below. These are followed by an analysis of the highlights of the working of this corporation as reported by it, which has a vital role to play in the economy not only of Bombay but also of the country.

Volume of Trade

Year	Million Tonnes
1976	3.63
1977-78*	5.23
1978-79	4.60
1979-80	4.97
1980-81	5.29

(*15 months)

Finacial Results

	(Rupees in	(Rupees in crores)	
- T	1979-80	1980- 81	
Profit for the year before depreciation	32.53	35.62	
Depreciation	7.71	12.51	
Profit before tax	24.82	23.11	
Provision for taxation	15.05	12.67	
Profit after tax	9.77	10.44	

- (A) Refining Division: (i) Safety Record: In August 1975, the refinery completed 7 million manhours without a lost-time accident, which is believed to be a world record for petroleum refineries. After the Government take-over, the refinery has again completed 4 million manhours without a lost-time accident on 1st January 1981.
- (ii) Environmental Improvement: As a result of the increasing substitution of high sulphur fuel by low sulphur fuel and reduction in per cent fuel consumption, the average sulphur dioxide emission level in the refinery has been reduced to half over the last four years.
- (iii) Indigenous Development: In 1970 the refinery pioneered the formation of a Technical Development Committee for Indigenous Materials for the petroleum, petrochemicals and fertilizer industries with a view to developing indigenous manufacture of a wide range of engineering materials, spares, equipment, etc. to replace their imports. Import substitution achieved through this development activity is presently saving foreign exchange to the extent of Rs. 6 crores per annum to the member industries alone. The savings to the national economy as a result of non-members benefiting from this development are much higher.
- (B) *Marketing*: The year 1980-81 was yet another one of sustained growth. The total sales of the Corporation increased by 6.4 per cent to 5.29 million tonnes as compared to 4.97 million tonnes in the previous year. The turnover increased to Rs. 12,14.13 crores during the year 1980-81, as against Rs. 9,36.18 crores in the previous year. Its foreign exchange earnings through international aviation and bunker sales at Rs. 86.08 crores were higher by Rs. 13.09 crores as compared to the previous year.

As in the past, the Corporation continued its efforts towards improving the distribution of essential commodities in the rural areas. With this objective in mind, five Multi-Purpose Distribution Centres and three Farm Fuel Outlets were commissioned in 1980-81 raising their number to 74 and 34, respectively.

Bharat Petroleum has planned a number of major expansion and diversification projects with an estimated investment of about Rs. 350 crores over the next five years (1981-82to 1986-87). Some of the plan projects are as given below :—

- a. Debottlenecking of distiller and additional secondary processing facilities: This project will increase the BPCL refinery capacity to 6 million tonnes per annum (for processing any combination of Bombay High and Middle East crudes), and will increase the middle distillate production by over half a million tonnes. Estimated total outlay of this project is about Rs. 134 crores, and it is scheduled for completion by October 1984.
- b. Marketing of LPG: The Bharat Petroleum Corporation has plans to significantly expand marketing of LPG in view of the additional quantities of LPG available from Bombay High, Mathura Refinery and Koyali Refinery expansion. Under this project, a new LPG Filling Plant with a filling capacity of 75,000 tonnes per annum on a 2-shift basis was commissioned in its refinery at Bombay in 1979-80. A bottling plant of 24,000 tonnes per annum capacity has been commissioned at Delhi. A total of 8.7 lakh new domestic consumers will be enrolled by September 1984. A bottling plant with an annual capacity of 24,000 tonnes will also be commissioned at Coimbatore by mid-1983. The estimated outlay on this scheme is about Rs. 34 crores.
- c. Production of Aromatics: A project for the manufacture of 80,000 tonnes of Benzene and 21,000 tonnes of Toluene utilising 207,000 tonnes per annum of high aromatic Naphtha from Bombay High crude is under implementation. This Rs. 20 crore project will help in reducing the shortfall of Benzene and Toluene in the country, which are of vital

importance for the growth of the petrochemicals industry. This project will help saving of foreign exchange to the national exchange.

- d. Additional Tankage: To take care of the growth and to provide adequate storage facilities at various locations in the country, the corporation has planned to increase the tankage for crude and products investing about Rs. 50 crores in the next three to four years.
- e. Bcmbay-Manmad Product Pipeline: The Corporation has plans to lay a 245 km. pipeline from Bombay to Manmad to transport major products like diesel, kerosene and petrol, with an investment of approximately Rs. 45 crores. This will ensure an easy, quick and economic flow of petroleum products to the upcountry.
- f. Sulphur Extraction Plant for Pollution Control: A plant is planned to be installed in the refinery to convert sulphur dioxide into sulphur, thus reducing S02 emission and thereby minimising atmospheric pollution in the Trombay-Chembur area. The estimated outlay for this project is Rs. 4.5 crores. It will not only reduce pollution, but will also ensure production of elementary sulphur which is not available in the mineral form in India. Production of sulphur will thus save foreign exchange.
- g. Aviation Fuel Hydrant System at Palam, Delhi: To cater to the fuelling of aircraft at the proposed new international terminal complex at Palam Airport, the BPCL plans to design and construct a modern aviation fuel hydrant system with an investment of about Rs. 25 crores.

Hindustan Petroleum Corporation (*The account is based on published brochures supplied by the Hindustan Petroleum Corporation (May 1982).*): The Hindustan Petroleum Corporation Limited was formed as a public sector enterprise by nationalisation of the then ESSO Company along with its refinery at Bombay and commercial interests in India in 1974. The Corporation was constituted into a commercial autonomous corporation under control of the Ministry of Petroleum, Chemicals and Fertilizers, Government of India. Later on in December 1976, the Caltex company's operations in India were taken over by the Government, and in May 1978, these were amalgamated with this Corporation. In 1979, Kosangas Company, engaged in the activities of bottling, distribution and marketing of liquefied petroleum gas was acquired and merged with Hindustan Petroleum Corporation. The combined resources, facilities and expertise of the enlarged corporation are a source of great strength for providing better service to consumers all over the country.

The Hindustan Petroleum Corporation has two oil refineries, one in Bombay and the other in Visakhapatham. The Bombay refinery has a capacity of 3.5 million tonnes per year. The capacity of the Visakh refinery is 1.5 million tonnes per annum. HPC's lubricating oil refinery at Bombay is capable of manufacturing about 200,000 tonnes of lube oil base stocks and other products annually.

Growth: At the time of the Government take-over, the ESSO were marketing about 2.5 million tonnes of petroleum products and the Caltex were marketing about 1 million tonnes of petroleum products. The total volume of petroleum products marketed by these two companies throughout the country was of the order of 3.5 million tonnes. As against this, the Corporation had set a target of marketing 6.827 million tonnes of petroleum products during the year 1983-84 which constituted about 92 per cent increase in volume since the Government take-over. The actual sales by the Corporation amounted to 5.59 million tonnes in 1980-81 as against 5.15 million tonnes in 1979-80. The rate of growth over a year was thus 8.4 per cent which appears to be quite good. The present share of HPCL in all India marketing of petroleum products in 1983-84 is of the order of 18.4 per cent and it is expected that the same will reach 20 per cent in the next few years.

In 1980-81, the Corporation completed seven years after the Government take-over of the erstwhile ESSO organisation's operating in India in 1974. The rate of growth of the HPC over a period of seven years was about 70 per cent. By any standards this is a spectacular rate of growth. To achieve these targets the network of the field sales organisations, storage capacity of the products at the terminals and depots and transport network for distribution had to be strengthened. The Corporation has also opened a large number of retail outlets largely in rural areas and on highways to provide better service to rural population. The Corporation has formulated a detailed plan to achieve a sales target of about 8 million tonnes by the end of the Sixth Plan period (1984-85), and an all out effort will be made to achieve the

The LPG produced by the erstwhile ESSO and Caltex companies was handled through their concessionaires who owned the LPG bottling plants, LPG cylinders and had organised a network of distribution and marketing. In May 1979, Government took over the Kosangas company, the major concessionaires of the erstwhile ESSO Co. and also took over the management of Parel Investment and Trading Co. and Domestic Gas Pvt. Ltd., the major concessionaires of the erstwhile Caltex Company.

At the commencement of 1980-81, the total production of LPG in the country was of the order of 5 lakh tonnes. During the next two years this production has almost doubled; the principal sources being Bombay High Associated Gas, Mathura Refinery, Koyali Refinery, etc. As a result of this availability of gas, the three major oil companies have already launched a massive enrolment programme of providing LPG to a large number of consumers all over the country. The Corporation enrolled over one lakh consumers during the latter half of 1980-81 and had hoped to enrol further 1.4 lakh consumers by the end of March 1982. Thereafter, it was to try to enrol about 2 lakh consumers each year. The total number of consumers planned to be serviced by the Corporation at the end of 1982, was expected to be 11 lakhs. To achieve this target, three new bottling plants of 25,000 tonnes capacity each, located at Bombay, Bangalore and Nagpur have been commissioned. A new bottling plant of 25,000 tonnes capacity is under construction at Hyderabad and the capacity of the Indore plant is being increased to 25,000 tonnes. At present the Corporation has 15 bottling plants spread all over the country.

A large investment has been made in tank-lorries, tank-wagons, LPG cylinders, etc. so as to achieve the new enrolment programme. The increased use of LPG would result in a corresponding saving in consumption of kerosene and to that extent the imports of kerosene would be minimised.

The growth in the Bombay refineries since the Government take-over is claimed to be quite satisfactory. By debottlenecking the secondary processing facilities it has been possible to increase the throughput at Bombay Fuels Refinery by one million tonnes. A number of other modifications such as the installation of a desalter, water cooling system, etc. are under implementation so as to improve the overall performance of the Bombay Fuels Refinery. The capacity of the Lube Refinery is being expanded.

So far as the Fuels Refinery at Visakh is concerned, a major reconstruction and modernisation programme has been taken so that it can continue to operate efficiently and economically.

Projects completed after nationalisation :

a. Vacuum Pipestill / Catalytic Cracker Debottlenecking Facilities:. The project, costing Rs. 4.7 crores, was commissioned at Bombay refinery on January 18, 1978, resulting in increased production of LPG and higher quantities of light and middle distillates. The entire project was designed, engineered and commissioned by HPC personnel. This has resulted in increased production of LPG (16,000 tonnes) as also light and middle distillates contributing to substantial foreign exchange savings of about Rs. 1.2 crores per annum.

- b. Strategic Crude Tankage: Four large-sized tanks having a total storage capacity of 315,000 tonnes were commissioned in 1979 in Bombay, at an investment of Rs. 7.8 crores. Another large tank was commissioned at Visakh in November 1980 by investing about Rs. 2.1 crores. This was to increase strategic crude storage to tide over possible interruptions during emergencies.
- c. Hindustan Petroleum Corporation and Bharat Petroleum Corporation Integration Projects: To maximise the processing of Bombay High Crude at Bharat Petroleum, various facilities were commissioned in 1978-79. This improved the yield pattern at both the refineries and also assisted in optimum utilisation of various downstream facilities available at these refineries.
- d. The Corporation has commissioned three new LPG bottling plants at Bombay, Bangalore and Nagpur each with a capacity of 25,000 tonnes per year. A large number of LPG cylinders, tank-wagons and tank-trucks have been procured, the total investment being Rs. 38 crores.
- e. A 18-kilometre pipeline of eight-inch diameter has been laid between the Bombay Refinery and Santacruz Airport for transportation of AIF, eliminating truck transport and relieving traffic congestion as also reducing atmospheric pollution, the total sanctioned investment being Rs. 2 crores. It will also avoid product contamination and product losses on account of transport in lorries.

Operations: Refineries: The Bombay Fuels Refinery achieved a crude throughput of 3.115 million tonnes during the year 1980-81 despite there being a pipe still turn-around of 35 days. In addition to the crude, 86,500 tonnes of waxy distillates produced by the Bharat Petroleum Corporation from Bombay High (BH) crude were reprocessed by the refinery as against 62.600 tonnes in 1979-80. The refinery also achieved the highest ever production in motor spirit, high speed diesel oil and industrial diesel oil. The total distillates (including Lubes) recovery was at 69.2 weight per cent.

The Visakh Refinery had achieved a throughput of 1.319 million tonnes in spite of processing twelve different types of crudes, as against the highest throughput of 1.329 million tonnes in 1978-79. Production of LPG was at an all time high since the starting of the refinery. The total distillates recovery was at 70.1 weight per cent in 1980-81 as against 68.8 per cent in 1979-80.

The Lube Refinery at Bombay achieved a. production of 180,000 tonnes consisting of Neutrals Lube Oil Base Stocks and Transformer Oil Base Stocks during 1980-81, despite a VPS shutdown of 68 days, as against 193,000 tonnes in 1979-80. Crude affreightment operations for the HPC/ BPC, Bombay Refineries were carried out satisfactorily during 1980-81. A total of 5.44 million tonnes of imported etude was transported in 1980-81 as against 5.1 million tonnes in 1979-80. Bombay High crude was also transported to Vadinar on behalf of Indian Oil Corporation.

Marketing: The market sales of petroleum products at 5.592 million tonnes in 1980-81 show an increase of 434,000 tonnes as against 5.158 million tonnes of 1979-80. The industry sales of petroleum products showed an increase of 3 per cent over the consumption of 1979-80. However, the Corporation was able to maintain a growth of 8.4 per cent in 1980-81 over the previous year's figures. The sale during 1983-84 were 6.49 million tonnes.

LPG Marketing: In accordance with Government's policy, the Corporation has drawn up plans for rationalising the LPG distributorships, and all sub-dealers in the erstwhile concessionaires who are found suitable are being appointed as direct dealers of the Corporation for the distribution of LPG. Consequent upon the availability of LPG from Bombay High and other sources, the oil companies took up, during 1980-81 a massive programme of providing new LPG connections to about one million consumers. The share of the Corporation in this was about 25 per cent.

Major Projects under Implementation: (a) Lube Refinery Expansion: This project envisages the expansion of the capacity of the Lube Refinery at Bombay by 74,000 MT of high viscosity index Lubes at a cost of Rs. 14.3 crores. It was to be commissioned *in* June 1983 with an investment of Rs. 17 crores. The project is particularly important as it would go a long way in meeting the increased requirements of lube oil, and will save the country Rs. 15 crores in foreign exchange per annum.

- (b) Visakh Refinery Expansion: The all India demand estimates for petroleum products in the 80s indicate that the country will have a deficit of middle distillates of the order of eight million tonnes by 1987-88. This calls for urgent action in providing additional crude processing capacity in the country, especially in the southern region where the deficit is much more pronounced. The proposal to increase the capacity of Visakh refinery from 1.5 million tonnes to 4.5 million tonnes is an important effort in the direction of self-sufficiency. The expansion is so designed that it can process upto 3.00 million tonnes per year of Bombay High crude. The project was scheduled for completion in 1984-85, and the total cost is now estimated at about Rs. 119 crores. The value of petroleum products in foreign exchange will be to the tune of about Rs. 134 crores per annum after completion of the project.
- (c) Bombay-Pune Pipeline: The 158 km. product pipeline from Bombay to Pune, estimated to cost Rs. 56 crores, will provide considerable economic advantage over an alternative method of transporting products by rail. The proposed pipeline, on which work is already in progress, will be an important landmark in the efforts to transport petroleum products to regions south of Bombay.

(d)Sulphur Recovery Projects: The Chembur area is known for its high level of atmospheric pollution. The Corporation sharing the concern of the Government and the people for environmental conservation, has taken up a project to reduce sulphur dioxide emissions from the Bombay refineries. The sulphur recovery project, with a current estimate of Rs. 4 crores is under implementation and is expected to be completed by 1983. In addition to containing sulphur dioxide emissions, this project will also result in the production of sulphur of the order of 4,000 metric tonnes per annum. The sulphur to be recovered from the hydrogen sulphide rich streams at HPC's Bombay Refinery would save foreign exchange to the tune of over Rs. 22 lakhs per annum.

There are also a number of comparatively smaller projects such as replacement of crude furnace, increasing tankage capacities at the refinery and in terminals which are under implementation.

Major Projects under consideration: (a) Expansion of Bombay Refinery: To utilise the increased production of crude oil from Bombay High, the Corporation has submitted a proposal to the Government for the expansion of the Bombay Fuels Refinery by two million tonnes. The feasibility report of this project envisages that it should be possible to complete this project without secondary processing facilities in about 30-33 months, with an investment of approximately Rs. 45 crores. The expansion is scheduled for completion in April 1985.

(b) Crude Oil Discharge Pipeline at Visakh: The capacity of the Visakh refinery is being increased from 1.5 to 4.5 million tonnes. This refinery has been designed to use both imported and Bombay High crude which will be transported by LR tankers. To avoid lighterage operations and reduce crude freight costs, it is proposed that an oil jetty be established at the Visakh outer harbour and a new crude oil discharge pipeline be constructed so that crude oil can be pumped directly from LR tankers to the refinery. While the construction of the oil jetty at the outer harbour is being taken care of by the Visakh Port Trust, the cost of crude oil discharge pipeline which is currently envisaged at about Rs. 14 crores will be on HPC's account. The project is scheduled for completion by September 1985.

Among the new major projects which are under consideration of the Corporation and for which investment proposals are being formulated for the consideration of the Government are as under :—

- a. Manufacture of Bright Stocks in the Lube Refinery at Bombay;
- b. Increasing the production of Hexane at Bombay Fuels Refinery; and
- c. Some downstream projects like recovery of propylene.

The Corporation undertook a study of a number of expansion and diversification projects with a view to meet the requirements of the country and minimise the need to import petroleum products. These are under consideration of the Corporation and the Government.

Energy Conservation Programme: The spiralling cost of energy and restricted availability of oil have made energy conservation a national priority, whether it be in industry, transportation or domestic consumption. Over the last few years, several steps have been taken at the two operating refineries at Bombay and Visakh to improve energy productivity. This has been achieved by setting up " energy conservation cells " which continuously monitor the scope and further energy saving measures through " energy audit" exercises. The action plan has been drawn up under the following two broad heads:—

- (1) Energy conservation through operational improvement.
- (2) Energy conservation through investment in capital projects.

Operational improvement by its very nature is a continuing activity, to keep the refineries at its peak efficiency and benefits start flowing immediately on implementation of certain actions. Examples of some of the programmes implemented in this category are :

- (i) Combustion efficiency-monitoring of furnaces.
- (ii) Monitoring of preheat exchanger systems for optimum utilisation of all available beat.
- (iii) Utilities monitoring through steam leak surveys and prompt remedial action; efficient maintenance of steam traps etc.
- (iv) Corbelling on furnaces.
- (v) Replacing of gland packings of all hydrocarbon pumps with mechanical seals.

Capital projects for energy conservation on the other hand, involve substantial investment and sometime lag for benefits to accrue, but their savings potential may be quite considerable. Some of the projects taken up by the refineries under this head are:

- (i) Outboard Convection Bank for crude furnace at Bombay Refinery.
- (ii) Crude Preheat Exchangers.
- (iii) Crude Desalters at both refineries.
- (iv) Replacement of old furnaces and boilers with new ones for higher efficiencies to meet international standards of efficiency.

A careful energy accounting or "audit" for each of the refining processes is planned to be an important and continuing phase of the Corporation's activity for identifying further areas of energy conservation. It is also the endeavour of the Corporation to optimise energy utilisation at the refineries since, apart from resulting corporate benefits, energy conservation is a national priority.

ELECTRICAL MACHINERY, APPARATUS AND APPLIANCES

Consistent with the increasing demand for electric power and expanding electrification the demand for electrical equipment of various types, such as generators, transformers, switchgears, transmission line towers, ensulators, electric motors, etc. gathered momentum. The growth, of this industry was a natural outcome of the tremendous efforts of the country towards self-reliance and import substitution. It is now one of the most important industries which has a significant role to play in shaping the industrial and agrarian economy of the country, as also the destiny of the vast Indian multitudes. Electrical machinery and appliances have contributed not only towards achieving comfort and enrichment of individual life of the people but also towards enrichment of the industry and the agrarian economy of India.

The expansion of this industry is not confined to the private sector. The public sector has also contributed to the basic growth of the heavy electricals industry in India. Though there is no public sector project in this industry in Bombay, the private sector industry in the city grew very rapidly on account of the development of public sector projects elsewhere in the country.

The light electrical industry, manufacturing electric lamps, fans, radio sets, television sets, meters, capacitors, condensers and a wide range of electrical appliances progressed rapidly since the inception of this industry in Bombay. The requirements of equipment for generating stations was initially met through imports. In order to restrict inports and achieve self-reliance, manufacturing facilities for large turbines and generators were established indigenously. Facilities for indigenous manufacturing of important accessories like boilers, feed water pumps, electrostatic precipitators, etc. were established in the public as well as private sectors. The private sector was also permitted by the Government to manufacture industrial turbo-sets upto 300 K.W. The entire demand for generating equipment excepting some hydro-electric generators is progressively met from mdigenous sources. Even generators for nuclear power stations are now being supplied by indigenous manufacturers. Development work on 500 M.W. turbo-generators has already been taken up in hand to ensure that the demand for turbo-generators with higher unit ratings would be met indigenously during the Sixth Five-Year Plan. The demand for industrial turbo-sets used in textile, cement and sugar industries is also met from indigenous sources now. (Indian Electricals Manufacturers Association, Directory, 1974.)

Since electrical machinery and apparatus manufacturing is a very important industry of Bombay it may be of immense interest to give its account at the microlevel.

The Crompton Greaves Limited established in 1937 is one of the pioneers in the electrical machinery and appliances industry not only of Bombay but also of India. It has foui factories in Bombay, and it manufactures a very wide range of articles, such as industrial motors, fractional horsepower motors, control gears, electrical transformers, alternators, switchgears, instrument transformers, tap changers, switchboards, lamps, tubes, carbon and float switches, fuse switches, and a number of other articles. The Company has a recognised Export House and has a full-fledged International Division with a network of concessionaires and dealers in many countries.

The Larsen and Toubro established in 1938, manufactures electrical switchgears and other equipment and electronic controls. The Siemens India, established in 1957, has factories at Worli and Andheri in Bombay, besides, four units elsewhere. It is also one of the pioneering concerns in this industry manufacturing switchgears, railway signalling relays, switchboards, electric motors, electro-medical equipment, railway signalling equipment and instrumentation equipment.

The Ralliwolf Ltd. (1958) with a factory at Mulund is known for the production of special purpose electric motors and electric tools. The National Electrical Industries, established in 1945, produces electric motors upto 1000 H. P.', motorised grinders, polishers, and monoblock pumps and other apparatus. The Industrial Meters Pvt. Ltd. with factories at Kandivli and Lower Parel is a manufacturer of transformers and other electrical machinery. It was incorporated in Bombay in 1961. The Hindustan Klockners Switchgear Ltd., established in 1957, has a plant at Borivli which manufactures various types of starters, push button stations, limit switches, remote control devices, and a range of electrical machinery. The Hindustan Brown Bovory (1949) with a factory at Goregaon, the Macneill and Magor Ltd. (1949), the Kir on Industries (1951)with a plantat Mazgaon and the Morarji Dorman Smith Ltd. incorporated in 1961 (plant at Worli) are the manufacturers of electrical machinery and various types of equipment in Bombay. Then there is the Guest Keen William, incorporated in 1931, with two units at Bhandup which produces electrical steel stampings, laminations, precision pressed metal components, and other articles which are essential for generation and distribution of electric power. It meets the increasing demand of the electrical industry in Bombay as in other parts of the country. The Otis Elevators Co. (India) was incorporated in 1953, and has a factory at Kandivli which manufactures lifts of various types and escalators. These are highly in demand at present. There are many other factories in Bombay, though it may not possible to mention them all.

The growth of this industry dates back to 1937. It received tremendous stimulus in the post-Independence period. The stimulus was provided partly by the expansion of rural electrification and partly by the rise in demand by other industries and consumers. The industry in Bombay as in India made a steady progress with only short-lived aberrations.

It may be useful to analyse the principal characteristics of the industry in Bombay as per the Annual Survey of Industries of 1975-77 and to compare it with the industry in Maharashtra. The industry in Bombay comprised 454 factories which formed 71.99 per cent of units in the State. It provided employment to 37,277 persons or 63.86 per cent of the employment in the State. The capital invested in the factories in Bombay was to the tune of Rs. 1,43,58 lakhs or 60.82 per cent of that in Maharashtra. The output of electrical machinery, apparatus and appliances in Bomaby was valued at Rs. 2,74,99 lakhs or 65.40 per cent of the production in Maharashtra. The value added on manufacture was as high as Rs. 68,90 lakhs or 65.87 per cent of that in Maharashtra.

It can be deduced from this analysis that nearly two-thirds of the electrical machinery, apparatus and appliances industry in Maharashtra is concentrated in Bombay alone. The average employment per factory was about 82.

This industry ranked third in Bombay as regards invested capital and value added on manufacture, and fourth as regards value of output.

The account of some of the segments of the industry is given below.

ELECTRICAL INDUSTRIAL MACHINERY

The Annual Survey of Industries has grouped together the various segments of this industry, such as, electrical motors, generators, transformers, electric magnetic clutches, and brakers, etc. As per the Survey of 1973-74 and 1975-77, there were 230 and 167 registered factories in Bombay, respectively in the years referred to. The total employment in the industry which stood at 22,831 inclusive of 17,099 workers in 1973-74 declined to 18,968 inclusive of 13,350 workers in 1975-77. This decline appears to be commensurate with the decline in number of factories. The position as regards capital of the industry is given below. The figures represent annual averages in the respective survey periods:

Item	1973-74	1975-77
	(Rs.in lakl	ns)
Fixed capital	23,90.88	30,64.55
Working capital	35,17.67	39,30.72
Capital invested	63,57.68	82,01.60
Outstanding loans	36,99.94	31,23.00

The position of capital shows that in spite of fall in number of factories and employment, there was a conspicuous rise in capital. It can therefore, be deduced that only the small marginal units might have wounded up, while some units might have increased their capital investment.

Despite the fall in employment, there was a rise in total emoluments fromRs. 17,58.05 lakhs in 1973-74 to Rs.19,81.40 lakhs in 1975-77. The factories consumed fuel worth Rs. 1,27.97 lakhs in 1973-74 and Rs. 1,67.78 lakhs in 1975-77. The factories worked for 56,72,165 man-days per annum in 1975-77 period. The raw material consumption of the factories declined from Rs. 82,31.05 lakhs to Rs. 74,01.08 lakhs over the years under study. The other inputs of the factories in 1975-77 were of the order of Rs. 33,86.60 lakhs. The value of total inputs increased from Rs. 91,75.79 lakhs in 1973-74 to Rs. 109,55.46 lakhs per annum in 1975-77. It can safely be said that there was no real decline in the industry in this period.

The value of plant and machinery also increased from Rs.19,58.99 lakhs to Rs.24,66.84 lakhs in the period under study.

The position of output and production of the industry in Bombay is given below :—

Item	1973-74	1975-77
Value of products	1,30,64.47	1,29,47.49
Other output	N.A.	31,60.40
Total output	1,33,63.74	1,61,07.89
Depreciation	2,66.34	2,94.21
Value added on manufacture	39,21.60	48,58.21

It can safely be deduced that the total output and value added showed a conspicuous rise despite the fall in employment and factories. The marginal and small units might have been forced to close down, while those efficiently managed must have expanded.

The factory payments in the industry were with Rs. 4,79.88 lakhs and the income was computed at Rs. 43,78.33 per annum in 1975-77.

The higher ratio of total output to total inputs shows the high profitability in this industry in Bombay. The value added was about 21 per cent of the total inputs in the industry. It also shows the satisfactory position of the industry. It is also borne out by observations that the electrical industrial machinery is a growing industry. Some major industries including cotton textile, even some of the engineering industries, went through periods of stagnation. But the electrical industry always maintained a pace of growth despite short-lived aberrations. The products of the industry enjoy a ready market in the country, while the quantum of exports is also increasing progressively. Many of the products of the Bombay industry are comparable to international standards, and have found an acceptance in many countries.

The account of the various groups of this industry is given below.

ELECTRIC MOTORS

Manufacture of electric motors is an important segment of the electrical machinery industry of Bombay. The phenomenal growth of this industry is directly related to growth of industrialisation and improvement in agrarian technique in the country. The balanced industrial and agricultural development in the country depends upon a reliable source of motive power meeting the characteristics required by the driven equipment. The electric motor industry caters to the demand from diverse industries, such as textile, sugar, chemicals, mining, cement, etc., which require electric motors for diverse functions. Agrarian progress on account of rising irrigation facilities has directly increased the demand from agriculturists who are now found to install motor pump-sets in increasing number. The use of various gadgets relieving the hard manual work is increasing the demand for general purpose motors. The manufacture of sophisticated machine tools required special purpose motors including servo motors working to close tolerances and having characteristics to meet the requirements of sophisticated and closely controlled high output machine tools.

The electric motors industry in Bomaby meets the general and special requirements, and the manufacturing range covers motors from 0.75 K.W. to 5,000 K.W. for D.C. machines and upto 10,000 K.W. for A.C. machines. Electric motors are manufactured also in various insulation classes, enclosures, mountings, and for normal or heavy duty industrial applications.

The history of electric motors industry in India dates back to the establishment of a firm at Coimbtore before the Second World War. A Bombay firm next entered the line. Two more units in the country were started during the war. Bombay provided a congenial home to this industry in the post-Independence period. A number of concerns, some of them with foreign collaboration, undertook manufacturing electric motors in Bombay.

The industry was granted tariff protection for the first time in 1948, and the Tariff Board (later Tariff Commission) held four enquiries in regard to continuance of protection. The industry enjoyed tariff protection for a considerable time. In 1961-62 there were five large-scale units in Maharashtra, while there were several small-scale units in Bombay. (*Ibid.*) (*Handbook of Commercial Information*, 1963.)

The industry requires mainly pig iron, steel, silicon steel, stampings, copper wires, aluminium ingots, insulating materials and ball bearings as raw materials. The imported components are now progressively substituted by indigenous ones.

The Crompton Greaves Ltd. established in 1937 is one of the largest manufacturers of industrial electrical motors, fractional horsepower motors and a wide range of electrical machinery. It has four plants in Bombay at Prabhadevi, Worli, Kanjur Marg and Bhandup. It has an installed capacity to manufacture 8.40 lakh electrical motors, the actual production in a latest year being 6.99 lakhs. (A State-wise Pictures of Large Scale Industrial Activity, 1981.) The Siemens India Ltd., established in 1957 has factories at Worli (near Television Centre) and Andheri, besides others at Kalwe, Nasik, Calcutta and Bangalore. It manufactures electric motors, and a wide range of electrical machinery including switch-gears, railway signalling equipment, electro-medical equipment and instrumentation equipment. It has an installed capacity to manufacture fifteen thousand electric motors per year. The Ralliwolf Ltd., with a factory at Mulund manufactures special purpose electric motors, besides a number of electric tools. It has an installed capacity to produce 12,200 motors, the actual production in a latest year being 11,968 motors. (Ibid). The National Electrical Industries, established in 1945 has a plant at Lalbaug, besides another factory at Pune. It manufactures electric motors upto 1,000 H.P. besides motorised bench grinders, polishers, pedestal grinders and mono-block pumps. (IEMA (Indian Electrical Manufacturers' Association Directory), 1974). There are many other concerns engaged in this industry in Bombay.

ELECTRIC TRANSFORMERS

Transfomers perform an essential function in distributing electricity by stepping up the voltage at generating stations and stepping it down at consuming points. The origin of the electric transformer manufacturing industry in India can be traced back to 1936-37 when the Government Electric Factory, Bangalore, a State Government enterprise, started manufacturing transformers. At the beginning of the Second World War this was the only unit in the country. Between 1941 and 1943 three more firms commenced production, one each in Bombay, Calcutta and Lahore. After Partition of India in 1947, the Lahore unit was shifted to Bombay. In 1951-52, there were two units in Bombay out of the seven

factories in India. Their number increased to five by the end of the Second Five Year Plan. (Handbook of Commercial Information, 1963).

The former Planning Department of the Government of India constituted an Electrical Machinery and Equipment Panel in 1945, which encouraged the growth of transformer manufacturing industry. All kinds of help was extended to entrepreneurs with an objective to encourage the growth of the indigenous industry.

The transformer industry made significant progress during the sixties and seventies. The expanding electrical network required a large number of power and distribution transformers in various ratings and voltage classes. Now the demand is met in full from indigenous sources. The Bombay industry is said to be operating on sound foundations. The transformers upto 220 KV and rating upto 250 MVA was initially, manufactured indigenously. The manufacturing range has now been extended to voltage ratings upto 400 KV to cater to the needs of 400 KV transmission line systems.

The demand for special type of transformers such as booster and traction transformers for railway electrification, non-inflammable and dry type transformers for mining, furnace transformers for metallurgical industry, rectifier transformers for chemical and electro-metallurgical industries and welding transformers are now being manufactured. The quality of the transformers manufactured has found widespread acceptance in international markets. Hence the export of transformers is increasing rapidly from year to year. (Indian Electrical Manufacturers, Association Directory, 1974.)

The Crompton Greaves, established in 1937, has four plants in Bombay, *viz.*, at Kanjur Marg, Bhandup, Prabhadevi and Worli. It is a renowned manufacturer of transformers of various kinds, and has an installed capacity to manufacture 30 lakhs of transformers per annum. The Industrial Meters Pvt. Ltd., established in 1961 manufacturer's transformers and other electrical machinery. It has two factories in Bombay, at Kandivli and Lower Parel. The National Electrical Industries Ltd. is an old company established in 1945. It has a factory at Lalbaug and another one in Pune. It Produces transformers with a very high voltage capacity. There are many other manufacturers in Bombay in this line of industry, though it may not be possible to mention them all in this brief review.

The raw material essential for production of transformers includes hot rolled and cold rolled silicon steel sheets, copper strips and wire, porecelain bushings, cooling tubes, mild steel sheets, transformer oil, paints and a wide range of insulating material and fasteners. Though most of these items are indigenously available, a few components are imported.

SWITCHGEAR

Switchgear is a generic term which covers all apparatus for controlling and regulating the supply of electricity and ensuring its distribution and use. It ranges from the several types of switches employed in making and breaking electrical circuits under normal conditions to fuses and circuit breakers which operate under normal loads for operating the power circuit. Circuit breakers are safety devices and are usually of two types, air breakers and oil immersed. Fuses are used as circuit breakers in low voltage electric circuits.

Manufacture of switchgear and control-gear developed only during the Second Five-Year Plan. The expansion of electrical network and inter-connection between the State grids and generating stations required reliable protective equipment giving protection within stipulated graded timings and capable of clearing faults of increasing proportions. Installation of high tension transmission voltages demanded protective equipment suitable for operating at those high tension voltages. The manufacturing range of circuit breakers is being extended to 400 KV. The industry also offers auxiliary switchgear and protective equipment such as isolators, protective relays, instrument transformers, etc.

The industry also manufactures industrial type switches and switchboards for low tension distribution and protection, motor starters, motor control centres and process control equipment.

Bombay provided a congenial home to this industry. The Siemens India Ltd., incorporated in 1957, is a pioneering concern manufacturing switchgears of various kinds and capacities in Bombay. It has an installed capacity to produce 19.21 lakh switchgears per annum, the actual production in a latest year being 14.57 lakhs. (A State-wise Picture of Large Scale Industrial Activity, 1981.) The concern has taken up an ambitious expansion and modernisation programme. The Crompton Greaves which has a big name in electrical industries is another manufacturer in this field. The Hindustan Klockner Switchgear Ltd., incorporated in 1957, has a factory at Borivli. It manufactures standard starters, starters for special applications, push button stations, limit switches, remote control stations, special starters for machine tool controls and a variety of equipment. The Larsen and Toubro Ltd. with a plant at Powai, also manufactures switchgears, and other electrical equipment and electronic controls. The Kiron Industries Ltd., with works at Mazagaon, was established in 1951. It produces high voltage isolators upto 220 KV, switchgears, panel boards, distribution switchboards and high tension and low tension cable boxes. The Morarji Dorman Smith Ltd., incorporated in 1961 has a plant at Worli which produces miniature circuit breakers and distribution boards. (IEMA, op. cit. 1974.) The Hindustan Brown Bovery with a factory at Goregaon and the Macneilland Magor Ltd., are also engaged in this industry in Bombay.

The factories require extruded steel sections, extruded brass and copper sections, phosphor, bronze, spring steel, wires, strips, special silver alloy, insulating bars and tubes, porcelain and steatite bushings and electrical grade thermosetting moulding powder. These materials are increasingly manufactured in the country, though formerly they were imported.

CAPACITORS AND CONDENSERS

This is comparatively a small industry, and the products are manufactured by the big companies producing a wide range of electrical machinery and equipment, as also by small units. Some of the factories in Bombay produce capacitors required for power factor improvement with associated control-gears for rating upto 33 KV. In addition, furnace capacitors, condenser bushings, starting and running capacitors for electric motors, fans are also manufactured.

OTHER ELECTRICAL EQUIPMENT

The electrical industry in Bombay is also engaged in production of various ancillary equipments for power generation, transmission, distribution and utilisation of electrical energy. This equipment includes insulators and bushings, diesel generating sets, welding generators, welding transformeis, welding rectifiers, spot welding machines, electric house service meters, measuring and controlling meters, and instruments.

Electric meters manufacturing is one of the segments in the electrical industry in Bombay. The industry grew in Bombay after 1955 in which year the first factory in the city was established. The Industrial Meters Pvt. Ltd., incorporated in 1961, has two plants at Kandivli and Lower Parel. It manufactures electrical measuring instruments and other equipment. The Malik Meters Pvt. Ltd. started in 1967 is another producer of meters and electric measuring instruments in Bombay. (*IEMA*, op. cit., 1974.)

ELECTRIC WIRES AND CABLES INDUSTRY

This industry is conceived to manufacture a wide range of insulated wires and cables of various specifications. As per the Annual Survey of Industries there were 45 registered factories providing employment to 3,339 employees including 2,412 workers in Bombay in 1973-74. The number of factories declined to 23 providing employment to 2,084 persons including 1,437 workers as per the survey of 1975-77. The fall in employment was almost commensurate with that in the number of factories. The structure of capital of the Bombay industry can be studied from the following figures (The figures are annual averages in the respective survey periods.):—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	3,81.66	4,22.20
Working capital	3,42.24	5,54.95
Capital invested	11,05.17	12,62.52
Loans outstanding	75,51.16	9,72.19

The decline in number of factories and employment was thus not accompanied by a decline in capital investment in the industry. The factories worked for 634,702 man-days per annum as per the 1975-77 survey. In spite of the fall in employment there was a rise in the total emoluments from Rs. 1,73.34 lakhs in 1973-74 to Rs. 2,34.00 lakhs per annum in 1975-77. The wages to workers also rose from Rs. 94.41 lakhs in 1973-74 to Rs. 99.53 lakhs in 1975-77 period. This might be due to general rise in wages and dearness allowance. It can definitely be said that the share of wages to workers is much less in the total emoluments paid by the factories. This can be attributed to the preponderance of technical personnel and managerial personnel over workers.

The factories consumed fuel valued at Rs. 30.77 lakhs in 1973-74 and at Rs. 51.42 lakhs per annum in 1975-77. They consumed material worth Rs. 22,65.02 lakhs and Rs. 22,38.06 lakhs during the years under study. The total inputs of the factories were to the tune of Rs. 24,46.90 lakhs in 1973-74 and Rs. 24,62.52 lakhs in 1975-77, the rise being very meagre. The other inputs of the factories, which are available for the 1975-77 survey period, were worth Rs. 1,73.05 lakhs. The value of plant and machinery was computed at Rs. 6,91.42 lakhs and Rs. 7,87.92 lakhs in the years under reference. The structure of the output of the industry in Bombay is shown below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Value of products	27,78.23	28,61.36
Other output	N.A.	50.51
Total output	28,66.91	29,11.87
Depreciation	55.35	50.86
Value added on manufacture	3,64.64	3,98.49

The above figures bring home some conclusions. The total output of the industry comprises the main products *viz.*, wires and cables, while other bye-products are only of meagre value. The decline in the number of factories and employment was not reflected in output as the value of products and total output registered an increase over the period under study. The ratio of value of inputs and output shows the satisfactory position of the industry. The value added on manufacture is almost one-third of the capital investment in the industry, while it is almost 96 per cent of the fixed capital of the factories in Bombay, in 1975-77. The factory payments of the companies were computed at Rs. 1,58.37 lakhs and the net income at Rs. 2,40.12 lakhs per annum as per the survey of 1975-77.

From the above analysis it can be deduced that wire and cable manufacturing in Bombay is more of a capital intensive rather than a labour intensive industry.

The electric wires and cables industry broadly covers the manufacture of, (i) bare and reinforced conductors, chiefly of copper and aluminium, (ii) rubber or plastic insulated electrical installation cables, (iii) cotton, silk or enamel covered electrical winding wire for instruments, (iv) paper insulating power cables, and (v) dry core telecommunication cables.

The industry commenced in India in 1923 with the manufacture of bare copper conductors and rubber insulated cables and flexibles by a factory at Tatanagar. In the initial stage, the Calcutta firm which owned the factory was helped by Government by duty-free imports of electrolytic copper rods for manufacture of electric cables and wire. (Handbook of Commercial Information, 1963.) The industry expanded during the Second World War when foreign supplies were curtailed and the growth of indigenous industries and domestic demand increased considerably.

The growth of the industry in Bombay started from middle of this century. Since then the demand for various cables and wires continued to rise progressively, and new units came into existence to manufacture bare copper conductors, plastic coated copper and aluminium wires, rubber sheathed cables and P.V.C. coated wires. It is now a well-established industry and practically all needs of overhead transmission lines, underground transmission and power distribution network are met by the local industry. In the field of cables, India is one of the pioneer countries to introduce aluminium as conductor for underground cables. The progress made by the local industry has found acceptance in the world market and PILC/PVC power cables with aluminium conductors art now exported to many countries. The progress in the production

of PVC, polythene and cross-linked polythene coated cables is remarkable. At present, underground cables upto 33 KV rating are manufactured indigenously. The industry is also meeting the domestic demand for a variety of cables like mining, trailing, shot firing, aerial cables, etc.

The increasing demand for sophisticated electrical equipment required usage of winding wires and strips insulated with enamels or covered paper, cotton, fibre glass etc. The winding wire industry is meeting all such diverse needs.

The Ajit Wire Industries at Andheri (East), established in 1949, undertook the manufacture of enamelled copper wire in 1955. This firm in Bombay is now one of the pioneers in the line in India, and it manufactures enamelled copper wires according to British and Indian standard specifications. This unit was the first to manufacture enamelled aluminium wire in India in 1962. It has an up-to-date laboratory and modern machinery and testing equipment which ensures super enamelled copper wire of good quality. It supplies good quality wires to the reputed electric and electronic manufacturers in Bombay as well as those in India. This concern was the first to go overseas to offer technical know-how for the manufacture of enamelled copper wires to Messrs. Magnet Wires and Electricals Ltd., Kuala Lumpur, Malaysia. Its technical collaboration with the latter Malaysian firm started in December 1971. (IEMA Directory, 1974). It is gratifying to note that this Bombay firm has extended technical collaboration to a foreign firm in this complicated sector of industry.

The Devidayal Electronics and Cables Ltd., established in Bombay on 15th January 1953 (*Ibid*). is another reputed large manufacturer of enamelled wires and cables in Bombay. It manufactures super enamelled wires and strips, steel and alloy steel wires, covered wires and strips, insulating enamels, nickel chrome alloy strip wires etc. Besides its original established factory at Reay Road in central Bombay, it has set up a new plant at Pokhran Valley near Thane in 1960. It has recently undertaken a phased programme of modernisation.

The Hindustan Transmission Products, with a factory at Chandivli in Bombay, was originally established in 1940. The products manufactured include super enamelled copper wire, insulated wires and strips, magnet wire enamels, synthetic resins and insulating varnishes. (*Ibid*). It is one of the old concerns in this industry in Bombay.

The Power Cables Pvt. Ltd., with a factory at Mahul near Trombay, was established in 1958. (*Ibid*). It manufactures electric cables and wires, conductors, welding electrodes, PVC compounds, iron and steel wires, insulating oils and a number of other products.

The Cable Corporation of India has a factory at Borivli (1957) and is one of the large-scale manufacturers of cables of various specifications. The sales turnover of this unit was to the tune of Rs. 14.63 crores in 1978-79 and Rs. 31.42 crores in 1979-80. It has an installed capacity to produce 1,600 kilometres of insulated cables and 9,144 kilometres of PVC insulated cables and wires per annum. (A State-wise Picture of Large Scale Industrial Activity 1901.) The concern is owned by one of the leading industrial houses in India.

ELECTRICAL APPARATUS, APPLIANCES AND OTHER PARTS

This is a very important segment of the electrical apparatus and appliances industry in Bombay, the products of which occupy an honoured place in modern conditions of living. It is mainly a consumers goods industry which is conceived here, for the purposes of analysis, to cover the manufacture of electrical appliances, apparatus and other parts inclusive of electric lamps, bulbs, fluorescent tubes, sockets, switches, electric fans, insulators except porcelain, conductors, electric irons, heaters, shavers, cleaners and many other articles of consumers interest. This concept of the coverage of the industry accords with the classification adopted in the Annual Survey of Industries, the statistics of which are analysed below.

The electrical apparatus, appliances and other parts manufacturing industry, as per the findings of the Annual Survey of Industries in 1973-74 and 1975-77 periods, comprised 185 registered factories in 1973-74 and 129 in 1975-77 in Bombay. The factories provided employment to 7,675 persons including 6,148 workers in 1973-74 which declined to 4,630 persons including 3,372 workers in 1975-77. The decline in employment appears to be commensurate with the decline in number of factories. The structure of capital of the units in Bombay was as under. The figures reveal annual averages in the respective survey periods:—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	3,33.14	4,06.75
Working capital	6,84.56	3,72.16
Capital investment	11,09.32	11,32.24
Outstanding loans	8,00.00	8,43.55

It can be deduced that in spite of the fall in number of factories and employment, there was no decline in fixed capital, capital investment or outstanding loans, though there was a considerable fall in working capital. It is certain that there was progress in the industry in Bombay during the period under study.

The industry in Bombay worked for 1,253,433 man-days per annum during the period 1975-77. There was a considerable decline in total emoluments, namely from Rs. 3,09.48 lakhs including wages paid to workers (Rs. 2,03.80 lakhs) in 1973-74 to Rs. 2,66.53 lakhs including wages paid to workers (Rs. 1,42.79 lakhs) per annum during 1975-77. This decline could not be due to fall in wages but due to fall in employment.

The fuel consumption by the electrical apparatus and appliances industry in Bombay was valued at Rs. 30.91 lakhs in 1973-74 and at Rs. 39.11 lakhs per annum in 1975-77. They utilised raw material worth Rs. 18,14.10 lakhs and Rs. 17,73.89 lakhs, respectively in the years under study. The other miscellaneous inputs of the factories were worth Rs. 3,02.36 lakhs per year in 1975-77. The total cost of inputs was Rs. 20,47.59 lakhs in 1973-74 which increased to Rs. 21,15.36 lakhs in 1975-77. The increase in costs may be attributed to the rise in prices. The fall in the value of plant and machinery from Rs. 4,07.40 lakhs to Rs. 3,89.01 lakhs over the years under reference is inexplicable. The volume of production of the Bombay factories is analysed below. The figures represent annual averages during the two survey periods:—

Item	1973-74	1975-77
Products	25,33.24	25,33.98
Other output	N.A.	86.42
Total output	25,84.80	26,20.40
Depreciation	48.74	47.60
Value added on manufacture	4,88.46	4,57.23
Factory payments	N.A.	1,35.71
Net income	N.A.	3,21.52

The above statistics bring home the conclusion that there was a decline in the output and value added on manufacture in the industry in Bombay. The fall in production was however less than proportionate with the fall in number of factories and employment. It can therefore be deduced that the marginal units must have wounded up and that consumer resistance to products might have reduced demand and production in the Bombay industry, during the limited period under consideration. It may however be borne in mind that the period under review is too short to deduce any far-reaching conclusions, and that the industry has actually prospered in the post-Independence period.

As regards the structure of the industry in Bombay, it can be surmised that it is more of a capital intensive industry rather than a labour intensive one. The industry consumes less fuel than many other industries such as cotton textile and some sectors of metal and machinery industries. The ratio of total output to total inputs shows the profitability in the industry. The value added on manufacture compared very favourably with the fixed capital.

ELECTRIC FANS

The electrical industry in India commenced with the manufacture of fans. It was in 1924 that electric fans manufacturing was commenced in the country by a private limited company in Calcutta. The fans were sold at competitive prices and became popular among the elite class within a short period. The success of this concern provided an impetus to many others. By 1939, about half a dozen firms undertook manufacture of electric fans in the country. (Handbook of Commercial Information, 1963.) The progress of the industry has been phenomenal and new records of production were set up in 1959-60.

The history of the industry in Bombay dates to the year 1937 during which the Crompton Parkinson Limited was established The lead given by this concern was followed by a number of units which were set up in this city.

The industry received considerable encouragement during the Second World War when there was a sharp decline in imports. The industry sought for tariff protection from the Government in 1949. In 1951, the Indian Tariff Board, having regard to the comparative figures of the landed costs of imported fans and the fair selling prices of the indigenous products and also keeping in view the restrictions on imports, recommended that there was no case for protection to the industry.

In 1950-51, there were 22 units in the organised sector in the country which had a capacity to produce about 288 thousand fans per annum. By the end of 1960-61 the number of units increased to 24 with an installed capacity to manufacture about 871,750 fans per annum on a single shift basis. Of these six were in Maharashtra. (*Ibid.*)

With revolutionary changes in the methods of production and assembly, it has been possible to achieve distinct economies in costs of production and to make available the products at even lower prices in the face of increasing costs of raw material and wages.

The principal manufacturers of electrical fans in Bombay are Crompton Greaves Ltd., Rallis India Ltd., Almonard Pvt. Ltd. and G.E.C. Ltd., Besides, two other companies have their registered offices in Bombay, the plants of which are located elsewhere. The Crompton Greaves, with four units in Bombay, two being at Worli and two at Kanjur Marg (Bhandup) is by far the oldest concern in Bombay. The Crompton, a leader in electrical engineering and technology since 1900, were the first in India to make high power-factor capacitor fans. It manufactures almost everything in electricals. Some of the finest and the best equipped material testing, quality control, research and development facilities in the country are with the Crompton Greaves in Bombay. A few landmarks in the development of this enterprise may not out of place. Established at Chelmsford in England about hundred and ten years ago, the Crompton Parkinson Ltd., constructed a plant at Worli in Bombay in 1937 to manufacture a wide range of electrical equipment. It was integrated with Messrs. Greaves to form Greaves Cotton and Crompton Parkinson on April 27, 1937. There was financial participation of Crompton Parkinson in Greaves Cotton in 1947 with a view to accelerating the expansion of its Worli plant. The two companies finally merged in 1966 to form Crompton Greaves Ltd., bringing together all the diverse functions under one management. (IEMA, op. cit, 1974). The sales turnover of the company was valued at Rs. 70.09 crores in 1978-79 and Rs. 88.74 crores in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981).

The Rallis India established in 1957 is another large-scale manufacturer of electric fans of all kinds. It has a factory at Mulund in Bombay, and has an installed capacity to manufacture 3.50 lakh fans per annum. Its production of fans in a latest year amounted to 2.38 lakh fans. (*Ibid.*) The Almonard with a factory on Saki-Vihar road and the G.E.C. with a factory at Goregaon (Aarey Road) also manufacture fans in Bombay.

Almost all types of fans are manufactured by these firms like ceiling fans, table and pedestal fans, industrial fans and high pressure blowers and exhaust fans. The products are exported from India to 38 countries in the world, and the industry is an important foreign exchange earner, accounting for as much as 10 per cent of the total exports of engineering goods from India in 1963. (Handbook of Commercial Information, 1963.) Within the country, the demand for electric fans is rising very rapidly on account of progress of electrification even in remote areas and improvement in the level of living of the people.

Fans which were not within reach of the lower middle class families about 25 years ago have penetrated them of late. Consequently the demand for table fans and ceiling fans has soared very high.

Almost all the raw materials required for electric fan manufacturing are available indigenously.

ELECTRIC LAMPS

The expansion of industrialisation, rural electrification and the progressive rate of urbanisation have contributed to the growth of this industry in Bombay. Rising income and standard of living are also responsible for an increase in demand for the appliances like electric lamps, fluorescent tubes, etc. during the last about 30 years. Since 1952, there was a fifteen-fold increase in the output of fluorescent lamps, while the output of electric bulbs has trebled. (Kothari's Investor's Encyclopaedia.)

The first electric lamp manufacturing factory was established in Calcutta in 1932. Two other companies manufacturing lamps were also incorporated in the same year in Calcutta. Just before the Second World War two factories were set up in Bombay, (Handbook of Commercial Information, 1963.) and they were the pioneers of the industry in the city. During the War the existing factories expanded their installed capacity, while new ones came into being. By 1950, there were eleven factories in India including the two in Bombay, and they had a total annual rated capacity to produce 26 million lamps. The manufacture of fluorescent tubes was undertaken for the first time in India in 1952. The industry went through various phases of growth during the post-planning era.

The industry was partly dependent upon imports of components in the initial stages of its growth. About 40 per cent of the requirements of raw materials and components were imported in 1961-62. (Handbook of Commercial Information, 1963.) During the Third Plan certain chemicals, soda, lime, glass tubing, glass shells, caps, solder wires and tungsten filament were manufactured indigenously.

The imports were chiefly from Great Britain, West Germany, the Netherlands and Japan. Automobile bulbs were imported from Japan and Czechoslovakia and studio lamps from Britain, the Netherlands, West Germany, Japan and the U.S.A. Gas filled lamps and incandescent lamps were imported mainly from the above-mentioned western countries. (Ibid). Gradually the local production was not only increased but was also diversified to cover almost all products with the result that the imports are now restricted to categories of projector lamps, scaled beam lamps and miners cap bulbs.

The Crompton Greaves Ltd., with a world-wide reputation for manufacturing some of the finest electrical equipments, has four manufacturing units in Bombay, two at Worli and two at Kanjur Marg (Bhandup). These units together manufacture lamps, fluorescent tubes, fans and a wide range of electrical products. Besides, there are many other manufacturers in Bombay most of which are of recent origin. There are many feeder ancillary industries in Bombay which manufacture brass caps, glass tubes and rods.

DOMESTIC ELECTRICAL APPLIANCES

The common domestic electrical appliances comprise electric iron, kettle, water heater, radiator, stove, toaster, coffee percolator, oven, hot plate, cooker and incubator. The components of such appliances consist of a metallic body or frame, heating elements of resistance wire and insulating materials. This industry is of very recent origin, and is mainly confined to the small-scale sector. The initial growth of the industry was mainly in the form of assembly of parts, which in subsequent years developed into a manufacturing and assembling industry. It developed after the commencement of the First Five-Year Plan when imports of luxury articles were curtailed. In 1957-58 there was one large-scale factory in this industry in Bombay, while there were many small-scale units.

A mention may be made of some of the manufacturers in Bombay:—

Devidayal Stainless Steel, Reay Road; Killick Nixon; Standard Electrical Products, Jogeshwari (West); Industrial Controls and Appliances, Andheri (East); Homa Industry, Andheri-Kurla road; Anchor Industries, Malad; Ketco Geysers, Tardeo, etc.

The industry has grown mainly under consumer patronage and ban on imported articles. Its growth is traceable from the mid-fifties of this century. The products of this industry have penetrated the houses of even the middle class and lower middle class of Bombay, though the costlier electrical gadgets are well beyond their reach as yet.

The principal raw materials required by this industry comprise resistance wires and strips, ceramic bases and wire holders, insulators, metal castings and sheet metal pressings, etc. A number of small components are also required. All these are locally available, and an ancillary sector of the industry has grown along with the main industry in Bombay. Resistance wires are generally imported though most of the other items are procured from indigenous sources. A number of articles produced in Bombay are exported to South East Asian countries. Japan and China are however the formidable rivals of the Bombay products in foreign markets.

OTHER ELECTRICAL EQUIPMENT

Manufacturing of other electrical equipment including electric switches, sockets, holders, adopters, insulators, etc. is undertaken in Bombay mainly by small-scale units and proprietary concerns. Information for these units is not available.

ELECTRONICS INDUSTRY

The electronics industry in India as well as in Bombay is increasingly playing an important role in national development. This industry nucleated during the early 1950's with the manufacture of radio receivers by a few firms. The National Radio and Electronics Company Limited established in Bombay in 1940 is one of the pioneers in the manufacture of entertainment and consumer electronic products and a variety of industrial and professional electronic products. The other pioneers in the electronics industry in Bombay were the Advani-Oerlikon established in 1951 and the Cosmic Radio established in 1952. The Motwane Private Limited was however the earliest concern in Bombay established in 1909. Since the early 1950's the industry in Bombay has not only grown in total volume, but also has diversified enormously. In fact, there is hardly any major sector of the economy in which electronics do not find some use. The trend has been towards growth of professional electronics and self-reliance in many of the high technology sophisticated fields.

The importance of the industry can be judged from the following facts. More than 80 per cent of India's population is now covered by the mass communication media like radio and television. The defence preparedness of the country is now based on the indigenously manufactured radars and sophisticated systems. The process control instrumentation is being increasingly used for economic running of different processes and manufacturing industries like fertilizers, petrochemicals, etc. Indigenously manufactured computers are being used in some cases. Electronics plays an important role in the control of nuclear reactors and optimal distribution of power through the grids. The launching of the first Indian satellite stood testimony to the Indian ability to design and implement complex projects involving myriad of electronic systems. (*Times of India Directory and Yearbook, 1980-81.*)

The production of electronics and components increased tremendously during the last about 15 to 20 years. The

industry has gained a firm ground in Bombay. Besides meeting the total demand, there is a substantial export of electronics items. The industry has diversified into areas like radio frequency cables, microwave components, digital instruments, control equipments, etc.

The electronics industry mainly comprises the manufacture of consumer electronics like radio sets, television sets, tape recorders, record players and public address systems; telecommunication equipment; computers and data processing equipment; control and industrial electronics which are meant for optimisation of operational cost, quality and efficiency in production in various industries; medical electronic equipment; instruments and components and materials. The establishment of the Television Centre in Bombay in 1972 gave new dimensions to this industry. A number of units have been incorporated to manufacture T. V. sets which have found inroads into thousands of houses in the city.

As mentioned earlier the Motwane Private Limited established in 1909 was the earliest concern to manufacture public address amplifiers and special sound systems in Bombay. It is however, remarkable that the Forbes Forbes Campbell and Company Limited is by far the oldest concern in Bombay established as early as 1767 (It was established in 1767 a as trading concern under the name Forbes and Company.) which later on entered electronics and engineering industries in Bombay. The concern is running two factories in Bombay, viz., at Chandivli Estate and Kurla, besides two others elsewhere. It manufactures wire and microwave communications, sound and vision broadcasting equipment, airfield equipment, instruments, electronic components and raw material. The Larsen and Toubro Limited established in Bombay in 1938 has a factory at Powai which manufactures plant and equipment for nuclear power generation, electrical switchgear and electronic controls, and a wide range of sophisticated machines for various industries Its sales turnover was valued at Rs. 74,49 crores in 1979-80. The activities of the National Radio and Electronics Co. (1940) are already mentioned earlier. The installed production capacity of its factory at Andheri is as under':—

Item	Numbers (000)
Radio speakers	258
Radio receivers	200
Voltage sta <mark>bil</mark> isers	15
Electronic office machines	15

The turnover of its sales was computed at Rs. 10.82 crores in 1979-80. The Advani Oerlikon Limited established in 1951 in Bombay has a factory at Bhandup. It is a leading manufacturer of electronic control equipment, welding electrodes, welding rectifiers, motor generators, power and distribution transformers, power control equipment, electrostatic photocopying equipment and a number of sophisticated machine tools. It has started two research and development wings, one in Bombay and another in Pune. Its sales turnover was worth Rs. 13.48 crores in 1977-78. The Siemens India Limited established in 1957 in Bombay, has a factory at Worli and another at Andheri, besides two units elsewhere. It manufactures railway signalling relays, switchboards, electric motors, electromedical equipment, instrumentation equipment, switchgears and many other items. The installed capacity of all the units of the Siemens is given below (A State-wise Picture of Large Scale Industrial Activity, 1981.):—

Maharas

Product	Thousand Nos.
Switchgears	1,921
Electric motors/generators	15
X-Ray equipment	0.750
Coupling filters	70
Switch boards	15.20

The turnover of sales were computed at Rs. 72.73 crores in 1978-79 and Rs. 95.80 crores in 1979-80. The Killick Nixon incorporated in 1947 has a factory at Chandivli which produces electronic goods and other machinery. (Bombay Chamber of Commerce Directory, 1976.)

There are a number of other concerns in Bombay which are engaged in the manufacture of electronic goods.

The electronics industry is a highly capital intensive industry. The employment potential of the industry is limited as most of the functions are carried out by sophisticated machinery. It is also a highly technologically advanced industry requiring the services of technocrats and trained electronic engineers. The industry in Bombay as in India is awaiting a bright future.

The industry found a congenial home in Bombay mainly on account of the infrastructure facilities and the availability of electronic engineers. The demand for the electronic items also provided a tremendous stimulus to this industry. For example, tape recorders, cassette players, stereo amplifiers and stereo players are highly in demand from the well-to-do as well as the higher middle class with the result that manufacturers were encouraged to produce them. A recent addition to the sound and light electronics is the video player which is making inroads into hundreds of households. The demand for electronic calculators is almost multiplying.

Electronic sound technology has advanced tremendously during the test about ten to fifteen years. The establishment of the Television Centre in Bombay in 1972 gave a great fillip to the industry in this city. The demand for T.V. sets and parts thereof has been progressively increasing. The demand for stereo players, amplifiers, tape recorders, cassette tapes, video players and a wide range of sound electronics has increased tremendously. The industry, therefore, received a

stimulus during the last about 10 to 15 years in Bombay.

The Cosmic Radio Limited with a factory at Andheri was incorporated in Bombay in 1952. It manufactures stereo amplifiers and loudspeakers, stereo cassette tape decks, tape recorders, record players and stereo headphones. The Polestar Electronics Private Ltd. which has a factory at Kandivli manufactures television receivers, amplifiers and a range of sound electronic goods. It has expansion plans to manufacture micro processors and microwave ovens. It has plants at Delhi and Chandigarh as well.

As per the classification adopted in the Annual Survey of Industries, several electronic goods are classified in a single group. It includes the manufacture of radio and television transmitting and receiving sets including transistor radio sets, sound reproducing and recording equipment including tape recorders, public address system, gramophone records and pre-recorded magnetic tapes, wires and wireless sets, telephone and telegraph equipment, signalling and detection equipment and apparatus, radar equipment and installations, parts and supplies specially used for electronic apparatus.

As per the Annual Survey of Industries there were 39 registered factories in this group of industry in Bombay in 1973-74 which fell in number to 35 in 1975-77. The factories provided employment to 6,051 employees including 4,444 workers in 1973-74 which declined to 4,842 employees inclusive of 3,365 workers in 1975-77. The structure of capital of the factories was as under. The figures reveal annual averages for the survey periods.

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	4,66.25	4,58.52
Working capital	5,00.93	4,63.50
Capital investment	11,59.19	14,28.85
Outstanding loans	8,71.02	10,20.27

It is evident that there was an increase in capital investment in the industry in spite of a fall in fixed capital, working capital, number of factories and employment.

The factories worked for 13,85,178 man-days per annum in 1975-77 period. The total emoluments paid to employees amounted to Rs. 2,62.73 lakhs inclusive of wages to workers amounting to Rs. 1,58.95 lakhs in 1973-74 which increased to Rs. 3,24.51 lakhs and Rs. 1,92.50 lakhs respectively in 1975-77. This increase could be attributed to rise in wages, bonus and other monetary benefits to the employees.

By the very nature of this industry the fuel consumption forms a smaller proportion of the costs of production. It amounted to Rs. 13.05 lakhs in 1973-74 and Rs. 20.76 lakhs in 1975-77. The value of raw materials consumed by the factories was Rs. 10,16.36 lakhs in 1973-74 and Rs. 9,80.73 lakhs in 1975-77. The value of other inputs was Rs. 3,27.69 lakhs in 1975-77. The total inputs of the Bombay factories were computed at Rs. 1,05.00 lakhs and Rs. 13,29.18 lakhs, respectively in 1973-74 and 1975-77. The value of plant and machinery was computed at Rs. 2,92.12 lakhs in 1973-74 and Rs. 2,37.90 lakhs in 1975-77.

The structure of production by the firms in Bombay was as under. The figures are annual averages :

(Rs. in lakhs)

Item	1973-74	1975-77
Products	14,16.22	15,99.82
Other output	N.A.	1,99.10
Total output	15,18.50	17,98.93
Depreciation	27.78	35.93
Value added on manufacture	4,40.71	4,43.81

The factory payments of the units were worked out at Rs. 145.84 lakhs while the net income at Rs. 2,87 98 lakhs per annum in the 1975-77 survey period.

The above statistics lead us to some conclusions. Though there was a decline in the number of factories, employment, and raw material consumption, the total output showed a conspicuous increase. It is a highly capital intensive industry with low employment opportunity. The value of products and value added on manufacture also registered a rise over 1973-74. The value added on manufacture is quite high as against the fixed capital and working capital of the industry. The ratio of total output to total inputs is high and is suggestive of the profitability of the industry. The net income of the companies in 1975-77 shows the high returns on capital in the industry. The high rates of dividend distributed by most of the concerns in Bombay also bear testimony to the high iate of returns ranging upto 30 percent in some efficiently managed companies in Bombay.

RADIO RECEIVERS

Manufacture of radio receivers is largely a post-Independence phenomenon. The expansion of radio broadcasting service in the country during the last few decades helped growth of the industry. The Electrical Machinery and Equipment Panel on the development of electrical industries in its Report (April 1947) had observed that adequate consideration was not being given to the production of radio receivers in the country at that time.

According to the *Wealth of India* by the Council of Scientific and Industrial Research, the assembling of receiving sets from imported components was started in the third decade of this century after the incorporation of medium wave broadcasting transmitters in Bombay and Calcutta in 1927. As per the *Wealth of India* a Bombay firm which was set up in 1940, subsequently entered into technical collaboration with a London firm, not only to assemble receiving sets but also to manufacture several components.

Production of a few components like wooden cabinets, metal parts, knobs, transformers, chokes, coils, resistors, pilot lamps had already been taken up on a limited scale. The components and raw material which were required to be imported were valves, insulating materials, condensers, loudspeakers, enamelled copper and live wires and other precision parts.

It is now an important industry as the demand for radio sets and transistors is growing very fast. Like many other avenues of production Bombay has provided a congenial home to this sector also. Besides the units in the organised sector, there are several small-scale and cottage industry units engaged in this line of production in Bombay.

STORAGE AND DRY CELL BATTERIES

The growth of demand for cars and trucks and the increasing operations of railways and telephones provided an impetus to the industry producing storage and dry cell batteries. In fact many services and industries are now increasingly using storage batteries. Naturally this industry grew rapidly since the Second World War. It is a matter of gratijBcation that the industry has fully justified the protection granted to it by the Government.

The first dry cell battery making factory in India was established in 1926 by an English firm near Calcutta. Another firm came into the field in 1936 in Maharashtra. At the beginning of the Second World War, these were the only two companies in India manufacturing about 18 million dry cell batteries annually. During the war 80 per cent of the production was reserved for use by the defence services. The industry was granted tariff protection in 1947 which was continued upto 1954. In 1950-51, three units out of four in the country were in Maharashtra. (Handbook of Commercial Information, 1963)

Storage batteries differ from dry cells as they depend for their operation on the reversible reaction of electric current with which they are charged. A storage cell consists of two dissimilar electrodes immersed in an electrolyte. The two types of commercial batteries are lead acid cells and alkaline cells. Storage batteries are very useful for many services.

The first attempt to manufacture storage batteries was made by a firm in Calcutta in 1931. The increased demand during the Second World War encouraged an increase in production to 1.22 lakh storage batteries per annum in India. The tariff protection granted to the industry in 1948 was continued upto the end of 1955. The industry manufactures various types of batteries for motor vehicles, automobiles, electric driven equipment, marine engines, aircrafts, tractors, tanks, etc. There are special batteries for railways, telephones, telegraphs, power stations, fork lift trucks, etc. Till the mid-fifties they were imported from foreign countries. Great advancements have now been made in this industry in recent years.

The Standard Batteries Ltd., Bombay, in collaboration with a Swedish concern has made immense progress in this field, and it possesses equipment and machinery to produce batteries of a high standard. It has two factories in Bombay *viz.*, at Santacruz and Bhandup. The installed capacity of this concern and production in a latest year are given below (A State-wise Picture of Large Scale Industrial Activity, 1981):—

Item	Installed capacity (No.)	Production (No.)	Sales in 1979-80(Rs. in crores)
Lead acid storage batteries	7,05,800	3,97,335	
Cap lamps without batteries	60,000	16,545	18.64
Battery operated trucks	120	84	

The Estrela Batteries, founded in Bombay in 1939 has a factory at Dharavi. It was primarily formed to manufacture electric batteries, dry cells and other electrical goods. The company has all the necessary machinery, a mechanical engineering department and a well-equipped laboratory. It also manufactures battery for flash lights, radio-sets, automobile vehicles, special instruments and signalling equipment. It has an installed capacity to produce 130 million dry cells and batteries, of which it actually produced 46.60 millions in a latest year. The sales turnover of the concern was Rs. 6.10 crores in 1978-79 and Rs. 5.53 crores in 1979-80.

The Union Carbide of Bombay is a renowned manufacturer of dry cells for transistor sets and torches. It is also a manufacturer of auto lamps.

Besides the large-scale manufacturers, there are many small units in Bombay which manufacture, assemble, repair and rebuild storage batteries. The small-scale sector recorded a substantial progress during and after the Second Five-Year Plan

The storage and dry battery cells industry in Bombay is a foreign exchange earner, and it caters to the needs of defence services and public services, such as, telegraphs, telephones, railways and telecommunications. Though most of the raw materials required for the industry are now available indigenously, the industry has to depend upon imports of sulphur and synthetic resins. Progressively sulphur is also being obtained from the petroleum refineries in Bombay which produce it as a bye-product. The Indian Standards Institute has formulated standard specifications for lead acid storage batteries for aii crafts and motor cycles as well as heavy duty and light duty lead acid storage batteries for motor vehicles, hard rubber containers for motor vehicle batteries and stationary cells and batteries.

As per the Annual Survey of Industries there were nine manufacturers of dry and wet batteries in Bombay in 1973-74 which provided employment to 3,739 employees. The fixed capital in the industry was Rs. 372.43 lakhs, working capital Rs. 112.33 lakhs and invested capital Rs. 818.07 lakhs in the same year. The total emoluments paid to workers were of the order of Rs. 3,09.48 lakhs.

The factories consumed raw materials worth Rs. 10,48.20 lakhs, the value of plant and machinery being Rs. 448.68 lakhs. The value of products of the industry was Rs. 15,84.88 lakhs. The total output and total inputs of the Bombay industry were computed at Rs. 15,59.46 lakhs and Rs. 11,51.97 lakhs, respectively. This shows the profitability in the industry, and the high returns on capital. The value added on manufacture was Rs. 3,48.82 lakhs in 1973-74. (Figures for 1975-77 are not available.)

AIR-CONDITIONERS AND REFRIGERATORS

The manufacturing of air-conditioners and refrigerators which are deemed to be luxury items by Indian standards is of very recent origin. Its history in India is traceable to the period of the First Five Year Plan (1951-56). Initially the industry was limited to assembly of imported parts and components. At the end of the Second Plan there were 14 units in the organised sector in India, manufacturing domestic and commercial refrigerators, air-conditioners, and water coolers, of which five were located in Bombay. Besides, there were ten units manufacturing air-conditioners, of which three were in Bombay. (Handbook of Commercial Information, 1963.) The industry found a congenial homein Bombay in addition to Calcutta and Delhi. The Government of India took interest in fostering the cause of this industry since 1960-61, when several licences for the manufacture of scale units and compressors were issued. In these days compressors and control units and modulating motois were imported for the refrigerators. Now, however, all components are manufactured indigenously, a small portion being produced by ancillary units. Black and galvanised steel sheets and light steel structural are required by the industry which are available in the country.

The Godrej and Boyce Co. has a nation-wide name for refrigerators. The company with plants at Lalbaug in Central Bombay and at Vikhroli, is an integrated unit. Its sales turnover inclusive of refrigerators, furniture and other items was of the order of Rs. 107.64 ciores in 1979-80. The Voltas Ltd. with a factory at Lalbaug and another factory at Thane is another reputed company with an installed capacity to manufacture 15,100, air-conditioners, 33,000 refrigerators and 2,400 water coolers per annum. The sales turnover of the two plants of the Voltas was valued at Rs. 178.74 crores in 1978-79 and Rs. 204.50 crores in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981.) There are many other units in Bombay in this industry and activities allied to it. To mention a few: Hind Rectifiers, Bhandup; Jafkay Engineering Corporation, Marol; Khandelwal Herrmann Electronics, Bhandup; Larsen and Toubro, Powai; Premier Automobiles, Kurla, etc. The Larsen and Toubro is specialised in the manufacture of cold storage plants required for very large dairies and meat processing plants.

The refrigerators and air-conditioners manufactured by the Bombay industry are exported to many middle-east and south-eastern countries.

The Annual Survey of Industries statistics for the refrigerators and air-conditioners manufacturing industry are not separately available. The 1973-74 survey has grouped together manufacture of refrigerators, air-conditioners, fire-fighting equipment, and their parts, components and accessories. According to this grouping there were 29 factories in Bombay which provided employment to 2,432 employees including workers in 1973-74. The fixed capital of the factories was Rs. 125.10 lakhs, working capital Rs. 206.67 lakhs, and invested capital Rs. 574.62 lakhs. The total emoluments paid by the firms in Bombay amounted to Rs. 153.40 lakhs including Rs. 90.56 lakhs paid as wages to workers.

The factories consumed fuel worth Rs. 8.11 lakhs and raw materials worth Rs. 302.22 lakhs. The value of plant and machinery was Rs. 62.37 lakhs. The products of the entire industry group were valued at Rs. 638.43 lakhs, the net value of semi-finished products being Rs. 90.25 lakhs. The total output of the Bombay industry was valued at Rs. 967.81 lakhs against the total inputs of Rs. 388.08 lakhs. The value added on manufacture was computed at Rs. 570.67 lakhs.

The above statistics show the high ratio of output to inputs, high profits and higher returns on capital. The share of wages in total emoluments is much less in this industry.

MACHINERY AND MACHINE TOOLS

Machinery and machine tools manufacturing is a broad sector of industry which comprises a wide range of manufacturing activity in Bombay. For purposes of analysis this sector, which can very broadly be termed as the engineering industry, is conceived to include the following principal segments of industries:—

- a. manufacture of prime movers, boilers and steam generating plants, such as diesel engines and parts,
- b. industrial machinery for food and textile industries,
- c. industrial machinery for other than food and textile industries, and
- d. manufacture, alteration and repair of general items of non electrical machinery, components, equipment and accessories not elsewhere classified.

This Classification of the industry accords with the one adopted by the authorities of the Annual Survey of Industries for 1975-77. The 1973-74 Survey has furnished separate statistics for many more segments, and the same are utilised, wherever necessary, in the account of the respective segments.

Before proceeding to the account of the various segments of this industry, it is deemed useful to give an analytical account of the machinery and machine tools industry, highlighting its principal characteristics, and the place of the Bombay industry in that of Maharashtra. This analysis is based on the Annual Survey of Industries in 1975-77. The figures reveal annual averages for the survey period.

The machinery and machine tools industry in Bombay comprised 630 registered factories which formed 59.38 per cent of the same industry in Maharashtra in 1975-77 period. They provided employment to 39,491 persons which constituted 39.20 per cent of the employment in the State. The invested capital in Bombay factories was of the order of Rs. 1,12,84 lakhs or 32.63 per cent of the invested capital in Maharashtra factories. The output in Bombay was computed at Rs. 2,33,23 lakhs which was 38.64 per cent of that in the State. The value added on manufacture in Bombay was computed at Rs. 61,54 lakhs or 33.86 per cent of the industry in Maharashtra.

The above analysis leads to the conclusion that the machinery and machine tools industry in Bombay constitutes a smaller part of the industry in Maharashtra as compared to the other major industries, such as cotton textile; rubber, plastic and petroleum; metal products; chemicals and electrical machinery. This is attributable to the development of new factories in the Thane-Belapur and Pune industrial areas.

A detailed analysis of the industry as per the Annual Survey of 1973-74 and 1975-77 is given below, the figures levealing annual averages in the respective survey periods. There were 638 registered factories in 1973-74 as against 630 in 1975-77 in Bombay. They provided employment to 36,501 persons and 34,491 persons in the respective years. The

structure of capital of the factories can be studied from the following statistics:—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	30,37.65	37,11.95
Working capital	25,48.89	40,10.68
Capital invested	92,26.25	1,12,83.99
Outstanding loans	45,04.38	56,31.34

The above statistics reveal the growth of the factories in Bombay, the rise being very conspicuous in regard to invested capital. The factories worked for 1,06,28,514 man-days per annum in 1975-77 period. The cost of production in the industry is revealed by the statistics given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Total emoluments	22,85.25	28,91.59
Fuel consumed	2,18.44	4,07.66
Raw material	89,16.13	1,13,83.63
Other inputs	N.A.	49,30.19
Total inputs	1,02,29.82	1,67,21.48

It can be deduced that raw materials constituted a major part of the total cost of production, while the share of wages was much less, and that of fuel very small.

The value of plant and machinery was Rs. 33,09.07 lakhs in 1973-74 and Rs. 43,98.64 lakhs in 1975-77. The structure of output of the factories in Bombay can be studied from the statistics given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Products	1,36,00.46	1,84,41.20
Other output	N.A.	48,81.63
Total output	1,48,04.77	2,33,22.83
Depreciation	3,79.46	4,47.41
Value added on manufacture	41,95.48	61,53.94

There was, thus, an increase in output of the industry during the period under review. The factory payments of the units in Bombay were computed at Rs. 9,93.45 lakhs and the net income at Rs. 51,60.48 lakhs in 1975-77.

The conclusion imminent is that the ratio of output to inputs shows the satisfactory condition and profitability of the industry in Bombay. The proportion of value added on manufacture to total inputs and investment also shows the high productivity of the industry. The value added was about 54 per cent of the invested capital in 1975-77. The net income of the factories was about 45 per cent of the invested capital. This shows the high returns on capital investment in the industry in Bombay.

Within the limitations of data constraints, an attempt is made below to give an account of the industry in Bombay at the micro-economic level. The account of some of the well-known machinery manufacturers, on the basis of available information, is given below. (Based on Bombay Chamber of Commerce Directory 1976 and A State-wise Picture of Large Scale Industrial Activity, 1981) It may however be stated that the information for many units is not available.

Bombay is an important centre of the machine tools industry, and there are about 21 big companies engaged in this industry in the city. The large-scale manufacturers in Bombay include, Godrej and Boyce Manufacturing Company, Ralliwolf, Larsen and Toubro, Kramps Hydraulic (India), Vickers Sperry of India, Indian Tools Manufacturing Limited, Investa Machine Tools and Engineering Company, Garlic Engineering, Siemens India Limited, Advani Oerlikon, Voltas

Limited, Consolidated Pneumatic Tools Company, Schra-Scovill Duncan Limited, Greaves Cotton, Electro Pneumatics, Dee-Key Industries, Bharat Tool Manufacturing Company, Horstanann India Private Limited, Star Diamond Tools, etc.

The Godrej and Boyce, established in 1897, has factories at Vikhroli and Lalbaug. It is one of the old concerns in Bombay engaged in the manufacture of machines tools, locks, safes, steel furniture, steel cupboards, refrigerators, typewriters, steel tubings, fork lift trucks and a wide range of producers goods as well as consumers goods. It has pioneered in the manufacture of almost all the products mentioned above. It is one of the leading companies in India, and is a reputed manufacturer of machinery and machine tools. The total sales of this company were computed at Rs. 86.42 croresin 1978-79 and Rs. 107.64 crores in 1979-80. The Forbes Forbes Campbell and Company, incorporated in 1934, manufactures thread cutting tools-taps, dies, rotary cutters, high speed air tools, spark plugs, auto turned components, flexible shaft equipment, special tools, jigs and fixtures. It also manufactures a number of electronic components. It has two factories in Bombay viz. at Chandivli and Kurla, besides others at Aurangabad and Hyderabad. (Bombay Chamber of Commerce Directory 1976.) The turnover of its sales was Rs. 11.39 crores in 1979-80. The Forbes and Company was established as the earliest English trading firm in 1767.

The Greaves Cotton and Company is another very old company of Bombay established in 1859. It manufactures diamond drills, operating equipments and high pressure water circulating pumps, surface drills, industrial diamond tools, steel valves, strainers, filters, float switches and alarm contactors. The sales of the company including the Nasik unit were worth Rs. 72.92 crores in 1979-80. The Turner Hoare and Company, established in 1895, has a factory at Signal Hill Avenue in Bombay which manufactures automobile clutch assemblies, super centrifuges, mineral oil purifiers, vegetable oil refining plants, generating sets, hydro pneumatic material handling equipments, mechanical cleaning rakes for thermal power stations, and many other items under collaboration with two U.S.A. firms. The Empire Industries is another very old company established in 1900. It has two factories in Bombay, at Vikhroli manufacturing industrial equipment and vitrum glass, and at Lower Parel engaged in textile processing, besides, a large unit at Ambarnath.

The establishment of the Larsen and Toubro limited in 1938 was an important addition to the Bombay industry. With a huge factory at Powai (It has plants at Bangalore, Faridabad and Kansebahal also) and another at Madh Island, it manufactures a wide range of machinery which includes: earthmoving and agricultural equipment, hydraulic excavators and material handling equipment, drilling and mining machines; plant and equipment for dairy, meat processing and cold storage, breweries, pneumatic grain dischargers; machinery for sugar, fertilizer, chemical, pharmaceutical, petrochemical industries; plant and equipment for nuclear power generation and for cement, paper and pulp, iron and steel industries, electrical switchgears and other electrical equipment, electronic controls; petrol pumps, valves, instruments, aluminium capsules; packaging machinery; tyre curing presses and low temperatuie welding alloys. The sales turnover of the company was Rs. 74.49 crores in 1979-80.

Product	Installed. capacity (Nos.)	Sales turnover in 1979-80 (Rs. in crores)
Portable electric tools	60,000	
Valve refacers	1,200	4.93
Stands	4,500	4.93
Special purpose motors	12,200	Gaz

The Macneill and Magor Limited, incorporated in 1949, manufactures chemical equipment, electrical switchgears, mining equipment, valves, textile coats, industrial diamond tools, pumps, fork lift trucks, etc. Besides, two units in Bombay, it has plants at Calcutta, Madras and Ghaziabad. The Rallis India manufactures petrol engines besides many electrical goods, pharmaceuticals, pesticides, canned foods, etc., at Bombay. It was established in 1948. (It has 4 works in Bombay.) The Westerwork Engineers Limited, established in 1961, has a plant at Bhandup Village which manufactures industrial furnaces for steel plants and rolling mills, heat treatment furnaces, ovens, lime kilns, oil burning systems, boilers, heat exchangers and pressure vessels, pneumatic foundry moulding machines and material handling equipment.

The Vickers Sperry of India Limited which has a factory at Kandivli (East) was established in 1965. It manufactures high pressure oil hydraulic equipment such as pumps, control valves, cylinders, accessories and components thereof. It has an installed capacity to manufacture 60,000 numbers of the items, the sales turnover being Rs. 5.53 crores in 1979-80.

The Consolidated Pneumatic Tools, with factories at Mulund and Nasik, was incorporated in 1957. It manufactures air compressors, a wide range of pneumatic tools for applications in industry, mining and construction work. The sales of the company were worth Rs. 10 crores in 1979-80. The Communication and Power Equipment Company has a factory at Lalbaug, which was established in 1942. It manufactures mechanical power transmission equipment and industrial drives of a wide variety.

The Indian Tool Manufacturers Ltd., with a factory at Sion and two others at Nashik and Aurangabad is a manufacturer of many kinds of machine tools as under :—

Product	Installed capacity per annum (No. in '000)	Sales (1979-80) (Rs. in crores)
Reamers	185.6	
Drills	7200	
Tool bits	300	
Gear hobs	6	11.08
Taps	580	
Cutters	138	
Micro metres	12	

The Machinery Manufacturing Corporation, established in Bombay in 1946, manufactures machinery required for textile, sugar, jute, paper and cement industries, and also for heavy industries like oil, mining, chemicals and other related industries. The Maneklal Manufacturing Company founded in Bombay in 1941 is a reputed manufacturer of textile machinery, as also industrial and consumers rubber, bakelite, leather, celluloid and plastic products. It has a factory at Saki Naka near Kurla.

The Advani Oerlikon Limited, established in 1951, is another reputed large manufacturer of machinery, electrical machinery and electronics in Bombay. It has factories at Bhandup, Kalina, Haybander, besides the units at Pune, Madras, Raipur and Visakhapatnam. The company manufactures a wide range of electronics and machinery. It is almost a pioneer in welding technology. It has research and development laboratories at Bombay and Pune. Since 1951, welding was the main field of this company. But recently it entered in new fields like electronics, control systems, photocopying, power control, and power distribution machinery. The company manufactured about 103.70 million pieces of various articles in a latest year. (A State-wise Picture of Large Scale Industrial Activity, 1981.)

The Industrial and Agricultural Engineering Company has plants at Bhandup and Ahmadnagar for the production of boilers, industrial oil filters, water treatment plants, feed water heaters and other machinery. The value of sales of the concern was Rs. 6.96 crores in 1979-80. The Killick Nixon with a factory at Chandivli was established in 1948. It manufactures engineers' files, concrete prestressing equipment, vibrators, mixers, jacks, pumps and furnaces. Its sales were worth Rs. 9.73 crores in 1979-80. The New Standard Engineering Company with a plant at Goregaon manufactures drilling and threading machinery and blow room machinery. Its sales were to the tune of Rs. 10.52 crores in 1979-80. (*Ibid*)

The WMI Cranes Ltd., with a plant at Bhandup and another at Bangalore is a large producer of cranes.

There are many other concerns in this industry the information for which is not available. The latter half of the 19th century witnessed the growth of some English companies, while the industry received a real impetus during the Second World War. Many of the companies have foreign collaboration with reputed firms in the West.

The industry received a growth stimulus in the Second World War. The establishment of peace however, created conditions of slump in demand and foreign competition. The hardships were mitigated by Government by granting tariff potection from time to time. Further development of the industry was ensured by ban on imports of machinery. The industry derived immense benefits from Government protection against foreign competition. All-round growth of consumers and producers goods industries in the post-planning period accentuated the demand for machinery. This resulted into development of the industry during the last about 30 years.

The account of the various segments of the industry is given in the following pages. There is however a formidable difficulty in presentation of a statistical analysis of the various segments due to the grouping adopted in the Annual Survey of Industries. The particular method of grouping renders it difficult to present the statistical data for each segment.

MACHINE TOOL INDUSTRY

The Machine tool industry is an important one and its development is very necessary if the engineering industry is to play its correct role, not only in building up the infrastructure of the economy, but also in providing sufficient consumer goods to meet the demands of an expanding economy. Machine tools are basic machines which are used for making other machines. Hence the development of this industry is a pre-requisite for the growth of industrialisation. The history of growth of this industry can be traced to the Second World War prior to which the country used to import most of its requirements of machine tools. During the War it was felt necessary to manufacture machine tools in the country itself so as to meet the increasing demand. The requirements of new growing industries during the Second World War and the scarcity of supplies on account of curtailment of imports acted as a stimulus to the machine tool industry in Bombay as in India. The Machine Tool Control Order was passed in 1941 by the Government of India in order to ensure quality production of machine tools. The Government appointed a Machine Tool Controller primarily to secure supplies of the best quality of machine tools for the war industries. The Government of India also encouraged the development of this industry by placing orders with Indian firms and by inviting technical experts from the U.K. to guide the Indian firms, which resulted in an increase in indigenous production from Rs. 6 lakhs in 1942 to Rs. 1.12 crores in 1945. The real impetus to the development of the industry was however revived only after 1947. The Government of India after Independence helped the industry in tackling various problems relating to supply of raw materials, tariff protection, import regulations, Government purchases of machine tools, allocation of large quota of pig iron, steel and coal to the machine tool industry on priority basis, etc. In 1961-62, the Government annouced the inclusion of this industry among the priority industries for the grant of fore

The position of the Indian industry as a whole improved with the incorporation of the Hindustan Machine Tools in the

public sector in 1955. The decade after 1951 witnessed a considerable advance. During period of the Second Five Year Plan, large composite units in the private sector expanded. Foreign collaboration, both as regards capital and technical know-how, made rapid progress during the Second Plan Period. The industry registered a dynamic growth in the sixties. In the seventies it consolidated its achievements of the sixties and showed an increased rate of production. In 1979, machine tools valued at Rs. 154.4 crores were produced in the country. (Engineering World, February 1982) The share of Bombay in this was quite high.

Bombay is one of the important centres of this industry and there are about 21 big companies manufacturing machine tools in this city. The machine tool factories provided employment to 2,371 persons in Bombay in 1973-74. The large-scale manufacturers in Bombay include companies of countrywide reputation, such as Godrej and Boyce Mfg. Co., Ralli-wolf, Kramps Hydraulik (India), Vickers Sperry of India. Indian Tool Manufacturing Limited, Investa Machine Tools and Engineering Co. Limited, Garlic Engineering, Siemens India Limited, Advani Oerlikon, Voltas Limited, Batliboi and Company Limited, Consolidated Pneumatic Tools Company, Schra-Scovill Duncan Limited, Greaves Cotton and Co., Electro Pneumatics, Dee-key Industries, Bharat Tool Mfg. Company Private Limited, Horstanann India Private Limited, Star Diamond Tools, etc.

Besides, there are several large-scale and small-scale units manufacturing graded and ungraded varieties of machine tools, metal working and wood working machine tools along with agricultural implements.

The Godrej and Boyce Mfg. Co., established in 1897, the Indian Tool Mfg. Limited, established in 1937, the Investa Machine Tools and Engineering Co. Limited., established in 1942 and the Larsen and Toubro Limited, incorporated in 1946 are some of the pioneering concerns in Bombay. The Larsen and Toubro with a plant at Powai was established in 1938 as a partnership firm, was incorporated as a private limited company in 1946 and was converted into a public limited company in 1950. It manufactures food producing and processing machinery, general engineering plants, dairy and refrigeration machinery, machinery for bottling industry, agricultural machinery, and a wide range of machinery and equipment. The machine tool factories in Bombay manufacture a variety of machine tools including electric power presses, guillotine snears, geared press brakers, grinders, pneumatic industrial tools, pillar drills, hacksaw machines, power hammers, power presses, plate bending and plate straightening machines, shotblasting machines, welding machines, slitting and decoiling machines, scrap processing machines, electric tools, drills, sander, saws, blowers, carbide cutting tools, furnaces, foundry equipment, die sets, pumps and valves, tapping machines, diamond dressing tools, polishing and buffing machines, sheet metal working machinery, capstan lathes, wire nail making machines, flash butt welding machines, magnetic chucks, impact presses and a number of other tools. Production of machine tools encompasses a wide range of production processes like casting, welding, forging and machining in all of which metallurgical considerations are very important. The devices employed in machine tools are electrical, hydraulic and pneumatic. The controlling functions in a machine tool are done by electrical, electronic, oil, hydraulic, pneumatic, fluidic and numerical control devices, as also by mini computers.

As per the Annual Survey of Industries(*The Annual Survey of Industries, Statistics for 1975-77 are not available.*) in 1973-74, there were 35 machine tool manufacturing factories in Bombay which provided employment to 2,371, persons, 1758 of them being workers. The fixed capital of these factories was Rs. 135.40 lakhs, while the working capital was Rs. 179.25 lakhs. Their total invested capital stood at Rs. 433.87 lakhs and outstanding loans at Rs.230.25 lakhs in the year under reference. Machine tools is a capital intensive industry requiring a higher degree of rationalisation and modernisation. Consequently the ratio of capital to employment is very high. The total emoluments to employees in the concerns was to the tune of Rs. 163.95 lakhs which included payment of wages to workers, namely, Rs. 85.16 lakhs. The share of wages to workers in the total emoluments paid by the concerns shows that there is a preponderance of technocrats and managerial class of employees in this industry over the workers proper. The factories, as per the survey, consumed material worth Rs. 423.78 lakhs. The cost of fuel consumption was Rs. 12.01 lakhs, while the value of plant and machinery was computed at Rs. 136.99 lakhs. The total value of inputs was computed at Rs. 501.88 lakhs, while the value of output was Rs. 798.95 lakhs. The ratio of output to inputs was thus quite satisfactory. The value of products of the industry was to the tune of Rs. 753.05 lakhs, while semi-finished products were worth Rs. 199.51 lakhs. The value added on manufacture was of the order of Rs. 280.62 lakhs.

These statistics bring home the fact that the machine tools industry is a capital intensive industry, the share of labour in output being comparatively small. The ratio of value added to total inputs is also quite high.

The products of the machine tool industry are very diverse. There are over twenty major groups of machines, each divided into a number of sub-groups, types, sub-types and sizes. The products are marketed mainly to the engineering industries, railway workshops, ordnance depots and many other sectors of industry. The main raw materials required are pig iron, alloy and special steels, coke etc. which are acquired from indigenous sources. Formerly machine tools were imported from the U.K., U.S.A., East Germany, Czechoslovakia, U.S.S.R. and Japan. Now they are exported in large quantities. The share in exports of the Bombay factories is quite sizeable.

The machine tool industry faces many problems, such as, the quality of raw materials, the availability of accessories, and procedural matters and regulations which hamper growth. Most of the machine tool factories are well laid out, and have good equipment and buildings. They have good standards rooms with basic measuring equipment, the larger units having extremely well-equipped standards rooms.

Castings are reported to be of good quality and other raw materials are generally satisfactory. The quality of specialised materials such as steels, is however variable which presents problems of maintaining quality. The basic manufacturing processes and techniques are good, though a little old-fashioned. Many specialised parts and most precision components are imported. Most of the machines are of foreign design. Some of the machine tool factories are found to develop design ability and to train designers who may eventually be able to help the industry to become less dependent upon foreign collaboration.

After cessation of the war the industry suffered from foreign competition, and applied for tariff protection in 1946. The recommendations of the Tariff Board were accepted by the Government of India in July 1957. The protection granted was in the nature of restriction of imports. The Tariff Board felt that one of the methods to promote the development of the industry was to increase the rate of tariff duty on the type of machine tools manufactured in the country, and to restrict the import of machine tools to meet only the pressing demand after taking into consideration indigenous production. Since it was felt that an increase in the import duty would inflate capital costs, the Government accepted the recommendation to restrict imports of such types of machine tools as were manufactured in the country. In fact the import of these machine tools was even completely banned.

It is observed that by Western standards productivity in the Indian machine tool industry is low, which is partly attributable to nature of the labour force and partly to dependence upon manual operations. The industry faces problems as regards the availability of certain accessories and prototypes. The Government have however allowed the import of prototypes for export-adoptation for the export market as well as for improvement in the existing models of machine tools. Many of the machines manufactured are of Western origin, while some of them are patently unsuited to the Indian pattern of use.

Many of the machine tool manufacturers appear to sell and service their products through agents, even in the home market. Machine tools are also exported from Bombay to the U.K., Europe, U.S.A., Sri Lanka, Middle East, South East Asia and Africa. The lower cost of the machine tools in Bombay as compared to that in European countries and the U.S.A. attracts foreign buyers. The Indian machine tool industry made a modest beginning in the export of machine tools in 1956-57, and the F.O.B. value of exports was Rs. 87,000 in 1956-57; Rs. 15.76 lakhs in 1961-62; Rs. 66.13 lakhs in 1966-67; Rs. 3,04.36 lakhs in 1971-72; and Rs. 2,12.60 lakhs in 1972-73.

The Indian Machine Tool Manufacturers' Association established in September 1946, claims to have played an important role in the development of this industry in Bombay as in India. It tackles various problems of the industry, particularly with regard to the supply of raw materials, tariff protection, import regulations, Government purchases of machine tools, demand surveys, rationalisation in production, etc. It sponsored a number of delegations to the international machine fairs from time to time and developed contacts with the manufacturers and users of machine tools abroad so as to facilitate an interchange of ideas and information and to promote export of machine tools. The Central Machine Tool Institute is established with the objective of helping the industry to develop on the right lines and in the right direction. It is planning to help the industry in the development of new designs, new technology and of training the personnel for better design and production.

The Indian Machine Tools Exhibitions (IMTEX) held from time to time are of immense value for fostering the growth of the Industry. The fifth All India Machine Tools Exhibition held at Vikhroli in Bombay in early 1982 was said to be the largest specialised exhibition of its kind ever held in India. More than 400 Indian manufacturers and about 125 overseas companies from 13 countries displayed their products in this exhibition which satisfied the highest international standards. Many foreign delegations from industrially advanced countries visited this exhibition. IMTEX-1982 reflected India's technological achievements in the machine tool industry, and Bombay was the proper venue for it.

COTTON TEXTILE MACHINERY

The cotton textile industry is the oldest and largest organised industry not only in Bombay but also in India. Mechanisation of cotton textile production in the country started in 1854 when the first mechanised textile mill was started in Bombay. The industry developed very rapidly during the last two decades of the 19th century and the first 45 years of the present century. The expansion, modernisation and periodic replacement of machinery by the cotton textile mills naturally increased the demand for machinery by cotton textile mills. The principal items of textile machinery in use in the early stages of the cotton textile industry were as under:—

(1) spinning machinery, blow room machinery, carding engines, drawing frames, blubbing frames, intermediate frames, roving frames and spinning ring frames, (2) weaving machinery like winding machines, warping machines and looms, and (3) processing and finishing machinery like jiggers, mercerising machines and calendering machines.

The machinery for the cotton mills in Bombay continued to be imported from England until about 1900, after which some continental countries including Germany, Switzerland, Holland and France exported machinery to Bombay. While the Lancashire machinery makers could secure fairly good business by direct correspondence with the Bombay millowners, they realised the advantages of having a local firm of influence and standing to represent their interests among Indian buyers of cotton textile machinery. This system continued quite for long. It was during the Second World War that it became difficult to procure machinery from abroad, and that a beginning was made in the manufacture of textile machinery indigenously. In the post-war period, several manufacturers took up large-scale production of various items like spinning ring frames.

The Acme Manufacturing Co. Ltd., Bombay, was the first to manufacture cotton textile machinery in Bombay. The first cotton textile machinery manufacturing unit in India was however established in Calcutta. The Acme Manufacturing Co. with a factory at Wadala, commenced production of ring frames in 1947-48. In 1948 the unit had a capacity to manufacture 72 ring frames per year. Another unit manufacturing cotton textile machinery, namely the Star Textile Engineering Works, was established in Bombay in 1948. (Handbook of Commercial Information, 1963.)

With an emphasis on fuller utilisation of installed capacity of mills and on replacement and modernisation of obsolete machinery, the necessity of modern and improved machinery was keenly felt in the period of the First Five Year Plan. This paved a way for considerable progress in the manufacture of textile machinery during the First Plan. The National Machinery Manufacturers, Bombay, which was incorporated in 1947, went into production of complete ring frames in 1954. (*Ilbid.*) This concern was an important addition to the machinery industry. It further undertook the production of spare spindles and spinning rings. Its production of drawing frames, speed frames and reeling machines commenced in 1954 in Bombay.

Besides the pioneering concerns mentioned above, there are several manufacturers of cotton textile machinery in Bombay. They produce almost all kinds of machinery and equipment of the latest designs and qualities. In addition to major items of cotton textile machinery manufactured by the principal manufacturers, almost all spare parts and components are fabricated by other engineering firms.

It may be noted that the industry suffered from foreign competition in its embryonic stage. The prices and quality of imported goods lent a favourable position to the imports. The indigenous industry therefore applied for tariff protection to the Government of India. Tariff protection was therefore granted by the Tariff Board for the first time in 1949 and then in 1950, 1954 and 1960, (*Ibid.*) during which years the rates of tariff were changed to suit the demands of the situation. Lately however the import of most of the cotton textile machinery has been banned, and there is no question of granting any protection in the case of such items.

The principal raw materials required by the industry comprise pig iron, mild steel, free cutting steel, hard drawn bright steel flats and bars, tin plates and coke. Formerly these materials were imported, but now they are available indigenously with the exception of a few special items which are imported in small quantity.

Certain items of machinery like combers, testing machines and single spindle automatic pirn winding machines were imported from Britain, U.S.A., West Germany, Netherlands and Japan upto the end of the Second Five Year Plan. Most of them are however indigenously manufactured at present. The products of the industry are required mainly by the indigenous cotton mill industry. Exports of some items during the last about 25 years, have increased considerably.

It may be useful to give an account of a few concerns in this industry in Bombay. As mentioned earlier the Acme Manufacturing Co. was the pioneer in this industry in Bombay. The Maneklal Manufacturing Ltd., established in Bombay in 1941, has a factory near Kurla which manufactures a wide range of textile machinery. The Machinery Manufacturing Corporation produces textile machinery, besides other kinds of machinery, for sugar, jute, paper and cement industries. It was established in 1946. The Central India Machinery Manufacturing with a plant at Jogeshwari produces shuttles, picking sticks and other equipment.

The Maharashtra State Textile Corporation, a public sector undertaking for maintaining ' sick mills', manufactures spindles, looms, automatic looms and other accessories at Bombay, Solapur, Kolhapur and Aurangabad. The enterprise

has many development projects in hand. Besides the machinery manufacturers, some of the cotton textile mills in Bombay have started production of the entire range of textile machinery. A mention may be made of some of them: Kohinoor Mills, Morarjee Goculdas Mill (Bhandup), Phoenix Mill, Piramal Spinning and Weaving Co., Podar Silks and Synthetics, Raghuvanshi Mills (Mahalaxmi), Rubi Mills, Sitaram Mills (Chinchpokli) and Tata Mills (Dadar).

The authorities of the Annual Survey of Industries have grouped the textile machinery and food industry machinery together. Hence it is difficult to give a statistical analysis of either of them separately.

INDUSTRIAL MACHINERY

Capital goods like industrial machinery constitute a vital sector of the national economy. Industrial machinery was imported entirely from the western countries upto the beginning of the Second World War. Manufacture of industrial machinery began in the country during the war, when supplies from abroad were curtailed. Subsequently, the growing demand for machinery and plant arising from industrial growth coupled with the policy of self-sufficiency provided a stimulus to the progress of indigenous machine building industry. A beginning in this respect was made, towards manufacture of cotton textile machinery, and machinery for industries like sugar, tea, flour mills, vegetable oils, etc. This was followed by manufacture of machinery for chemical plants, solvent extraction plants, paper mills and cement factories.

A plant in Bombay manufactures complete cement plant machinery with foreign collaboration. There was no unit in the country producing complete cement plants at the beginning of the Second Five-Year Plan. (Handbook of Commercial Information, 1963.)The Larsen and Toubro and the Machinery Manufacturing Corporation (1946) are the producers of cement plants in Bombay.

The account of a few machinery manufacturers has already been given earlier.

TYPEWRITERS INDUSTRY

The growth of industries, expansion of trade and commerce and Government activity necessitated the quick disposal of the increasing volume of business and official correspondence. The growing correspondence and writing activity further accentuated the need for a machine that could help to transcribe as quickly as possible. Several attempts were made in the western countries in the previous century to devise a writing machine. According to the Encyclopaedia Britannica the invention of Christopher Latham Sholes and two other residents of the United States of America resulted into the first practical machine for writing in 1867. Messrs. E. Remington and Sons, the pioneers in this line of industry, took up the development and commercial manufacture of that machine in 1873.

Within a few years after the introduction of this machine in the U.S.A., the first typewriter was imported into India in 1896. The first portable typewriter was imported into the country in 1921, while the first electric typewriter, which was then a novel device was imported in 1925. (Handbook of CommercialInformation, 1963.)

The first typewriter manufacturing industry in India is said to have been started in 1930 when assembly of the components of typewriters in the country commenced, and manufacture of some of the accessories was taken up. In spite of the intricacy involved in the manufacture of this machine the well-known steel fabricating firm of Godrej and Boyce in Bombay first undertook the job of manufacturing of the All India Typewriter. The credit was all the more greater because it was accomplished without asking for Government protection against imports. The birth of the Indian typewriter at a time when even established firms in the West were not in favour of manufacturing typewriters, stands testimony to the Indian ability to undertake such a high precision job. It is again remarkable to note that India was the first country in Asia to manufacture a typewriter.

It was after Independence that the industry providing for local fabrication of the majority of the components, setting up of the necessary tool rooms for ensuring precision of tools, and training of technical personnel came into being. The Government of India encouraged the indigenous industry by curtailing imports. A phased programme for the indigenous manufacture commenced in 1952. (*Ibid.*) Besides the Godrej and Boyce of Bombay, two other companies, *viz.*, Remington Rand of India, Calcutta and Rayala Corporation of Madras were granted licences for typewriter manufacturing. The fourth concern in this industry started production in the sixties. The Government of India banned the import of typewriters since July 1957 totally. Certain accessories for which Indian prototypes are not available are allowed to be imported. The machine requires alloy steel and ferrous and non-ferrous material, of which special alloy steel is required to be imported.

The installed capacity of the Godrej Company was to manufacture 12,000 English typewriters per annum in 1960, the indigenous contents of each machine being 95 per cent. The Company has increased its capacity since then. It also manufactures vernacular typewriters in Marathi and Hindi languages. The company has modern machinery and technical know-how necessary for this industry.

SEWING MACHINES

Sewing machine is a product of light engineering industry. This industry is about 45 years old in India. The first unit in the laige-scale sector commenced production in 1937. (*Ibid.*) This unit was required to switch over to the production of certain munition items in 1939 as per directives of the Government of India. Its production of sewing machines during the Second World War was confined to meet the requirements of the Government. All of its products were diverted to meet the requirements of war. After the cessation of war, it was reorganised for production on a large scale. The industry was granted protection initially in 1947 which was withdrawn in 1955. (*Ibid.*)

Calcutta is the original home of the sewing machines industry in India. During the period of the First Plan there were only two organised units in Calcutta engaged in the manufacture of domestic sewing machines. Production of industrial sewing machines was started for the first time in the country in May 1952 at Calcutta. The industry grew very rapidly during the Second Five-Year Plan, the output of machines being nearly 2.5 lakhs in 1959 against the target of 2.20 lakhs during the Second Plan period. The progress of the industry from the fifties to the seventies continued to be impressive.

Almost all the components and parts required in the manufacture of sewing machines are being fabricated within the country. Except for some raw material of specific quality, all the material is now indigenously available.

The sewing machines industry in Bombay is mainly in the small-scale sector. The small-scale units assemble components or manufacture parts and spare parts. Some of them sell machines under their own trade names. A large proportion of the parts used by the large-scale units are manufactured by small-scale units. Of the 106 parts in a machine, about 94 are manufactured by small units. Even needles which were entirely imported upto the fifties are now indigenously manufactured.

Formerly sewing machines were imported from Western countries, the U.S.A. being the principal supplier. Indian sewing machines have improved so much in quality that large exports are now made to America, South-East Asia, the Middle East and Africa. Exports to countries like the U.K., Canada, West Germany, Belgium, Sri Lanka and Afghanistan are by no

means small. There is a huge demand for sewing machines in the country, particularly in the urban and semi-urban areas. The increase in demand is attributable to growing urbanization, increase in incomes and diversification in fashions in clothing and garments.

DIESEL ENGINES

The diesel oil engine, which is an internal combustion engine, is named after Dr. Rudolf Diesel, a German inventor of the engine. Diesel engines like petrol engines belong to the prime mover group of machinery. A diesel engine obtains ignition from the heat generated by compression, while the petrol engine is a spark ignition engine. There are two broad categories of diesel engines, *viz.* horizontal slow speed type and vertical high speed type.

The first factory to manufacture diesel engine in India was established at Satara in 1932. The industry was developed by the Kirloskars in Pune in the late forties and early fifties. In the post-war period there was no restriction on imports, and diesel engines of foreign make were freely available in the country. This had an adverse impact on the indigenous growth of the industry. The liberal import policy, continued upto 1952, made it imperative on the part of the Indian Diesel Engine Manufacturers Association to persuade the Government to restrict imports. The Government agreed to grant protection to the industry in subsequent years.

At the end of the Second Five Year-Plan there were nine units in Maharashtra. Production of diesel engines prior to 1956 was linked exclusively to agricultural uses. They are used in agriculture for operating centrifugal pumps for irrigation. The uses of these engines are now diversified to various industries, flour milling, rice milling, electricity generation and processing industries. Besides the stationary diesel engines, mobile engines are used on an extensive scale in the automobile vehicles. With the sharp increase in the output of diesel trucks and cars, there was a rapid growth of the diesel engine producing industry.

The Premier Automobiles, Bombay, obtained its requirements of diesel engines from the Automobile Products of India, Bombay. With an increase in demand for road rollers, trailers, tractors and automobiles, the industry has grown considerably during the last about 25 years. The types and sizes of stationary diesel engines produced are singular cylinder horizontal engines, single cylinder vertical engines, and multi-cylinder vertical engines. Engines of higher power are now required for use in road rollers, air compressors, stone crushers and similar machinery.

A micro-level information about the industry in Bombay is not available.

The principal raw materials required for this industry are pig iron, Martin's acid steel, alloy steel, white metal, etc. which are available indigenously. While imports of diesel engines are prohibited, the stationary diesel engines are exported to Bahrein Islands, Burmah, Sri Lanka, Cambodia, Iran, Iraq, Phillippines, Thailand, and many countries in the middle east and south-east Asian countries. (Handbook of Commercial Information, 1963). The Victoria Jubilee Technical Institute in Bombay has its own heat treatment unit and testing department which helps the industry in quality control and various aspects.

The Automobile Products of India with a factory at Bhandup produces automotive diesel engines. The Lakshmiratan Engineering Works established in 1946 manufactures diesel engines and textile machinery in Bombay.

TRACTORS AND EARTHMOVING MACHINERY

Tractors and earthmoving machinery industry is of recent growth in Bombay. The International Tractor Company of India, which is a subsidiary of the Mahindra and Mahindra was established at Kandivli in 1963 in collaboration with a U.S.A. firm from Chicago. It commenced production of agricultural tractors in 1966. It exported about 1,000 tractors and 600 agricultural implements between 1966 and 1976 to Turkey, Zambia, Kenya, Tanzania, Uganda, Somalia, Muscat, Indonesia and Nepal. The Larsen and Toubro is a large manufacturer of earthmoving and agricultural equipment. It was established in 1938. The Tractor Engineers Limited, established in 1952, has a factory at Powai which produces track and under-carriage parts for crawler tractors and also parts for agricultural and earthmoving machinery in collaboration with an international concern in the U.S.A. (Bombay Chamber of Commerce Directory, 1976).

ROAD ROLLERS

Road rollers were manufactured in the country during the Second World War, but thereafter there was a break. The industry was originated in West Bengal. A firm in Bombay was licensed to manufacture road roller chassis for use with an agricultural tractor of 4.5 tons capacity. The firm went into production in 1956. (Handbook of Commercial Information, 1963)

POWER DRIVEN PUMPS

Power driven pumps are used generally for pumping liquids by centrifugal force. The first attempt to manufacture power driven pumps in India was made in 1925, but the industry did not make much progress till the Second World War. The post-war impetus to agricultural production, however, enabled the industry to develop rapidly. Development of irrigation and lift irrigation under the various development plans gave a further impetus to pump manufacturing.

The raw materials required by the industry comprise ferrous materials including pig iron for base plate and pump body and mild steel for shafts and keys, and non-ferrous materials such as gun metal for impellers and bushings. Centrifugal pumps are exported to middle east countries.

TRANSPORT EQUIPMENT

Transport equipment manufacturing has emerged as an important sector of industry in Bombay. This sector which can broadly be categorised as a part of the engineering industry underwent a process of accelerated growth ever since the development of automobile and ship building and repairing industries in Bombay. The transport equipment industry is conceived to comprise various sub-sectors manufacturing motor vehicles, motor cycles, scooters, ship building and repairing, locomotives, railway wagons, coaches, and other rail-road equipment, bicycles, cycle-rickshaws, air-craft components, bullock-carts, push carts, hand carts and other types of transport equipment and parts thereof. This classification accords with that adopted by the authorities of the Annual Survey of Industries.

The structure of the transport equipment industry in Bombay is analysed below on the basis of the statistics compiled under the Annual Survey of Industries in the period 1975-77. The figures represent annual averages for the survey period. This industry in Bombay comprised 223 registered factories which constituted 66.17 per cent of the factories in the industry in Maharashtra. They provided employment to 33,754 persons who formed 58,38 per cent of the employment in the State. The invested capital in the transport equipment factories in Bombay was computed at Rs. 87,53 lakhs or 29.90 per cent of that in the Maharashtra industry. The output of the Bombay factories, computed at Rs. 1,74,93 lakhs, constituted 52.72 per cent of output in Maharashtra. The value added on manufacture by the industry in Bombay was of the order of Rs. 49,84 lakhs or 54.49 per cent of the total industry in the State.

The above analysis brings home the fact that the percentages, in respect of invested capital, output, value added and employment in the Bombay factories to the factories in Maharashtra were not commensurate with the percentage of number of factories in this city. It can therefore be deduced that the factories, or at least a section among them, in Bombay may be comparatively smaller in size. The more plausible deduction however can be that the miscellaneous sub-sectors of the Bombay industry may be consisting of smaller units. This might be more so because the principal or large units manufacturing automobile vehicles, ship building and railway rolling stock are located in Bombay.

The detailed statistics about the transport equipment industry in Bombay as per the A.S.I, of 1973-74 and 1975-77 are analysed below. The figures are annual averages of the years under the Survey.

TABLE No. 12
MANUFACTURE OF TRANSPORT EQUIPMENT AND PARTS IN BOMBAY

(Rs. in lakhs)

Item	1973-74	1975-77
No. of estimated factories	272	223
All workers	44,410	25,061
All employees	54,463	33,754
Man-days worked	N.A.	99,32,467
Fixed capital (Rs.)	38,31.23	32,04.95
Working capital (Rs.)	23,69.17	17,58.83
Capital investment (Rs.)	1,49,84.14	87,52.81
Outstanding loans (Rs.)	49,25.96	59,87.61
Wages to workers (Rs.)	25,64.74	19,65.35
Total emoluments (Rs.)	37,26.61	34,86.09
Fuel consumption (Rs.)	3,47.86	4,85.12
Material consumed (Rs.)	1,06,01.84	1,00,61.72
Other inputs (Rs.)	N.A.	16,15.46
Total inputs (Rs.)	1,19,63.19	1,21,62.30
Plant and machinery (Rs.)	61,05.04	51,74.14
Products	1,34,20.25	1,51,76.40
Other output	N.A.	23,16.77
Total output	1,78,57.30	1,74,93.17
Depreciation	3,95.81	3,46.83
Value added on manufacture	54,98.30	49,84.03
Factory payments	N.A.	9,55.04
Net income	N.A.	40,28.99

Some conclusions are imminent from these statistics. There was a general decline in the industry in Bombay over the

period from 1973-74 to 1975-77. The recession was more conspicuous in respect of number of factories, employment and capital investment. The rise in outstanding loans during 1975-77 is also symptomatic of a recession. The rise in value of total inputs in 1975-77 might be due to other factors not covered in the statistics. Though the value of total output receded in 1975-77, the value of products showed a pronounced rise. It can also be observed that the value added on manufacture compared very favourably with the fixed capital and working capital. The figures of total output and total inputs read along with the value added show the profitability of the industry.

The automobile industry which comprises manufacture of motor vehicles, motor cycles and scooters is the most important segment of the industry, which is followed by ship building and repairing, railway rolling stock and bicycles and cycle-rickshaws. The historical account of development of the various sectors of the industry is given in what follows:

AUTOMOBILE INDUSTRY

The automobile industry is one of the most sophisticated and developed industries in India. It is regarded as the cardinal indicator and a pace setter for economic development in the country. It gives all-round boost to production of other industries. This industry provided direct employment to 57,000 persons in 1974-75. Besides, there is tremendous additional employment provided in the automobile ancillaries, allied industries and services. The importance of the industry to the Indian economy lies in its being, firstly, an important industry in itself, giving direct employment to a large number of workers and turning out finished products worth huge amounts; secondly, a parent industry utilizing the products of other industries; thirdly, a reserve arsenal of the nation, which can be geared to defence requirements during war; and fourthly, a provider of the most important means of modern transport. It has an immense potential of generating national income, and substantially increasing employment and national productivity. Moreover, it offers a bright scope for training and creation of a cadre of highly skilled technicians and technocrats for manning various industries.

The automobile industry accelerates the development of other industries as it requires the products of other industries such as steel and metal alloys; components such as pistons, piston rings, cylinder liners, gudgeon pins, gaskets, oil seals, valves, brake linings and clutch discs and wheels; and ancillary requirements such as sparking plugs, batteries, electric bulbs and wires, tyres and tubes, paints, and upholstering material. Besides, automobile vehicle users require petroleum products, servicing Stations, repair workshops, spare parts, etc

India is today one of the few automobile manufacturing countries in the world, and is the only one in continental Asia.

The first motor car was imported into India in 1898. Thirty years later a factory set up in Bombay by General Motors India Ltd. began to assemble cars and trucks for the first time with imported components. The General Motors India which was then a subsidiary of the General Motors of the U.S.A. was established in 1928, and is generally considered to be the pioneer of assembly operations in India, although another firm viz., Mackenzie and Company claimed to have started assembling cars and trucks in Calcutta earlier than General Motors. (Handbook of Commercial Information, 1963) The Ford Motor Company of India commenced assembly of automobiles at Madras in 1930. Prior to the Second World War the combined production capacity of General Motors and Ford Motors was 96,000 units per annum. About two decades afterwards two Indian concerns in the private sector laid the foundations of the indigenous automobile industry by taking up simultaneously company knocked down assembly of motor vehicles and manufacture of vital automobile components, under technical collaboration arrangements with foreign manufacturers. The subsequent period witnessed the enormous growth of the industry and the establishment of several ancillary industries, agencies for distribution of cars, the setting up of repair and service shops, installation of assembly plants, and growth of the manufacture of body panels for commercial vehicles.

The history of the indigenous automobile industry in India can be traced to the year 1942 when a limited company was floated at Calcutta to manufacture vital parts of a motor vehicle such as the engine, gears, rear and front axle. The history of the automobile industry in Bombay however, begins from 1944 in which year the Premier Automobiles Ltd. was registered under the Indian Companies Act with an authorised capital of Rs.10 crores which was subsequently raised to Rs. 25 crores. It went into production in 1947. This company was followed by two esteemed companies at Bombay, viz., the Mahindra and Mahindra Limited, which was established in October 1945 and started production in 1949, and the Automobile Products of India Limited, established in 1949, which went into production in 1955. It is noteworthy that the automobile industry in India comprises eight approved vehicle manufacturers, such as (i) Premier Automobiles, Bombay; (ii) Mahindra and Mahindra, Bombay; (iii) Automobile Products of India, Bombay; (iv) Hindustan Motors, Calcutta; (v) Tata Locomotive and Engineering Company (registered Office at Bombay but factories at Pune and Jamshedpur); (vi) Ashok Ley land, Madras; (vii) Standard Motors Products, Madras, and (viii) Simpson and Company, Madras. The annual assembling capacity of the six approved manufacturers of vehicles as in 1956-57 was as follows:—

Premier Automobiles	18,000
Mahindra and Mahindra	4,800
Hindustan Motors	18,000
Standard Motor Products of India	6,000
Tata Locomotive and Engineering Co	7,500
Ashok Leyland	1,500
	55,800

The Mahindra and Mahindra, Premier Automobiles, Automobile Products of India, Ramon Engineering Ltd., Hindustan Ferodo and Gabriel India are the principal automobile manufacturers in Bombay. They manufacture medium and light commercial vehicles, cars, jeeps, scooters, auto-rickshaws, tractors, forgings, gears, radiators etc. The statistics of production of automobile vehicles by the Mahindra and Mahindra, Premier Automobiles, Automobile Products of India and Ramon Engineering in four years are furnished below:—

Item	1976	1977	1978	1979
Passenger cars	14,973	17,481	12,931	11,550
Jeeps	6,847	9,584	11,010	12,340
Commercial vehicles	3,551	2,834	2,618	4,163
Scooters	32,986	21,610	26,722	26,338
Three Wheelers	3,320	878	2,049	3,376
Mopeds	25	487	945	2,225
Tractors	6,348	1,932	7,007	9,405

There were 130 factories manufacturing motor vehicles, motor cycles, scooters and parts thereof, in Bombay in 1973-74 which increased to 145 in 1975-77. As per the Annual Survey of Industries, this industry provided employment to 20,917 employees of whom 15,898 were workers in 1973-74. The employment decreased to 19,088 including 13,695 workers in 1975-77. The industry worked for 55,89,858 man-days per annum during 1975-77. This is a capital-intensive industry and had a total capital investment amounting to Rs. 59,28,23,600, while the fixed capital and working capital were Rs. 21,34,47,100 and Rs. 13,21,05,000, respectively in 1973-74. The capital investment in the automobile industry in Bombay increased to Rs. 66,87,32,000 in 1975-77, while the fixed capital and working capital in the same period amounted to Rs. 24,40,22,000 and Rs. 13,16,31,000. The loans outstanding on the factories in 1973-74 amounted to Rs. 36,03,90,200 which increased to Rs. 44,32,11,000 in 1975-77. The 130 factories in 1973-74 paid Rs. 10,38,93,600 to workers by way of wages, while the total emoluments to all employees amounted to Rs. 17,25,00,700. The wages paid to workers by the 145 factories in 1975-77 increased to Rs. 11,04,16,000, while the total emoluments to all employees was to the tune of Rs. 20,23,76,000. This rise can very well be attributed to escalation of money wages over the period of comparison.

The factories are operated mainly on electricity and crude oil, the total consumption of which was valued at Rs. 2,25,10,600 in 1973-74. The value of fuel consumption increased to Rs. 3,56,50,000 in 1975-77. The raw materials utilised by them were worth Rs. 73,76,96,400 in 1973-74 and Rs. 78,91,04,000 in 1975-77. The value of plant and machinery in the industry was estimated at Rs. 26,99,00,100, while the value of total inputs was Rs. 82,34,16,900 in 1973-74. The value of total inputs of factories covered by the Annual Survey of Industries of 1975-77 was Rs. 94,72,05,000, the value of plant and machinery increasing to Rs. 34,10,32,000. The value of production in the automobile industry in Bombay as classified by the Annual Survey of Industries in 1973-74 and 1975-77 is given below:—

Item	1973-74	1975-77		
ehtra St	(Rs.)	(Rs.)		
Products	1,12,65,08,800	1,20,09,63,000		
Net value of semi-finished goods	1,14,88,200	9,25,72,000		
Total output	1,15,13,16,300	1,29,35,35,000		
Value added on manufacture	29,93,80,500	32,02,45,000		

An amount of Rs. 2,85,18,900 was accounted for as depreciation in 1973-74 which decreased to Rs. 2,60,84,000 per annum in 1975-77. The net income of all the factories was computed at Rs. 24,89,06,000 per annum in 1975-77.

It will be of great interest to further study the automobile industry of Bombay at the micro-economic level. An attempt is made below to give an account of the large-scale units within the limitations of data constraints.

The Premier Automobiles Ltd. commenced production in 1947 with the assembly of about 3,000 vehicles per annum consisting of Desota, Dodge and Plymouth Cars and Dodge/Fargo Trucks under an agreement with a foreign concern, viz., Chrysler Corporation of the U.S.A. The assembly of motor cars under this agreement was, however, suspended in 1956 in accordance with government policy in the matter. The company started production of Fiat cars in collaboration with an Italian company namely Fiat Societa Per Azioni in 1950. Besides these ventures, the company undertook manufacture of axle and components, diesel engines arid shock absorbers under technical collaboration with some renowned firms in the U.S.A. and the U.K. Manufacture of components like propeller shaft and universal joint, exhaust pipe, radiators, and leaf springs was taken up in 1949.

All these technical collaboration agreements, however, have now expired and the Premier Automobiles Ltd. manufactures its products under its own trade name 'Premier'. Accordingly it now manufactures, (i) passenger cars, (ii) petrol commercial vehicles, (iii) diesel commercial vehicles, (iv) petrol industrial engines, (iv) diesel industrial engines, (vi) diesel marine engines, (vi) room air-conditioners and (vii) ERW steel tubes.

The Premier has its main assembly plant at Kurla, a mechanite castings foundry at Wadala in Bombay and a stamping plant at Dombivli in Thane district. It provided employment to 9,485 persons of which 7,476 were in the Kurla plant, 923 in the Wadala plant, and 1,086 in the Dombivli unit in 1972-73. The plant at Kurla provided employment to 9,140

persons of whom 6,089 were daily rated and 3,051 were monthly rated employees on 31st December 1976. During the year ending with June 1976 the company produced 14,520 vehicles. The production and sales of vehicles during 1974-75 and 1975-76 are given below(Annual Report 1975-76 (published), The Premier Automobiles Limited.):—

	1974-75		1975	-76
Item	Production	Sales	Produc- tion	Sales
Cars	14,753	14,928	12,229	12,272
Drive-away chassis	169	162	40	34
Diesel trucks	3,784	3,516	2,151	2,245
Petrol trucks	177	284	100	97
Total	18,883	18,890	14,520	14,648

The quantum of production and the value of the products of the Company inclusive of vehicles and other articles in 1969-70 and 1972-73 is given below:—

	1969-70		1972-73		
Item	Quantity (No.)	Value (Rs. in lakhs)	Quantity (No.)	Value (Rs. in lakhs)	
Cars	12,083	16,05.41	13,192	20,31.10	
Drive away Chassis			1,202	1,91.14	
Commercial Vehicles	3,957	12,61.35	3,519	13,54.53	
Industrial Engines	231	21.04	406	41.42	
M.S. Tubes	10,16,806 (Metres)	24.19	10,02,132 (Metres)	50.75	
Air-conditioners	2,325	53.89	1,502	42.78	
Factory made components		58.75		81.51	
Total		30,24.63		37,93.23	

The company exported goods worth Rs. 22.71 lakhs in 1975-76 as against Rs. 30.70 lakhs in 1974-75. The products are mainly exported to various countries in Gulf area, Mauritius, Bangla Desh, Sri Lanka etc. The reported total income was Rs. 51.70 crores as against the total expenditure of Rs. 51.53 crores during the year ending June 1976. Its capital investment stood at Rs. 1,030.40 lakhs (subject to arrears of depreciation amounting to Rs. 395.80 lakhs) as on June 30th, 1976.

The production of vehicles (No.) by the Premier in 1976 to 1979 is given below (Automan India, 1981, Association of Indian Automobile Manufacturers (Published).):—

Time of Valida	Year				
Type of Vehicle	1976	1977	1978	1979	
Passenger Cars	14,973	17,481	12,931	11,550	
Commercial Vehicles	2,319	1,881	1,264	1,079	

The value of turnover of the Premier in 1979-80 was reported as under:—

	Value		Value
Item	(Million Rs.)	ltem	(Million Rs.)
Cars	425	Other items	38
Commercial Vehicles	103	Other income	23
	1	Total (Value Million Rs.)	589

The Mahindra and Mahindra Limited which was established in October 1945 and started production in 1949, is a pioneering concern manufacturing Jeeps. The assembly of Jeeps commenced in India on June 3,1949 after a market for Jeeps was firmly established in the country. The components were imported from the U.S.A. in completely knocked down condition, while accessories such as tyres, tubes, batteries and a few other items were procured locally. The indigenous content of the built-up Jeep was increased progressively during the subsequent period. It was in 1955 that the company commenced a phased manufacturing programme in technical collaboration with a U.S.A. company *viz.*, Willys Overland Export Corporation, and their successors Kaiser Jeep Corporation. In conformity with the target envisaged in the Second Five-Year Plan, the Government of India sanctioned, in August 1958, an increase in the company's licensed manufacturing capacity to 5,500 Jeeps per annum. A further licence was granted to the company in 1961 for increasing its capacity to 10,000 jeeps per annum, by 1965-66. The present licensed capacity is for 25,000 jeeps inclusive of 5,000 forward control trucks and 5,000 utility vans.

The company started production at its plant at Mazagaon which was expanded and developed subsequently by shifting to the spacious factory at Kandivli. In order to achieve economy in production the Automotive Division of the company was divided into six units, viz., (i) Jeep Unit, (ii) Engine Unit, (iii) Foundry, (iv) Marketing, (v) Truck and Station Wagon Unit, and (vi) Research and Development Centre. The First three of these are situated at Kandivli, the fourth at Worli and the last two at Ghatkopar. It is also developing an assembly plant for utility vans and trucks at Nasik. In order to yield economy in fact and yet retain its multi-purpose utility, the design of the Jeep and Truck was developed and changed from time to time since 1966. The company at present manufactures jeeps, jeep-trucks, station wagons and industrial engines. The volume of production in some years is given below:—

Year (Nov. to Oct.)	Production (No.)	Year (Nov. to Oct.)	Production (No.)		
1949-50	289	1969-70	10,168		
1959-60	6,482	1972-73	14,216		

The production of vehicles (No.) of this concern in 1976, 1977, 1978 and 1979 is given below (Automan India, 1981):—

Type of Vehicles				
Type of Vehicles	1976	1977	1978	1979
Jeeps	6,847	9,594	11,010	12,340
Commercial vehicles	1,232	953	1,354	3,084
Tractors	6,348	1,932	7,077	9,405

The value of turnover of the company during the year ending with October 1979 was as under: (Ibid)

Item	Value (Million Rs.)	ltem	Value (Million Rs.)
Jeeps	587	Other items	94
Commercial vehicles	156	Other income	154
Tractors	448		
	1,439		

Besides meeting the indigenous demand for jeeps, the company exports the vehicles to Bangla Desh, Sri Lanka, Jordan, Nepal, New Zealand, Yugoslavia as also to U.N. Organisations like UNICEF and WHO.

It provided employment to 6483 workers as on October 30, 1973, while its capital investment stood at Rs. 19,78.35 lakhs on the same date. It reported its gross income as Rs. 49,70,74,380 and expenditure as Rs. 46,85,21,317 during 1972-73. It procures its raw materials from indigenous steel plants as also from Japan, U.K., West Germany, Australia etc. against global orders.

The International Tractor Company of India, an associate company of Mahindra and Mahindra manufactures diesel tractors suitable to Indian soil conditions. The regular production of tractors at the factory at Kandivli started in April 1966 with an indigenous content of 51 per cent, which was increased to 80 per cent. The company has an installed capacity to manufacture 10,000 tractors per annum.

The Automobile Products of India Limited which was established in 1949 and commenced production in 1955, is one of the pioneering manufacturers of scooters, Lambrettas and three wheelers in India. The Automobile Products of India Limited, Bombay, original formed for the purpose of manufacturing automobiles gave up the project later and obtained permission to manufacture Lambretta motor scooters besides diesel engines and automobile components. It went into production in August, 1955 in collaboration with an Italian firm, acquiring an actual capacity of 6000 scooters upto the end of 1955.

Now it has an installed capacity to manufacture 48,000 vehicles per annum. Besides scooters, it manufactures three-wheeler vehicles, Fly Wheel Magnetos for Scooters under collaboration with another Italian company. It has technical collaboration with two West German concerns as well. Besides the main plant at Bhandup in Bombay, it has factories at Aurangabad, Nagpur and Lucknow. It provides employment to about 3282 persons, of which about 1952 employees are in the Bhandup plant. It uses mainly indigenous raw materials, procured from suppliers of machines and plants, while some material is also imported.

In 1981, the Automobile Products of India(Information supplied by the company.) put 21,527 scooters and 5,868 three-wheelers on the road. The sale of its ancillaries division amounted to Rs. 9.3 crores. It achieved a total sales turnover of Rs. 27 crores in 1981. The value of products and exports of the Bhandup Plant in 1980 and 1981 is given below:—

(Rs. in lakhs)

	1980		1981	
Item	Products		Products	Exports
Scooters	1,147	1.08	1,112	0.83
Three-Wheelers	388	3.30	589	6.92
Spares	75	0.29	64	0.34
Total	1,610	4.67	1,765	8.09

The number of Scooters and three-wheelers produced by the Automobile Products of India is given below:— (Automan India, 1981.)

	1976	1977	1978	1979
Scooters	32,986	21,610	26,722	26,338
Three-Wheelers	3,320	878	2,049	3,376

Scooters are highly in demand all over the country. The demand in fact out-strips supply. The principal buyers for three-wheelers are autorickshaw operators and operators of delivery vans.

The Ramon Engineering Limited, the details for which are not available, is mainly engaged in the manufacture of moped vehicles. It manufactured 25 mopeds in 1976, 487 in 1977, 945 in 1978 and 2,225 in 1979. The Gabriel India which was commissioned into production at Mulund in 1960 manufactures automobile accessories such as shock absorbers, engine bearings, etc. Its turnover amounted to Rs. 60 millions in the year ending May 1980, while it employed 470 persons in the same year.

The Hindustan Ferodo, a comparatively larger unit manufacturing brake linings, clutch facings and other auto parts, started production in 1949 at Ghatkopar. Its turnover during the year ending with December 1979 amounted to Rs. 185 millions of which goods worth about Rs. 5 millions were exported. It provided employment to about 2,188 persons in the same year. (Automan India, 1981)

Besides, there are many other factories manufacturing automobile spare parts and accessories. Most of them are young industries established in the sixties and seventies of the century.

The automobile industry in Bombay as in India suffered from a demand recession in 1975-76 which slumped the sales and production of cars and commercial vehicles. The severe inflationary trends which prevailed in the preceding years had substantially put up the cost of cars. The situation was aggravated by increase in taxation. High price of petrol also seriously restricted the demand for vehicles. The anti-inflationary measures taken by Government checked a further rise

in cost of manufacturing. However the entire situation was such that the demand for automobiles slumped considerably. As a result, cars and other vehicles for which there used to be a waiting list for several years, became available off-the-shelf. Road transport business was also adversely affected due to the recession in the economy and competition from railways. This affected the demand for and production of commercial vehicles in 1975-76. The industry was therefore found to take stringent cost reduction measures in order to survive the crisis. Steps were also taken to utilise the available plant capacity by increasing the manufacture of components which were hitherto being purchased from outside. The recession in the automobile industry had an adverse impact on the ancillary industries as well. The recessionary trend was however reversed and there was revival of demand from March 1976. Almost all the companies were operating at full capacity from 1976. Some of the companies intensified research and development activities from 1976 in order to improve the quality of products, to design and develop new products to meet the market requirements and competition, and to achieve cost reduction. The designs of a few vehicles were also developed to meet export market requirements.

During the last about 4/5 years the automobile industry of Bombay has made rapid progress in the field of exports. The export performance of the principal manufacturers in Bombay can be judged from the following statistics:—

Manufacturer and Products	Commercial Vehicles (Rs. in thousands)		
	1977-78	1978- 79	1979- 80
Premier Automobiles—			
Trucks	368	1,177	519
Buses	5,155	3,345	2,162
Bus Chassis	605	871	
Deemed Exports	718	125	1,806
Total	6,846	5,518	4,487

Mahindra and Mahindra-			
Jeep type trucks	890	1,160	390
Jeep trucks CKD	1,180		2,290
Deemed Exports	3,100	4,000	5,700
Total	5,170	5,160	8,380

Two and Three Wheelers

Total	414	195	541
3-Wheelers	407	130	401
Scooters CBu	7	65	140
Automobile Products of India-			

Passenger Cars

Total	487	189	2,060
Deemed Exports	241	76	174
Cars	246	113	1,886
Premier Automobiles -			

Jeeps

Jeeps			
Mahindra and Mahindra—			
Jeeps CBU	2,040	6,230	5,620
Jeeps CKD	2,780	450	2,370
Deemed Exports	11,000	30,600	31,200
Total	15,820	37,280	39,190

Source.—Automan India, 1981.

The main problems of the automobile industry in Bombay as in India are the mounting cost of production, non-availability of suitable materials the high cost of maintaining a car and growing consumer resistance, The steep hike in the price of petrol since 1973 has given a severe jolt to the industry.

It is however felt that there are better prospects for the growth of the industry, particularly in view of the rapid growth of the economy and the prospective demand for cars, commercial vehicles, jeeps and buses. The realization of the prospective growth depends upon realization of the economies of large-scale production, rationalization and export incentives.

It will be interesting to furnish below ("Focus on Automobile Industry". An article by President of the Association of Indian Automobile Manufacturers, in the Financial Express, June 25, 1977.) the statistics of production of automobile vehicles and other ancillary products in India:—

(APRIL-MARCH)

Type of Vehicles	Actual Production in			Development Council's Production Targets for	
	1974-75	1975-76	1976-77	1977- 78	1978-79
Passenger Cars	31431	21777	36490	35000	40000
Jeeps	9628	7133	8365	9000	10000
Comml. Vehicles	40649	43764	46422	60000	66500
Scooters	88356	112550	156854	250000	300000
Moter-cycles	61222	70105	72462	88000	100000
Mopeds	31911	34265	34458	80000	100000
Three-Wheelers	12210	13278	20037	31000	40000
Tractors	31101	33267	33145	45000	52000
Automotive Ancillaries	210	252	265	380	500

Note.—Except the last item which is given in crores of rupees, all other figures are in numbers of vehicles.

It may be recalled that the Tariff Commission in 1953 had recommended that only those firms which had a manufacturing programme should be allowed to assemble vehicles in the country. The Government of India had accordingly recognised five manufacturers of vehicles in India, including the Premier, and the API of Bombay. The Government had also recognised the Mahindra and Mahindra of Bombay for the assembly of jeep type vehicles. The Tariff Commission in its 1956 Report had recommended *inter alia* that high priority should be given to the manufacture of commercial vehicles rather than to passenger cars, and that efforts should be made to meet the anticipated increase in the demand for diesel commercial vehicles. The commission had recommended tariff protection to the industry for a period of ten years an enhancement of revenue duties on essential components. The recommendations were accepted with the exception that the method adopted was to convert the then existing revenue duties into protective levies.

The Government of India had set up in 1959 an Ad-hoc Committee under Mr. L. K. Jha which *inter alia* estimated the percentage of indigenous contents in the vehicles manufactured by various companies. Measures were taken up for increasing the indigenous contents of all vehicles with the goal of import substitution. According to the *Programmes of Industrial Development* (1961-66), the indigenous contents of the vehicles have been steadily rising since the Ad-hoc Committee Report in early 1960, and it visualised that the same will rise upto 90 per cent by the end of the Third Plan. They rose up further recently.

In 1962-63, the main export markets for Indian cars were Pakistan, Singapore, Cambodia and Saudi Arabia, and for chassis, bodies, frames and parts, Viet Nam and Sudan. (Handbook of Commercial Information, 1963.)

AUTOMOBILE ANCILLARIES

An automobile factory is usually a composite unit where, in addition to the assembly of a complete vehicle, manufacture of some of the essential components and machinery of a few other components is also undertaken. They generally produce major components, and buy from the ancillary industries parts and accessaries worth more than half the exfactory price of the complete vehicle. Normally the ancillary sector manufactures some engine, transmission and frame components like pistons, piston rings, fuel pumps and nozzles, radiators, valves, clutch assembly, brake assembly, shock absorbers and springs, and all other electrical components, rubber and asbestos parts, body fittings and a number of miscellaneous accessories.

When the automobile industry was first established in India, the ancillary industry was in an underdeveloped stage. There was, at that time, some production of a few rubber components, electrical equipments and body components. As per the report of the Tariff Commission of 1953, "only a nucleus " of the ancillary existed in India at that time.

The Premier Automobiles, Bombay, one of the principal manufacturers of automobiles, has been manufacturing radiators since 1949, mostly for its own consumption. The Teksons Pvt. Ltd., Bombay, came into the field in 1960. The Bharat Radiators Pvt. Ltd. commenced production of automobile radiators and components in 1959. It has its factory at Santacruz near Vidyanagari which employs about 166 workers. Its annual turnover is worth about Rs. 18 millions (1979-80). (Automan India, 1981). The Fuel Injunction Ltd., Bombay, commenced production of nozzles in 1956, and of elements in 1957. The industry was confronted with foreign competition in its initial stages of growth. This made it imperative on the part of the Government of India to grant tariff protection upto the end of 1963.

Commercial production of clutch assemblies was commenced in Bombay by the Automobile Products of India in 1957 with an annual production capacity of 15,000 units. The Asbestos Magnesia and Friction Material Ltd., Bombay, with an annual production capacity of 1,08,000 numbers started manufacturing clutch facings or discs in 1956. This was the only unit in India producing clutch assemblies on a commercial scale till the end of the Second Five-Year Plan. (Handbook of Commercial Information, 1963.)

Production of brake linings was commenced in 1956 by the Automobile Products of India and the Asbestos Magnesia and Friction Material Ltd. in Bombay. The total capacity of the two units was 3744 thousand feet of brake linings at that time. The Hindustan Ferodo manufactures brake linings and clutch facings on a large-scale in Bombay. It has its factory at Ghatkopar which commenced production in 1949. It employs about 2,188 employees and has a turnover worth about Rs. 18.5 crores per annum. Its products are exported to foreign countries. In the manufacture of hydraulic brake assembly, the Automobile Products of India was the only firm in India producing this essential item which commenced production in 1957. (Ibid.)

The Premier Automobiles, Bombay, took up production of leaf springs in 1949. This was the second firm in India to manufacture this item, the first unit being started at Kapurthala in 1948. The Metropolitan Springs Ltd. Bombay, which commenced production in 1952 was the second manufacturer of leaf springs in Bombay.

Shock absorbers constitute an important component in an automobile vehicle. The manufacturing of shock absorbers was undertaken in India by the Premier Automobiles, Bombay, and another firm in Madras in 1956, prior to which these parts were wholly imported.

The annual production capacity of these two units was 34,000 sets of hydraulic shock absorbers in 1956. Another unit was started in Bombay in 1959 for the manufacture of friction type shock absorbers. The Gabriel India Ltd. which commenced production of shock absorbers and engine bearings in Bombay in 1960 is now a renowned concern. It has its factory at Mulund which employs about 470 employees, and has an annual turnover of Rs. 60 millions approximately. (Automan India, 1981.)

Electrical equipment including sparking plugs for automobiles is being manufactured in Bombay since 1955. The Auto Accessories (India) Pvt. Ltd. was the first enterprise in Bombay to start manufacture of sparking plugs in 1955. This concern was established in collaboration with a British firm. This was the second unit in India, the first factory being established in Bangalore in 1953. These two units were the only manufacturers of sparking plugs in India upto 1962. They had together an annual capacity to produce about 1.6 million sparking plugs in 1962. (Handbook of Commercial Information, 1963.)

The automobile ancillary industry which is now an established industry in Bombay, had to suffer the pangs of foreign competition during the initial stages of development. Realising the needs of the situation the Government of India granted tariff protection to this industry from January 1955 to December 1963. (*Ibid.*) The ancillaries produced in Bombay meet the needs of the automobile manufacturers in Bombay as also of others in the country. A number of items, such as leaf springs, diesel motor engines, electrical equipment, brake linings and clutch facings are exported in considerable quantities. The foreign exchange earnings by these concerns although not very large are symbolic in importance.

SHIPS, BOATS AND CRAFTS

The earliest evidence of ship-building activity is found in the archaeological remains of Mohinjo-daro dating back to some 2500-1500 B.C. There is literary as well as archaeological evidence to show that ship building was an ancient industry in

India and that seafaring was a popular profession in coastal areas. The Sanskrit work *Yukti Kalpataru* is the earliest known treatise on the art of the ship building. (*Radha Kumud Mookerji*, *History of Indian Shipping*) According to this source, there were as many as twenty-five different varieties of Indian ships. The Venetian traveller of the 13th century, Marco Polo left an account of ship-building in India. Indian ship-building survived throughout the middle age. The industry flourished during the 18th and early 19th centuries when the East India Company encouraged the fabrication of ships in India for its use. The industry was concentrated in Bengal. At that time on the west coast, a ship-building yard functioned at Surat, and later at Bombay. The Bombay Dockyard produced vessels for civilian use as well as for the use of the Royal Navy under the supervision of Parsi ship builders. The ships built in Bombay were not only durable but also cheaper than those built in foreign countries.

Indian ship building industry decayed during the latter half of the 19th century when the British authorities withdrew their support. Discriminatory rates of import duties in Great Britain on goods carried by Indian ships also created conditions for its decline.

The need for revival of Indian shipping and ship-building industry was felt during the First World War when the requirements of overseas trade of the country and of naval defence became more and more pressing. A number of steamship companies were established at that time. One such company *viz.*, the Sciendia Steam Navigation Co. Ltd. which was set in 1919 was the pioneer in developing the modern ship-building industry in the country. (Handbook of Commercial Information, 1963.) The company has a ship repairing workshop at present in Bombay.

The principal raw materials required in ship-building are steel and timber. About 20 to 30 per cent of the requisite materials are available in the country (1961). The categories of steel required are plates, bars, black sheets, G. I. sheets, steel wire ropes and heavy structural. In addition paints and ancillary equipments are also required. Machinery and equipment like propellers have to be imported. Steel required for ship-building purposes which had to be imported formerly is now available from Rourkela. Wire ropes and paints are already being produced indigenously.

Mazagon Dock: Mazagon Dock Ltd..., Bombay, was acquired by the Government of India in 1960. It was primarily a ship repair yard established in 1915. It is now a public sector undertaking incorporated as an autonomous commercial corporation and is one of the largest ship-building undertakings in India. The Government decided that the company's ship-building facilities should be considerably augmented and modernised to cater primarily for building warships and merchantships as well. In pursuance of this decision an expansion scheme was launched in 1964 and completed in 1970-71. Two new ship-building berths with necessary cranes and other essential services have been provided. These berths are capable of accommodating ships upto approximately 15,000 LWT. The Production and Assembly Shop, Weapons and Electronic Complex and several other workshops were built and expanded with all modern facilities. The tidal Kasara Basin has been converted into an impounded wet dock capable of accommodating four medium size ships at a time. With these modern shops, ship-building berths, machinery, equipment and associated facilities, Mazagon Dock is now capable of building various types of ships such as, (a) sophisticated warships, (b) passenger ships, pssenger-cum-cargo ships and cargo ships, (c) dredgers, (d) tugs, barges, trawlers, etc. Three Leander class frigates built by the Mazagon Dock have already been commissioned in the Indian Navy. It is remarkable that the frigates are of fully Indian design. A luxury passenger-cum-cargo vessel designed and built for the first time in India was delivered by Mazagon Dock to the Shipping Corporation of India in December 1974. This ship is now plying on international routes.

During the decade 1965-75, the value of production and foreign exchange earning of the company rose from Rs. 3,86 lakhs and Rs.1,21 lakhs to about Rs. 37,38 lakhs and Rs.10,54 lakhs, respectively. In addition to shipbuilding the Mazagon Dock hss also built up substantial capacity for ship-repair work. During 1974-75 as many as 673 ships were repaired out of which about 282 were foreign vessels.

This company has also built for the Indian Navy a bucket dredger, two inshore mine-sweepers, two *Avcat* tankers designed to carry aviation fuel. It has received orders for constructing six off-shore fixed well platforms for the Oil and Natural Gas Commission. The annual production turnover of the company registered a growth from Rs. 1,63.61 millions in 1970-71 to Rs. 5,33 millions in 1977-78. (*The Times of India Directory and Year Book, 1980-81*)

The Mazagon Dock is a symbol of national pride and progress in the production of sophisticated warships. It occupies a place of honour among the few producers of Leander type frigates in the world.

RAILWAY ROLLING STOCK

The first Indian railway ran over a stretch of about 34 kilometres from Bombay to Thane on April 16, 1853. Since then the Central and Western Railways emanating from Bombay expanded over a large part of the country; The railway system brought engineering workshops in its wake initially for the maintenance and servicing of rolling stock, and in the course of time *tot* manufacture of passenger coaches and other rolling stock. As per the *Wealth of India {Part II)*, the then B. B. & C. I. Railway built a particular type of carriage for passengers in 1863. The early carriages were built of timber seasoned teak. The designs and construction of carriages showed considerable improvement from the beginning of the present century with the introduction of continuous vacuum brake and bogie carriages (*Handbook of Commercial Information, 1963.*)

The original locomotive works of the Great Indian Peninsula Railway (now Central Railway) were opened at Byculla about 1854, and provided employment to about 800-1,000 operatives. In the course of time the expansion of the railway forced the company to look for a larger area and in 1878 it was shifted from Byculla to the present workshop at Parel. The latter workshop was found, subsequently, too limited to cope up with the volume of work, and the carriage and wagon shops were removed to Matunga, in about 1909-10. The G. I. P. Railway workshops provided employment to about 7,826 persons in 1909.

The Central Railway have five workshops in Bombay at present, *viz.*, Locomotive Workshop at Parel, the Matunga Carriage and Wagon Workshop, Signal and Telecommunication Workshop at Byculla, Electric Multiple Unit Car Shed at Kurla and Diesel Loco Shed at Kurla. The Locomotive Workshop at Parel established in 1878 is primarily meant for periodical overhauling, major repairs and special repairs to steam, electric diesel hydraulic, diesel, electric engines and cranes. As many as 264 locomotives were overhauled and repaired in this workshop in 1976-77. The workshop also carried out repairs and overhauling of 40 cranes and 66 non-locoboilers in the same year. Many locomotive components are also manufactured in this workshop which provided employment to about 6,900 persons in 1976-77.

The carriage and wagon workshop at Matunga undertakes major as well as special repairs and periodical overhauling of carriages and wagons. About, 3,609 passenger carriages and 4,113 railway wagons were repaired and overhauled in this workshop in 1976-77. It employed about 5,900 persons in the same year. A special vestibular railway coach with comfortable chair cars for the Deccan Queen plying between Bombay and Pune was also manufactured in the Matunga workshop.

The signal and telecommunication workshop at Byculla undertakes repairs, periodical maintenance and manufacture of signal and telecommunication equipment. It also undertakes repairs of medical equipment. The articles manufactured include self-printing ticket machines, C. P. Valves, AWC-2 Zincs, wagon retarders, moped trollies, axle counters, etc. A

fully equipped maintenance and repairs cell for ultra-sonic Flaw Detectors and Rail Testers has been set up in this workshop. About 950 persons are employed in this workshop.

The Electric Multiple Unit Car Shed at Kurla undertakes overhauling and repairs of electric equipments of local train coaches which are maintained here. The car shed, as on 31st March 1977, had a capacity of holding about 284 motor coaches and 434 trailer coaches which are used for the running of over 853 local trains daily. As many as 444 electric multiple coaches were overhauled and 21 were specially repaired in the car shed in 1976-77. It provided employment to about 2,300 persons in the same year.

The Diesel Loco Shed at Kurla undertakes the repairs of diesel hydraulic engines which are utilised mainly for yard shunting and for running pilots and shunters on Bombay-Kalyan railway section. It overhauled 54 engines and provided employment to 400 persons approximately in 1976-77.

Besides, there is a maintenance shed at Bombay-V. T. for repairs to mail/express train engines. (Based on information supplied by the Central Railway.)

The Parel Workshop of the then Bombay-Baroda and Central India Railway was opened in 1868. The workshop was, in those days, chiefly engaged in repairing the company's rolling stock and in building carriages and wagons of every description. Locomotives were imported from England and fitted up in the workshop. Upto 1880 the workshop employed about 1,500 to 2,000 men which number increased to 4,062 in 1909. The workshops were under charge of a Locomotive and Carriage Superintendent aided by an Assistant Locomotive Superintendent and an Assistant Carriage and Wagon Superintendent who were Europeans. (Gazetteer of Bombay City and Island, Vol I, 1909.)

There are two Loco Sheds of the Western Railway at present in Bombay *viz.*, Parel Loco Shed and Bandra Loco Shed. Besides, there aie two carriage shops at Lower Parel and Mahalaxmi, and an Electric Car Shed at Bombay Central.

The Parel Loco Shed homes about 40 railway engines which are serviced, maintained and repaired regularly. Seventy-five per cent of the engines are used for the hauling of mail, express and passenger trains. (Now most of the trains are hauled by electric locomotives from Bombay (1983). The shed is equipped with machinery and technical staff (675 persons in 1969-70). The Bandra Loco Shed is equipped to overhaul and repair about 50 steam and diesel engines, most of which are utilized for shunting goods trains. The shed provided employment to about 1,050 persons in 1970.

The Lower Parel Carriage Shop was built in 1900 as a central workshop for repairs to broad gauge locomotives, carriages and wagons. The locomotives workshop was subsequently shifted to Dohad in 1928 due to paucity of accommodation at Lower Parel. Like-wise a new wagon repair shop was constructed at Kota in 1962. After shifting of the above referred workshops to Dohad and Kota, the Parel and Mahalaxmi Workshops are presently engaged in periodical overhauling and repairing of broad gauge coaching stock only.

The Electric Car Shed at Bombay Central deals with maintenance and repairs of electric motor coaches. It is provided with the necessary machinery and technical personnel. (Information supplied by the Western Railway.)

B.E.S.T. WORKSHOPS

The first engineering workshop of the Bombay Electricity Supply and Tramways Company was established in 1886 at Colaba to repair trams in Bombay. The workshop provided employment to 275 operatives in 1909. It was shifted to Kingsway at Dadar in June 1915 on account of the complaints of the residents at Colaba. After incorporation of the bus service in Bombay a new workshop was opened at Colaba in 1926 for bus repair. With the expansion of the fleet of the BEST the Colaba workshop was felt to be inadequate. It was therefore imperative to attach a bus workshop to the tram workshop at Dadar. Subsequently the entire workshop at Colaba was shifted to Dadar in 1950. With the discontinuance of tram service in 1964, the tram workshop was converted into bus workshop and the employees were absorbed in the bus workshop at Dadar. (B.E.S.T. Upakramachi Katha (Marathi).

The BEST central workshop at Dadar is a very big one providing the necessary machinery for repairing and overhauling the entire fleet of 1,929 buses in Bombay. The workshop is equipped to overhaul the chassis of buses, bus bodies, mechanical repairs and painting of buses.

BICYCLE INDUSTRY

The history of bicycle industry not only in Bombay but also in India dates back to 1939 in which year the Hind Cycles Ltd. started manufacture of a complete bicycle in Bombay. The company is one of the pioneers in the manufacture of bicycles and spare parts in India. It has its factory in Worli area, and also has put up a new unit at Kandivli for assembly of Besini Auto Engines.

The year 1939 saw the commencement of the production of a complete bicycle in India by the Hind Cycles, Bombay and another unit at Patna. The products of the industry were highly in demand by the defence services of the country. The two factories supplied 55,000 bicycles for the defence services during the Second World War. The factories were faced with foreign competition after the cessation of war. The industry was therefore granted protection in March 1947 in the form of conversion of the revenue duties into protective duties. The protection was reviewed from time to time and rates of duties were changed from time to time. The protection was extended upto December 1963. The combined installed capacity of the two units in Bombay and Patna was 120,000 bicycles per annum at the commencement of the First Five-Year Plan, (Handbook of Commercial Information, 1963.) while their actual production was 101,126 in 1950-51. (Kotharis Investor's Encyclopaedia.)

From humble beginnings in 1939, the bicycle industry has grown considerably in dimensions, and it meets the fast growth demand from all over the country. Besides indigenous demand, the industry exports a large number of bicycles. In 1951-52, the number of bicycles imported were 2.83 lakhs, while self-sufficiency was attained in 1958 and the Govt, banned import of bicycles and components except for some accessories and special metals which are required for manufacturing. The Hind Cycles Ltd. was subsequently taken over by the Govt, in public interest. It is now known as the National Bicycle Corporation of India, Worli, and has two plants in Bombay. It has an installed capacity to manufacture two lakh bicycles per annum, its sales turnover amounting to Rs. 6.74 crores in 1977-78. The Central Distributors Ltd., Bombay, acts as financial guarantor to the Hind Cycles. It also manufactures bicycle components and parts. Besides, there are a few small-scale units in Bombay which started production of components and spares. The Bicycle Manufacturers Association of India has created an Export Pool for assisting its member concerns in finding export markets for Indian bicycles.

Most of the raw materials required by the industry can be had from indigenous sources, while imports are confined to steel tubes, cold rolled steel strips and bars, etc. Efforts are on the way to reduce the imported constituents.

The Annual Survey of Industries of 1975-77 does not give separate statistics for this industry. However the 1973-74 A.S.I, gave statistics for a group covering bicycles, cycle-rickshaws and parts. As per the Annual Survey of 1973-74, there were 17 registered factories which provided employment to 1308 employees including 1077 workers. The fixed capital in

these factories was Rs. 49.74 lakhs, the working capital Rs. 96.51 lakhs and invested capital Rs. 190.53 lakhs. The factories paid Rs. 48.17 lakhs by way of emoluments including Rs. 29.06 lakhs as wages to workers. The fuel consumption of the factories was limited to Rs. 9.95 lakhs, the raw material consumed being worth Rs. 482.78 lakhs. The value of plant and machinery was Rs. 80.94 lakhs.

The products of the industry were valued at Rs. 588.93 lakhs. The total output and total inputs were computed at Rs. 609.66 lakhs and 509.05 lakhs, respectively in the year. The value added on manufacture was estimated at Rs. 93.49 lakhs in 1973-74.

METAL PRODUCTS AND PARTS

This is a broad sector of industry which covers a wide range of manufacturing activity. The various segments of this sector are conceived to cover (i) manufacture of fabricated metal products, such as metal cans from tinplate, terneplate or enamelled sheet metal, metal shipping containers, barrels, drums, kegs, pails, safe vaults, enamelled sanitary equipment, (ii) manufacture of furniture and fixtures primarily of metal, and (iii) manufacture of hand tools and general hardware. This classification accords with the one adopted by the authorities of the Annual Survey of Industries, 1975-77. The 1973-74 Survey gives separate statistics for many more segments, and the same are utilised wherever necessary. Before giving an account of the various segments of this industry, it may be useful to give an analytical account of the metal products and parts industry at the outset. This analysis is based on the Annual Survey of Industries in 1975-77. The figures stand for the annual averages for the survey period.

As per the Annual Survey of Industries of 1975-77, there were 751 registered factories in this industry in Bombay which formed 67.05 per cent of the industry in Maharashtra. The industry in this city provided employment to 37,818 persons which constituted 70.52 per cent of the employment in the State. The capital invested by the Bombay metal products manufacturing units was computed at Rs. 1,00,24 lakhs constituting 67.12 per cent of the investment in the Maharashtra industry. The output of the factories in Bombay was computed at Rs. 2,16,91 lakhs or 72.32 per cent of that in the State. The value added on manufacture by the Bombay concerns was to the tune of Rs. 57,93 lakhs which formed 72.98 per cent of that in Maharashtra. This analysis leads to some obvious conclusions. Bombay occupies a place of honour in Maharashtra as regards this industry, as about 72 per cent of the production is done here. The output of the industry in Bombay is more than double the capital investment. The value added on manufacture is about 57 per cent of the fixed capital. This shows the higher productivity and higher returns on capital.

As per the A.S.I, there were 532 registered factories in this industry in Bombay in 1973-74 which increased to 751 in 1975-77. The total employment provided by the industry in 1973-74 and 1975-77 was estimated at 39,092 including 30,545 workers, and 37,818 including 28,446 workers, respectively. The position in respect of capital is given below :—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	32,75.57	36,16.04
Working capital	33,95.46	31,48.57
Capital invested	82,83.99	1,00,24.45
Outstanding loans	46,98.84	82,86.16

It follows from the above statistics that there was a rise in fixed capital and capital invested. But this rise was not commensurate with that in the number of factories in 1975-77. The industry in Bombay worked for 1,09,21,303 mandays in 1975-77.

The structure of costs incurred by the factories in Bombay can be studied by the following statistics:—

(Rs. in lakhs)

Item	1973-74	1975-77
Wages to workers	15,53.13	17,34.77
Total emoluments	21,85.64	29,82.49
Fuel consumed	3,09.46	5,30.01
Material consumed	94,24.65	1,24,67.85
Other inputs	N.A,	25,05.09
Total inputs	1,07,01.48	1,55,02.95

Thus, there was an all-round increase in the costs incurred by the factories, it being most marked in the case of raw material consumption and value of total inputs. The value of plant and machinery was computed at Rs. 34,81.65 lakhs in 1973-74 and Rs. 46,37.62 lakhs in 1975-77.

The position about the output of the industry is stated below:—

Item	1973-74	1975-77
Value of products	1,43,30.61	1,94,60.69
Other output	N.A.	22,30.31
Total output	1,53,68.27	2,16,91.00
Depreciation	3,16.42	3,94.68
Value added on manufacture	43,50.36	57,93.36

The above figures show a conspicuous increase in output of the Bombay metal products industry over the years under reference. The value of factory payments was computed at Rs. 11,54.70 lakhs and net income at Rs. 46,38.67 lakhs in 1975-77.

It can be deduced from the above analysis that though this may not be a labour-intensive industry like cotton textiles, it has a large employment potential. The share of wages paid to workers in the total emoluments is rather less. The ratio of total output to total inputs shows the satisfactory position of the industry. The value added on manufacture is quite high. The net income of the factories is almost 46 per cent of the invested capital which means a very high rate of returns on capital.

Several large companies in Bombay are engaged in manufacture of metal products. They together constitute a growing sector of the industry of Bombay. Many of the companies have foreign collaboration arrangements with reputed concerns in the Western countries. The collaboration in some cases is in regard to financial participation as well as technical know-how, while in some cases it is only as regards technical know-how. The industry in Bombay has derived considerable advantages on account of such collaboration agreements. The industry in Bombay is found to take roots in the thirties of this century. It however received an immense stimulus during the Second World War when there was a virtual stoppage of imports of metal products on account of War demand in the exporting countries. The demand from growing industrialisation in this period also enlarged the growth of the indigenous industry. It is well-known that all industries were passing through a period of boom during the war which required a huge quantity of equipment. This demand encouraged the expansion of existing metal engineering plants and the incorporation of new ones in Bombay.

The defence efforts of the then Government of India also provided a tremendous encouragement to the growth of metal engineering as the products were essential for equipping the defence services as well as the defence equipment production in the country. The Government extended the necessary assistance to the industry. The cessation of hostilities in 1945 however brought about conditions of a mild slump in the industry on account of demand recession and foreign competition. Since there was no ban on imports, the articles were freely impoited which confronted the indigenous industry. The Government of India was persuaded from time to time for the granting of protection to the infant industry. The appeals for tariff protection were considered, and protection was granted from time to time. (Handbook of Commercial Information, 1963.)

The real growth of the industry was however achieved after Independence. The Government of India adopted a purposeful growth-oriented policy. The appeals for protection were considered very sympathetically. The industry thus received Government protection, though not virtual patronage. With the further growth of the industry in Bombay, Calcutta, Jamshedpur and many other centres, the Government of India banned the import of the many metal engineering products. The inevitable result was the progress of the indigenous industry. The production was diversified to meet the demand from the clients and to achieve economies of scale. The production was not confined to metal products, but was also diversified to the production of machinery and equipment for the growth of the machinery industry in Bombay as well as in India. In fact many of the members of this industry are manufacturing machinery and equipment also.

It is attempted below to give an account of some of the well-known manufacturers in Bombay, on the basis of available information. It is possible that the companies whose information is not available may also be large-scale manufacturers of reputation.

The Guest Keen Williams Ltd., incorporated on 17th February 1931 at Calcutta, was converted into a public limited company in 1956. The Bhandup plant of this company commenced in September 1953, which is now the largest producer of high class steel and brass wood screws in India. (Kothari's Investor's Encyclopaedia.) The Precision Pressings division of the company at Bhandup, besides its plants at Howrah and Bangalore, is ranked among the largest and the most versatile engineering groups in the country. The activities of this division help the nation's power and energy programme and its products are essential to the generation, distribution and utilisation of electric power for industrial and domestic purposes. The range of its products include a large variety of electrical steel stampings, laminations, strip wound cores, precision pressed and deep drawn sheet metal components, precision press tools, jigs, fixtures and dies. (IEMA, 1974.) It also manufactures fasteners, rivets, spikes, screws of various types, cotter pins, safety pins, bolts and nuts and other industrial fasteners.

The turnover of sales of the Guest Keen Williams amounted to Rs. 41.34 crores in 1978-79 and Rs. 50.81 crores in 1979-80.

The Indian Smelting and Refining Company, established in 1931, has factories at Bhandup and Pokharan (Thane). It manufactures brass sheet, strip coils, non-ferrous alloys, castings, etc., the sales turnover of which was of the order of Rs. 17.54 crores in 1977-78. (A State-wise Picture of Large Scale Industrial Activity, 1981.)

The Kamani Engineering Corporation, incorporated in 1945 has a plant at Kurla. It is a well-known manufacturer of high tension transmission line towers, track structures, rural electrification poles, railway electrification structurals, road rollers, flood light poles, signalling posts, and fabrication of a number of items. The sales turnover of this company was of the order of Rs.17.01 crores in 1978-79 and Rs. 16.61 crores in 1979-80. It has an installed capacity to produce 45,000 tonnes, its actual production being 21,500 tonnes in a latest year. The Kamani Tubes Ltd. manufactures nonferrous metal tubes, the turnover of which was worth Rs. 5.86 crores in 1976-77. (*Ibid.*)

The Godrej & Boyce Co. with two factories at Vikhroli and one at Lalbaug in Bombay is by far the oldest and the largest manufacturer of metal products such as steel furniture, cupboards, safes, locks, padlocks, refrigerators, machine tools and a wide range of industrial goods and consumers goods. Its sales turnover of all products was as high as Rs. 86.42 crores in 1978-79 and Rs. 107.64 crores in 1979-80. The Fit Tight Nuts & Bolts Limited, incorporated in 1957, has a factory on Andheri-Kurla Road, besides another at Porbandar. It is a very large manufacturer of high tensile fasteners and items for industries, such as, automobiles, tractors, machine tools, marine engines, diesel engines, electrical equipment. It also produces special type of nuts, bolts, and many producers goods. The sales turnover of the company was Rs. 8.29 crores in 1978-79 and Rs. 10.65 crores in 1979-80. The Graham Firth Steel Products Ltd. with a factory in Bombay has an annual production capacity to produce 9,000 tonnes of narrow cold rolled steel strips. Its turnover of sales was worth Rs. 5.63 crores in 1979-80. The Special Steels Limited with a factory at Borivli, besides another one at Tarapore, is a manufacturer of steel wires, high carbon steel wires, tyre bead wires, pre-stress concrete wires, flat strips, bright drawn bars and alloy steels. The turnover of its sales was to the tune of Rs. 26.31 crores in 1978-79 and Rs. 31.44 crores in 1979-80. The Metal Box India, a foreign company, was incorporated in 1933. It has two factories in Bombay at Worli and Trombay. It is a reputed manufacturer of metal containers, drums, closures, hardware and publicity materials, aluminium extrusions, special purpose package fabrication and machinery components. The turnover of sales of this company was worth Rs. 18.34 crores and Rs. 36.92 crores, respectively in 1978-79 and 1979-80. The Zenith Tin Works, incorporated in 1938, has a factory at Mahalaxmi, which is a large-scale manufacturer of metal containers, aluminium collapsible tubes and pilfer

The Khira Furniture Co. is a manufacturer of steel furniture and cupboards. The Steelage Industries Limited, established in 1932, has a factory at Mazagaon which produces bank security products, safes of varying types and qualities, safe deposit lockers, steel furniture and cupboards.

The Killick Nixon Ltd. with a factory at Chandivli was incorporated in 1947. It manufactures jacks, pumps, ductiflex sheatings, furnaces and vibrators, the sales turnover being to the tune of Rs. 7.76 crores in 1978,79 and Rs. 9.73 crores in 1979-80. The Bombay Forgings Ltd. with factories at Kalina and Mahalaxmi is a manufacturer of closed die castings, steel forgings and tootb brushes. Its sales turnover was valued at Rs. 5.56 crores in 1977-78. (A State-wise Picture of Large Scale Industrial Activity, 1981.) It was established in 1966. The Hindustan Transmission Products Ltd. has a factory at Chandivli which manufactures enamelled copper wires, strips, products of copper scrap, insulating varnishes etc. It was established in 1940.

The Structural Engineering Work Ltd. incorporated in 1943 at Bombay is equipped for design, fabrication and erection of steel frame building, bridges, towers, tanks, chimneys, aeroplane hangers, pressure vessels, transmission towers, kiers, etc. It also manufactures oil and vegetable ghee plants, sugar factory vessels, etc.

The National Steel Works Ltd. originally established in 1940 in Lahore was shifted to India in 1947. It is engaged in rerolling steel bars of various categories. It has a production capacity of 18,000 tonnes per annum. It has a factory at Parel Tank Road. (Kothari's Investor's Encyclopaedia.)

The above survey though exhaustive is no means complete. There are many other concerns which manufacture a wide range of metal products. The above survey suggests that the growth of this industry gathered momentum in the thirties. Many of the reputed concerns entered the field during the Second World War period, while the development was accentuated during the fifties of this century. It is now a developed industry equipped with modern and sophisticated plants and machinery, and has a honoured position in the economy of Bombay as well as the country.

METAL CANS, SHIPPING CONTAINERS, BARRELS, DRUMS AND METAL CONTAINERS

According to the Annual Survey of Industries, this sector of manufacturing is conceived to cover fabricated metal products such as metal cans from tin plates, terneplate or enamelled sheet metals, metal shipping containers, barrels, drums, kegs, pails, safes, vaults, enamelled sanitary and other fabricated metal products not elsewhere classified. This is a very broad grouping which covers several products although of similar nature. It is, therefore, quite difficult to present an account of the industry at the micro-economic level. Hence a general account of the industry based on the Annual Survey of Industries statistics and the published information about some of the important manufacturers in Bombay is given below. An attempt is also made to go to the micro-economic level.

The fabrication of metallic containers commenced in Bombay during the First World War when supplies required by the Oil Companies became scarce in the country. The sustained growth of the industry had however to await the development of the indigenous steel industry and the installation of the first tin plate manufacturing plant during the second decade of the present century. Improved metal packaging techniques were introduced in the country for the first time in the early nineteen thirties. (Handbook of Commercial Information, 1963.) The industry progressed rapidly after the Second World War. The growth of this industry has been directly related to that of other industries as its products are mainly in demand by other industries.

The products of the industry which can broadly be called metal containers are used for canning food-stuffs, and for storage or carriage of oils, chemicals, lubricants, paints, pharmaceuticals and toiletries. The shape and size of the containers vary according to the uses to which they are put. Large drums and barrels are required for bulk transport of mineral oils, and petroleum products. The petroleum industry requires drums of a capacity of 200 litres and above. Medium sized drums and kegs are utilised mainly for carrying vegetable oils and chemicals. Open top cans are required for packing processed and preserved fruits, vegetables and dairy products. Tin plate containers are in demand by the confectionery, biscuit, edible oils, baby foods, paints, insecticide and toiletry industries. Tooth-paste manufacturers, ointment producers and photographic films use very small containers in the shape of rigid or collapsible tubes made, generally, of aluminium foil. Thermo-plastic containers are now replacing metal containers in some of the industries as packing materials.

The recent technological improvements have succeeded in manufacturing tamper-proof containers which ensure the purity and non-contamination of the products to be packed. Their quality has further been improved by coating the inside of the containers with particular types of lacquer paints.

The growth of the petroleum industry, vanaspati, preservation of food articles, chemicals and pharmaceutical industries after the Second World War accentuated the development of the metal container industry in Bombay. The growing supply of liquefied petroleum gas, shipping containers and many industries provided a further stimulus to the industry.

A number of large concerns, some of them with foreign collaboration, have developed in Bombay. The Metal Box Company of India Ltd., initially founded at Calcutta in 1933, has two factories in Bombay. This foreign concern is specialised in tin-printing and the production of open top cans for processed food-stuffs, tin plate containers, composites, collapsible and rigid tubes, polyethylene bags, insecticide sprayers, trays, toys, pilfer-proof closures, industrial components and other hardware. The value of sales by this concern increased from Rs. 18.34 crores in 1978-79 to Rs. 36.92 crores in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981) The Zenith Tin Works with a factory at Mahalaxmi in Bombay manufactures various types of metal containers, pilfer-proof closures and

extruded products. It has an installed capacity to produce 16,500 tonnes of metal containers. Its sales were reported to be about Rs. 7.71 crores in 1978-79. (*Ibid.*) The Gannon Dunkerley and Co. has a factory at Mahul near Trombay. It has specialised in the manufacture of liquefied petroleum gas cylinders and fabrication work connected with the same, the value of its sales being Rs. 1.39 crores in 1979-80. The Poysha Industrial Company with a plant at Sewri is another manufacturer of metal containers and battery jackets. The Mahindra Owen is developing a plant for manufacture of shipping containers which are so very essential for the shipping industry. Besides, there are many other concerns in this industry in Bombay, and the structure of the entire industry is analysed below.

As per the Annual Survey of Industries, there were 144 registered factories engaged in the industry in Bombay in 1973-74. Their number increased to 239 in 1975-77. Most of the new units enumerated in the 1975-77 survey might be small-scale units. There was no increase in employment or in capital investment in 1975-77 over those in 1973-74 The tofkl employment in these factories showed a decline from 14,361 persons (including 11,436 workers) in 1973-74 to 11,748 persons (including 9,208 workers) in 1975-77. The trend in capital, as per the survey, is given below:—

(Rs. in lakhs)

ltem	1973-74	1975-77
Fixed capital	10,48.97	11,05.13
Working capital	14,06.70	13,80.37
Capital investment	29,81.11	28,72.36
Outstanding loans	14,76.49	19,97.68

The industry worked for 3,409,967 man-days as per the 1975-77 survey. The payment of wages to employees was to the tune of Rs. 8,51.62 lakhs including Rs. 6,93.15 lakhs paid to workers in 1973-74, the corresponding figures being Rs. 9,01.09 lakhs and Rs. 5,56.94 lakhs per annum as per the 1975-77 survey. The value of fuel consumed amounted to Rs. 91.15 lakhs which increased to Rs. 1,62.95 lakhs in 1975-77. The factories utilised raw materials to the extent of Rs. 49,79.66 lakhs in 1973-74 and Rs. 53,31.24 lakhs per annum in 1975-77. The other inputs of the units were valued at Rs. 805.70 lakhs in 1975-77. The value of total inputs by the firms stood at Rs. 55,34.24 lakhs in 1973-74 and Rs. 62,99.89 lakhs per year in 1975-77. The value of plant and machinery during the years under study was placed at Rs. 12,48.45 lakhs and Rs. 15,13.56 lakhs, respectively. The position of the value of production of the units in Bombay was as given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Value of products	69,42.98	74,60.86
Other output	N.A.	6,97.96
Total output	73,04.59	81,58.82
Depreciation	1,03.81	1,25.21
Value added on manufacture	16,66.53	17,33.72
Factory payments	N.A.	2,89.59
Net income	N.A.	14,44.13

The above statistics lead to some conclusions about the industry in Bombay. Firstly, there was a fall in employment inspite of the increase in the number of factories in 1975-77. Secondly, while there was an increase in the total emoluments to employees, the payment of wages to workers declined. Thirdly, the increase in the use of raw materials during the 1975-77 survey was not commensurate with the increase in the number of factories. Fourthly, the value of total inputs was about 75 per cent of the value of output as per the 1975-77 survey. Fifthly, the net income of the concerns was about 50 per cent of the capital investment of the concerns as per the 1975-77 survey. It means excellent returns over capital investment.

It may be pertinent to write about the raw materials used by the industry. Drums and kegs are made of mild steel sheets or galvanised iron sheets of varying thickness. Large drums are manufactured from thick deep-drawing quality steel sheets which are processed hot rolled, cold rolled, pickled, dried and oiled. Capsules are made of tin plates. For tin plate containers the raw materials are black sheets coated with tin. The tin is imported from abroad. Some of the products of the industry are exported to Burmah, Sri Lanka, Kenya and Thailand. (Handbook of Commercial Information, 1963.)

FURNITURE AND FIXTURES OF METAL

The steel furniture industry first appeared as an off-shoot of the organised manufacture of improved locks and safety locker equipments. It is as old as the present century. It has grown fast with the nourishment provided by the increasing indigenous availability of steel sheets and other material. Towards the end of the 19th century, a pioneer firm in Bombay, namely, the Godrej Boyce Manufacturing Company, engaged in the manufacture of improved locks succeeded in producing steel safes, which were found to be of acceptable quality. Soon after, the experiments of the firm with safes

led to the manufacturing of steel furniture, and thus the foundations were laid for, what has turned out to be one of the important engineering and metal products industries not only of Bombay but also of India. It is claimed that production of Indian steel cupboards developed earlier than elsewhere. The industry expanded considerably after the Second World War in general and the mid-fifties in particular. Many factories were established in Bombay and its environs. The growth of the industry is attributable mainly to the expanding use of steel furniture in offices, libraries, hospitals, shops and establishments, and households. The increased use of steel furniture is mainly due to its pronounced advantages in respect of economy of space, durability, economy of costs, risk of fire and increasing scarcity of good seasoned wood.

The renowned steel furniture manufacturers in Bombay are the Godrej Boyce Manufacturing Co., Khira Furniture Co., Zenith, Steelage, besides which there are several small manufacturers in Greater Bombay and its periphery. The industry is now decentralising to the suburbs. During the post-Independence period Ulhasnagar near Bombay is emerging as an important centre of the industry. In fact the Ulhasnagar manufacturers are now confronting the Bombay manufacturers regards price competition, though they are found to compromise quality in favour of lower prices. Though the connoisseurs of good quality and the well-to-do prefer the products of the renowned manufacturers, the humble purchasers are found to have a preference for Ulhasnagar products.

As per the Annual Survey of Industries, there were 19 factories manufacturing furniture and fixtures of metal in Bombay in 1973-74 which increased to 29 in 1975-77. These factories provided employment to 6,874 persons including 5,245 workers in 1973-74. The employment increased to 7,445 persons inclusive of 5,869 workers in 1975-77. The combined position of capital of the factories covered under the Annual Survey is given below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Fixed capital	7,62.75	8,84.92
Working capital	5,61.39	5,39.28
Capital investment	21,61.44	24,06.29
Outstanding loans	12,07.21	14,50.35

The industry worked for 22,41,670 man-days per annum during the 1975-77 survey period, on an average. The annual wages paid to all employees were to the extent of Rs. 518.60 lakhs inclusive of Rs. 284.08 lakhs by way of wages to workers in 1973-74. The corresponding average annual wages increased rapidly to Rs. 804.13 lakhs and Rs. 454.81 lakhs in 1975-77 period. This position brings home two conclusions. Firstly, the rise of wages was considerably high. Secondly, the proportion of wages to workers in the total wage bill of the industry was comparatively low. This might be attributable to the preponderance of skilled engineers, technocrats and managerial personnel in the industry over workers.

The factories consumed fuel valued at Rs. 64.16 lakhs in 1973-74 and Rs. 110.52 lakhs per annum in 1975-77. The consumption of raw materials by them was valued at Rs. 15,90.16 lakhs in 1973-74 and at Rs. 23,30.35 lakhs per year in 1975-77. This shows an increase of about 50 per cent. The other inputs of the factories were to the tune of Rs. 3,74.59 lakhs per annum in 1975-77. The total value of inputs of the factories increased fromRs. 17,51.50 lakhs in 1973-74 to Rs. 28,15.47 lakhs in 1975-77. The value of plant and machinery of the units was Rs. 1,21.31 lakhs in 1973-74 and Rs. 8,09.16 lakhs in 1975-77, which shows a rise of about 670 per cent. It means that the value of plant and machinery might have appreciated either due to expansion or rise in their prices or both the factors combined together.

The structure of output of the industry can be studied from the statistics below:—

(Rs. in lakhs)

Item	1973-74	1975-77
Value of products	26,53.53	40,86.95
Other output	N.A.	3,63.81
Total output	28,32.12	44,50.76
Depreciation	72.35	89.57
Value added on manufacture	10,08.27	15,45.72
Factory payments	N.A.	2,05.02
Net income	N.A.	13,40.70

The conclusion imminent from the above statistics is that the output of the industry increased by about 120 per cent in the 1975-77 survey period over that in 1973-74. The value of products however, increased only by about 50 per cent, while the value added on manufacture by about 52 per cent. It means that the higher rate of growth in the value of output might be due to the higher value of other outputs which included bye-products in 1975-77 period. The steel furniture and fixtures industry in Bombay appears to be more capital intensive and less labour intensive. The ratio of net income to capital investment appears to be quite high. The industry offers a higher rate of return on capital.

The steel furniture manufactured by the concerns in Bombay includes pedestal desks and side tables, tubular revolvingtilting chairs, tubular counter chairs, tubular writing tables with drawers, arm chairs, adjustable typist chairs, nesting chairs, factory workmen chairs, sofa-sets, steel safe-cabinets, lockeYs, steel coffers, cash boxes, card cabinets, almirah and cupboards, open book shelves for libraries, other library equipment, etc. Besides, steel furniture, light and dainty furniture, particularly for furnishing drawing rooms, made of aluminium has come into vogue in very recent years. Aluminium chairs with upholstery are being produced increasingly as they are in demand in Bombay.

Formerly certain types of steel furniture, particularly for office and hospital uses were required to be imported to meet domestic needs. The imports were mainly from the U.K., Czechoslovakia, West Germany, Switzerland, the Netherlands, Italy, U.S.A. and Japan. During the last few years, however, steps had been taken to stimulate the export of steel furniture. The items of good quality are exported to Kuwait, Thailand, Sri Lanka, Afghanistan, Uganda, Nigeria, Singapore and Burma. (Handbook of Commercial Information, 1963.)

SMALL TOOLS, HAND TOOLS AND ACCESSORIES

Small tools and hand tools cover a wide range of items. In general, however, they cover cutting tools, precision and measuring tools and machine tool accessories. Hand tools are used by carpenters, blacksmiths, masons, fitters and craftsmen. According to the Report of the Indian Tariff Board on the small tool industry (1949), the first twist drills, reamers and cutters were made by a firm in Bombay city in 1937 and this was the only firm of its kind in India engaged in this line of industry even upto 1943. (Handbook of Commercial Information, 1963.) The Second World War provided an impetus to the growth of industry, and it was between 1943 and 1946 that two more units came into the field, one in Bombay and another in Secunderabad. Thus in 1946 there were only two firms in Bombay which manufactured small tools and hand tools.

After the Report of the Tariff Board in 1949 several steps were undertaken to help the industry. The Government of India imposed restrictions on the import of such tools so as to grant protection to the infant industry. Besides, a statutory provision was also made for refund of a portion of import duty leviable on raw materials required for the manufacture of small tools indigenously. This concession was particularly in respect of import duty on special steel which was essential for the indigenous industry. Requirements of the Government for small tools were met from indigenous production as far as possible. These measures, coupled with the growing demand for small tools in various industrial sectors, stimulated the expansion of the industry. There was a diversification of products, particularly in the fifties and sixties. The industry produced threading taps and dies, lathe mandrels, drill sleeves, surface plates, measuring instruments, grinding wheels, abrasives and engineer's steel files.

Grinding wheels are required mostly to grind iron, steel and non-metallic materials including glass, marble, porcelain, precious stones, rubber, etc. Grinding wheels are extensively used in transport industries, machine tool building and in foundries

Grinding wheels are also required for grinding non-metallic materials, and are further used for a large variety of works, such as tool and cutlery sharpening, cylindrical grinding, general and surface grinding, grinding of cereals etc. There are numerous varieties of grinding wheels which are required for different purposes.

It was during the outbreak of the World War II that a factory for the manufacture of grinding wheels was started in Bombay by Grindwell Abrasives Ltd., with the technical assistance of two Czechoslovakian engineers. (Kothari's Investor's Encyclopaedia) This was the pioneering unit in India in this industry. It was followed by another unit in Amritsar, and in 1943 there were only two units in the country including the Bombay firm mentioned above. Even at the commencement of the First Five Year Plan these were the only two units producing grinding wheels in the country, with an annual capacity of 3,600 tonnes. The production capacity of the Grindwell Co. was stepped up to 1,.000 tonnes during the First Plan.

The products of the industry comprise grinding wheels, grinding segments, stones, valve grinding paste and thread grinding wheels, special type of wheels, such as those required for production of razor blades, abrasive discs for railway workshops, mounted points and valve seat grinding wheels with steel bushes. There has been a marked increase in the demand for grinding wheels recently. The growth of hand tools, small tools and many other industries, has accentuated the demand for the products of this industry. (Kothari's Investor's Encyclopaedia.) The claim of the industry for protection from foreign competition was first referred to the Tariff Board in 1945. After enquiry by the Board, protection was granted to the industry by restricting the import of grinding wheels of the varieties already being manufactured in India. Subsequently a protective duty was also imposed on grinding wheels and segments. The protection continued with varying rates of duties upto end of December 1959. (Handbook of Commercial Information, 1963.)

The raw materials required for the manufacture of small tools comprise high-speed steel, alloy and tool steel, carbon steel, pig iron and coke, furnace oil and hardening oils. Most of these were imported formerly, but now they are indigenously available. The raw materials for coated abrasives are available in India, except for synthetic abrasive grains and Turkish emery. The principal raw materials used for grinding wheels are synthetic abrasive grains and bonding materials. Synthetic abrasive grains are imported in small quantity.

Among bonding materials, elastic bonding is imported, while vitrified and mineral bonding materials are indigenously produced. Fibre glass discs are also imported. Carbide powder required for certain tools was freely imported formerly, but it is available indigenously now.

The Indian Tool Manufacturers (1937), a private sector company with a plant at Sion, and subsidiary plants at Nasik and Aurangabad, is a manufacturer of reamers, drills, tool bits, gear hobs, taps, cutters and micrometers. It has modernised its factory at Sion very recently. The combined sales of the concern were to the extent of Rs. 7.95 crores in 1978-79 and Rs. 11.08 crores in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981.) The S. S. Miranda (1975) owned by the Piramal Group has a factory at Kandivli which manufactures tool bits, hacksaws, metal cutting hand saws and carbide tipped tools. The value of sales by this concern increased from Rs. 3.23 crores in 1978-79 to Rs. 5.35 crores in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981.)

In the Annual Survey of Industries, hand tools and general hardware are classified together to form an industry group. According to the survey there were 134 registered factories in this industry in Bombay in 1973-74 which increased to 162 in 1975-77. The rise in the number of factories was, however, accompanied by a slight fall in employment, namely, from 8,942 persons including 6,762 workers in 1973-74 to 8,528 persons including 6,120 workers in 1975-77. The industry functioned for 24,50,177 man-days per year in 1975-77. The trend in the capital structure of the industry during the two survey periods can be studied from the following figures:—

Item	1973-74	1975-77
Fixed capital	7,93.10	8,85.16
Working capital	8,30.28	7,34.90
Capital investment	17,48.07	21,75.09
Outstanding loans	10,65.36	14,67.78

It is obvious that with the exception of the fall in working capital which is inexplicable, there was a rising trend as regards fixed capital, capital investment and outstanding loans which was commensurate with the rise in the number of factories in Bombay. Despite the fall in employment there was an increase in emoluments and wages, *viz.*, from Rs. 5,11.06 lakhs including Rs. 3,80.89 lakhs paid to workers in 1973-74 to Rs, 6,87.97 lakhs inclusive of Rs. 3,88.84 lakhs paid to workers per annum during the survey of 1975-77. This rise could be attributed to the general rise in wages and dearness allowance.

The fuel consumption of the industry in Bombay increased very steeply from Rs. 57.18 lakhs in 1973-74 to Rs. 1,35.79 lakhs in 1975-77. The consumption of raw materials also registered a considerable increase from Rs. 11,80.66 lakhs to Rs. 18,83.41 lakhs during the years under study. The other inputs of the industry were valued at Rs. 5,10.24 lakhs per annum in 1975-77 period. The total inputs of the factories in this industry increased from Rs. 14,42.83 lakhs in 1973-74 to Rs. 25,29.44 lakhs in 1975-77 which means a rise of less than double. The value of plant and machinery rose in consonance with the growth of the industry, *viz.*, from Rs. 11,09.39 lakhs to Rs. 14,18.06 lakhs during the years under study.

The value of products of the factories in Bombay increased by a little less than 50 per cent from Rs. 24,85.28 lakhs in 1973-74 to Rs. 36,47.04 lakhs per year in the survey of 1975-77. The value of other outputs stood at Rs. 2,86.89 lakhs per year in 1975-77. The growth of total output of the industry was quite impressive over the years under reference. It went up from Rs. 26,01.47 lakhs to Rs. 39,33.94 lakhs per annum. The depreciation of the concerns was enumerated at Rs. 93,90 lakhs in 1973-74 and at Rs. 1,04.70 lakhs in 1975-77. The value added on manufacture which is an important measure of the efficiency of an industry also showed an impressive rate of growth. The value added increased from Rs. 10,64.73 lakhs in 1973-74 to Rs. 12,99.79 lakhs per annum in the 1975-77 survey period. The factory payments and net income of the factories in Bombay were of the order of Rs. 2,41.69 lakhs and Rs. 10,58.11 lakhs, respectively, per annum as per the survey of 1975-77. The net income of the factories was only a little less than 50 per cent of their capital investment in 1975-77. This means quite high returns on capital investment in the industry. The total emoluments paid by the factories were very much less than their net income. This leads us to the conclusion that the share of returns on capital was very much higher than the share of wages and emoluments.

INDUSTRIAL FASTENERS AND SCREWS

Industrial fasteners comprise a variety of bolts, nuts, rivets, dogspikes, panel pins and wire nails. Machine screws are meant for use in metallic parts. They are highly in demand from the railways, aircraft industry, automobile industry, manufacturers of electric motors, fans, transformers, bicycles, sewing machines and other machinery. Wood screws are used in the making of furniture and cabinetware, boxes and frames and in the building industry. Threaded fasteners made of steel are widely used for several purposes.

Industrial fasteners and screws, although they may appear very simple products today, were imported totally from Great Britain, West Germany, Belgium, Denmark, Netherlands, Austria, Italy and Japan. It may be surprising that these products were imported even up to 1961. The indutry originated mainly in the Punjab, the first factory of wood screws in undivided India being started at Karachi in 1932. (Handbook of Commercial Information, 1963) The first factory of machine screws was started in 1941 at Amritsar. The industry came to be located mainly in the Punjab where the indigenous machine building industry was already developing, although the principal source of supply of steel wire, was situated at Jamshedpur. Railways and the defence equipment industry encouraged the initial growth of this industry during the Second World War.

The history of this industry in Bombay is traceable to 1944 during which year a large unit in the city took up production of wire nails. (Ibid) The Guest Keen Williams Limited which was initially incorporated in West Bengal in February 1931, commenced manufacture in the Bhandup plant in Bombay in September 1953. (Kothari's Investor's Encyclopaedia.) It is now one of the largest manufacturers of high class steel and brass wood screws. This foreign concern has two plants in Bombay which manufacture rivets, screws, stampings, laminations, nuts and bolts. The value of sales of these products is given below (A State-wise Picture of Large Scale Industrial Activity, 1981.):—

	Sales (Rs.in crore	es)
Item	1973-74	1975-77
Stampings	7.88	10.50
Laminations,nuts,bolts	18.74	22.57
Rivets, screws etc	14.72	17.74
Total	41.34	50.81

It is establishing a new unit at Pune for substantial expansion of capacity for pressed components and assemblies. Another large-scale concern in Bombay engaged in this industry is the Fit Tight Nuts and Bolts Limited with a plant at Andheri, and another near Porbunder which manufactures nuts, bolts, socked head cap screws and taps gauges. It was

established in 1957. Its sales turnover amounted to Rs. 8.29 crores and Rs. 10.65 crores in 1978-79 and 1979-80, respectively. (*Ibid*). Besides, there are many other concerns and small-scale units in Bombay manufacturing these items.

The industry has flourished after about 1960 and there is a ready demand for its products. While the imports of these products are prohibited, some of the products are exported from Bombay to African and Asian countries.

The principal raw materials comprise annealed wire, mild steel, steel wire and brass wire, which are available indigenously. The consumable stores required by the industry are thread rolling dies, high carbon or alloy steel slitting saws, tungsten carbide wire drawing dies and many other items some of which are imported in a small measure.

LOCKS AND PADLOCKS MANUFACTURING

The modem lock manufacturing industry in India is more than 100 years old. Bombay, Aligarh, Delhi, Calcutta, Madras and Dindigul are some of the traditional centres of manufacture of locks. The organised industry came into being at Aligarh, when a lock making workshop was set up by the Postal Department there in 1860. The manufacture of lever locks was began at Dindigul about the same time. An organised padlock factory was established in Calcutta for the first time at the beginning of the present century.

The pioneer in the locks and padlock manufacturing industry in Bombay was however the Godrej and Boyce Co. which established a unit in Bombay manufacturing brass and steel lever type locks, in 1926. The Godrej and Boyce have their plants at Lalbaug and Vikhroli and are accredited to manufacture locks, padlocks, security locks and night latches. They also manufacture a variety of safes and safety cupboards. There are many other companies manufacturing safes, safety cupboards and locks and safety latches in Bombay at present. A number of small-scale factories under government assistance have joined the industry in recent years.

The principal raw materials required by the industry are mild steel, galvanised mild steel wire, cast brass, brass sheets, phosphor bronze wire, etc. Some of the products of the industry are now exported to Sri Lanka, Kenya, Nigeria and some countries in the middle East. (Handbook of Commercial Information, 1963.)

BALL AND ROLLER BEARINGS INDUSTRY

Ball and roller bearings in various sizes and specifications are essential for moving parts of various types of machinery, electric fans and in traction machinery, On account of the high degree of skill required for the manufacture of ball and roller bearings, it has been necessary to seek technological collaboration with foreign companies, and also to secure some types of special steels and raw material components. Prior to 1950 there was absolutely no production of ball and roller bearings in India. The entire quantity required was imported from West Germany, the U.K., Austria, Switzerland, Sweden, Italy, Japan, U.S.A. and U.S.S.R. The New Haven Steel Ball Corporation of Bombay started manufacturing steel balls since November 1951. (*Ibid.p.90*) The installed capacity of this unit was 5 lakh steel balls per annum at the beginning of the Second Five-Year Plan. No other new unit was started in India upto 1956, and the demand was met by increasing and diversifying the production of the unit at Bombay, while imports were also permitted.

The manufacture of steel balls was undertaken subsequently by another unit in Bombay, and the requirements of balls for the bicycle industry amounting to 3 millions in number were met by these sources. The electric fans industry accounted for nearly 60 per cent of the requirements of ball bearings during the Second Plan. The tremendous growth of factories producing agricultural machinery, automobiles, textile machinery, electrical equipment, machine tools, diesel engines, aircrafts, defence equipments and pumps during the post-planning period increased the demand for ball and roller bearings.

The most important imported raw material used in the manufacture of ball bearings and steel balls is high carbon chromium steel bars and wire. Other raw materials are now available indigenously. They comprise brass strips and rods, mild steel for rivets, sleeves and nuts.

The industry had to face foreign competition which matter was referred to the Tariff Board, and then to the Tariff Commission. The Government of India accepting the recommendations of the commission granted tariff protection to the industry in the mid-fifties, which was continued for some years.

Ball bearings and steel balls of some specifications are also exported in small quantity from Bombay.

DOMESTIC UTENSILS

Production of domestic utensils of brass, copper and bell metal is a traditional industry carried on by skilled workers working in cottage units, for generations. Some of the items of brass and bronzeware produced by these cottage units are used as decorative articles, and thus belong to the category of artistic handicrafts.

Famous centres of production in Uttar Pradesh and Gujarat date back to the early middle age, while other centres in Maharashtra and Bengal could be traced to the 18th century. Fabrication of utensils by mechanical process is, however, of comparatively recent origin in the country. The first mechanised unit is known to have been started in Bombay city in 1907. Most of the mechanised units in the large and small-scale sectors were set up in the third decade of the present century. (Handbook ofCommercial Information, p. 171).

The hereditary artisans working in the cottage units generally turn out their products by the traditional handbeating method with small equipment and tools. A major proportion of the production of utensils in Bombay is in the small-scale sector. Generally scrap metal including worn out and discarded utensils is melted for the casting operation in the small units. The methods of pressing and spinning for fabrication of utensils are generally adopted in the organised sector of the industry.

According to a survey undertaken by the Maharashtra Small Industries Service Institute during 1955-57, there were 36 small-scale units manufacturing utensils in Maharashtra, while there were ten large-scale units producing domestic utensils in the State. (Ibid., p. 172.) The domestic utensils industry is comparatively smaller in Bombay. Separate statistics for this industry in Bombay are not available. The essential raw materials for themanufacture of domestic utensils are aluminium circles, copper, zinc unwrought, stainless steel sheets, German silver scrap, tin ingot/scrap and nickel silver. The industry has to depend partly on imported raw materials as the supply of non-ferrous metals in the country is very limited. With the growth of the re-rolling mills in the country indigenous re-rolled circular sheets of metals have, however, become available to the fabrication of utensils.

OIL PRESSURE LAMPS INDUSTRY

This is a small industry in Bombay producing oil pressure lamps and hurricane lamps. In 1960-61, there were five units in Bombay out of the total of ten units in India. The production of the units increased steadily since 1954. With the restrictions on imports and "the growing demand for the lamps, the industry could make a considerable headway. Besides the medium large units, there are quite a few small units manufacturing oil pressure lamps.

All the materials required for the industry are produced indigenously, and there has been a considerable improvement in the quality of lamps manufactured. The Indian Railways are important users of oil lamps. The industry was granted tariff protection from 1951 to 1957. (Kothari's Investor's Encyclopaedia)

BASIC METALS AND ALLOYS INDUSTRY

The basic metals and alloys industry is one of the most important industries of Bombay. The industry has a long history in the city which dates back to 1857 in which year the Byculla Iron Works and Metal Mart was established by Mr. N. C. Richardson. This pioneering enterprise had a factory on Parel road with branch works on Nesbit road, Mazagaon. The enterprise had to face many difficulties in the matter of supply of fuel, suitable appliances and skilled labour which were practically non-existent at that time. Prior to the establishment of this organised plant, an Indian foreman employed in the Gun Carriage Factory was credited to be the pioneer of the iron foundry in Bombay.

In 1909, Messrs. Richardson and Cruddas, Bombay, owned one of the largest engineering works in India affording employment to 2,000 persons. The firm had two workshops, each containing foundries capable of dealing with the heaviest casting required in trade, pattern-shops, smith-shops, fitting and machine-shops and a large structural steel boiler department. The Richardson and Cruddas turned out steel and other work for the Indian Railways, and roof trusses of various designs and style for Government Offices. It had business transactions with all parts of India, Burma, East Africa and the Strait Settlement. It also manufactured sanitary appliances.

Bombay in 1909 contained 15 foundries and metal works. They provided employment to about 5,841 operatives.

The information about them is furnished below as per S. M. Edwardes Gazetteer of Bombay City and Island, 1909:—

Name	Operatives employed	Name	Operatives employed
Byculla Iron Works	1,160	A. K. Patel and Co.	178
Byculla Iron Works Branch .	400	Garbeile and Co.	N.A.
Carnac Iron Works	628	P. & O. Company's Iron Works	886
Defence Iron Works	1,005	Napier Foundry	200
Dock Iron Works	100	Marsland, Price and Co.	445
Empress Iron and Brass Works	100	Geo. Gahagan and Co. Bombay Foundry.	350
Tarachand Masani and Co	120	oto Co	- Otto
D. M. Daruwalla	54	Iron Works	215

The other metal, lock, cutlery and tin works were :—

Name	Nature of Work	Number of hands employed
Godrej Boyce and Co.	Blacksmith, cutlery and safe making	240
Art Metal Works	Iron gates, railing and brass work	50
Anant Shivaji Desai Works	Aluminium, German silver and other metals stamped into household utensils.	100
Asiatic Petroleum Oil Works	Tin works	353
Burma Oil Works	Tin works	290
Standard Oil Works	Tin works	177

The basic metals and alloys industry in Bombay as classified under the Annual Survey of Industries comprised 294 registered factories which formed 44.55 per cent of the factories in this industry in Maharashtra State. Bombay ranks the first in the districts in Maharashtra as regards all the aspects of this industry, namely, number of factories, invested capital, employment, inputs, output, value added on manufacture, net income of factories, etc. The capital investment in this industry, as per the A.S.I. of 1975-77, was to the tune of Rs. 90,80 lakhs or 32.39 per cent of the capital investment

in the industry in Maharashtra. The industry provided employment to 29,663 persons in Bombay which formed 45.73 per cent of the employment in Maharashtra. The output of the Bombay metals and alloys industry was worth Rs. 2,18,01 lakhs which constituted 43.44 per cent of the output of the industry in Maharashtra. The value added on manufacture by the industry in Bombay was enumerated at Rs. 42,44 lakhs which formed 47.35 per cent of the industry in Maharashtra. This analysis brings home the conclusion that a little less than half the basic metals and alloys industry in Maharashtra State is localised in Greater Bombay, and the city is the nerve centre of the industry in the State.

The statistics of the basic metals and alloys industry, as per the Annual Survey of Industries, are available for two sectors, *viz.* (i) iron and steel industries and (ii) foundries for casting and forging iron and steel. The statistical data for the basic metals and alloys industry and its two sectors, as referred to above, as per the Annual Survey of Industries in 1973-74 and 1975-77 periods are furnished in the following table. The data enables us to analyse the structure of this important industry of Bombay.

TABLE No. 13
Basic Metals and Alloys Industry, Greater Bombay
(Figs, of Rs. in lakhs)

Basic metals and alloys industry			Iron and Steel industry		Foundries for casting and forging iron and steel	
	1973-74	1975-77	1973-74	1975-77	1973-74	1975-77
1. Number of estimated factories.	296	294	32	31	179	161
2. Fixed capital (Rs.)	27,12.66	34,72.63	4,39.82	5,79.59	18,48.13	19,63.15
3. Working capital (Rs.)	27,75.73	31,09.16	5,47.37	2,72.83	13,71.83	16,56.65
4. Capital investment (Rs.)	65,48.71	90,80.46	11,52.36	12,24.21	40,56.33	49,98.69
5. Outstanding loans (Rs.)	70,02.87	67,95.35	9,97.02	9,51.22	50,02.60	39,73.36
6. Man-days worked	N.A.	87,89,204	N.A.	8,50,524	N.A.	56,04,056
7. All workers	22,600	22,194	3,685	2,106	14,365	14,349
8. All employees	29,787	29,663	4,652	2,960	19,003	18,828
9. Wages to workers (Rs.)	13,15.43	14,48.89	1,72.49	1,07.38	9,40.67	9,74.22
10. Total emoluments (Rs.)	18,89.42	24,95.75	2,86.98	2,00.67	12,89.57	16,28.54
11. Fuel consumed (Rs.)	19,38.26	10,65.00	74.74	1,90.13	17,66.71	6,06.30
12. Material consumed (Rs.)	1,09,73.22	1,42,97.77	21,84.50	19,32.77	50,68.19	62,09.53
13. Other inputs (Rs.)	N.A.	18,11.15	N.A.	3,12.32	N.A.	9,04.78
14. Total inputs (Rs.)	1,34,12.69	1,71,74.51	23,94.55	24,35.22	70,54.88	77,20.61
15. Plant and machinery (Rs.)	31,85.52	46,80.46	4,51.93	6,93.79	19,96.92	25,89.66
16. Products (Rs.)	1,57,67.62	1,96,78.75	27,46.05	24,41.94	86,91.23	1,00,28.51
17. Other output (Rs.)	N.A.	21,21.81	N.A.	4,59.01	N.A.	5,89.29
18. Total output (Rs.)	1,69,56.13	2,18,00.56	28,67.58	29,00.95	93,54.70	1,06,17.80
19. Value added (Rs.)	32,56.37	42,44.19	4,23.03	4,06.72	21,21.68	26,88.22
20. Factory payments (Rs.)	N.A.	10,99.22	N.A.	1,56.47	N.A.	5,84.72
21. Net income (Rs.)	N.A.	31,44.97	N.A.	2,50.25	N.A.	21,03.50

It may be useful to give a micro-economic level account of the industry in Bombay by furnishing a few details about some enterprises in this industry. It is however cautioned that the account although attempted to be comprehensive is by no means complete or even thorough. It is particularly so because of data constraints. The Richardson and Cruddas, the earliest iron works and metal mart in Bombay was. established in 1857 at Byculla. In 1909, it was credited to be one of the largest engineering works employing about 2,000 persons. It was converted into a public limited company in 1949, and was taken over by the Government of India in 1972. It is now managed as a public sector undertaking since then. It has a subsidiary plant at Nagpur, and produces steel structures for bridges, transmission line towers, general industrial plant and equipment, sugar mill plant and machinery, railway points and crossings, sluice gates and hydrants and castings. It has an installed capacity to produce 25,800 tonnes of structurals and 3,600 tonnes of C.I. castings. The Mukund Iron and Steel Works with a factory at Kurla and another at Kalwa (Thane) is a large-scale manufacturer of the following products:—

Products (A State-wise Picture of Large Scale Industrial Activity, 1981)	Installed capacity (Thousand tonnes)	Sales in 1979- 80 (Rs. crores)
Iron and Steel	212.4	
Steel castings	12	66.06
E.O.T. cranes	2	66.06
Steel structurals	1.8	2

The Kamani Metals and Alloys incorporated in 1945 has a large plant at Kurla which produces non-ferrous metals and alloys strips. It refines and manufactures all kinds of non-ferrous metals. It has an installed capacity to produce 25,530 tonnes of metal and alloy strips per annum, the sales in 1979-80 amounting to Rs.10.98 crores. The company has sister concerns in Kurla which are engaged in engineering industry. The Nathani Steel Pvt. Ltd. has a factory at Vidyavihar which produces steel profiles, iron and steel scraps, sheet metal and machinery.

The Bombay Metal and Alloys Mfg. Pvt. Ltd. was established in 1943. It manufactures non-ferrous ingots, castings, pressure die castings, cast iron, cast steel and non-ferrous parts for railway rolling stock. It has an engineering department and foundry at Mazagaon and smelting works at Thane. The Devidayal Metal Industries established in 1951 has a factory at Bhandup which produces lamp caps and other metal products.

The Indian Standard Metal Company incorporated in 1937 has a factory near Byculla which produces gun metal, bronze, brass, bearing metals, aluminium, zinc and lead alloys, type metals, master alloys, solders and other non-ferrous alloys. It also produces many types of castings, brass and copper forgings etc. The Crown Aluminium Works at Sewri manufactures aluminium utensils and other articles. The Metallica Works Limited, Kandivli, was established in 1942. It produces alloys of various categories, die casting alloys, solders, fluxes and various kinds of castings.

The Khandelwal Metal and Engineering Works at Powai is also a large manufacturer in this industry. The National Steel Works founded in 1940 at Lahore was shifted to Bombay in 1947. The re-rolling department of this unit is engaged in rerolling steel bars.

The Indian Smelting and Refining Co. is one of the old units incorporated in 1932. It has a plant at Bhandup and another one at Pokhran (Thane). It is engaged in the manufacture of all kinds of non-ferrous alloys and castings, commercial quality (hot rolled) brass and copper sheets; industrial quality (cold rolled) brass and copper sheets, sheets and coils. Its sales were of the order of Rs. 17.54 crores in 1977-78 inclusive of the Pokhran plant. Another large-scale company established in the thirties, 1938, was the Indian Metal Company. It produces all kinds of non-ferrous alloys as well as pressure die-castings in zinc base and aluminium base alloys. Since 1953 the company has been working on the development of speroidal graphite cast iron-castings and is now on commercial production. It also produces stainless steel heat resisting and other alloy steel castings. (Bombay Chamber of Commerce Directory,)

NON-FERROUS METALS

The non-ferrous metals industry is of recent origin. It was only during the Second World War that the industry came into being in the country. The production of metals by mining and smelting started in India in the first decade of the present century and made considerable progress during the Second War. The basic non-ferrous metal industry consists of virgin metals, alloys and semi-manufactures. The Indian Smelting and Refining Company (1932) was a pioneer in this field. The industry grew considerably during the Second World War. Its new development was particularly marked during the planning period in the case of electric wire, insulated wire, copper rods, aluminium sheets and alloys.

Reclamation of metals and alloys from scrap, which is known as the secondary metal industry constitutes an important part. It was developed considerably during the World War II, and at present there are many firms in Bombay engaged in it.

Considerable progress has been made in recent years in fabrication and castings of non-ferrous metals. In regard to aluminium particularly, industrial alloys have become increasingly popular. Copper and brass sheets are highly in demand for the production of utensils, electrical goods, electrical appliances, boilers of various kinds, pipes and tubes required for various industrial and consumer uses. Like-wise lead pipes and tubes have also been produced in large quantities for the manufacture of non-ferrous castings for various industrial purposes. The industry therefore grew greatly in importance.

Zinc is an important metal, mainly used in alloys in the production of brass, in galvanising steel sheets and wires and in the manufacture of pigments. There is a smelting factory in Bombay, which is mainly fed by imports from Bolivia. It has an installed capacity of 700 tonnes, but the actual production is less due to difficulties of imports.

Virgin aluminium is not produced in Bombay. But there are many units producing aluminium articles for domestic and industrial uses. There are many units engaged in rolling sheets and circles in Bombay. Due to the paucity of virgin aluminium these units are working very much below their capacity.

NON-METALLIC MINERAL PRODUCTS

The non-metallic mineral products industry is conceived to cover a wide range of manufacturing, such as, structural clay products, glass and glasswares, chinaware and porcelain articles, cement, lime and plaster, structural stone goods, stoneware, stone dressing and crushing, asbestos cement and other cement products, slates, abrasive graphite products, mineral wool, silica products, etc. Although a majority of these articles are being produced as handicrafts in Bombay from old times, they were brought under the fold of registered factories during the last about 60 years.

The first noteworthy pottery was opened in 1877 at Naigaum. There were about 20 potteries in the north of the Island in 1909. The J. J. School of Arts pottery was regarded to possess a high order of merit. The Bombay Brick and Tile manufactory at Sewri made very good tiles at the beginning of this century. The brick and tile industry provided employment to 800 operatives, while the lime kilns to 420 operatives in 1901. Marble carving provided employment to 850 souls in 1901, while stone-carving was carried on in the form of architectural ornamentation on a large scale in Bombay.(For details refer earlier pages, Industrial Development prior to First World War.) These industries were however not covered under the Factories Act.

With the growth of Bombay, the industry underwent a process of rapid development during the course of this century. The fast developing construction industry provided a stimulus to the increase in production of non-metallic mineral products in general. The Digvijay Cement Company established a cement factory at Sewri in 1944. This is a very important unit as it provides an essential product. The Asbestos Cement Company is another important company which founded a factory at Mulund in 1934. The account of these and other concerns is given in following pages.

The statistics for the various segments of the non-matallic mineral products industry in Bombay as per the Annual Survey of Industries of 1973-74 are given below :—

Industry	No of Units	Employment	Output (in lakhs of rupees)
Structural clay products	39	4229	3,05.40
Glass and glass products	36	7074	17,61.52
China-ware and porcelainware	2	227	24.20
Cement, lime and plaster	2	312	5,60.27
Structural stone goods, stone dressing and crushing	96	1970	3,25.18
Asbestos cement, and other cement products	5	3142	13,96.22
Slate products,abrasive,graphite products,mineral wool ,silica products etc	25	1974	3,20.82

The structure of the non-metallic products industry in Bombay which is inclusive of all the manufacturing segments mentioned above can be studied from the statistics in the following table. The statistics are based on the Annual Survey of Industries in 1973-74 and 1975-77. They reveal annual averages during the respective survey periods. No particular comments on the same are given.

TABLE No.14 Non-Metallic Mineral Products (Figs, of Rs. in lakhs)

	Item	1973-74	1975-77
1.	No. of estimated factories	207	225
2.	Fixed capital (Rs.)	12,38.94	12,72.70
3.	Working capital (Rs.)	12,86.37	9,15.17
4.	Capital investment (Rs.)	29,72.05	26,89.54
5.	Outstanding loans (Rs.)	14,95.68	15,75.78
6.	Man-days worked	N.A.	43,90,985
7.	All workers	15,128	12,171
8.	All employees	18,928	14,998
9.	Wages to workers (Rs.)	5,85.17	5,19.57
10.	Total emoluments (Rs.)	8,56.74	9,35.99
11.	Fuel consumed (Rs.)	3,45.67	6,72.34
12.	Material consumed (Rs.)	23,93.16	26,36.56
13.	Other inputs (Rs.)	N.A.	5,18.93
14.	Total inputs (Rs.)	29,93.78	38,27.81
15.	Plant and machinery (Rs.)	17,58.18	17,90.74
16.	Value of products (Rs.)	46,09.44	49,25.20
17.	Value of other output (Rs.)	N.A.	3,94.72
18.	Total output (Rs.)	46,93.65	53,19.92
19.	Depreciation (Rs.)	1,56.87	1,52.49
20.	Value added on manufacture	15,42.99	13,39.62
21.	Factory payments (Rs.)	N.A.	2,33.39
22.	Net income (Rs.)	N.A.	11,06.23

GLASS INDUSTRY

The glass industry occupies an important position in the economy. Besides supplying a wide range of products for daily use and of artistic appeal, a large number of industries particularly chemicals and pharmaceuticals, distillery and brewery, electric lamps, automobiles, building, and preserved food, are dependent on glass and glass goods. Scientific research, analytical and strategic operations are also dependent on the industry for glassware and apparatuses. Glass is also used for the building up of houses, such as glass bricks, tiles and window panels.

Glass manufacturing was started on modern lines in India with the establishment of a bottle making factory at Jhelum in 1892.

The outbreak of World War I gave a tremendous fillip to the rapid development of this industry. The industry experienced short-lived prosperity during the War period. The industry was hit hard during 1933-39 following the devaluation of the Japanese Yen. The industry clamoured for protection in 1937, upon which the matter was referred to the Tariff Board.

The outbreak of the Second World War once again provided an impetus to the industry by way of stoppage of imports and heavy demand for glass-ware by the defence services.

The industry now manufactures a variety of products such as sheet glass, blown and pressed-ware, bangles and other articles. In addition to the organised factories there are several small units in Bombay.

The information about a few units in Bombay is given below.

The Borosil Glass Works, established in 1962, has a factory at Marol in Bombay. It manufactures scientific and laboratory glass-ware, process piping and plant in glass, industrial and lighting products, pharmaceutical tubing, ampoules, vials

and consumer-ware. It has financial and technical collaboration with an American concern. The sales turnover of this company was as high as Rs. 7.72 crores in 1979-80. The Vallabh Glass Works manufactures processed glass and many glass products in Bombay. The Empire Industries, a very old concern founded in 1900, manufactures vitrum glass, besides many other products in its factory at Vikhroli. The Vazir Glass Works at Andheri is a producer of glass vials and bottles for pharmaceuticals, and borosilicate neutral glass. (Bombay Chamber of Commerce Directory, and A State-wise Picture of Large Scale Industrial Activity, 1981) The Bharat Glass factory at Chembur is another producer of glass-ware.

This review of the industry although attempted to be exhaustive is by no means complete.

ASBESTOS CEMENT AND CEMENT TILES

There has been a phenomenal growth in the building and construction activity in Bombay since the end of the Second World War. The growth of Bombay as the commercial metropolis of India after Independence and multiplication in the population of the city gave a fillip to the growth of the construction industry. This has had a definite impact on the rise and growth of the manufacture of cement tiles, asbestos cement and other cement products in the city. The increasing demand for cement tiles as an alternative to cement flooring during the last about 30 years has also contributed to the expansion in this industry.

As per the Annual Survey of Industries there were five registered factories manufacturing asbestos cement and other cement products in 1973-74 which provided employment to 3,142 persons including 2,284 workers. The Asbestos Cement Ltd. is one of the leading firms in India manufacturing asbestos cement products. Besides catering to the demand of the civilian population, the firm supplies asbestos cement products to the defence forces of India. It is therefore regarded as a defence-oriented industry.

As per the A.S.I, statistics for 1973-74, the capital investment in the five registered factories in Bombay amounted to Rs. 9,53,47,300, while the fixed capital was Rs. 4,47,59,100 and working capital Rs. 7,46,83,900. The value of plant and machinery was Rs. 5,52,02,000 while the raw material utilisation was worth Rs. 6,16,17,300 and fuel and power consumption amounting to Rs. 45,60,600. The total emoluments to employees were to the tune of Rs. 2,94,00,700 including Rs. 2,04,05,200 by way of wages to workers. The total value of inputs was Rs. 7,32,04,600, while the output was worth Rs. 1,39,62,290 of the value added on manufacture being Rs. 6,13,73,000. The value of finished products was Rs. 13,89,15,100, while that of semi-finished products was Rs. 7,08,000. The Cement Tiles Manufacturers' Association, which is a registered organisation reported 21 member manufacturers of cement tiles in Bombay, besides 29 other factories, in 1977. Of these 50 factories engaged in tile manufacturing, quite a many are not registered under the Factories Act. On an average each factory employs about 20 workers, and the total employment in them is estimated at 1,000. Though cement tile making is not a capital intensive industry, the capital investment in it is estimated at Rs. 400 lakhs. A worker is estimated to produce 300 tiles per day on an average.

In accordance with the demand for variegated and colourful tiles, the manufacturers produce beautiful mosaic as well as chequered tiles in different colours. Generally the tiles are in three sizes, *viz.*, 8" x 8", 10" x 10" and 12" x 12". There is no dirth of demand for tiles in Bombay, and it is noteworthy that good quality tiles are also exported to countries in the Middle East and Gulf areas. The approximate value of exports may be around Rs. 50 lakhs per year.

Of the raw materials required for cement tiles, grey portland and white silvicrete cement is procured from indigenous manufacturers of cement. Dolomite powder and chips are supplied by producers in the country. Some of the colouring agents are required to be imported though others are available locally.

The workers in many of the factories are organised by trade unions of local significance many of which are affiliated to different central trade unions.

The Asbestos Cement Ltd. by virtue of its integration and assured demand for its products, appears to be comparatively free from many problems which the other factories in the industry are required to face. The other factories suffer from the lack of modernisation of machinery which is still imported at a very high price. They are also handicapped due to insufficient and erratic supply of grey cement and due to fluctuations in demand which lead many uneconomic units to close down. Restrictions on credit by banks and unhealthy price competition among manufacturers lead to uncertainty and production of sub-standard products. Cement tiles manufacturers are organised by the Cement Tiles Manufacturers Association, established in 1962. It aims at promotion of co-operation and exchange of technical know-how and also at solving problems faced by the members.

The Asbestos Cement Limited, incorporated in 1934, has a factory at Mulund. It has an installed capacity to produce 50,000 tonnes of asbestos cement products per annum, the sales turnover being Rs. 6.26 crores in 1979-80. The Nitco Tiles Co. manufactures mosaic tiles, its sales being worth Rs. 5.50 crores in 1977-78.(A State-wise Picture of Large Scale Industrial Activity, 1981. f Ibid.)

The Bombay Potteries and Tiles was established in 1933, and has two factories at Kurla and Mazagaon at present. It manufactures d wide range of porcelain ware, ceramics, glazed wall tiles, sanitary ware, special refractories and many other articles.

Though Bombay by her very nature of being a thickly populated city is not a congenial place for cement industry, there is a large-scale unit which manufactures cement. The Digvijay Cement Company, established in 1944 has a plant at Sewri which has an installed capacity to produce 2 lakh tonnes of cement, the actual production in a recent year being 1.36 lakh tonnes. Its sales were computed at Rs. 20.27 crores in 1978-79 and Rs. 17.46 crores in 1979-80.†(*Ibid*) In view of the acute shortage of cement and the multiplying demand from the construction industry, the cement production by the Digvijay Cement Company has assumed tremendous importance.

MANUFACTURE OF FOOD PRODUCTS

Scientific methods of processing and preservation of food products came to be developed only about a hundred years ago. The industry gained momentum mainly after the outbreak of the First World War, when supply of large quantities of bread, vegetables, fruits, meat and canned food had to be arranged, for the armed forces. Further impetus to the industry was provided by the Second World War. The wide assortment of the canned products and their easy transportability have created a fast increasing demand for preserved foods. Thus, an industry which had its beginnings in the scarcity conditions of war, has now assumed a considerable importance. Later, the increase in sophistication in tastes, growing urbanization, higher standard of living and the constraints of city life led to the increase in demand for food products which are more varied, exotic tasting and incorporating sophisticated flavours. Other sociological changes, such as the desire to spend less time in kitchen, the increased value placed on leizure, the hotelling habit and the weakening of family ties created increased demand for food products.

The industry has an important role to play in the national development programme which comprises food supply, economic improvement, and improved nutritional standard of the people. This is mainly a demand-oriented industry, and awaits a very bright future in view of the growing urbanization, industrialization and rising standard of living.

The history of the industry in Bombay can be traced to the first decade of the nineteenth century when one of the best known bakeries was established in Old Hanuman Lane. In 1901 there were about 350 sweetmeat makers in Bombay. But since then, with the large growth of the city and of its cosmopolitan character the number of food product makers, sweetmeat makers, etc. has greatly gone up. According to an inquiry by the Bombay University School of Economics (1960) there were 658 manufacturers of sweetmeats and *farsan* in Bombay, which provided employment to 2,230 persons. Rationing of food articles during the war and post-war periods had a great impact on all the food products as some of them were used as substitutes for cereal products. After derationing, sweetmeats and bread had a volume of demand lower than what it obtained during the rationing period.

In the unorganised sector there are a large number of establishments comprising flour mills, bakeries, production of edible oils, sweetmeat makers, biscuits and confectionery products, fish curing, canning of fruits and vegetables, breakfast food and dairy products. They provide employment to a considerable number of persons and cater to the needs of society and play an important role in the socio-economic life of the city.

But the scope of this narrative needs to be restricted to the food products industry in the factory sector for which reliable data are available.

The food products industry is here conceived to comprise basic food industries and processed food industries registered under the Factories Act which are engaged in flour milling, production of edible oils, biscuits, bakery products, confectionery, vanaspati, meat and fish processing, canning fruits and vegetables, breakfast food, dairy products, infant foods, malts and malt products, etc.

Table No. 1 gives the number of working factories and employment in reporting factories in the category of food industries except beverages from 1923 to 1957. The statistics for the few years with a quinquennial break-up are furnished below to illustrate the growth of this industry in Bombay during the period of 35 years:—

Year 1	No. of working factories	Employment in reporting factories 3	Percentage of employment to total factory employment
1923	16	1021	0.5
1925	29	1489	0.7
1930	29	1957	1.1
1935	33	2192	1.1
1940	90	4410	1.9
1945	99	9115	2.3
1950	184	8033	2.1
1955	233	8798	2.1
1957	275	9997	2.4

These statistics illustrate that there was a hundred per cent growth in the industry in regard to number of factories, employment and percentage employment over the period of 12 years from 1923 to 1935. But the growth of the industry was tremendous from 1935 to 1940 in all respects. Actually the pace of growth was started from 1938, in which year the number of factories increased to 82 and employment to 3822. Throughout the period of war the industry continued to grow, reaching the climax in 1945. This can certainly be attributed to the boom created by the demand on account of the war and the enforcement of rationing of many food articles. The war efforts of the Government demanded considerable supplies of processed foods. The enforcement of rationing increased the demand for food products as substitutes for cereals while shortages of many articles forced the consumers to buy processed foods, There was a decline in the number of factories in 1946. But this was, a short-lived aberration as the factories began to multiply from 1947, and reached the 184 mark in 1950. It is however noteworthy that although the number of factories increased from 1945 to 1950 by about 85 per cent, there was an actual decline in employment as also in the percentage share of this industry in total factory employment. This can be attributed to the post-war stagnation, a higher degree of mechanisation with labour saving devices, and the settlement of displaced persons from Pakistan who entered this industry and started many small scale units. The same trend of growth was visible till 1955. The industry however reached a climax in 1957 with 275 factories employing 9,997 persons who formed 2.4 per cent of total factory employment in Bombay. Thus, over a period of 35 years from 1923 to 1957 the number of factories increased seventeen employment therein rose only nine times. This growth of the industry must be rated as spectacular by any standards. As per Census of 1961 foodstuffs manufacturing industry provided employment to 24,112 persons

The Annual Survey of Industries (1975-77) has grouped together manufacture of sugar, hydrogenated oils, Vanaspati ghee, edible oils and fats, such as mustard oil, groudnut oil, til oil and many other food processing factories though the statistics for all of them are not available separately. In respect of this industry as in the case of others, Greater Bombay ranked the first in Maharashtra State as regards the value added on manufacture by this industry. As per the A.S.I. (1975-77), the value added on manufacture by the food products industry was Rs. 19,94 lakhs per annum which formed 23.59 per cent of the total value for Maharashtra.

The selected characteristics of the industry can be analysed by the following statistics based on the Annual Survey of Industries (1975-77). There were 220 factories manufacturing food products in Bombay of which thirty were engaged in

manufacture of edible oils and fats. The factories in the food products industry provided employment to 19,234 persons of whom 12,801 were workers. The share of edible oil mills in total employment was 2,941. The fixed capital in the industry as a whole was Rs. 17,93.47 lakhs, the working capital being Rs.13,96.52 lakhs. The capital investment of the factories was of the rank of Rs.38,86.77 lakhs, while their outstanding loans stood at Rs. 18,20.05 lakhs. The idemand for the products of this industry is ever increasing with increasing population. But the element of consumer resistance, particularly from the middle class, is quite obvious in the wake of soaring prices.

According to the A.S.I. (1975-77), the factories worked for 61,46,767 man-days per annum; the share of oil-mills in this was 9,20,615. The total emoluments paid to employees amounted to Rs.11,41.59 lakhs while wages paid to workers were only Rs. 6,09.76 lakhs per annum. It means that emoluments to employees belonging to non-working class were quite enormous. A part of it must also be accounted for by bonus and other benefits to employees. The inputs in the food products industry, as per the A.S.I., could be analysed as under:—

(Rs. in lakhs)

Item	Total food products	Oil mills
Fuel consumption	6,57.88	2,51.65
Material consumed	2,41,37.18	88,90.05
Other inputs	35,50.83	26,51.75
Total inputs	2,83,45.89	1,17,93.45

The value of plant and machinery of the food products factories was to the tune of Rs. 23,50.02 lakhs. The output and value added on manufacture by the factories engaged in food products and oils, as per the A.S.I., were as under :—

(Rs. in lakhs)

Item	Total food products	Oil mills
Value of products	2,72,76.12	96,59.35
Value of other output	32,92.61	25,54.04
Total output	3,05,68.73	1,22,13.39
Value added	19,94.11	3,78.32

It is evident from the statistics of inputs and output that the ratio is not high as in the case of many other industries. The share of material consumed in total inputs is quite high in this industry. The proportion of value of products to total output is also quite high as the bye-products of the industry are small in value. Being mainly a processing industry, the ratio of value added on manufacture to total output is considerably small.

The net income of the factories in this industry as a whole was Rs. 16,72.76 lakhs of which the share of oil mills was Rs. 2,30.78 lakhs.

Some of the segments of the food products industry are within the purview of price control measures by Government. These segments include flour mills, large-scale bakeries, infant foods and hydrogenated oils and vanaspati products. It may be useful to furnish some information about some of the segments of the food products industries in the case of which qualitative data are available.

MEAT INDUSTRY

The establishment of the Modern Abattoir by the Bombay Municipal Corporation at Deonar in April 1973 is by far the most important landmark in the history of food industry in Bombay. It is probably the first of its kind and has registered appreciable success in processing wholesome meat, both for local consumption as well as for export. It has satisfied the necessity of providing good quality and hygienic meat to the citizens of Bombay who had to put up with unwholesome meat from unhygienic slaughter houses of the worst type. This modern slaughter house, under vigilance of the Municipal authorities, relieved the citizens of illicit slaughter of animals in residential localities.

Besides production of wholesome meat, bye-products from slaughtered animals are put to gainful utilisation fetching the maximum returns. Enzyme preparations which were formerly imported in bulk, are now available from the processes in the Deonar Abattoir. Some of the bye-products are utilised in manufacture of life saving drugs and as many as a dozen national and international companies are utilising the bye-products with advantage.

CONFECTIONERY

The confectionery industry is of recent origin. The demand for its products has widened and deepened in scope in the post-Independence era. With increased urbanization and rising income confectioneries are highly in demand. The industry found a congenial home in Bombay though its growth in the country is limited. The concentration of this industry in Bombay is mainly due to the demand for its products, particularly from higher strata of society. Though the *per capita* consumption of confectioneries in the country is only 28 grams, the corresponding rate in Bombay is much higher.

The production of confectionery in the organised sector is much smaller than in the small industry or cottage sector. The Parle Biscuit Co., the Britannia Biscuits Co., and the Shangrila Food Products are the largest producers of confectionery in Bombay. Their products consist of biscuits, toffees, chocolates, cocoa butter, food drinks and other cocoa-based products.

The Cadbury India was incorporated in 1948 as a private limited company under the name Cadbury Fry (India) Ltd. It was changed to Cadbury India (Pvt.) Ltd. in 1977 and was converted into a public limited company. It has its factories at Panchapakhadi and also at Induri village in Pune district. Its sale of confectioneries was worth Rs. 22,45.53 lakhs and Rs. 16,65.97 lakhs in 1978 and 1977, respectively. The Shangrila Food Products founded in 1947 in Bombay has a biscuit factory at Bhandup. Its authorised capital is Rs. 50 lakhs, while issued capital is Rs. 20 lakhs. (Kothari's Economic and Industrial Guide, 1976.)

This industry has been going through a difficult period marked with ups and downs since 1968 when excise duty was imposed for the first time. Meanwhile the Government has reserved the confectionery industry for the small sector under its policy of encouraging the latter so as to provide greater employment opportunities. "The capacity utilisation of the units in this industry, set up at heavy investment, has been approximately 48

per cent only. As a result, employment has not increased and the working of the units has been highly uneconomical due to low capacity utilisation."(*Ibid.*)

BAKERIES

There is a very large number of bakeries in Bombay, the first best known bakery being established by a Goanese in the first decade of the last century. The industry received great patronage from the European community and Parsis in Bombay, who by virtue of their food habits were the main consumers of bread. Though no statistical data is available it can broadly be said that the bakery industry was very prosperous during the World War II. The war time spate in demand was attributable to military supplies, paucity of wheat due to rationing of foodgrains and social hazards. The industry had a slight set-back after flight of the Europeans after Independence. But this was off-set within a short time by increasing demand on account of a rapid pace of industrialisation and urbanisation of Bombay. With short-lived aberrations of upheavals due to shortage of supplies of flour and other equipment the industry appears to be developing at a rapid pace.

The etablishment of the Modern Bakeries Ltd. as a registered company by the Government of India on October 1, 1965 was the most important landmark in the history of modern and scientific production of bread. This public sector enterprise was established with an authorised capital of Rs. one crore with the object of setting up a chain of bakeries to develop bakery industry on sound and scientific lines and for improving the dietary standard of people. It has set up many bakery units with automatic equipment for production of fortified and enriched bread in cities like Bombay, Delhi, Calcutta, Hyderabad, Kanpur, Madras, Bangalore, and Cochin. Besides funds from the Government of India, this enterprise received gift aid from Governments of Australia and Canada under the Colombo Plan.

The daily production capacity of the Modern Bakery Plant at Goregaon in Bombay is 60,000 S. L. of 400 grams. The sales of this unit were worth about Rs. 1,40 lakhs in 1979-80. (A State-wise Picture of Large Scale Industrial Activity, 1981,)

The Britannia Industries is another large-scale manufacturer of bakery products in Bombay. It is the main competitor of the Modern Bakeries and matches the latter in almost all respects.

OTHER FOOD PRODUCTS

The Mahila Grihodyoga Lijjat Papad, though of recent origin is a unique manufacturer of papad. This organisation of ladies has earned a name in the food industries in Bombay for supply of papad of good and wholesome quality. The sales of the organisation were to the tune of Rs. 5 crores in 1979-80 which appears to be quite spectacular, particularly in view of the nature of the industry. It provides employment to a large number of women workers.

There is a large number of flour mills, some of them registered under the Factories Act, while a large proportion of them are governed under the Shops and Establishments Act, 1948. Separate statistical data are not available about this most essential food industry.

The Wallace Flour Mills with two factories in Bombay, one at Mazagaon and another at Tardeo is one of the best known flour mills not only in Bombay but also in Western India. It is engaged in processing of wheat into flour, rava, etc. Its production in Bombay amounted to about 79,197 tonnes, while the value of sales was to the tune of Rs. 11.59 crores in 1978-79.(A State-wise Picture of Large Scale Industrial Activity, 1981.)

The fruits and vegetable preservation industry has a good scope both in internal as well as in external markets. There is an ever increasing demand for these products from the areas in Gulf countries where daily consignments are sent by air. There are many kinds of units in food preservation and manufacture of products of corns, chocolates, dairy products such as salted butter, ghee etc. There is an assured demand for all such products. Some of the manufacturers of such products in Bombay are as under: Mahindra Food Products, James Smith & Co., Corn Products Private Ltd., Herbertson Ltd., Dr. Writers Chocolates & Canning Co., Poison Ltd., Britannia Biscuits, Khemka & Co., and Lyka Laboratories.

The equipment for this industry is manufactured mainly by the Larsen & Toubro Ltd. and the Vulcan Laval Ltd. both in Bombay.

VEGETABLE OILS AND VANASPATI

The principal vegetable oils extracted in Bombay are groundnut oil, rape seed oil, mustard oil, sesamum oil, coconut oil and many other non-edible oils. The domestic consumption of all the edible oils has increased tremendously with the rising population and standard of living of the people. The consumption of vegetable oils in industries has also considerably increased since the Second World War. The development of soap, paints and varnishes industries has stimulated the consumption of non-edible oils also. Castor oil consumption as a lubricant has also registered a considerable expansion.

There are a few oil mills at present in Bombay. A bulk quantity of oil is also brought from oil mills elsewhere.

Vanaspati is the Indian counterpart of hydrogenated oil products, like margarine, which are used as alternatives to animal fats. The vanaspati industry is the second largest food processing industry in India.(Kothari's Investor's Encyclopaedia)

The history of this industry in Europe dates back to the nineteenth century when a rapid increase in population in Europe increased the demand for butter. The demand out-stripped production of butter. Vanaspati was first imported in India from Holland, after World War I, due to insufficient supplies and the soaring prices of ghee. In 1938, about 23,000 tonnes of vanaspati was imported. The first vanaspati factory was established in India in 1930 with a small installed capacity. In 1935, two factories produced vanaspati in India. During the Second World War, the demand for vanaspati increased tremendously which gave a fillip to the development of the industry. (*Ibid*)

The Tata Oil Mills, founded in 1917, is one of the oldest oil mills in Bombay. It has a factory at Sewri which manufactures vegetable oils, vanaspati, refined cooking oils, oil-cakes, toilet and washing soaps, toilet articles, industrial perfumes, glycerine, detergents, and allied products. The Sewri Plant comprises an oil mill, oil refinery and hydrogenation plant, solvent extraction unit, a glycerine unit, a washing and toilet soap plant, a bonded laboratory and other units. The company has two other factories, one each at Ernakulam and Calcutta.

The Indian Vegetable Products established in 1929 manufactures vanaspati, margarine, refined oil, industrial hard oils and organic chemicals in its factory at Gholapdeo in Bombay. The Ahmed Oomerbhoy Ltd.,

established in 1930, manufactures all kinds of edible oils, refined oils, vanaspati as well as margarine in its factory at Byculla.

The Bombay Oil Industries Private Ltd., established in 1948, is a manufacturer of vegetable oils, refined oils and fatty acids.

The Hindustan Lever, established in 1956, is another big name in the vanaspati industry, manufacturing soaps, detergents, edible fats, toilet preparations and a wide range of nutrition products. The Vegetable Vitamin Foods Company with a factory at Sion, produces vanaspati, refined oils, other edible oils and groundnut oil for industrial use. The Western India Vegetable Products Ltd. was founded in Bombay in 1945 to manufacture vanaspati, refined oils, edible oils, soaps, wax etc. It commenced its manufacturing activity in 1948

The Godrej and Boyce is another reputed concern manufacturing vanaspati, refined oils, soaps and detergents in Bombay.

The above survey of the industry covers most of the reputed concerns in Bombay, although it is not complete.

BEVERAGES AND TOBACCO PRODUCTS

This group of industry is conceived to comprise the manufacture of beverages, tobacco, cigars, cigarettes, cheroot and cigarette tobacco. As per the Annual Survey of Industries, there were 19 registered factories including 8 units manufacturing cigars, cigarettes, cheroot and cigarette tobacco in 1973-74, in Bombay. Their number declined to 17 including 7 cigarette factories in. 1975-77. The industry provided employment to 4,668 persons in 1973-74 and 4,522 in 1975-77. Of this, employment in the cigarette factories was, 3,557 in 1973-74 and 3,263 in 1975-77. The

position of capital in the total industry group and the cigarette factories was as under:—

(Rs. in lakhs)

Item	Total industry		Cigarette	factories
	1973-74	1975-77	<mark>1973-</mark> 74	1975-77
Fixed capital	5,63.71	6,29.64	3,95.72	4,41.61
Working capital	16,22.89	14,86.99	15,19.33	14,23.85
Capital investment	23,89.13	25,07.50	20,79.83	21,69.80
Outstanding loans	10,62.21	8,69.09	10,45.77	7,25.21

The factories in the total industry worked for 1,342,175 man-days while the cigarette factories for 953,001 man-days per annum in 1975-77 survey period. The total costs incurred were computed as under:—

(Rs. in lakhs)

Item	Total industry		Cigarette factories	
	1973-74	1975-77	1973-74	1975-77
Total emoluments	4,56.57	5,29.99	3,72.33	4,19.93
Fuel consumed	37.82	71.56	21.80	37.20
Material consumed	31,99.98	31,03.64	27,45.89	26,52.01
Other inputs	N.A.	8,56.76	N.A	7,56.66
Total inputs	38,36.49	40,31.95	33,38.32	34,45.87

The value of plant and machinery was of the order of Rs. 7,42.86 lakhs in 1973-74 and Rs. 10,04.31 lakhs in 1975-77 for the total industry. The value of plant and machinery of the cigarette factories was Rs. 6,16.83 lakhs and Rs. 7,96.18 lakhs in the years under study.

The structure of output as per the surveys can be studied by the following figures :—

	Total industry		Cigarette factories		
Item	1973-74	1975-77	1973-74	1975-77	
Value of products	49,50.07	48,67.20	42,73.38	40,89.95	
Value of other output	N.A	3,20.46	N.A	2,80.41	
Total output	49,65.98	51,87.66	42,88.63	43,70.36	
Value added on manufacture	10,52.12	10,64.99	8,88.54	8,54.74	

The factory payments of the beverages and cigarette factories taken together were computed at Rs. 1,31.47 lakhs and of cigarette factories at above Rs. 1,06.77 lakhs, while the net income of the total industry was computed at Rs. 9,33.52 lakhs and of the cigarette factories at Rs. 7,47.97 lakhs in 1975-77 survey.

The above statistical analysis brings home some plausible conclusions. There were no sure signs of decline in the beverages and tobacco industry in Bombay from 1973-74 to 1975-77. In fact the invested capital, emoluments paid, total inputs and total output of the industry showed a rise. The same conclusion holds good for the cigarette factories. The ratio of total output to total inputs shows the high rate of profitability of this industry. The value added on manufacture which is about 25 per cent of the total inputs shows the satisfactory position of the entire industry in Bombay. The proportion of net income to invested capital in the total industry shows the high rate of returns on investment. This rate is still higher in the case of the cigarette factories.

Though beverages were not unknown to Bombay in old days, they acquired an increasing demand from the beginning of this century. The demand has always been on the increase with growing urbanization, industrialisation and rise in money incomes. The Parle Products Pvt. Ltd. with a factory at Vile Parle was incorporated in 1950. It is a leading concern manufacturing aerated waters, of different kinds, biscuits and toffees. Its sales turnover was to the tune of Rs. 1,05 crores in 1978-79. (A State-wise Picture of Large Scale Industrial Activity, 1981)

The Imperial Tobacco Company, a foreign company, is the oldest in Bombay manufacturing cigarettes, cigars and smoking tobacco. Incorporated in 1910 it has a factory at Parel, besides five others in other States of India. The Golden Tobacco Co. was the next to be established in Bombay in 1930. It has a factory at Vile Parle, besides another at Baroda. It is by far the biggest manufacturer of cigarettes, pipe tobaccos and cigars, in Bombay. Its total sales turnover was Rs. 66.79 crores in 1978-79 and Rs. 76.09 crores in 1979-80. (*Ibid.*) The Gamadia Factories Ltd., established in 1931 has a cigarette manufacturing unit at Mahalaxmi under the firm name of Masters Tobacco Co. (India). The Godfrey Phillips India is another large-scale manufacturier of cigarettes, cigars, and pipe tobaccos with a factory at Chakala (Andheri East). This foreign concern was incorporated in 1936 and has a subsidiary concern at Gaziabad in Uttar Pradesh. The turnover of its sales amounted to Rs. 70.04 crores in 1979-80.

LEATHER AND LEATHER PRODUCTS INDUSTRY

It is one of the oldest cottage industries of Bombay which flourished mainly because of the natural advantage offered by large cattle population in the hinterland. As mentioned earlier the first leather tannery and factory worked by machinery was established in Bombay in 1887 by Sir Adamji Peerbhoy at Dharavi. The leather industry provided employment to 5,500 workers in 1901. The growth of the industry was accelerated under the impetus of the two World Wars. Though there are many factories working with varying degrees of mechanisation, the bulk of the footwear, especially the indigenous varieties, is produced with handicraft'techniques by craftsmen financed by other businessmen.

As per the 1961 Census the leather and leather products industry in Greater Bombay provided employment to 12,945 persons. This might be inclusive of factory employment as also persons in the household industry. In the nature of things the employment in the household leather products industry is higher than that in factories.

In Bombay, there are 48 registered factories engaged in the manufacture of leather and leather products which provide employment to 3,327 persons, of which 2,807 are workers. The growing mechanisation in the industry which requires less labour has limited the scope for employment. Besides, the scope for development of the industry in Bombay is extremely limited due to paucity of space, pollution aspect of the industry and restrictions by municipal authorities. Goats and sheep skins and cattle hides are obtained from the Deonar slaughter house as also from parts of Maharashtra and Gujarat to Bombay. Finished and semi-finished leather is obtained by processing hides and skins. The oldest known tanning process in India called, 'East India Tanning' has been in vogue for the past two centuries. About 15 to 20 years ago the wet-blue chrome process was introduced. In this process bichromate and other chemicals are used to produce semi-tanned leather. The semi-finished leather is processed exquisitely so as to manufacture footwear, wallet, leather garments, handbags, and fur products.

Bombay is the main centre for industrial leather. The share of Bombay in the exports of finished leather and quality products to the East European Countries, North America, Japan, Sweden, Yugoslavia, the U.K. and many Pacific countries is quite large.(India exports around 8 per cent of the world exports of finished leather and goods. The country has immense potentialities for increasing exports, particularly to East Germany and Romania.)

The Carona Sahu & Co. established in 1953 is one of the largest manufacturers of leather-wear not only in Bombay but

The Carona Sahu & Co. established in 1953 is one of the largest manufacturers of leather-wear not only in Bombay but also in India. It has a modern factory at Jogeshwari which manufactures leather, rubber and canvas shoes, and a wide range of P.V.C. footwear. Its authorised and subscribed capital are Rs. 50 lakhs and Rs. 48 lakhs, respectively. The analysis of its working is given below:—

	1979	1978*
	(Rs.in lakhs)	
Total Current Assets	774.05	675.27
Total Assets	845.06	742.72
Total Current Liabilities	460.60	395.03
Total Liabilities and Net Worth	445.06	742.72
Sales	17,36.57	14,64.18

*(Kothari's Economic and Industrial Guide, 1980-81.)

The Bhor Industries (1943), with factories on Veer Savarkar Road and at Borivli though not a leather manufacturing unit as such, is a well-known enterprise manufacturing foam leather, furnishing foam cloth, flooring and sheeting. It exports these goods to Western countries and South East Asia.

As per the Annual Survey of Industries (1975-77), the 48 factories in Bombay provided employment to 3,327 persons of whom 2,807 were workers. The fixed capital of these factories was Rs.1,10,22,000, while the working capital amounted to Rs.1,51,61,000. The capital investment in these concerns was of the order of Rs.5,43,42,000. Their outstanding loans were as high as Rs.3,38,65,000. The factories worked for 9,56,491 man-days per annum during the survey period. The leather industry in Bombay paid Rs.1,30,52,000 by way of wages to workers, while the emoluments to all employees in the industry amounted to Rs.1,83,23,000.

The leather and leather products factories consumed raw material worth Rs.8,63,50,000, the value of fuel consumption being Rs.23,23,000. The total value of inputs in the factories was Rs.13,07,01,000. The estimated value of plant and machinery of the factories was Rs.1,43,50,000.

The value of total output of the industry in Bombay was as high as Rs.16,18,81,000 which comprised the value of products, Rs.12,46,24,000 and the value of other output, Rs.3,72,57,000 per year. After allowing a depreciation of Rs.14,51,000, the net value added on manufacture of the industry was Rs.2,97,30,000 per annum. The net annual income of the factories was of the order of Rs.2,48,21,000.

The above statistics lead us to some interesting conclusions. The leather, and leather products industry is less capital intensive but more labour intensive. The proportion of fixed capital to capital investment is quite modest. It is also noteworthy that though this is a labour intensive industry, its employment potential appears to be very modest. This might be because of the fact that more and more jobs in the factories are now performed by mechanised processes which require less labour. The share of wages and emoluments in total inputs of the factories is quite low. The fuel requirements of the industry are not very high. The proportions of value added on manufacture and net income of the factories to the value of total output are very high. This brings home the fact that the industry pays handsome returns on capital.

The demand for the footwear is not markedly elastic. P. V. C. footwear are however replacing leather footwear on an increasing scale. P. V. C. footwear are cheaper than pure leather goods. The use of what is known as industrial leather has come increasingly in vogue during the last about 15 years. There appears to be a tendency towards standardisation of products, though there are obvious limitations in this respect. Shoe-making industry affords a large scope for use of mechanical devices in large-scale sector than *chappal* making. The scope of mechanical techniques in *chappal* making is far more limited in view of the very small amount of leather required, and the very wide variety of straps that form the upper part of the product. "In fact that is why perhaps no powerful competition in producing *chappals* on a large scale, as in shoes, has so far arisen and the handicratt technique occupies a virtual monopoly in this field. It is however possible to use some of the improved techniques used in shoe manufacture in preparing the sole."

" The large-scale producers are by far the deadliest competitors of the small shoe manufacturer. If the scope of standardisation in the shoe branch of footwear is comparatively limited as compared to other industries, it is a more limited in *chappal*. The conditions here do not favour only large-scale production."(*Prof, Lakdawala and Prof, Sandesara, op. cit.*)

WOOD PRODUCTS, FURNITURE AND FIXTURE

Furniture manufacturing is a very old industry of Bombay. With the establishment of rule of the British and the settlement of Europeans there was an increasing demand for wood furniture. Besides Europeans, the Parsis and the elite among Gujaratis, Muslims and Hindus were the customers of wood furniture. During those days, however, it was not an organised industry; a few proprietors used to employ some carpenters for making various articles. The wood wac procured from Central Provinces, Malabar coast as well as Burma. The Burma teak as also the Malabar teak were chosen by the connoissure. These varieties are however not available at present as imports from Burma are banned, and the Malabar teak has almost been extinct. The good quality furniture of the present day is made of what is known as C. P. teak and that brought from the Nasik forests.

Furniture of old days was of a heavier type with a lot of decorative designs. The shift, at present, has been towards dainty furniture, with less of teak contents and more of inferior wood covered with veneer and formica lamination. The

emphasis now is on upholstery and furnishing cloth.

The Kamdar Private Limited, incorporated in 1934, has a big furniture factory at Chinchpokli. It enjoys a reputation for quality of the products. The N. R. Jasani Ltd. manufactures wooden and upholstered furniture as well as office and household furniture in its factory at Jogeshwari (West). There are many other factories, many of them small-scale or cottage units.

As per the Annual Survey of Industries there were 95 registered factories employing 3,441 persons in 1973-74 and 108 factories employing 2,909 persons in 1975-77. The position of capital of the factories was as under :—

(Rs. in lakhs)

Item		1973-74	1975-77	
Fixed capital	 	 3,71.43	1,31.92	
Working capital	 	 2,04.39	2,67.23	
Capital invested	 	 6,76.64	4,15.43	
Outstanding loans	 	 3.80.14	2.66.02	

There appears to be a decline in the capital of the factories in Bombay in spite of the rise in their number. They worked for 822,182 man-days per annum in 1975-77.

The cost structure of the Bombay factories was as under. The figures reveal annual averages in the survey periods : -

(Rs. in lakhs)

Item	1973-74	1975-77	
Total emoluments	1,29.59	1,96.44	
Fuel consumption	28.57	22.65	
Material consumed	39.91	5,60.45	
Other inputs	N.A.	1,14.91	
Total inputs	4,89.11	6,98.01	
The value of output is detailed below:—	(Rs. in lakhs)		
Item	1973-74	1975-77	
Value of products	6,89.34	8,90.75	
Value of other output	N.A.	85.15	
Total output	7,13.64	9,75.90	
Depreciation	20.78	13.29	
Value added on manufacture	2,03.74	2,64.60	

The net income of the factories in Bombay was Rs. 2,23.93 lakhs per annum during 1975-77.

The above statistics lead us to some conclusions about the industry in Bombay. The ratio of output to total inputs shows the profitability in the industry. The value added on manufacture was almost 35 per cent of the total inputs. This also shows the profitability in the industry. The value added on manufacture was about 65 per cent of the invested capital. It is suggestive of the high returns on capital in the wood products and furniture industry.

Besides furniture making in the city, a huge quantity of articles are brought for sale from Ulhasnagar and adjoining areas. The Ulhasnagar products are cheaper than those made in Bombay although they are generally inferior in quality. The wooden furniture industry faces competition from articles of steel, particularly of the folding variety. Though local carpenters are the largest in number, the Punjabi carpenters have lately entered the Bombay furniture industry.

PAPER AND PAPER BOARD INDUSTRY

The paper and paper board industry is a consumer goods industry. Though the production and use of paper was not unknown in India even prior to the advent of the machine made paper, the history of the industry in India is traceable to the year 1870, when the first modern paper mill was established on the banks of the Hooghly in Calcutta. By 1900 there were eight paper mills in the country producing over 20 thousand tons of paper per annum. The manufacture of paper increased from 20 thousand tons in 1900 to 84,100 tons in 1940 and to 11,583 tons in 1950.(N. S. R. Shastri,"A Statistical Study of India's Industrial Development "(Article).) Indian paper was confronted with foreign competition till the First World War. However the Swadeshi Movement gave a fillip to the industry along with many indigenous industries. The condition of the industry improved during the war as the supplies of paper were curtailed due to the war. The cessation of the war initiated a slump in the industry, which was mainly on account of foreign competition. On the recommendations of the Tariff Board the Government of India granted protection to certain classes of paper in 1925. This acted as a stimulus and the industry picked up the pace of growth. Except for a short-lived aberration in 1930 the industry registered a rising trend in the subsequent period. The protection was extended from time to time, which

showered benefits on the industry. The Second World War provided a further impetus to the industry as the supplies of foreign paper were curtailed.

There are four paper mills in Bombay city and suburbs. The varieties of paper manufactured by the mills in Bombay include all kinds of writing and printing paper except newsprint, and straw boards and other boards. Excellent facilities of a port, availability of water and existence of well established markets, banks and commercial houses, technocrats and skilled labour have contributed to the establishment of this industry, though the main raw materials are not locally available. The Bombay paper industry enjoys the advantages of ready availability of chemicals and dye-stuffs locally.

The history of paper industry in Bombay is traceable to 1862 when the Girgaum Paper Mill was established. It was also the oldest paper mill in India. Its production was of the order of 250 tons in 1908.(*Gazetteer of BombayCity and Island,* Vol. I, 1909, p. 502,) The subsequent history or fate of the factory is however not known.

The paper products, and printing and publishing industry of Bombay is composed of 646 factories which provided employment to about 26,166 persons. The value of output of the factories is about Rs. 1,15,11.60 lakhs, the value added on manufacture being Rs. 30,28.58 lakhs. This industry is conceived to cover manufacture of paper and paper boards; containers and boxes of paper; printing and publishing of newspapers, periodicals, books, journals, maps, preparation of envelopes, picture post-cards, embossing and allied activities. Of the 646 factories, about 13 are engaged in printing and publishing of newspapers, and 87 in printing and publishing of periodicals, books, journals, maps, etc. The detailed statistics of the industry in Bombay, as per the Annual Survey of Industries in 1973-74 and 1975-77 are given below. The figures reveal annual averages.



Maharashtra State Gazetteers

TABLE No. 15 PAPER AND PAPER PRODUCTS, AND PRINTING, PUBLISHING AND ALLIED INDUSTRIES

(Rs. in lakhs)

Item	1973-74	1975-77
No. of estimated factories	588	646
2. Fixed capital	24,64.43	27,66.14
3. Working capital	16,22.89	19,77.61
4. Capital investment	44,05.48	46,09.33
5. Outstanding loans	27,33.47	29,38.49
6. Man-days worked	N. A.	77,90,154
7. All workers	24,640	19,654
8. All employees	32,198	26,166
9. Wages to workers	9,75.87	10,20.48
10. Total emoluments	15,35.98	16,99.19
11. Fuel consumed	1,21.28	2,12.70
12. Material consumed	57,85.24	66,42.45
13. Other inputs	N.A.	13,34.63
14. Total inputs	66,66.88	81,89.78
15. Plant and machinery	43,94.11	36,94.33
16. Value of products	80,22.04	92,81.39
17. Value of other output	N.A.	23,30.21
18. Total output	96,63.70	1,15,11.60
19. Depreciation	2,23.33	2,93.24
20. Value added on manufacture	27,73.48	30,28.58
21. Factory payments	N.A.	6,17.43
22. Net income		24,11.14

PRINTING PRESSES

The first Printing Press appears to have been established in Bombay in 1674 in consequence of a letter despatched by the Deputy Governor and Council of Bombay to the Court of Directors in 1670. There upon the Court of Directors established a press in 1674 with an iitiported printing press, type and paper, and a printer sent from England. (Bombay Gazette, 1st July 1906, India Office Records.) From that date upto 1778 no information is available regarding printing presses in Bombay. In 1778 a Parsi appears to have performed English printing. The following 20 years witnessed the introduction of journalism and the establishment of regular printing presses, For example, the Bombay Gazette press founded by Douglas Nicholson and the Bombay Courier press which commenced work in 1790.

There was a tremendous difficulty in getting skilled and educated compositors. At the close of the 18th century presses and newspapers were subjected to various restrictions, one of them being that no article could be published without prior permission of the Chief Secretary to Government. But several of these disabilities were removed during the Governorship of Mountstuart Elphinstone, and by 1835 the presses had become practically free from official interference.

As regards native printing presses the earliest appears to have been the *Bombay Samachar* press, opened in 1812, which published the first edition of the *Bombay Samachar* in 1822.(*Gujarati type was moulded in Bombay for the first time in 1797 by a Parsi printer working in Bombay Courier Press.*) About 1830 Government opened a press for their own official publications which was afterwards handed over to the Byculla Education Society, in 1848, which had a monopoly for Government printing work.

By 1867 Bombay contained about 25 printing presses, the chief among which were the presses owned by the *Times of India, Bombay Gazette,* Byculla Education Society, Ganpat Krishnaji, Imperial, Oriental, *Indu Prakashy Jam-e-Jamshed, Akbar-i-Soudagar* and *Darpan.* By 1878, the number of presses had increased to 53, including the Government Central Press which was established in 1872. Of these, 48 were under Indian proprietorship. Of the latter, 29 issued newspapers and periodicals and the remainder performed job of printing of various kinds. In 1909 there were 120 printing presses in the city.

During the course of this century, printing presses have multiplied in number, and have equipped themselves with modern machinery. There is considerable improvement in the mode of printing, and diversification in the range of printing from stationery items to the most sophisticated lithographic printing and art printig. The newspapers in Bombay have mammoth printing presses. For example, the presses of the Times of India Group of newspapers, the Indian Express Group, the Prees Journal Group, the Bombay Samachar, the Mumbai Sakal, the Blitz and many others in the field have mammoth machinery. They employ a considerable number of skilled workers and trained supervisory personnel.

The Government Central Press, now located on the Marine Drive, is one of the biggest printing organisations in Bombay. Originally established for the printing of Government orders and secret documents, the Press now prints all Government reports, notifications, Acts and rules, the weekly Government Gazette, Budget publications, many Government periodicals, publicity literatures, folders and posters, etc., State lottery tickets, prestigious volumes for Education Department, Maharashtra State Board for Literature and Culture. The Government Central Press, Bombay, is now one of the prestigious institutions of the Government of Maharashtra which caters to the needs of various Government Departments of the State. The Printing Press is equipped with modern Letterpress and Offset machines with sophisticated equipments such as photocomposition machines, photopolymer plate-making unit. There are 1,935 employees working in the Press. This Press has bagged several National Awards for Excellence in Printing in competition with the private presses. The Joint Management Council and various Shop Floor Councils are actively functioning in the organisation.

The Bennett Coleman and Company, established in 1838, has a huge press in its building near the Victoria Terminus Railway Station. It is engaged in printing and publishing of newspapers and periodicals including a year book. It publishes the following publications and periodicals from Bombay: The Times of India, the Maharashtra Times, the Navbharat Times, the Economic Times, the Evening News of India, the Illustrated Weekly of India, Dharmayug, Femina, Filmfare, Madhuri, Dinaman, Youth Times, Parag, Sarika, Science Today, Indrajal Comics and Times of India Directory and Year Book.

The Indian Express Newspapers (Bombay) Limited was established in 1936 and has a huge press in its own building at Nariman Point. It prints and publishes a chain of newspapers and periodicals mentioned below: The Indian Express, the Lokasatta, the Financial Express, the Sunday Standard and the Screen. The Free Press Journal, the Navashakti, the Free Press Bulletin and Janmabhoomi are published by the Free Press Group in Bombay. It has also a big press which was damaged in a recent fire. The Mumbai Samachar, one of the oldest vernacular newspapers, enjoys a wide patronage among Gujarati readers, and is equipped with a big press. The Blitz which is published in English as well as in many vernacular languages also enjoys a large readership. The company has started a daily under the name the Daily.

There are several other printing presses in Bombay which undertake printing of books, magazines, maps, art printing work, etc. Many of them have earned a name as eminent publishing companies.

It may be useful to mention a few of the companies engaged in the paper, paper board and packaging materials industry in Bombay. The Vakil and Sons Private Limited, established in 1928, is one of the large letterpress, offset and silk-screen printers in Bombay. It has two plants in Bombay which are equipped for composing, processing and plate-making, printing, hot-stamping and embossing. It prints publicity literature, art books, art magazines, books, art calendars, etc. The I.T.C. Limited, established in 1910, has a unit at Parel (5 units outside the State) which is engaged in printing and packaging material. Sai Giridhara Supply Co., established in 1966, has a factory at Wadala which manufactures telex paper rolls, adding and calculating machine rolls and teleprinter reperforator tapes.

Avadhoot Industries (1964) has a factory at Andheri which manufactures paper packaging material and light to heavy duty containers. The Colour Cartons Limited (1948) manufactures at its factory at Bhandup a range of paper based and laminated industrial packaging materials, e.g. cartons, boxes, labels, wrappers, catch covers with multi-colour printing by offset and letter press processes.

The Pai Paper and Allied Industries (1957), with two units in Bombay e.g., at Worli and Dhuruwadi, manufactures reperforator parchment tapes for auto telex, computers and data processing machines, teleprinter tapes, telex rolls, paper rolls for industrial and electronic equipment, flexible packaging materials, and consumer products like paper napkins, toilet paper rolls, etc. The Paper Corrugation and Packaging Limited (1969) has a factory at Kandivli which manufactures corrugated boxes, rolls, sheets, heavy-duty shipping containers and other packaging requisites. The R.M.D.C. Preps Private Limited (1957) with a factory at Worli manufactures packaging materials, printed cheques for three nationalised banks, and undertakes printing of magazines, books, etc.(Bombay Chamber of Commerce Directory, 1976.)

The Kores (India), a foreign concern, has plants at Worli and Thane wherein are manufactured carbon papers, duplicating stencils and inks, ribbons and many other stationery articles. The Coates India, another foreign company, incorporated in 1947, owns a factory at Chandivli in Bombay which manufactures printing inks, synthetic resins and stationery articles.

The above survey of some units is by no means complete in the absence of availability of information.

WATCHES AND CLOCKS MANUFACTURING

The clock manufacturing industry in India originated in 1926 during which year the first tower clock was made in India by Dr. H. Parameshwaran (*Wealth of India, Industrial Products, Part II.*) Such clocks have since been set up in public buildings, particularly in South India. Commercial production of clocks in India was however taken up in 1932 by the Indian Clock Manufacturing Co. at Tatanagar.Later a factory in Bombay city and another in Bhavnagar commenced production of non-striking, 8-day winding, round or rectangular shaped clocks.(*Handbook of Commercial Information, 1963.*)

Another firm in Bombay, the Favre Leuba Limited, was granted a licence in June 1956 to produce watches in

collaboration with a French concern. The annual capacity of this unit at the end of the 5th year of its commencement of production (1961) was 3,10,000 watches. The third unit in Bombay was sanctioned in 1960 with an annual production capacity of 3,00,000 watches in collaboration with a West German firm. The fourth firm manufacturing watches in Bombay was granted production licence in the first year of the Third Plan (1962-63). The annual installed capacity of this firm was 3,00,000 watches.(Ibid.)

Bombay has thus provided a congenial home to the watch making industry. Prior to the development of the indigenous industry watches were imported from Switzerland, Great Britain, West Germany and Japan, while clocks were imported from West Germany, Great Britain, France, Italy and Japan. (Ibid.)

The raw materials for this delicate industry constitute brass rods, brass strips, stainless steel, special steel strips and rods. Some of the components are made from leaded brass or special leaded nickel. Main spring is made from straight carbon steel and silico manganese steel, and hair springs of phosphor bronze. Special steels and brass for watches and clocks have to be imported. Upto 1961-62, almost all the parts of watches were imported, after which the imported constituents were gradually reduced.

The HES Limited with a factory at Jogeshwari was established in 1946 for the manufacture of alarm time-pieces and level clocks. It has technical collaboration with a foreign firm of Czechoslovakia. The Favre Leuba & Co. is an old dealer in watches and alarm time-pieces established in Bombay about 1850. It has now started manufacturing activity as well.

RARE EARTHS

Rare earths comprise a group of precious elements with a wide variety of uses in industry and science. The Thorium Plant at Trombay produces thorium nitrate, thorium oxide, thorium hydrocarbonate and many other elements which are useful not only in industry but also as fuel for atomic reactors. It is therefore felt necessary to give a brief account of this industry and scientific programme which has also an interesting history.

INIDAN RARE EARTHS LIMITED

In the early part of this century large bundles of coir and coconut fibre used to be shipped to Europe from the Western Coastal regions of India. The presence of fine particles of a shining yellowish-brown sand in the bundles aroused the curiosity of scientists, eminent among whom was Mr. Schemberg, a German Chemist. They identified in 1909 that these beach sands contained monazite. The Geological Survey of India which took up the investigation later, established the presence of extensive deposits of monazite in parts of Kerala and Tamil Nadu coastal areas. Geologically, monazite is a constituent of the old crystalline rocks of the Archaean or pre-Cambrian Age (several hundred million years old) in parts of the Nilgiri and adjoining hills of the Western Ghats. With the passage of time, these rocks got disintegrated and the sands were carried to the Arabian sea through water streams. Owing to the peculiar disposition of the underwater sea currents and sand bars existing in the coastal areas, heavier particles of mineral sands like monazite and ilmenite got deposited on the beaches or in shallow waters through a natural process of separation. These deposits are valuable sources of rare earths, a group of elements with a wide variety of uses in industry and science.

During the early period following the discovery, monazite was freely exported. In 1948, when the Government of India set up the Atomic Energy Commission under the Chairmanship of the late Dr. Homi Bhabha, one of the first steps taken by the Commission was to stop the export of monazite and constituted a committee to investigate the possibility of setting up a facility to process the mineral for the production of rare earths on a commercial scale. In August 1950, Indian Rare Earths Limited (IRE) was registered at Bombay as a private limited company jointly owned by Government of India and the then Government of Travancore Cochin State. Later, the State Government's shares were handed over to the Government of India, and the IRE became a full-fledged Central Government Undertaking under the Department of Atomic Energy. The company took up the construction of the Rare Earths Plant in April 1951 at Alwaye in collaboration with a French firm, Societe des Produits Chimiques des Terres Rares (now Rhone Poulene) which provided the necessary process details and technical assistance. The plant was commissioned in the following years. Besides the rare earths plant, in the late fifties and early sixties, when the Atomic Energy Establishment, Trombay (now Bhabha Atomic Research Centre) was in the early stages of development, the company played an important part in the construction of some of the facilities at Trombay.

The IRE employs about 2000 persons at its factories and offices. Another 3000 people work for the contractors in seasonal operations like sand collection, sand transportation, cargo loading, etc. The Rare Earths Division of the company manages the Rare Earth Plant at Alwaye. Monazite, a phosphate of rare earths and thorium, after it is separated from the other minerals at the sand separation units of the Mineral Division, is sent to this plant, where it is chemically treated and processed to produce a wide range of industrial chemicals. The products are rare earth chloride, rare earths fluoride, rare earths oxide, trisodium phosphate, thorium hydroxide and certain pure compounds of individual rare earths like cerium lanthanum, etc. Except for thorium hydroxide which is sent to the Thorium Plant at Trombay, the other products are marketed by the Rare Earths Division.

THORIUM PLANT

The Thorium Plant was one of the first few facilities built by the IRE for the Department of Atomic Energy at Trombay. The company is operating the plant on behalf of Government since 1955.

The crude hydroxide concentrate produced at the Rare Earths Factory at Alwaye is the feed material for this plant. The end products are thorium nitrate and thorium oxide, besides a few other compounds of thorium and rare earths fluoride.

Thorium products have industrial, applications in the gas mantle industry, refractories, polishing compounds, in the manufacture of heat resistant alloys and so on, but the importance of thorium lies in its potential as a fuel for the future breeder reactors.

With the present annual output of about 160 tonnes of thorium nitrate and a few other products of thorium, the company not only meets the entire industrial demands in the country but also exports to countries, such as U.S.A., U.K., Iran, U.A.R., Japan, Turkey, Sri Lanka, Bangla Desh, Pakistan, West Germany and Spain. The main products of the Thorium Plant at Bombay are Thorium Nitrate, Thorium Oxide, and Thorium Hydrocarbonate.

ELECTRICITY GENERATION AND DISTRIBUTION

Electricity played a vital role in the development and modernisation of Bombay to its status as one of the few large cities in the world. Its importance in the development of modern industry in this industrial Metropolis cannot be exaggerated. The history of electricity in Bombay began with the establishment of the Tata Hydro-Electric Power Supply Company in 1910 which started generation, transmission and distribution of electrical energy from its hydro-electric power station at Khopoli. The geographic location of Bombay near hydro-electricity sources lent it an advantage of great magnitude. It is also stated that the Tatas, with a business vision, established the Khopoli station with their eye on the prospective

demand from Bombay.

Though the year of introduction of electricity in Bombay is not known, electric lighting appears to have been introduced in the cotton mills in Bombay for the first time in 1893. The Finlay Mill, established in Bombay in 1907, was the first completely electrically driven cotton mill in India. With a few exceptions, Bombay millowners were not inclined to encourage the Tata scheme for hydro-electricity, but preferred to wait and watch the practical results of the electric drive in the local mills. The painstaking efforts of Sir Dorabji Tata bore fruit in the form of the Khopoli project and power was switched on for the Bombay cotton mills on February 8, 1915 by Lord Willingdon, the Governor.

The Khopoli power house was fitted with Turbo-generators and electrical plants of the Western type that had been in successful operation in large hydro-electric power stations in Europe and the United States. Electricity was then generated at a pressure of 5,000 volts and was raised by transformers to 10,000 volts at which pressure the current was conducted to Bombay by high tension transmission wires. The length from generation to receiving station in Bombay is 43 miles. The receiving station in Bombay was located at Parel. (S. M. Rutnagur, op. cit.)

The scheme was found to be so encouraging that the Tatas undertook another hydro-electricity scheme at Andhra Valley, about 12 miles to the north of Lonavala. This scheme was taken up by incorporation of the Andhra Valley Power Supply Company in 1916. It embraced the generation of 60,000 KVA by water power with transmission over 56 miles at 100,000 volts and distribution in bulk to the consumers in Bombay. (Ibid.)

In the nature of things there was an ever increasing demand for power in Bombay. This encouraged the Tatas to establish the third hydro-electric power company in 1919, namely, the Tata Power Company with a generation station at Bhira near Bombay. The generation of hydro-electricity in the vicinity of the city was a great boon for it. The pioneering efforts of the Tatas in this field were unmatched in those days in India.

Even with the expansion of the generation capacity of the above power stations, the demand in Bombay was insatiable. It was therefore imperative on the part of the Government to search and strive for additional sources for power. Accordingly the Koyana Hydro-Electricity Project was incorporated. It was followed by a number of other power generation projects, such as, the Tarapur nuclear power project, and thermal power stations at Nashik, Bhusawal, Parli Vaijnath, Koradi, etc.

At present electricity generation and transmission is being done in Bombay by the Tata Hydro-Electric Power Supply Company. This company has generation station at Trombay, besides another at Khopoli. It has its receiving stations at Bombay and surrounding areas. The Tata Power Company also has a generating station at Trombay, besides the one at Bhira. The Andhra Valley Power Supply Company has also a generation station at Trombay and another at Bhivpuri. It has also receiving stations in Bombay and the surrounding areas.

The electricity requirements of Greater Bombay are met by the Tata Hydro-Electric system through three distribution agencies, namely the BEST in the island of Bombay, the Bombay Suburban Electric Supply Company covering areas of the western suburbs and southern parts of eastern suburbs and the Thana Electric Supply Company covering the northern areas of the eastern suburbs (See page 309). In addition to this, direct supplies are also made from the Tata Hydro-Electric system to consumers with huge load demand like the railways, textile mills and a few other industries. The supply of power from Tata Hydro-Electric system is met not only from out of their own generation at Khopoli, Andhra Valley, Bhira and Trombay but also from purchases from the Maharashtra State Electricity Board.

In 1970-71 total sales from the Tata system were placed at 5,251 million KWH of which 2,594 million KWH were sold to textiles and other industries. Railways accounted for 322 million KWH while the rest was sold to licencees. The Tata Hydro-Electric system serves an area of about 1,000 sq. miles which extends over the Bombay-Pune region. The actual sales out of this system to Greater Bombay are, however, not precisely known.

Generation of power by the Tata system was estimated at 3,065 million KWH during 1970-71, of which 1,764 million KWH was thermal power.

BOMBAY ELECTRIC SUPPLY AND TRANSPORT UNDERTAKING

The BEST was granted licence for the generation and distribution of electric power in the city of Bombay on 7th June 1905. No sooner the licence was granted than the company established a generating station at Wadi Bunder and commenced electricity supply to the city of Bombay on 11th September 1905. The advent of electricity brought about a great change in the civic life of the city. The company made rapid progress during the first six years. In 1910 it decided to close down the Wadi Bunder Generating Station and build a new one at Kussara Basin Road for which the company took land on lease of 50 years (1st June 1911) from the Bombay Port Trust, where a Steam Station was erected. The commencement of electricity generation by the BEST was followed by the establishment of hydro-electric power generation by the Tatas who were in a position to supply cheap power to the city. The B.E.S. & T. Co., therefore, started purchasing a portion of their requirements of power from Tatas in 1916. On the 11th January 1925, the Steam Generating Station at Kussara Basin was completely closed down as its operation was found uneconomical. The large steel frame structures now occupied by the Distribution Stores are the remnants of the old power house. In 1927, a receiving station was constructed by the side of it to receive the entire power requirements of the B.E.S. & T. Co. Ltd. The company was completely municipalised on 7th August 1947 and now it forms a part and parcel of the Bombay Municipal Corporation.

While reviewing the bulk supply agreement with Messrs. Tatas, it was decided to purchase electrical energy in bulk from Messrs. Tatas at 22,000 volts at their two existing receiving stations at Parel and Dharavi and at the new receiving station at Carnac Bunder, commissioned in 1956. It was also considered desirable that the B.E.S. & T. would lay their own 22,000 volts cables from the main transforming stations of the Tatas to the 22 kV receiving stations of the BEST located at various load centres. This agreement was finalised in 1956.

The following statement gives the statistics of receiving stations, units purchased, units sold etc. by the undertaking during 1947-48 and 1979-80:—

(Rs. in lakhs)

Particulars	1947-48	1979- 80
No. of transforming sub-stations	247	1,144
Total capacity of distribution from transformers (in MVA)	99.2	7,15.6
Units purchased from Tatas (in millions)	222.4	1,468.0
Units sold (in millions)	197.8	1,332.5
No. of conmsumers (in thousands)	108.2	553.8

BOMBAY SUBURBAN ELECTRIC SUPPLY LTD.

The Bombay Suburban Electric Supply Limited, established in 1929, are licensees under the Indian Electricity Act, 1910, for the supply and distribution of electricity in the area from Bandra to Bhayander on the Western Railway, and Chembur, Trombay, Kurla, Ghatkopar and Vikh-roli in the eastern suburbs. It covers an area of 368 square kilometres, and serves over four lakh consumers including a large number of factories. This company purchases bulk power from the inter-connected system of Tata Hydro-cum-Thermal Generating Stations. (*Bombay Chamber of Commerce Directory*, 1976.) Table No. 16 gives information regarding power purchased, sold and revenue earned by the company from 1941 to 1972.

TABLE No. 16

Electricity purchased AND SOLD and Revenue EARNED BY Bombay Suburban Electric Supply Company

	K.W.H. sold to public for							
Year	K.W.H. purchased	Domestic consumption	Combined consumption	Commercial light and power	Industrial power	Public lighting	Total	Revenue earned (Rs.)
1	2	3	4	5	6	7	8	9
1941	6,143,630		2,367,834*		2,391,565	478,514	5,237,913	7,75,616
1946	14,610,613	o o b t	5,384,080*	1404	6,810,936	446,890	12,641,906	16,64,022
1951	35,961,760	asm	14,965,171*	olali	15,159,393	674,615	30,799,179	35,15,086
1956	70,146,253		25,615,447*		33,231,434	1,624,030	60,470,911	71,33,100
1961	160,007,443	35,809,731		22,603,999	81,291,820	3,040,568	144,823,892	1,44,26,591
1966	367,673,531	83,798,388		34,231,340	2,17,007,313	4,036,072	341,843,924	3,51,86,599
1971	691,360,243	162,030,875		56,651,893	392,203,514	12,256,277	627,929,744	8,44,84,196
1972	799,792,524	187,288,837		62,788,152	464,303,978	12,909,506	732,272,199	9,60,25,781

^{*} Combined consumption is indicated as commercial tariff was not existing. Source.—Information furnished by the Company.

In 1972, the mileage of Power line of the company was 789 km. H.T. and 892 km. L.T. Its installed capacity was 179,000 kVA (Transformer capacity of 22 kV receiving station) and utilised capacity was 157,600 kVA. The fixed capital of the company was Rs. 17,32,36,060 including building, equipment, machinery etc., while the working capital was worth Rs. 95,31,615. The power supplied by the company for industrial consumption was 464,303,978 units and for household consumption 187,288,837 units. It provided employment to 1,604 persons and paid them Rs. 97,90,297 as wages.

THANA ELECTRIC SUPPLY COMPANY

The Thana Electric Supply Company, which was established in 1927 is engaged in the distribution and supply of electricity in the franchised area covering Powai, Bhandup and Mulund in Bombay, and Thane town and adjoining area in Thane district. (*Ibid.*)

All the above companies have their headquarters in Bombay.

BOMBAY GAS COMPANY

The Bombay Gas Company deserves a mention by virtue of its being one of the oldest plants in Bombay. Established in 1863 it provided town gas and afforded street gas lights in 1866. Located in the heart of the city at Lalbaug it continues to manufacture fuel gas by high temperature carbonisation of coal and gasification of coke and oil. It also processes coal bye-products like coke, coal tar, naphthalene, solvents, tar acids, etc. The company, in the service of the city for about 120 years, distributes fuel gas through a network of pipelines in the Bombay Island.

LABOUR MOVEMENT

The Bombay cotton mills provide a good example of the adaptations of a population to an industrial environment. As one of the oldest examples of the factory system outside Europe and the U.S.A., the mills in the city have given their workforce a long exposure to industrial organisation. During the early sixty years of the mills' existence, the workers had an informal but resilient organisation of their own making. Outsiders were unsuccessful in establishing trade unions. However the millhands were able to launch strikes, maintain their wages at a steady level and give other evidence of effective leadership. (*Richard Newman, Workers and Unions in Bombay : 1918-1929; A Study of Organisation of Cotton Mills (Australian National University Monographs on South Asia), 1981, p. 3.)*

The first textile mill was opened in 1854 (1856 according to some authors). Others followed soon afterwards, and by 1875, the year in which the Bombay Millowners Association was formed, there were 27 mills employing 13,500 Workers. Expansion continued until the turn of the century, after which the less capable pioneers sold out. New promoters, like the Wadia and Tata families enlarged their interests by painstaking,management and enormous investment. Control became concentrated in a fewer hands, and the industry learnt to live with competition. By the end of the First World War there were about 79 mills, dominated by eight large companies and providing employment to 117,110 workers.

Bombay (The Cotton Green at Colaba was moved in 1922 to a new exchange laid out on a reclamation between railway and harbour at Sewri.) was the largest cotton market in Asia, and in some years did more business than even Liverpool. The main reservoirs of Bombay labour were the central districts of the Western Deccan, and the Konkan. The workforce had always retained its rural characteristics, while only a small proportion of the migrants lost contact with their rural origin. This had a definite impact on their stimuli to work and organize. Most of the mills lay on the arteries of Parel road and DeLisle road. Other industries were also located around Parel, Chinchpokali, Mazagaon (engineering works), and Sewri (oil installations). The working population itself seems to have been residing around the mill area. Nearly 90 per cent of the workers lived within fifteen minutes walk of their employment in those days. Most of the millowners refused to provide housing to workers. The jobber who formed a link between the workers and management came to occupy an important position, and it was he who had a crucial role in labour relations in those days. "The jobber was the fulcrum of labour organisation in the Bombay Mills... On many occasions during the 1920's it is possible to see the jobbers tipping on advantage to and fro between management and labour as they wove their way through the conflicting pressures that built up around them." (Richard Newman, op. cit., p. 251.)

Almost one-third of the mill industry was managed by Parsis, particularly Tatas, Wadias and Petits. A small proportion was in the hands of Hindu agents, the largest among them being Thackersey Moolji who managed three mills. Muslims and Jewish influence was confined to Currimbhoy Ebrahim and E. D. Sassoon, respectively. The British share in the industry was small.(*Ibid.*, *p.33.*)

The mill surroundings were unhealthy and the working hours long which were reduced to 11 in 1922.

The political movement had also some influence on the labour movement since the second decade of this century. The nationalist leaders began to look at the industrial labour as a recruiting ground for the cause of struggle against the British imperialism. The Royal Commission on Labour in India, set up in 1929, was a creation of the Labour Party in Britain and a landmark in the history of Indian worker. The ILO of which India was. a full member, was another stimulus to reform. The Home Rule Leagues were the first of the post-war movements to bid for labour support. However the millhands impinged upon the non-co-operation movement only twice, once as protest against the arrest of Khilafat leaders in Sept. 1921 (Mohammed Ali and Shaukat Ali) and then iri Nov. 1921 when Mahatma Gandhi lighted a bonfire of foreign cloth in a meeting at the Elphinstone mill. S. A. Dange and Nimbkar emerged as the most prominent Bombay communists of the inter-war periods.

However, Richard Newman suggests that the Bombay millhands were hardly touched by nationalist agitations. Those millhands who were drawn into an alliance with Congressmen apparently worked at first from industrial motives rather than from desire to topple British rule. "It is an even grosser distortion to suggest, as some writers have done, that the AITUC was an industrial wing of the Indian National Congress and that its foundation was symptomatic of the spread of nationalism to the working classes. In Bombay at least, the majority of AITUC leaders were either not Congressmen at all, or Congressmen who were far removed from the mainstream of the movement."(*Ibid p. 263.*) The political forces however caused changes of attitude within the workforce who became receptive to new ideologies. They also helped a long-term involvement of workers in politics. Price inflation, not Marxism, was the cause of unrest in the immediate postwar period.

It was against this background that the labour movement developed in Bombay. The first body which is generally credited with trade union characteristics was the Kamgar Hitwardhak Sabha founded in 1909 by B. R. Nare, S. K. Bole and H. A. Talcherkar. It was followed by the Social Service League under the able leadership of N. M. Joshi.

Labour movement in Bombay during the pre-Independence period had a distinct character compared to that after Independence." The movement then was spontaneous, self-reliant, virile and largely free of sectarianism and rivalries which are perhaps its most conspicuous and cancerous features today. The workers then were largely illiterate, relatively new to the industrial culture. Yet, their movement seems to have suffered from no problems of leadership."(Bagaram Tulpule," Foreword", Vasant Gupte, Labour Movement in Bombay.p.VII.) Though trade union leaders in the pre-Independence period belonged to various political ideologies, there was a common bond of anti-British feeling. The movement was a movement of protest not only against employers, but also against the alien Government. The movement was however devoid of that common bond after Independence. The movement is now guided by different stimuli and forces. The national economy now needs industrial peace keeping in view the interests of workers and consumers. The vested interests and sectarianism of the present day leadership now very often clash with the national interest.

The following account of labour movement therefore aims at a comparatively detailed narrative of the early developments in the field, particularly the early history of unionism, leadership in those days, the strikes in pre-unionisation and post-unionisation days, in Bombay.

HISTORY OF LABOUR MOVEMENT

Although labour was not organised in the true sense in the initial stages of industrialisation, the occurrence of strike was frequent in almost every cotton mill in Bombay. The chief cause was the reduction in wages on the day of payment without any previous intimation to the workers of the contemplated change. One of the oldest strikes reported was in the

Swadeshi mills at Kurla in 1887 which was due to the inadequacy of the wage rates in the card and weaving rooms, Besides factory workers, the workmen in other sectors also used this weapon. For example, the butchers in Bombay went on strike in 1866,1867 and during the communal riots of 1893 and 1898. The strike in three textile mills in Bombay in October 1892 involved about 2,800 workers, who struck work anticipating a wage cut. Probably the biggest strike in the previous century occurred in 1893 which involved about 8,000 workers in the David Sassoon, Alexandra, E. D. Sassoon, Indo-China Bombay City, Wadia and New Eastern mills. A strike took place in 1897 on the issue of discontinuance of daily payment of wages which had been temporarily introduced during the great plague of 1896-97. The railway workers including Station Masters and Assistant Station Masters struck work on 6th May 1899 due to rejection of their demands by the G.I.P. railway authorities, which included change in hours of duty, wages and non-discrimination between Indian and European employees. This strike lasted for 27 days.

The working people expressed their dissatisfaction through strikes, but they were not organised. The Government had armed itself with plenary powers to suppress workers' refusal to work. The Workmen's Breach of Contract Act of 1859, and the Employers and Workmen's Disputes Act of 1860 were measures in this direction.

The Swadeshi movement and the boycott movement which developed after 1905 under the leadership of patriots like B. G. Tilak, Joseph Baptista, N. C. Kelkar and other luminaries of the time provided a stimulus to the growth of industries as well as the labour movement in Bombay.

It may appear interesting to note that there were a number of strikes between 1905 and 1908 in the textile mills on the issue of introduction of electric lights in mills, the main objection being the increase in number of working hours (15 hours a day) on account of electric lights. The strike in the Jacob Sassoon mill in January 1906 pressurised the owners to reduce the working hours to 12. Statutory regulation of hours of work came only in 1911.

Although not even elementary trade unions, the only organisations that came across were the Mahomedan Association and the Indian Labour Union. Despite any good organisation the workers used to exercise a certain amount of pressure on the authorities. (Factory Labour Commission.) The dawn of this century witnessed a strike of about 20,000 textile workers in Bombay, against a threatened wage cut in 1901, which was withdrawn after the cut was restored. As per the Annual Factory Reports of the Bombay Presidency there were many sporadic strikes from 1904 to 1912. A strike of considerable dimensions involving many big mills in Bombay took place in the later part of 1904 on account of wages. It involved seven to eight thousand workers for eleven days.

The new Factories Act was enacted in 1911 which brought about, for the first time, regulation of working hours to 12 in textile factories.

The first political strike took place in Bombay in 1908 after the conviction of B. G. Tilak in a sedition case, and was in the nature of a protest against the severe sentence of six years of rigorous imprisonment inflicted upon him. As per the Annual Factory Report nearly all the factories in the City were closed for six days in July 1908 at the time of Tilak's trial. A large part of the work-force in Bombay participated in this protest. The Bombay Postal Union formed in 1907 and the Kamgar Hitwardhak Sabha in 1909 were the forerunners of labour unions in Bombay.

War and Post-War Period: There were some strikes during this period which could be mainly attributed to the inflationary conditions on account of war, wages lagging behind prices and acute economic distress among the workers. The influenza epidemic in 1917-18, which took a toll of many thousands, drove away a large number of workers from the City to the villages. This created scarcity of labour. Another factor was the growing awakening and consciousness among the workers about their rights. The political movement for Home Rule had already started. It was followed later by the mass campaign of Non-co-operation under the able leadership of Mahatma Gandhi. This had profound effects upon the working class which developed a new sense of solidarity and a keen desire to secure improvement in their conditions of life and work. The social and political workers who were prepared to help them in organisation of the movement were also instrumental to the struggle of the working class. (The Royal Commission on Labour (1931) also shares these observations, although in a more subdued tone. The main cause was the realization of the potentialities of the strike in the existing situation, and this was assisted by the emergence of trade union organisers, by the education which the war had given to the masses and by a scarcity of labour arising from the expansion of the industry arid aggravated by the great epidemic of influenza.)

The Bombay textile industry witnessed strikes particularly in 1917 which were short-lived and confined to individual mills. The demand was always for an increase in wages in view of rising prices. The strikes used to end with a full or partial fulfilment of the demand, mainly against the background of rising demand for cloth and shortage of labour. The mill owners could hardly allow production to hamper. The workers invariably secured about ten per cent rise in wages.

The first general strike in the textile industry took place on 9th January 1919 which spread like wild fire to 75 mills out of 85 during the course of a day or two. It begah with the Century mills on 27th December 1918 which attracted the minds of their colleagues in five mills. The workers marched from mill to mill and brought about a stoppage of all mills. The Police Commissioner, Mr. Vincent intervened at the request of workers and organised a meeting between them and the Governor. The Governor of Bombay also personally persuaded the millowners to meet some of the demands and the strike was settled after 17 days. It involved 1.50 lac workers, there being some acts of violence also.

There was no union to organise the strike, the only force behind being the Kamgar Hitwardhak Sabha, a welfare organisation. Some meetings were organised by S. K. Bole, H. A. Talcherkai, S. V. Patil and also by Congress leaders like Jamnadas Dwarkadas, Mavji Govindji, Dr. Sathe and Dr. Velkar. Mr. N. M. Joshi, who later became well-known as the father of the Indian trade union movement, did not take any direct part in the strike. He however championed the case of the workers in the press and on the platform.(V. B. Karnik, Strikes in India, 1967, p. 107.)

Another general strike of textile workers started on 1st January 1920 in the Jacob Sassoon mill, for bpnus payment to offset high cost of living. It spread to 25 mills and by the 4th January it became a city-wide strike. The workers joined the strike spontaneously because of the discontent due to rising cost of living. It was guided by the Millhands Association and the Kamgar Hitwardhak Sabha. These organisations were not trade unions as such. They jointly formed an organisation called the Bombay Labour Settlement Committee, with N. G. Chandavarkar as president, and Joseph. Baptista, Ginwala, Pawar, Talcherkar, Bole, Koregaonkar and Thakkar as other office bearers. This committee formulated the demands including reduction in working hours, recess of one hour, wage increase by 50 per cent, payment of wages on 15th of every month, compensation for injuries, etc. The workers struggle continued Successfully for about a month. On request of the Labour Settlement Committee the Governor mediated, and the mill owners who were already forced by the long bitter struggle of workers showed willingness to consider the demands. A settlement was reached, and the Committee advised the workers to resume work. The workers, surprisingly refused to respond for a couple of days, and abruptly ended the strike on 2nd February. The strike is memorable because apart from substantial wage increase, the working hours were reduced by two and compensation for employment injury was obtained. It paved the way for better legislative measures in the subsequent period. It became an event of national importance and served as a guidance for improved industrial legislation. (Vasant Gupte, Labour Movement in Bombay 1981.pp.42-44)

In February 1920, 1500 municipal workers (sweepers) struck work for annual bonus and grain compensation allowance.

The Municipal Corporation repressed the workers, and the agitation ended on 10th February through the intervention of the Bombay Central Labour Federation.

Workers of the Asiatic Petroleum Co. struck work over a demand for 20 per cent wage increase and one month's bonus per year, on 1st September 1920. It spread to the Burma Oil Company, Indo-Burma Petroleum Co. and Standard Oil Co. in about a fortnight. Mr. Ginwala, a solicitor and friend of trade unions brought about a settlement on 28th September, and the workers received 20 per cent wage increase. There was another strike by the oil workers in the next year on the bonus issue (1st February 1921). It involved about 2500 workers, but proved to be unsuccessful. (V. B. Karnik. Strikes in India, 1967, p. 112.)

The workers of the Bombay Gas Co. struck work on 1st October 1920 on the ground of victimization of eight workmen. The management justified their action as punishment for insubordination. Negotiations were held between management and workers' leaders, namely, Baptista and Jhabwala, but they were fruitless. The strike of about 1000 workers fizzled out with many workers losing their jobs.(*Ibid., P. 113*,) The seamen's strike for four days in 1920 rewarded them with about 30 to 35 per cent wage increase.

The Tramway men of the B.E.S.T. launched on a strike on 7th October 1920 for wage increase, which fizzled out on 21st November. Though the workers resumed work unconditionally the management granted certain concessions. The workers attempted another strike in 1922 which ended unsuccessfully, about 1300 workers losing their jobs.

G.I.P. Railway Strike: In May 1920, there was a strike of the G.I.P. railwaymen in Parel and Matunga workshops lasting for five days. In both cases the cause was delay in payment of wages as per the revised scales. The strike was withdrawn on an assurance for early payment. Next year the workers in Parel workshop struck work from 17th August to 12th October 1921 on grounds of anew scheme of dropping of tickets by workers and recognition of union. The Works Manager's office was raided and office records burnt. The agitation was called off after alterations in the existing arrangements. The strike however led to a split in the railwaymen's union. Baptista, the President, resigned accusing Mr. Jhabwala, the Secretary, of having mixed up politics with trade union organisation. (Ibid., p. 76.)

Postmen's Strike: The first strike of postmen took place from 20th September to 8th October 1917 involving about 750 postmen and overseers on grounds of pay scales, recruitment of additional workmen and some other concessions. Conducted in a peaceful manner, the strike yielded some good results for the workers. The 1920 strike of postmen from 12th September 1920 to 12th February 1921, involving about 1500 P & T workers, was however a formidable one. The workers had a union with leaders like Baptista and Natarajan. A deputation of the All India Trade Union Congress met the Governor but the strike was not successful. (Ibid.,114-15.)

Strikes during the Great Depression: The Indian economy was showing recessionary tendencies from 1923 which became more and more evident in succeeding years. The climax was reached in 1930 alongwith the Western countries which were in the grip of the Great Depression.

In Bombay there were two general strikes of textile workers in 1924 and 1925.

Strike of 1924: The textile strike of 1924 was on the issue of bonus that was being paid every year since 1917.

The situation marked by angry demonstrations, riots, looting and police firing, gave birth to a new leader from the ranks, viz., A. A. Alwe who was a weavei in one of the mills. During the strike, Mr. Alwe had talks with the Governor who suggested him to form a union. With this encouragement Alwe formed a trade union of textile workers in Bombay and named it Girni Kamgar Mahamandal and became its president. Joseph Baptista was actively associated with textile workers. He and his colleagues were against a strike. But once it took place they did not hesitate to help the workers. Baptista and others formed a committee to bring about a settlement, the members of the Committee being Baptista, N. M. Joshi, F. J. Ginwala, Kanji Dwarkadas, Jhabwala and G. N. Sahasrabuddhe. On appeal to the Governor by the Committee, the Government appointed a committee on 22nd February under Chief Justice of the Bombay High Court, with other members such as R. P. Masani, D. M. Thackersey, Municipal Commissioner, etc. The report of the Committee countered the demand for bonus on grounds of lower profits of mills, and demoralised the workers. The strike involving 1.16 lakh workers collapsed on 25th March after a loss of eight million man-days.

Strike of 1925 (Based on issue of Bombay Labour Gazette, 1925 and 1926,.): The general textile strike of 1925 occurred on 15th September 1925 on the issue of wage cut (D.A.) by about 11.5 per cent. The reasons for the cut were higher price of cotton, increased costs, Japanese competition and unprecedented accumulation of cloth and yarn.

According to Mr. Alwe the employees' anger against Government was vented against workers. The strike was spontaneous, and began in a few mills on 15th September 1925, but spread to all the 76 mills in the city involving 1,45,000 workers. The strikers following the example of the Lancashire workers were prepared to meet half way, and met the Governor. The latter expressing sympathy for the workers was unable to help them in the face of stagnation of the textile industry. The strike became protracted, about 60 per cent of the workers returning to their villages, and the rest following odd jobs. " This strike costing 11 million man-days is a classical example of a struggle imposed by employers on their workers to be utilised as a weapon to extract concession from the Government." (Vasant Gupte, op. cit., p. 49.)

The strike was withdrawn after restoration of wage cuts on 3rd December after the Viceroy issued an ordinance (1st December 1925), suspending the levy of excise duty.

Harder Days: 1928 to 1930 were still more difficult years as all industries were in the grip of depression, wage cuts and threats of unemployment on account of rationalisation. Another feature of this period was the emergence of communist influence in the trade union field. The communists regarded every strike as an episode in class war which they were determined to develop. To them, economic demands were of searching consequence and they were to be utilised for fomenting discontent and struggle against the capitalistic system.

The revival of the national movement, and particularly the call for a protest strike organised by the Congress Committee on February 3, 1928, *i.e.* the day the Simon Commission was to land in Bombay, gave a vigour to strikes during this period. This protest strike was an extension of the hartal. Industrial workers joined the strike and participated in mass demonstrations. The communists exploited the situation to penetrate into all sections of workers.(*Vasant Gupte. op. cit, p. 50.*)

These factors led to bitter and long drawn struggles, the most important amongst them are described below.

Great Strike of 1928 (Richard Newman, op. cit, pp. 168-209.): The great strike of 1928 was unprecedented in the history of either the textile industry or unionism. It had a deep impact and consequences of very wide dimensions. It caused realignments of trade union forces and the emergence of new leadership and a new ideology-oriented unionism. The communist unionists were the creation of this strike. It is therefore essential to narrate this episode thoroughly.

The industrial relations of the cotton textile industry began to show some signs of maturing into class conflict during the

middle of the 1920s. The millowners had to adapt to the harsh realities of international competition and technical innovation. The Bombay Millowners' Association was required to become a mouthpiece for the industry and a common forum of the mill agents. The union leadership was also experimenting with new forms of union structuring. The BTLU and the Girni Kamgar Mahamandal both were benefited from the strike of 1925. But the Mahamandal's principal worker, Mayekar lost his prestige from 1926 and the communists exploited the situation in their favour. From January 1928, the Sassoon group announced their scheme for rationalisation and technical innovations, requiring the spinners to work on two sides of a ring frame for a 50 per cent inciease in wages. This invoked a strike in the group's mills in Worli area.

Fear of unemployment was the main motive of the strikers. Since the beginning of November 1928, the Sassoon group of mills reduced the number of workers more than half. The Jacob mill also fell in line. The Sassoons would not retreat as the two-side spinning was a crucial part of their rationalisation plan, and regarded as essential to their economic survival. A parallel dispute took place in the Spring mill of Ness Wadia, Finlay mills, Kohinoor mill, Brady and Petit groups of mills, all of which had their own variant of rationalisation. The Brady and Petit groups laid off their spare hands, and the mills were changing to finer counts by reducing the size of their preparatory departments to match the lower intake of cotton.

Many mills were reducing wages by advocating various changes in production. The strategy of "nibbling off "wages was so successful that even a high Government official believed that a general strike had become " almost essential" if the workers were not to have their standard lowered. Another trend was towards stricter discipline and extra rules.

Sober leaders like N. M. Joshi still believed that the technical reforms were in the long term interest of workers, that rationalisation should be introduced uniformly by the Millowners' Association, with more attention to the related problems of redundancy and extra pay. Joshi's views prevailed with the BTLU, Jhabwala protesting. The ranks in the Mahamandal were also divided on the issue. Mayekar was compelled to quit, and the communists got an edge a little closer to formal power. The Mahamandal invited Dange, Nimbkar and Jhabwala to join its advisory committee. The millhands were still suspicious of these outsiders. However as rationalisation was increasingly adopted and local strikes collapsed, the millhands began to listen to the communists with a new respect. The attempt to widen the Sassoon disputes had been premature, the victim of the 'unhappy lack of class consciousness and class solidarity' as Joshi put it. An honest humanitarian that he was, Joshi's paramount concern was prevention of poverty and suffering, and was more inclined to compromise. "It was therefore to Dange, Nimbkar and Mirajkar, rather than to Joshi, that the millhands turned for advice as the industry slide into the greatest crisis of its history." (Richard Newman, op. cit., p. 178.)

The economic glut compelled the closure of six mills, while some others were working partially. This meant unemployment for many. In this way the significance of the Sassoon strike was undertsood by many people. There was widespread discontent, sporadic strikes, but all contributing to the rising tempo and bitterness of industrial conflict. There was a show of intransigence which although contrary to the views of the leaders, finally convinced them that the communists' predictions of a class conflict were about to become a reality. On 13th April 1928 the Mahamandal reversed its earlier decision under Mayekar and voted to declare a general strike.

Bombay's greatest strike began to evolve on 16th April 1928, with troubles in the Kasturchand mill, Currimbhoy and Mahommedbhoy mills etc. In the beginning it was simply a conglomeration of minor disputes. The trouble began to spread on 19 April. Nimbkar, Mirajkar, Jhabwala and Alwe led processions, and the situation went on worsening, even though the events were spontaneous revolts by the millhands. In the course of a few days one by one all the mills except the two at Colaba were in the grip of a great strike by 26th April.

Joshi's attitude to the strike was in line with his earlier views. The tactical differences among the leaders were partly resolved by the mill-hands though factionalism persisted for some time.

However the financial difficulties of the militant group and the need for united bargaining with the Millowners' Association forced the parties together. The new Joint Mill Strike Committee was formed comprising the moderate contingent of Joshi, Ginwala, Asavale, Munawar, S. V. Parulekar and the militants Dange, Nimbkar, Mirajkar, Bradly (advisers of the Mahamandal), Jhabwala (Mill Workers' Union), Alwe, K. A. Desai, Avsekar and P. T. Tamhanekar. The Committee met on 3rd May for evolving a strategy for the strike and prepared a list of demands.

Even at this point of time the BTLU was the only union registered under the Trade Unions Act. On 23rd May the Mahamandal's Committee registered a union under the name Girni Kamgar Union (GKU). Jhabwala registered the Mill Workers' Union on 1st June.

The Joint Strike Committee prepared a list of 17 demands. "The essence of the demands was that none of the existing conditions of work should be varied 'to the disadvantage of the workers before securing the approval of the workers through their organisations' (No. 3) and ' that any changes made by individual mills should receive the sanction of the Association' (No. 4). The same point was reiterated in every demand that left room for negotiation: no final solution of the industry's problems was possible without agreement within and between the parties concerned. In this way the unions insisted that the millhands should be treated as a single workforce, with themselves as its spokesman, an attitude that was justified both by the self-interest of the unions and the industrial developments of the previous decade. With this safeguard, the Strike Committee was prepared to reconsider the ' efficiency system' in a more favourable light (No. 7) and to advocate the standardisation of pay, work and conditions (No. 10) and departmental rules (No. 15). Several existing practices were individually condemned: the forfeiting of unclaimed wages (No. 9), the issuing of attendance tickets and the enforcement of daily machine cleaning (No. 11), dismissal without notice (No. 13) and the informal methods of granting leave (No. 14). The Committee said that wherever daily working hours were less than ten they should not be increased without the consent of the workers and payment at overtime rates (No. 2). The Committee had several proposals to make on the subject of wages. It wanted them restored to the levels of 1925 (No. 1), it suggested that the dearness allowance should be amalgamated with the basic rates (No. 12) and it asked for total pay to be 'raised substantially' wherever it was less than Rs.30 (No. 8). It also thought that the rates for new varieties should be fixed in consultation with the union (No. 5) and posted in the vernacular in the departments concerned (No. 6). All of this was refreshingly direct and practical an

In the course of events Joshi and Dange had a tactical alliance as the former saw Dange's intellectual capacity to master technicalities of the industry and match the employers at the bargaining table. They had mutual respect for each other.

A good deal of time was wasted on recriminations and well-worn arguments, but the unionists realised the designs of the owners. Mill-owners put forward their standardisation scheme for wages by 26th June, which was rejected by unionists. The unionists accepted the jobbers' support in July which hardened the strike further.

The Strike Committee organised picketing and supply of relief. About 27,000 workers left Bombay in May to their native places. The Government estimated that 50,000 workers spent the strike away from the city. The other estimates were much higher.

Cracks had begun to appear in the carefully preserved facade of the owners' intransigence, some of which extended

feelers to Dange and others. Both camps were exhausted. The strikers were at the end of their tether. On 20th September the Morarji Goculdas mill reopened. The Government convened a conference of Millowners' Association and the Strike Committee on 4th October. An agreement was reached to appoint the Bombay Strike Enquiry Committee which was appointed on 13th October by Government with Justice Fawcett as Chairman and P. Khareghat and B. S. Kamath as members. The Report of the Committee was published in March 1929.

On 6 October the mills officially reopened, and by 8 October 1928, 50,000 men resumed work.

The settlement was a victory for the workers, in spite of its qualifications. The owners had been forced to accept terms which they had earlier rejected, wages had been restored to their former level, though not to the 1925 level. Millhands except those in the Sassoon group had won a respite from the spread of rationalisation. The whole issue of wages and working procedures was now on the anvil of the Enquiry Committee, where Joshi, Dange and others could hammer it into a more acceptable shape.

"The most remarkable feature of the strike was undoubtedly the behaviour of the men." They sacrificed Rs. 3.5 crores of their own wages over a loss of 22 million man-days. They showed courage in desperate circumstances. Their commitment to the strike was impressive and gave a lie to judgement of British officialdom that the issues were not so much economic as political. "Rationalisation and retrenchment provided the foundation of protest, standardisation the unity of purpose, and the jobbers and the strike committee translated these elements into a form of industry-wide organisation." (Richard Newman, op. cit. p. 208.)

The balance of power among the unions was radically altered by the strike. The communists emerged as a force. As Dange said, " The strike was not our creation, but we were the creation of the strike." The alliance with Joshi gave substance to their leadership, and their association with the moderates enabled their recognition as the workers' spokesmen. By their association with the moderates the communists forced employers to recognise them.

Textile Strike of 1929: Since the successful strike of 1928, Girni Kamgar Union (GKU) had become very powerfull and had formed mill committees in every mill. The committees started dictating terms to employers which invited hostility from the employers. Disputes flared up more quickly than the union could deal with. The mill committees were militant, though the communists felt concerned about their hostility. The employers had to deal with a union of the leaders and a union of the militant workers. Much of the confusion in industrial relations was due to the fact that the GKU had these two centres of influence which had not yet matured into a united organisation with a single strategy.

In February 1929 communal tensions developed into riots between Hindus and Muslims. There was an upsurge of violence. The GKU was at a disadvantage as it could not control the rank and file and the various forces. In the meantime the leaders of the GKU were arrested for the Meerut trial on March 20. The Meerut arrests were the prelude to a third phase of industrial strife which culminated in the general strike of 1929.

In the meantime the Strike Enquiry Committee's Report (24th March 1929) gave its blessings to both rationalisation and standardisation, but urged that wage reductions should be postponed as a good gesture. The problem of victimisation eclipsed all other issues in industrial relations. The deliberations between the managing committee of GKU and mill owners failed. The managing committee of GKU decided to call a strike from 26th April 1929.

The millowners knew that Dange and Joglekar, the leaders of the GKU, were under arrest in the Meerut case, and the owners were waiting for a strike when they could take stern action. To their expectations the GKU gave a call for general strike and on 26th April 1929, over a lakh of workers in 62 mills in the city were involved, resulting in a loss of about eight million man-days. However the workers were not enthusiastic as there were no common economic demands which could hold them together. The GKU resorted to violence, which necessitated the arrests of B. T. Ranadive and Deshpande and their allies.

The strike was a great disaster for the workers, and it badly affected the prestige and membership of the union due to failure of the strike. It was a turning point in the conduct of industrial relations. The failure left the union penniless, demoralised and divided. There was greater victimisation. New workers were recruited. The expelled workers were recruited on the employers' terms. The Millowners' Association was out to break the GKU.

The owners were aggressive. They organised the Blue Flag Union and broadcast their point of view. The idea of a company union first came from the manager of one of the Sassoon mills. The owners recruited strike-breakers from Bangalore, Ahmedabad and Indore. There was a demoralising effect on strikers. About a dozen mills in Madanpura had ignored the strike. Inter-union collaboration came to an end at the outbreak of strike. Jhabvala's union sympathised with the GKU stand on victimisation, but it gave no practical help. The BTLU and the Maha-mandal were opposed to the strike. The weaker minorities in the workforce found it impossible to stop work against the hardships of the previous strike. The jobbers translated the lack of unity of millhands into a defeat for the union. The Report of the Court of Enquiry (19th September 1929) further demoralised the union. Support for the unions dwindled; by the middle of 1930 the GKU had dwindled to less than a thousand members and the BTLU to only a few hundred.

G.IP. Railway Strike (1930): The strike started on 4th February 1930. Originally it was meant to be a one-day protest against victimisation, low wages and the threat of unemployment. But R. S. Ruikar, the President of G.LP. Raitwaymen's Union decided to convert it into an indefinite strike. It was firstly general all over the Railway. The Government promised fair and early consideration of the demands. There were talks with the Railway Board which agreed to grant some concessions. Satisfied with the outcome of talks, S. C. Joshi, V. V. Giri and Dewan Chamanlal gave a call to wokers to resume work from 15th March. However the communists were not in agreement and wanted to prolong the strike, and launched a Satyagraha at all centres. There was a big morcha up to Victoria Terminus. This resulted into police firing. Later the strike was called off officially on 15th April 1930. It involved 22,608 workers, a large number of them being from Bombay. (Vasant Gupte, op. cit., pp. 56-57.)

Statistics of Industrial Disputes (Ibid.): During the period between April 1921 and June 1929, there were 401 industrial disputes in Bombay which involved 10,77,929 workers with a loss of 4,92,97,817 man-days. The industry-wise position of disputes in Bombay is given below:—

Industry		No. of disputes	Workers involved
Spinning and Weaving		317	10,21,682
Metal and Engineering		19	3,045
Railway Workshops		7	20,450
Railways		8	2,496
Printing and allied concerns		7	1,285
Government and public concerns		4	405
Municipality		6	7,143
Others		33	21,421
	Total	401	10,77,927

Depression and Revival (1929-1936) (V. B. Karnik, Strikes in India, pp. 250-55.): The world economic crisis fell on India with heavier force than on any other leading country owing to India's extreme dependence on primary production. The value of Indian primary products, on which four-fifth of the population was dependent fell by one-half. This crisis gave a great setback to all industries. They cut down their production and also sought to reduce cost of production through wage cuts and rationalisation. A large number of workers were thrown out of employment in private industries and in public sector undertakings like Railways. Workers put up a vigorous and determined fight against this offensive. But it had no effect. In this period employers were not afraid of strikes. Many times they welcomed them as a convenient method for reducing production.

Apart from the economic conditions there were some other factors which came in the way of workers resorting to strikes. One was the split in the labour movement which widened in 1931 as the communists effected one more split. They broke away from the All India Trade Union Congress. The first attempt at unity succeeded only in 1934 when communists returned to it. The larger unity did not take place until a few years later.

The second factor was the widespread militant national movement which began in 1930. The mass Civil Disobedience Movement spread far and wide, and a number of trade union leaders participated in it. They were then not available for building unions or for organising strikes. Moreover there was a tendency in Government circles to regard strikes as a part of the Civil Disobedience Movement and to deal with them harshly.

The third factor which contributed to the downward trend was the possibility of gradual improvement in conditions of work and life opened out by the recommendations made by the Royal Commission on Labour.

As against these there was the constant and strong pressure of communists to organise strikes and develop struggles against employers and the Government. But for this, pressure might not have taken place. In the end in 1934 the Government illegalised the Communist party and some other organisations closely associated with it including some trade unions.

The attitude of the Government was throughout harsh and unsympathetic. Government used emergency legislation like the Public Safety Act and the Criminal Law Amendment Act on occasions to arrest and detain strike leaders.

In 1934, the Government of Bombay put on the statute book a new measure called the Bombay Trade Disputes Conciliation Act. The object of the Act was to avoid strikes which had plagued the industry during the previous years. It followed the collapse of the general strike of 1934.

One of the objects of the legislation was to put an end to communist domination over the textile workers of Bombay.

The strikes of this period in Bombay were as follows:

Textile Strike of 1934 (V. B. Karnik, Strikes in India, p. p. 256-59.): A general strike of textile workers took place in Bombay in April 1934 and was organised according to the decision taken at the All India Textile Workers Conference held in Bombay in January. This was to be an all India general strike. But in actual fact it took place only in Bombay, Nagpur and Sholapur.

The general strike was the culmination of a large number of strikes in individual mills which took place in the preceding three years. As a matter of fact during the whole period there was no peace in the textile industry. It was the natural reaction of the workers to the wage cuts and rationalisation. In the name of trade depression and with a view to cut down costs, millowners had embarked on a campaign to reduce wages and to introduce labour saving devices.

Communists organised many strikes during the period, but most of them failed. Other leaders were also in the field, they were also compelled to organise strikes but they never allowed things to get too far. Towards the end of 1933 it was realised by both sections that the only remedy under the circumstances was a general strike of all the textile workers. The Joint Strike Committee of Communists and Non- Communists represented the All India Textile Workers Conference and Council of Action. The strike began on 23rd April. But later the strike committee split up. The number of workers involved in the strike was about a lakh. There were fourteen demands.

On 30th April a batch of 14 leaders of the strike was arrested and detained under the Bombay Special (Emergency) Power Act. They were released only after the end of the strike.

Attempts were made by some public organisations to settle the strike. But both the millowners and the Joint Strike Committee were adamant and no *via-media* was possible. The strike collapsed on 20th June. It was later officially called off by the Joint Strike Committee.

After the end of the strike the Government of Bombay instituted a criminal case under the Trade Disputes Act against some leaders. However Government lost the case in the lower court as well as High Court. The Government of India brought forward a bill to amend the particular section of the Trade Disputes Act. The Government of Bombay enacted the Bombay Trade Disputes Conciliation Act to deal with disputes in the textile industry of Bombay.

Tramway Workshop Strike: A dispute arose in September 1931 in Kingsway Workshop of the Bombay Electric Supply and Tramways Company. The dispute was over the closure of workshop on every Monday. The other demands included security of service, revision of wages, recognition of the union. During this period the company declared a lockout; 512 workers were involved. The compromise between the workers and the company was accepted, and the lockout was lifted on 21st October.

Dock workers' Strike: Dock workers were until 1930 one of the most exploited and most unorganised section of the Indian working class. Their wages were low, hours of work were long and employment was intermittent. Besides, they were in a large majority of cases employed by contractors.

The first organised strike of dock workers took place in 1932 which began on 12th March and settled on 4th April. It was organised by the Bombay Dock Workers Union under the leadership of Dr. M. R. Shetty and Mr. A. N. Shetty. It took place for an increase in wages and various allowances and for stability of employment. The abolition of contract system was also demanded but it was realised from the very beginning that it was difficult to get it.

The strike created a big stir in the dock area as nothing of the kind had ever happened before. There were some violent incidents in the strike. The strike was settled on 4th April through a compromise reached between the union and the stevedoring firms. Workers received 25 per cent increase in wages and some additions to their allowances. The union was also granted recognition.

There were in the next couple of years a number of small strikes of various types of workers in the dock area.

Municipal Workers' Strike: In 1932-1933 there were several short-lived strikes in some of the departments of the Bombay Municipality. The strike in the drainage department in September 1932 is notable because the Bombay Municipal Servants' Act was utilized, as in 1928, to break the strike. Miss Maniben Kara succeeded in securing a compromise through talks with the Municipal Commissioner. The strike took place in order to secure an increase in wages from Rs. 25 per month to Rs. 30 per month. The number of workers involved was about six hundred.

Strikes under the Congress Rule: Under the Government of India Act of 1935, labour had some representation in provincial Legislative Assembly. The total number of seats allotted to it was 38. There was also a slight broadening of franchise. This enabled some sections of workers to have a little influence over elections in general constituencies. Labour thus became a political factor which all politicians had to take into consideration.

The Indian economy began reviving in 1934. In the next couple of years it made a good recovery, and by 1937 it reached a stage of normal expansion.

The establishment of popular government helped labour to put forward their demands.

Immediately on assumption of the office, the Congress Ministry of Bombay made the declaration with regards to its labour policy. The enthusiasm resulted in the organisation of new unions and also resulted in the growth of strikes. In Bombay, the Congress Ministry in 1938 enacted a law, applicable in the first instance to the textile industry, which for all practical purposes outlawed a strike. It was called the Bombay Industrial Disputes Act of 1938. Gulzarilal Nanda, the former General Secretary of the Textile Labour Association of Ahmedabad, who was then a Parliamentary Secretary was the main architect of the legislation. The Act was amended from time to time and was finally replaced by the Bombay Industrial Relations Act in 1946.

The Government of Bombay set up the Textile Labour Enquiry Committee under the chairmanship of Mr. Jairamdas Daulatram. The Committee brought out its final report in 1940, but by that time the Congress was no longer in the office.

Towards the end of 1938 there was a strike of seamen in Bombay. It was on the issue of employment by rotation. It was continued for four months and the workers succeeded in getting their demands.

LABOUR MOVEMENT DURING WORLD WAR II (V. B. Karnik, Strikes in India, pp. 293-300.)

The Second World War began in Europe in September 1939. Immediately thereafter the Viceroy made India a party to the war. The Indian National Congress took strong objection to this course of action adopted by the Viceroy. Its stand was that India would not participate in the war except on the basis of the solution of her political problem. This led to a conflict between the Government and the Congress resulting in the Quit India Movement of 1942.

Immediately there was an increased demand for labour and also a desire on the part of the Government to see that there were no strikes and lockouts "so that the production might not be interrupted. But along with increased economic activity there was a steep increase in the prices of essential commodities and resulted in demand for dearness allowance. In some cases in Bombay and Ahmedabad long term agreements were evolved for the payment of D.A.

During the period there were some one-day political protest strikes. The two most notable were in Bombay, one on 2nd October 1939 and another on 26th January 1940. The strikes were organised mostly by communists.

The textile workers of Bombay organised a general strike on the issue of D.A. in March 1940. Earlier the issue had been referred to a Board of Conciliation. The Board recommended granting D.A. at a certain rate and was accepted by millowners, but not by the Girni Kamgar Union (Red Flag). In the month of February there were strikes in several mills but the union advised the workers to call them off as the issue could not be settled only through a general strike. The communists however called the strike on 5th March. It affected about 1,57,000 workers in all the mills in the city.

As soon as the strike began, Government orders prohibiting meetings, processions etc. were issued by the Police Commissioner. Government also arrested under D.I.R. a number of union leaders prominent amongst them being Mr. Dange, Mr. Ranadive, Mr. Parulekar and Mr. Mirajkar. During the course of strike the. All India Trade Union Congress gave a call for a one-day sympathetic general strike and it took place on 10th March and about three lakhs workers participated in it. The Mill owners' Association was in a strong position as it had accepted the recommendation of the Board of Conciliation and they refused to do anything more. There were also dim prospects of securing anything more. This had its effect upon workers, and they started drifting into the mills from the first week of April and normal work was resumed in all mills on 13th April. Thus the strike ended unsuccessfully.

G.I.P.Railway Workshop Strike (Vasant Gupte, op. cit, pp. 121-22.): During the World War II there were two important strikes in the Parel Workshop. The first started on November 6, 1941 over a demand for increase in dearness allowance. The Railway Board responded by granting D.A. of Rs. 4.50 per month. But the workers did not respond despite advice of the leaders to withdraw the strike. The management further conceded a concession of continuity of service. Thereupon the workers withdrew the strike on 19th November.

The other strike by the same workers started on 16th April 1941 over an issue of granting travelling concession to permanent workers for evacuating families from Bombay. On the 1st May, S. C. Joshi, General Secretary of the G.I.P. Railwaymen's Union led a deputation to the General Manager, when an agreement was reached. The strike was withdrawn from 4th May.

Dockyards Strike: On April 20, 1941 about 6,000 workers in the dockyard resorted to a strike demanding public enquiry of the arrest of a worker. The matter involved violence upon which Jamnadas Mehta persuaded the Dockyard authorities to release the arrested workers. The workers however did not relent, and it was only after N.M. Joshi's promise to place their demands before the Government of India that the workers withdrew the strike from 28th April.

B.E.S.T. Strike (1941): The B.E.S.T. Traffic Union and B.E.S.T. Workers' Union struck work on 28th May 1941 for pay scales, dearness allowance, annual leave, double wages for work on weekly holiday etc. This agitation involved more than 1200 workers. The dispute was referred to adjudication of a High Court Judge. N. M. Joshi advised withdrawal of the strike and the workers responded on the 2nd June.

Besides, there were a number of strikes in medium and small factories in Bombay, which were mainly for demand of bonus, increase in wages, restoration of wage cuts, etc. Workers in soap factories like Lever Brothers, Swastik Oil Mills and Tata Oil Mills went on strike in the middle of 1941. Most of the strikes ended with a compromise and give and take. There were also some strikes by workers demanding adequate supply of food-grains quota. This vital problem was solved by the employers by making some arrangements for improving supply, because they were eager to continue production in the wake of war demand and high profits.

All India Postal Strike, 1946 (V. B. Karnik, Strikes in India, pp. 317-18.): The postmen and lower grade staff union launched a strike on 10th July 1946 on the ground that the Government had not implemented the assurance of revision of pay scales given in February 1946. Consequently the postal services were adversely affected in Bombay as in India. It was supported by AITUC. The latter organised a sympathetic strike on 22nd July which involved about half a million workers in Bombay Presidency for a day. The telegraph workers in Bombay joined the fray on 23rd July which spread to other centres. At this stage Sardar Vallabhbhai Patel intervened and persuaded the Government to implement the earlier offer of relief. Upon this the strike was called off on 5th August 1946. The strike of telegraph workers lingered for a few days, but was abandoned. It received a good deal of popular support on account of the political movement against the British.

Indian Navy Strike, 1946 (Ibid., pp. 318-20.): It was a political strike, the grounds given being improvement of service conditions. In the true sense, it was a mutiny of the naval workers against imperialistic rule. The Government also treated it as such, and but for the pressure of the nationalist movement Government would have crushed it mercilessly. The trouble started with a hunger strike of the ratings of the signal school of the navy on 18th February 1946 as a protest against hardships and racial discrimination. The ratings from the entire naval establishment in Bombay including about 3000 persons held demonstrations the next day. The following day witnessed the involvement of all the ships of the navy in Bombay, two of them hoisting the Indian National Congress flag.

The episode led to a heavy exchange of fire between the army and the naval ratings on 21st February 1946. The strike spreaded to other naval establishments in India. It also led to a sympathy strike by the Royal Indian Airforce men at Sion and the Royal Army Supply Corps at Kurla which had repercussions on the airforce and army men in other centres in the country also. Demonstrations of industrial workers in Bombay turned violent. Workers in mills, railway workshops and other categories raised violent demonstrations which invited Government's wrath. The leaders of the Indian National Congress including Patel and Nehru advised the strikers to call off the agitation. The strikers responded, and the strike was called off on the 23rd. The Government appreciated the good gesture by not taking any action against the strikers except those involved in violence.

Textile Strike of 1950 (V. B. Karnik, Strikes in India, pp. 341-44.): It was the second largest strike of the textile workers in Bombay, the previous longest one being that of 1928. The strike of 1950 was organised by the Mill Mazdoor Sabha, an affiliate of the Hind Mazdoor Sabha. The union, though established in 1947, claimed the largest following among textile workers. The strike continued for 63 days involving more than one lakh workers. The strike occurred on account of a dispute over the bonus award by the Industrial Court. The Rashtriya Mill Mazdoor Sangh (INTUC), the registered representative union and the Millowners' Association had arrived at an agreement for the payment of bonus. However, the Mill Mazdoor Sabha opposed the agreement and gave a call for strike which began on 14 August 1950. The call for the strike was opposed by the Government and the R.M.M.S. Initially the communists and their Bombay Girni Kamgar Union had opposed the indefinite strike, but later supported the same as it was groomed to be successful. The Hind Mazdoor Sabha and the Socialist Party extended their full support and organised a one-day general strike on August 31 in all industries. The events led to violence and police firing causing the death of ten persons.

After announcement of modifications in the earlier bonus award by the Labour Appellate Tribunal, the strike was called off from 16th October as the workers were also quite exhausted in the struggle and were demoralized. The strike which lasted for 63 days, caused a loss of 92,11,117 man-days, involving a loss of wages estimated at Rs. 350 lakhs. The loss of production was estimated at Rs. 22 crores.

The strike was unsuccessful, and exhibited a lack of confidence of the workers in the R.M.M.S. The mill Mazdoor Sabha although enjoyed support among workers, it could not make deeper inroads on membership of the R.M.M.S. The strike had attracted the attention of foreign organisations like the British Trades Union Congress, International Confederation of Free Trade Unions and other labour organisations in the West.

Besides, there were a number of other strikes in the post-Independence period affecting the working of the dockyard, the Bombay Port Trust, the Air India (18 February 1949), 43 silk mills (July 1948) and the petroleum workers of Burmah Shell and Stanvac Oil Companies (28th February 1950 to 14th March 1950). An important strike in the period was that organised by the Bombay Municipal Kamgar Sangh from 13th May 1949. It involved more than 10,000 workers of the Bombay Municipal Corporation, and ended unsuccessfully after more than five months on 7th October. The man-days lost in this episode amounted to 6,72,099.

During the decade 1941-50 there was intense industrial unrest which was attributable to a number of factors such as protests against decline in standard of living, demand for workers' share in profit, spread of consciousness and increased union activity. Industrial Courts and Adjudicators played an important role in averting work stoppages.

Some Recent Developments: Industrial peace in Bombay was disturbed very often than not in the fifties and sixties of this century. The most important disquieting factor which generated strike and conflicts was the continuous rise in

prices. Consequent upon the vast expenditure on development and the burden imposed on the national economy by the needs of defence preparedness against the background of the aggressions by China (October-November 1962) and Pakistan (October 1965), prices, more particularly the prices of foodgrains and other essential goods, escalated rapidly from month to month. There was an all-round dissatisfaction and resentment among the working class.

The Bombay unions affiliated to the Hind Mazdoor Sabha took the lead in giving an organised expression to the protest of workers against the rise in prices, the scaicity of foodgrains, and the imposition of Compulsory Deposit Scheme. (*V. B. Karnik, Indian Trade Unions, 1966.*) They decided to organise a one-day protest strike in Bombay. All unions except those affiliated to the I.N.T.U.C. agreed to organise a 'Bombay Bandh' to cover all industrial and commercial activities. A Joint Committee, namely, the Mumbai Mazdoor Sangharsh Samiti was formed to organise the protest strike. The Committee gave a call for 'Bombay Bandh' on 20th August 1963. Over seven lakh workers belonging to all industries, such as textile, engineering, chemicals, docks, banks and other white collar workers also participated in large numbers. Only the essential services were exempted from the 'Bandh'. As per the *Times of India* of the next morning the strike " stood out as the most well conducted".

With its spectacular success in Bombay, the 'Bandh' became a new popular form of struggle. Several Bandhs were organised thereafter. "The 'Bandh' cannot be said to have brought any definite relief to workers but they highlighted their plight and compelled the Government to pay some attention to it." (*Ibid.*). They were mixed trade union-cwm-political party actions.

The municipal workers of Bombay had organised, during the period, two notable strikes, one in 1962 and another in 1963. Both were on the issue of dearness allowance. The first one was successful to a large extent, and was settled through the intervention of Mr. Y. B. Chavan, Chief Minister of Maharashtra. The second which began on 11th August 1963 was ventured by the Socialist leaders of the Municipal Workers' Union, and involved about 30,000 workers. They had the support of workers in other industries too. The dock workers struck work for a day in sympathy with them. Bus and tramway workers and taximen also went on sympathy strike for three to four days. The gigantic demonstration of 'Bombay Bandh' of 20th August 1963 also took place during the course of the municipal strike. Yet the strike failed and workers had to resume work on the 12th day without securing any benefit.

"The strike failed because, owing to the wrong attitude adopted by the leadership of the union, it assumed a political colour, became in fact a confrontation between the union and the Government." (*Ibid.*). Though the demand of workers was an economic one, the union leaders insisted on intervention of the Home Minister and the Chief Minister without utilising the usual machinery for settlement of the trade disputes. The consequence was coercion, arrests, recruitment of strike breakers and suspension of some workers.

A great loss to the trade union movement in Bombay as also to India was caused by the death of G.D. Ambekar in 1964, the Treasurer of the INTUC and the General Secretary of the Rashtriya Mill Mazdoor Sangh of Bombay. He was a devoted and selfless worker, and a capable and farsighted leader.

The one day strike of June 7, 1966 in the textile mills in Bombay was one of a great magnitude. It involved 1,72,282 employees who protested against the Bonus Ordinance. A similar episode had taken place earlier on December 29, 1965 against the cut in dearness allowance. It involved 1,69,827 textile workers in Maharashtra including Bombay. The next one in importance from the point of view of man-days lost was the strike of workers in Mahalaxmi Glass Works, Bombay, as a protest against the decision to close the semi-automatic section. The management had declared a lockout after the commencement of the strike. The strike began on March 2,1965 and ended successfully on July 29,1965. It involved 894 workers with a loss of 95,956 man-days. There were four important lockouts in Bombay during 1965 which caused a loss of 1,47,284 man-days. The lockouts were in the Siemens Manufacturing Company (1,119 workers), Firestone Tyre and Rubber Co. (1243), Mahalaxmi Glass Works (894) and Krishna Steel Industries.(Labour Gazette, Government of Maharashtra, December 1966.)

TRADE UNIONS IN BOMBAY

The earliest known example of a welfare organisation of workers is the Bombay Millhands Association, which was established in 1890 by N. M. Lokhanday, the first leader of Indian workers. It was formed to ventilate the grievances about hours of labour and the internal regulations of some of the mills, with a view to influencing revision of the Factory Act. It had no formal membership, no funds or rules.

The first body that is generally credited with trade union characteristics was the Kamgar Hitwardhak Sabha, founded in 1909 by B. R. Nare, S. K. Bole and Talcherkar. It began as a broad-based welfare movement aiming at education, support in unemployment or sickness and help settlement of industrial disputes. During the 1920s the Sabha sank gradually from public view and seems to have disappeared from about 1925.(*Richard Newman op. cit, p. 114.*) Its membership was drawn from municipal workers and those from Parel railway workshop and the mills around DeLisle Road and Chinchpokli.

The other welfare body for the cause of mill workers was the Social Service League, N. M. Joshi being its leader. Joshi and the League were inseparable in spirit. It may be mentioned that in January 1921 the Government chose him to fill one of the labour seats in the Central Legislative Assembly, a seat he was to occupy with only a few months interruption until the Assembly was dissolved in 1947. He served on the Royal Commission on Labour (1929-31) and several enquiries. "His greatest prominence was achieved as India's representative to the International Labour Organisation."(*Richard Newman, op. tit., p. 114.*) The League had begun in 1913.

The Girni Kamgar Sangh was formed in 1919 by Kanji Dwarkadas, L. R. Tairsee and D. R. Mayekar, which was managed by workers only. It had however no great impact on labour matters. It was in January 1920 that the existing unions were fused into a United Textile Workers' Union with Baptista as President. Its activities were however limited, and the condition of textile industry from 1920 to 1923 was also not propitious for its activities.

The national freedom movement " was the most addictive diversion of trade union leaders." (*Ibid., p. 140*) The All India Trade Union Congress (AITUC) which first met in Bombay in October 1920, was the most important federation of trade unions. Even at its birth, however the internal squabbles of the Bombay leaders were exhibited.

The legal basis for trade union organisation was provided by the Indian Trade Union Act of 1926. Registration under the Act was voluntary initially, and it did not entitle a trade union to secure recognition from employees. With the passage of the Industrial Disputes Act (1947), a better status was given to the registered trade unions, in that the advantage of machinery sel up for the settlement of industrial disputes is available only to registered unions. As regards recognition, at the Sixteenth Indian Labour Conference held at Nainital in May 1958, the Government and the employers agreed in principal to the adoption of criteria and conventions for the recognition of trade unions. Little progress has, however, been made with regard to its implementation. Under the Act, any seven or more persons can register as a trade union and any registered union can represent the workers. This naturally creates inter-union rivalry. Because of this every industry and every large factory have more than one union. The slogan of 'one industry, one union' is yet to materialise. The Bombay Industrial Relations Act tried to remove the defect partially by creating a category of 'Representative Union'

which alone can represent the workers before Industrial Courts. The Industrial Relations Act (1946), however, is not applicable to the engineering industry, as it is governed by the Industrial Disputes Act of 1947. Inter-union rivalry is inevitable though Government has attempted to reduce its intensity by having an inter-union code of conduct.

The progress of trade unionism goes along with the degree of the development of industries and in case of a particular industry along with its development. In Greater Bombay, the trade union movement appeared first in the textile, transport and communications and printing groups because these industries were the first to develop. Bombay is a centre of the cotton textile industry since the middle of the last century. The city is also the main centre of different types of transport, such as railway, shipping and bus transport. The development of means of communications, such as posts, telegraphs and telephones facilitated the formation of trade unions in these sectors. Printing is also in a sense an old industry. The trade union movement scarcely extended beyond the sectors stated above till the Second World War. The development of the engineering industry was essentially a war and post-war phenomenon, and therefore, the trade union movement in this industry emerged itself in a substantial measure only in the war and post-war period. (*Dr. B. R. Rairikar, Wages and Earnings in Engineering Industry in Bombay City and Suburbs (unpublished Thesis for Ph.D. degree of the University of Bombay)*.

Girni Kamgar Mahamandal: It was founded in December 1923 under the leadership of Bhatvadekar, Mayekar, A. A. Alwe, Tawde, Kusgaonkar, K. A. Desai and G. R. Kasle, all of whom were mill workers, although in a relatively higher pay group. The membership of the Mahamandal increased with the strikes of 1924 and 1925. From the middle of 1925 the Mahamandal deliberately sought the backing of jobbers in mills, as they had an influence over the workers. It emerged from the 1924 strike without open attachment to any political faction. Communists like Joglekar were on the union's advisory committee in an individual capacity. Mayekar looked after the union's administration and edited its newspaper, the Kamkari.

Early in 1925 the All India Trade Union Congress (AITUC) set up a Textitle Workers' Organisation Board composed of Baptista, Joshi, Ginwala, Jhabvala and V. P. Lele. After some pamphleteering, Ginwala and Jhabvala launched a new union in Parel, the Bombay Textile Workmen's Union, which aimed to provide a proper grievance procedure and advice on strike matters to avoid a repetition of the losses of 1924. The Madanpura Mill Workers' Union was formed by Syed Munawar of the Social Service League in 1925. Two other embryonic unions appeared in the early months of 1925, one at the Bombay Industrial mill and the other at DeLisle Road, but neither of them was backed by the AITUC, and neither seems to have survived for long. (Richard Newman, op. cit., p. 153.) In spite of these organisations the jobbers in mills had an upper hand in controlling the incidence of strikes, and "the struggling Mahamandal, the moribund Hitwardhak Sabha and the two feeble fledgings of the trade Union Congress "(Ibid., p. 154.) could not control the millhands.

Bombay Textile Labour Union (BTLU): On 31st December 1925 the representatives of all organisations, except the Mahamandal, agreed to form the Bombay Textile Labour Union by amalgamating the Madan-pura Mill Workers' Union, the Bombay Textile Workmen's Union, the Sat-Rasta Girni Kamgar Sangh, all of which had existed before the 1925 strike; the Kurla Kamgar Mandal, formed in October under guidance of Bakhale and Jhabvala, and other groups of millhands. N. M. Joshi was elected its first President with other office bearers including Asavale, Ginwala, Jhabvala, Bakhale, Kanji Dwarkadas, Syed Munawar, Bole and Talcherkar. "The new union can be seen as formal consummation of the developing relationship between Joshi and two other groups concerned primarily with welfare; the Central Labour Board and the Dwarkadas faction of the former Home Rulers. It was also an attempt to secure the political flanks of trade unionism by bringing various movements into coalition: the Liberals (Joshi and Kanji), Congressmen (Ginwala and Jhabvala), reformist non-Brahmans (Bole and Asavale) and local notables of the Muslim community. In spite of its welfare antecedents, the BTLU had more pointed economic objectives than the Mahamandal...... The union's objectives and the shape of its constitution reflected Joshi's wide knowledge of labour affairs and the multifarious contracts he had made in India and abroad".(Ibid., pp. 160-61.)

The BTLU began with a membership of less than 5000. It stood for political concessions to labour and better representation to workers in Legislature and municipalities. It was dependent upon jobbers.

The BTLU and the Mahamandal attempted to graft trade unionism on to traditional forms of leadership, and to build union out of alliances, with the jobbers.

Girni Kamgar Union (GKU): Registered in May 1928, the GKU emerged as a great force in the labour movement in Bombay under Alwe, Jhabvala, Bradley, Nimbkar, B. T. Ranadive, S. V. Ghate, S. A. Dange, Joglekar and Mirajkar. After the successful strike of 1928 the response of the workers to this union was magical. By the end of 1928 the total number of members was about 50,000, which increased to one lakh in January 1929. The growth of the union was spontaneous. The jobbers in mills were also willing to ally themselves with the GKU because they still sought protection against the standardisation scheme. By the beginning of 1929 the other textile unions offered no real competition to the GKU. The failure of the 1929 textile strike was however regarded as a failure ofthe GKU. The GKU insisted that relations with the employers were crucial and that organised strength was the best way of advancing the workers' interests. In spite of its failure in the 1929 strike, it made an important contribution to the political life of the mill area and to the growth of labour movement. (Richard Newman, op. cit., p. 260.)

Railway Employees' Unions (Vasant Gupte, op. cit., p. 68.): Some of the railway employees had organised themselves as early as 1897, the organisation being called the Amalgamated Society of Railway Servants of India and Burma. This Society changed its name to National Union of Railwaymen of India and Burma, while registering in 1928. In 1919 was formed another union called G.I.P. Railwaymen's Union which was later on amalgamated with G.I.P. Railway General Employees' Union in 1928. It had a membership of 41,000 in 1929.

Seamen's Unions (Ibid., pp. 68-69.): The Indian Seamen's Union was formed in 1921. The membership of the union was 21,512 in 1929. N. M. Joshi and Parulekar of the Servants of India Society and Syed Munawar were the important office-bearers of this union. In 1926 a new union, namely, Bombay Seamen's Union was formed, which had a membership of 548 in 1929.

Postal Unions(Ibid): The Bombay Postal Union was formed in 1907, and was probably the earliest union in Bombay. It had a membership of 1500 in 1929 from among clerical staff. The Bombay Postmen's Union was formed in 1925, which included 1286 members in 1929.

Municipal Unions(Ibid): Trade union movement in municipal services began in 1927 when the Bombay Municipal Workmen's Union was established. The clerical staff also organised the Bombay Municipal Officers' Association in April 1927. In September 1928, the Servants of India Society and the Social Service League formed another union under the name, Bombay Municipal Kamgar Sangh.

Port Trust and Dock (Ibid,): The Bombay Port Trust workers were among the earlier workers to unite. They formed two unions in 1920, namely, Bombay Port Trust Employees' Union and the Bombay Port Trust Railwaymen's Union, which had a membership of 1891 and 457, respectively in 1926. During the period 1926-28 three more unions were formed by dock workers, each of which had membership around one thousand. The B.P.T. Union is still in existence.

Besides the above early period unions, there were a number of unions in the period prior to 1930. The names of a few registered unions among them in Bombay city are mentioned below:—

	Month and year	Membership
Name	of formation	(March 1929)
General Workshop Men's Union	May 1928	500
Bombay Engg. Workers' Union	Dec. 1928	1053
Tramways' Union	March 1927	324
Press Workers' Union	March 1927	310
Bombay Telephone Employees' Union	March 1928	195
Bombay Kasbi Karigars' Union	March 1927	N.A
Bombay Taxi Drivers' Union	August 1928	742

All India Trade Union Congress (AITUC): A convention of representatives of various trade unions was organised at the initiative of N. M. Joshi, at Parel on 16th July 1920 to consider the arbitrary decision of the Government of India while selecting the Indian workers' delegate to the first session of the ILO held in 1919. This convention decided to form a central organisation of trade unions namely All India Trade Union Congress. The AITUC met for the first time in Bombay in October 1920. The office-bearers of the AITUC included Lala Lajpatrai, Joseph Baptista, C. F. Andrews, S. A. Brelvi, Dr. Annie Besant, Dewan Chamanlal, N. D. Gadgil, V, G. Dalvi, Anant Ram and Vaikunth Ram and L. R. Tairsee. This was the first central organisation in India in the formation of which Bombay city and Bombay unionists had a lion's share.

Trade union movement passed through several vicissitudes and hazards in the course of time. There were many occasions of unity and disunity. The Congressmen, the Royists under M. N. Roy, the Communists and others had differences, sometimes ideological, tactical or personal. The AITUC was thus a divided house.

Indian National Trade Union Congress (INTUC): The Congress leaders on their release from jail in 1945 found that the AITUC had gone into the hands of Communists. They therefore started recapturing their unions and their position in the AITUC.In the meantime, the Congress came into power in. most of the provinces, while the Communists had reverted to their old militant policy of class conflict. The sequel of events led to a conference in New Delhi under the chairmanship of Sardar Vallabhbhai Patel in May 1947. The Conference decided to constitute the Indian National Trade Union Congress, a new and powerful central organisation, with an affiliation of 200 unions and 5.75 lakh members.

Trade Unions in Bombay (1940-47): During this pMod; tftrg trade unionism in Bombay was unprecedented both in respect of number of unions and membership. Their position is given below:—

Year (December)	No.of Unions	Membership	Year (December)	No.of Unions	Membership
1940	82	128,634	1944	117	166,254
1941	84	116,854	1945	140	198,383
1942	90	124,243	1946	193	212,977
1943	100	138,882	1947	279	295,685

The above account mainly pertains to the trade union movement in the cotton textile, railways, posts and telegraphs, port trust and docks, municipality and other sectors. Unionism in the engineering industry was a comparatively late development which is dealt with below.

Trade Unions in Engineering Industry (B. R. Rairikar, op. cit): The first union in the industry was registered in 1929. It was called the Bombay Engineering Workers' Union with a membership of 250. It was followed by the General Workshop Employees' Union, registered in 1930. Both the unions had a very short life of a year or so. It was during the Second World War and the post-war period that the greatest progress took place in the engineering industry which provided stimulus to increase in unions. The rising prices, the desire to have a share in the enormous war time profit and the fall in real wages prompted the workers to organise themselves. The rise in employment in this industry, also led to rise in unionism in the industry. In 1945-46, there were seven city unions in Bombay, besides three plant unions which together had a reported membership of 6820. The names of the unions in engineering industry in Greater Bombay as in 1945-46 are given below, as they were the pioneers in the Engineering industry:—

	Unions	Year of Registration			
	City Unions				
1.	Engineering Workers' Union	1940			
2.	Bombay Metal Workers' Union	1941			
3.	Engineering Factory Kamgar Union	1942			
4.	National Engineering Workers'Union	1945			
5.	Iron Workers' Union	1945			
6.	Bombay Iron and Steel Workers' Union	1943			
7.	Bombay Engineering Mazdoor Sangh	1945			
	Plant Unions				
8	Calenders, Cables and Construction Company Employees Union	1942			
	Godrej and Boyce EmployeesUnion	1943			
10	Indian Radio and Cable Communications	1943			

The employment in the industry in 1946 was about 60,040. It seems, therefore, that a little more than 10.56 per cent of the workers were unionized.

Trade unionism had a continuous and phenomenal rise in the postwar period. The main cause might be the worsening economic condition of the workers. The higher profits earned by the entrepreneurs invoked a strong feeling among the workers to have a share in the profits in the form of bonus. Government policy inspired by welfare objectives created a psychology of expectations in the minds of workers. "The machinery of compulsory adjudication through which the trade union movement tried to have expansion of wages in terms of the Fair Wage Committee's Report helped the trade union movement to make further advantage." (B. R. Rairikar, op. cit, p. 124) Most of the industrial disputes involved the problem of wage, D.A. and bonus.

The number of city unions, which can be styled as federations of committees of workers in various factories, increased to nine, and of plant unions to 15 in 1950-51. The important additions to the plantunions were the Richardson and Cruddas Union (May 1946), Crompton and Parkinson (December 1946), Mackinnon and Mackenzie (September 1946), Greaves Cotton (November 1946), Larsen and Toubro Union (January 1948), Sankey Electrical Stamping (March 1948), Rallis Brothers (July 1947), Volkart Bros. (July 1947), Estrella Batteries (December 1947), Standard Batteries (June 1948) and East Asiatic Employees' Union (December 1948). The membership of unions submitting returns increased to 15,799 in 1950-51 as against 6,820 in 1945-46, *i.e.* by about 132 per cent. The employment in the engineering industry was 78,693 in 1950, which meant that slightly more than 20 per cent of the workers were unionized.

The Engineering Workers' Union, National Engineering Workers' Union, Engineering Mazdoor Sabha and Metal Mazdoor Sabha were the most important in the industry in Bombay. The Engineering Mazdoor Sabha was affiliated to the Hind Mazdoor Sabha, the Metal Mazdoor Sabha and the Engineering Workers' Union were under communist domination, while the National Engineering Workers' Union was affiliated to the I.N.T.U.C. By 1950, the trade unionism in engineering industry had immensely grown in number, strength, stability and its role. The organisational base was widened and they were gaining strength.

While the total employment in engineering industry increased to 86,025 (*Lakdawala*, op. cit., p. 869.) in 1956, the membership of reporting unions was 29,762. It means that slightly less than 35 per cent of the workers were unionized as against 20 per cent in 1950.

The total membership of unions, including non-reporting unions, in the engineering industry from 1957-58 to 1960-61 is given below:—

Year	Membership	Year	Membership
1957-58	33,251	1959-60	39,327
1958-59	30,588	1960-61	60,218

These statistics are however exclusive of the membership of the Bombay Labour Union and the General Workers' Union which had some engineering factories affiliated to them, but were mainly general labour unions. It is noteworthy that the union membership increased by more than 100 per cent from 1955-56 to 1960-61, while the increase in 1960-61 over that in 1945-46 was about 900 per cent.

The total employment in engineering industry in Bombay was 115,121 (inclusive of transport group) in 1960, of which 60,218 workers had trade union coverage. It means that nearly 52.39 per cent of the workers were unionized in 1960. Throughout the entire period under reference a greater and greater number of workers were coming under the fold of unionism.

The following table shows the strength of the different Central Unions in the major industries in Greater Bombay in 1960-61.(Compiled from the Annual Report on the Indian Trade Unions Act, 1926,1960-61.) The Central Unions, namely the

Hind Mazdoor Sabha, the I.N.T.U.C. and A.I.T.U.C dominated the engineering industry. The other Central Unions, U.T.W.F. and the Bharatiya Mazdoor Sangh (B.M.S.) had little foothold in the industry.

TABLE No. 17 SHARE OF DIFFERENT NATIONAL FEDERATIONS IN TRADE UNION MEMBERSHIP IN MAJOR INDUSTRIES IN BOMBAY, 1960-61

Federation	Textile	Printing	Chemicals	Engineering
A.I.T.U.C	26,089	2,954	2,845	12,847
A.I. I.U.C		_	· ·	12,847
	(16.02)	(45.79)	(19.05)	(21.33)
B.M.S	162	105		405
	(0.10)	(1.58)		(0.68)
H.M.S	14,785	1,471	2,986	11,839
	(9.08)	(22.86)	(19.99)	(19.66)
I.N.T.U.C	1,18,916	N.A	2,891	13,199
	(73.03)		(19.36)	(21.92)
Socialist	N.A	N.A		9,271
				(15.39)
Unattached	2,881	1,920	6,215	12,657
	(1.77)	(29.77)	(41.60)	(21.02)
total	16,28,33	6,450	14,937	60,218
	(100)	(100)	(100)	(100)

Note.-Figures in brackets represent the percentage share of the total membership.

The above statistics bring home the conclusion that the I.N.T.U.C. was the most powerful organisation in engineering industry. However, the difference in membership of H.M.S., I.N.T.U.C. and A.I.T.U.C. was not much. The Engineering Mazdoor Sabha was the largest among the unions in the industry in Bombay, with a membership of 10,505. It was followed by the General Engineering Employees' Union, and the Association of Engineering Workers. Since 1950, there was a decline in the incidence of industrial disputes, which might be due to the reference of disputes for arbitration.

Structural Pattern: The structural pattern of engineering unions reflects the industrial unionism as the dominant form. The second important feature of the unions is that there are the city unions in the industry to which the plants are affiliated. Some of these one plant unions are unattached to any organisation. There are also unions covering all the units under one management though all these units do not belong to the engineering industry. There are some general city unions covering the workers from various industries to which some of the units from engineering industries are affiliated; but they are not many. The affiliation, of some of the engineering units to' general unions' must be due to the attachment to particular leadership. The area of operation of the union is the industrial zone of Bombay-Thane area. Many units have more than one rival union which is mainly due to existence of four national organisations, which are attached to different political parties. The political rivalries among them weaken trade union activity. Though the unions are city unions, the bargaining is not industry-wise but plant-wise.

Union Management: There is a three-tier system in union management in engineering industry in Bombay. At the bottom is the factory committee of each factory. Members of the city union from each factory elect this factory committee. It consists of as many members as the ratio of the specified number of members for one representative, which varies according to the total membership. The committee is a link between the factory and the city union. It manages and decides all questions pertaining to the factory. It retains part of the income and passes the rest to the city union. There is a managing committee or executive committee above the factory committee which is elected by the latter. The managing committee constitutes the main executive of the union and is responsible for maintaining the organisation. It is this body which secures the vertical co-ordination of the trade union work. At the top of city union is the General Council or the Board of Representatives. It is generally composed of elected representatives of the members from various factories. It wields the power to lay down policies. The management of various unions, though broadly conforms to this pattern, differs from union to union.

The sources of income of a city union are subscriptions received and donations, while the expenditure is on items such as salaries, allowances, office expenses, legal expenses, meetings and propaganda, donations, and welfare of workers. Expenditure on welfare is however very insignificant.

The engineering workers in Bombay are fairly organised. The unions fought the cause of labour through joint negotiations and court proceedings. The employers have also adjusted to the reality of the situation by granting recognition to the unions. The growth of rival and overlapping unions appears to have led to a frittering away of the strength and resources of the movement. Frequent strikes and violence are the other consequences. The movement is yet to emerge out of its agitational stage to blossom into an institution of real strength striving for welfare and productivity of labour.

ACHIEVEMENTS OF LABOUR MOVEMENT (Vasant Gupte, op. cit ,p, 135,) (PRE-INDEPENDENCE PERIOD)

The working class of Bombay pioneered the Labour Movement in the country. The weapon of strike was discovered and developed by the Bombay workers themselves, and was very effectively used even before regular trade unions appeared on the horizon. The achievements of the textile strike of 1920 were so "basic and extensive that they are still to be matched by any other similar event".

One of the major achievements of the Bombay labour movement was the reduction in working hours. The hours of work in the initial stages of industrialisation were from sunrise to sunset, and often exceeded 15 hours a day. They were reduced to nine by the end of pre-Independence period. The major credit for this goes to the continuous struggle of the workers, though philanthropists and public luminaries also played a vital role through petitions, journalism and persuasions. The movement greatly influenced the factory legislation from time to time, and also forced the millowners to grant half an hours recess and Sunday as a holiday. During the World War II employers attempted an increase in hours, but workers resisted it through strikes such as the general strike in textile industry in 1941, and ultimately foiled that attempt. The achievement of the strike of 1920 in respect of working hours was spectacular.

The history of labour movement in Bombay is full of struggles for wage increase, though the strategy adopted varied from time to time. During the earlier days of scarcity of labour, the threat of desertion of labour forced employers to

increase wages. This period was followed by strikes which compelled employers to increase wages whenever prices soared up. At times the workers had to wage a war against cuts in wages. The wage cuts in the later 1920's led to a series of strikes, the most important among them being the Great Strike of 1928. The two-pronged struggle for wage increase and fight against wage cuts was responsible for considerable rise in wages till mid-nineteen thirties. Wages registered a rise from 1940 because of D.A. linked to the cost of living index which was awarded by the Ranganekar Board of Conciliation. The annual payment of bonus was commenced from 1941. The payment of D.A. and bonus though originally meant for textile industry in Bombay was instrumental to the grant of such benefits to industrial workers in the country.

The average monthly wage in the Bombay textile industry which was Rs. 12.58 in 1901 increased gradually to Rs. 17.01 in 1917 and Rs. 30.75 in 1920 on account of two general strikes. The year 1934 witnessed a cut in wages from Rs. 34.56 to Rs. 27.25, which continued upto 1937. By 1547 the average monthly wage reached a high mark of Rs. 88.50 which also included D.A. and bonus. The wages in other industries were almost jn consonance with those in the textile sector.

It is however noteworthy that although the labour movement was instrumental in increasing money wages it could not improve much the standard of living of workers. The real wages of the workers did not improve appreciably. This was particularly true of the war time situation when real wages dwindled even below the 1934 level. During the period 1940-44, although the total net profits of textile mills were estimated at Rs. 25.27 crores, the index of real wages of workers fell by about 20 per cent.

Besides reduction in working hours and increase in wages, there were many other achievements of the labour movement in Bombay. The textile general strike of 1920 achieved, besides higher wages, employers' acceptance of the obligation to pay compensation for employment injury and to provide medical aid during working hours. As a result of the 1928 general strike, the Fawcett Committee was appointed which was instrumental in formation of rules of work. The rules ensured a great measure of security of job to workers and standardisation of service conditions.

An important achievement of the labour movement was the birth of trade union as an institution for the welfare of workers. The struggle of workers coupled with the leadership of competent trade unionists lent the unions a status, and they became a weapon of collective bargaining.

CONTEMPORARY TRADE UNIONS

The registration of trade unions does not confer any significant right upon them as registration does not entitle them to secure recognition from employers. With the passage of Industrial Disputes Act (1947) a better status has been conferred on a registered union as it enjoys the advantage of machinery set up for the settlement of industrial disputes. Though some criteria and conventions for recognition of unions are set, little progress is achieved as regards their implementation. Since any seven or more persons can register as a trade union, there is a multiplicity of unions. This naturally creates inter-union rivalry and unco-ordinated activity. The Bombay Industrial Relations Act (1946) tried to remove this defect partially by creating a category of "Representative Union" which alone can represent the workers before Industrial Courts. The Bombay Industrial Relations Act (1946) is, however, applicable only to the textile industry, but not to engineering, chemicals and chemical products, pharmaceuticals, petroleum and many other industries. These latter industries are governed by the Industrial Disputes Act of 1947. Hence only the textile industry enjoys the benefit of a representative union, which can safeguard the interests of workers and maintain industrial harmony.

Under the circumstances stated above, as also many other factors inherent in the labour movement in the country, many unions, particularly the plant level unions do not undergo the formalities of registration under the Trade Unions Act of 1926. A number of unions are therefore not registered. Even the registered unions, which are expected to furnish the details regarding membership, office bearers, monetary position etc. to the Registrar of Trade Unions, do not submit their returns regularly, sometimes for years together. Registration of some unions is cancelled while some do not renew their registration. The non-submission of returns, cancellation of registration and inter-union rivalry are serious handicaps in the study of trade unions.

Under these constraints and limitations, the details of the registered trade unions in the various sections of industries in Bombay are furnished below on the basis of the information made available by the office of the Commissioner of Labour, Government of Maharashtra. (*Vide* letter dated 22nd August 1982 from office of the Commissioner of Labour, Maharashtra Government,) The industry-wise information pertains to the year ending with December 31, 1980, and it had its own limitations. It is quite likely that a good many unions may not be covered in this study, though they might have a considerable patronage in Bombay, by virtue of their non-submission of returns to the Labour Office, or their non-registration, etc.

Textile Industry Unions: There were nine registered trade unions in Greater Bombay in December 1980 which represented the cause of the workers in the textile industry. Almost all of them are industrial unions, while none of them can claim to be a craft union. Of the existing registered trade unions in the textile industry, the Rashtriya Mill Mazdoor Sangh was the only union registered in the pre-Independence period. The Mill Mazdoor Sabha was registered just after Independence (October 1947), while the Mumbai Girni Kamgar Union was registered in the late fifties (March 1959). The rest of the existing registered unions were registered in the course of the seventies of this century. It can be deduced from the dates of registration that the Rashtriya Mill Mazdoor Sangh (RMMS), registered on 27th August 1941, is the oldest among the existing unions of textile workers in Bombay. It is also the oldest among the existing registered unions in various industries in Bombay. The other unions registered in earlier years and referred to in previous pages are either extinct or disintegrated or unregistered. As per records, the RMMS claimed the largest membership (1,39,153) in textile mills. The RMMS is affiliated to the INTUC, and is recognised as a representative union for the textile industry under the Industrial Relations Act. By virtue of its status as a representative union it is supposed to be a spokesman of the textile workers, and is under obligation to negotiate and to deal with the Bombay Millowners' Association which plays the role as spokesman and a mouthpiece of the millowners. The RMMS also deals with the owners of individual mills in settlement of disputes. It has political affiliations with the Indian National Congress, the ruling party.

The Mill Mazdoor Sabha, registered on 22 October 1947, is also an old registered union. It had a membership of 17,991 workers in the textile industry in Bombay in 1980. The Mill Mazdoor Sabha is recognised as a representative union for the silk mill industry under provisions of the Industrial Relations Act, and is affiliated to the Hind Mazdoor Sabha.By virtue of its being recognised as a representative union it is expected to safeguard the interests of the workers in silk industry, and deal with the owners or the Bombay Millowners' Association as the case may be.

The Mumbai Girni Kamgar Union is another important union of textile workers, registered on 2nd March 1959. It enjoyed a membership of 11,442 in 1980 and is affiliated to the All India Trade Union Congress (AITUC). It has political affiliations with the Communist Party of India. The Girni Kamgar Sabha, registered on 31st May 1977, enjoyed a membership of 11,681 in 1980 as per official statistics. This union is not affiliated to any National Federation of trade unions. The Lai Bavta Mill Mazdoor Union is another important organisation of textile workers in Bombay, registered on 2nd October 1971. It had a membership of 4,060 as per official statistics in 1980. This is affiliated to the CITU, and has therefore leanings towards communist ideology.

TABLE No. 18 REGISTERED TRADE UNIONS IN TEXTILE INDUSTRY, GREATER BOMBAY, 31ST DECEMBER 1980

Serial No.	Name and Address	Date of Registration	Membership and Affiliation*	Office Bearers
1	2	3	4	5
1	Mill Mazdor Sabha, Hindu Colony, Dadar	22-10-1974	17991 ——————————————————————————————————	Pre—Kisan Tulpule GS—D. G. Phatak Tre—A. B. Mulay
2	Rashtriya Mill Mazdoor Sangh, Mazdoor Manzil, Parel Tank Road, Parel	27-8-1941	1319153 INTUC	Pre—Vasant Hoshing GS—A.T. Bhonsle Tre—E. D'souza
3	Mumbai Girni Kamgar Union, Dalvi Building, Parel.	2-3-1959	11442 	Pre—Bhagvan Thorat GS— Gangadhar Chitnis Tre D.N.Yelkar
4	Lal Bavta Mill Mazdoor Union, Janashakti, Globe Mill Passage, Bombay-13.	2-10-1971	4060 CITU	Pre—Dinkar Kadav GS—P. K. Kurne Tre—S.T. Koli
5	Girni Kamgar Sabha, Mogal Lane, N. M. Joshi Marg, Bombay-11.	31-5-1977	11681 N.A	Pre—Namdeorao Ghatge GS— Vishwanath Satam Tre—Dattatraya Rane
6	National Rayon Corpn. Officers' Guild, P.D'Mellow Road, Carnac Bunder, Bombay	13-4-1972	555 NA	Pre—G. R. Khanolkar GS—E. G. Fernandes Tre—R. S. Sampath
7	Rashtriya Cotton Kamgar General Union, Cotton Exchange Building, Bombay.	20-10-1976	563 INTUC	Pre—Navin Bhagat GS.—Jayaram Rahate Tre—Devendra Joshi
8	Maharashtra State Textile Corporation Employees' Union, Govind Wadi, Andheri.	23-3-1978	61 NA	Pre- Kishor Deshpande GS—S.S.Sawant Tre—M.S.Dabke
9	Bombay Textile Technicians and Officers' Association, Kennedy House, Goregaonkar Road, Bombay-7	5-6-1980	437 NA	Pre—R. J. Mehta GS—Prakash Phatarphekar Tre—D. T. Keluskar

* CITU: Centre of Indian Trade Unions. AITUC: All India Trade Union Congress. INTUC: Indian National Trade Union Congress,

HMS : Hind Mazdoor Sabha. BMS : Bharatiya Mazdoor Sangh. -

NA; Not Affiliated,

Engineering Industry Unions: Industrial relations in the engineering industry are governed under the Industrial Disputes Act of 1947. As per official information, there were 14 registered trade unions in this industry in Bombay upto 31st December 1980. Of these nine were industry unions and five plant level unions. As many as five unions including two plant unions were affiliated to the AITUC. Three trade unions including one plant union had affiliation to the INTUC. The Bharatiya Mazdoor Sangh (BMS) and the CITU claimed an affiliation of one registered trade union each. Four of the unions inclusive of two plant unions were not affiliated to any national federation or central trade union. Of the total of 14 unions registered under the Trade Union Act, only one was registered in the pre-Independence period, the rest of them being organised in the post-planning era.

The Engineering Mazdoor Sabha, registered on 20 th June 1946, appears to be the oldest among the existing registered trade unions in this industry. This organisation was reported to have a membership of 9,861. It is not affiliated to any national federation or any political party. The Association of Engineering Workers, registered On 10 October 1958, was however the largest among the registered unions in the industry in Bombay. It enjoyed the membership and patronage of 27,366 workers. It has affiliations to the INTUC and the Congress Party. Next in importance from the point of view of membership on record was the Engineering Workers' Union. It had a membership of 11,146. This organisation is affiliated to the CITU, and believes in communist ideology. The Mahindra and Mahindra Workers' Union, registered on 29 September 1956, was a plant level union enjoying a membership of 5,447 in 1980. It is affiliated to the AITUC. The Kamani Employees' Union is quite an old organisation of workers in the Kamani Engineering Company, registered on 24 December 1951. This union enjoyed a membership of 3,586 workers, and is an independent organisation without being affiliated to any central trade union or political party.

The rest of the trade unions had smaller membership. The details of the registered trade unions in the engineering industry in Bombay as upto 31st December 1980 are furnished in the following table:—

TABLE No. 19
REGISTERED TRADE UNIONS IN ENGINEERING INDUSTRY, GREATER BOMBAY, 31ST DECEMBER 1980.

Serial No.	Name and Address	Date of Registration	Membership and Affiliation	Office Bearers
1	2	3	4	5
1	Engineering Maz <mark>door</mark> Sabha Kamgar Sadan, Kennedy Brigde, Bmbay- 7	20-6-1946	9861 NA	Pre— R.J.Mehta GS—T.V.Nair Tre— B.D.Makaji
2	Kamani Employees' Union opp. Premier Automobile, Kurla	24-12-1951	3586 NA	Pre— Y.V.Chavan GS— S.B.Pathare Tre— K.N.Karwara
3	General Engineering Employees' Union, Poibawdi, Parel	12-10-1954	787 AITUC	Not available
4	United Siemens' Union of India, Dongri	31-3-1956	Not given AITUC	Pre— M.N.Yusufi GS—Abdul Wahab Tre—Bawa Miyab
5	Mahindra and Mahindra Workers Union, S.V.Road Kandivili West	29-9-1956	5447 AITUC	Pre— S.B.Salvi GS— B.S.Dhume Tre— R.D.Nadkarni
6	Association of Engineering Workers , Janta Colony Ghatkopar.	10-10-1958	27366 INTUC	Pre—Datta Samant GS— T.S.Borade Tre— B.S.Talekar

Serial No.	Name and Address	Date of Registration	Membership and Affiliation	Office Bearers
1	2	3	4	5
7	Engineering Sangh, Rajan Building, Poibawdi, Parel	16-2-1960	417 BMS	Pre—Raman Shah GS.—P.R. Keluskar Tre—K.R.Desai
8	Engineering and Metal Workers' Union, S.V. Road, Andheri	3-11-1964	1680 AITUC	Pre—V.Kamble GS— B.S.Dhume Tre- S.D.Nalawade
9	Engineering and General Workers' Union, Akurli Road, kandivili (East)	22-8-1969	717 AITUC	Pre—S.R.Jagtap GS—B.R. Shivankar Tre—A.R. Nadkarni
10	Maharashtra Engineering, Plastic and General Kamgar Union, Anand Wadi, Malad(E).	20-3-1970	386 	Pre—T. Upadhyay GS— R. R. Mishra Tre —B. R. Mishra
11	Engineering Workers' Union, 21-10- 1970 11146 Janashakti, Globe Mill Passage, Bombay-13.	21-10-1970	11146 CITU	Pre—S. Y. Kolhatkar GS— K. L. Bajaj Tre— P. M. Vartak
12	Premier Automobiles Mechanite Foundry Employees' Union, Opp Sarvodaya Hospital Ghatkopar.	12-2-1973	246 INTUC	Pre- Y.V.Chavan GS-S.K.Rajan Tre- A.N.Chakravarti
13	Mukund Staff and Officers' Association, C/o Kamani Employees Union, Kurla	20-6-1973	1039 NA	Pre- Y.V. Chavan GS-S.K.Rajan Tre- A.N.Chakravarti
14	Engineering and Metal Employees' Union, Opp. Sarvodaya Hospital Ghatkpar	31-7-1976	138 INTUC	Pre- G.P.Galgali GS- S.K.R.lyengar Tre-R.K.Shah

Chemical Products Industry Unions: There were six registered trade unions in the chemicals and chemical products industry in Bombay as on 31st December 1980. All of these unions were registered in the post-Independence period. This could be attributed to the fact that the growth of the industry was accelerated only in the post-Independence period. It is a salient feature of the industry that it enjoys a happier position as regards industrial peace and unionism.

Of the six registered unions, three were industry level unions, while the rest of the three were plant level unions. Three unions were affiliated to central unions, one each to the AITUC, the INTUC and the HMS, whereas three organisations including two plant level unions were not ffiliated-to any central union or any political party. One of the plant level unions, namely, Hindustan Organic Chemicals Employees' Union, although registered in Bombay, represented the workers of the public sector undertaking at Rasayani on the outskirts of Bombay Metropolitan Region.

The Dyes and Chemical Workers' Union, registered on 16th September 1947, was by far the largest organisation enjoying a membership of 5,608 workers. It is affiliated to the AITUC and believes in communist ideology. The Chemical Mazdoor Sabha, registered on 30th August 1947, is the oldest among the existing registered unions in this industry. It had a membership of 2,863 in 1980 and is affiliated to the Hind Mazdoor Sabha.

 $The \ details \ of \ the \ registered \ trade \ unions \ in \ this \ industry \ in \ Bombay \ as \ up to \ 31st \ December \ 1980 \ are \ furnished \ below:$

TABLE No. 20
Registered Trade Unions in Chemical Industry, Greater Bombay, upto 31st December 1980

Serial No.	Name and Address	Date of Registration	Membership and Affiliation	Office Bearers
1	2	3	4	5
1	Chemical Mazdoor Sabha, Satyagiri, Dadar	30-8-1947	2863 HMS	Pre—Kisan Tulpule GS— V.A.Khanollkar Tre—G.Vasy
2	Dyes and Chemical Workers' Union, Dalvi Building, Poibawdi, Parel	16-9-1947	5608 AITUC	Pre—Not given GS—Not given Tre—Not given
3	Chemical Employees' Union Kennedy House, Goregaonkar Road, Bombay-7	21-1-1950	1636 	Pre-R.J.Mehta GS-Prakash Phatarphekar Tre-Bharat Mulik
4	Glaxo Laboratories Employees' Union C/o Glaxo Laboratories, Worli	20-2-1954	2117 NA	Pre— V.M.Verghese GS—P.A.Rao Tre— K.R.Bhende
5	Mindia Chemicals Employees' Union, 5th Road, Khar (W)	20-3-1978	182 NA	Pre— G.R.Khanolkar GS—Not available Tre —A.K.Desai

Pharmaceuticals Industry Unions: Six unions of pharmaceuticals industry workers were reported to be registered in Bombay as upto 31st December 1980. The Glaxo Laboratories Employees' Union registered in February 1951 was shown under the chemical industry as per the returns from the Commissioner of Labour. It had a larger membership than any other union in the pharmaceuticals industry in Bombay. The All India Pharmaceutical Employees' unions except one were plant unions. The All India Pharmaceutical Employees' Union with a membership of 1,455 was the only general industry union which was affiliated to the AITUC. The May and Baker Employees' Union was another organisation which was affiliated to a central trade union, namely, CITU. The rest of the four trade unions had no affiliation to a central trade union or a political party. Trade unionism in the pharmaceuticals industry is still in its infancy, and its history dates back to October 1955 when the Parke Davis Employees' Union was registered. The other unions were registered in the sixties. This was in conformity with the accelerated growth of the industry in the planning period.

The details of registered trade unions in this industry in Greater Bombay as upto 31st December 1980 are furnished in the table below:—

TABLE No. 21
Registered Trade Unions in Pharmaceuticals Industry, Greater Bombay, December 1980

Serial No.	Name and Address	Date of Registration	Membership and Affiliation	Office Bearers
1	2	3	4	5
1	Parke Davis Employees' Union, Saki Naka , Bombay	14-10-1955	809 NA	Pre— A.K.Chakradev GS— V.G.Ajgaonkar Tre— A.D.Mungekar
2	All India Boots Pure Drug Employees' Union, Sion	29-3-1961	936 NA	Pre— B.S.Chitre GS—Rajmani Singh Tre— G.P.Shetty
3	May and Baker Employees' Union, Sion.	7-10-1961	969 	Pre- N.R.Shithankar GS- G.M.Coutinho Tre-J.J.Gharat
4	Hoechst Employe <mark>es'</mark> Union, Khetan Bhuvan, J.M.Tata Road, Bombay-20	14-3-1964	1093 NA	Pre—M.S.Irani GS— A.W.Naroha Tre—D.Dutt
5	All India Pharmaceutical EMployees' Union, Shramjivi Awaj, Sweri.	9-5-1964	1455 AITUC	Pre— S.N.Junnarkar GS—Roza Deshpande Tre—B.G.Singh
6	Franco Indian Employee's Union C/o Franco Indian Pharma, E. Moses Road, bombay-11	13-12-1968	344 	Pre-A.D.Poojari GS-Madan Phadnis Tre- S.K.Bangera

Petroleum Industry Unions: The growth of the petroleum industry is comparatively of recent origin. Naturally trade unionism found a congenial home in the industry only in recent years. The Commissioner of Labour reported seven registered trade unions in this industry in Bombay as upto 31st December 1980, The Petroleum Workmen's Union, registered on 1 lth October 1949, is by far the oldest among the existing organisations. With a membership of 890, it was affiliated to the AITUC. The Petroleum Employees' Union, registered on 18th November 1954, was however the biggest union with a membership of 2,109. It is affiliated to the INTUC under leadership of congressmen. The other unions which were quite smaller in size were independent, and had no affiliation or attachment to central trade unions or political parties. The Bharat Petroleum Corporation had three unions, one each of process technicians, management staff and refinery personnel.

The information about the registered trade unions in petroleum industry in Bombay as upto 31st December 1980 is furnished in the following table:—

TABLE No. 22
Registered Trade Unions in Petroleum Industry, Greater Bombay, December 1980

Serial No.	Name and Address	Date of Registration	Membership and Affiliation	Office Bearers
1	2	3	4	5
1	Petroleum Workmens' Union Sweri	11-10-1949	890 AITUC	Pre—B.S.Dhume GS—P.S.Desai Tre—T.S. Panickar
2	Petroleum Employees' Union, Golanji Hill Road, Sewri.	18-11-1954	2109 INTUC	Pre—Raja Kulkarni GS—C.N.Shirali Tre— K.N.Krishnan
3	Bharat Petroleum Corpora- tion, Process Technicians and Analysts' Union, L. Techcians, H. No. 4, Block No. 8, Mulund Colony.	14-6-1963	144 	Pre-S. K. Hinduja GS-P. M. Kulkarni Tre- G.B.Venkatraman
4	Hindustan Petroleum Management Staff Association, Bhulabhai Desai Road, Bombay-26.	17-8-1970	607 NA	Pre—H. R. Handa GS— G.M.Kannamwar Tre—R.G.Nayak
5	Bharat Petroleum Corporation, Management Staff Association (Refining Division) C/o. Bharat Petroleum Refineries Site, Bombay-74.	5-8-1978	125 NA	Pre—M. L. Mattoo GS—M. M. Rao Tre—P. S. Raghavan
6	Bombay Petrol Pumps and General Workers' Union, New Mill Road, Kurla.	2-5-1979	269 NA	Pre-S. A. Dube GS-P. B. Goankar Tre-R.B. Yadav
7	Bharat Petroleum Corporation Limited (Refinery), Employees' Union, Tilak Nagar, Chembur.	6-2-1980	737 NA	Pre-M.L.Punjabi GS P.O Verghese Tre-U.V.Pai

Electrical Engineering Unions: There were only two registered unions reported from the industry. One of them was registered on 3rd February 1971, while the other on 6th December 1975, its office bearers being H. N. Trivedi, M. K. Shenoy and V. S. Mathews. Both the trade unions were independent of national federations of unions.

Transport Workers' Unions: Trade unionism in the transport industry appears to be dominated by the Hind Mazdoor Sabha to which are affiliated five of the eight registered unions. The organisations of workers affiliated to the Hind Mazdoor Sabha which had a large following are supposed to be notable. They had together a membership of 84,934 workers in Bombay, while the three other trade unions had a total membership of only 1,143 in December 1980.

The Maritime Union of India is the oldest among the existing registered trade unions in this industry in Bombay. It was registered on 30th March 1941. It had a membership of 6,816 in 1980, and is affiliated to the HMS. Another union registered in the pre-Independence period is the B.E.S.T. Workers' Union registered on 10th July 1946. It had a membership of 21,425 workers, and is affiliated to the HMS. The Transport and Dock Workers' Union, registered on 15th May 1968, is however the biggest among the transport workers' unions in Bombay. It enjoyed a membership of 26,137 workers in 1980, and is affiliated to the HMS. The Bombay Port Trust Employees' Union and the National Union of Seafarers which enjoyed a membership of 12,476 and 18,080 workers, respectively in 1980, are also very important unions with a status in the working class in this metropolitan city. Both these unions under common leadership are affiliated to the Hind Mazdoor Sabha.

The transport workers unions, though not organisations of factory workers as such, have had a great impact on the labour movement in metropolitan Bombay. Industrial peace in the transport sector is vital for a healthy economic and social life in the City. Industrial disputes and stoppages of work by transport workers hampers normal life and production in the City. The transport workers' unions are also among the well organised trade unions in Bombay.

The information about transport workers' unions in Greater Bombay as upto 31st December 1980 is given below:—

TABLE No. 23
Registered Trade Unions of Transport Workers, Greater Bombay, December 1980

Serial No.	Name and Address	Date of Registration	Membership and Affiliation	Office Bearers
1	2	3	4	5
1	Maritime Union of India, National Insurance Building, Hornby Road, Fort.	30-3-1941	6,816 HMS	Pre—C. F. Delima GS—K. P. Kolah Tre—B. R. Fernandes
2	B.E.S.T. Workers' Union, 42, Kennedy Bridge, Bombay.	10-7-1946	21,425 HMS	Pre—George Fernandes GS—N. A. Phenany Tre—F.D.Nazreth
3	Bombay Port Trust Employees' Union, Kamgar Sadan, Mazagaon.	11-12-1952	12,476 HMS	Pre-Shanti Patel GS-S. K. Shetty Tre-R S. Pawaskar
4	Transport and Dock Workers'Union, P. D'Mello Bhavan, Carnac Bunder.	15-5-1964	26,137 HMS	Not available
5	National Union of Seafarers', Goa Street. Bombay-1.	28-2-1955	18,080 HMS	Pre—Shanti Patel GS—Dr. Leo Barnes
6	State Transport Employees' Association, Yahatuk Bhavan, Bombay-8.	10-3-1969	97 INTUC	Pre-A. N. Kulkarni GS-P. G. Ranade
7	B.E.S.T. Officers' Association, B.E.S.T. House, Bombay-5	7-10-1972	478 NA	Pre-G. S. Nadkarni GS-Not available Tre-K. P. Shirsekar
8	State Transport Officers' Associ- ation, Vahatuk Bhavan.	27-6-1980	568 	Pre-M. G. Phadtare GS-S. M. Shitole Tre-S. B. Bhoyar

The Mathadi Workers' Union, information for which is not available, kas a large following. The organisations of white collar workers have also emerged in recent times. Since many of them are primarily on an All India basis, the account of their activities has not been covered in this volume. Organisations of Government servants have come up in recent times. The above survey does not cover a good many such unions. Many unions are found to revolve around personalities. A strong person dominates the union. He determines its policies and actions. The union becomes known as his union, though it might be affiliated to some organization. The workers look up to him to secure their demands and champion their cause. Many such unions are associated with the names of Datta Samant, George Fernandes, Bal Thakare, Mahadik, Datta Salvi, Shanti Patel, S..R. Kulkarni, Vasant Hoshing, Bhai Bhosale, Anna Patil, Narayan Phenany, Roza Deshpande, Kurne, Dhume, Raja Kulkarni, K. T. Sule, Jagannath Jadhav, Kishore Deshpande, S. Y. Kolhatkar, Chitnis, Somnath Dube, Sanzgiri, Khanolkar, Vasant Tulpule, R. J. Mehta, P. K. Sawant, Patkar, R. G. Karnik and many others. The Bharatiya Kamgar Sena, a trade union wing of the Shiv Sena, also has gained a strong foothold in the labour movement in Bombay during the last few years.

The study of trade unions and labour movement in Bombay will not be complete without the mention of a galaxy of men of merit of the earlier generation who distinguished themselves in the cause of labour-Alvares, Ambekar G. D., Bakhale R. R., Baptista, Dange S. A., P. D'Mello, Dinkar Desai, Deshpande S., V., Jhabvala, Joglekar K. N., Joshi N. M. (died in 1955), Joshi S. M., Karnik V. B., Kotwal Manohar, Ashok Mehta, Purshottamdas Trikamdas, Ginwala, Nare, Bole, Jamnadas Mehta, Mirajkar S. S., Nimbkar R. S., Nath Pai, Ranadive B. T., Roy M. N.. Thengadi D. R., Thengadi Dattopant, Tulpule Bagaram, etc. etc.

INDUSTRIAL DISPUTES

In the nature of things industrial peace is disturbed on several occasions giving rise to industrial disputes. There are several reasons for the incidence of such disputes, the principal reasons being pay and allowances, conditions of work, discipline, bonus, leave and hours of work recognition of union, retrenchment, etc. At times the disputes take place not for any economic demand but for some extraneous considerations, clash of vested interests of union leaders, political reasons or ambitions of leaders for personal gains. The Government have established a machinery for settlement of industrial disputes under various legislative measures. Accordingly cases of disputes are referred to concerned bodies for conciliation, arbitration and adjudication. The labour and industrial courts play an important role. The entire problem of industrial disputes is, however, a multiple phased problem which defies solution quite often, and disputes do take place resulting into disturbance of industrial peace.

The statistics of the various aspects of industrial disputes in Bombay from 1930 to 1947 are given in Table Nos. 24 to 29, while Table No. 30 gives the statistics of industrial disputes for the textile industry, engineering industry and miscellaneous industries for the period from 1950 to 1970 and for the year 1980.(Vasant Gupte, op. tit, .pp. 162-68.) The statistics are self-explanatory and need no comments.

TABLE No. 24 Industrial Disputes in Bombay City (1930-47)

Year	Spinning and Wvg.	Metal and Engineering	Others	Total
1930	27	1	15	43
1931	14	2	2	18
1932	11	2	12	25
1933	35		7	42
1934	26		4	30
1935	9		11	20
1936	6		5	11
1937	24	2	15	41
1938	31	4	21	56
1939	31	13	17	61
1940	22	8	27	57
1941	21	10	36	67
1942	38	19	52	109
1943	37	31	63	131
1944	34	28	90	152
1945	65	45	93	203
1946	179	50	132	361
1947	203	79	189	471

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TABLE No. 25 Number of Work People Involved in Disputes (1930-47)

Yea	r Spinning and Wvg	Metal and Engineering	Others	Total
1930	36,407	175	27,521	64,103
1931	22,015	3,892	310	26,217
1932	6,745	3,405	3,947	14,097
1933	42,777		942	43,719
1934	1,13,592		1,450	1,15,042
1935	8,668		1,051	9,719
1936	10,515		746	11,261
1937	35,581	155	4,062	39,798
1938	24,436	537	2,415	27,378
1939	20,624	1,111	1,879	23,614
1940	1,88,397	6,528	3,284	1,98,209
1941	32,562	11,385	12,335	56,182
1942	70,913	26,347	23,307	1,20,567
1943	58,442	16,499	28,403	1,03,344
1944	60,704	46,316	36,438	1,43,458
1945	71,688	57,385	43,884	1,72,957
1946	4,14,691	85,102	78,786	5,78,579
1947	4,36,219	99,147	70,908	6,06,274

TABLE No.26 NUMBER OF WORKING DAYS LOST (1930-47)

Year	Spinning and Wvg	Metal and Engineering	Others	Total	
1930	1,54,640	525	9,03,872	10,59,037	
1931	2,08,955	17,666	7,460	2,34,081	
1932	1,67,348	38,961	11,958	2,18,267	
1933	3,48,553		8,258	3,56,811	
1934	32,04,322		3,917	32,08,239	
1935	66,299		4,645	70,944	
1936	1,72,203		19,712	1,91,915	
1937	1,47,159	2,416	42,679	1,92,254	
1938	1,22,914	867	13,204	1,36,985	
1939	94,456	14,248	14,217	1,22,921	
1940	45,91,790	20,516	27,423	46,39,729	
1941	89,043	96,316	80,370	2,65,730	
1942	2,86,173	2,23,625	2,43,071	7,52,869	
1943	3,02,034	51,526	94,305	4,47,865	
1944	3,19,186	1,22,715	2,06,705	6,48,606	
1945	4,16,202	1,96,130	2,02,204	8,14,536	
1946	14,02,275	5,03,204	3,53,756	22,59,235	
1947	22,77,132	4,33,852	5,39,319	32,50,303	

TABLE No.27 DISPUTES IN BOMBAY BY CAUSES (1930-47)

Year	Pay and Allowances	Conditions of work, discipline, personal etc.	Bonus	Others includin leave and hours	Total	
1930	18	10	1	14	43	
1931	8	5		5	18	
1932	16	9			25	•
1933	26	14		2	42	•
1934	18	10		2	30	•
1935	8	9		3	20	
1936	4	5		2	11	•
1937	25	8	1	7	41	
1938	32	19	=	5	56	•
1939	40	18		3	61	•
1940	44	9		4	57	•
1941	50	11		6	67	•
1942	55	12	27	15	109	
1943	57	16	26	32	131	tteers
1944	77	23	20	32	152	
1945	64	40	51	48	203	
1946	140	70	28	123	361	
1947	171	120	74	106	471	1

TABLE No. 28 Disputes in Bombay by Results (1930-47)

Year	Entirely favourable to workers	Partially favourable to workers	Entirely unfavourable to workers	Inconclusive, indeterminate, indefinite etc.	In Progress	Total
1930	14	3	22	3	1	43
1931	5	4	8	1		18
1932	5	7	11	1	1	25
1933	5	1	29	4	3	42
1934	4	5	20	1		30
1935	6		14			20
1936	2	4	3	2		11
1937	8	10	21	1	1	41
1938	3	19	32	2		56
1939	13	19	24	3	2	61
1940	14	13	27	2	1	57
1941	6	15	43	1	2	67
1942	13	26	65	2	3	109
1943	15	48	65	3		131
1944	19	39	81	10	3	152
1945	21	37	104	32	9	203
1946	44	67	187	57	6	361
1947	66	57	252	84	12	471

TABLE No. 29 Disputes in Bombay by Duration (1930-47)

Year	One day	2-5 days	Over 5 days	Total
1930	7	19	17	43
1931		6	12	18
1932		7	17	25
1933	2	12	28	42
1934	3	12	16	31
1935	1	7	12	20
1936	1	2	8	11
1937	2	21	18	41
1938	10	26	20	56
1939	9	24	28	61
1940	12	19	26	57
1941	12	33	22	67
1942	16	51	42	109
1943	21	63	47	131
1944	41	72	39	152
1945	62	77	64	203
1946	126	130	105	361
1947	130	186	155	471



TABLE No. 30 Industrial Disputes according to Industries in Bombay, 1950, 1970 and 1980

		Textile		E	Engineerin	g	Miscellane	ous			Total	
Year	disputes	No. of workers involved		No. of disputes	No. of workers involved	No. of man- days lost	No. of disputes	No. of workers involved		disputes	No. of workers involved	No. of man-days lost
1950	66	2,88,659	97,68,457	35	25,345	122,447	70	25,759	65,140	171	3,39,763	99,56,044
1951	91	88,833	5,40,751	31	26,232	85,722	94	38,301	1,97,371	216	1,53,366	8,23,844
1952	67	71,178	2,92,993	23	15,132	43,618	77	18,279	64,397	167	1,04,589	4,01,008
1953	44	65,305	3,31,394	38	21,044	1,25,301	43	10,453	21,478	125	96,802	4,78,443
1954	36	32,617	1,83,632	36	33,3 <mark>69</mark>	84,464	64	24,807	38,886	136	90,793	3,06,984
1955	56	43,524	1,27,307	27	8,85 <mark>3</mark>	30,787	92	31,254	1,09,613	175	83,631	2,67,607
1956	87	1,29,099	2,71,187	50	34,806	1,03,335	65	26,233	77,202	202	1,90,138	4,51,724
1957	66	58,899	1,64,320	36	19,047	1,13,068	76	33,849	1,18,465	178	1,11,795	3,95,853
1958	35	30,680	47,439	22	15, <mark>7</mark> 04	4,55,007	83	66,439	5,17,773	140	1,22,823	10,20,219
1959	43	66,928	1,79,802	38	49,215	1,67,752	98	22,462	84,353	179	1,38,605	4,31,907
1960	31	85,266	1,41,309	38	30,044	1,72,084	114	1,22,475	5,23,478	183	2,37,785	8,36,871
1961	17	12,884	26,819	41	9,154	90,773	143	41,864	3,21,093	201	63,902	4,38,685
1962	53	60,964	1,73,022	54	7,990	1,12,282	194	1,76,926	6,94,889	301	2,45,880	9,80,193
1963	47	80,704	1,81,160	89	17,028	1,53,732	198	67,805	4,27,808	334	1,65,597	7,62,700
1964	46	59,464	2,09,785	111	26,930	2,33,605	246	85,102	5,08,594	403	1,71,496	9,51,984
1965	51	3,87,295	4,08,676	116	21,396	1,85,558	212	58,976	3,43,302	379	4,67,667	9,37,536
1966	56	2,43,087	20,39,857	161	28,282	2,56,174	256	73,581	5,20,156	473	3,44,950	8,16,187
1967	39	26,865	86,312	157	41,263	5,47,636	218	77,984	8,54,624	414	1,46,112	14,88,572
1968	14	14,288	61,064	139	36,968	4,84,743	177	54,251	5,65,992	330	1,05,507	11,11,799
1969					Not availa	able						
1970	60	1,64,062	5,26,707	142	32,081	3,53,518	188	70,878	5,52,085	390	2,67;021	13,32,310
1980	80	1,03,323	1,87,337	102	37,933	2,87,204	53	7,287	67,237	235	1,48,543	5,41,778

TABLE No. 31 Number of Trade Unions and T. U. Membership in Bombay City (1922-47)

1922 9 24,000 1923 8 25,013 1924 9 22,851 1925 10 22,598 1926 22 47,068 1927 32 59,489 1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,196 1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,386 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	Year	Number of	Trade Union
1923 8 25,013 1924 9 22,851 1925 10 22,596 1926 22 47,066 1927 32 59,489 1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,779 1938 67 90,710 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	(December end)	Trade Unions	Membership
1924 9 22,851 1925 10 22,598 1926 22 47,068 1927 32 59,485 1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1922	9	24,000
1925 10 22,598 1926 22 47,068 1927 32 59,489 1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,196 1935 60 71,295 1936 51 53,779 1938 67 90,710 1939 78 121,386 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1923	8	25,013
1926 22 47,068 1927 32 59,489 1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1924	9	22,851
1927 32 59,489 1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1925	10	22,598
1928 45 160,787 1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,779 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1926	22	47,068
1929 52 159,699 1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,775 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1927	32	59,489
1930 45 88,537 1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,386 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1928	45	160,787
1931 44 59,327 1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1929	52	159,699
1932 45 68,285 1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,775 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1930	45	88,537
1933 46 69,161 1934 45 70,198 1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1931	44	59,327
1934 45 70,198 1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1932	45	68,285
1935 60 71,295 1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1933	46	69,161
1936 51 53,779 1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1934	45	70,198
1937 57 63,711 1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1935	60	71,295
1938 67 90,710 1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1936	51 2 1	53,779
1939 78 121,388 1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1937	57	63,711
1940 82 128,634 1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1938	67	90,710
1941 84 116,854 1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1939	78	121,388
1942 90 124,243 1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1940	82	128,634
1943 100 138,882 1944 117 166,254 1945 140 198,383 1946 193 212,977	1941	84	116,854
1944 117 166,254 1945 140 198,383 1946 193 212,977	1942	90	124,243
1945 140 198,383 1946 193 212,977	1943	100	138,882
1946 193 212,977	1944	117	166,254
	1945	140	198,383
1947 279 295,685	1946	193	212,977
	1947	279	295,685

(Compiled from the issues of Bombay Labour Gazette.)

BANKING, TRADE AND COMMERCE



Maharashtra State Gazetteers

INTRODUCTION

THE CITY OF BOMBAY HAS A LONG HISTORY AS a centre of banking and trade. Now, Bombay is considered as the largest trading and distributing centre in the country and is the abode of almost all the financial institutions with either their head-offices or branch-offices in Bombay. An attempt is therefore made in the present chapter to depict the development of Bombay from a small island to its present position as one of the largest financial and trading centres.

The present chapter for the sake of convenience is divided into two sections *viz.*, (1) Banking and Finance, and (2) Trade and Commerce.

In the first section are described the various financial institutions that cater to the requirements of the economy. They include such agencies as money-lenders, joint-stock banks, co-operative societies, the Life Insurance Corporation, joint-stock companies, small savings movement, State-aid to industries and other State sponsored financial institutions.

Of these, the money-lenders and the indigenous bankers are the traditional institutions which played an important role in the credit supply mostly to the people of urban areas. The establishment of banks and their development on modern lines is a later phenomenon. The earliest bank in Bombay was established as early as in 1720. The development of financial organisations and institutions in Bombay began during the 19th Century. Until the establishment of the Bank of Bombay in 1840, the banking business in Bombay was carried on by about hundred Hindu shroffs who were the traditional indigenous bankers. But the excessive rates of interest charged by them and the malpractices adopted to exact money from the poor proved detrimental to the economic well-being of the people in the past. In order to check the prevailing malpractices, the then Government of Bombay State passed the Bombay Moneylenders Act of 1946. Another important event that eventually undermined the influence of money-lenders was the gradual rise of the modern joint-stock banks. After the World War II, and especially after Independence, the banks have considerably expanded their scope of activity by way of liberal policy of credit and also by their policy of branch expansion.

Development in the field of banking was accompanied by a still greater development in the field of cooperation. A large network of co-operative societies is spread all over the city and includes industrial and service co-operatives, housing societies, etc.

These financial institutions, in addition to purveying credit to all classes of people in Bombay, also collect the savings of the people in the form of premia and invest them in the interest yielding securities. The insurance and joint-stock companies need in this context a specific mention. The post-war period experienced a remarkable progress in the case of both these categories. Besides, in 1945, the small savings movement was started with the intention of mopping up purchasing power to fight the inflationary forces set in motion by the war, and later it was adopted by the Planning Commission as an important means to finance the development schemes included in the Five-Year Plans.

The role of Government in the field of finance and other fields of economic activities is also discussed in this chapter. Thus, the first section describes in detail the banking and financial institutions in the district in their historical and structural aspects.

In the second section of the chapter are discussed the structure, direction as also the quantum and value of trade and commerce in the district. In fact, the banking set-up in Bombay has significant bearings on the pattern and organisation of trade and commercial activities. The growth of banking and various financial institutions and increasing facilities of transport and communications have contributed immensely to the growth of trade in Bombay. The State Trading Corporation, State Marketing Federation, Export Promotion Councils, and many other agencies also help the trading activities in Bombay. As such the second section describes all types of trading activities such as forward trading, wholesale and retail trading, regulated and co-operative marketing, as also inland and foreign trade undertaken in Greater Bombay. Besides, it also includes narration of trade-routes which are responsible for growth of trading activities.

SECTION I -BANKING AND FINANCE GOVERNMENT MINT

After the transfer of Bombay Island to the East India Company, several schemes including a plan for establishment of English currency were considered. In 1670-71 the Court of Directors recommended establishment of a mint at Bombay for coining gold, silver and copper coins. In 1675, President Aungier also put forward his suggestion for the establishment of a mint. On 15th October 1676, the King by Letters of Patent empowered the Company to establish a mint at Bombay and permitted them to coin moneys of gold, silver, copper, tin, lead or any metal. Accordingly, the grant of privilege was intimated by the Company in 1677 and a Rupee was struck at Bombay bearing the Royal Arms and the legend, "By authority of Charles the Second".

During the first half of the 18th century a considerable quantity of silver rupees of varying coinage and alloy and of a value inferior to the standard of the Bombay and Surat rupees used to be brought to Bombay from outside. Persons were appointed at the Land Pay Office to exchange rupees for pice at the rate of 80 pice for a rupee. Due to scarcity of copper, the local authorities coined tutenag pice to the value of Rs. 2,000. This coin was however, discontinued in 1773. For the want of small currency, half and quarter pice to the value of Rs. 10,000 were coined. Great scarcity of silver which prevailed on the Bombay Island in the middle of eighteenth century led to the establishment of gold currency in 1765. The resolution passed in 1767 equalised the standard of Surat rupees with that of Bombay rupee. In 1774, the rupees coined at Broach were again admitted as current in Bombay.

In 1775 owing to the want of silver currency gold was coined to the amount of Rs. 60,000 in pieces of the value of one silver rupee each, to be in fineness exactly equal to the gold rupees then in circulation and of 1/15th part of the weight of a gold rupee. However, in 1778 the issue of gold coin was stopped.

The old Bombay rupee was identical with that coined at Surat under the Mughal Government. It weighed 178.314 grains and contained 1.24 per cent of alloy. Asthe Nawab of Surat did not observe the agreement with the Bombay Government, all the Bombay rupees were carried to Surat to be re-coined, and the Bombay mint ceased to coin silver for more than 20 years. In 1800, however Government ordered the Surat rupee to be struck in Bombay and from that date the rupee was maintained at an equal value in both the mints. It weighed 179 grains and contained 7.97 per cent, of alloy.

According to the order of 1800, in the Bombay coins 15 grains of silver represented one of gold. A scarcity of rupees in 1801 was responsible for the introduction of new gold coin as a circulating medium. In 1815, the Government ordered abolition of Surat Mint and decided that whole coinage of the Presidency should be conducted at the Bombay Mint. In 1827, the copper pie was introduced which weighed 33 1/3 grains and was equal to one-twelfth of an anna.

The coinage of India was made uniform in 1835. The East India Company's rupee was ordered to take the place of the *Sicca* rupee. However there was a difference between *Sicca* rupee and the Company's rupee as the former contained 8 per cent more silver than the latter. In 1841, a two anna silver piece was introduced and a proclamation was issued regulating the gold coinage. According to this proclamation the gold coins were to bear on the obverse the head of Queen Victoria and on the reverse-a lion and a palm tree with the designation " East India Company ". In 1844, a change was made in the device on copper coinage issued from Bombay mint.

In 1857, the sub-divisions used in the public and other accounts were rupees, annas and pies. One gold mohur was equal to 15 silver rupees; one rupee equal to 16 copper annas; one anna equal to 4 pice; and 1 pice equal to 3 pies. However, many mercantile houses and traders retained the old sub-divisions of rupees, quarters and reas. Although the gold mohur and copper anna formed sub-divisions in the scheme of the British Indian currency, those coins were not current.

Upto the year 1893, the operations of the Indian Mints were regulated by the Coinage Acts, *viz.*, Act XVII of 1835, Act XIII of 1862, and Act XXIII of 1870. These Acts provided for the free coinage of gold and silver for the public and for the coinage of copper for Government regiments. There was no great demand for a gold coinage. But public took full advantage of the free coinage of silver. Under the terms of the Coinage Acts in force upto 1893, any person tendering silver to the mint to the amount of 1,000 tolas and over was entitled to have it coined into rupees on payment of a seignorage charge of Rs. 21 for every 1,000 rupees of outturn produced by his tender.

In June 1893 the Indian Mints were closed to the free coinage of gold and silver and since that date no rupees were coined except on Government account.

In 1895 an agreement was effected between the Government of India and two of the local Exchange Banks for the coinage of a British dollar at the Bombay Mint for circulation in the Straits Settlements and Hongkong. The agreement ceased in 1903 when the Government of the former colony issued a new coin called The Straits Settlements Dollar for circulation in their territories. The coinage of the rupee with the effigy of King Edward VII was commenced in January 1903.

Experiments were undertaken in 1905-6 (Bombay Mint, 150th Anniversary Celebration, 1st May 1982, published by Bombay " Mint.) for the manufacture of Cupro-nickel one anna piece with a view to obtaining a coin distinctive in shape from any existing coins current in British India. The minting of this coin began in 1906-07 and the first issues to the public were made from 1st August 1907.

After George V came to the throne in 1910, coins were issued in bis name. There was a tiny elephant on the design of the mail of his effigy on one rupee coin. The Government had to stop minting of these coins as there was wide-spread resentment among the members of one community in India, as this elephant looked like a pig.

Indian coins were issued in the name of George VI when he was crowned in May 1937.

The coins of quaternary silver alloy were introduced from 1940 in place of standard silver. Due to inadequate supplies of silver and the high prices of this metal prevailing in India, it was decided in 1946-47 to discontinue minting rupees, half-rupees and quarter-rupees, in quaternary silver alloy coins as they contained silver, and instead coins in pure nickel were introduced. These coins came into circulation in 1947.

After January 26, 1950 the effigy of the English monarch on the obverse was replaced by the Ashoka Pillar. From 1950-57 different figures appeared on the reverse of the coins. On one rupee, half-rupee and quarter-rupee coins there were ears of corn; on two annas, one anna and half an anna coins there was a bull; and on one paisa there was a flying horse.

India adopted the decimal system of coinage from April 1, 1957. The lowest denomination in decimal coinage system as adopted in India is one paisa, and one hundred paise makes one rupee. Initially this paisa was called Naya Paisa to distinguish it from the old paisa. The prefix " Naya " was dropped from 1963. All the coins of decimal series bear the Ashoka Pillar on the obverse side with letters ' Bharat' in Devanagri and ' India' in English on its two sides. On the reverse side these coins bear the denomination in numericals in English, and in letters in Hindi, and also the year of the issue in English numericals. The only exception was that of aluminium-bronze 20 paise coin issued from 1968 to 1971 as this coin contained a figure of a lotus

flower on its reverse. It had been decided to issue coins bearing, on the reverse, our national bird, national animal, national fruit, national flower, etc. Accordingly, the first issue was made of national flower. But later, this proposal was dropped and therefore, the 20 paise coin with the lotus on the reverse remained an exception.

With the sudden increase in the prices of copper and nickel, certain changes in the alloy composition of the decimal series were introduced in 1962. They were as under (*Indian Coinage Since Independence, issued on the occasion of the 25th Anniversary of Independence, Govt, of India.*):—

(1) The bronze one paisa was replaced by nickel brass (copper 79 per cent, zinc 20 per cent, nickel 1 per cent) in 1962. The weight and shape of the coin remained unaltered. In October 1965, the aluminiummagnesium alloy (Mg-3.5 to 4 per cent, Al. remainder) was adopted for the paisa, and the shape was changed from round to square with rounded corners, this new coin weighed 0.75 grams. (2) A new coin in aluminium-magnesium alloy of the denomination of three paise, weighing 1.25 grams and hexagonal in shape was introduced in July 1964. (3) Two paise coin in aluminium-magnesium alloy, weighing 1.0 gram and 8 scalloped was introduced in July 1965. Five paise coin in aluminium-magnesium alloy, weighing 1.5 grams and square with rounded corners was introduced in January 1967. (4) A new coin in the denomination of twenty paise was introduced in April 1968, discontinuing minting of twenty-five paise coin in pure nickel with a view to conserve nickel which was in short supply. The alloy chosen for this new twenty paise coin was aluminium-bronze (copper 92 per cent, nickel 2 per cent and aluminium 6 per cent). The coin was circular in shape and weighed 4.5 grams. (5) The same alloy was used for ten paise coin from the same date with a view to conserve nickel. The aluminium-bronze ten paise coin weighed 4.25 grams, instead of 5.0 grams of the earlier cupro-nickel piece of the same denomination, the shape and design remaining the same in all respects. The aluminium-bronze alloy proved very popular because of its golden yellow colour but this also led to the erroneous belief that this coin contained 'gold 'resulting in large-scale hoarding and diversion of these coins for the making of trinkets, etc. The minting of ten paise and twenty paise coins in aluminium-bronze alloy was therefore, stopped from October 1971. (6) In lieu of the Al. Bronze ten paise coin a new aluminium-magnesium coin was introduced in October 1971 in an entirely new shape and size. It weighs 2.3 grams, has 12 scallops and measures 26 mm. across scallops. (7) In place of aluminium-bronze twenty paise coin, the minting of twenty-five paise coin was resumed from January 1972, but instead of pure nickel, cupronickel alloy (75 per cent copper and 25 per cent nickel) has been adopted. The shape and weight as also the general appearance remained the same as of the pure nickel piece except for a small change in the design on the reverse. The cupro-nickel twenty-five paise coin weighs 2.5 grams and is circular in shape (19 mm dia). (8) Cupro-nickel alloy in place of pure nickel has also been adopted for the fifty paise coin from January 1972 with a view to reducing the nickel content. But the shape, weight and general appearance remained unchanged, except for security edging which has been adopted (instead of milled edge of the nickel piece) to deter counterfeiting and for a small change in the design of the reverse. (9) A small change in the design of the reverse of 3 and 5 paise coins was made in March 1972 so as to bring; uniformity in the design of the reverse of all the denominations.

Apart from the various series of new coins, the mint issues commemorative coins almost every year. Commemorative coin is a coin issued to mark, honour, or observe an event, place or person, or to preserve its memory. The themes on commemorative coins are selected every year by the Government of India on National and International events.

Danaminations

The list of commemorative coins issued by Bombay Mint since Independence is given below:—

Vaar Thans

Year	Theme	Denominations
1964	Jawaharlal Nehru	Re.1 and 50.P
1969	Mahatma Gandhi	Rs.10,Re.1.50.P. and 20 P.
1970	Food for all	Rs.10 and 20P.
1971	Food for all	Rs.10 and 20 P.
1972	Indian Independance 25 th Anniversary	Rs.10 abd 50P.
1973	Grow More Food	Rs.20,Rs.10 and 50 P.
1974	Planned families, Food for all	Rs.50, Rs.10 and 10 P
1975	Equality, Developement, Peace	Rs.50,Rs.10 and 10P
1976	Food and work for all	Rs.50,Rs.10 and 10 P.
1977	Save for Development	Rs.50,Rs.10,10P and 5 P
1978	Food and Shelter for all	Rs.50,Rs.10,10P and 5 P
1979	Happy Child Nation's Pride	Rs.50,Rs.10,10P and 5 P
1980	Rural Women's Advancement	Rs.100,Rs.10, 25P. and 10 P
1981	World Food Day	Rs.100,Rs.10,25 P. and 10 P

Besides, proof coins or uncirculated coins are minted at Bombay. Proof coins (or Collector's coins as they are popularly called) are exceedingly high quality coins. They are struck individually with specially prepared blanks and highly polished dies. A 'Proof set' of Indian coins consists of one coin of each denomination authorised for circulation or commemorative purposes. Orders for the proof coins are booked every year by the Master of the Mint, Bombay upto a specified date notified every year in the leading newspapers.

The current capacity (*Nineteenth and Twentieth Century Coins of India, D. C. Chakravarty, 1979.*) of the India Government Mint, Bombay, is 3.0 Million pieces a day, on double shift basis. It is the only licensed gold refinery in the country at present. Besides, it manufactures and supplies the reference, secondary and working standards of metric weights, capacity and linear measures for all the States in India. There is also a medal section which undertakes production of medals for civilian and military awards. Orders for supply of Proof' and 'uncirculated' coins are now executed by Bombay Mint.

In the year 1970 the Bombay Mint coined coins for Greece. In the same year the mint produced 86 million coin blanks for Thailand. This mint supplied coins between the period 1891 and 1947, to many foreign countries, such as Sri Lanka, East Africa, Australia, Egypt, Bhutan, Iraq, Saudi Arabia, Malaya and Muscat.

MONEY-LENDERS

The institution of money-lenders is a traditional organisation and sometimes an hereditary occupation which is generally undertaken by Marwadis, Pathans, landlords, traders, etc. Prior to the introduction of banking system on modern lines by the British rulers in the 19th Century, the money-lenders and the indigenous bankers used to perform all the banking activities. The former used to advance loans mostly for unproductive purposes at a very high rate of interest and did not accept deposits while the latter advanced loans for commercial and industrial purposes and accepted deposits. The fast growth of commercialisation and industrialisation leading to higher standard of living has resulted in the increasing demand for financial assistance and has finally led to the flourishing of institutions engaged in money transactions including the institution of money-lenders. The money-lenders generally work on individual basis with their own financial resources.

In Bombay, the establishment of cotton mills attracted large number of uneducated workers from various parts of the country. It became very difficult for them to adjust with the new conditions of life in the city as also to maintain their families at their native places. They ultimately became regular victims of moneylenders. Before the growth of banking and such other credit facilities, money-lender was the only source for the reasonable rate of interest, the borrowers were continually exploited by the money-lenders. Chronic indebtedness became more or less their way of life. In due course, credit facilities at reasonable rates were made available. The money-lenders, however, continued to enjoy almost the same predominant position in the economy as in the past. In these circumstances, it was found necessary to regulate the business of money-lenders by a legislative act. It was with this purpose in view that the Bombay Money-Lenders Act was passed in 1946.

Generally, theie are two types of money-lenders, professional and casual. The latter advance loans to their friends and try to cover the risk by charging a high rate of interest. The dealings of a casual moneylender are of a casual character and in some cases they even fail to get the repayment of loan. The other type is of professional money-lenders, who undertake money-lending as an occupation or means of their livelihood. There are still others who combine this occupation with some other profession or trading activity. There are Marwadis who are full-time money-lenders and who also supply consumer goods to the borrowers. The Marawadi money-lenders also adopt various techniques for keeping their hold on customers. They generally advance loans on pledge of physical security such as ornaments, moveable or immoveable property etc. The rate of interest varies according to nature of security offered and is calculated on monthly basis. Generally the customers of Marwadis comprise low income group or even middle class people such as mill workers, government servants, petty traders, etc.

Rapid industrialisation and growth of trade and commerce in Bombay provided a good scope to money-lenders. As a money-lender used to offer loans on security immediately without any hesitation, many traders came forward to borrow money from him to meet their business requirements. All these factors have led to increase in the number of moneylenders. During 1963-64, there were 1202 money-lenders in Bombay; while the number increased to 2053 in 1970-71. As compared to Bombay Division, Bombay claimed the highest number of money-lenders; as out of the total of 3228 money-lenders during 1970-71, there were as many as 2053 money-lenders in Bombay. The number of money-lenders in Bombay rose to 2600 during 1973-74 against 3633 in Bombay Division. However, in 1980-81 the number of money-lenders in Greater Bombay showed a decrease as the same stood at 2117.

The transactions of money-lenders are now governed by the Bombay Money-Lenders Act, 1946 which was amended by the Bombay Money-Lenders (Unification and Amendment) Act, 1959. The amount of loans advanced by money-lenders during 1950-51 and 1960-61 in Bombay is shown in the following statement:—

(Figures in Rs.)

Particulars	1950-51	1960-61
Total loans advanced to traders and non-traders—		
(i) Exempted under Section 22 of the Act	144,982,527	122,288,806
(ii) Not exempted under Section 22 of the Act	14,372,104	19,248,066
Loans advanced to traders-		
(i)Exempted under Section 22 of the Act	143,496,497	121,531,111
(ii) Not exempted under Section 22 of the Act	3,522,834	13,158,710
Loans advanced to non-traders-		
(i) Exempted under Section 22 of the Act	1,486,030	757,695
(ii) Not exempted under Section 22 of the Act	10,849,270	6,089,356

A comparative position of money-lending business in Greater Bombay and the State during 1970-71, 1973-74 and 1976-77 was as follows:—

(a) Money-lending transactions exempted under Section 22 of the Bombay Money-Lenders Act—

	Loans to traders	Loans to non- traders	Tota Loans
Year	Year (Rs.)		(Rs.)
Greater Bombay—	a Sta	ate	Gaz
1970-71	306,733,000	31,235,000	337,968,000
1973-74	264,938,113	49,662,291	314,600,404
1976-77	209,417,000	37,292,000	246,709,000
Maharashtra —			
1970-71	307,952,000	41,466,000	349,418,000
1973-74	266,371,513	65,506,068	331,877,581
1976-77	209,417,000	41,251,000	250,668,000

(b) Money lending transactions not exempted under Section 22 of the Bombay Money-Lenders $\mathsf{Act}-$

	Loans to traders	Loans to non- traders	Tota Loans
Year	(Rs.)	(Rs.)	(Rs.)
Greater Bombay—			
1970-71	63,180,000	62,578,000	125,758,000
1973-74	105,512,565	84,403,512	189,916,077
1976-77	61,144,000	30,999,000	92,143,000
Maharashtra —	e7		
1970-71	1 <mark>17,068,000</mark>	239,721,000	<mark>35</mark> 6,789,000
1973-74	163,804,450	336,437,819	500,242,269
1976-77	91,105,000	153,883,000	244,988,000

The licensed money-lenders in Greater Bombay who were not exempted under Section 22 of the Bombay Money-Lenders Act, 1946 advanced loans to the tune of Rs. 6,09,62,000 in 1980-81 out of which Rs. 4,05,47,000 were advanced to traders and Rs 2,04,15,000 to non-traders. Similarly the money-lenders who were exempted under Section 22 of the Act advanced an amount of Rs. 8,47,35,000 as loans during 1980-81 to non-traders. As compared to advances during 1970-71, the loans advanced in 1980-81 showed a decline.

The maximum rates of interest upto 12 and 15 per cent per annum on secured and unsecured loans, respectively were in force upto July 1971. However, these rates were increased to 14 and 17 per cent per annum, respectively upto September 1974. Afterwards these rates were allowed to increase upto 18 and 21 per cent on secured and unsecured loans, respectively.

CO-OPERATIVE MOVEMENT

Since the passing of India Act X of 1904, co-operative credit societies have been established in Bombay City, and the first co-operative credit society, known as the Bombay Pioneer Urban Co-operative Credit Society was registered in 1905. In 1906, the Bombay Urban and the Shamrao Vithal Co-operative Credit Societies were formed.

Subsequently a number of co-operative societies of various types were registered.

The total number of different types of co-operative societies during 1960-61 in Bombay was 1670 which increased to 2,965 in 1964-65 and further to 5,207 in 1970-71. Out of 5,207 co-operative societies, housing, urban credit and consumers' stores together accounted for 4,879, covering nearly 98 per cent of the total. The co-operative movement in Bombay is necessarily an urban movement. During 1975-76, the total number of co-operative societies of all types stood at 7645. The details of all types of co-operative societies in Greater Bombay are given in the following pages.

Primary Agricultural Credit Societies : At the end of June 1976, there were nine primary agricultural credit societies with a membership of 2881. The paid up capital of these societies amounted to Rs 12.94 crores, of which Government's share amounted to 30 lakh. The amount of deposits were to the tune of Rs 4.64 crores, where as the total liabilities were to the tune of Rs. 49.32 crores. The working capital of these societies was to the tune of Rs. 27.03 crores, the total investments Rs. 6.12 crores and total assets Rs 55.87 crores.

Out of nine societies, one society owned a godown with a storage capacity of 250 tonnes, three societies had one hired godown each with the total storage capacity of 850 tonnes. Only two societies dealt in advancing loans which amounted to Rs. 90,346 during the year 1975-76.

Urban Credit Societies: Joint-stock banks in the beginning used to cater to the needs of big entrepreneurs,

industrialists and businessmen concentrated in big cities. These banks were not interested in developing business of common man. Under these circumstances, numerous petty traders and artisans, small salaried classes had to depend upon the moneylenders. Even now most of the families in industrialised cities like Bombay are found in debt. With the recent trend of urbanisation, the need for urban credit societies is assuming new significance.

The urban credit societies reach a common man in the distant cornets of the city where a joint-stock bank may not reach. In 1948-49, Bombay City had 269 urban credit societies with a total membership of 3,06,616; while the number of urban credit societies in suburban areas was 24 with a membeiship of 6,538. The percentages of population covered by these societies in the city and suburban areas were 20.5 and 8.3, respectively. Thus compared to the figures in Bombay State, the highest number of urban credit societies and the highest percentage of coverage of urban population were found in Bombay city. The co-operative movement received impetus especially after 1960 and Bombay was no exception to it. During the decade 1960-61 to 1970-71 the number of urban credit institutions had been doubled in the city. During 1970-71, the number of credit societies was put at 905 with 10,41,000 members.

Urban Banks ('For details refer to 'Co-operative Banking 'under the section of Banking and Finance.): Prior to the lecommendations of Mehta-Bhansali Joint Re-organisation Report on Co-operative Movement in 1939, every urban credit society whose working capital exceeded Rs. 50,000 was called a major urban bank. According to these recommendations the former Bombay Government laid down that only those urban credit societies which actually undertook the business of banking and which had a paid-up share capital of not less than Rs. 2,000 could be called full-fledged urban bank. The first co-operative bank *viz.* the Shamrao Vithal Co-operative Bank was registered under the co-operative fold in 1906. It was mainly established to help the people of Saraswat community by giving them credit facilities. Since its inception, the Bank has showed an all-iound progress in its business.

During 1970-71, the total number of co-operative banks in Greater Bombay district was 69 with a total membership of 4,76,000. In 1975-76, the number of banks rose to 83 with a total membership of 4,73,636. However, the number of primary urban co-operative banks decreased to 75 by the end of December 1977. Of these, four were under liquidation and 11 were salary earners' co-operative banks.

Salary Earners' Societies: These are also known as Employees' Credit Societies and are mainly urban credit societies. The repayment of loans from the salaries of the members enables the societies to avoid the problem of overdues which is a common problem faced by all types of credit societies. During 1975-76, the number of such societies was 875 and their total membership was 12,18,635. Other particulars of these societies are given below:—

Maharashtra State Gazetteers

Particulars	Number
Total employees' credit societies	875
Members	12,18,635
Paid-up capital (Rs. in '000)	25,95,73
Working capital (Rs. in '000)	50,10,20
Distribution of consumers' goods—	
(i) Societies engaged	40
(ii) Value of goods purchased (Rs. in '000)	3,001
Goods sold—(Rs. in '000) :	
(i) Foodgrains (Rs. in'000)	1,492
(ii) Others (Rs. in '000)	1,446
Profit—	
(i) Societies	837
(ii) Amount (Rs. in '000)	27,104

Milk Supply Societies: Milk supply business is growing enormously in the vast area of Greater Bombay. The three dairies established by the State Government find it very difficult to cope up with the demand for milk. This very fact led to the growing of business of private milk suppliers. However, to overcome the competition and other problems of business such as difficulties in distribution of milk, transport, etc., some of them came together and formed co-operative societies. During 1964-65, there were as many as 27 dairy societies including two dairy federations in the Greater Bombay district. The total number of members of these societies was 1,184. The number of societies however, decreased by three during 1970-71, and their membership by 501. During 1975-76, the number of milk societies showed an increase and the same stood at 29, while the number of dormant societies was 4. The particulars of these societies are given below:—

Particulars	Number	
Number of	29	
societies		
Number of members -		
(i) Societies	15	
(ii) individuals	806	
Paid-up capital (Rs. in	20,75	
'000)	20,73	
Working Capital (Rs. in	96,97	
(000)	30,37	
Sales (Rs. in'000)	1,45,39	
Profit -		
(i) Number of societies	17	
(ii) Amount (Rs. in '000)	88	
Number of persons	50	
employed	30	

Consumers' Stores: The development of consumers' co-operation as an economic system is well-

associated with the name of Rochdale Pioneers. The consumers' co-operative movement received a great fillip during the First World War as a result of the abnormal conditions created by the war, but soon after the cessation of war, most of the stores had to be wound up. But since the Second World War, there had been a mushroom growth of these consumers' co-operatives, due to the noteworthy drive to instigate the consumers to come together fot their own interest in getting proper distribution of consumers' goods at fair prices. The movement gained ground and leceived momentum after Independence and more so with the progress of Five Year Plans. Now, most of the consumers' stoies undertake the sale of number of articles including the controlled commodities.

From 309 primary consumers' stores in Greater Bombay in 1965-66, the number rose to 389 in 1970-71. In 1975-76 the number of consumers' stores increased to 417, the details of which are given below:—

Particulars	Number
Number of primary consumers' stores	417
No. of members (in '000)	17,52
Share capital (Rs. in '000)	50.72
Working capital (Rs. in '000)	2,04.84
Total sales (Rs. in '000)	30,01.79
Number of societies in profit	290
Amount of profit (Rs. in '000)	12.35

Besides, the primary consumers' stores, there are wholesale consumers' stores in Greater Bombay engaged in the wholesale business of sale and purchase of consumers' goods. From 3 wholesale consumers' stores in Greater Bombay during 1964-65, the number increased to 8 in 1970-71 with a total membership of 47,306.

These eight stores had 55 branches scattered all over the district. During 1975-76, there was further increase in the number which stood at 15 with 99 branches with a total membership of 70,817. The details of these wholesale consumers' stores are given below:—

Particulars	Number
Total number of wholesale stores	15
Total number of	
branches	99
Membership -	70,817
(i) Individuals 70,381	
(ii) Consumers' stores 420	
(iii) Others 16	
Share Capital (Rs. in '000)	91.48
Working capital (Rs.in'000)	4,61.79
Sales (Rs. in '000)	32,13.61
Purchases (Rs. in '000)	30,29.14
Profit -	
(i) Number of stores	9
(ii) Amount (Rs. in '000)	11.01
Loss -	
(i) Number of stores in loss	5
(ii) Amount (Rs. in '000)	21.02
Number of stores without profit or loss	1

Labour Contract Societies: In pursuance of its policy of progressive elimination of middlemen in the sphere of business, Government has decided to give preferential treatment to these societies in respect of

entrusting work to them. These societies also get loans from the Government.

During 1960-61, there were only 27 labour contract societies with a total membership of 3,775. Their number, however, increased to 43 with 6,623 members in 1964-65 and again to 67 during 1970-71 with 9,147 members. In 1975-76, there were as many as 103 labour contract societies in Greater Bombay, the details of which are given below:—

Particulars	Number
Number of labour contract societies	103
Number of members—	
(i) Labourers	13,187
(ii) Others	178
Paid-up capital (Rs. in '000)	11,73
Working capital (Rs. in '000)	49,82
Value of contracts executed (Rs. in '000)	1,65,93
Number of labourers employed	127
Income earned (Rs. in '000)	1,31,60
Profit—	
(i) Number of societies	48
(ii) Amount (Rs. in '000)	2,44

Transport Societies: Another important sector of the co-operative movement is the organisation of transport societies. These societies were first organised at the end of Second World War with a view to benefiting ex-service personnel. The Government sanctioned financial assistance to these societies. The successful working of these societies of ex-servicemen prompted the organisation of transport societies by other persons. These societies however, received a set-back due to nationalisation of passenger transport.

During 1970-71, the number of transport societies in Greater Bombay was 12 with 1,376 members. The number increased to 13 in 1975-76, including one society of ex-servicemen. However, out of 13 societies, 8 were dormant during the same period. The details of these societies are given below:—

Particulars	Number
Number of societies	13
Number of members	2,097
Paid-up capital (Rs in '000)	4,42
Working capital (Rs in '000)	24,05
Profit -	
(i) Number of societies	5
(ii) AMount (Rs. in '000)	98

Fishermen's Societies: A fishermen's society helps the fishermen to avail of the facilities of credit and other requisites such as nets, yarn, launches, etc. Besides, these societies help the members in transportation of fish to the market places by plying launches and trucks with the aid of Government loan and subsidy. The members of the society can get a better price for their fish by selling the same directly in

the market.

There is a great scope for the fishing industry to flourish because of the constant and heavy demand for fish in Bombay. The fishermen have now understood that if their business is organised on co-operative basis, it brings them more profit than the individually organised business. A fishermen's society also protects its members from the exploitation by traders and middlemen and thereby helps in improving the economic conditions of the fishermen.

During 1964-65, there were 8 societies of fishermen working in Greater Bombay, besides one apex body with the total membership of 1,757. In the following years, there seemed to be a great increase in the number of societies which rose to 13 during 1970-71 with a total membership of 3,580.

Weavers' Societies: The weavers' societies have not much scope to develop their business in Greater Bombay as most of the handloom cloth arrives in Bombay market from areas and regions outside Greater Bombay. Besides, the taste of the people for this cloth has also undergone considerable change during the last two decades due to heavy competition from mill-made cloth. All these factors together are responsible for creating hindrance in the smooth working of these societies in Bombay. However, there were 16 weavers' societies in 1960-61 which increased to 18 during 1965-66, but reduced to 17 during 1970-71. The total membership of these 17 societies during 1970-71 stood at 2,045.

Housing Societies: The problem of accommodation in Greater Bombay was felt severely after the partition of the country and the consequential influx of population from Pakistan. The Government therefore, came forward to assist in organising co-operative housing societies by giving land and financial aid. At present, different housing schemes such as subsidised industrial housing societies, low-income group housing societies, middle-income group housing societies, slum-clearance schemes etc., are implemented by various authorities.

The Saraswat Co-operative Housing Society was the first co-operative housing society formed in 1915.

The co-operative housing societies are of three types: tenant ownership housing societies, co-partnership tenant societies and the mixed typed which is the combination of the above two types.

The co-operative housing soceities of individuals other than backward class people and industrial workers are financed by the Maharashtra Co-operative Housing Finance Society established in 1958. This society gets finance mainly from the Life Insurance Corporation of India on the guarantee of the State Government. As the number of co-operative housing societies in Greater Bombay went on increasing, it was felt necessary as compared to the number in other cities to have a federal body of the housing societies. In view of this, the Bombay Co-operative Housing Federation Ltd., was registered in 1948. It is carrying on various activities to serve the interests of its member societies in particular, and help the movement of co-operative housing in Greater Bombay in general.

With a view to solve the huge housing problem in Greater Bombay, co-operative housing societies are playing a vital role. During 1964-65, there were as many as 1,635 housing societies with 6,432 members. Out of these societies, the number of societies of backward class people was 55. All these societies constructed 15,058 houses. The number of societies during 1971-72 rose to 4,053 with a total membership of 1,31,161. Besides, there were 88 housing societies of backward classes, nomadic tribes, *vimukta jatis* and other backward classes. These 4,053 societies constructed 47,953 houses during the same period. The share capital of these societies amounted to about Rs. 9.33 crores; while loans borrowed were to the tune of Rs. 51.32 crores. Out of the 88 housing societies of backward classes, nomadic tribes and *vimukta jatis* in 1971-72, the number of housing societies of scheduled castes (flood-affected) was 73 which constructed 600 houses during the same year. The share capital of these societies was to the tune of Rs. 28.51 lakhs, while the amount borrowed stood at Rs. 57.65 lakhs. In 1975-76, the number of housing societies rose to 5,564, the details of which are given below:—

Particulars	Number
(1) Number of societies	5,564
(2) Number of members	17,07,306
(3) Paid-up capital (Rs. in '000)	1,10,026
(4) Reserve and other funds (Rs. in '000)	30,899
(5) Borrowings (Rs. in '000)	8,52,018
(6) Total liabilities (Rs. in '000)	16,95,140
(7) Working capital (Rs. in	9,92,943
(8) Fixed assets (Rs. in '000)	1,69,566
(9) Houses constructed by societies during the year	355
(10) Value of houses constructed (Rs. in '000)	9,038
(11) Number of societies without profit or loss	605
(12) Number of societies in profit	3,294
(13) Profit (Rs. in'000)	2,145

Other Industrial Co-operatives: Cottage industries and small scale industrial units assume a great significance in our economy as these units try to solve the severe problem of unemployment. In Bombay as elsewhere, the Government have not only offered financial assistance to these units but have given some concessions as also taken some measures towards promoting the sale of their products.

During 1960-61, there were as many as 82 industrial co-operatives in Greater Bombay, which however, increased to 85 in 1970-71. During 1975-76, the number of the societies stood at 79, of which 26 were dormant. These 79 societies included oil crushing, pottery, flaying and tanning, handicraft, general engineering, chemical engineering, leather goods, other village industries and miscellaneous industries. The details of these industrial societies are given below—

Particulars	Number
Number of societies	79
Number of dormant societies	26
Membership—	
(i) Societies, individuals and others	5,637
(ii) Of dormant societies	1,788
Total liabilities (Rs. in '000)	12,454
Paid-up capital (Rs. in '000)—	<u> </u>
(i) Working capital	13,409
(ii) Total	2,603
(iii) Government contribution	851
Statutory reserve fund (Rs. in '000)	1,004
Other funds (Rs. in '000)	1,692
Deposits (Rs. in '000)	1,233
Total borrowings (Rs. in '000)	1,925
Other liabilities (Rs. in '000)	3,996
Total assets (Rs. in '000)	13,409
Closing stocks (Rs. in '000)—	
(i) Raw ma <mark>terial</mark>	2,110
(ii) Finished goods	143
Fixed assets (Rs. in '000)—	
(i) Plant and equipment	2,704
(ii) Land and buildings	700
Profit—	
(i) Number of societies	44
(ii) Amount (Rs. in '000)	485
Loss—	
(i) Number of societies	26
(ii) Amount (Rs. in '000)	169
Number of societies without profit or loss	9

Industrial Estates: Bombay being a big industrial city, there is always a cut throat competition among the entrepreneurs. In the severe competition from large industries, a small-scale unit cannot stand on its own footing for the requirements of raw material, a plot of land, shed, etc. Such small units come together and start working on co-operative basis. During 1964-65, there were ten industrial estates working in Bombay. The year 1975-76 recorded a slow growth in the number of such industrial estates, as the same stood at 18 during 1975-76 against 15 in 1970-71.

The financial and other aspects of these industrial estates are given below:—

Particulars	As on 30th June 1976	
Number of industrial estates	18	
Membership—		
(/) Individuals	873	
(ii) Societies	3	
Working capital (Rs. in '000)	26,687	
Paid-up capital (Rs. in '000)	3,341	
(i) Government (Rs. in '000)	25	
(ii) Societies (Rs. in '000)	19	
(iii) Indivi <mark>du</mark> als an <mark>d others</mark> (Rs. in '000)	3,297	
Statutory reserve fund (Rs. in '000)	329	
Other funds (Rs. in '000)	2,398	
Deposits (Rs. in '000)	6,047	
Borrowings (Rs. in '000)	4,132	
All other liabilities (Rs. in '000)	14,678	
Total assets (Rs. in '000)	26,687	
Investment (Rs. in '000)	961	
Fixed assets (Rs. in '000)	19,295	
Loans outstanding (Rs. in '000)	3,842	
All other assets (Rs. in '000)	2,589	
Difference between assets and liabilities (Rs. in '000)	(-)106	
Employment provided by industrial estates	132	
Employment provided by members	3,294	

Greater Bombay Co-operative Board: Education and training in co-operation and propaganda for the spread of co-operative movement are undertaken by the District Co-operative Board under the guidance of

Maharashtra State Co-operative Union Ltd. A similar district level co-operative institution known as the Greater Bombay Co-operative Board Ltd., was established in 1949. The area under its jurisdiction extends over the city and suburbs of Bombay. The membership of the board is of two types *viz.*, ordinary membership consisting of all cooperative societies in Greater Bombay; and the associate membership consisting of individuals and representatives of the Maharashtra State Co-operative Union, Central Financing Agency, and the Co-operative Department of the State Government. On the 30th June 1976, there were 824 co-operative societies and 341 individuals as members of the Board.

The Board during 1975-76 conducted 27 Panch Committee Education Classes, two camps of the employees of the co-operative societies including one camp of women employees in the co-operative field, 8 education classes for employees of industrial societies. Besides, the board conducted two acquaintance meetings so as to keep acquaintance with the executives of different co-operative societies, and 14 training classes for women's co-operative societies.

The Board since 1960 publishes one Marathi fortnightly *viz., Sahakari Jeevan.* It has maintained a library equipped with a good collection of books on co-operation. It has also published some booklets giving yearly statistics of co-operatrve societies in Greater Bombay.

At the end of 1976, the membership of the Board comprised 817 primary co-operatives, 7 central co-operatives and 341 individuals.

In its efforts to spread co-operative movement in the State, the Board conducts two co-operative training colleges, one at Pune and the other at Nagpur, in addition to eleven co-operative training centres in the State and one evening school in Greater Bombay. Under the Member Education Programme, the Board holds secretaries' training classes, managing committee classes, various types of camps, study tours, rallies, etc. The Board also conducts functional courses in marketing, auditing, banking, dairy, etc.

During 1975-76, the number of persons on the roll of secretaries' training classes stood at 27, and the number of persons on the roll of managing committee classes stood at 292.

Co-operative Unions: During the early period of the Twentieth Century the co-operative movement in India suffered from various drawbacks. The Maclagan Committee of 1915 felt that the main hitch was nothing but lack of knowledge and information about the movement. As a result was expounded the idea of setting up a co-operative union, for imparting knowledge to workers in the field of co-operation.

Maharashtra State Co-operative Union, Bomhay: At the Regional Co-operative Conference held in 1917, it was decided to set up such a union and the same was registered on 13th July 1918, under the name of Bombay Central Co-operative Institute. In 1957, the name of the institute was changed to Bombay Provincial Co-operative Union. After the formation of the Maharashtra State in 1960, the Union was renamed as Maharashtra Rajya Sahakari Sangh.

The main objects of the Sangh are to impart education in co-operation and to function as a focussing centre of non-official opinion on various subjects affecting the co-operative movement, to further the spread of co-operative movement, to undertake publicity and publish literature.

The Sangh began its working in right earnest from its inception in 1918. The Sangh battled valiantly when the Thomas Committee Report of 1931-32, came as a death-blow to co-operative movement. During the period, the Sangh brought to the notice of the State Government, the deficiencies in the said report. Besides, the Sangh urged the Government not to take any policy decision with regard to co-operative movement without consulting the workers in the field of co-operation. The movement after making some changes in its structure was reinforced. The Sangh celebrated the Golden Jubilee of co-operative movement in 1954 and its own Golden Jubilee in 1971.

All District Co-operative Boards and Divisional Co-operative Boards which are registered separately under the Act, are affiliated to the Sangh, besides all apex Co-operatives, Urban and District Central Co-operative Banks and other important co-operatives in Maharashtra.

The Sangh has a special women's wing working under the guidance of the Women's Educational Advisory Committee which chalks out and executes educational programme for women. The Sangh convenes State Co-operative Conferences, organises seminars, symposiums, panel discussions, etc.

The Sangh brings out various publications including two fortnightlies one in Marathi *viz.*, 'Sahakari Maharashtra' and the other in English known as 'the Bombay Co-operator'; one quarterly in English *viz.*, 'The Maharashtra Co-operative Quarterly'. The Sangh has audio-visual propaganda machinery as an effective means of carrying the gospel of co-operation in rural areas.

The principal source of revenue of the Sangh is the education fund collected from the co-operative societies on the basis of their working capital. The societies are under statutory obligation to pay their contribution to the fund. The income of the Sangh, during 1975-76 amounted to Rs. 42,000; while its expenditure during the same period amounted to Rs. 1,21,000.

Bombay District Central Co-operative Bank: This Bank was registered on 6th August 1974 and actually commenced its banking business on 12th February 1975. It has its head office at Palton Road, and has opened three branches, one each at Vile Parle, Dadar and Ghatkopar.

The area of operation of the bank covers the Greater Bombay district as also the New Bombay City. The number of members of the bank on 30th June 1975 was 469 which increased to 1545 upto 30th June 1980.

The particulars of its membership are shown below:—

Particulars	As on 30th June 1976	As on 30th June 1980
Co-operative Societies	425	1,125
Individual members, Others and Maharashtra State Government.	175	420
Total	600	1,545

The authorised share capital of the bank is Rs. 5.00 crores.

The paid-up share capital at the time of registration and commencement of banking business was Rs. 11,11,200 and Rs. 11,96,700, respectively. At the end of June 1980, the paid-up share capital of the bank was Rs. 58.42 lakhs, out of which an amount of Rs. 10 lakhs was by way of contribution from the State Government.

The particulars of deposits of the bank are shown below :—

(Rs. in lakhs)

	Type of Deposits	1977-78	1978- 79	1979- 80	Percentage of increase over last year
1.	Current Deposits— (a) Societies (b) Individuals	65.89 12.77	1,10.68 8.13	1,61.47 8.67	45.88 6.64
2.	Savings Deposits- (a) Societies (b) Individuals	91.53 27.37	,	2,61.54 45.27	29.66 13.34
3.	Fixed Deposits— (a) Societies (b) Individuals	4,23.53 18.62		10,91.35 41.22	57.77 49.54
4.	Term Deposits- (a) Societies (b) Individuals	1.01		0.41 2.99	98.33 76.92
5.	Cash Certificates	0.04	0.11	1.09	89.90
6.	Call Deposits	15.00		10.00	
	Total	6,55.76	10,81.48	16,24.01	50.16

The bank has become a member of the Deposit Insurance Corporation of India, and deposits to the extent of Rs. 10,000 are insured by the said corporation. The bank has started fixed deposit scheme linked with various schemes such as Janata personal accident benefit policy scheme, surgical operation scheme, hospitalization scheme. Besides, the bank has also started pension scheme, cash certificate scheme, etc.

The surplus resources of the bank are invested in the form of shares and deposits in the Maharashtra State Co-operative Bank and Government bonds and debentures of the Bombay Municipal Corporation. The total investment of the bank increased from Rs. 40.55 lakhs during 1974-75 to Rs. 10,90.94 lakhs during 1979-80.

The bank being a central financing agency for co-operative sector, has started advancing different types of loans to various societies, such as, co-operative societies, urban credit societies, industrial co-operative societies, housing societies, labour-contract societies, fisheries societies, etc. in Greater Bombay and New Bombay area.

The particulars of the loans advanced by the bank upto the end of June 1976 and 1977 are as follows:—

Particulars	Amount (Rs)	Amount (Rs.)
Loans advanced (cash credits of overdrafts)	1,480.50	2,883.15
Bills discounted	6.42	2.60
Loans advanced (medium- term)	8.59	3.96
Total	1,495.51	2,889.71

The total loans overdue during 1975-76 amounted to Rs. 2.49 lakhs which increased to Rs. 6.91 lakhs during 1976-77. The outstanding short-term and long-term loans as on 30th June 1980 were Rs. 575.96 lakhs and Rs. 13.53 lakhs, respectively.

The actual profit gained by the bank shows an increasing trend in the succeeding years since its inception as the amount of profit went on increasing from Rs.0.71 lakh in 1974-75 to Rs. 6.73 lakhs in 1975-76, Rs. 13.00 lakhs in 1976-77 and Rs. 15.50 lakhs in 1979-80.

The bank has become a member of the Bombay Banker's Clearing House from 1st July 1977, and started participating in clearing house from the same date.

The bank issues demand drafts and collects cheques of the parties under mutual arrangement scheme for Maharashtra, Gujarat and Karnatak States. The bank being a member of the All India State Cooperative Banks Federation issues demand drafts on any State and Union Territory of India.

Maharashtra State Co-operative Bank Limited, Bombay: The Bank was established on October 11, 1911 by a special resolution of the then Government of Bombay. Originally, it started business by taking over from Government the function of financing agriculturists under the Scheme of Taccavi Loans. During the ensuing two decades of otherwise smooth working, the Bank, sometimes, faced critical periods. The Bank could, however, successfully weather through these storms and stood firm on its own strength and emerged even stronger than before. The World War II brought stability to agricultural prices and enabled the Bank to further consolidate its position. The astute and enlightened leadership thus provided by stalwarts in the cooperative movement and the progressive and pragmatic attitude of the State Government helped, to a large extent, in the continued progress and prosperity of the Bank.

During the year 1975 deposits improved to Rs. 162.52 crores from Rs. 151.46 crores in the year 1974 and maintained a satisfactory growth rate. The Bank undertakes various schemes for deposit mobilisation.

After attainment of Independence in 1947, the Bank has not only achieved phenomenal progress in its traditional activities but has also projected a significant image as a Development Bank resulting in consolidation and diversification of the co-operative effort in the State, as also provided a leadership to the co-operative sector of the State. The evolution of the crop loan system of financing agriculture, acceptance of the principle of State-participation in the share capital of co-operatives, the successful organisation of co-operative sugar factories and other processing industries, which became forerunners of producers' co-operatives, the successful implementation of the scheme for monopoly procurement of foodgrains and cotton as the sole agent of the State Government, and the starting of an industrial consultancy cell are some of the significant contributions to the development of co-operative endeavour in the State.

The essential feature of the working of the Maharashtra State Cooperative Bank is its role as a Development Bank. The Bank's entire career has been marked with a spirit of innovation and experimentation. The eminent position it occupies today in the co-operative sphere in the whole country has not been an accident, but it is the result of its sustained progressive policies. The Bank has, thus, played its role as a balancing agent, both in financial terms and in the matter of providing leadership to the co-operative movement. It has been fortunate to have the guidance from outstanding thinkers and the required assistance from the enlightenedadministration of the State, which has enabled it to occupy a premier position in the co-operative banks of the State. The progress of the Maharashtra State Co-operative Bank Limited, Bombay is shown below:—

(Rs. in crores)

Particulars	1973 (June)	1975 (June)	
Paid-up Capital and Reserves	24.63	33.05	
Deposits	127.81	162.52	
Advances	164.61	233.69	
Investments	39.33	50.21	
Total income	11.84	20.02	
Net profit	0.87	1.39	
Dividend	0.50	0.78	
Number of employees	1409	1690*	
Number of branches	28	34*	

^{*}The figures pertain to 30th September 1975.

JOINT-STOCK BANKS

Historical Background: The present banking system is the outcome of innovations considerably influenced by historical growth and past traditions. The agency houses in Bombay were the pioneers of banking in the city. The earliest mention of a bank in Bombay is recorded in December 1720. It was established for the benefit and advantage of both the Company and the inhabitants, with the capital stock of one lakh rupees advanced by the Company from their cash. The management of the Bank was supervised by the then Bombay Government. During the first twenty-four years of its existence, the bank could not prosper, as the sums were lent on personal bonds and no care was taken of the securities pledged. Besides, some of the debts were of twenty years duration and the carts and houses mortgaged to the bank had fallen into decay even before the settlements of the accounts. Regulations were passed in 1774 to prevent further difficulties arising from large amount of outstanding debts. As a result, the bank worked smoothly for the following thirty years. Again in 1778, the sum due from bond creditors increased to Rs. 28 lakhs and the amount of debt due from the Government treasury to the bank also reached a high figure and the same was increasing annually by the accumulation of interest. Therefore the then Government of Bombay proposed to fix the debt at a certain sum, write it off and establish a new bank. Thus, the career of the first bank was closed.

During the nineteenth century until the establishment of the Bank of Bombay, the banking business in Bombay was carried on by about hundred Hindu shroffs. In 1835, a savings bank was established by the then Government. As the commercial activities were rapidly expanding and Bombay had abundance of capital, the proposal of establishing a Bank of Bombay was first brought forward in 1836.

The Bank of Bombay commenced its working in 1840 with a capital of Rs. 52 1/2 lakhs. The business of the Bank of Bombay was confined to receiving deposits, keeping cash accounts, discounting bills and drafts and other investments. In fact until the establishment of Government Paper Currency Office in 1860, the Bank of Bombay also enjoyed the privilege of issuing bank notes. The Bank of Bombay was afterwards reconstructed in the year 1868. In 1842, another company viz., the Bank of Western India was formed at Bombay to give every facility for the conduct of exchange and other legitimate banking business which was conspicuous by its absence in the charter of the Bank of Bombay. The business of the Bank of Western India was chiefly confined to exchange of loans and deposits and continued its working until 1845, when the shareholders of that bank formed themselves by a fresh deed of agreement into a new company viz., Oriental Bank. In 1845, another banking company under the name of Commercial Bank was formed mainly on the suggestion of native merchants for the purpose of encouraging and assisting the local trade as the two banks mentioned earlier could not serve that purpose. In 1851, there were two banks in Bombay, besides the Government Savings Bank and two branches of other institutions viz., the Oriental Bank of London and the Agra and United Service Bank. During the next five years, three more banks were opened, of which two were branches, one of the North-Western Bank of India and the other of the London and Eastern Bank. The new Chartered Mercantile Bank of India, London and China was of local origin. However, between 1855 and 1863 the branches of the London and Eastern Bank and the North-Western Bank closed their business in Bombay. But the Chartered Bank of India, Australia and China, incorporated by Royal Charter, opened an agency in

Bombay and a new bank *viz.*, the Central Bank of Western India was established in Bombay in 1860 with a capital of Rs. 50 lakhs. By 1862, two European Corporations *viz.*, the Sind, Punjab and Delhi Corporation and the Comptoir d' Escompte de Paris, had opened branches in Bombay.

The period between 1861 and 1864 recorded great prosperity, and enormous wealth poured into the city as a result of the cutting off of the American cotton supply.

This sudden increase of wealth led to the widest speculation and resulted in the formation of numerous financial and banking institutions.

In 1867, the Bank of Bengal opened an agency and in 1869 the Honkong and Shanghai Bank and the Agra Bank of London opened their branches in Bombay City.

By 1870, there were eighteen local banks, besides five exchange banks and 32 financial associations and Corporations in Bombay. All of the newly founded banks did not survive after 1871, but the five exchange banks continued their banking transactions.

The banking business flourished steadily upto 1890 and suffered from stagnation between 1890 and 1905. The stagnation was the result of bad seasons and the out break of plague. The chief features of this stagnation period were the closure of the Land Mortgage Bank of India and London, the Agra Bank and the Oriental Bank Corporation; the closing of the Government Savings Bank and the winding up of the National Mortgage Bank.

In 1908, there were in all 12 banks in the city, of which three banks viz., Mercantile Bank of India Limited (1854) (The year in bracket shows the year of establishment of the Bombay branch.), Chartered Bank of India, Australia and China (1858), and the National Bank of India Limited (1863) had their head-offices in London. Besides, four other banks viz., Comptoir National d' Escompte (1861), Hongkong and Shanghai Banking Corporation (1869), Yokohama Specie Bank Limited (1894), International Banking Corporation (1904) had their head-offices at Paris, Hongkong, Yokohama and New York, respectively. The branch of the Alliance Bank of Simla was opened in Bombay in 1903. The Bank of Bengal (Agency) was established in Bombay in 1867.

In addition, the head-offices of three more banks *viz.*, Bank of Bombay, Bank of India, and Indian Specie Bank Limited, were opened in Bombay in the years 1868, 1906 and 1906, respectively.

The development of the commercial banks since 1910, reflects the industrial and the economic growth of the country. The city of Bombay, being an industrial and trade centre, had a good share in the development of commercial banking. The Swadeshi movement that began in 1905 also gave a stimulus to Indian commercial banking and many of the big banks, such as the Central Bank of India and the Bank of India, were established during this period. There was a boom in commercial banking during 1906-1913 which was followed by a crisis during 1913-17. During the crisis, 87 banks failed, the majority of them were the small and weak banks, but the crisis weakened the confidence of the people in the banking system.

A large number of mushroom banks had been established by 1913 (in Western India, as in U.P. and Punjab). They conducted their business in a reckless manner. Their aggregate subscribed and paid-up capital were only 40 and 14 per cent, respectively of the authorised capital. They adopted high sounding names and there was no law to prevent them from resorting to any malpractices and undesirable means. There was mismanagement of funds and the directors misappropriated the funds.

The liquid assets being low, the financial position of the banks was precarious. The larger banks were rather operating on sound lines and were able to withstand the crisis. The difficulties of the banks during crisis were aggravated by the absence of a central bank and lack of co-ordination between these banks, presidency banks and the exchange banks.

There was a brief respite from 1918 to 1921, during which only 21 banks with a total paid-up capital of Rs. 14 lakhs failed. The war and the post-war boom gave another impetus to the starting of banks and a large number of banks, especially for financing industries were established. The post-war boom not merely in banking but also in the economy ended in 1922 and the number of bank failures increased. During 1922-24, it stood at 234 with a total paid up capital of Rs. 6 crores and 10 lakhs. One of the important banks was the Tata Industrial Bank which failed in 1923 and v/as merged later with the Central Bank of India. Of the 342 banks that failed in the country during 1913-14, 49 were in the province of Bombay, the largest number being in Punjab (81). During the Swadeshi movement of 1906, a large number of banks were established in Bombay due to the existence of the port and the speculative activities in cotton and silver in the market.

The dissatisfaction with the banking system led to a demand for enquiry in its working. In 1929, the Government of India appointed a Central Banking Inquiry Committee for a comprehensive survey of the banking system.

The development of commercial banks reflects that the multiplication of branches is a more marked feature of the growth of our banking system rather than extension to new places. The competition for new branches had been chiefly between the Imperial Bank of India and the Indian Joint-stock banks; after 1920 the branch expansion by exchange banks was relatively slow. By 1936, out of the total blanches of 1450, 99 belonged to exchange banks and 360 to Imperial Bank of India and out of the remaining two-third belonged to the smaller banks. The biggest six Indian banks had their branches concentrated in the city areas. The narrow area covering chiefly the Bombay province served by the Bank of India is the indicator of the deliberate policy to adhere to the biggest industrial and commercial centres of the land and that also in the British ' territory.

The details of bank failures in Bombay are given below:—

- (1) Bombay Banking Company:—It was established in November 1898 and was liquidated during the banking crisis and panic of 1913-14. The bank had achieved reputation and inspired confidence due to one . of the directors being an eminent medical practitioner of Bombay. The agents were given full freedom by the directors and they used the funds for loans to themselves and prepared false balance-sheets. The shareholders were given good dividend and so did not inquire into the working of the Bank. But a suspicion was created in 1912 when the manager took a trip to United States of America and the depositors withdrew an amount of Rs. 5 lakhs in 1912-13. The director continued to endorse the working of the Bank and to assume the responsibilities he incurred for the hundis submitted to him. But the Bank had to suspend payments, when the withdrawals increased due to the failure of Central Bank of India in Bombay and the agents declared themselves insolvent. The liquidators reported that the bank only maintained one daybook and ledger and they suspected that the registers of securities and pre-notes were suppressed.
- (2)The Pioneer Bank, Bombay: It was established in September 1911 and liquidated in December 1916. Its authorised and subscribed capitals were Rs. 50 and Rs. 15 lakhs, respectively and it collected just Rs. 2 lakhs as paid-up capital. In 1913, its deposits were to the tune of Rs. 3 lakhs. Most of the paid-up capital was fake, because as soon as it was collected on the shares it was loaned to the same persons on the security of the same shares. The advantage of this was taken by persons in financial difficulties. When petitions were made on this ground for the winding up of the bank it was argued that this related to internal management. But it was liquidated in 1916.
- (3) Credit Bank of India: The bank was started in 1909, with an authorised capital of Rs. 100 lakhs, subscribed capital of Rs. 50 lakhs and paid-up capital of Rs. 10 lakhs. The bank gathered in its fold persons who did not have any training in their jobs. When the bank was liquidated in 1916, the manager of the bank, Jaffer Joosab pleaded ignorance; he even did not know the meaning of the term, 'bill of exchange'. Even the Chairman of the Board of Directors and the auditor pleaded ignorance for all the errors at the trial case.
- (4) The Tata Industrial Bank: It was established in 1917 and was warmly supported due to the house of Tatas. But the termination of the war inflation and prosperity and the crisis of 1920, led to the decline in its dividends. These induced sobriety and the shareholders ultimately forced the amalgamation of the Bank with the Central Bank of India. The Bank was established with the objective of financing the industries of Tatas, but the post-war deflation accompanied by the difficulties of the Tata group of industries, disappointed the shareholders who had hoped for very high dividends for the Bank and they voted heavily for amalgamation in July 1923.
- (5) The Indian Specie Bank:—It was established in March 1914, with an authorised capital of Rs. 2 crores, subscribed capital of Rs. 1.50 crores and paid-up capital of about Rs. 75 lakhs. It was due to the initiative and enterprise of Mr. Chunilal Saraiya who though a medical person had experience in banking. He played an important part in establishing the Bank of India in 1906 but as the authorities refused to appoint him as its manager, he withdrew. His reputation and ability was highly rated and he was able to attract eminent persons from business life of Bombay to be the directors. But events proved that Mr. Saraiya's inclination was rather speculative. There was a strong rumour that the Bank was cornering silver and in spite of the denial by the Chairman, the Commerce of Calcutta reported that the bank was buying the silver in market on a large scale. Yet the shares of the Bank were put up for Rs. 52 to Rs. 66. The businessmen and the local journal commended the manager Mr. Saraiya for earning a profit of Rs. 25 lakhs at a stroke on the sale of silver at enhanced rates to the Secretary of State in England and the Finance member in India. The Bank came to be linked up with well-known speculators in the city. The Bank resorted to various malpractices, creation of fictitious debtors was active in cotton share speculation and had accumulated losses of more than Rs. 1 crore. The failure of People's Bank in Lahore and the Credit Bank in Bombay in 1913 created panic in public. But the bank paid out Rs. 90 lakhs at the time of the run by the depositors. Yet deposits began to fall. Mr. Saraiya tried to re-establish the confidence and the bank continued to deal in a variety of speculative activities. Ultimately, the sad demise of the manager forced the directors to petition to the Government for voluntary liquidation.

By 1939, the commercial banking structure was firmly established in the country and especially in the industrial cities including Bombay.

However the commercial banks by 1939 had not yet touched two fields. They financed only the internal trade of the country, leaving the foreign trade largely to exchange banks. Secondly, they had little to do with the marketing of agricultural produce or discounting of agricultural bills.

The outbreak of the war and the extension of hostilities by Japan in December 1941, led to large withdrawals of deposits from the banks due to the panic created by the war. But the deposits began to return soon and on the whole the Indian banks stood well at the first shock of war. Thereafter, there was an enormous growth in bank deposits. The expansion of currency was primarily responsible for the rise in deposits, but the rise in prices of shares and commodities and general rise in prices also increased the demand for credit. In August 1939, the deposit liabilities of the scheduled banks were Rs. 249 crores, but at the end of July 1944, they had risen to Rs. 759 crores. The demand deposits increased more than the time deposits. Between September 1939 and September 1944, demand liabilities rose from Rs.1,33 crores to Rs. 5,78 crores, whereas the time liabilities increased from Rs. 1,02 crores to Rs. 1,86 crores. This reflected a higher liquidity of assets of the banks. The cash ratio of the banks was high at 15 per cent by 1945. Advances and bills though higher declined as percentage to total deposits from about 53 in 1939 to 30 in 1944. The opportunities for commercial investments were curtailed and the banks diverted their funds to investment in war loans which rose to 40 per cent of total assets by the end of the war. The volume of capital and reserves had grown but not in proportion to the immense increase in deposits.

Another notable war-time trend was the great increase in the number of banking offices. In the eighteen months ending June 1944, the increase in number was by 688; in the quarter ending December 1943 it was 160; while in the first three months of 1944, the increase was 156. The rate slowed down and was 100 upto September 1944. The increase almost entirely was accounted for by the scheduled banks. Even as regards the expansion of deposits, it was mainly as regards the big banks, the 'Big Five' as they were known in addition to the Imperial Bank of India, the Bank of India, the Allahabad Bank, the Central Bank of India, Bank of Baroda and the Punjab National Bank. The smaller banks opened new branches without a parallel increase in resources, which was a source of weakness for the banking structure. Again new offices were largely opened in big towns to the neglect of small ones and this led to unhealthy branch competition and uneven development of the banks in the country as a whole.

Under the conditions of cheap money, low rates of interest, the bank rate remaining at 3 per cent during the war period, the commercial banks were able to expand and improve their position in the financial structure.

With the end of the war, the earnings and profits of the banks declined sharply and many banks were in difficulties and a number of banks failed. The partition of the country with Independence in 1947, adversely affected a number of banks which had branches or head-offices in Bengal and Punjab. A banking crisis was avoided by the Reserve Bank of India providing the necessary help to these banks. Yet a few banks failed during this period. By 1949, the economic conditions in the country were normal but the deficits in the budgets of the Union Government continued, which meant continuous expansion in the currency supply. The banking deposits continued to expand and with that the branches of the commercial banks. The Reserve Bank realised the need for the regulation of the banking system and suggested legislation which led to the Banking Companies Act of 1949. The banking system suffered from certain basic defects.

The defects were to be removed in the interest of establishing a sound banking system which was necessary for the rapid growth of the economy. The Banking Companies Act, 1949 was enacted for achieving this objective. Formerly, the joint-stock banks were governed by the General Companies Act of 1913. This Act was amended in 1936, and included some specific provisions for the banks such as, a bank could not be managed by a managing agency. Yet, there was no specific regulation of the banks. The Banking Regulation Act, 1949, is a comprehensive legislation applied to all banking companies including co-operative banks.

The period from 1949 to 1955 can be described as that of amalgamation of the banks and the consolidation of the banking structure. With the powers acquired by the Reserve Bank, a number of amalgamation of commercial banks were brought about. Small banks were amalgamated with bigger banks and the uneconomic branches of the banks were closed down. With the removal of the weak links in the banking structure there was an improvement in the efficiency of the banks. The deflationary trend during 1952-54 reduced the profits of banks and compelled the banks to reduce their costs of operations by improving their efficiency.

Under the Banking Companies Regulation Act of 1949, the Reserve Bank of India was given the responsibility of assisting as an intermediary in proposals for amalgamation of banks on a request from such banks. Reserve Bank of India attempted to merge the weak and inviable banks with strong and viable units. But the procedure of amalgamation was slow and complex. The Act was amended in 1950 to simplify the whole process. Yet amalgamations depended on the initiative and will of the banking companies. So the consolidation of the banking structure was dependent on the mercy of the small banks. But when the Pilai Bank was closed in 1960 and the Laxmi Bank was compulsorily wound up by the High Court, Bombay, the Indian banking system was widely disturbed. Thereupon the Banking Companies (Second Amendment) Act, 1960 was passed empowering the Reserve Bank of India to apply to the Central Government for an order of moratorium in respect of a weak and inviable bank. The Reserve Bank of India was empowered to prepare a scheme of reconstruction of the banking company or its amalgamation with another banking company, which had to be approved by the Central Government with modifications, if any. Thus the Reserve Bank of India was empowered to compulsorily merge a sick bank with a healthy bank. In preparing the scheme, the Reserve Bank of India was working with the State Bank of India; some weak banks were merged with the State Bank as its subsidiaries. Between 1960-65, the total number of mergers and amalgamations under the Act were 188, out of which voluntary amalgamations accounted for 20 only. Between 1960-65, 56 banks were granted moratorium. Of these, 45 were compulsorily merged with other banks and one was allowed to go into compulsory liquidation. Three banks were ordered to be wound up and one was allowed to amalgamate voluntarily with another bank. The number of compulsory mergers was 30 in 1961, though it slowed down later on.

The bank mergers have been greatly beneficial to transferee banks, transferor bank, depositors and the solidarity of the banking structure of the country as a whole. As the amalgamations were brought about through the Reserve Bank of India, the interests of the depositors were properly looked after. The weak and inviable banks were being eliminated and this improved the strength of the banking structure. The quality of the structure went on improving and a healthy tone was provided to the system. In the following statement is shown the statistics of the bank mergers:—

Year	Total number of bank mergers	Year		Total number of bank mergers
1960	7	1963		22
1961	36	1964		79
1962	11	1965		33
1960- 65			Total	188

Training institutes for bankers were established by the Reserve Bank and internal examinations were introduced. The trained banking personnel were being provided to the banks. All this introduced efficiency and maturity in the operations of the banks. The Reserve Bank was also able to establish its effective control over the commercial banks. The use of the powers given by the Banking Regulation Act of 1949 and the functions of licensing, inspection, supervision established a continuous contact between the banks and Reserve Bank of India. By the end of the First Plan, 1955-56, the Reserve Bank of India had established its position as the leader of the commercial banks and the money market in the country.

With economic development of the country under the plan and the rapid growth of industries, the demand for credit went on expanding. The commercial banks had consolidated their position during the earlier period and were able to expand credit after 1956.

There have also been a number of basic functional and structural changes in the working of the commercial banks. In a survey of the Reserve Bank of India ia April 1972, according to the data supplied by 43 banks (including all Indian Banks with deposits of Rs. 25 crores and above), the medium-term credit to industry provided by them amounted to Rs. 78.6 crores which was equal to 14 per cent of their total outstanding credit to industry. The establishment of the Industrial Development Bank of India has shifted the responsibility of financing large industries from the commercial banks, yet the refinancing of industrial loans advanced by commercial banks stood at Rs. 38 crores on June 30, 1969. In spite of the State financing institutions, the commercial banks are extending their role in providing term finance to industries.

There was also a change in the security pattern of bank credit. For bank advances, between 1951 and 1962, advances against agricultural commodities rose by 51 per cent, while those against manufactures and minerals rose by 100 per cent which again reflects the importance of new industries.

There have been certain structural changes in the commercial banking system. An important feature has been a marked reduction in the number of banks through the elimination of weaker units as a result of voluntary or compulsory mergers. There had been no contraction in banking facilities, though there had been a decline in the number of banks from 566 in 1951 to 89 in June 1969. During this period there had been an increase in the number of bank branches from 4,151 to 8,254. There had been a rapid expansion of branches to the non-urban areas.

With the nationalisation of fourteen major Indian banks by the ordinance in July 1969, a revolutionary change took place in the banking structure. These 14 banks had 3,770 branches (49 per cent of the total), deposit liabilities of Rs. 2,742 crores (58 per cent of the total) and advances of Rs. 1,744 crores (55 percent of the total) on 31st December 1968. About 83 per cent of the banking business was controlled by the Public Sector (1970) with these fourteen banks and the State Bank of India and its subsidiaries. Out of the remaining 17 per cent business in the private sector, 6 per cent of the banking business was in the hands of the Indian scheduled banks (36), 10 per cent was in the hands of banks incorporated outside India (15) and the non-scheduled banks having only 1 per cent of the total. Through the control of the Reserve Bank of India and the institutions such as Industrial Development Bank of India and Agricultural Refinance Corporation, the commercial banking structure is linked up to various State-sponsored financial institutions in the country and an attempt is made to build up a co-ordinated financial infrastructure consistent with the needs of rapid economic growth of the country.

Before the nationalisation of commercial banks in 1969, an experiment with a scheme of social control of banks was introduced. It was shortlived, yet it led to the establishment of the National Credit Council at an all-India level. It was envisaged as an instrument of credit planning and it was to lay down guidelines for the banks with regard to the provision of credit. On the council various economic interests were represented. The council indicated the quantity and quality of credit that banks should furnish for each sector and each industry in the economy.

Under the social control policy, the banking companies were asked to reconstitute their board of directors to represent the various economic interests in the country. Each board was to have a professional banker as it's full-time chairman. In 1968, the Banking Regulation Act was amended accordingly to implement the policy of social control over banking credit. Every foreign bank was to have an advisory board. The banks were prohibited from advancing loans to directors or to concerns in which the directors were interested. The social control provisions widened the scope of the powers of Reserve Bank of India as regards advances of the commercial banks. The Government was even empowered to take over any bank which consistently refused to follow social control provisions and policies.

The Government of India set up the National Credit Council with the Finance Minister as Chairman and the Governor of the Reserve Bank of India as the Vice-Chairman.

The Indian commercial banks accordingly reconstituted their boards and the foreign banks had set up advisory boards. The policy of social control was introduced by 1967, but the experiment was hardly implemented and there was the demand for nationalisation of commercial banks. A number of arguments were advanced in favour of the proposal and they were accepted as the basis for the decision of nationalisation of 14 big Indian commercial banks in 1969.

It was argued that over the past twenty years, a very close link had been established between the commercial banks and well-known industrial houses. This led to a kind of concentration of financial and economic power which was reflected in the functioning of the commercial banks. Further the directors of these banks attempted to use the resources of the banks for the industrial concerns in which they were interested. This led to the diversion of funds from the rural and semi-rural sectors to the large-scale industries situated in the urban areas. The small industrial and business units suffered from the scarcity of funds as they had to compete with the big concerns. These arguments against the functioning of private commercial banks were examined by a number of individuals and groups in the country. For quite some time in 1968, after the introduction of social control policy, discussion on the question of nationalisation of commercial banks was very wide-spread. Ultimately in 1969, the Government announced its decision to nationalise 14 big banks in the country. The private banking companies were compensated by the Government. The total amount of compensation payable to 14 nationalised banks had been determined at Rs. 87.4 crores.

The immediate impact of nationalisation was the acceleration of deposit mobilisation and of lending to the priority sectors. Aggregate deposits of the scheduled commercial banks registered an increase of Rs. 621 crores in 1969, as against a rise of Rs. 493 crores in 1968. This can be largely attributed to the ambitious plan of branch banking adopted by the nationalised banks. Direct and indirect finance extended to agriculture by the nationalised banks increased from Rs. 27 crores at the end of June 1969 to Rs. 66 crores at the end of June 1970. By adding the assistance given by the State Bank and it's subsidiaries, the total assistance to agriculture rose upto Rs. 216 crores at the end of June 1970. The advances of the nationalised banks in favour of road transport operators had been more than doubled during the period of seven months rising from Rs. 6 crores to Rs. 13 crores. Self-employed persons received Rs. 2 crores worth of bank finance at the end of January 1970 as against Rs. 30 lakhs at the end of January 1969. Taking the entire public sector banking system, the assistance to the newly defined priority sectors and the so-called neglected sectors increased by Rs. 166 crores to Rs. 604 crores by the end of January 1970. The target for the opening of the branches especially in the rural areas had been placed at 71,350 in 1970, as against 1,035 in 1969.

Even after the Regulation of Banking Act of 1949, there had been failures of banks from year to year. The bank failure partly were attributed to the laissez-faire policies of the Government and the laxity of the laws and dishonesty of the promoters. The bank failures had a very deterrent effect on the confidence of the public in the banking institutions, and there were always cumulative runs on the banks with the consequential danger of banking crisis. In 1950, the Rural Banking Enquiry Committee had stressed the need for the establishment of a Deposit Insurance Corporation but no decision was taken. In 1954, the committee on finance for private sector under the Chairmanship of Shri A. D. Shroff had recommended the introduction of deposit insurance in the country.

The Banking Companies Act was also amended in 1960, to give additional powers to the Government and the Reserve Bank to provide for expeditious payments to the depositors of banks in liquidation, and rehabilitate banks in difficulties. But these measures were not sufficient, and hence, bank nationalisation was inevitable.

Banking in the city of Bombay : (1) 1960-66 : The data of the functioning and development of banks in the city of Bombay is available from 1960. The same is given in Tables Nos. 1 and 2.

During the period 1960-66, the number of reporting bank offices increased from 186 to 327. The total average of month-end deposit balances increased over the period from Rs. 3,48 crores to Rs. 6,65 crores; current deposits increased from Rs. 1,37 crores to Rs. 1,88 crores; savings from Rs. 37 crores to Rs. 1,20 crores; and fixed deposits from Rs. 3,48 crores to Rs. 6,65 crores. The total debits to total deposits increased from Rs. 61,98 crores in 1960 to Rs. 110,83 crores in 1966. Total approved limits as at the end of the year (i.e., cash credits and overdrafts) increased during the period from Rs. 3,22 crores to Rs. 6,57 crores and the debits to cash credits and overdrafts rose from Rs. 20,07 crores to Rs. 54,14 crores. Annual rate of turnover of current deposits increased from 40 to 51 which reflects an increase in the velocity of circulation of money. The overall annual rate of banking turnover increased from 16.2 to 17.8. All these rising trends indicate the expansion of demand for and the facilities for the provision of credit in the city. The expansion of industries over the period and the opening of new branches increased the deposits of the commercial banks and also the mobilisation of larger financial resources by the banking system.

The development in banking in the city of Bombay can be further reviewed in the context of the development in Maharashtra. The Reserve Bank data gives the trends over the period 1960 to 1966. The data for relates to the former bilingual State and therefore the data from to 1966 is relevant. The total number of reporting banking offices in the State increased from 525 in 1961 to 811 in 1966. Total deposits (average month-end deposit balances) increased over the same period from Rs. 4,18 crores to Rs. 8,04 crores. They were mostly the deposits of the business and individuals. The deposits of Government and quasi-government bodies in 1966 were Rs. 95 crores. The credits advanced by the banks were mainly in two forms, loans and bills and cash credits and overdrafts. Total of the approved limits by the banks in Maharashtra under both these heads were Rs. 5,63 crores in 1961 and Rs. 11,44 crores in 1966. These reflect the increasing demand for credit from the private business sector due to the expansion of industries and business in the State. Annual rate of

turnover of current deposits (businessmen and individuals) in 1961 was 45 which increased to 51 by 1966, reflecting an increase in the velocity of circulation of money due to the larger business demand for banking facilities.

The data in relation to the city of Bombay indicates similar trends as those in Maharashtra, but in a more sharper manner. The number of reporting offices in the city increased from 186 in 1960 to 327 in 1966. The average of month-end deposit balances increased from Rs. 3,48 crores in 1960 to Rs. 6,65 crores in 1966. Total debits to various individuals, Companies etc., increased over the period from Rs. 61,98 crores to Rs. 1,10,83 crores and the total of approved limits as at the end of the year increased from Rs. 4,96 crores to Rs. 10,26 crores. Debits to cash credits and overdrafts increased from Rs. 19,99 crores to Rs. 50,79 crores. Average of month-end bank credit outstanding; during the year increased from Rs. 277 crores in 1960 to Rs. 619 crores in 1966. Annual rate of turnover of current deposits (businessmen and individuals) increased over the same period from 39 to 52, reflecting quite a sharp increase in the velocity of circulation of bank credit. All these trends indicate the rapid expansion of industries and business in the city of Bombay, more remarkable than in other areas of Maharashtra and the consequential expansion of credit and the banking facilities to these sectors. The commercial banks were able to expand their supply of credit in a flexible manner and satisfy the rising demand in the city.



Maharashtra State Gazetteers

TABLE NO.1
BANKING BUSINESS OF SCHEDULED COMMERCIAL BANKS BOMBAY CITY

		Average of	month-end de balance	posit	Total debits to			Total of approved limits as at the end of the year				
	No. of reporting offices	Government and Quasi-	Business and Individuals	Total (2+3)	Government and Ouasi-Government	Business and	Total (5 + 6)	Cash Credits a	nd Overdrafts		Other	
Year	omices	Government bodies	mulviduais	(2+3)	bodies	Individuals		Government and Quasi- Govemment bodies	Business and Individuals	Government and Quasi- Government bodies	Business and Individuals	Total (8+9 + 10+11)
	1	2	3	4	5	6	7	8	9	10	11	12
1960	186	41.3	307.1	348.4	545.8	5,652.0	6,152.8	4.8	317.6		173.9	496.3
1961	204	45.6	313.4	359.0	612.4	5,938.4	6,550.8	1.8	321.7		185.3	508.8
1962	224	48.6	331.4	380.0	692.7	6,446.6	7,139.3	5.3	382.0	2.3	207.7	597.3
1963	266	64.6	383.6	448.2	893.5	6,653.6	7,547.1	9.6	488.8	0.8	255.8	755.0
1964	299	77.0	454.8	531.8	1,140.3	7,736.6	8,876.9	20.8	523.0	1.3	316.4	861.5
1965	.321	78.8	532.1	610.9	811.5	8,792.0	9,603.5	23.8	558.2	0.7	404.1	986.8
1966	327	81.0	583.6	664.6	1,019.4	10,063.5	11,082.9	26.8	629.8	4.8	365.0	10,026.2

TABLE No. I - contd.

Year	Debits to Ca and Ove		Average of I bank Loans		Credit out during the Credit Overd	year Cash s and	Total (15 + 16+ 17+18)	Rate of Turnover	Overall Annual Rate of Turnover
	Government and Quasi- Government bodies	and	Government and Quasi- Government bodies	and	Government and Quasi- Government bodies	and		Business and Individuals	Business and Individuals
	13	14	15	16	17.	18	19	20	21
1960	8.9	1,998.5		89.8	1.8	185.1	276.7	39.6	15.8
1961	19.3	2,163.4		97.9	0.7	208.9	307.5	46.0	17.0
1962	39.50	2,370.2	1.0	100.6	2.2	207.6	311.4	50.0	16.3
1963	91.2	3,207.8	2.4	144.3	3.8	282.8	433.3	49.4	15.1
1964	121.2	3,898.2	2.6	174.2	11.9	319.4	508.1	48.2	16.3
1965	226.4	4,770.2	5.2	185.7	19.0	371.6	581.5	43.0	16.9
1966	334.7	5,079.3	5.3	223.8	15.9	373.5	618.5	51.4	17.3

TABLE NO. 2 DEPOSITS, CREDITS AND OVERDRAFTS WITH SCHEDULED COMMERCIAL BANKS, BOMBAY

(Rs. in crores)

Year	No of reporting offices	Average balance	e of mon	th-end	l deposit	Total debits to			and	cash cxredits and overdrafts	tunrover of	rate of turnover	
		Curretn	Savings	Fixed	Total(3+4+5)	Deposits	Deposit	Fixed Deposit Accounts	Total (7+8+9)				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1960	186	1,36.7	36.7	1,75.0	3,48.4	54,31.6	62.3	7,03.9	61,97.8	3,22.4	20,07.4	39.7	16.2
1961	204	1,25.1	42.5	1,91.4	3,59.0	57,40.5	73.7	7,36.6	65,50.8	3,23.5	21,82.7	45.9	17.7
1962		1,24.7	47.9	2,07.4		62,40.9	92.3	8,06.1	71,93.3	3,87.3	24,09.7	50.0	16.9
1963		1,35.8		2,50.2		66,90.1	1,26.2	7,30.8	75,47.1	4,98.4	32,99.0	49.3	15.8
1964		1,57.7		2,99.2		78,00.1	1,53.3	9,23.5	88,76.9	5,43.8	40,19.4	49.5	16.8
1965		1,89.3		3,30.8		82,96.6	2,06.0	11,00.9	96,03.5	5,82.0	49,96.6	43.8	17.2
1966	327	1,87.7	1,19.6	3,57.3	6,64.6	96,43.0	3,18.5	11,21.5	1,10,82.9	6,56.6	54,14.0	51.4	17.8

(2) 1966-70: Among the eight big cities in India, Bombay was the most important in respect of the total number of bank offices, deposits and credit. During 1966-70, Bombay added more offices and recorded higher increases in total deposits and credit than any other centre. Bank offices increased by 135. There has been quite significant increase in the deposits in city branches, though the growth rate of deposits in Bombay might appear lower than that in several other centres. However, considering the high level of deposits in the centre, the quantum of rise in terms of a percentage growth rate of 11.6 is actually quite substantial. The fact that Bombay combined the largest increase in offices and deposits with a fairly marked rise in the average deposit per office shows the extraordinary potential that the city offers for deposit mobilization. In Bombay, credit increased by a larger amount than deposits, the credit-deposit ratio was close to 100 per cent. For all banks in the metropolitan centres taken as a whole, new offices accounted for slightly more than a quarter of the total deposit increase over the period.

There was heavy concentration of banking in business areas. Although the number of offices situated in these areas was relatively small, a strikingly high proportion of the total banking business in the centre was handled by them. This was not merely in terms of credit but equally important in respect of deposits. The areas were further responsible for much of the deposit acceleration over the period 1966-70. The proportion of deposits secured by the offices in these areas was also considerable. In each of these centres, the business areas had well over half of the city's aggregate deposits, though the number of bank offices operating in these areas was accounted for around a third of the total. In Bombay, during 1966-70, out of the 135 new offices opened, only 21 were in this area group while in Calcutta, the proportion was slightly higher at 15 out of 75. It can be stated that the intensity of banking in these areas increased as indicated by the sizable rise in the average deposits per office. The business areas were responsible for at least half the deposit increase in the city as a whole. The individual accounts may not be important here as in business areas, deposits would be mainly institutional or commercial and generally consequent to or following an extension of credit.

The following statement shows the residential area-wise percentages of banking business undertaken in Greater Bombay in 1970:—

Residentia Area*	Percentage of offices in the area to the total in the centre	percentage of deposits in the area to the total in the centre
I	18.7	9.7
II	7.0	5.0
III	29.1	9.5
Total	54.8	24.2

Maharas

Residential Area	per	Percentage of cerdit in the area to the total in the centre	Average credit per office (Rs. in lakhs)
I	121.9	3.1	38.4
II	167.3	2.5	82.1
III	76.7	4.0	32.0
Total	103.8	9.6	40.6

^{*} The details of areas covered under these residential groups are given on the subsequent page.

The metropolitan cities provide remarkable scope for banking business. The marked rise in the average deposit per office indicated that the spread of the metropolitan city branch net-work had indeed been accompanied by an overall rise in deposits and not as was sometimes feared in business. The deposits that centre obtained from even a pure residential or non-business area of a city were generally higher than what an office in an urban or rural centre would bring in. The average deposit per office of rural branches of scheduled commercial banks was only Rs. 13.4 lakhs (September 1970). As against this the average even among the residential areas in Bombay was Rs. 103.8 lakhs. This degree of deposit potential was advantageous in evolving the strategy of branch expansion in Greater Bombay.

The following statement shows that in 1951, Bombay city accounted for over a fourth (26.5 per cent) of the all India figure of current deposits and less than a third (30.3 per cent) of their debits. Over the years, the share of big cities (Bombay, Calcutta, Madras and Delhi) declined and in 1966, Bombay and Calcutta accounted for 23.8 per cent and 14.5 per cent of total current deposits, as regards debits to the share of these cities declined to 27.1 per cent and 22.0 per cent, respectively. The following statement gives statistics of current deposits, debits and turnover of current deposits in Bombay during 1951, 1956, 1961 and 1966:—

(Amount in crores of Rs.)

	1	1951	1	1956	1961		1966	
Particulars	Amount	Percentage to all India total						
Current Deposits	1,11.2	26.5	1,34.4	29.2	1,25.1	24.6	1,87.7	23.8
Debits to Current Deposits Accounts	53,23.4	30.3	58,17.6	29.2	57,40.5	27.8	96,43.0	27.1
Turnover of Current Deposits	47.9		43.3		45.9		51.4	

^{*} Figures for the years 1951 and 1956 are year-end figures of deposits; while for the years 1961 and 1966 figures of amount are month-end averages during the years.

In 1951, the four big cities (Bombay, Madras, Calcutta and Delhi) accounted for as much as 60.6 per cent of total current deposits and 69.9 per cent of total debits. In 1966, these four cities accounted for 51.1 per cent of current deposits and 59.9 per cent of debits thereto. The turnover of current deposits in 1966 at Bombay was 51.4 crores; at Calcutta 68.2 crores; and at Madras 56.3 crores.

The following statements show the comparative statistics of banking business in Bombay:—

Particulars	1966	1970
Number of bank offices	347	482
Outstanding deposits (Rs. in crores)	7,30	11,29
Credit (Rs. in crores)	6,90	11,12
Average deposit per office (Rs. in lakhs)	2,10	2,34
Average credit per office (Rs. in lakhs)	1,99	2,31
Compound annual glowth rate of deposits	N.A	11.6
Compound annual growth rate of credit	N.A	12.6

Particulars	Increase during 1966- 70
No. of bank offices	135
Total deposits (Rs. in crores)	3,99
Total credit (Rs. crores)	4,22

Average deposit per office of new offices at the end of every year of establishment	Rs. in lakhs
First year of establishment	15.61
Second year of establishment	35.54
Third year of establishment	50.40
Fourth year of establishment	60.30
Fifth year of establishment	80.57

Areas covered under the respective business and residential areas in Bombay are shown in the following statement:—

Area number	Areas covered		
Business area I	Fort, Ballard Estate.		
Business area II	Kalbadevi, Zaveri Bazar, Bhuleshwar, Mandvi, Opera House, Sandhurst Road, Lamington Road, Thakurdwar.		
Residential area l	Substantial extent of business activities — Worli, Prabhadevi, Mahim, Bandra, Dadar, King's Circle, Sion, Wadala.		
Residential area II	More selected or exclusive residential localities—Cumballa Hills, Walkeshwar Road, Peddar Road, Breach Candy, Colaba, Churchgate.		
Residential area III	Less affluent or more middle class neighbourhoods—Chembur, Ghatkopar Vikhroli, Bhandup, Kurla, Mulund, Santacruz, Vile Parle, Andheri, Malad, Borivli.		

The business area-wise information of banking business in Bombay during 1966 and 1970 is shown in the following statement :—

Business	of off the au the to	ice in rea to	of dep in the to the	osits area total	to deposit growth in the centre	dep per d (Rs lak	osit office . in hs)	of credit in the area to the total in the centre	Average credit per office (Rs. in lakhs)
	1966	1970	1966	1970	1970	1966	1970	1970	1970
1	2	3	4	5	6	7	8	9	10
Business area l	17.0	13.4	58.8	58.5	58.0	7,27	10,16	74.1	12.67
Business are II	21.9	18.9	11.1	10.1	8.2	1,07	1,25	6.1	75
Total for Greater Bombay	38.9	32.3	69.9	68.6	66.2	3,78	4,96	80.2	5,72

TABLE. No. 3
List of Commercial Banks (Directory of Bank Offices, December 1980 Reserve Bank of India.) and Their Branches in Greater Bombay, at the end of December 1980

Name of Bank	No. of branch offices, sub- branch offices including head office, transacting banking business	No. of offices not transacting banking business, i.e. registered offices or administrative offices, etc.
(1)	(2)	(3)
Allahabad Bank	14	1
Andhra Bank	7	1
Bank of Baroda	69	10

Bank of Cochin	1	
Bank of India	70	4
Bank of Karad	3	
Bank of Madura	5	
Bank of Maharashtra	58	
Bank of Rajasthan	5	
Banares State Bank	1	
Bharat Overseas Bank.	3	
CanaraBank	59	6
Catholic Syrian Bank .	2	
Central Bank of India .	62	6
Corporation Bank	15	1
Dena Bank	77	3
Federal Bank	4	1
Grindlays Bank	11	
Habib Bank	1	
Indian Bank	25	
Indian Overseas Bank .	29	1
Jammu and Kashmir Bank	1	
Karnatak Bank	5	
Laxmi Commercial Bank	2	
Maharashtra State Co- operative Bank	32	

New Bank of India	8	
Oriental Bank of Commerce	9	
Punjab and Sind Bank.	11	
Punjab National Bank.	20	11
Ratnakar Bank	2	
Reserve Bank of India.	2 (1 central office)	
Sangli Bank	14	
South Indian Bank	2	
State Bank of Bikaner and Jaipur	8	
State Bank of Hydrebab	11	
Sate Bank of India	85	1
Sate Bank of Indore	- 3	1
Sate Bank of Mysore	5	
Sate Bank of Patiala	1	
Sate Bank of	5	
Saurashtra		
Sate Bank of Tranvancore	2	1
Syndicate Bank	37	3
Tamilnadu Mercantile	C+1+	Ω_{0}
Bank		
Union Bank of India	65	1
United Bankof India	14	1
United Commercial Bank	33	1
United Industrial Bank	1	
United Western Bank	15	1
Vijaya Bank	17	2
Vyasa BAnk	3	

Deposits and advances of all scheduled commercial banks in Bombay are given in the following statement:—

(Rs. in lakhs)

As on last Friday of	No of functioning offices	No of reporting offices	Deposits (Rs)	Advances* (Rs)
1	2	3	4	5
June 1970	480	469	10,40,60	10,34,56
June 1973	606	606	15,83,67	14,13,94
December 1975	N.A	729	21,70,78	20,36,66

^{*} In the case of advances, the reporting offices are recorded as 463.

The above statement reveals the increasing trend in the total deposits and advances of all scheduled commercial banks in Bombay along with the number of banking offices. The percentage of deposits to advances has also increased from about 87.5 to 91.0 during 1973-75.

The deposits and advances of scheduled commercial banks in Bombay according to type as on last Friday of

June 1973 revealed that the fixed deposits were the largest in amount.

As against this, the savings deposits as on last Friday of June 1973 stood highest in respect of number of accounts, and the same are shown in the following statement:—

(Amount in lakhs of Rs.)

No. of No. o		Curr	ent	Savings	
offices	offices	No. of accounts	Amount	No. of accounts	Amount
606	606	3,40,441	3,93,34	2,34,8,673	3,12,43
Fixe	ed	Oth	ers	Tot	al
No. of accounts	Amount	No. of accounts		No. of accounts	Amount
6,64,704	8,46,73	22,233	28,40	33,76,051	15,80,90

The affluent society and businessmen have the tendency to put large amounts in the fixed deposit accounts. However, the number of fixed deposits is generally less than that of savings deposits.

The deposits and credits of 939 scheduled commercial banks at the end of March 1981 amounted to Rs. 50,50,87 lakhs, and Rs. 47,21,74 lakhs, respectively.

Table No. 4 reveals the occupation-wise classification of outstanding credit of scheduled commercial banks in Greater Bombay.

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TABLE No. 4
Occupation-wise Classification of Outstanding Credit of Scheduled Commercial Banks in Greater
Bombay

(Amount in thousands of Rs.)

Occupation As on the last Friday of				
	June 1973 December 1975			
	No of Accounts	Amount	No of Accounts	Amount
I. Agriculture and Allied activities:	855	25,49,11	714	38,21,62
1.Agriculture excluding plantations	492	20,66,97	391	35,88,47
(i) Direct finance	306	1,09,11	176	3,11,17
(ii) Indirect finance	186	19,57,86	215	32,77,30
2. Allied activities	337	1,84,02	299	1,94,06
3. Plantations	26	2,98,12	24	39,09
II Industry:	34,010	7,01,70,21	39,546	11,13,97,30
1. Mining and quarrying	50	96,10	36	1,27,80
2. Manufacturing	23,639	6,32,87,54	28,075	10,01,30,18
3.Electricity generation, Transmission and distribution	236	17,88,17	275	22,47,70
4. Construction	562	16,09,91	643	17,23,02
5. Transport	3,623	13,09,70	3,407	34,85,45
6. Personal and professional services	5,900	20,78,79	7,110	36,83,15
III. Trade	24,995	2,41,70,69	26,118	3,02,69,60
1.Wholesale trade	17,558	2,25,76,66	17,556	2,79,11,71
2.Retail trade	7,437	15,94,03	8,562	23,57,89
IV. Personal loans (including consumer durables)	25,933	29,65,07	36,150	43,93,34
V. All others	26,412	97,72,79	29,724	70,68,86
Total bank credit (I+II+III+Iv)	1,12,205	10,96,27,87	1,32,252	15,69,50,72
Of which: samll scale industry	16,964	97,96,25	19,546	1,47,86,53

It can be seen from the table relating to occupation-wise classification of outstanding credit that the total bank credit of scheduled commercial banks increased from about Rs. 10,96 crores in June 1973 to about Rs. 15,69 crores in December 1975. The increase in the amount of bank credit can also be noticed in all the occupational groups, such as, agricultural and allied activities, industry, trade and personal loans.

This trend indicates the expansion of industries and business in Bombay. In the group of industries, manufacturing industries absorbed the highest amount of bank credit which amounted to about Rs. 6,33 crores in June 1973, and subsequently increased to about Rs. 10,01 crores in December 1975. As against this, the mining and quarrying industries had utilised the lowest amount of bank credit which amounted to about Rs. 92 lakhs and about Rs. 1,28 lakhs in June 1973 and in December 1975, respectively.

The classification of outstanding credit of scheduled commercial banks in Greater Bombay as in the month of June 1980 (Banking Statistics—BSR. June 1980, published by Reserve Bank of India.) is shown below:—

Occupation		Amount in 000's of Rs.	
(1)	(2)	(3)	
Agriculture	5,536	490,7,52	
Industry	37,682	19,85,22,26	
Transport operators	10,337	2,75,13,29	
Services	17,718	50,07,38	
Trade	37,054	6,59,24,98	
Personal loans	73,846	75,77,04	
All others	59,932	1,08,29,29	
Total Bank Credit	242,105	32,01,64,76	
Of which for small scale units	24,264	2,54,69,94	

Nationalised banks: By an ordinance of 19th July 1969, 14 banks were nationalised. They are (i) Central Bank of India, (ii) Bank of India, (iii) Punjab National Bank, (iv) United Commercial Bank, (v) United Bank of India, (vi) Canara Bank, (vii) Dena Bank, (viii) Syndicate Bank, (ix) Union Bank of India, (x) Bank of Baroda, (xi) Allahabad Bank, (xii) Indian Bank, (xiii) Bank of Maharashtra, and (xiv) Indian Overseas Bank.

All these nationalised banks have their branches located in Greater Bombay. Information regarding the working of some of these banks is given in the following pages.

(1) *Indian Overseas Bank*: The first branch of the Indian Overseas Bank in Bombay City was opened in the Fort area in September 1941 and upto nationalisation, nine more branches were added to the list and the number went upto 18 by the end of June 1973.

Upto June 1973, these eighteen branches together had gathered deposits to the tune of Rs. 22.87 crores which formed about 14 per cent of the total bank deposits in the country.

The type-wise break-up of deposits in these branches by the end of June 1973 is shown below:—

Type of Account		Percentage to total deposits	
1. Current accounts	6,59.02	28.8	
2.Savings accounts	4,82.26	21.1	
3.Term deposit accounts	11,45.97	50.1	
	22,87.25	100.00	

Of the bank's total credit in the country, about 12.4 percent *i.e.*, Rs. 12.15 crores was utilised to finance various sectors of the economy in Bombay city. The credit-deposit percentage ratio for all the eighteen branches together, stood at 53.1.

The following statement gives the amount of credit given by these branches to various sectors of the economy in Bombay by the end of June 1973:—

Type of credit	Amount (Rs. in lakhs)
(a) Priority sector—	
1. Agriculture	46.1
2. Small scale industry	1,53.5
3. Transport operators	14.2
4. Retail trade	18.4
5. Professional and self- employed	5.7
Total of priority sectors	237.9
(b) Others—	
Medium and large industry	4,28.5
2. Wholesale trade	4,11.4
3. Others	1,37.1
Total	977.0
Grand Total	12,14.9

Apart from the disbursement of the total credit of Rs.12.15 crores to various sectors of the economy, the bank invested Rs. 4.60 crores in various securities issued by the State Government and other State sponsored agencies.

Since nationalisation, the bank has introduced several new services including a number of attractive need-based savings schemes.

(2) *United Commercial Bank*: Prior to the nationalisation of banks, the bank was known as the United Commercial Bank Ltd. and was established in Bombay in 1943. It is one of the biggest five commercial banks of the country. Upto September 1971, the bank opened 21 branches in Bombay.

Particulars of the loans advanced by the bank to small scale industries, agriculturists and others as on 31st December 1971 are shown in the following statement:—

Particulars	No of Accounts	Amount (Rs. in thousands)
Raod transport	83	8,51
Small scale industries	307	1,55,68
Retail Trade	105	21,43
Agriculture	3	96
Small business	24	59
Professionla and self-employed	30	1,29
Education	6	47
Exports	71	1,16,55

The type-wise deposits of all the Bombay branches of the bank are shown in the following statement :—

As on	No of branches	Deposits (Rs in thousand)				Bills(Rs. in thousands)	
		Demand	Savings	Time	Total	thousands)	
29th December 1967	16	10,47,41	3,53,09	13,37,35	27,37,85	17,07,94	5,21,86
31st December 1971	21	13,44,32	6,33,38	19,15,84	38,93,54	26,24,28	6,01,04

(3) Central Bank of India: The bank had opened 57 branch offices in Greater Bombay upto 1972, of which only 52 offices transacted banking business.

In 1968, all the branches together excluding ten branches had the total deposits of Rs. 35,87,60,000 and the number of accounts in all types of deposits stood at 1,49,849. The amount of total deposits alongwith the number of accounts in Bombay branches increased considerably in 1972 and the same stood at Rs. 89,28,49,000 and 3,05,816 accounts, respectively. This statistics reveals the progress achieved by the branch offices in Bombay.

Table No. 5 reveals the ownership of deposits of the branch offices of the bank in Greater Bombay as in 1972.

TABLE NO.5 OWNERSHIP OF DEPOSIT, CENTRAL BANK OF INDIA, BOMBAY BRANCHES 1972

(Rs. in 000')

	Fixed Deposits		Current Accounts		Saving Deposits		Other Deposits		Total Deposits	
Total Deposits	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount	No. of Accounts	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Manufacturing concerns	103	2,68,12	1,094	78,51			1	50,00	1,198	3,96,63
Trading concerns	295	57,12	12,501	8,82,57	38	3,02	3	1,13	12,837	9,43,84
Personal	50,425	30,16,50	5,141	2,45,00	214,474	27,79,70	6,442	1,03,82	276,482	61,45,02
Banking companies	1	4,00	15	3,95					16	7,95
Business	172	52,25	4,593	44,5,32	17	32	24	1,40	4,806	4,99,29
Public institutions and trusts	402	3,03,70	326	42,91	229	17,30	25	13,80	982	3,77,71
Others	3,660	2,26,03	3,487	2,34,45	1,836	39,68	512	57,89	9,495	5,58,05
Total	55,058	39,27,72	27,157	19,32,71	216,594	28,40,02	7,007	2,28,04	3,05,816	89,28,49

The following statement analyses the advances of the bank according to purpose in Greater Bombay in 1968 and 1972 (The statistics for the years 1968 and 1972 exclude the advances of eleven and two branches, respectively as the same is not available with the Head Office of the Bank):—

	1968			972
Purpose	No of accounts	Amount (Rs. in '000)	No of accounts	Amount (Rs.in '000)
1	2	3	4	5
Industry	103	1,39,09	669	9,68,42
Commerce	164	52,86	437	1,49,25
Agriculture			27	13,88
Personal and professional	298	28,02	1,000	70,79
All others	684	1,82,46	2,340	4,87,15
Total	1,249	4,02,43	4,473	16,89,49

The advances of the bank in Greater Bombay also revealed an increasing trend as the same increased from about Rs. 4,43 lakhs in 1968 to Rs. 16,72 lakhs in 1972.

The advances of the branches in Greater Bombay according to security are shown in the following statement:—

(Rs. in thousands)

Security	1968	1972
Food articles	12,00	20,52
Indus <mark>tria</mark> l raw mater <mark>ials</mark>	50,09	3,88,80
Plantation products		98
Manufacture and minerals	1,42,14	5,98,11
Other securities	2,38,48	6,64,03
Total secured advances	4,42,71	16,72,44

(4) Bank of India: The Bank of India was incorporated in September 1906 in Bombay under Act VI of 1882 with subscribed capital of Rs. 100 lakhs divided into one lakh shares of the face value of Rs. 100 each and the paid-up value of Rs. 50 each.

Of this, 55,000 shares were privately applied for and the remaining shares were offered for public subscription. A sum of Rs. 10 per share was payable on application, Rs. 15 per share on allotment and Rs. 25 per share two months thereafter. The National Bank of India Limited was the banker to the issue.

The bank started its business on 1st November 1906 in Bombay and by the end of the year, the working funds amounted to Rs. 70 lakhs. Even though, in the early stages the bank followed a conservative policy with regard to its operations, it was justified in view of the banking crisis of 1913. The bank overcame all the difficulties through careful management of its funds, especially by maintaining adequate liquidity. The steady increase in the business of the bank during the first decade called for a strengthening of its capital structure.

The bank adopted changes in the memorandum and articles enabling the bank to raise the authorised capital from Rs. 1,00 lakhs to Rs. 2,00 lakhs by the creation of one lakh shares of Rs. 100 each. The shares were issued for Rs. 50 lakhs atRs. 50 paid-up value and the premium of Rs. 50 per share went to strengthen the reserve fund.

In 1920, the bank opened its first branch in Ahmedabad. In 1921, the bank was invited to manage the clearing house of the Bombay Stock Exchange. In 1927, the bank opened its branch at Bullion Exchange and soon after it took over the management of the clearing house of Bombay Bullion Exchange and the same is still continued.

The Great Depression of 1930 and the subsequent fall in the prices of agricultural commodities, such as, of oilseeds, cotton and raw jute affected the business of the bank adversely. It became difficult for the bank to recover several of its advances and interest rates began to soar. Besides, the book value of its investments also came down heavily. However, the bank emerged from the Depression with added strength, and during the decade 1929-39, the advances of the bank increased as also the working funds. The profits of the bank increased from Rs. 18.72 lakhs to Rs. 21.70 lakhs during the same period. During the decade 1929-39, the bank opened 12 new branches of which seven were in Bombay.

The Second World War created many acute problems for the bank. The initial reverses for the allies resulted in heavy withdrawal of funds from the bank, but thereafter the large defence expenditure incurred by the Government brought substantial increase in the deposits. After the War, the bank began to expand its activities abroad and opened its first foreign office in London in 1946. The post-war years marked the expansion of the bank's branches and operations in foreign countries.

In 1951, the paid-up capital of the bank was further increased by Rs. 50 lakhs and a premium of Rs. 50 lakhs was realised by the issue of shares.

The bank in 1968 set up specialised cells to deal with financing of agriculture, small-scale industries and other priority sector activities. Besides, the bank has also set-up a residential training college at Andheri to provide training to its staff.

Soon after the nationalisation of the bank in July 1969, the Bank of India Limited, became the Bank of India and the chairman was appointed as the custodian of the bank. The policies of the bank were progressively reoriented to serve large national objectives.

Upto 1975, the bank had opened 66 offices in Greater Bombay, of which 64 were engaged in transacting banking business and 36 were equipped with the safe deposit vaults.

(5) Canara Bank: The Canara Bank was originally established in 1906 as the Canara Hindu Permanent Fund Limited which later became Canara Bank. The first branch of the Bank was started in Greater Bombay in 1928 and the same was located in Fort area. Upto 1971 the bank opened 40 branches in Bombay.

The various types of deposits increased tremendously from 1967 to 1971 as also the number of accounts in the Bombay branches of the bank. The same are given in the following statement:—

(Rs. in thousands)

As on the last Friday	Fixed Deposits		Current Account		Savings Deposits		Other Deposits	
of December	No. of accounts	Amount Rs.		Amount Rs.	No. of accounts	Amount Rs.	No. of accounts	Amount Rs.
1967	22,127	14,57,77		9,58,84	1,07,239	9,46,05	8,178	1,45,29
1969	20,368	19,10,65	14,324	8,49,39	1,31,287	11,61,85	13,954	60,56
1971	28,308	39,29,72	19,272	14,19,67	2,11,671	19,50,33	20,447	91,50

On the last day of March 1967, the overdrafts and cash credits of the branches in Greater Bombay amounted to Rs. 23.24 crores and the same increased to Rs. 34.67 crores on the same day of March 1971. The following statement further throws sufficient light on the growth of business of the bank in Greater Bombay.

As on the last Day of March	Advance	Bills purchased and discounted (Amount) (Rs in thousands)			
	Industry		Trade		
	No of accounts	Amount (Rs. thousands)	No of accounts	Amount (Rs. thousands)	
1967	977	13,98,75	2,067	7,52,51	15,25,32
1969	948	17,65,11	1,648	6,17,50	19,26,36
1971	2,166	25,29,66	1,677	8,99,03	31,45,20

(6) Syndicate Bank: The Syndicate Bank was established in 1925 at Udipi. Its first branch in Greater Bombay was started in 1937. Upto December 1975 the Syndicate Bank had opened 31 branch offices in Greater Bombay, of which only 28 were engaged in the banking transactions and the remaining were administrative offices. The registered office of the bank is now situated at Manipal in Karnatak State. The particulars of advances to the priority sectors by the branches in Greater Bombay as on the last Friday of February 1972 are given below:—

Name of priority sector	AS on last Friday of 1972				
	No of Accounts	Amount (Rs. in thousands)			
Road transport operators	154	16,84			
Small scale industries	734	2,01,24			
Retail trade	322	22,13			
Agriculture (direct)	60	29,26			
Small business	67	4,42			
Professional	280	15,67			
Educational	100	5,28			
Exports	350	4,81,71			
Total of all sectors	2,067	7,76,55			

During December 1967 to December 1971, the deposits of the branches in Greater Bombay increased from Rs. 9 crores to about Rs. 30 crores and the amount of advances rose from Rs. 6 crores to Rs. 24 crores.

(7) Union Bank of India: The Bank was founded in the year 1919 and was incorporated on 11th November 1919 as a limited company.

The branch expansion of the bank in Greater Bombay is shown below:—

As on the last Friday of	Number of branches
December 1968	3.
December 1969	4:
December 1970	Te G 24
December 1971	40
December 1975	50

All types of deposits of the bank increased from Rs. 29 crores in 1966 to about Rs. 44 crores in 1971.

(8) Bank of Baroda: The first Bombay branch of the bank was opened on Apollo Street in 1919. In April 1961, the New Citizen Bank was amalgamated with the Bank and as a result, seven branches of the New Citizen Bank were declared as the branches of the Bank of Baroda. Upto 1970, including these seven branches, there were, in all 43 branches of the bank in Greater Bombay.

The following statement gives the ownership of deposits of its branches in Greater Bombay as existed in 1969:-

(Rs. in thousands)

Type of deposit	No. of Accounts	Deposits (Rs.)		
Fixed deposits	30,894	4,09,737		
Current account deposits	20,849	1,75,656		
Savings deposits	14,632	1,86,397		
Other deposits	7,747	23,618		
Total	74,122	7,95,408		

The data for the years 1967 and 1969 further reveals the fact that the amount of advances according to purpose increased from Rs. 83 crores to about Rs. 97 crores as shown in the following statement:—

(Rs. in thousands)

Purpose	Year end	ded	Year ended		
ruipose	1967	1	1967		
	No.of	Advances	No.of	Advances	
	accounts	(Rs.)	accounts	(Rs.)	
Industry	596	7,01,483	1,276	7,91,909	
Commerce	592	72,357	1,133	90,242	
Agricluture	1	1,871	10	987	
Personal					
and	1,139	28,422	3,032	42,285	
Professional					
All others	273	28,746	582	5 3,355	
Total	2,601	8,32,879	6,033	9,78,778	

The highest amount of advances was provided for the purpose of commerce and the smallest amount was granted for agriculture.

As regards the amount of advances according to security, the highest amount was recorded against the security of industrial raw materials and the same amounted to Rs. 695 lakhs in 1967 and Rs. 721 lakhs in 1969. However, the total secured advances of all the branches of the bank in Greater Bombay rose from Rs. 73 crores in 1967 to Rs. 78 crores in 1969.

(9) *Indian Bank*: The first branch of the Indian Bank was established in the Fort area as early as in 1936, but it took about 15 years to start its second branch at Mandvi. On the last Friday of December 1972, there were in all 15 branches of the bank in Bombay city. The number of branches, however, rose to 19 in December 1974. All these branches were equipped with safe deposit vault facility.

The deposits and advances of these branches are noted in the following statement:—

(Rs. in lakhs to decimal point)

As on the last Friday of	No. of branches		Advances (Rs.)
December 1972	15	1,821.60	896.76
December 1973	18	2,278.74	1,109.15
December 1974	19	2,769.30	1,378.18

(10) State Bank of India: The origin of the State Bank of India goes back to the first decade of the Nineteenth Century, when the Bank of Bengal, the first of the three Presidency banks was established in 1806 and received its charter in 1809. The other two Presidency banks were the Bank of Bombay (1840) and the Bank of Madras (1842). The Imperial Bank of India was established in 1921 by amalgamation of the three Presidency Banks. Until 1935 i.e., till the establishment of the Reserve Bank of India, the Imperial Bank of India acted as the sole banker to the Government. After the establishment of the Reserve Bank of India in

1935 the Imperial Bank ceased to function as banker to the Government. As the commercial banks including the Imperial Bank of India were prospering only in the urban sector, the All India Rural Credit Survey Committee recommended the creation of the State Bank of India by taking over effective control from the Imperial Bank of India.

The State Bank of India was accordingly constituted on 1st July 1955 as successor to the Imperial Bank of India under the State Bank of India Act, 1955. Latter, the State Bank of India (Subsidiary Banks) Act was passed in 1959 enabling the State Bank to take over eight former State associated banks as its subsidiaries. As a result of the merger of two of the subsidiaries, there are now seven subsidiaries, viz. (i) State Bank of Bikaner and Jaipur, (ii) State Bank of Hyderabad, (iii) State Bank of Indore, (iv) State Bank of Mysore, (v) State Bank of Patiala, (vi) State Bank of Saurashtra, and (vii) State Bank of Travancore.

Alike its predecessors, the State Bank of India along with some of its subsidiaries, conducts Government banking business as the agent of the Reserve Bank of India at centres where the latter does not have an office or branch of its banking department. Further, it also maintains currency chests and small coin depots at various centres all over the country ensuring adequate and continued circulation of currency notes amongst the public and withdrawing the used and soiled currency notes from circulation.

The bank is a major customer in the giltedged market. In addition to its scheme of financing of agriculture, the activities of the bank include financing of small-scale industries and small business, and foreign exchange business. In fact in 1950, the bank formulated a liberalised scheme of financing small scale industries and is continually responding to the growing needs of this sector by providing increasing credit facilities on liberal terms and under simplified procedures. The bank's role in the field of export promotion is not confined to export financing alone but extends to exploring and developing new markets for Indian exports.

The first branch of the bank other than the main branch was established, at Girgaum in 1916, and the number of branches in Greater Bombay upto September 1974, increased to 50. Of these, only six branches did not provide the safe deposit locker facility.

Various schemes initiated by the bank include issuing of gift cheques, traveller's cheques, recurring deposits, premium prize deposit certificates, etc.

RESERVE BANK OF INDIA

History: The Reserve Bank of India was established on April 1, 1935 as per the Reserve Bank of India Act, 1934.

Its predecessor, the Imperial Bank of India performed certain central banking functions such as a banker to Government and a banker's bank to some extent. However, the regulation of note issue and management of foreign exchange continued to be the direct responsibility of the Central Government. (For details refer to Reserve Bank of India, Functions and Working, 1983, published by the Reserve Bank of India.) In 1926, the Hilton Young Commission recommended that the dichotomy of functions and division of responsibility for control of currency and credit should be ended. The Commission suggested the establishment of a Central Bank, to be callSd the' Reserve Bank of India', independently of the Imperial Bank whose separate continuance was considered necessary for enlargement of banking facilities in the country. The Gold Standard and Reserve Bank of India Bill to give effect to this recommendation was introduced in the Legislative Assembly in January 1927, but was dropped on account of sharp differences of opinion. The Indian Central Banking Enquiry Committee (1931) however, strongly recommended the establishment of the Reserve Bank at the earliest. The question again assumed importance during the process of constitutional reforms in India. Ultimately a fresh bill was introduced into the Indian Assembly on 8th September 1933 which was passed on 22nd December 1933. It received the Governor General's assent on 6th March 1934. After some preliminaries, the Bank was inaugurated on April 1, 1935.

The Bank was originally constituted on the pattern of leading central banks in Western countries. Its share capital was Rs. 5 crores, divided into five lakhs fully paid-up shares of Rs. 100 each. Since then there has been no change in the capital of the Bank.

From January 1, 1949, the Reserve Bank entered upon its career as a State-owned undertaking. The Act of 1948 empowered the Central Government to issue such directions to the Bank as it might, after consultation with the Governor of the Bank, consider necessary in public interest.

Functions: The main functions of the Reserve Bank are broadly the same as those of central banks in other countries. It has the sole right to issue notes, and it acts as a bankers' bank, holding custody of their cash reserves and granting them accommodation in a discretionary way. The Bank possesses not only the usual instruments of general credit control such as the Bank Rate, open market operations and the power to vary the reserves requirements of banks, but also extensive powers of selective and direct credit regulation. The power of moral suasion is also employed in a comprehensive manner. Another, important function of the Bank is to conduct operations of Government, and to advise it on economic matters in general and on financial problems in particular. The Bank has also an important roleto play in the maintenance of the exchange value of the rupee. It acts as the agent of the Government in respect of India's membership of the International Monetary Fund. It exercises conttol over payments for and receipts from international trade and other kinds of foreign exchange transactions in the national interest.

The Reserve Bank of India grants financial accommodation to the co-operative banking sector (besides the scheduled banks) for financing agricultural operations and marketing. It set up the Agricultural Credit

Department for this purpose.

The nationalisation of 14 major Indian scheduled commercial banks on July 19, 1969 was an important landmark in the history of Indian Banking. The immediate task set for the nationalised banks was mobilisation of deposits on a massive scale and lending of funds for all productive activities, particularly to the weaker sectors of the economy. On April 15, 1980, six more private sector banks were nationalised, extending further the area of public control over the country's banking system. As a result of nationalisation, the Bank has been successful in attaining the goals of promotion of monetisation and monetary integration of the economy, filling in the gaps in financial infrastructure, meeting the credit needs of the economy subject to the requirements of sectoral allocation, and above all in rendering support to the planning authority in productive deployment of investible funds so as to maximise growth with stability and social justice.

Organisation: The general superintendence and direction of the Bank's affairs is vested in the Central Board of Directors with headquarters at Bombay. As the Chairman of the Central Board of Directors, the Governor is the Bank's chief executive authority who is assisted by the Deputy Governor. There are four Local Boards with headquarters in Bombay, Calcutta, Madras and New Delhi.

The primary functions of the Bank regarding note issue and general banking business are exercised through two separate departments, *viz.*, the Issue and the Banking Departments. These departments constitute, what are known as the 'Local' offices (*In the Reserve Bank of India Act, a distinction is made between the terms*' office 'and ' branch', of the Bank. The Local Boards in Bombay, Calcutta, Madras and New Delhi are designated as offices, while those in the other centres are termed as branches.) branches of the Bank, and in Bombay they are located in the Fort area and Byculla, respectively, besides at many other places in India. Formulation of policies concerning monetary management, supervision of banks, extension of banking credit facilities, exchange control, management of foreign exchange reserves and rendering of advice to Government on economic and financial matters are mainly done at the headquarters (central office) of the Bank in Bombay. The headquarters of the Department of non-banking companies is located in Calcutta.

The Central Office has many departments which are mentioned below:—

- 1.Secretary's Department.
- 2. Department of Banking Operations and Development.
- 3. Industrial Credit Department.
- 4. Agricultural Credit Department. (These departments were closed as the bulk of their functions were taken over by

the National Bank for Agricultural and Rural Development from July 12, 1982.)

- 5. Rural Planning and Credit Cell.
- 6. Rural Planning and Credit Department. (It was created on July 12, 1982 to perform certain functions relating to rural credit.)
- 7. Exchange Control Department.
- 8. Department of Currency Management.
- 9. Department of Expenditure and Budgetory Control.
- 10. Department of Government and Bank Accounts.
- 11. Department of Non-Banking Companies (Regional Office).
- 12. Department of Economic Analysis and Policy.
- 13. Department of Statistical Analysis and Computer Services.
- 14 Credit Planning Cell.
- 15. Department of Administration.
- 16. Personnel Policy Department.
- 17. Management Services Department.
- 18. Legal Department.
- 19. Inspection Department.
- 20. Premises Department.

URBAN CO-OPERATIVE BANKS

An urban co-operative bank supplies short-term and medium-term credit to its members. The area of operation of such a bank is restricted to a district or a town or a part of the town, or even a factory or a department. Membership is open to all persons residing within the area of operation and the liability of members is limited. However, only with the prior permission of either the Registrar or Assistant Registrar of Co-operative Societies, a person can become a member of more than one bank. Capital is raised by issuing shares, accepting deposits on current, savings and fixed deposit accounts and by borrowing from the central financing agency.

The loans advanced by the bank are on personal security, on mortgage of property or on security of valuables pledged or produce hypothecated. Cash credits are allowed and overdrafts are sanctioned on any of the securities. It carries banking operations like issue of *hundis* and drafts and collection of cheques, *hundis*, drafts, etc.

The year 1906 recorded the registration of first co-operative Bank in Bombay *viz.*, the Shamrao Vithal Co-operative Bank. The Bank was mainly established to help the people by way of credit to the needy members of Saraswat community. During 1970-71, there were 69 co-operative banks in Bombay. The number increased to 83 during 1975-76.

The urban co-operative banks are of two categories, viz., (i) Primary Urban Co-operative Banks, and (ii)

Salary Earners' Co-operative Banks. There were 75 primary urban co-operative banks in Greater Bombay on 31st December 1977; of which 4 were under liquidation. Besides, there were eleven salary earners' co-operative banks in Greater Bombay. These banks catered to the credit required by their members for consumption purposes.

The following statement shows the number of primary urban co-operative banks (Registrar of Co-operative Societies, Bombay) in Greater Bombay along with their different types of deposits as on 31st December 1977 :—

No. of primary	Total no. of	Deposits				
urban co- opera- tive banks	ban branches excluding era-their Head ve offices	Total	Current	Savings	Fixed	Others
71	97	10,75,179	1,39,641	4,31,669	4,48,421	55,448

The classification of loans and advances by the primary urban co-operative banks reveals that the loans and advances are given for various purposes such as :—

- a. small scale industries;
- b. small traders, small shopkeepers and small businessmen for trade and commerce;
- c. transport operators;
- d. education;
- e. construction and/or repairs to house property, dwelling houses etc;
- f. repayment prior to debt;
- g. consumption purposes; and
- others.

The rate of interest charged by every co-operative bank varies according to the purpose and also according to the term of repayment *i.e.* short-term and medium-term.

The following statement reveals the number of salary earners' cooperative banks in Greater Bombay alongwith their branches and deposit mobilisation:—

(Rs. in thousands)

No. of salary	Deposits as on 31st December 1977					
operative banks	Total	Savings	Current	Fixed	Others	
17	1,58,298	48,668	2,218	1,01,360	6,052	

FOREIGN EXCHANGE BANKS

Historical Background: The foreign exchange bank is defined as the bank whose head office is outside India. Though there is no rigid differentiation between foreign exchange banks and other Indian Commercial Banks, the basic point of distinction is that they invest a considerable portion of their funds during the busy season in discounting foreign trade bills. The financing of foreign trade in India is largely handled by them.

Most of these exchange banks were established during the latter part of the 19th century and the earlier part of the present century. The extension of the external trade and absence of a well-developed modern banking structure were responsible for the expansion of the foreign exchange banks. A list of foreign exchange banks which had established their branches in Bombay upto 1925 is given below:—

	Name of bank	Head office	Year of establishment of Agency or branch of the Bank in Bombay
(1)	Yokohama Specie Bank Ltd.	Yokohama	1894
(2)	Netherlands India Commercial Bank.	Holland	1920
(3)	Hong Kong and Shanghai Banking Corporation(The business of Hong Kong and Shanghai Banking Corporation was transferred to the Mercantile Bank Ltd., on 1st October 1972.)	Hong Kong	1869
(4)	Chartered Bank of India, Australia and China.	London	1858
(5)	National Bank of India Ltd.	London	1863
(6)	Mercantile Bank of India Ltd.	London	1854
(7)	Bank of Taiwan	Taipeh (Formosa)	1917
(8)	Sumitono Bank	Japan	1916
(9)	Mitsui Bank	Tokyo	1924
(10)	The International Banking Corporation (absorbed by the National City Bank of New York).	New York	1904
(11)	Netherland Trading Society	Holland	1920
(12)	National Vetrumariuo	Lisbon	N.A.
(13)	The Eastern Bank of India	London	1910

Foreign firms such as Thomas Cooks and Sons and Grindlays and Company also conducted a substantial amount of foreign exchange business though they were mainly trading and tourist agencies.

The number of foreign exchange banks in 1870 was only three and by 1919-21 they were 19. They had a lucrative business in India by that time, bothin relation to the financing of foreign trade as well as internal activities. They financed the foreign trade by issuing and purchasing the trade bills known as D.P. (documents on payment) and D. A. (documents on acceptance) bills. As the exchange rates between the Rupee and the Sterling fluctuated from time to time, there was risk involved in this business. But the exchange banks by the first quarter of the present century had established their position and prestige; and

due to the large volume of their business, were able to withstand the risks. Of course, the forward exchange market provided the necessary support.

There were a number of criticisms levelled against these foreign banks which were visible in the evidence of the Indian members before the Babington Smith Committee and in the minority report of the Hilton Young Commission. The issuing of council bills and reverse council bills by the Government of India for supporting the exchange value of the Rupee was considered to provide a special help to the exchange banks. Even Sir Stanchy Reed stated before the Hilton Young Commission, "I hold the view rightly or wrongly that this practice of spoon-feeding the exchange banks has been demoralising to the exchange banks". The exchange banks, further invested their funds largely on the London money market and this deprived the Indian money market of the opportunity to develop further. They always protested against the proposal of allowing the presidency banks to participate in foreign exchange business or gain access to the London money market. They were against even the starting of the central bank for the development of the Indian money market. These points of complaint were less relevant by 1939, when already the Reserve Bank of India was established and the rate of exchange between the Rupee and the Sterling was fixed at the level of Rs. 1 = 1 s. 6 d.

Yet the Indian banks and Indian interests continued their criticism against the foreign exchange banks. The main two points were, firstly, the monopolistic position of these banks, and secondly, the discriminatory policies adopted by them. The Indian commercial banks, with their limited skill and resources were not able to compete with the powerful foreign banks and thus could not participate in financing of the foreign trade. The foreign banks also discriminated against Indian interests. They employed for the high position mostly their own nationals. They favoured their own shipping and insurance firms. Even the exports and imports of the country were largely carried out by the foreign firms, mainly British.

While the foreign exchange banks substantially helped the expansion of the foreign trade and bore the risk of fluctuating exchange rates; they were also able to earn good profits in their business in India. There were no restrictions or regulation or these banks till 1949, though the Indian commercial banks were regulated by the Indian Companies Act. There was always the demand from Indian banks for the control of foreign banks but no such legislation was enacted till after Independence.

The Second World War (1939-45) led to the imposition of foreign exchange controls by the Reserve Bank of India. Under the controls, exchange transactions could only be carried out by the authorised agents approved by the Reserve Bank of India and it acquired the powers of asking for information from the exchange banks about their transactions relating to India and the other countries with which the Indian branches of the exchange banks had their dealings. The rates of exchange between the Rupee and these currencies were fixed by Reserve Bank of India and the policies regarding these transactions were laid down by the Reserve Bank of India. The Reserve Bank of India acquired the surplus exchange resources arising from the export surplus of the country during the war period and a part of this was used for the repatriation of the foreign debt of the country. As a result of all these developments during the war period, Reserve Bank of India and the exchange banks came in contact with one another and a co-operative attitude developed between them. The Reserve Bank of India acquired more powers under the Indian Banking Companies Act of 1949, and under the Act, certain regulations were imposed on the functioning of the exchange banks.

Reserve Bank of India has the powers to impose strict regulations on the exchange banks if necessary and thus the foreign exchange banks are on par with the other Indian banks in the country.

Since Independence, the Indian banks have been extending their activities and have opened branches in various countries. By 1960, there were as many as 100 offices of Indian banks in foreign countries, though majority of them were in Pakistan. The main obstacle in the way of Indian banks taking up banking business in foreign countries has been the difficulty of opening branches and working them successfully. There are political and currency complications. A branch in a foreign country needs huge capital, great experience and prestige to attract funds. Yet the Indian banks are venturing abroad in various countries. Still they have not got a sufficient share in the financing of foreign trade, and the foreign exchange banks have the major share, in financing the foreign trade of the country.

With the changing structure and functions of the Indian commercial banks and the economic development of the country, certain trends are evident in the working of the foreign exchange banks. Their share in the financing of internal trade is very insignificant today. This can be accounted for by two factors. The volume of imports and exports of the country has increased at a very rapid rate, and though the Indian commercial banks are slowly extending their share in this field, the volume of business of exchange banks is large and increasing. The rates of exchange are now maintained at a fixed level and can be changed by the Government only after the approval of the International Monetary Fund. Thus the risks in financing of external trade are very low and the profits of the exchange banks are high. The tourist trade is expanding which again expands the transactions of the exchange banks.

Since 1950, and more so after 1956, a large number of collaboration agreements have been undertaken in the industrial sector, between the Indian and the foreign firms. These collaborating firms, would naturally bank with the banks of their own nation and thus have their accounts with these banks. They would also draw credit from these exchange banks and thus the business of the foreign exchange banks continued to expand. The credit controls are not all directly applicable to the foreign exchange banks, and as these banks are mostly concerned with those sectors which are accepted as the priority ones by the plans, the financial activities of the exchange banks have continued to expand. Their functioning is largely confined to, these definite sectors, and as with the other financial institutions, their business is also continually expanding.

The list of Foreign Exchange Banks functioning in Greater Bombay in 1980 (Directory of Bank Offices,

Foi	reign Exchange Bank	No. of Branch offices/ Administrative offices/ sub-offices		
	American Express International Banking Corporation.	Local Head Office.		
2.	Bank of Oman	1 branch.		
3.	Bank of Tokyo	1 branch.		
4.	Banque National de Paris	2 branches.		
5.	British Bank of the Middle East	1 branch.		
6.	Chartered Bank	1 branch, 5 sub- branches. 1 administrative office.		
7.	European Asi <mark>an Bank</mark>	1 branch.		
8.	Mercantile Bank	1 branch, 6 sub- offices.		
9.	Mitsui Bank	1 branch.		
10.	Nedungadi Bank	1 branch.		

Information about some foreign exchange banks operating and having branches in the city of Bombay and their operations are described in the following paragraphs.

Mercantile Bank Limited (The name of the bank has been changed to Hong Kong and Shanghai Banking Corporation Since 1st January 1983) (Incorporated in England): The Mercantile Bank Ltd. is one of the oldest British banks to have been established in the city of Bombay. It's first branch was established as early as in 1853 in the Fort area. It was mainly undertaking banking and exchange business of every description. Since then upto 1966, no new additional branch was opened, mainly for undertaking ordinary banking business. There were six branches of the bank in Greater Bombay in 1970 five of them being established since 1966. They were established as follows:—

(1) the branch at Tulsi Wadi, 1st March 1966, (2) the branch at Vile Parle (West), 14th October 1966, (3) the branch at Chembur, 15th March 1967, (4) the branch at Bandra, 28th August 1968, and (5) the branch at Andheri (East), 28th January 1969. As the separate information about the assets and liabilities of these branches in the city of Bombay is not available, an aggregate data of all the Indian branches of the bank is given.

The total liabilities and assets of the bank from 1967 to 1970 are given below:—

(Rs. in lakhs) (Rs. in lakhs)

Year	Liabilities and Assets	Year	Liabilities and Assets
1967	43,29	1969	53,18
1968	55,23	1970	60,09

The entire business of the Hong Kong and Shanghai Banking Corporation in India was transferred to the Mercantile Bank Ltd. on 1st October 1972.

American Express International Banking Corporation: The date of establishment of the branch in Bombay is June 1, 1922. The nature of transactions as reported by the bank is ordinary banking business, discounting of foreign and indigenous bills, etc.

National and Grindlays Bank Limited: The first branch of the bank was established in Bombay in 1865 and upto the year 1972, the number of branches in Greater Bombay increased to 11.

Under the advances of the bank, Rs. 2,95 lakhs and Rs. 8 lakhs relate to the medium-term advances for which finance has been obtained, respectively from Industrial Development Bank of India and Agricultural Refinance Corporation.

(Rs. in lakhs)

(Rs. in lakhs)

Year	Liabilities and assets (As on 31st December)	Year	Liabilities and assets (As on 31 st December)
1966	2,43,55	1969	2,79,27
1967	2,54,55	1970	3,55,59
1968	2,71,31		

The data given in the following statement indicate the pattern of the advances by the Bombay branches of the Bank.

(Rs. in'000)

	196	57	1969		
Sector			No.of Accounts	Amount Rs.	
Industry	225	22,35,58	267	27,57,20	
Commerce	393	12,59,58	485	1,64,600	
Agriculture	4	1,75	2	4,39	
Personal and professional	463	22,03	509	17,48	
All others	135	2,17,74	143	1,97,74	
Total	12,20	37,36,68	14,06	46,22,81	

The bank's advances in Greater Bombay as above reflect not merely the policy of the Bank in relation to these advances but also the industrialised nature of the city. By 1969, as regards the number of accounts, the largest was under personal and professional *viz*; 509, but the amount of advances to industry was the highest which stood at Rs. 27.57 crores (accounts 267) in 1969; and to commerce at Rs. 16.46 crores (accounts 485). The advances to personal and professional sector were hardly Rs. 17 lakhs. As agriculture plays a very small role in the city, the number of accounts were only two and the advances under it amounted to about Rs. 4 lakhs. The commerce and industry which form the basic sectors in the city, account for the major part of the advances of the bank. The data reflect the fact that the largest amount of transactions were in terms of Sterling and U.S. Dollar. In 1971, the purchase and sale of Sterling were Rs. 102 lakhs and Rs. 164 lakhs, respectively and purchase and sale of U.S. Dollar were Rs. 110 lakhs and Rs. 58 lakhs, respectively. The transactions in other currencies *viz*. Canadian or Australian were relatively very small. The amount of deposits of the branches in Greater Bombay increased from Rs. 43,40 lakhs in 1967 to Rs. 61,45 lakhs in 1971 and the number of deposit accounts increased from 80,144 to 1,04,763 over the same period. Similarly, their business in relation to advances of loans to indigenous and foreign trade continually expanded over this period.

The largest number of accounts and the amount there under in the branches of the bank in Greater Bombay are under personal accounts. Out of 95,524 total number of accounts in March 1970, the total number of personal accounts stood at 87,910; whereas, the number of accounts in trading concerns stood at 3,965; and manufacturing, at 799. The amount outstanding on 31st March 1970 on personal account was Rs. 27,31 lakhs; while under manufacturing it was Rs. 4,78 lakhs. A large amount of personal deposits were in the fixed

deposits and the savings accounts; while for the manufacturing and trading concerns, they were largely in savings and current accounts.

The first branch of the bank was established in the Fort area in 1865. Upto December 1975, the number of branches of the bank increased to 11. They are situated at Mandvi, Cumballa hill, Dadar, Byculla, Ghatkopar, Santacruz, Vile Parle, etc. These branches carry out all types of banking business, while the branches at Cumballa Hill, Dadar, Santacruz and Vile Parle, provide safe deposit locker facilities.

Mitsui Bank Limited {Incorporated in Japan with Limited Liability): The bank has one branch office in India which was established on 28th May 1955 in Bombay. The bank is a scheduled 'A' class bank doing ordinary banking business such as deposits, foreign exchange, loans, etc. The following statement gives the profit and loss account of Bombay branch for the year ended 31st December.

Year	Expenditure (Rs.)	Income (Rs.)
1967	28,99,528.95	28,99,528.95
1968	26,34,097.33	26,34,097.33
1969	23,27,163.12	23,27,163.12
1970	23,78,371.50	23,78,371.50

First National City Bank: (Incorporated with limited liability in the U.S.A. and established in 1812).—The First National City Bank has three branches in the city of Bombay. The first branch was established in January 1904. The bank is mainly concerned with banking business and foreign exchange business. It's rate of interest for loans varies from 9 to 10 1/2 per cent. The prime consideration in sanctioning loans is the credit worthiness of the client and the viability of the project. The statement given below about the ownership of deposits as on 31st July 1970 indicates that the number of personal accounts of the bank were the largest as the same stood at 12,052 on July 31,1970. The next in importance in the number of accounts were business accounts and trading companies. The deposits of manufacturing concerns were higher in relation to other deposits.

Maharashtra State Gazetteers

(Rs. in thousands)

	Fixed	Deposits	Current	Accounts	Saving	Deposits	Total	Deposits
Particulars	No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
		Rs.	R	ls.	F	₹s.		Rs.
Manufacturing concerns.	47	41,992.18	325	37,309.29			372	79,301.47
Trading companies	31	948.36	463	9,473.35			494	10,421.71
Personal	1,233	9,319.69	449	2,418.20	10,380	20,255.53	12,062	31,993.42
Banking companies			13	1,115.49			13	1,115.49
Business	19	18,735.78	77	10,813.35			96	29,549.13
Public institutions and trusts.	38	4,084.79	37	4,187.64	28	293.93	103	8,566.36
Others	48	2,40,378.17	28	1,083.92			76	2,41,462.90
Total	1,416	3,15,458.97	1,392	66,401.24	10,408	20,549.46	13,216	4,02,409.67

As regards the advances of the Bank, the largest amount was to industry, accounting for Rs. 207,594.23 thousands by August 7, 1970. The total advances on that date were Rs. 217,478.95 thousands and the number of total accounts stood at 764.

The data on advances according to securities in Greater Bombay indicates that all the advances were on the security of industrial raw materials and the same amounted to Rs. 154,294.60 thousands. The business of the Bank which was confined to the city of Bombay reflected two features. Firstly, a large number of accounts and transactions were in the category of personal transactions and they could be mostly in relation to the American citizens residing in the city. Secondly, the amount of advances to industries by Bombay branches was the highest on 7th August 1970 and that again could be in relation to the American industrial and business firms in the city, and their operations in the country.

STATE-AID TO INDUSTRIES

The main object of industrial policy is to bring about a balanced and a rapid development of the country's industrial resources. This cannot be achieved if things are left entirely in the hands of private enterprises, because the paucity of capital, the shortage of industrial and capital goods, the lack of technical skill and the desire to have quick and sure returns are the obstacles in the way of private entrepreneurs. The State therefore has got an important role to play on this behalf. Financial assistance for creation of fixed assets and working capital is one of the important factors for the promotion of industries. The same is made available through the following institutions:—

	Source	Financial Assistance
(1)	Directorate of Industries under the State-Aid to Industries Act, 1960.	Working capital and fixed assets.
(2)	Maharashtra State Financial Corporation.	Working capital and fixed assets.
(3)	State Bank of India, Commercial banks under the Reserve Bank of India guarantee scheme.	Working capital.
	State Industrial and Investment Corporation of Maharashtra (SICOM).	Share capital participation.
1	Maharashtra Small Scale Industries Development Corporation Ltd., (MSSIDC).	Share capital participation.

Besides, large scale industrial units get financial assistance from the Industrial Development Bank and the Industrial Credit and Investment Corporation of India, The Directorate. of Industries, however, is not associated with any of the formalities for financing large scale industrial units through these two organisations. The Directorate of Industries renders financial assistance under the State-Aid to Industries Act, 1960 and furnishes technical scrutiny report in the case of applications considered by the Maharashtra State Financial Corporation and the State Bank of India. The Directorate of Industries is indirectly associated with processing of applications of medium scale industries sponsored by the State Industrial and Investment Corporation of Maharashtra and small scale industries sponsored by the Maharashtra Small Scale Industries Development Corporation.

The rate of interest charged differs so as to give special treatment to small entrepreneurs and to those from the underdeveloped regions. This is one of the incentives offered by the State Government for dispersal of industrial growth and preventing over-concentration of industries in the Bombay-Thane industrial complex. The Deputy Director of Industries, Bombay region, operates the scheme for financing small and cottage industries in Greater Bombay and grants loans upto Rs, 3,000. The details of loans granted under State-aid to Industries Rules, 1961, to the cottage and small scale industries in Greater Bombay area by different agencies are given in the following statement:—

	190	57-68	196	8-69	196	9-70	197	0-71
Name of Agency	Units	Amount (Rs.)	Unit	Amount (rs.)	IIInit	Amount (Rs)	Unit	Amount (Rs)
Maharashtra State Financial Corporation.	1	4 6,62,000	9	4,81,000	14	5,63,000		7,63,657
Bank of Maharashtra		1 8,000	11	72,400	9	72,200	15	85,000
The Deputy Director of Industries, Bombay,	2	28,300	26	35,750	14	20,000	15	24,000

The two important schemes implemented by the Directorate of Industries, Government of Maharashtra, Bombay, in the last few years are (i) Employment Promotion Programme, and (ii) Export Promotion, the details of which are given in the following few paras.

(i) Employment Promotion Programme: Under this programme, the scheme of seed money assistance to educated unemployed is implemented. During 1973-74, the Government of India launched a programme to assist the educated unemployed young men to be self-employed in small industries, service industries or business enterprises. The scheme is implemented by the Industries Commissioner through different develop-

ment corporations within their jurisdiction. The main objective of the scheme is to encourage new types of small ventures including trading activities for full utilisation of locally available raw material, indigenously developed know-how, local skills and talents. However, as the class of entrepreneurs is being initiated for the first time to venture into small industrial or business enterprise, it may not be always possible to provide margin money for a bankable proposal. Usually, the financing institutions stipulate upto 30per cent of the total cost of the project, including working capital finance. The scheme for seed money assistance envisages filling up the gap of margin money to the extent of 10 per cent of the project cost and in very exceptional cases upto 15 per cent at a low rate of interest of 4 per cent per annum and a long moratorium for repayment.

Entrepreneurs are expected to seek financial assistance from the institutional sources, *i.e.*, the nationalised banks, Maharashtra State Financial Corporation, etc. The main feature of the scheme apart from seed money assistance is to provide co-ordinated assistance by regional development corporations right from the stage of selection of the business or production opportunity upto the point the project goes into operations.

Assistance of seed money is available to proprietary units, partnership concerns, private limited companies or co-operative housing societies, with majority share holding by eligible persons without any further dilution of holding by those who do not belong to this category. In the case of manufacturing units, dilution of equity is permitted only if the educated unemployed are in majority. The equity held by them should at least be 76 per cent of the total equity, for getting an assistance of seed money. In such case, the seed money is sanctioned upto Rs. 30,000. Besides, all the educated unemployed partners are expected to take active part in the enterprise. Assistance of seed money is given only at the start of the project both for fixed and working capital as evaluated by the financing agency.

The repayment of loan given as seed money for fixed assets commences only after the entrepreneur's obligation has been fully met or after eight years, whichever is earlier. The repayment is generally spread over a period of four years after the period of moratorium. The first instalment commences six months after the expiry of moratorium comprising of the accumulated interest followed by equated six-monthly instalments of principal with interest. In Greater Bombay area, the scheme is implemented by the Industries Commissioner, Bombay, through the Maharashtra Small Scale Industries Development Corporation and the Khadi and Village Industries Board.

The assistance for self-employment is given for the following activities:—

- a. Small industries and services institutes
- b. Agro-service centres
- c. ,Animal husbandry, dairy, poultry, piggery, fisheries, etc.
- d. Retail shops for sales and services, especially those relating to goods coming under the public distribution system, organisation of co-operatives for marketing goods, agencies and services of hotels and motels, etc.
- e. Transport, and
- f. Medical practitioners at places with a population not exceeding 50,000.

The expenditure on this scheme in Greater Bombay since its inception was as under:—

Year	Units	Amount in lakhs (Rs.)
1972-73	5	0.13
1973-74	48	3.02
1974-75	29	3.08
1975-76	266	8.17
1976-77	108	3.00
Total	456	17.40

(ii) Export Promotion Activities: An export promotion wing headed by the Director of Export Promotion, who is also the Member-secretary of the State Board for Export Promotion, has been constituted within the Directorate of Industries, to act as the secretariat cell of the Board, standing committee, and the seven commodity panels under the Board for export promotion and to perform all other executive functions relating to export promotion.

The Export Promotion Cell in the Directorate of Industries recommends deserving cases for preferential treatment to various organisations in the matter of procuring of land, water, power, raw materials, machinery, etc. It also makes arrangements to disseminate information to interested exporters and helps them in the display of their products in the selected international trade fairs and exhibitions. It also assigns

to reputed concerns or organisations the work of conducting export potential surveys of selected products and commodities. Of late, in view of the tremendous potential, efforts are concentrated in the countries in the Middle East.

The export promotion wing in the Directorate makes special efforts to assist the exporters by taking up their genuine difficulties both with the State Government as also with the Central Government. This pertains to items like custom duty problems, refund of excise duty, exenijption from payment of octroi duties, etc.

Recommendations of the panels are screened by the committee of the Chairmen of the panels presided over by the Secretary of Industries, Energy and Labour Department, Government of Maharashtra, and important recommendations involving general issues and policies are placed before the Board for consideration. Actions or other recommendations of the panels, relatively less in importance and of an individual nature are initiated by the Export Promotion wing without reference to the Board.

Important recommendations of the Board involving major policy decisions on the part of the State Government are placed before the Industries sub-committee of the High Power Committee of the State Cabinet.

Besides the export promotional activities of the Directorate of Industries, the following State Government agencies in Bombay, are engaged in commercial exports of products coming under their respective purview:

Agency	Products
MAFCO Limited	Frozen buffalo meat, fresh and frozen vegetables, bananas, mangoes, peas and fish.
Maharashtra Agro- Industries Development Corporation Limited.	Canned and bottled fruit juice, pulp and squashes.
Maharashtra Small Scale Industries Development Corporation Limited.	All items of small scale industries.
Maharashtra State Oil Seeds Commercial and Industrial Corporation Limited.	Cotton seed, cakes and extraction.
Maharashtra Fisheries Development Corporation Limited.	Frozen sea food, prawns and lobster tails in cans and frozen fish.
Maharashtra State Powerloom Corporation Limited.	Powerloom cloth.
Maharashtra State Textile Corporation Limited.	Cotton textiles.
Maharashtra State Co- operative Marketing Federation Limited.	Cotton bales.
Development Corporation of Konkan Limited.	Mangoes.

A sum of Rs.5 lakhs was placed at the disposal of the Maharashtra Small Scale Industries Development Corporation Limited as agency of the State Government for solving the difficulties of warehousing faced by upcountry exporters. The Corporation has already constructed a warehouse at Sewri wherein an area of 929 square metres is earmarked for exporters. In addition, another warehouse in Cotton Green area admeasuring 6,967.72 sq. metres has been acquired by the Corporation from Bombay Port Trust and the warehouse would

be available to exporters for storage and repacking. These facilities are proposed to be expanded in a phased programme depending on the demand and availability of funds.

As a measure of encouragement, the Government of Maharashtra annually distributes awards in the form of silver plaques to the best exporters. The scheme covers large scale, small scale entrepreneurs and merchants in the State.

STATE-SPONSORED FINANCIAL INSTITUTIONS

Maharashtra State Financial Corporation: Various State Financial Corporations have been established in pursuance of the State Financial Corporations Act, 1951 for catering to the financial requirements of small and medium sized industries. The Maharashtra State Financial Corporation (MSFC) was established in 1953 as the then Bombay State Financial Corporation and was reconstituted under Section 70 of the Bombay Reorganisation Act, 1960. Accordingly, its name was changed to Maharashtra State Financial Corporation.

The Corporation considers applications for loans of Rs.10,000 to Rs. 10,00,000 from proprietary concerns, partnership concerns without minors and private limited companies. However, in the case of public limited companies and registered co-operative societies, the Corporation is empowered to consider applications upto Rs. 20 lakhs.

In order to assist particularly the small scale industries, the Maharashtra " State Government has entered into an agency-cum-guarantee agreement with the Corporation under which loans from Rs. 10,000 to Rs. 75,000 and in exceptional cases upto Rs. 1 lakh are granted by; the Corporation on liberalised terms. The Government also gives guarantee in each of these loans. Loans above Rs. 1 lakh are considered by the Corporation under its own rules.

A list of industrywise loan applications sanctioned by the Corporation during 1979-80 in Greater Bombay district is given below:—

Sr. No.	Type of Industry	Applications sanctioned	
		No.	Amount (Rs. in lakhs)
1.	Mining and quarrying		
2.	Food mfg. industry except beverages	1	29.30
3.	Mfg. of Textiles	15	57.91
4.	Mfg. of footwear and other wearing apparels and made up textile goods	2	2.34
5.	Mfg. of wood and cork except mfg. of furniture	2	0.86
6.	Mfg. of furniture and fixtures		
7.	Mfg. of paper and paper products	3	3.33
8.	Printing, publishing and allied industries	13	35.04
9.	Mfg. of leather and leather products	2	5.88
10.	Mfg. of rubber products	1	3.18

11. Mfg. of chemicals and chemical products	9	25.67
12. Mfg. of products of petroleum and coal	1	20.00
13. Mfg. of non-metallic mineral products	1	5.50
14. Basic metal industries	3	26.37
Mfg. of metal products except 15. machinery and transport equipment	20	53.70
16. Mfg. of machinery except electrical machinery	7	26.32
17. Mfg. of electrical machinery, apparatus and appliances	5	17.97
18. Mfg. of transport equipment		
19. Miscellaneous mfg. industries	16	70.35
20. Electricity, gas, steam and sanitary services		
21. Hotel Industry	6	31.45
22. Transport industry		
(a) Road transport	13	5.90
(b) Water transport	2	0.64
23. Beverages industry		
24. Industrial estates		
25. Motion picture and distribution		
Tota	122	4,21.71

Note: Mfg.= Manufacturing

Total number of cases sanctioned by the Corporation in Greater Bombay District are given in the following statement:—

Year	Number	Amount (Rs. in lakhs)
1964-65	126	1,95.45
1965-66	63	1,06.27
1966-67	66	1,64.87
1967-68	37	1,18.34
1968-69	59	1,37.92
1969-70	120	2,09.26
1970-71	142	1,95.65
1971-72	131	2,47.68
1979-80	122	4,21.71

During 1979-80, the actual amount disbursed by the Corporation amounted to Rs. 2,72.36 lakhs.

Industrial Development Bank of India: The Industrial Development Bank of India (IDBI) was set up with its headquarters in Bombay in July 1964 as a wholly owned subsidiary of the Reserve Bank of India in terms of the Ilidustnal Development Bank of India Act, 1964, for providing credit and other facilities for the development of industry and for matters connected therewith The various activities of the Bank include (i) direct assistance td industry in the form of loans, underwriting of shares and debentures, guarantee for loans and deferred payments; (ii) refinance of industrial term loans granted by Commercial and State Co-operative Banks, State Financial Corporations and other term financing institutions; (iii) rediscounting of usance bills, promissory notes arising out of sales of indigenous machinery; (iv) refinance of export credits and direct loans and guarantees in participation with commercial banks in respect of exports; (v) subscription of the shares and bonds of State Financial Corporations and other term financing institutions; (vi) promotional activities such as marketing and investment research and techno-economic studies; and (vii) co-ordinating the activities of other term-financing institutions.

Thus the Bank has been designed and empowered to function, not merely as a financing institution, but a central co-ordinating agency, which ultimately is concerned directly or indirectly with all problems relating to the long *and* medium term financing industrial growth.

The minimum amount of loan that is normally refinanced is Rs. 2 lakhs which is relaxed in the case of projects already assisted under the scheme; in the case of loans to small scale industries guaranteed under the Central Government's Credit Guarantee Scheme and to small road transport operators, the minimum limit has been fixed at Rs. 10,000 and Rs. 20,000, respectively.

The minimum period of loans so to be eligible for refinance is of 3 years. The maximum period in respect of loans given by Commercial and State Co-operative Banks is upto 10 years and upto 25 years in the case of term-lending institutions.

It normally refinances upto 80 per cent of the eligible loans. But in the case of loans to small scale units covered under the Credit Guarantee Scheme, loans upto Rs. 20 lakhs to small and medium sized projects, in specified backward areas and loans upto Rs. 5 lakhs in other cases, refinance is provided upto 100 per cent.

The normal rates of interest for refinance of industrial loans are 6.75 per cent and 7.00 per cent where the ceilings on the rates to be charged by the financial institutions are 10.25 per cent and 10.50 per cent, respectively. In the case of refinance of loans to small scale units, which are covered under the Credit Guarantee Scheme, a concessional rate of 5 per cent is charged, provided the lending institution itself charges not more than 8.50 per cent per annum. Recently, the rate has been reduced to 3 1/2 per cent in respect of loans upto Rs. 20 lakhs granted to small and medium sized projects in specified backward areas, provided the primary lender does not charge an effective rate exceeding 7 per cent.

The following statement reveals the statistical information of financial assistance sanctioned and disbursed by the bank to industrial units located in Greater Bombay since its inception upto 30th June 1973:—

	Le	oans	nns Underwriting		Loans for export.		Guarantee for export	
Particulars	No, of Units	Amount	No. of Units	Amount	No. of Units	Amount	No. of Units	Amount
		(Rs.)		(Rs.)		(Rs.)		(Rs.)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Assistance sanctioned	8	7,22.80	6	2,53.78	8	17,14.12	1	1,80.14
Assistance disbursed	3	2,07.80	5	46.33	7	8,85.18	1	1,79.19

During the period 1979-80 the Bank sanctioned a loan amounting to Rs. 26.14,47 lakhs to 20 industrial units located in Greater Bombay. The schemewise loans distributed during 1979-80 were as under:—

Scheme	No. of units	Amount sanctioned (Rs. in lakhs)
Soft loans	10	2,181
Technical development	8	3,25.60
Project loans	1	1,05
Underwriting debentures	1	2.87

Industrial Credit and Investment Corporation of India Ltd.: The Corporation (ICICI) is a financial institution which was established on 5th January 1955, to encourage and assist industrial investment in the country.

In pursuit of its objective of promoting private industrial investment, the Corporation grants financial assistance for various purposes including purchase of capital assets in the form of land, buildings, machinery, etc. It underwrites public and private issues and offers sale of industrial securities, ordinary shares, preference shares, debentures and debenture stock. The Corporation makes direct subscriptions to such securities The Corporation makes similar loans in foreign currencies for payment of imported capital equipment and technical services. It also guarantees payments for credits made by others.

Since its inception upto December 31st 1972, the Corporation sanctioned assistance amounting to Rs. 62,49; 30 lakhs to 144 companies in Greater, Bombay for their 230 projects.

Industrial Finance Corporation of India: The Corporation was established in 1948 under the Act of the Indian Parliament with the object of providing medium and long term credits to industrial concerns in India, particularly in circumstances where normal banking accommodation is inappropriate or recourse to capital issue methods is impracticable.

Fifty per cent of the paid-up capital now standing at Rs. 10 crores is held by the Industrial Development Bank of India, which is a wholly owned subsidiary of the Reserve Bank of India. The remaining 50 per cent is held by the scheduled banks, co-operative banks, insurance concerns and investment trusts, etc.

The main sources of funds of the Corporation other than its own capital include repayment of loans, borrowings from the market by issue of bonds, loans from the Central Government, foreign credits, etc.

The following statement reveals the progress made by the Corporation in assisting the industrial growth of Bombay.

Year	No. of concerns assisted	Total cost of these projects (Rs.)	Facilities sanctioned by the corporation	Net amount sanctioned	Amount disbursed upto 30th September (Rs.) 1973 (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
1968- 69	3	3,69.31	Rupee loan, foreign currency loan, underwriting of shares.	78.60	36.75
1969- 70	2	11.00	Rupee loan, foreign currency.	7.58	7.57
1970- 71	3	2,01.46	Rupee loan, direct subscription, foreign currency.	1,12.13	95.01
1971- 72	2	10,51.00	Rupee loan, underwriting.	28.00	6.27
1972- 73	4	14,63.88	Rupee loan, foreign currency, underwriting of debentures.	1,36.67	9.57

The rate of interest charged continued to be 8.5 per cent per annum on rupee loans, 9 per cent on sub-loans in foreign currencies and 7 per cent per annum subject to certain conditions on rupee loans for projects located in the less developed districts.

National Industrial Development Corporation: The Corporation, with its headquarters at New Delhi, renders consultancy engineering services by way of detailed design and erection of complete projects and preparation of detailed project reports. It is specialised in engineering industries, pulp and paper, electronics, metallurgical and ore handling projects. The services of the Corporation are being used by the Central Government, various State Governments, public sector enterprises and private entrepreneurs in India.

Upto 1972-73, 5 companies located in Greater Bombay were assisted by the Corporation. The total loan sanctioned to these companies amounted to Rs. 2,30.36 lakhs. Of the 5 companies, which received assistance, 4 were textile mills and one engineering unit.

Maharashtra Small Scale Industries Development Corporation Limited: The Corporation was established on 19th October 1962 to promote and finance small industries. It also provides machinery, equipment, technical and managerial assistance to small scale industries. It has started a number of activities so to emerge as a multi-service agency for the small scale sector.

The Corporation started its active career in 1963 with the programme of procurement and distribution of raw materials. The raw materials supplied by the Corporation fall under three categories, *viz.* ferrous metals, nonferrous metals and chemicals.

The scheme of supply of machinery on hire purchase basis is implemented by the Corporation since the beginning of 1964. During 1970-71, the Corporation supplied 36 machines worth Rs. 1.80 lakhs to 14 units in Bombay. The number of units as also the number of machines supplied to these units by the Corporation showed an increase during 1971-72, as the same stood at 26 and 72 respectively. The value of machinery provided to 26 units in Bombay during 1971-72 amounted to Rs. 9.07 lakhs.

The Corporation has continued to function as handling and drumming agents for State Trading Corporation for mutton tallow received at Bombay Port.

The Corporation started its import activity in 1967-68 with a view to assist small units. After the change in the import policy of Government of India, the Corporation has started collecting release orders issued by the State Trading Corporation and other agencies.

SMALL SAVINGS

The Government of India established Savings Banks in Presidency towns as early as in 1833. Their

management was transferred to the Presidency Banks in 1865 and they were extended to other towns of the country. From 1896, these Savings Banks were managed by postal department and all accounts were treated as at call as in ordinary banking. No special reserves were maintained against these deposits. This money constituted the unfounded debt and was a floating charge on the credit of the Government. The rate of interest was relatively low, at 2 per cent in 1936 and hence did not attract large deposits from the general public. The small savings movement got an impetus during World War II, and there has been further marked progress due to the efforts and schemes made for the mobilisation of small savings since 1950.

The net collection of small savings is shared between the Central and State Governments since 1952, on an agreed formula which has undergone several changes since then. In June 1958, the formula was revised and the States were to retain their entire market borrowings and in addition receive two-third of the net collection from small savings in their respective areas.

The small savings schemes are getting popularity among the poor as well as the affluent class of society. This is due to the fact that Government have introduced various schemes to suit the requirements of individuals, groups, people with low income as well as tax-payers.

Most of the small savings schemes are worked through post-offices, and the number of branches of post offices are more in number than the branches of scheduled banks. Besides, a poor man visits the post-office very often and therefore finds it more convenient to deal with post-office than with sophisticated banks.

The schemes with income-tax concessions are mainly meant for the higher strata of society. In 1984-85, the following small savings schemes were in operation:—

(i) Post-Office Savings Bank Account; (ii) Cumulative Time Deposit Account; (iii) Recurring Deposit Account; (iv) Time Deposit Account; (v) National Savings Certificates and (vi) Public Provident Fund Account. The total target and achievement in all these schemes and accounts in Greater Bombay from 1974-75 to 1976-77 and 1984-85 are shown below:—

(Rs. in lakhs)

	Small Savings	Achievement		
Year	target	Gross	Net	
1974-75	27,00 00	47,64.99	—(46.39)	
1975-76	22,0000	64,46.87	+(10,87.17)	
1976-77	16,50.00	77,42.70	+(20,71.03)	
1984-85	N.A.	76,983.23	+(38,214.73)	

Post-Office Saving Bank: The post-office savings scheme came into force by theenactment of Government Savings Bank Act, (Source,—Post-Office Small Savings Schemes, Part I, A. N. Dureja, 1984.) 1873(5 of 1873). The same was afterwards amended by Savings Banks Amendment Act, 1959. The Post-Office Savings Bank constitutes a source for the collection of small savings especially from the people with meagre earnings.

This is the largest and the oldest savings institution and plays an important role in mopping up savings which are utilised for national development. As per the Post-Office Savings Bank General Rules, 1981, any person is eligible to open his account with a deposit of not less than Rs, 5 in any post-office either sub-post-office, branch post-office or head post-office functioning as a post-office savings bank.

The depositor receives interest at the rate of 5.5 per cent per annum (1984). No interest is allowed on any sum in excess of Rs. 25,000 in a single account or Rs. 50,000 in a joint account. The interest received by the depositor from the account is free from income tax. During 1958-59, the net collection in Greater Bombay under the scheme amounted to Rs. 20,000 which increased to Rs. 1,17,57,000 during 1960-61 and to Rs. 5,79,16,000 during 1965-66.

The collections under the scheme in Greater Bombay during 1975-76 and 1976-77 are given below :—

(Rs. in lakhs)

Pa	rticulars	1975-76	1976-77
(1)	No. of accounts	25,670	9,77,07
(2)	No. of accounts opened during the year		
	(a) target	55,000	80,000
	(b)achievement	1,72,037	22,360
(3)	Collection		
	(a) target	8,81.00	8.80.00
	(b) achievement		
	(i) gross	9,97.35	11,62.26
	(ii) net	4,18.97	95.99

The gross collection during 1984-85 was Rs. 48,76.16 lakhs, while the net collection amounted to Rs. 63.32 lakhs.

National Savings Certificates: The National Savings Certificates are issued according to Government Savings Certificates Act, 1959. At present, the Act is applicable to the 7 - Year National Savings Certificates of 2nd, 3rd, 4th and 5th issues and the National Savings Annuity Certificates.

The 7-Year National Savings Certificates 2nd , 3rd and 4th issues came in force on 16th March 1970 *vide* Post-Office Savings Certificates Rules, 1960 whereas the certificates of Vth issue came in force in 1974.

The salient features of the 7-Year and 6-Year National Savings Certificates are shown in the Table No. 6.

TABLE No. 6

		7-Year	6-Year		
Serial No.	Salient feature	II ISSUE	VI ISSUE	VII ISSUE	
1	Date of introduction	16th March 1970	1st May 1981	1st May 1981	
2	Denominations	Rs. 10, 50, 100, 500, 1,000 and 5,000	Rs.10, 50, 100, 500, 1,000,5,000 and 10,000.	Rs. 100, 500, 1,000, 5,000 and 10,000	
3	Period of maturity	7 Years	6 Years.	6 Years.	
4	Surrender value for a Certificate of Rs. 100 Denomination at Maturity	Rs.155.50	Rs.201.50.	Rs. 100	
5	Rate of interest	6-5 per cent (Compound)	12 per cent (Compound half yearly)	12 per cent (Payable six monthly)	

6	Tax concession on interest	Interest-free of Income Tax	Interest-free of Income tax upto Rs.7,000 a year inclusive of interest on other specified investments. The tax is not deducted at source.	As for VI Issue.
7	Lock up period (period of non- encashability)	3 Years	3 Years.	3 Years.
8	Limit of holdings	Rs.75,000 for single investor (adult or minor) Rs. 1.5 lakhs for joint holders. This Limit includes all holding in the earlier issues of certificates as per details given in Rule 7.	No limit	No limit
9	Exchange with prize bonds	Not permitted	Not permitted	Not permitted
10	Purchase of surrender of savings Stamps	Allowed	Not allowed	Not allowed
11	Exchange with Gift Coupons	Allowed excepting Gift coupons of Rs.5 which can be exchanged only for cash.	Not permitted	Not permitted
12	Partial discharge	Allowed after the lock-up period.	Not permitted	Not permitted
13	Pledging as security	Allowed	Allowed	Allowed
14	Conversion from one denomination to another	Allowed	Allowed	Allowed
15	Purchase by Non- resident Indians	Not allowed	Allowed	Allowed

The 6-Year National Savings Certificates (VI and VII issues) were introduced on 1st May 1981.

The gross and net collections under the 7-Year and 6-Year National Savings Certificates (*The III issue was discontinued in December 1980, while the IV and V issues in April 1981*) in Greater Bombay in 1984-85 were as follows:—

(Rs. in lakhs)

Particulars	1984-85
(A) 7-Year National Savings Certificates :—	
(1) IInd Issue—	
(a) gross	164.55
(b) net	—83.69
(B) 6-Year National Savings Certificates :—	
(1) Vith Issue—	
(a) gross	23,426.94
(b) net	23,334.64
(2) VIIth Issue	
(a) gross	4,327.22
(b) net	4,231.74

Post-Office Time Deposits: The scheme came into force from 16th March 1970 vide Post-Office (Time Deposit) Rules, 1970. It is governed by the Post-Office Savings Bank Rules, 1965.

The time-deposit accounts are of four types, *viz.*, 1-year account, 2-year account, 3-year account and 5-year account. Any person is eligible to open an account but the persons may apply to the post-office together with the amount of deposit which should be in integral multiples of Rs.50. Every time deposit is made in cash or by crossed cheque drawn in favour of the depositor or the Postmaster. The repayment of time-deposit is made only on the production of the pass book accompanied by an application.

The rate of interest paid to the depositor varies according to the period of time-deposit and is 9 per cent for 1-year deposit, 9.75 per cent for 2-year and 10.5 per cent for 3-year deposit and 11.5 per cent for 5-year deposit.

The interest is paid annually and is subject to income tax. The deposits in 2-year, 3-year and 5-year time-deposit accounts can be accepted through authorised agents under the standardised agency scheme.

During 1970-71, the gross and the net collections in the above-stated time-deposits in Greater Bombay were the same, and amounted to Rs. 35,36,26,000. The following statement gives gross and net collections under the scheme in Greater Bombay since 1974-75:—

(Rs. in lakhs)

Year	Gross collection	Net collection
1974-75	82,83.08	75,22.36
1975-76	1,15,15.33	83,01.02
1976-77	52,37.57	41,33 06
1984-85	4,17,59.95	1,09,59.00

Protected Savings Scheme: The scheme was introduced vide Rule 10A of Post-Office Savings Banks (C.T.D.) Rules, 1959 and Rule 11A of Post-Office Recurring Deposits Rules, 1970. The objective of the protected savings scheme is to promote regular savings of small savers, to provide an insurance cover in case of death of the depositor without any additional charge of premium, etc. in case of 5-year cumulative time deposit or recurring deposit accounts of Rs. 5, 10, 15 and 20 denominations opened on or after 1st July 1972. The accounts opened earlier but current on this date are also eligible. Since the 5-year and 15-year C.T.D. accounts have been discontinued with effect from 1st November 1973, only the existing 10-year C.T.D. accounts are covered by this scheme. In respect of accounts of Rs. 15 and Rs. 20 denominations, the benefit is available from 2nd June 1975 onwards.

The rate of compound interest at maturity in the case of recurring deposit account is 9.25 per cent per annum. In the recurring deposit account the depositor gets income-tax-free interest upto Rs. 3,000 a year and wealth tax exemption on deposits up to Rs. 1.5 lakhs of interest, while in 5-year C.T.D. account, the depositor gets whole income-tax-free interest upto Rs. 3,000 a year and complete tax exemption in addition to general limit of Rs. 1.5 lakhs.

Cumulative Time Deposits: The scheme came into force on 2nd January 1959 vide Post-office Savings Banks (C.T.D.) Rules, 1959. The object of the scheme is to enable depositors to provide for specific purpose by means of periodical deposits repayable in a lump sum inclusive of interest at the end of a specified period. Under this Scheme, deposits of Rs. 5 or any multiples thereof but not exceeding Rs. 1,000 for a period of 10 years can be opened. The maximum limit of total deposits in all the CTD accounts held by depositor during the entire period of accounts changes from time to time, the same from 1st February 1975 being 1,20,000 in case of single account and double the amount in joint account.

The amount of interest earned on deposits in C.T.D. accounts is exempted from income-tax. The deposits are also exempted from wealth tax. The deposits under 10-year accounts are entitled for rebate of income-tax subject to prescribed limits. The 10-year accounts opened on or after 1st October 1979 are eligible for 6.75 per cent compound interest.

The net collection under the C.T.D. scheme in 1958-59 in Greater Bombay stood at Rs. 3,10,000 which increased to Rs. 6,00,000 during 1960-61, and to Rs. 74,14,000 during 1970-71 and to Rs. 75,16,000 in 1975.

The following statement gives statistics regarding number of accounts opened and amount collected under the scheme in Greater Bombay :—

(-)	
(2)	

Particular	1975	1976
Number of accounts as on 1st April	1,539	14,004
Number of accounts opened in 1976-77—	e	Gá
(a) Target	7,500	15,000
(b) Achievement	2,465	4,827
Collection (in thousand Rs.)—		
(a) Target	2,20.00	2,50.00
(b) Gross	2,26.95	2,55.22
(c) Net	75.16	67.34
	Number of accounts as on 1st April Number of accounts opened in 1976-77— (a) Target (b) Achievement Collection (in thousand Rs.)— (a) Target	Number of accounts as on 1st April Number of accounts opened in 1976-77— (a) Target (b) Achievement Collection (in thousand Rs.)— (a) Target 2,20.00 (b) Gross 2,26.95

The gross and net collections in 1984-85 amounted to Rs. 9,55.60 lakhs and Rs. 5,07.15 lakhs, respectively.

Recurring Deposits Scheme: The scheme of Post Office recurring deposits (R.D.) came into force on 1st of April 1970 vide Post Office Recurring Deposits Rules, 1970. Under this scheme, only one type of account viz. 5-year account with a denomination of Rs. 5 or any multiple thereof can be opened.

The deposits opened after 1st March 1983 are eligible for 11.50 percent compound interest per year. One withdrawal not exceeding 50 per cent of the deposits is allowed after one year.

During 1970-71, the total number of such accounts was 10,018 with net collection of Rs. 5,09,000. The number of accounts increased to 1,16,173 in 1975 and to 1,71,406 in 1976. The number of new accounts opened under the scheme in 1975-76 and 1976-77 were 55,233 and 85,312, respectively and the gross

collection under the total number of accounts during the said period amounted to Rs. 1,73 lakhs and Rs. 2,71.23 lakhs, respectively. During 1984-85, the net collection amounted to Rs. 7,78.37 lakhs.

Sanchayika Savings Scheme: Sanchayika is a savings bank run by school-going children for themselves. The scheme was started in 1965 with a basic idea to inculcate the habit of thrift in the minds of children as also to make them aware of the benefits of savings and its role in the economic development of the country. The scheme is entirely operated by the school authorities themselves. A school savings bank, called as Sanchayika opens a single savings account in the name of the school.

The Sanchayika accounts with effect from 1st November 1979, earn interest at 5.5 per cent from the Post Office savings bank. The progress of the scheme in Greater Bombay is shown in the following statement:—

	Particulars	1975-76	1984- 85
(1)	Number of Sanchayikas as on 1st April	166	59
(2)	Number of membership	20,165	28,431
(3)	Collection in the year (Rs. in lakhs)	5.69	14.58
(4)	New Sanc <mark>h</mark> ayika formed during the year	30	59
(5)	Collection during the year (Rs. in lakhs)—		
	(i) Target	0.75	N.A.
	(ii) Achievement	0.22	14.58

Small Savings Agencies: A number of small savings agencies are functioning in order to promote and popularise small savings schemes. The number of total agents on the roll as on 1st April 1976 was 988 and the total collections made through them amounted to Rs. 13,10.79 lakhs during 1976-77. During 1984-85, the number of agents increased to 7,712 and the total collections of all agents amounted to Rs. 2,79,43.82 lakhs. The following savings organisations and agencies are working at present (1984).

- a. National Savings Organisation: It is working under the Ministry of Finance, Government of India.
- b. Standardised Agency System: The system was introduced with effect from 1st October 1960. Under this system, authorised agents are appointed by the respective State Government authorities. These agents canvass for the sale of National Savings Certificates, Social Security Certificates and Time Deposit Accounts. They are entitled for a commission of 2 per cent with effect from 1st July 1976 for the investments in the securities.
- c. Manila Pradhan Kshetriya Bachat Yojana: The scheme was introduced from 1st April 1972 with a view to encourage habit of thrift (among the households), to popularise C. T. D. and R. D. accounts and to raise resources for the. development plans. The area savings leaders axe authorised to Secure collections every month from, the households in C.T.D. and R.D. accounts. The area savings leader claims commission for: all ihe deposits made through him at the rate of 4 per cent with effect from 1st July 1976. The agents issue printed receipts to the depositors for the monthly deposits collected from them and deposits the amount collected at the post office. The area savings leader is attached to one post office and is given area of about 1,000 households.

The agents are of two types viz., institutional agents appointed through the National Savings Organisation and individual agents.

The agency is given to a woman either on a security of Rs. 100 or on fidelity guarantee. The number of *Mahila* agents as on 1st April 1975 was 83 which increased to 1168 on 1st April 1984. These agents operated 3219 C.T.D. and R.D. accounts up to 1st April 1975 which increased to 13697 accounts up to 1st April 1984. The collections under both the accounts in 1975-76 and 1984-85 amounted to Rs. 4.15 lakhs and Rs. 376.35 lakhs, respectively.

The total incentives given to these agents during 1984-85 amounted to Rs. 2.61 lakhs.

(4) Pay Roll Savings Scheme: The scheme was introduced in August 1959 with an object of promoting voluntary savings of the employees and wage earners in the private sector and was extended to Government offices in May 1962. Under this scheme an amount is deducted from the salary or wage bills of the employees every month and deposited in the post-office. The scheme is applicable to C.T.D., R.D., 2/3/5-Year T.D. accounts, 7-Year National Savings Certificates (IInd issue) and 10-Year Social Security Certificates.

The group leader is entitled to the reimbursement charges at the rate of 2.5 per cent with effect from 1st July 1976 for this work. Number of groups as on 1st April 1975 stood at 899, and the number increased to 1020 up to 1st April 1984.

The following statement gives statistics regarding the scheme in Greater Bombay for 1975-76 and 1984-85:

	Pay Roll Sayings Group	1975- 76	1984- 85
(1)	Number of groups as on 1st April 1975 and 1984		1,605
(2)	Membership in old groups	1,42,328	8,46,566
(3)	Collections in old groups (Rs. in lakhs)	2,91.27	11,87.55
(4)	New groups formed in the year	121	143
(5)	Membership in new groups	20,870	57,898
(6)	Collection (Rs. i <mark>n la</mark> khs)—		
	(i) Target	2.60	N. A.
	(ii) Achievement	24.3	

(5) Public Provident Fund Agency System: The Public Provident Fund Agency System was Introduced with effect from -1st November 1969; The authorised agent is entitled for commission at the rate of 1 per cent on the amount at the time of opening the public provident fund account and at the same rate on all subsequent deposits into such accounts during the tenure of the agency provided that the accounts in question are not transferred to places outside the area of operation of the agent. The agency of the public provident fund agent is for three years or it can be for a lesser period also. The total collections under this scheme in 1975-76 and 1984-85 were Rs. 55 lakhs and Rs. 2143.88 lakhs, respectively.

Unit Trust of India: *Unit Scheme, 1964:* The scheme was introduced by the Union Trust of India, a statutory public sector investment institution with effect from 1st July 1964. The sale of Units through post of Sces. was started from 1st July 1966.

The scheme attracts savings of the people through the sale of its units under different schemes. These savings are then invested in the shares and debentures of good companies for the benefit of unit holders. Income from these investments after meeting the expenses of the Trust is distributed to the unit holders annually as dividend.

The face value of a unit is Rs. 10. The application for purchase of units should be in multiples of 10 units. The units can be purchased from offices of the Unit Trust, branches of most of the commercial banks, branches of selected co-operative banks, all head post offices and departmental sub-post offices. The Units for children's gift plan are sold by the offices of Trust and branches of selected co-operative banks; while the units for unit linked insurance plan and reinvestment plan are sold only at the offices of the Trust and concerned offices of the Trust, respectively. The rate of dividend declared during 1982-83 was 13.50 per cent per annum.

Income by way of dividend up to Rs. 3,000 exclusively from Units is exempted from income-tax (1984). This is over and above the existing exemption limit of Rs. 7,000 for income from Units and other specified categories of investments. Investment up to Rs. 35,000 in Units is totally exempted from wealth tax. This is also in addition to the existing exemption limit of Rs. 2.65 lakhs for investment in Units and other specified categories.

Unit Scheme, 1976 (Capital Units): The scheme was introduced on January 1st. It is primarily oriented towards achieving capital growth. The face value of each unit is Rs. 100 and the units are sold in multiples of 5. The actual sale and purchase price however, varies from time to time according to market value of the portfolio. The difference between the sale and repurchase prices varies between 8 and 10 per cent. Investments in these units enjoy the same income-tax and wealth tax exemptions as applicable to the units under the Unit Scheme of 1964.

Savings Bank Prize Incentive Scheme: The Scheme was introduced in 1973 by the Central Government to popularise Post-Office Savings Bank and to provide incentive for postal savings.

The account holders, who have kept a balance of not less than Rs. 200, which qualifies for interest for the months of December to March are eligible for participation in the draw for prizes which takes place in January

and July every year. In each draw of prizes 11,116 prizes are distributed throughout the country. The first prize is of Rs. 2,50,000; five second prizes of Rs. 1,00,000 each; 10 third prizes of Rs. 50,000 each; 100 fourth prizes of Rs. 10,000 each; 1,000 fifth prizes of Rs. 500 each; and 10,000 sixth prizes are of Rs. 50 each. In all, the prizes worth Rs. 32,50,000 are distributed in each draw.

A code number for each account eligible to participate in the draw is given by the post-office in which the account stands.

A prize under this scheme is treated as income for the purpose of income-tax and is therefore liable to income-tax. In respect of prize-money exceeding Rs. 1,000 deduction of income-tax is made at source at the rate of 33 per cent of the prize-money.

Persons having single or joint accounts or accounts in the name of minors are eligible to participate in this scheme. But, public accounts, security deposit accounts, sanchayika accounts and provident fund, superannuation fund and gratuity fund accounts in post-office savings bank are not eligible for participation in this scheme. Accounts which have not been operated upon during the past six years and have been actually treated as ' silent accounts' by the post-office are not eligible for inclusion in the draw. No account holder is eligible for more than one prize in each draw.

INSURANCE

Historical Background: Sir John Child, the then Governor of Bombay, was instructed by the Court of Directors to constitute an insurance office in the Bombay Island. In 1793, the Bombay Insurance Society was set up in Bombay by a few well-known European merchants.

The general insurance system on modern lines was started in second half of the 19th Century and the famous 'Triton' was set up in 1850 to undertake general insurance business. In 1834, the 'New Oriental' was established and in 1871 some prominent citizens of Bombay started the Bombay Mutual Life Assurance Society. The society was not very keen on extending its operations for several years after its formation and it was left to "the Oriental Government Security Life Assurance Company Limited, the first proprietary life insurance office to be formed in India, to expand the business in an organised manner throughout India and abroad. A few years later, a few such life insurance companies such as Bharat and Empire companies were established.

In 1874, the famous 'Oriental' was started and it gave a real impetus to the insurance business in India. Its success was mainly due to its economic and sound management. In 1881 there were 107 insurance companies, of which 38 dealt with fire, 22 with life and 47 with marine insurance in Bombay. During 1892-1900, a number of Indian insurance firms were established. But the number of Indians continued to patronise foreign concerns as they were considered to be more sound than Indian firms. In 1909, Bombay contained 34 fire insurance companies, 33 life insurance companies and 55 marine insurance companies. Companies whose head offices were in Bombay numbered 7 and most of them transacted business in life insurance. The local life insurance companies were, the Indian Guarantee and Securityship Association, established in 1872 with a nominal capital of Rs. 5 lakhs; the Oriental Government Security Life Assurance Company, Ltd., which started business in 1874; the Mutual Provident and Guarantee Society Ltd., established in 1885; and the Empire of India Life Assurance Company Ltd., which commenced business in 1897 with an authorised capital of Rs. one crore.

During the early part of the present century (1901-1918), the cult of 'Swadeshi' led to the promotion of a number of Indian insurance enterprises. Legislation was also enacted for insurance during this period. The First World War gave a further impetus to Indian insurance business. The life insurance business transacted by 1916 was to the tune of Rs. 23 crores. Insurance companies from U.S.A., China and Germany also started their operations in India.

In 1919, the New India Insurance Co. was started by Tatas first for general insurance and later in 1929 for life insurance business too. Lalji Naranji and Manu Subedar promoted the Jupiter General Insurance Co. During 1920 to 1939, a number of insurance firms were established by the Indians and the insurance business experienced a boom; well-known among these were the Vulcan, the Laxmi and the New Insurance. There were number of institutions in Indian insurance business, and high rebates, excessive commissions and increased operation expenses became the order of the day; therefore the first comprehensive legislation was enacted covering all branches of insurance and check the evils in the business.

A number of organisations such as the Life Insurance Council and the General Insurance Council were established under the Act. The first one was dissolved after nationalisation but the General Insurance Council is in existence.

The Indian Life Assurance Companies Act, 1912 was the first piece of legislation, which was later amended in 1928. This was substituted by another Act *viz.*, Indian Insurance Act passed in 1938 in order to introduce sound business practices in India. The same was further amended in 1941, 1942, 1944, 1946 and 1948.

The immediate impact of the war was to reduce the insurance business from Rs. 43 crores in 1939 to Rs. 33 crores in 1940. But the confidence was restored and during 1941 and 1945, 25 new life insurance offices were established. Except inflation period, the insurance business showed a considerable increase. New insurance firms such as Devkaran Nanjee Trinity Mutual, Jayabharat and Ajay Mutual were floated during this period, and the business of foreign concerns declined during 1939 and 1951.

It was in the wake of the freedom movement that such companies as the New India, the Jupiter and the Laxmi came into existence. A further spurt in the formation of new companies was witnessed during the

World War II when inflationary pressure tended to swell the volume of insurance business in the country. With a view to establish a closer watch in the matters of management, investment of funds and expenditure of insurers, Government established a department of Insurance under the authority of the Controller of Insurance and enacted the Insurance Act of 1938. This Act was extensively amended in 1950 when further controls in the interest of policy holders were introduced.

Interlocking of business and insurance finance increased the concentration of economic power in a few hands. In 1945, Sir Cowasjee Jehangir Committee was appointed to examine the conditions existing in Indian insurance business. The committee concluded that the interlocking of bank and insurance finance was most injurious to national economy. The legislation on the basis of the committee's report was undertaken in 1950.

A few companies including Central India Insurance were formed during the period after Second World War, but mostly the life insurance business had started consolidating its position.

1951-1956: Even though during the initial period of the First Plan, the increase in the insurance business was not significant, but during the entire plan period, there was a substantial increase in business. The staff and group insurance schemes were introduced. The life insurance business during the period was growing even though no new business units were established. The non-Indian offices were declining in importance. Life insurance was an important capital formation agency during 1955.

1956-1965'. The historic decision of nationalisation of life insurance in India was declared on 19th January 1956 by the then Finance Minister which affected 154 Indian insurance firms, 16 non-Indian insurers and 75 provident societies.

By the Life Insurance (Emergency Provisions) Ordinance 1956, the management and control of life insurance business in India including foreign business of Indian insurers and the Indian business of foreign insurers was vested in Central Government and thus business in life insurance passed from the private sector to public sector. This was the first step towards complete nationalisation of life insurance business in India, a step never attempted anywhere in the world before on such a gigantic scale and which opened a new chapter in the history of Indian insurance. A comprehensive legislation was introduced shortly afterwards and resulted in the enactment of the Life Insurance Corporation Act of 1956.

Nationalisation aimed at widening and deepening all possible channels of public savings and mobilising these savings more effectively to finance development plans.

On September 1, 1956, the Life Insurance Corporation of India was established and took over the entire assets and liabilities of life insurers in India. From 1957, there was a steady rise in the new business in India as well as outside India. But the inflationary trend in the economy did lead to an upward trend in the expenses of Life Insurance Corporation.

By the end of the IIIrd Five-Year Plan, insurance consciousness spread significantly in the country. About 70 per cent of new life policies were issued to persons participating in insurance for the first time. A number of new schemes were introduced by the Corporation such as group and joint saving insurance, salary saving schemes or collection of premium through the post-offices. The Corporation also actively supported the house building activities through the life insurance policies.

In 1958, number of proposals for life insurance in Greater Bombay stood at 73,779 and the same increased to 94,510 in 1959. The sum proposed in 1958 was Rs. 40,94,33,681; and the same increased to Rs. 51,48,37,717 in the following year. Number of policies and sum assured also showed an increase in Greater Bombay as follows:—

	Number of Policies	Sum assured (Rs.)
1958	66,996	37,27,00,572
1959	84,045	45,95,77,783

Structure and business of Life Insurance Corporation: The Life Insurance Corporation of India, was set up in 1956 to take over the life insurance business of all the insurance business in India. In 1964, it entered the field of general insurance. The capital of the Corporation is wholly provided by the Central Government. The head office of the Corporation is in Bombay and there are five zones with their zonal offices at Bombay, Calcutta, Madras, Delhi and Kanpur.

The Corporation is managed by the Board of Directors. The policy directives are issued by the Government of India, and it is interpreted by the Board of Directors. The policy is applied by the executive committee. It also co-ordinates and controls the functions of different departments.

Network of offices of the Corporation: On the eve of nationalisation, there were 245 private insurance companies operating in the country; that covered nearly 97 centres. The prospects of expansion of business remained fairly limited prior to the nationalisation as the erstwhile insurers were mainly interested in catering to the needs of urban populace where insurance business was profitable and there for interior rural centres were neglected. The nationalisation witnessed a shift in the outlook of the general populace, in their

way of thinking and spread of life insurance came to occupy the foremost importance. As a result, a large number of offices were opened to undertake the life insurance business. The growth in its activities can be seen from the following statistics:—

Year	Number of Branch Offices	Number of Sub-offices
1956	182	34
1960	267	120
1965	388	145
1970	424	115
1976	659	23

In 1981-82, the district-wise branches of the Bombay division, of which the Greater Bombay district forms a part, were as follows :—

Greater Bombay 62; Thane 8; Raigad 2 and Goa 5. The departments of training of agents, salary savings scheme, and gioup insurance and superannuation, are also located in Bombay.

The area-wise branches of Life Insurance Corporation in Greater Bombay during 1981-82 are shown below :—



Area	Number of branches
Fort	24
Dadar	4
Sandhurst Bridge	5
Goregaon	1
Ghatkopar	1
Vikhroli	1
Bandra	1
Santacruz	5
Malad	1
Andheri	1
Kurla	1
Borivli	1
Mulund	1
Chembur	1
Nariman Point	7.38
Churchgate	1
Kandivli	1
Khodadad Circle	2
Ballard Estate	3

Agency Force: An agency unit forms a link between the Corporation and its policy holders. There were more than 2 lakh agents on the roll of the Corporation in 1956, the number of active agents was, however, small. There was, however, dropout in the total number of agents for various reasons, the principal among them being the inability of quite a large number of part-time agents to do the minimum quantum of business laid out by the Corporation.

The strength of life insurance agents in Greater Bombay area is given below:—

As on	Number of Agents
31st December 1956	16,105
30th April 1960	7,626
31st March 1968	12,327
31st March 1976	12,542
31st March 1982	8,683

Out of 8,683 total agents in Greater Bombay in 1981-82, 6 were crorepati agents who undertook a business of Rs. 697.41 lakhs.

Career Agents: The Career Agents Scheme was launched in 1972 to attract educated youth towards life insurance business. These career agents have made sizeable contribution to business production. The LIC started this Scheme in the beginning at 13 centres in the country, by the end of 1976, the strength of these centres rose to 38 including Greater Bombay. Besides there were eight direct agents in Greater Bombay district in 1975-76.

Development Officers '.Besides the agents, the LIC gets business through the Development Officers appointed for the specific purpose. Since nationalisation of insurance the Development Officers play a pivotal role in recruiting, guiding, and supervising the agents. The LIC had 4830 Development Officers in 1958 in the country with an average business per Development Officer of Rs. 6.5 lakhs. The number incieased to 7698 during 1975-76 along with the average business per Development Officer which amounted to Rs.23.6 lakhs. There were 50 crorepati Development Officers in Greater Bombay in 1981-82 whose individual new business was more than one crore of Rupees. The strength of Development Officers in Bombay division and in Greater Bombay area during the same period was as follows:—

Year	Bombay Division	Greater Bombay District
1958	304	N.A.
1975-76	611	547
1981-82	515	449

Progress of New Business: The total new business of the Life Insurance Corporation at the time of nationalisation in terms of sum assured was Rs. 1,48.5 crores. The various measures adopted since nationalisation resulted in a spectacular increase in the individual new business as in 1975-76, the Life Insurance Corporation completed a new business of Rs. 21,16.30 crores under individual assurance and Rs. 32,69.04 crores under group insuiance making a total of Rs. 53,85.34 crores. The relevant figures for the Bombay division and for the Greater Bombay area are shown below:—

(1) BOMBAY DIVISION

Year	business in terms of	sum assured	New business in terms of sum assured (Group insurance and superannuation scheme) (Rs. in crores)	per policy
(1)	(2)	(3)	(4)	(5)
1956	68,776	33.45	3.76	4,863
1965- 66	1,44,723	1,05.80	15.65	6,229
1970- 71	1,41,609	1,81.46	45.38	9,612
1975- 76	1,80,939	2,22.43	1,68.36	12,293

(2) GREATER BOMBAY

Year (1)	No. of proposals (2)	Sum proposed (Rs.) (3)	No. of policies (4)	Sum assured (Rs.) (5)
1958	73,779	40,94,33,681	66,996	37,27,00,572
1959	94,510	51,48,37,717	84,045	45,95,77,783
1965- 66	l	1,03,84,11,269	1,30,210	1,00,33,57,371
1967- 68	l	1,03,32,48,426	1,06,280	97,95,74,101
1975- 76	, , , , ,	37,62,76,500	15,600	36,60,16,200
1981- 82*	3,27,345	6,28,77-37	1,54,980	2;29,04 76

*Figures of Rupees for the year 1981-82 are in lakhs.

Business under Salary Savings Scheme: The salary savings scheme was implemented with effect from 1st September 1966, on an experimental basis in some of the offices situated in Bombay. Subsequently the Government extended it to class III and class IV government servants working in all the offices and departments throughout the State of Maharashtra.

In 1969, the salary savings scheme was finalised with approximately 3,800 firms/institutions in Greater Bombay and the number of policies secured under the scheme from the employees of these firms/institutions was approximately 3.5 lakhs.

The progress under this scheme during 1974-75 and 1975-76 in Greater Bombay was as follows:—

	1974-75 1975-76		5-76	
	Number of policies	assured (Ps. in	Number of policies	Sum assured (Rs. in lakhs)
Greater Bombay	53,900	40,35.5	51,263	38,55.07
Bombay Division	66,487	4,48,41.21	62,997	46,34.40

Business under Group Scheme : The following statement gives the business of group scheme by G and S Department (Group Insurance and Superannuation) completed, through branch offices in Bombay division and also in Greater Bombay area during 1975-76 :—

Division/District	Number of Schemes		Sum assured Rs.	Annuity per annum Rs.	Premium income Rs.
Bombay Division	272	30,117	36,30,24,921	<mark>2</mark> ,48,364	1,70,72,740.78
Greater Bombay	262	27,740	35,04,70,726	2,48,364	1,62,87,019.71

First Premium Income: The statistics of first premium income for Bombay branches are given below:—

	First Pro	emium (1	975-76)
Division/District	Non- salary savings scheme	Salary Savings scheme	Total
Bombay Division	7,20,26,983	22,01,994	7,42,28,977
Greater Bombay	6,65,46,259	18,59,904	6,84,06,163

During 1975-76, the Corporation introduced a special policy known as the Grihalaxmi Policy designed to provide life-long security for the housewife. The main feature of the policy is that while the husband who is the proposer pays the premium, the wife is the beneficiary and a trust in her favour is created under section 6 of the Married Women's Property Act. The plan provides return of all premia to the proposer if the beneficiary dies before the age of 55.

STOCK EXCHANGE

The Stock exchange is an important constituent of capital market in any economy and provides the infrastructure for economic democracy combined with planned economic development. It provides a market place for the purchase and sale of securities. The origin of the stock market therefore goes back to the time when securities representing title to property or promises to pay were first issued and made transferable from one person to another. At the end of eighteenth century, the East India Company was the dominant body which used to transact business in its loan securities. By 1830, due to considerable increase in the volume of business in loans as well as in corporate stocks and shares, the business in Bombay was transferred in the shares of commercial banks like the Chartered Mercantile Bank, the Chartered Bank, the Agra Bank, the Oriental Bank and also the old Bank of Bombay. The shares of cotton presses were one of the prominent shares in Bombay brokerage.

Between 1840 and 1850, there were about 6 brokers recognised by both the banks and the merchants, with an entry of late Mr. Premchand Raichand as a broker in 1849-50, the trade of brokers came into prominence. Within a short period he monopolised the broking business in shares, stocks, bullions and partly exchanges and held all the strings of business in his own hands. The display of that brilliant financial strategy by him broking business in shares as well as in the best gilt-edged securities of those days crowned him as the "

Napoleon of Finance".

Premchand's career attracted many other men into the field and fry 1860, the number of brokers increased to 60.

In 1861, the American Civil War broke out and it totally stopped the supply of cotton from U.S. to Europe, resulting in the cotton famine which at large led to unlimited demand for Indian cotton available in the largest quantity in Bombay Presidency. The large exports of cotton were paid for in bullion which poured in Bombay from Liverpool in the shape of silver and gold. Out of the total imports, bullion which amounted to Rs. 85 crores between 1861-62, and 1864-65, Bombay alone absorbed Rs. 52 crores giving an average of Rs. 13 crores per annum.

The import of this large amount of bullion was an addition to the wealth of the city and served as fresh capital for a number of new ventures such as banks and financial associations, trading, cotton cleaning, pressing and spinning, hotel companies, shipping and steamer companies, etc.

During the 'Share Mania' of 1861-65, the number of brokers increased to 200. The first vital spark of speculation authority and wealth was kindled by Asiatic Banking Corporation originally named as the Bombay Joint-stock established in 1863. But at the end of American Civil War, a disastrous slump followed and caused widespread desolation.

The depression was long and severe but the 'Share Mania' had the important' and lasting effects such as the expansion of liquid capital, and establishment of regular market in securities which helped at large to make Bombay the chief centre of money and capital market.

It was in those troubled times between 1868 and 1875 that brokers organised an informal association, and finally on or about 9th of July 1875, a few native brokers resolved upon forming an association in Bombay for protecting their trade. They also thought of providing a hall for the use of the members of such association. An indenture was executed on the 3rd of December 1837, constituting the articles of exchange and the stock exchange was thus formally established in Bombay under the title of ' Native Share and Stock Brokers' Association'.

In 1876, when the stock exchange was constituted, the entrance fee for a non-member was Re. 1 and the number of members on the list was 318. The commerce and industry thus again came into prominence, credit was restored and prosperity was regained in Bombay with the establishment of the cotton industry, the building of new docks, and the extension of railway routes for transport of goods. The stock exchange played an important part in these developments.

The stock exchange thus channelled the flow of investment into stocks and gilt-edged securities and materially helped Government and also trade and industry. Over almost a hundred years, during which the stock exchanges have existed in the country, through their medium, the Central and State Governments have raised crores of rupees by floating public loans.

As the exchange grew in size, so did its accommodation. The premises taken on hire in 1874 on Dalai Street were given up when what is now known as the Stock Exchange old building situated at Dalal Street was acquired in 1895. The brokers' hall was thrown open on the 18th January 1899. In 1928, the piemises were further extended by acquiring from the Bombay Municipal Corporation for Rs. 5 lakhs the adjoining plot of land abutting on Apollo Street and flanked by Dalal Street and Hamam Street.

The stock exchange at Bombay has continued to expand in size and in its stature and influence. It is not only the oldest stock exchange but also the oldest trade association in the country. It is one of the voluntary non-profit making associations.

In the earlier formative years, the stock market passed through many turbulent phases such as share mania in 1861-65, coal boom in 1904-1908, bank failures in 1913, the First World War boom, the Post-World War slump in 1923-24, and the spate of corners in 1921-25. The Bombay share market recorded a continuous trend of evolution with emergencies gradually recurring after short intervals such as Wall Street boom and crash of 1929, World Economic Depression of 1931-32, Currimbhoy Cotton Mills group crisis of 1933, steel boom of 1937, Second World War crisis of 1941, Second World War boom and post-war slump of 1946-47, Commodity markets crisis of 1952-53, acd Equity boom and Chinese aggression emergency of 1962-63.

The Bombay Stock Exchange was recognised on August 31, 1957 on a permanent basis, described as a voluntary non-profit making association. Its membership in March 1958 was 501 and the entrance fee (card value) was Rs. 17,500 with membership deposit of Rs. 20,000 and annual subscription of Rs. 15.

There is no distinction between the jobbers and brokers on the Bombay Stock Exchange. A member can act as a jobber or a broker though when he is busy on his account, he has to give a different contract note. Under the Securities Contracts (Regulation) Act, 1956, seven stock exchanges have been recognised in the country. The pattern of regulation under the Act is that of unitary control. The Bombay Stock Exchange (1875) is one of them; others are those in Ahmedabad, Calcutta, Madras, Hyderabad, Indore and Delhi. The rules, by-laws etc. have been made uniform for all the exchanges.

The Bombay Stock Exchange which is more popularly known as the 'Dalal Street' has been granted permission on a permanent basis. The firms cannot be the members of the stock exchange in their own right. Individuals and partners, and if there are other stock exchanges in the city, those can be the members of the stock exchange. If an individual is denied membership an appeal can be made to the Government whose decision is binding on the recognised stock exchange. Some of the stock exchanges are companies limited by

guarantee or public limited companies under the Companies Act. But in Bombay and so also in Ahmedabad, the stock exchange is in the nature of a private club and the president is a whole-time salaried official. It is not registered under any Act.

The general administration of the stock exchange is entrusted to a committee, which in Bombay is known as the governing board. There are three sub-committees for conducting the routine business of management; they are, the arbitration committee, the defaulter's committee and the listing committee. The rules and byelaws for the general conduct of business are framed by the stock exchange authorities and approved by the Government. Now they are more or less uniform in all the stock exchanges and conform to the rules framed by the Government under the Securities Contracts Regulation Act, 1956. Forward trading is permitted on the basis of fortnightly settlements in Bombay and on the Bombay market, there are a large number of scripts on the forward list—as many as 74, while in Calcutta they are 18. The clearing house at Bombay is managed by the Bank of India. Next to Calcutta, Bombay has the largest number of listed shares, though cotton textiles and bank shares do predominate.

The jobbers on the Bombay stock exchange are known as 'Taravani-walas' as they are said to take away the cream of the business. This group helps to maintain a broad and active market, but they also, it is stated, accentuate the fluctuations on the market. The members also employ clerks for help and they are registered as authorised clerks; there are about 1,200 clerks in Bombay stock exchange. They help in the transaction of business of the members. The trading on the stock exchange takes place during stipulated hours. The bids are offered loudly and there is lot of noise around. A large gathering of members and authorised clerks for trading; is the feature of Bombay stock exchanges, as there is a large number of transactions, involving crores of rupees on these exchanges. There are fluctuations in the prices and yields of stocks and securities and they reflect the economic as well as non-economic changes in the economy. The taxation and the economic policies of the Government get reflected in these changes. There was the post-Korean war boom in the market followed by a crash in 1952, which was tided over smoothly. There have been no serious payment crisis for several years recently. The increase in the number of listed scripts, the controls imposed by the Indian Companies Act, and the declining role of the managing agents have restrained the speculative activities on the market. Small investors are entering the market and the role of Government institutions such as L.I.C, Unit Trust of India is becoming more significant. The Stack Exchanges themselves have been making an effort to restrain over-trading through a system of margins which is in vogue in Bombay stock exchange. Here it is operative in respect of 'badla' transactions only i.e. transactions which are earned over to the next settlement. There is the margin money which is to be deposited with the clearing house and is not returnable until the settlement day of the following clearing i.e., it is retained for about three weeks or so. Further the members of the Bombay stock exchange are required to submit every day a statement of. outstanding business in respect of a few highly speculative scripts, and the president of the exchange has a right to call for additional margins from any member if there is a marked increase in his outstanding business or the president may ask the member to liquidate a portion of his outstanding business. Thus the stock market authorities as well as the Government are making an effort to restrain the speculative activities on the market. The Reserve Bank of India also through it's controls, restrains the flow of credit to the stock market and the speculative and cornering activities of the members. On the whole, the record of working of the stock exchanges has been satisfactory. The stock exchanges have provided continuous market to a growing volume of securities. They have also contributed to the growth of investment habit, particularly in the urban areas. The speculative activity on the stock exchanges is not exces sive and serious payment crisis have not been experienced. Through stringent listing requirement, they have raised the standards of company reporting and established well defined practices as regards new capital-issues. The Government of India, through the Securities Contracts (Regulation) Act has formulated a number of provisions for the regulation of stock exchanges. A separate division called the Stock Exchange Directorate under the Ministry of Finance has been established. It has it's main office in Bombay. The Government has its representatives on the governign bodies. Through this representation and the functioning of the Reserve Bank of India, efforts have been made to evolve suitable measures for checking excessive speculation and developing sound share market practices on the stock exchanges.

Trading in the securities is carried out at the market, generally through the agency of the stock-brokers. The private securities are listed on the stock-exchange and the member brokers are allowed to deal only in these securities. The transactions in these shares are mostly spot transactions; delivery and payment are completed after the contract is made. The stock-markets are thus the organised markets for securities and as in case of exchange of commodities at the market, they are also subject to basic influences of demand and supply. The stock exchanges ensure the liquidity of capital and the evaluation of securities and direct the flow of savings into the most productive form of enterprise. On the market, genuine speculation has the role of forecasting the real value of the investments, and this is carried put through forward trading.

There are two types of securities dealt on the stock exchange: (i)proprietorship securities which include the ordinary shares, the preference and deferred shares; and (ii) creditorship securities, *i.e.9* debentures, giltedged stocks etc. Here the rates of interest as the return on the securities are fixed. On the stock exchange, the new issues of securities are floated largely through the prospectus. Under the Securities Contracts Act, a company is eligible for an official quotation on the stock exchange if at least 49 per cent of the issued capital is offered to the public for subscription in the first instance. The balance, through the stock-broker may be financed by associates and friends or the institutional investors. The underwriting of shares is also resorted to for ensuring the success of the issues offered to the public. The industrial finance institutions perform this function of underwriting.

The brokers, jobbers and authorised clerks are the persons who transact on the stock market. They are classified into bears and bulls—the former operating on the expectation of a fall in prices and the latter on the expectation of a rise in prices of securities. The transactions in shares are done on the floor of the exchange which is a place of great commotion and hectic activity. The floor is divided into a number of

separate booths, one for each particular security where the business in that script is transacted. The transactions on the 'floor' of the exchange are done by word of mouth and no contract is signed when the bargain is struck. The broker notes down the transaction in a small pad with all the details. After the day's transactions, the authorised clerk enters the transactions in the boot's maintained in the office with the details as well as the brokerage charge Next day the contract notes are signed and sent to the client. The shares can be bought for cash—described as delivery contracts or the purchase transaction and can be settled within a prescribed period and they are described as forward deals. Forward deals are allowed only in few selected scripts which are generally very active and broadly held. The transactions in forward deals can be carried over by purchase or sale to the next settlement through what are known as 'badla' transactions. There are also option dealings known as 'Teji-Mandi' operations on the stock exchange. The option means the right to choose; it may be single or double i.e., both for the buyer and the seller—whether to take or not to take up the shares within the prescribed specific period which is usually of three months. There are the 'put options' where the striking price is the current market' bid' price plus a sum of contango (carry over) interest on the value of the share calculated, over the period of the option. In case of a 'call option', it is the current market offered price plus interest; the cost of option is called the option money and its magnitude depends mainly on the nature and marketability of the security and the current market conditions. Options provide a 'hedge' against price fluctuations. The option price would be a form of insurance against a rise and the investor would be in a protected bear position. The Securities Contracts (Regulation) Act has legally prohibited option dealings but on the Bombay stock exchange (and so also at Calcutta stock exchange) unauthorised 'Teji-Mandi' business does take place.

The transfer of securities on the stock exchange is affected through a 'deed' of transfer between the one and the other holder, by a formal agreement duly stamped and signed by both the buyer and the seller. This is transferred to the register of shareholders maintained by the companies. Bearer shares can be transferred through delivery but such shares are very few on the Indian Stock Exchange. The process of registration involved in these transfers create a long delay and inconvenience to the operators on the stock market. With a view to overcoming this difficulty, a system of 'blank transfers' has been devised on the stock exchange, and has become an important part and parcel of stock exchange mechanism. A blank transfer is a transfer deed wherein the buyer's name is not entered or is left blank, so that the transfer form can be pasted quickly. This system of blank transfers is said to encourage speculation as the delivery becomes simple and there is also the saving of stamp duty. It assists 'badla' transactions and is a common form of securing a loan against the collateral security of share. But by facilitating forward business, the system of blank transfer encourages excessive speculation. It also facilitates manoeuvring of managerial control over companies by concealing the identity of the real holder. The Atlay Committee in 1924 had recommended the total abolition of blank transfers and a sharp reduction in the stamp duty on transfers. The Morrison Committee in 1936 made a similar recommendation. The Securities Contracts Regulation Act empowers the stock exchanges to make bye-laws for the regulation or prohibition of such transfers. The Indian Companies Act of 1951 also has provisions for prohibition of such control of companies through the blank transfer transactions. The blank transfers, under this regulation cannot be kept open for more than a year if the company pays the dividend annually or for more than six months in case of companies declaring half-yearly dividend. The reduction in stamp duty on transfers in 1955, has also discouraged such transfers.

Listing of Securities: There are certain standards or listing requirements set by the exchange and the company has to agree to certain terms and conditions laid down. The governing body of the stock exchange is responsible for granting permission to the company to have it's scripts traded on the exchange. The main object of listing is to provide a measure of safety in dealing, to the investors and is an indirect safeguard against unscrupulous manipulations. Listing does not necessarily mean the soundness of the company which has to be ultimately judged by the investor. Generally, the shares of the large companies are listed on the stock exchange, after informal discussion between the representatives of the company and the stock exchange authorities. The Securities Contracts Regulation Act, 1956 contains certain provision in respect of listing of securities on the stock exchange. It empowers the Government to compel a public limited company to have its shares, bonds, debentures listed, even by fulfilling the conditions which are prescribed by the stock exchange. A company which has been refused a quotation of its shares has a right of appeal to the Central Government which has the power to change the decision of the stock exchange. Certain provisions are imposed on the stock exchange by the Act.

The stock exchange conducted a survey (Profile of Stock Exchange Activity in India, published by Bombay Stock Exchange 1970) of 515 companies listed in Bombay in 1968-69. It covered 90 per cent of the total number of companies and 95 per cent of the total equity capital quoted in Bombay. According to the survey these 515 companies had 18.60 lakh book shareholders in 1968-69 as against 9.10 lakh book shareholders as per an earlier Stock Exchange survey covering 243 companies out of 300 companies listed in Bombay in 1961.

The following statement and Table No. 7 reveal the findings of the stock exchange survey in Bombay in 1968-69:—

	Percentages										
Size of Holding	No. of share- holders cleared		No. of share- holders non- cleared	Amount		Total share- Amount					
Small (Below Rs. 20,000)	98.67	36.86	98.96	27.30	98.86	30.44					
Medium (Rs. 20,000 to Rs. 50,000)	0.88	6.70	0.55	4.19	0.66	5.01					
Large (Rs. 50,000 and above)	0.45	56.44	0.49	68.51	0.48	64.55					
	100.00	100.00	100.00	100.00	100.00	100.00					

	Catagory of	Perc	entages	3
	Category of owners	Cleared	Non- cleared	Total
1.	Individual	7.28	15.90	13 05
2.	Joint-stock- companies	12.70	26.57	22.00
3.	Financial institutions	22.16	19.73	20.79
	(a) Unit Trust of India	1.73	1.41	1.75
	(b) L.I.C	11.25	6.49	8.73
	(c) Banks	7.35	2.80	3.65
	(d) Others	1.83	9.03	6.66
4.	Others	0.08	0.13	0.12
		43.07	62.33	55.96

The stock exchange survey (Stock Exchange Official Directory, Volume 2,1984.) revealed that the position of cleared companies was even more favourable in respect of big shareholders.

The ten highest holders covered by the stock exchange survey had 43 per cent of the total paid-up equity capital of cleared companies as against 62 per cent in the case of non-cleared companies. L.I.C. was found to be the biggest among the shareholders with a holding of about 12 per cent of the total capital of cleared companies as against six per cent in the case of non-cleared companies. The survey also revealed that the percentage of total paid-up capital of cleared companies was 13 in the case of joint-stock companies and seven in the case of individuals as against 27 and 16 respectively, in the case of non-cleared companies.

The growth and development of the Bombay Stock Exchange from 1946 to 1979 is given in Table No. 8. The

same also gives the market pattern of stocks listed on Bombay Stock Exchange.



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TABLE No. 7 FINDINGS OF STOCK EXCHANGE SURVEY IN BOMBAY, 1968.69

(Amount in crores of Rs.)

		Nι	ımber of S	harehol	ders		Nomi	nal Valu	e of Ho	of Holding				
Size of Holdings	Clea	ared	Non.cle	ared	Tota	al	Clea	red	Non.cle	eared	Tot	:al		
	No.	Percent	No.	Per cent	No.	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent		
10,000	607,614	96.79	1,207,802	97.94	1,815,416	97.55	76.31	30.29	122.21	23.79	198.52	25.93		
10,001-20,000	11,814	1.88	12,558	1.02	24,372	1.31	16.55	6.57	18.00	3.51	34.55	4.51		
20,001-30,000	3,268	0.52	3,888	0.32	7,156	0.38	8.14	3.23	9.72	1.89	17.86	2.33		
30,001-40,000	1,431	0.23	1,649	0.13	3,080	0.17	5.05	2.01	6.01	1.17	11.06	1.44		
40,001-50,000	811	0.13	1,272	0.10	2,083	0.11	3.68	1.45	5.81	1.13	9.49	1.24		
Above 50,000	2,794	0.45	6,045	0.49	8,839	0.48	142.18	56.44	351.92	68.51	494.10	64.55		
Total	627,732	100.00	1,233,214	100.00	1,860,946	100.00	251.91	100.00	513.67	100.00	765.58	100.00		
Holdings of ten highest							108.20	42.95	320.20	62.33	428.40	55.96		
holders of which—									En.	1				
(1) Individuals							18.29	7.26	81.66	15.90	99.95	13.05		
(2) Joint-stock companies							31.91	12.66	136.51	26.57	168.42	22.00		
(3) Financial Institutions							57.80	22.95	101.34	19.73	159.14	20.79		
(a) U.T.I.							6.16	2.45	7.22	1.41	13.38	1.75		
(b) L.I.C.						-	33.47	13.29	33.34	6.49	66.81	8.73		
(c) Banks							13.57	5.39	14.38	2.80	27.95	3.65		
(d) Others							4.60	1.83	46.40	903	51.00	6.66		
(4) Miscellaneous							0.20	0.08	0.69	0.13	0.89	0.12		

TABLE No. 8
GROWTH AND DEVELOPMENT OF BOMBAY STOCK EXCHANGE1946-79

As on 31st	No. of listed	No. of stock			(Rs. in crores)		Market value of capital	Average per company (Rs. in lakhs)			
December	companies	lictod	Equity	Preference	Debentures	Total	/Da :	Total capital	Market value		
1946	197	271				1,23		63			
1961	297	538	2,95	56	31	3,82	6,45	1,28	3,17		
1965	502	891	3,32	73	84	4,89	8,41	1,37	1,68		
1970	580	1060	8,52	1,23	1,41	11,16	17,51	1,92	3,02		
1976	797	1478	13,96	1,44	2,70	18,10	25,91	2,27	3,25		
1979	935	1609	18,76	1,51	3,93	24,20	40,29	3,58	4,30		
Percentage increase in 1976 over 1946.	305	445				13,71		2,60			
Percentage increase in 1976 over 1946.	59	66	3,20	97	2,21	6,38	2,08	66	93		

The table shows that over the years from 1946 to 1979 the number of listed companies quoted in Bombay went up by 738 and the corresponding number of listed stocks by 1,338. The paid-up value of listed stock simultaneously increased by Rs. 22,97 crores.

In 1971-72, on the basis of total assets, nine of the 20 bigger companies in India were quoted in Bombay, four in Calcutta, four in Delhi, two in Ahmedabad and one in Madras. On the basis of net worth, eight were quoted in Bombay, six in Calcutta, four in Delhi, and one each in Madras and Ahmedabad; while on the basis of total gross sales, eight each were quoted in Bombay and Calcutta, and two in Delhi and one each in Madras and Ahmedabad.

The structural pattern of listed stocks js outlined in Table No. 9.

TABLE No. 9
Structural Pattern of Listed Stocks at Bombay Stock Exchange

Particulars	(As on 31st December 1969)	(As on 31st December 1979)
No. of companies listed	570	2,133
No. of stock issues listed		
(i) Total	1,042	3,569
(ii) Equity	608	2,364

(iii) Preference	360	1,020
(iv) Debentures	74	185
Paid-up Capital (Rs. in Crores)—		
(i) Equity	7,83.75	27,40.37
(ii) Preference	1,11.97	2,29.59
(iii) Total	8,95.72	29,69.99
Debentures amount outstanding (Rs. in Crores)	1,18.70	5,03.59
Total capital employed (Rs. in Crores)	10,14.42	34,73.30
Market value of capital employed (Rs. in Crores)		
(i) Equity	12,68.55	<mark>4</mark> 5,60.54
(ii) Preference :	1,02 10	1,83.91
(iii) Debe <mark>ntures</mark>	1,14.75	4,79.28
(iv) Total	14,85.40	52,23.73
Average per company (Rs. in lakhs)—	te	Ga
(i) Share capital	158	139
(ii) Total capital	178	163
(iii) Market value of total capital	261	245
No. of companies on the cleared list	73	N.A.

The class-wise pattern of listed stock issues in Bombay Stock Exchange as on 31st December 1979 was as follows:—

Number of companies listed	935
Equity, preference and debentures	45
Equity and preference	315
Equity and debentures	23
Preference and debentures	
Equity only	546
Preference only	1
Debentures only	5

The overall denomination pattern of listed stocks in Bombay is shown in the following statement :—

(As on 31st December 1979)

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	E	quity	Prefe	erence	Debe	ntures
Denomination (Rs.)	No. of stock issues listed	No. of units issued (in '000)	No. of stock issues listed	No. of units issued (in '000)	No. of stock issues listed	No. of units issued (in '000)
1						
2	1	15,00				
5	7	5,48,65	2	1,38		
10	730	1,19,44,91	32	75,81	3	55,45
25	12	1,30,89	6	2,44	1	9,50
50	24	41,70	4	90	1	3,43
75	1	68,58				To.
100	232	5,12,79	412	1,39,98	30	50,99
250	2	1,23	3	16		
500			2	13	5	2,72
1000	2	5			61	13,17
5000					12	3,61
Others	4	16,49,29	5	88	5	23,53
Total	1,015	1,49,13,09	466	2,21,68	118	1,62,40

Table No. 10 shows the industrial pattern (*Present Position of the Stock Market in India, 1980, Published by the Stock Exchange, Bombay.*) of listed stocks in Bombay stock market.

On the basis of number of companies, the groups of chemicals, dyes and pharmaceuticals, refineries and plastics stand first.

TABLE No. 10 INDUSTRIAL PATTERN OF LISTED STOCKS AT BOMBAY

As on 31st December 1979

	No. of Companies		fstock	issues liste		Paid list Crs. Rs.)	ed-up Capit		Debentures (in Crs. Rs.)		Market value of capital (in Crs. Rs.)		Rs.)	Average per company (in Lakhs Rs.)			
		Total	Equity	Preference	Debentures	Equity	Preference	Total			Equity	Preference	Debentures	Total		Total Capital	Market Value
Banks	3	3	3			7.42		7.42		7.42	18.39			18.39	247	247	618
Insurance									198.88	256.58	56.15	1.58	194.38	252.11	134	596	452
Investment and finance	43	69	41	10	18	54.75	2.95	57.70	1.00	16.33	28.16	0.23	1.00	29.39	170	181	326
Trading	9	11	9	1	1	14.83	0.50	15.33	27.24	62.29	29.81	3.90	24.22	57.93	318	566	526
Electricity	11	36	11	9	16	29*95	5.10	35.05		62.07	68.59	1.17		69.76	443	443	498
Transport	14	18	14	4		60.90	1.17	62.07		0.75	0.03	0.10		0.13	75	75	13
Coal Mining	1	2	1	1		0.65	0.10	0.75		1.20	0.97	0.07		1.04	60	60	52
Other Mining	2	5	3	2		1.13	0.07	1.20		62.45	80.64	2.55		83.19	446	446	594
Cement	14	27	15	12		58.99	3.46	62.45		14.79	13.86	0.53		14.39	92	92	89
Potteries, tiles	16	26	19	7		14.13	0.66	14.79	3.40	137.38	183.45	7.95	2.84	194.24	219	225	318
Paper and Hardboards	61	117	80	34	3	123.83	10.15	133,98	14.17	140.55	263.22	7.55	13.58	284.35	197	219	444
Cotton textiles	64	127	68	47	12	116.34	10.04	126.38		5.29	3.94	0.30		4.24	264	264	211
Jute textiles	2	4	3	1		4.96	0.33	5.29	14.90	148.28	423.52	11.37	15.94	450.83	404	449	1,366
Synthetic Fibres, wool	33	63	37	19	7	120.20	13.18	133.38	3.27	100.32	188.38	5.01	3.49	196.88	136	143	231
Electrical equipment	70	112	76	33	3	91.26	5.79	97.05	15.00	82.84	63.10	8.91	12.08	84.09	5784	8284	8408
Iron and Steel	1	5	1	3	1	51.44	16.40	67.84	12.00	62.67	94.54	5.71	12.00	112.25	1689	2089	3741
Aluminium	3	8	3	3	2	44.24	6.43	50.67	19.79	175.76	172.53	12.91	19.41	204.85	119	134	156
Metals and Products	131	234	143	78	13	142.34	13.63	155.97	25.42	134.89	230.07	5.79	22.36	258.22	421	518	993
Transport equipment	26	53	27	19	7	102.76	6.71	109.47	5.75	76.00	120.86	4.10	5.48	130.44	146	158	271
General Machinery	48	86	54	26	6	65.34	4.91	70.25	13.42	87.84	143.64	4.24	13.22	161.10	130	154	282
General Engineering	57	86	62	17	7	70.30	4.12	74.42	6.15	427.30	848.79	22.72	5.61	877.12	348	353	724
Chemicals Pharma- ceuticals.	121	193	133	51	9	396.78	24.37	421.15	0.75	39.87	27.98	4.20	0.54	32.72	118	120	99
Sugar and Breweries	33	58	34	23	1	34.27	4.85	39.12	7.20	39.24	66.29	1.30	6.41	74.00	110	135	255
Food Products	29	52	35	11	6	30.32	1.72	32.04		31.49	47.24			47.24	242	242	353
Tea Plantations	13	14	14			31.49		31.49		2.58	3.58	0.22		3.80	36	36	5 54
Other Plantations	7	12	7	5		2.10	0.48	2.58		48.10	54.20	2.22	3.17	59.59	297	320	397
Tyres and Rubber Products	15	27	17	8	2	42.07	2.48	44.55	3.55	48.10	54.20	2.22	3.17	59.59	297	320	397
Miscellaneous	108	161	115	42	4	162.84	11.09	173.93	21.38	195.31	295.33	9.74	21.38	326.45	161	180	302
Total	935	1609	1025	466	118	1875.63	150.69	2026.32	393.27	2419.59	3527.26	124.37	377.11	4028.74	217	259	431

The Bombay Stock Exchange has contributed in the aggregate more than Rs. 4 crores to the State exchange during the period 1947 to 1969. The average annual revenue collected from the stock exchange by the State every year from 1947 to 1969 has exceeded Rs. 17 1/2 lakhs.

The mean of the index numbers of the daily average turnover, computed on the basis of the number of working days in each clearing according to the number of shares was about 97 in 1965, 92 in 1966, 82 in 1967, 63 in 1968 and 71 in 1969.

The annual volume of turnover by value was the highest in 1951. The plan period of 1961-65 witnessed a hectic market and the most active period.

Clearing Houses: The enormous task of settling the thousands of transactions entered into on the stock exchange during each settlement period is done through the 'clearing house'. It works on the same principles as the bankers' clearing house. The actual physical turnover of cash and movement of shares are reduced to the minimum by the elimination of all the intermediaries in the numerous transaction during the given accounting period. The parties to the contract deal with the clearing house to which they submit a balance sheet of their purchases and sales over the account period and settle only the net balances of securities and money. This system is very convenient to the members, and covers a large volume of transactions. The actual technique of clearance is the most complex part of stock exchange operations, involving the statement of all individual transactions and their quotations in terms of settlement prices and the make up prices. Yet the physical labour involved in a multiplicity of deliveries is reduced to the minimum by means of clearing.

On the Bombay Stock Exchange, there are certain procedures laid down for clearance. The last day of business, which is usually a Friday, is the day on which all transactions are either to be closed or carried forward to the next settlement. The *badlas* are arranged on this day. The new account commences on the following Monday. The last day for delivery on which all securities are to be delivered to the clearing house is usually the fourth or fifth day following the *badla* day. The pay.in.day which is the eighth or thenineth day following the *badla* day is the day on which all cheques are to be deposited in the clearing house, together with a list of the payments due or receivable. The pay.out.day is the day on which cheques are issued by the clearing house in favour of the members having credit balances; this is generally the second or third day following the pay-in-day.

Government Securities Market: This market differs from the share market on the basis of absence of risk and uncertainty as regards dividends or the capital. It is popularly known as the gilt.edged market. Further the investors are mainly institutions rather than individuals, the commercial banks, the L.I.C, the State Bank of India and the Provident Fund authorities are the important holders of government securities. Reserve Bank of India is an important holder as well as the predominant operator on the market through its open market operations, issuing the new floats, it takes up a proportion of the loans. Stock.brokers are important in the buying and selling of government securities on the market. The transactions are large in magnitude and the bulk of the business is handled by a relatively small number of brokers. There are other large number of small brokers but their total business is very small. The bulk of business is carried out by the Reserve Bank of India's brokers who number 30 in all the three important centres: Bombay, Calcutta and Madras.

The Government securities market is not an auction market like the share market. The average size of the transactions is large so that each purchase and sale has to be negotiated, though there is keen competition among the brokers and the jobbers. In a way there is an element of compulsion, as institutions are compelled to invest a part of their assets in government securities, and the operations of the Reserve Bank of India dominate the functioning of the market. The Reserve Bank of Indian operates in all securities, short and long. This makes its policy broad and flexible. Lately, the State Government securities are also entering the market as their number has been fast rising.

As in the share market, brokers play an important role in the buying and selling of government securities. There are some brokers who specialise in government securities but since transactions in government securities are of large dimensions, the bulk of the business in these securities is handled by a few brokers. Yet the market is specialised and competition is strong. The specialised financing institutions do a good job of bargain, hunting and generally obtain 'fine' quotations. The Reserve Bank of India, of course, acquires a large stock from the new issues of Government and uses them for its open market operations.

The objectives of its open market operations varied from time to time based on the existing economic situation and the trends in the money and capital markets. Yet by and large, these operations have not assumed the role of a full--fledged instrument of credit policy. They have been used in India more to assist the government in its borrowing operations and to maintain orderly conditions on the market, than for influencing the cost and availability of credit. The objectives of what is called grooming the market, such as acquiring securities nearing maturity to facilitate redemption and to make available on tap, a variety of loans to broaden the gilt-edged market have been more prominent in the conduct of the open market operations. On the whole, these operations have been consistent with the monetary policy of the Reserve Bank and avoided violent fluctuations in the gilt-edged prices. They have enabled the Reserve Bank to keep in close touch with the market and fill the gaps in demand and supply with a view to broaden the market.

The Reserve Bank's operations on the market are largely conducted in Bombay, though some transactions do take place in Calcutta and Madras. The Reserve Bank has no direct representative on the market but functions through the approved brokers. The Bank does not publish either the particulars about the various loans it is prepared to buy or sell or the rates of it's dealing. The brokers are verbally informed of the changes in this respect. The rates of sales and purchases are fixed in the light of the prevailing conditions in the market. Sometimes the mere announcement of the rates is sufficient to produce the desired effect on the market. Generally the Bank is an outright buyer in near-dated securities and an outright seller in new issues

and long-dated loans. In addition, the Bank undertakes switches which are generally from shorter dated to longer dated loans. The policy of switches is intended to help the shifting preferences of the market and to establish and maintain a harmonious pattern of yields.

BULLION TRADING

India has been traditionally known for her bullion trading. In Bombay, the organisation of the bullion trade evolved out of a few small shops on the Sheikh Memon Street where trading was done under the open skies. Gold and Silver were dealt in by four merchants who imported bullion and distributed all over the country through shroffs and bankers. All these transactions were based on customs and largely carried out verbally due to the high standard of integrity observed by the businessmen in the forward market. The trading was on the basis of monthly settlements and fortnightly clearings, and the trade was a very flourishing one.

During the First World War period, the volume of business increased rapidly and there were heavy fluctuations on the bullion market. There was an acute shortage of silver between 1917 and 1920. From 1917, the Government took over all the imports of gold and silver and released them in the market. Attempts were made to organise the trade and to evolve rules for the settlement of business. Seven leading silver merchants in Bombay took the first step to put the bullion trade on an organised scale by establishing the Silver Merchants' Association, a loosely.knit organisation. It formulated the rules for settlement of business and the working of the market. Bazar Merchants' Association was formed in 1920, but was replaced by Bombay Bullion Exchange Limited in 1923. After the war the trade in gold and silver expanded rapidly and Bombay, being the nearest eastern port for the West, was the chief centre for the marketing of bullion both for the internal and external trade. The bullion prices started rising after the Second World War and the same trend is still continuing.

The Bombay Bullion Exchange Ltd. is the largest exchange in India. The Exchange was a public limited company with a share capital of Rs. 102 lakhs divided into 200 shares of Rs. 5,000 each. These shares were held by about 138 persons when the Exchange went into voluntary liquidation in 1947. The board consisted of 12 directors elected by the share.holders, one.third of them retiring by rotation. Besides the shareholders, there were trading members who had no share in management but were permitted to enjoy all the trading facilities. Trading members were of two categories, ordinary members who paid an annual subscription of Rs. 251 and associate members who paid Rs. 151 per year. There was a committer elected by the shareholders known as the merchant's committee and this committee with the board of directors managed the business on the exchange. The board of directors had special powers, pertaining to admission fee, the tenders etc. The merchants' committee was mainly an advisory organisation. Most of the prominent bullion merchants of Bombay were enrolled as members. The exchange had a building of it's own with trading ring, offices, safe deposit vaults and other facilities.

Clearing House.—The exchange established the clearing house in 1936 for the settlement of forward business. This facilitated the issuing of delivery orders which had to be passed on from party to party and also avoided the risk of making payment in cash. It also provided safeguards against frauds and false representation by members for collection of dues.

The exchange also framed elaborate rules and bye.laws to regulate forward trading in bullion. These have established certain sound practices and customs. The outstanding transactions known as *badlas* in case of cornering, carried a compensation of Rs. 3.50 per unit of 100 *tolas* in case of silver, which lessened the temptation of speculation and cornering of silver or gold. The trade practices and precedents, the ruling and decisions of the board, and the judgements and orders of the courts of law made the rules of governance of the market more perfect.

The outbreak of the Second World War in September 1939, led to a complete disorganisation of the market and violent fluctuations in prices. The price of gold shot up from Rs. 34 per *tola* in March 1938 to Rs. 44 in May 1940 and Rs. 90 in May 1943. There was a ban imposed on the import of bullion and the exports were brought under the control of the Reserve Bank of India. An attempt to control the forward trading in bullion was made in 1943, when under the Defence of India Rule 90C, the Government prohibited all forward contracts which did not provide for delivery of bullion within a specified period. These restrictions were removed after the war, in January 1946 and forward trading in bullion was again freely resumed.

By 1947, apart from the Bombay Bullion Exchange Limited, the following two more associations were conducting forward trading in bullion, though a large part of the trade still was conducted by the Bombay Bullion Exchange. (1) Marwari Chamber of commerce:—This organisation was mainly interested in the trading of oil.seeds and wheat, but as forward trading in these commodities was prohibited during the war, the Chamber started trading in bullion. It had 203 ordinary members, 77 associates and 3 special associates. The membership fee was Rs. 75 for ordinary, Rs. 51 for associate and Rs. 15 for special associate members. The board consisted of 25 directors elected by panels of shroffs, commission agents and brokers. The chamber also maintained a clearing house. (2) East India Chamber of commerce:—It was incorporated in 1934 and since 1944, it has been doing forward trading in bullion in units smaller than permitted by the Bombay Bullion Exchange Limited. It was therefore known as 'Tukada Bazar'. There were about 485 members. The board of directors consisted of not less than 15 and not more than 21 directors. Clearings were weekly and units of transactions were 25 tolas for gold and 700 for silver. There was a trading hall but no separate clearing house.

In May 1947, the Government of Bombay appointed a cabinet committee to examine the various problems relating to forward trading in bullion. On the recommendations of the committee the Bombay Forward Contracts Act, 1947 was enacted. As a result forward bullion contracts entered outside the recognised association were declared illegal. The committee also suggested a single association for conducting forward

trading in bullion. The Bombay Bullion Exchange was not very willing to reconstitute itself on the lines suggested by the committee for the absorption of the smaller units. So in June 1948, a small committee consisting of the representatives of the Bombay Bullion Exchange Limited, the Marwari Chamber of Commerce and the East India Chamber of Commerce was constituted. The committee submitted a draft memorandum to the Government of Bombay, which was approved by the Government. On the basis of this memorandum and the suggested articles of the association, the Bombay Bullion Association Ltd. was incorporated on 17th September 1948 as public limited company under the Indian Companies Act. The Bombay Bullion Exchange went into voluntary liquidation and its assets were taken over by the new Association. The Government of Bombay and later the Government of Maharashtra supervised the regulation and control of forward trading in bullion by the Bombay Bullion Association from 1947 to 1960 when the Government of India took over the regulation of this trade. The Government of India on the recommendations of the Forward Markets Commission recognised the Bombay Bullion Association Limited on 26th October 1960, and the Forward Contracts Regulation Act, 1952 was made applicable to the association, under the supervision of the Forward Markets Commission. The Association, with it's highly developed organisation carried out it's policies of regulation and control smoothly. However certain problems had developed in this trade.

For the past many years, a steady upward trend has been persisting in bullion prices, created by the scarcity of supplies and the rising demand created by inflationary trend. The bulls have therefore dominated the market. Some strong speculators have been resorting to the cornering of stocks; the bearers by their behaviour have aggravated the situation. As a result, there have been frequent crises on the bullion market. The authorities of the Association who tried to resolve the crisis did not get sufficient co-operation from the members. The bullion market could be manipulated for the personal ends of a few speculators to the detriment of the bullion trade as a whole and the consumers at large. The association has been endeavouring to make the market run smoothly and steer it out of difficulties with the co-operation of sober traders and the Government.

Forward trading in bullion is quite widespread. It means a contract to buy or sell a specified quantity and quality of bullion at an agreed price at a future date. The prices are determined by the expectations of the buyers and sellers which in turn are influenced by multiple internal and external factors. Badla transactions which mean carrying over the outstanding transactions from one settlement to the next settlement are common. When the price quoted in the current settlement is lower than for the next settlement it is described as sidha badla, if it is higher it is known as ulta badla. These badlas attract graded automatic margins of steep progression payable by traders at the rates prescribed, depending on the magnitude of fluctuations and badla differences. If there are idle funds available, bankers and financers who want to earn interest enter the market and provide the funds for badla transactions and these transactions are described as Vyaj-badla as interest charges have to be paid on these funds. The return on these funds is 9 to 12 per cent

There are certain types of contracts entered into by the traders, tejimundi, fatak, jots, gaii, which are considered to be illegal. Since the Bombay Forward Contracts Control Act, these forward transactions are controlled by the Government and certain regulatory provisions are included in the Act. The unit of forward transactions in gold was 250 tolas and in silver 1 bar weighing 2,800 tolas. They are effected every month and generally there are twelve settlements during the year (except when there is an additional month, Adhik Mas) and are settled on the 15th day i.e. Pournima of the month. The board of the Association can fix the days for settlement. The rules about the delivery, purchase price, tender able bullion and auction are all framed by the board. The forward trading is under the supervision of the Forward Markets Commission. The Commission examined all aspects of the question of forward trading in bullion in the country, and suggested it's continuation on the basis of it's large volume and the long tradition in this business. It suggested that the trading should be limited to a few cities in the country including Bombay where both silver and gold forward trading should continue. So the Bombay Bullion Association continued functioning under the supervision of the Commission. There are the bye laws of the Association regulating the business hours of trading unit, contract period, settlement of business, etc. The functionaries on the forward market are many. The Choksies are the wholesale dealers in gold and silver. They were the importers earlier and now also hold large stocks of bullion. Shroffs or the indigenous bankers act as middlemen between the Choksies and the upcountry dealers. There are the speculators who deal on their own, and the brokers who enter the market on behalf of their clients. The jobbers buy and sell at narrow prices and square up to their outstanding business at the end of the day. They minimise the risk on the market and import liquidity. Jewellers and jari makers are also large purchasers of bullion for their professional work.

Spot Trading: The production of gold and silver in India is relatively small. Yet the demand for bullion is very large. Ready transactions are effected over the counter against cash payment and the trading is done either directly by the public or through the dealers. Standard marked bars (called *lagdies*) of standard fineness are available in the market. The trade is based on the confidence that the clients have in the seller. The spot market is constituted of Choksies *i.e.* the wholesale dealers, the retail dealers, the goldsmiths, the brokers and the commission agents. The market is well organised, and the prices are widely known. The bullion market is spread all over the country. The largest and the best organised is the Bombay Bullion Market, as Bombay is the chief distributing and entrepot centre for bullion. Bombay also gives the facilities for refining and assaying, and from all over the country the bullion comes here for being melted, refined and cast into commercial sized bars. Distribution of bullion throughout the country is done through Bombay. The vast and prosperous population of Bombay, the large numbers of jewellers, dealers and artisans have made Bombay the centre of this large established trade.

BILL MARKET SCHEME

The absence of a well.developed bill market has been considered to be a serious lacuna in the money

market. This limited the scope for short-term investment by the commercial banks.

Sale and repurchase of bills was limited in value. So to popularise the use of bills and develop the bill market, the R.B.I, in January 1952 introduced a bill market scheme under Section 17(4)C of the Reserve Bank of India Act. This section enables the R.B.I, to make advances to scheduled banks against security of usance promissory notes or bills drawn or payable in India and maturing within 90 days from the date of advance. Under the bill market scheme the scheduled banks woulp convert the demand promissory notes obtained by them in respect of loans, overdrafts and cash credit granted to them into usance promissory notes maturing within 90 days and to lodge such usance promissory notes with the Reserve Bank of India for refinance. The minimum limit for an advance which a bank could take from the Reserve Bank of India at any one time under the scheme was in the first instance Rs. 25 lakhs, and each individual bill tendered by the scheduled banks to the Reserve Bank of India for advances would not be less than Rs. 1 lakh. During the first year of the operation of the scheme, it was confined to the scheduled banks with deposits of Rs. 10 crores or more on 31st December 1951.

In 1953, the scheme was extended to scheduled banks having deposits of Rs. 5 crores or more provided they were in possession of a licence granted by Reserve Bank of India. The advances to banks were to be made at 0.5 per cent below the bank rate, and this was in order to popularise the scheme. A further inducement was that half the cost of the stamp duty incurred in converting demand bills into time bills was to be borne by the Reserve Bank of India. The objective of the scheme was to popularise the use of bills on the money market. Advances of the Reserve Bank of India to scheduled banks under the bill market scheme increased from Rs. 81 crores in 1952 to Rs. 3,23 crores in 1965-66.

In 1954, the scheme was extended to all licensed scheduled banks and the minimum amount which could be borrowed was reduced to Rs. 10 lakhs, and the minimum amount of each individual bill tendered as security was lowered from Rs. 1 lakh to Rs. 50,000. Thus the advances rose from Rs. 66 crores to Rs. 1,48 crores. By 1956, with the increasing use of the scheme, the R.B.I, removed the inducements of bearing cost of the stamp duty and the lower rate of interest. The rate of interest charged was 3.5 per cent. The Reserve Bank of India reserved the right to vary the rate of interest charged at its descretion. The effective rate of interest was 4 per cent and this was the common rate for all the advances to the banks from the Reserve Bank of India. When the bank rate was raised to 4 per cent in 1957, the stamp duty on usance bills was reduced to 50 ps. per 100 rupees and the minimum amount which can be borrowed was reduced to Rs. 5 lakhs. Even then the borrowing under the scheme was costlier than that against the government securities.

In 1958, for restraining the reliance of the banks on Reserve Bank of India under the scheme, for the busy season, the credit limit was reduced to 50 per cent of the previous year's level and the period of the availability upto the end of May 1960 instead of for the whole year. In October 1958, the scheme on an experimental basis for one year was extended to export bills, the minimum amount of advance being Rs. 22 lakhs. Reserve Bank of India agreed to bear half the cost of stamp duty on the usance promissory notes and the interest rate chargeable was 4 per cent. The scheme was liberalised in 1959. The minimum amount that could be borrowed was lowered to Rs, 1 lakh and the Reserve Bank of India further agreed to bear the entire duty on the usance promissory notes lodged with it as Security.

In 1960 the penal rates were introduced by the Reserve Bank of India to restrain the credit expansion of the commercial banks. The three tier rate system was introduced in 1951, yet the Reserve Bank of India was liberal in sanctioning limits under the bill market scheme to meet the genuine credit needs of industry and trade. Special larger credit was provided on bills to the sugar and jute mills. Refinancing facilities and additional quotas under the scheme were provided to the banks providing advances to small scale industries and co-operative banks. Similarly for export finance, under the export scheme, advances were given on the individual usance promissory notes/Again on 23rd March 1963, Reserve Bank of India introduced a new scheme *viz.*, 'export bill credit scheme'. The advances under the scheme increased from Rs. 11.8crores in 1963 to Rs. 26.69 crores in 1964. Thus the bill market scheme did encourage the use of bills which are known as self liquidative instruments on the money market.

With the policy of selective credit liberalisation of the Reserve Bank of India, the bill market scheme was extended to the food procurement and allied activities by Government agencies. The scheme was revived in November 1955. Under this, the banks were eligible for refinance from Reserve Bank of India at the bank rate without limit in respect of supplies, packing credits to exporters and advances to State Governments, their agencies and Food Corporation of India for procurement, storage and distribution of food grains. But this amount of refinance was to be taken into account in computing the net liquidity position of the bank which determines the cost of Reserve Bank of India accommodation for all other purposes. Thus the bank's availability for such finance is limited. But the refinance under the bill market scheme against advances to State Governments, their agencies and Food Corporation of India for food procurement, storage and distribution as were in excess of the maximum level of such advances in 1965 were excluded, and this was to help the State in its food policies and to enable the banks to satisfy the seasonal demand. But the amount of facilities sought by the banks in the busy season of 1966 was small, but this was partly due to the small demand for credit in 1966 and so the smaller reliance of the banks on Reserve Bank of India's advances. Banks were also afraid to borrow more under the scheme because of its impact on their net liquidity position. Yet the scheme has become a permanent feature of the credit system in the country and has given some elasticity to the money market. The advances under the scheme have been rising and there is a hopeful future for the bill market. The commercial banks can raise the necessary resources for meeting the mortgaging genuine needs of trade and industry without the need for their government securities. This provides the scope to the banks to extend their activities to the rural areas and the small customer in the urban areas.

The bill market scheme was intended mainly for the development of the market and an increase in the

volume of bills. But the new techniques of overdraft adopted by the commercial banks and the decline in the use of bills in financing trade have reduced the need for a wide bill market, which was traditionally an important part of the money market in Western countries. With the nationalisation of commercial banks, the supply of credit by the commercial banks tends to be rather productivity.oriented than security.based and also limits the scope for bills and the bill market in India.

JOINT-STOCK COMPANIES

The modern joint-stock companies have evolved from purely proprie tary or partnership type of concerns of the past. The joint-stock company as it exists today is a more stable and suitable form of business organization through which instability and risk involved in the business of a single individual or a partnership concern can be reduced. Under joint-stock company, a number of merchants come together and share the risk jointly.

A The joint-stock companies were for the first time registered according to the Act XLIII of 1850 and afterwards they were regulated by the Act VI of 1882.

Since 1876, the number of companies in Bombay and their capital have steadily increased in consequence of the natural expansion of the city and its trade interests. The same is revealed from the data given in the following statement:—

Year	No. of companies	Nominal capital (Rs. in lakhs)	capital (Rs. in	Average number of companies registered annually
1875- 76	75	859	536	
1885- 86	147	147 1028		14
1895- 96	191	1322	880	14
1905- 06	241	1889	1303	14

The number of registered companies further increased to 308 during 1908-09. Out of 308 companies, 169 were mills and presses, 97 trading companies, 18 banking and insurance companies, 8 land and building companies, 7 mining and quarrying companies, 3 sugar manufacturing concerns, 2 ice manufacturing concerns, one tea and planting company and three others. The nominal capital of all the 308 companies together amounted to about Rs. 29 crores, whereas the total paid-up capital amounted to Rs.19 crores. Besides, at the close of 1908.09 the number of companies limited by guarantee in Bombay city was eight, of which six were insurance companies.

In the absence of records regarding the companies in Bombay city from 1908-09 upto 1957-58, it is difficult to trace the gradual evolution of joint-stock companies for that period. The year 1958-59 recorded a further increase in the number of joint-stock companies in Greater Bombay, and the same stood at 4,156. Of this, the highest in number were the companies engaged in trade and finance as the same stood at 1,679 with the total authorised capital of Rs. 277 crores and paid-up capital of Rs.97 crores. Of the remaining number of 2,477 joint-stock companies, 890 were the companies engaged in the processing and manufacture of metals, chemicals and products thereof, 428 in the processing and manufacture of foodstuffs, textiles and leather products; and 502 in processing and manufacture not classified elsewhere. Besides in 1958-59, there were 275 companies engaged in personal and other services; 117 in construction and utility services; 90 in community and business services; 71 dealing in transport communication and storage; 64 in mining and quarrying; and 40 in agriculture and allied activities.

The joint-stock companies are divided into two kinds *viz.*, the private limited companies and the public limited companies. The Indian Companies Act of 1956 describes a private company as one which restricts the right to transfer its shares, if any, limits the number of its members to fifty and prohibits any invitation to the public to subscribe for any shares or debentures of the company. The Act further lays down that no company, association or partnership consisting of more than 20 persons shall be formed for the purpose of carrying on any other business that has for its object the acquisition of gain by the company, association or partnership, or by the individual members thereof, unless it is registered as a company. Thus, registration is made compulsory for these companies.

The number of joint-stock companies in Greater Bombay in 1967, 1971 and 1976 is shown below:—

Year	limit	oanies ed by ares	Comp limit guaran assoc not fo	Total	
	Public	Private	Public	Private	
1967	892	4133	164	12	5201
1971	908	5408	183	16	6515
1976	1206	7623	202	32	9063

During 1975-76, Greater Bombay accounted for about 88 per cent of the total joint-stock companies in the State. On 31st March 1977, there were in all, 9,588 joint-stock companies registered in Greater Bombay and the same accounted for 88 percent of the total of 10,895 in the State. As against this, the number of registered joint-stock companies in India stood at 48,057 and the number of companies in Greater Bombay accounted for about 20 per cent of the total in India. Out of 9,588 registered joint-stock companies in Greater Bombay, 1,258 were public limited companies, 8,085 were private limited companies, and 245 were grouped as associations not for profit and guarantee companies.

The following statement gives the distribution of joint-stock companies in Greater Bombay as they existed on 31 st March 1977:—.

District/State	Government companies		Non government companies		Total		Associations not for profit and	
		Private	Public	Private	Public	Private	guarantee companies	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Greater Bombay	15	23	1243	8062	1258	8085	245	
Maharashtra State	23	34	1450	9066	1473	9100	322	

On 31st March 1983, there were in all 17887 Joint-stock companies registered in Greater Bombay, of which 16617 were companies limited by shares and 270 were companies limited by guarantee and not for profit.

SECTION II—TRADE AND COMMERCE TRADE ROUTES

Bombay figured in the writings of ancient travellers as one of the ports of Thane coast, which once played a leading role in the foreign commerce of Western India. A steady increase in the external commerce of Bombay was especially noticed since the beginning of the nineteenth century. The opening of the Suez Canal in 1869 effected a complete revolution in the carrying trade of Bombay which had upto that date been restricted by a lengthy voyage round the Cape of Good Hope. With the improvement of communications and means of conveyance as also concessions given by the then Government, Bombay gradually developed into the chief centre of commerce both internal and external. Bombay's status as the 'Gateway of India' even today remains unchallenged.

Now, the Bombay Port Trust, the domestic and the international air-port, Central and Western railway routes and four national highways have provided Bombay with good communication infrastructure connecting it with all the important places within the country. Principally by reason of its present position, Bombay plays a vital role as the centre of entrepot trade of the country.

The internal or inter-regional and international trade routes emanating from Bombay which are responsible for developing Bombay into one of the biggest business and trade centres can be classified according to different modes of transport used.

In 1909, (The Gazetteer of BombayCity and Island, Vol I, 1909.) the internal or inter-regional trade routes connecting Bombay with other States in India consisted of road routes, rail routes and coastal routes. Bombay was connected by rail-routes of the Great Indian Peninsula Company and Bombay, Baroda and

Central India Railway Company. The Great Indian Peninsula Railway connected Bombay with southeastern and north-eastern portions of India. Whereas the Bombay, Barodia and Central India Railway connected Bombay with Gujarat, Rajputana, Central India, United Provinces and Punjab.

The bulk of trade was in cotton and grain brought from the Deccan and Central Provinces by the G.I.P. Railway and from Gujarat by the Bombay, Baroda and Central India Railway.

The inter-coastal trade routes connected Bombay port with the ports of Calcutta, Madras, Cochin, Karachi, Kaiidla, Porbundar, Janjira, Goa, etc. The chief items of coastal imports were raw cotton, rice, wheat, sugar, raw wool, opium, spices; whereas the chief items of coastal exports were salt, cotton piece goods, twist cotton yarn, metals, raw silk, sugar, etc.

The trunk routes of the Central and Western railways originating from Bombay connect her with the markets all over India. Bombay is the focal point of rail routes radiating in the northern, eastern and southern directions.

The three rail routes *viz-*, Bombay-Pune-Bangalore-Guntakal-Madras; Bombay-Bhusawal-Nagpur-Howrah; and Bombay-Bhusawal-Itarsi-Satna-Allahabad-Kanpur on the Central railway have afforded a good network of communications to important markets in the State of Maharashtra as well as to eastern, southern and central India.

The two railroutes on the Western railway *viz.*, Bombay-Baroda-Mathura-Delhi, the same reaching upto Jammu Tawi touching Saha-ranpur-Ludhiana-Jullunder; and Bombay-Baroda-Ahmedabad, have made direct transport facility available to entire North India as well as to Gujarat and Rajasthan.

The principal commodities arriving in Bombay from Madras-Guntakal-Bangalore-Pune-Bombay rail-route of Central railway are oil-cake from Davangere and Raichur; chemicals from Amarnath; tea from Cochin and paper from Dandeli. Among the other principal commodities arriving in Bombay from other rail routes including iron and steel products from Bhilai, Ganour, Bhatinda, Indore; oil-cake from Amritsar in Punjab and Akola, Dhue, Badnera and Tumsar in Maharashtra; paper from Ballarshah in Maharashtra and from Jagdhari; cotton textiles from Delhi, Ahmedabad; ferro-manganese from Tumsar and artware from Morarabad and Jaipur.

Besides these rail routes, Bombay Port Trust railway also undertakes loading and unloading of foreign traffic carried through Bombay port.

The Bombay Port Trust commissioned with effect from 1st January 1915, owns and operates its own railway which is connected to the broad gauge main lines of the Central and Western Railways at its intercharge railway yard at Wadala. The Railway runs for about 11 km. of straight route between Ballard Pier and Wadala, and has an extensive network of tracks of about 25 kilometres. It serves the docks as well as the important installations and factories on the Port Trust estates. This railway itself handles over 4 million tonnes of traffic annually. The same represents about 60 per cent of total rail-borne goods traffic from Bombay city.

Bombay is also served by four important National Highways. These four National Highways starting from Bombay are:—(1) Bombay-Agra Road, (2) Bombay-Ahmedabad Road; (3) Bombay-Pune-Bangalore Road; and (4) Bombay-Goa Road. The Bombay-Agra National Highway is the most important artery of traffic to the northern and eastern Maharashtra as well as to Upper India. The road further reaches Delhi and Amritsar. The principal commodities arriving in Bombay from this route consist of vegetables from Nashik; fruits from Jalgaon; readymade garments from Bhatinda; engineering goods from Ludhiana and Jullunder; and artware and handicrafts from Amritsar, etc. The Bombay-Ahmedabad-Jaipur national highway is mostly used for transportation of raw cotton from Ganganagar; cotton textiles from Ahmedabad, Surat, Surendranagar and Sidhapur; textile yarn from Jamnagar; and non-electrical machinery from Rajkot. The goods transport on Bombay-Pune-Bangalore-Madras road consists of cotton textiles from Madras, Mysore, Bangalore and Gokak; engineering goods from Bangalore and Pune; textile yarn from Gokak; iron and steel products from Khopoli, etc. The Bombay-Goa Road is used for the transport of cashewnuts, coconuts, jackfruits, and mangoes from Konkan and Goa.

Bombay is also connected with all minor and major ports on the Western coast. They are Janjira, Shriwardhan, Harnai, Dabhol, Jaigad Ratnagiri, Vijaydurg, Malvan and Panaji on Konkan coast; Karwar, Mangalore, Calicut, Cochin and Tuticor in on West coast and Madras, and Calcutta on East coast.

The trunk airroutes originating from Bombay connect Bombay with almost all the important air-ports in the country such as Hyderabad, Cochin, Bangalore, Calcutta, Madras, Delhi, etc. Principal commodities arriving in Bombay through these airroutes consist of costly commodities, such as art silk goods, woollen and silk carpets, fur goods, readymade garments, jewellery, perfumes, essential oils, etc.

The international trade carried through Bombay Port constitutes almost two-third of the total foreign trade of Bombay. The waterways emanating from Bombay port connect Bombay with adjacent countries such as Burmah, Sri Lanka, Pakistan and Bangla Desh and also to the African countries, Australia, New Zealand, Canada, Far Eastern countries, Japan, United Kingdom, United States of America, U.S.S.R., West Germany and many other American, Asian and European countries.

A large variety of commodities arrive in Bombay port from the above mentioned countries. Some among the imported commodities are metal and metal products, motor vehicles, their parts and accessories, food grains, synthetic fibres, fertilisers, etc.

CHANGES IN THE PATTERN AND ORGANISATION OF TRADE

With the changes in the socio-economic structure of Bombay, the pattern and organisation of trade has undergone many striking changes. Under the Portuguese rule the trade of Bombay was infinitesimal and was confined only to the sale of dried fish and coconuts to neighbouring coastal towns. From 1664 to 1688 Bombay gradually developed into the chief centre of English commerce with Western India. In 1757 Bombay was described as the grand store-house of all Arabian and Persian commerce. By the third decade of the 18th century, Bombay's commerce was in the most flourishing condition. During the first half of the nineteenth century, the export trade of Bombay was confined chiefly to Asian countries, and United Kingdom and after 1870 to other European countries. However, the internal trade had not received the same attention as the foreign trade at the hands of British Government. For several years after Bombay had passed into the possession of the East India Company, the internal trade of the Island of Bombay was hampered by lack of capital, external warfare, and epidemic diseases. Only since 1870, the retail trade, commission and agency business and the mill-industry have greatly developed. In the middle of eighteenth century, the traders except grain traders were free from government interference and every encouragement was ghen to fishermen, vegetable growers etc., to bring their produce to Bombay market.

The variegated changes which have occurred in the location, pattern, organization and composition of trade in Bombay since the end of nineteenth century may be the composite result of the changes in the status and composition of demand and supply of commodities, improved means of transport, technological advance, growth of banking, etc.

With the spectacular improvement in the means of transport and communications, trade is no longer confined to a limited area or to a limited variety of commodities. The improvements in the means of transport such as air-ways, had led to the opening of the new internal and external traderoutes. These increasing trade routes have increased the accessibility of Bombay with all big and small markets spread in the distant corners of the country as also with the foreign markets. As Bombay lies well away from agricultural regions, almost all the foodstuff consumed by Bombay populace is brought in Bombay from these regions. Before the opening of these various traderoutes, the external trade was mostly carried by the Bombay port; while the internal trade was carried by the rail routes of the Great Indian Peninsula Railway and Bombay, Baroda and Central India Railway and also by the inland waterways. Even then the trade was limited to specific commodities and with specific destinations but the process used to be a time consuming one.

Now, there has been a sizeable increase in the volume of trade. In keeping with this increase, the trade has become more and more organized. There has been vital changes in the organization of trade. The system of different categories of traders undertaking different trade activities and representing their trade problems through one or different trade organizations or associations, though very old, has recently gathered great momentum in Bombay. During the nineteenth century, only nine trade organizations were established in Bombay, now, there is a large number of trade associations representing almost all trading commodities.

Besides, there are export promotion councils and exporters' associations organised for undertaking various measures so as to give impetus to the exports of specific commodities. The Bombay regional office of the Trade Development Authority set up in 1970 under the control of Ministry of Commerce also helps to expand export activities,. Consumers on the other hand who play a vital role in the trade activities have also started organizing themselves to solve their own problems through societies such as Consumers' Guidance Society, Consumers' Association of India, etc.

The State Trading Corporation, with its branch office at Bombay and the Maharashtra State Co-operative Marketing Federation Limited also play a pivotal role in the trading activities in the State. The former generally organises and undertakes trading activities with other State trading branches and foreign countries in commodities approved by the Central Government; while the latter undertakes purchase and distribution of mineral oils, sale of potatoes, onions, fertilisers, etc. Bombay is also an important centre of forward trading in oils and oilseeds such as castor seed,groundnut, cottonseed, linseed, groundnut oil, groundnut kernels, pepper and cotton.

EXTENT OF EMPLOYMENT

Greater Bombay as it stands today is the financial and commercial capital of the country and the headquarters of several all India financial institutions and some of the largest industrial houses in the country. Bombay as a port helped the East India Company to a great extent in developing the overseas trade with India. After transferring its headquarters from Surat to Bombay, the Company left nothing unturned to encourage immigration, weavers and artisans from Surat and other places were offered well paid employment, land on easy terms and financial assistance in developing their business.

Now, Bombay's accessibility to every State in the country and with foreign countries by land, sea and air has proved a potential factor in promoting industrial and commercial functions in Bombay. The erstwhile fishing village was thus destined to be the premier port of India, as it offered all the natural pre-requisites of a harbour to be able to serve the entire Western seaboard of over one thousand miles.

With the opening of new trade routes, of Greater Bombay attracted more and more people seeking employment in one or the other avenue of trade and commerce.

Trade and commerce are the important sectors of the economy from the point of view of employment also. They afford employment to a larger number of people. Having established its claim as a prominent industrial and business centre, Bombay attracts entrepreneurs from all parts of India for establishing industrial and

commercial enterprises.

According to the census returns of 1901, more than one-tenth of the total urban population was engaged in trade of one kind or another.

The number of persons engaged in trade and commercial activities of Bombay has shown a rapid increase since 1901. But due to the absence of a common method of presenting occupational data in decennial census returns, a comprehensive picture of the growth of employment in trade and commerce and the occupation wise change in the employment pattern cannot be attempted. However, the fact of increasing absorption of man power in trade and commerce can be seen from the increasing percentage of persons engaged in trade and commerce to the total working population in Bombay in the recent decennial census returns. The 1931 Census showed 93,835 or 14 per cent, as earners following trade as the principal occupation against the total of 634,895 earners then engaged in different means of livelihood. The 1961 Census recorded the number of persons engaged in trade and commerce as 3,03,817 accounting for 18 percent of the total working population which stood at 1,686,668.

The following statement throws light on the extent of employment in trade and commerce in 1961 and 1971.

The 1971 Census showed an increase in the number of persons engaged in trade and commerce and the same was enumerated at 491,515 or 22.36 per cent of the total working population of 2,198,098.

EMPLOYMENT IN TRADE AND COMMERCE IN GREATER BOMBAY

	1961					
Category	Persons	Males	Females			
Wholesale trade	44,129	42,754	1,375			
Retail trade	212,316	198,946	13,370			
Miscellaneous 	47,372	44,969	2,403			
Total	303,817	286,669	17,148			
stro C	246	to				
III a		1971	Uc			
Category	Persons	Males	Females			
Wholesale trade	41,270	39,960	1,310			
Retail trade	327,669	313,102	14,567			
Miscellaneous	122,576	111,840	10,736			
Total	491,515	464,902	26,613			

Of 368,939 persons engaged in various activities and types of trade handled in Greater Bombay in 1971, 41,270 i.e. about 11 per cent were engaged in wholesale trade and 327,669 were engaged in different types of retail trade, the details of which are shown in the table No. 11.

TABLE No. 11
Extent of Employment in Trade and Commerce in Greater Bombay, 1971

_	_	T				1
		Particulars	Persons	Males	Females	
	(A)	Wholesale trade in textiles, live animals, beverages and intoxicants.	11,055	10,790	265	
	(B)	Wholesale trade in fuel, light, chemicals, perfumery, ceramics, glass.	6,150	6,015	135	
	(C)	Wholesale trade in wood, paper, other fabrics and skin and in edible oils.		5,610	170	
	(D)	Wholesale trade in all types of machinery, equipments, including transport and electrical equipments.	3,170	3,010	160	
	(E)	Wholesale trade in miscellaneous manufacturing.	15,115	14,535	580	
	(F)	Retail trade in food and food articles, beverages, tobacco and intoxicants.	1,13,821	1,05,125	8,696	zetteer
	(G)	Retail trade in textiles	39,160	38,425	735	
	(H)	Retail trade in fuel and other household utilities and durables.	32,370	31,445	925	
	(1)	Retail trade in others	77,716	74,220	3,496	
	(J)	Restaurants and hotels	64,602	63,887	715	
	(K)	Financing, insurance and Real Estate and Business Services.	1,22,576	1,11,840	10,736	

FOREIGN TRADE

The Bombay Customs Zone plays a major role in the foreign trade of the country. During 1965.66, the value of total imports of merchandise in and exports including re.exports from Bombay Customs Zone by sea, air and land amounted to Rs. 58,747 lakhs and Rs. 19,838 lakhs, respectively. These accounted for 41.71 percent of total imports during 1965.66 in the country and 24.62 per cent of exports from all customs zones in the country. The following statement (*Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce, Government of India, Calcutta.*) shows the value of imports and exports to and from the Bombay Customs Zone by sea, air and land:—

(Rs in lakhs)

	Exports (including Reexports)		Imports		
Year	All Customs Zones	Bombay Customs Zone	All Customs Zones †	Bombay Customs Zone	
1965-66	80,564	19,838	1,40,852	58,747	
April and May 1966	12,772	3,161	22,714	9,514	
June 1966 to March 1967 .	96,723	19,283	1,67,461	64,940	
1967-68	1,19,867	25,331	1,97,428	83,996	
1968-69	1,35,787	37,548	1,90,863	76,777	
1969-70	1,41,327	39,143	15,820	69,121	
1970-71	1,53,516	53,223	1,63,420	72,728	
1971-72	1,60,701	49,962	1,82,454	83,819	
1972-73	1,97,053	63,781	1,86,744	82,135	
1973-74	2,52,340	89,805	2,95,537	1,06,773	
1974-75	3,30,414	1,20,277	4,46,810	1,26,445	

+ Excludes figures in some cases for certain consignments on Government accounts.

As there was a change in the exchange value of the rupee from 6th June 1966, the figures after devaluation period are not comparable with those of the pre-devaluation period. Therefore the statistics of value of foreign trade in 1966-67 is divided into two parts—one relating to April and May 1966 and other to subsequent months from June 1966. The above cited statistics reveals that from 1967-68 to 1973-74, Bombay Customs Zone carried larger amount of imports into the country than the exports including reexports. As against this trend, Bombay Customs Zone in the year 1974-75 recorded 28.30 per cent of imports into the country and 36.40 per cent of exports including re-expoits from the country.

Sea-borne Trade: The Port of Bombay is the keystone of Bombay's prosperity. In the matter of natural facilities for shipping, Bombay is considered as one of the most fortunate of the world's ports.

Under the rule of the Portuguese, the trade of Bombay was confined to the sale of dried fish and coconut in small quantity to the neighboring coastal towns. With the transfer of the island from the Portuguese to the British in 1665, the future of this port came to be linked with the expansion of the East India Company. Under the East India Company's rule measures for encouragement of trade were forthwith promulgated.

As early as in the first quarter of the eighteenth century, considerable attention was paid to the exportation of raw cotton. There was reduction of customs duty from 6 to 2 1/2 per cent in 1795. The port attracted continuous immigration of native traders from Surat.

The import and export trade of Bombay grew steadily from 1800 onwards, with short-lived aberrations. This is evidenced by the subjoined statement. The passing of Lord Melville's Bill in 1813 threw open the trade of India to the merchants of Liverpool, Glasgow and other great trading centers.

The following statement gives statistics of foreign and coasting trade of Bombay, 1801-02 to 1906-07 (Gazetteer of Bombay City and Island, Vol. I, 1909. p. 417.):—

(Rs. in lakhs)

	Year	Foreign	Coasting	Total
Total value in	180102	1,76	2.30	4,06
Average value for decade ending .	1809-10 1819-20 1829-30 1839-40 1849-50	2,29 2,59 4,41 6,64 10,70	3,30 2,08 1,25* 1,58* 8,54	5,59 4,67 5,66 8,22 19,24
Total value in	1850-51	13,67	11,77	25,44
Average value for decade ending		19,47 48,84	6,72 8,07	26,19 56,91
Total value in	1870-71	40,63	5,80	4,643
Average value for decade ending	1889-90	41,54 67,54 80,57	10,45 17,52 21,12	5,199 8,506 10,169
Total value in	1900-01	69,73	25,47	95,20
Average value for period ending .	1906-07	95,77	23,34	1,19,11

^{*} Complete figures for the coasting trade of these two decades are not available.

The following statement shows the progress of imports and exports in merchandise and treasure with foreign countries from 1801.02 to 1900.012:—

The following statement shows the progress of imports and exports in merchandise and treasure with foreign countries from 1801.02 to 1900--01(*Gazetteer of Bombay City and Island, Vol I, 1909, pp. 418.19,*):—

(Rs. in lakhs)

Imports				Exports				
	Merchandise Treasure Total		Merchandise			Treasure	Total	
				Foreign	Indian	Total		
Total value in 1801-1802	72	22	94			80	1	81
Total value in 1850-1851	4,54	2,36	6,90			6,60	16	6,76
Total value in 1870-1871	11,52	3,31	14,83			24,82	97	25,79
Total value in 1900-1901	26,34	976	36,10			27,16	6,46	33,62

The import trade of Bombay upto 1869.70 was confined chiefly to the United Kingdom, China and the Persian Gulf, though there was some trade with France, Germany and Portugal. Owing to the abolition of the East India Company's monopoly and the opening of the Suez Canal (1869), the current trade from 1870 showed a disposition to return gradually to the channels used before the discovery of the passage round the Cape. Trade with the Mediterranean cities started increasing. London still retained its supremacy and monopolised about 60 per cent of the trade of the Indian Empire, but Trieste, Venice, Geneva and Marseilles were important commercial rivals. During the last quarter of the 19th century, there was a slow rise in the trade with Italy, Austria, Hungary, Belgium and Germany. Japan emerged as an important trading country with Bombay at the opening of this century. Among African ports, Mauritius alone was an important exporter of sugar to Bombay. America, which possessed practically no trade with Bombay till 1879.80, acquired a share

aggregating at successive periods since that date to Rs. 22, 34 and 56 lakhs.

During the first half of the nineteenth century the export trade of Bombay was confined chiefly to Asian countries and the United Kingdom but subsequent to 1870 other European countries headed by France, commenced to acquire an increasing share. The value of these shares at successive periods is shown below:

Country	1870- 71 to 1879- 80	1880- 81 to 1889- 90	1890- 91 to 1899- 1900	1900- 1901 to 1906- 07
France	180	452	456	394
Belgium	5	229	267	314
Germany	13	36	199	262
Italy	74	275	212	229
Austria- Hungary	91	173	137	156
Spain	4	20	13	43
Holland	13	25	45	39

The chief articles imported from foreign countries in Bombay comprised cotton piece-goods from the United Kingdom, America, Belgium, Germany and Holland; and silk manufactures from United Kingdom, France, Italy, Austria, Hungary and China. Machinery and mill requirements as also woollen manufactures were mainly imported from the United Kingdom, while raw silk was brought from China, Persia and the Straits Settlements. Sugar was imported to Bombay from Mauritius, Austria, Hungary, Germany, United Kingdom, France, Belgium and Java Metals were mainly imported from the United Kingdom. Kerosene and petroleum were imported from America and Russia, while liquors came mainly from the United Kingdom, France, Germany and Belgium.

At the beginning of this century raw cotton Was exported from Bombay to Japan and the United Kingdom. Cotton twist and yarn were exported to China and cotton piece-goods to Gulf countries and Africa. The British Government had prohibited the import of Indian piece-goods in Great Britain with the motive to assure protection to the British cotton textile industry. This measure hampered Indian economic interests and adversely affected the textile industry in Bombay. The other articles exported from Bombay were wheat, oil-seeds, raw wool, opium, etc.

The history of Bombay in the second half of the nineteenth century is a remarkable record of progress in every direction. Railway communication with the interior was opened up in 1853. Steam coastal ferry services were inaugurated in 1866. Six cotton mills commenced working between 1854 and 1860. Bombay had become the cotton market of Western and Central India. The opening of the Suez Canal for traffic in 1869 revolutionised the maritime trade of Bombay. Besides, the year 1858 witnessed the exit of the East India Company after a chequered career of about two and half centuries and Bombay passed under the direct rule of the British Crown.

As a result of all these developments, there was a remarkable upward swing in the trade of Bombay Port. The demand for Indian goods from distant markets coupled with the impact of improved internal communications brought about a rise in imports and exports.

The traffic handled at Bombay Port since 1900-1901 showed a steady increase till 1913-14. The increase was more remarkably recorded in exports and by 1913-14, the quantity of exports was twice the quantity exported at the turn of the century. Imports, however, fluctuated around 2.6 million tonnes and the total value of imports and exports increased from Rs.53 crores in 1900-01 to Rs.95 crores by 1909-10 and to Rs.1,32 crores by 1913-14. During World War I, the imports declined, while the exports recorded a substantial increase. With the end of the War, the traffic declined sharply, but after the initial decrease, the value of imports and exports again picked up rapidly exceeding the pre-war levels.

Another achievement of the Port Trust in the pre 1914 period, was the construction of B.P.T. railway which was commissioned with effect from 1st January 1915. Before the commencement of the Port railway, the bulk of the traffic had to be conveyed from ship to rail and *vice versa* by cumbersome and expensive method of transportation by bullock carts which involved double handling and storage.

The volume of trade handled by B.P.T. Railway declined from 5.02 million tons in 1913-14 to 4.01 million tons in 1915-16 and then stood at 4.15 million tons in 1918-19. Even though, the declining trend existed for a short while after the termination of the War in November 1918 the traffic picked up rapidly and the figure for 1919-20 rose to 6.25 million tons. The increasing trend in the volume of trade was maintained till 1929-30, when it reached 6.69 million tons.

The interregnum between the two World Wars witnessed a substantial increase in the volume of traffic handled at the Port. The volume of imports well exceeded over three million tons a year between 1920-21 and 1929-30, however, the volume of exports showed a decreasing trend. It was succeeded by the world-wide depression of the early thirties which resulted in the contractions of the world trade and had its adverse effect on the imports-exports handled at the port. The volume of trade, both imports and exports, dropped to 4.7 million tons in 1932-33 from 6.7 million tons in 1929-30 and then fluctuated approximately to the level of 5.4 million tons till 1939-40. But the decline in exports was more severe than in imports.

The onset of World War II, did not immediately lead to the revival of traffic as had happened at the time of World War I. However gearing up the defence efforts along with the revival of industrial activity to meet the

needs of the defence led to the revival of trade handled at the Port to the earlier level of 6 million tons from 1941 onwards. With the entry of Japan into the War and her occupation of Burma, the Bay of Bengal was virtually closed to shipping. This resulted in the diversion of country's sea borne trade to the West Coast ports of Bombay, Karachi and Cochin. As these ports were not well-equipped to handle all the additional traffic this led to acute congestion and serious delays in the Bombay Port in 1943-44. The cessation of the War in Europe in May 1945 brought some relief to the Port traffic.

The partition of the country which accompanied the attainment of Independence in 1947 necessitated a total reassessment of the Port schemes not only for rehabilitation but also for expansion and modernisation, as much of the trade formerly handled at Karachi was diverted to Bombay Port. The long-term schemes for the development of port facilities and provision of equipment were integrated with the first and subsequent Five-Year Plans.

During 1947-48, the rupee value of exports from Bombay Port stood at about 80 crores which increased to about Rs. 1,81 crores in 1950-51. During the year 1950-51, the value of exports of cotton manufactures stood at the highest, as the same accounted for 56- 40 per cent of the total value of exports.

The tables No. 12 and 13 indicate the value of principal articles of Indian produce and manufactures, exported from Bombay port and principal articles imported into Bombay port from foreign countries.

TABLE NO 12

PRINCIPAL ARTICLES EXPORTED FROM BOMBAY PORT TO FOREIGN COUNTRIES

(Statistical Abstract of Bombay State, 1952.)

Articles	Total Exp		
	1948-49	1950-51	Percentage to total exports during 1950-51
1	2	3	4
Cotton manufactures	21,07,76,667	1,02,14,75,161	56.40
Seeds	3,22,72,450	11,26,35,744	6.22
Cotton wasts	4,30,21,012	10,36,48,098	5.72
Oils	3,30,40,984	9,10,22,523	5.03
Cotton-twist and yarn	76,56,329	7,74,25,831	4.28
Spices	1,97,88,944	6,89,37,171	3.81
Cotton-raw	13,67,40,853	4,64,11,428	2.56
Wool-raw	1,05,22,082	3,55,84,736	1.98
Hides and raw-skins	86,13,161	1,92,30,426	1.06
Metals and ores	1,12,74,405	1,82,87,124	1.01
Gums and resins	77,49,550	1,72,04,349	0.95
Tobacco	1,86,35,525	1,70,69,396	0.94

				l
Postal articles	1,06,22,639	1,47,61,395	0.82	
Opium	7,83,360	1,39,08,635	0.77	
Fruits and vegetables	43,30,488	1,23,51,244	0.68	
Haberdashery and millinery	17,75,870	1,21,39,637	0.67	
Leather	68,03,084	1,00,13,840	0.55	
Tea	1,23,99,775	92,13,343	0.51	
Wool manufactures	58,63,662	91,23,818	0.50	
Other textile manufactures	5,14,18,007	86,77,595	0.48	
Apparel	58,85,768	82,82,041	0.46	
Rubber manufactures	52,32,255	74,15,666	0.41	
Drugs and medicines	53,80,800	62,51,056	0.35	
Manures	14,59,181	62,24,461	0.34	
Bristles	57,13,928	43,62,884	0.24	
Chemicals	31,46,129	40,94,402	0.23	retteers
Wood and timber	34,83,345	34,44,241	0.19	
Provision and oilmen's Stores	64,84,069	33,21,684	0.18	
Art works	9,95,969	31,47,437	0.17	
Myrobalans	11,95,383	24,51,472	0.14	
Fish (except canned fish)	19,51,410	23,86,489	0.13	
Dyeing and tanning substance except myrobalans.	6,67,066	21,65,154	0.12	
Hemp-raw	7,98,398	12,26,928	0.07	

Soap	46,07,153	2,88,001	0.02
Oil-cakes	3,53,852	2,41,334	0.01
Grain, pulse and flour		N.A.	
Jewellery (excluding imitation jewellery etc. also plates of gold and silver).		N.A.	
Other articles	4,47,23,403	3,65,42,804	2.00
Total	72,61,66,957	1,81,09,67,548	100.00

TABLE No. 13
Principal Articles Imported into Bombay Port from Foreign Countries (Statistical Abstract of BombayState, 1952.)

	Total Ir	Percentage to total	
Articles	1948-49	1950-51	imports during 1950-51
	Rs.	Rs.	
1	2	3	4
Cotton-raw	55,53,00,505	90,97,59,959	27.96
Oils	21,13,61,455	26,76,95,995	8.23
Machinery and mill work	33,12,36,301	42,17,74,476	12 96
Grain pulse and flour	37,75,99,927	27,21,82,036	8.37
Metals and ores	15,43,55,158	21,22,67,721	6.52
Artificial silk	11,72,95,459	13,94,98,500	4.29
Dyeing and tanning substances .	11,93,13,806	11,82,80,950	3.64
Motor cars and motor cycles, etc	14,77,87,258	10,68,13,371	3.28
Instruments and apparatus	9,69,19,183	9,50,54,110	2.92

Drugs and medicines Fruits and vegetables 4,03,09,573 5,43,87,711 1.67 Paper and paper postal articles not specified Chemicals and chemical preparations. Manures (excluding) sil. cakes) Wool-raw 2,36,93,901 3,52,13,777 1.08 Hardware 3,47,08,528 2,67,37,928 0.82 Provision and oil-men's store. Spices 1,68,55,711 2,20,28,387 0.68 Starch, dextrine and ferina 2,10,27,192 2,18,69,365 0.67 Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts thereof Wool Manuratures manufactures Staple fibre yam 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30					1
Paper and paper 7,55,74,511 5,38,80,508 1,66	Drugs and medicines	5,23,49,726	6,65,99,400	2.05	
Doard Postal articles not specified 3,03,12,459 1,36,82,154 0.43		4,03,09,573	5,43,87,711	1.67	
Chemicals and chemical preparations. Manures (excluding oil.cakes) Wool-raw 2,36,93,901 3,52,13,777 1.08 Hardware 3,47,08,528 2,67,37,928 0.82 Provision and oil-men's store . Spices 1,68,55,711 2,20,28,387 0.68 Starch, dextrine and parts thereof Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including warte) Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30		7,55,74,511	5,38,80,508	1.66	
chemical preparations. Manures (excluding oil.cakes) Wool-raw 2,36,93,901 3,52,13,777 1.08 Hardware 3,47,08,528 2,67,37,928 0.82 Provision and oil-men's store Spices 1,68,55,711 2,20,28,387 0.68 Starch, dextrine and ferina 2,10,27,192 2,18,69,365 0.67 Aircrafts and parts thereof 1,97,33,833 2,00,87,851 0.62 Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) 1,00,45,894 1,38,14,629 0.42 Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30		3,03,12,459	1,36,82,154	0.43	
(excluding oil.cakes) Wool-raw 2,36,93,901 3,52,13,777 1.08 Hardware 3,47,08,528 2,67,37,928 0.82 Provision and oil-men's store . Spices 1,68,55,711 2,20,28,387 0.68 Starch, dextrine and ferina 1,97,33,833 2,00,87,851 0.62 Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts thereof 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) 1,00,45,894 1,38,14,629 0.42 Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0,30	chemical	10,25,30,683	5,25,01,040	1.61	
Provision and oil-men's store . 2,87,92,969 2,50,28,086 0.77 Spices 1,68,55,711 2,20,28,387 0.68 Starch, dextrine and ferina 1,97,33,833 2,00,87,851 0.62 Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarm and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) Cotton manufactures 8,25,37,963 1,35,36,170 0.42 Staple fibre yarm 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30	(excluding	82,36,337	4,15,22,497	1.28	
Provision and oil-men's store . Spices	Wool-raw	2,36,93,901	3,52,13,777	1.08	
oil-men's store . Spices 1,68,55,711 2,20,28,387 0.68 Starch, dextrine and ferina 2,10,27,192 2,18,69,365 0.67 Aircrafts and parts thereof 59,12,063 1,71,15,851 0.53 Cycles and parts 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) 1,00,45,894 1,38,14,629 0.42 Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30	Hardware	3,47,08,528	2,67,37,928	0.82	
Starch, dextrine and ferina Aircrafts and parts thereof Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30		2,87,92,969	2,50,28,086	0.77	
Aircrafts and parts thereof Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts thereof Wool manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30	Spices	1,68,55,711	2,20,28,387	0.68	
parts thereof Rubber 59,12,063 1,71,15,851 0.53 Cycles and parts thereof 2,35,26,236 1,48,80,597 0.46 Wool manufactures including yarn and Knitting wool. 5,62,81,261 1,46,36,162 0.45 Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) 1,00,45,894 1,38,14,629 0.42 Cotton manufactures 8,25,37,963 1,35,36,170 0.42 Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30		2,10,27,192	2,18,69,365	0.67	
Cycles and parts thereof Cycles and parts thereof 1,48,80,597 0.46		1,97,33,833	2,00,87,851	0.62	etteers
Wool manufactures including yarn and Knitting wool. 5,62,81,261 1,46,36,162 0.45 Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) 1,00,45,894 1,38,14,629 0.42 Cotton manufactures 8,25,37,963 1,35,36,170 0.42 Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30	Rubber	59,12,063	1,71,15,851	0.53	
manufactures including yarn and Knitting wool. Seeds 73,27,099 1,39,01,845 0.43 Silk-raw (including waste) 1,00,45,894 1,38,14,629 0.42 Cotton manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30		2,35,26,236	1,48,80,597	0.46	
Silk-raw (including waste) Cotton manufactures Staple fibre yarn Clocks and 2,00,86,500 1,38,14,629 0.42 0.42 0.42 0.42	manufactures including <i>yarn</i> and Knitting	5,62,81,261	1,46,36,162	0.45	
(including waste) Cotton 8,25,37,963 1,35,36,170 0.42 Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30	Seeds	73,27,099	1,39,01,845	0.43	
manufactures Staple fibre yarn 5,146 1,34,54,601 0.41 Clocks and 2,00,86,500 97,52,486 0.30	(including	1,00,45,894	1,38,14,629	0.42	
Clocks and 2,00,86,500 97,52,486 0.30		8,25,37,963	1,35,36,170	0.42	
	Staple fibre yarn	5,146	1,34,54,601	0.41	
	Clocks and watches	2,00,86,500	97,52,486	0.30	

TABLE No. 13—contd.

	Total Imports		Percentage to total imports during
Articles	1948-49	1950-51	1950-51
1	2	3	4
	Rs.	Rs.	
Arms and ammunitions, etc.	25,14,536	1,32,29,064	0.41
Wood and timber	1,44,53,431	78,51,328	0.24
Belting for machinery	1,05,82,528	67,97,724	0.20
Gums and resins	93,11,795	61,69,788	0.19
Liquors	1,18,30,861	60,66,720	0.19
Precious stones and pearls, unset	68,92,765	56,29,983	0.17
Paints and painters' materials	1,42,64,462	56,56,479	0.17
Tallow and stearine	37,82,029	54,77,524	0.17
Leather and manufactures thereof		50,17,878	0.15
Building and engineering material	97,94,603	43,27,735	0.13
Glass and glassware	1,00,12,573	36,58,551	0.11
Carriages and wagons and parts for railways.	13,17,487	37,33,293	0.11
Books and printed material	46,34,684	34,04,083	0.10
Tobacco	81,07,424	27,85,836	0.09
		I	I

Sugar	5,303	27,95,129	0.09
Stationery	56,57,549	26,77,197	0.08
Bobbins	67,13,735	24,44,868	0.08
Earthware and porcelain	15,25,267	14,90,451	0.05
Silk manufactures including silk yarn	52,28,893	14,45,382	0.04
Cotton twist and yarn	1,68,62,107	8,72,725	0.03
Toilet requisites	25,02,993	7,30,386	0.02
Apparel	11,37,265	6,59,730	0.02
Animals living	2,95,344	6,04,257	0.02
Toys and requisites for games	9,09,053	2,98,840	0.01
Fents being bona fide remnants of piecegoods or other fabrics.	20,66,850	1,71,923	0.01
Haberdashery and millinery	5,12,814	1,53,616	
Теа			
Other articles	8,87,01,080	7,11,40,465	2.19
Total	3.01,80,12,665	3,25,32,49,118	100.00

Since Independence, there had been a continuous lise in the traffic handled by the Bombay Port upto 1967-68, which was mainly due to setting of two oil refineries at Bombay and the commissioning of the Marine Oil Terminal in 1954-56. From 7.00 million tonnes in 1950-51, on the eve of the launching of the First Five Year Plan, the traffic reached the peak figure of 18.27 million tonnes in 1966-67. The rupee value of the traffic passing through the Port also increased from 511.48 crores in 1950-51 to Rs. 953.82 crores in 1968-69.

The figures of imports and exports (coastal and foreign combined) handled at the Port including docks and bundars in certain selected years are given below (*The Port of Bombay, a Brief History, Bombay Port Trust.*):

Year	Import	s Exports	Total figures in Million D.W. Tonnes (i.e., '0000 ommitted)	
1	2	3	4	
	Pre-Indepe	endence		
1938-39	3.26	1.92	5.18	
1946-47	3.84	1.52	5.36	
	Post-Indep	endence		
1947-48	4.76	1.71	6.47	
1950-51	5.27	1.73	7.00	
1955-56	6.81	3.66	10.47	
1960-61	10.79	3.93	14.72	
1965-66	12.97	5.14	18.11	
1966-67	13.23	5.04	18.27	
1968-69	12.10	4.31	16.41	
1969-70	11.43	3.60	15.03	
1970-71	10.86	3.54	14.40	
1971-72	12.43	3.70	16.13	
1972-73	12.32	3.22	15.54	
1973-74	14.25	4.28	18.46	

Bombay port handles the maximum import traffic in the country and in the quantum of exports, it is next only to Marmagoa. The same can be proved with the help of 1967 figures of imports and exports. During 1967, the quantum of imports in Bombay Port accounted for 40.20 per cent of the total quantum arrived in all the ports in the country, while the quantity of exports during the same year from the port accounted only for 6.92 per cent of total seaborne exports. In terms of value during the same year Bombay Port handled about 26 per cent of the total traffic of major ports in India. A noticeable change has occurred in the composition of the trade and the Port now handles a much larger variety of cargo, than it had handled in the past.

An examination of the composition of traffic shows that the traffic of petroleum oil and lubricants has gone up considerably since 1954-55 and constituted on an average, in 1966-67 about 55 per cent of the total traffic of the Port. Increased demand for fertiliser products has been responsible for the increased imports of fertiliser raw materials, like crude sulphur, urea, rock phosphate, etc. The other main items which have contributed to the increase in the traffic of imports consist of iron and steel and machinery for plan projects, foodgrains, building materials and chemicals. The items of export are oil.cakes, iron scrap and dross, sugar, iron and steel and manganese ore.

From 1966-67 to 1970-71 the traffic of the Port, however declined mainly due to four reasons. The main reasons for the decline were the decline in the coastal exports of petroleum, oil and lubricants consequent upon the setting up of oil refineries elsewhere in India; decline in iron and steel imports consequent on the growth of indigenous production; decline in imports of foodgrains as a result of 'Green Revolution' in India and the virtual disappearance of the iron ore traffic from the Port as a result of the development of other ports for ore export.

The following statement shows the value and volume of exports and imports through Bombay Port during 1964-65 to 1971-72 (The Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce, Government of India, Calcutta.):—

Year	Exports (including re.exports)		Imports		
	Gross weight (tonnes)	Value (in thousands of Rs.)	Gross weight (tonnes)	Value (inthousands ofRs.)	
(1)	(2)	(3)	(4)	(5)	
1964-65	2,124,365	N.A.	6,771,142	N.A.	
1965-66	1,560,672	N.A.	5,057,673	N.A.	
1966-67	2,220,389	2,095,298	8,418,040	7,053,111	
1967-68	1,181,674	1,816,659	4,633,182	7,448,150	
1968-69	1,844,012	2,975,679	8,229,138	6,562,555	
1969-70	1,638,283	2,992,931	4,043,624	6,162,750	
1970-71	1,854,924	4,196,847	2,519,570	6,255,691	
1971-72	1,384,670	3,739,859	3,603,899	8,433,326	

Region-wise imports into and exports from Bombay Port (docks and *bundars* combined) to foreign countries excluding overside and coastal traffic based on audited returns are shown in table Nos. 14 and 15 given at the end of the chapter.

The percentage of exports from Bombay Port to some of the countries, in the years 1975-76 and 1980-81 is shown below:—

Commodities exported to	Percenta exports	centage of orts		
	1975-76	1980- 81		
(1) Japan	6.00	2.17		
(2) U.S.A.	5.37	3.70		
(3) U.K.	7.50	2.41		
(4) Far Eastern countries	7.07	8.96		
(5) African countries	8.75	4.66		
(6) Other Asian countries	33.61	29.40		
(7) Other European countries	18.04	14.70		
(8) U.S <mark>.S.R.</mark>	2.80	9.24		

The year 1980-81(Annual Administration Reports 1975-76 and 1980-81, Bombay Port Trust.) recorded 26,01,700 metric dead weight tonnes of exports from the Port to foreign countries including adjacent countries (excluding coastal traffic) and 1,16,09,100 metric dead weight tonnes of imports into Bombay Port from other countries excluding coastal traffic.

Out of the total volume of exports from the Port to foreign countries during 1975-76, fertilisers accounted for 20.06 per cent; whereas sugar, accounted for 15.52 per cent; metal and metal products,11.46 per cent; fruits and vegetables, 5.12 per cent; and oil.seeds 2.74 per cent. The corresponding percentages for 1980-81 were 1.3, 1.00,9.70, 6.15 and 0.35 respectively.

Of the total imports into Bombay Port from foreign countries during 1975-76, foodgrains and other foodstuffs constituted 19.05 per cent, chemicals constituted 9.52 per cent and metal and metal products constituted 3.10 per cent of total imports. The corresponding percentages for 1980-81 were 0.7, 5.28 and 15.47, respectively.

The percentage of imports from some of the countries to total imports in Bombay Port is shown below :—

	Country	Percentage to total imports o the year				
		1975-76	1980-81			
1.	Group of other Asian countries	61.16	42.95			
2.	U.S.A.	16.84	7.46			
3.	Other European countries	7.58	11.67			
4.	U.S.S.R.	4.20	2.86			
5.	Japan	2.90	3.81			
6.	Canada	2.48	4.11			
7.	U.K.	0.93	1.81			
8.	Other American countries	0.87	2.08			
9.	West Germany	0.86	3.61			
10.	Miscellaneous	0.60	4.92			
11.	Far Eastern countries	0.53	6.35			
12.	Australia and New Zealand	0.43	1.25			
13.	African countries	0.42	0.93			
14.	Pakistan	0.19	1.09			

Air-borne Trade: Next to sea routes, airways play an important role in the foreign trade of the country. The main gateways for export by air from the country are the international airports at Bombay, Calcutta, Delhi and Madras. In the trade of Bombay with foreign countries, the Bombay Airport accounts for small amount of foreign trade. Though the quantity of trade handled by the airport is very small than that of the Bombay port, the variety and the value of commodities handled by the airport are very important. The principal commodities exported through the airport (International) are pearls and piecious stones, developed cine films, pharmaceutical products, textile products, crude minerals—mainly mica, clothing excluding furs, vegetables, fresh fruits, etc.

Some of the commodities are very costly in relation to bulk and can stand the high cost of air freight, such as pearls and piecious stones, developed cine films, pharmaceutical products, etc. Some of the commodities exported by air are perishable and hence need to be moved rapidly such as vegetables and fresh fruits. Some of the commodities exported by air are seasonal and fashionable goods e.g. textiles, and clothing and are therefore subject to great loss in value if they do not reach their markets in proper time. Besides, there is a group of commodities generally listed as others, which include electronic equipment, machine tools, and machinery parts. These commodities on some other criteria justify the higher cost of air freight or demand for the speedy shipment, such as saving on inventory cost, the quick need for a replacement part of machine to minimise the duration of shut downs, saving on packaging or insurance, etc.

During the year 1967, among the four major international airports, Bombay airport accounted for 62 per cent of the value of the total foreign exports and 58 per cent of the value of total foreign imports by air. The value of total foreign exports from Bombay airport amounted to Rs. 3,096 lakhs as against the total value of foreign exports through all the airports in the country which amounted to Rs. 5,011 lakhs. The value of foreign imports at Bombay airport during the same year stood at Rs. 1,788 lakhs; as against Rs. 3,087 lakhs as the total value of foreign imports through all the international airports in the country.

Since 1970-71 onwards, the total exports including re-export and total imports from Bombay airport showed an increasing trend.

The following statement gives value of foreign imports and exports (including re.exports) handled through

(Rs. in lakhs)

Year	Exports (including re- exports)	Imports
1970- 71	5,688	5,031
1971- 72	6,201	6,190
1972- 73	10,949	9,155
1973- 74	15,790	14,275
1974- 75	22,493	14,412

During 1974-75, the total foreign exports by air from Bombay airport accounted for about 18 per cent of the total foreign exports including re-exports and 11 per cent of the total foreign imports by sea, air and land.

Export Credit and Guarantee Corporation: With a view to augmenting the foreign exchange resources of the country for the implementation of the development plans, several export promotion measures were contemplated by the Government of India in the immediate post-Independence period. Among many other export promotion measures, the introduction of a scheme of export credit insurance which had contributed significantly to the expansion of the export trade of the industrially advanced countries was considered by a committee appointed by the Government in 1956. The committee in its report concluded that the provision of export credit insurance facilities would considerably strengthen the hands of our exporters in developing new export markets for India's products. Besides, this facility would also assist exporters in securing the required finance facilities from banks in the country. The recommendations of the committee regarding the introduction of the credit insurance scheme were implemented by the Government which resulted in the setting up of the Export Risks Insurance Corporation Limited, as a fully Government owned company.

The study group on export finance set up by the Government of India in 1962 recommended the transformation of Export Risks Insurance Corporation into the Export Credit and Guarantee Corporation and the transformation accordingly took place on the 15th of January 1964. The Export Credit and Guarantee Corporation (ECGC) is a credit insurance organisation established to encourage, facilitate and develop India's export trade. It provides a service which is not available from commercial companies. Briefly stated, the objective of the Corporation is to improve the capacity of Indian exporters to sell in the international markets and also ensure that banks are enabled to lend more liberally and with less risk for financing exports.

The main functions of the Corporation include issue of insurance policies to Indian exporters to protect them against losses that they may suffer in the event of certain commercial and political risks blocking or delaying the receipts of payment for goods or services exported. It also furnishes in India on a liberal basis the pre.shipment and post-shipment credit facilities needed by them to maintain and expand their export trade.

The Corporation has a branch at Bombay besides the branches at Calcutta, Delhi and Madras and a field office at Cochin. The Corporation is under the administrative control of the Ministry of Foreign Trade. It has introduced a wide range of insurance policies for exporters covering the commercial and political risks inherent in export on credit terms, as well as a number of guarantees to banks on behalf of exporters to piovide a more easy and liberal flow of finance for export transactions.

In order to help the small exporters the Corporation agrees to cover banks upto 90 per cent of the risk under its packing credit guarantee as against the normal coverage of 66 2/3 per cent. The business of the Corporation has grown at a rapid pace over the years. The branch office of the Corporation at Bombay was established at the end of 1970. Besides the area of Greater Bombay, the branch also covers the area of the whole of Maharashtra, Gujarat, Madhya Pradesh and Goa, Daman and Diu. The growth in the business of the Bombay branch under policies and guarantees since 1973 is shown in the following statement:—

Year	No. of policiesissued during theyear	Maximum liability in respectof policies issued (Rs. in crores)	No. ofpoliciesin force	respect of	Risk value (Rs. incrores)	Premium income(Rs. incrores)
1	2	3	4	5	6	7
Policies—						
1973	791	37	1,514	65	64	19
1974	862	46	1,645	89	83	24
1975	875	45	1,756	102	152	43
1976	1,204	66	2,033	126	199	54
Guarantees—						
1973	1,461	72	1,145	42	552	69
1974	1,301	74	908	47	742	92
1975	1,127	63	837	51	1,028	86
1976	1,170	66	629	57	1,331	97

Export Promotion Councils: A number of export promotion councils have recently been established with a view to assisting in the promotion of export of specific commodities. The main functions of these councils are to conduct market surveys, arrange exhibitions, propaganda and publicity and liaison between trade and government, as also to send trade delegations abroad. The following export promotion councils have either their head offices or branch offices in Greater Bombay:—

- Basic chemicals and pharmaceuticals and soaps export promotion council;
- Chemicals and allied products export promotion council;
- Cotton textile export promotion council;
- Engineering export promotion council;
- Export promotion council for finished leather, leather manunfactures;
- Gem and jewellery export promotion council;
- Plastics and Linoleums export promotion council;
- Silk and rayon textiles export promotion council;
- Wool and woollen goods export promotion council.

The information about some of these export Promotion councils is given below :—

(i) Plastics and Linoleums Export Promotion Council: The Council then known as the Plastics Export Promotion Council was formed in June 1955. In 1958, linoleums were brought under the purview of the council and it came to be known as the Plastics and Linoleums Export Promotion Council. The head.office of the Council is at Bombay with regional offices at Calcutta and Madras.

The council had 675 members in Greater Bombay (January 1977). It is associated with the following organisations for the varied services rendered by them :—

- a. The Federation of Indian Export Organisation, Delhi,
- b. Indian Institute of Foreign Trade, New Delhi,
- c. Indian Council of Arbitration,
- d. Indian Standards Institution, New Delhi,
- e. Western India Shippers' Association, Bombay,
- f. Eastern India Shippers' Association, Calcutta and
- g. Indo. Yugoslav Chamber of Commerce, Calcutta.

It has three elected committees, one each for three regions to look after the admissions of members and exporters' interest in the respective region. There are in all 13 commodity-wise panels comprising major exporters in Bombay functioning in the Council. These panels are for the commodities such as plastic

spectacle frames, plastic bangles, moulded and extruded goods, PVC fabricated goods, plastic laminates, fountain pens, electrical accessories, PVC leather cloth, HDPE woven sacks, plastic imitation jewellery, PVC pipes, PVC footwear and thermosetting raw materials.

The prices are determined every quarter by a price fixation committee for each raw material. The members of these committees comprise the raw material suppliers, processors and Government nominees. The price fixation committees are working for poly-vinyl chloride, high density polyethylene, low-density polyethylene, polystyrene, urea formaldehyde and phenol formaldehyde.

The ultimate objective of the council is to increase export worth Rs.50 cores per annum from 1978-79 onwards. This will however, depend largely upon the commissioning of the plastic raw material plants at the Indian Pharmaceuticals Ltd. at Baroda. The Council has already created many markets abroad to absorb the output by sending annually 20 to 30 manufacturers and exporters under assistance from the Marketing Development Fund and other institutions.

The data for expoit marketing is collected from the reports of India's missions abroad, financial papers, overseas professional journals, and institutions like the Directorate General of Commercial Intelligence and Statistics, Trade Development Authority, Indian Institute of Foreign Trade, International Trade Centre, Customs etc. The service for overseas buyers is rendered thiough an overseas journal, commodity folders, and brand catalogues in the principal foreign languages.

The approximate total value of expoits of the selective firms in Bombay who are the regular exporters of the Council is as follows:—

(In	crore	s of	Rs.)
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	Value of exports of the
Year	regular exporters in
	Bombay
1971-72	3.09
1972-73	3.71
1973-74	6.96
1974-75	8.80
1975-76	9.31

The exports of the regular exporters in Bombay accounted for almost fifty per cent of the total exports of the Council.

The major export commodities of the council are plastic, electrical accessories plastic imitation jewellery, moulded and extruded goods, gramophone records, PVC pipes and special PVC sheeting, jute based linoleums, plastic bangles, spectacle frames, polylined jute, etc.

The new items exported and the items which had dropped out but made their appearance again in 1974-75, 1975-76 were PE film sheets and bogs, vinyl asbestos floor tiles, polyurethane foam and its products and dolls and toys. The commodities are exported by sea and air.

Dubai, Nigeria, Saudi Arabia, U.K., Bulgaria, Czechoslovakia, Iraq, Poland, U.S.A., and U.S.S.R. are some of the major export markets which import the commodities exported through the Council.

The new markets which entered in the list of the Council during 1974-75, and 1975-76 were Botswana, Buima, Burundi, Dahomey, Iceland, Mozambique, South Korea and Ruwanda. On the other hand, the Council lost the markets of Brazil, Egypt, Laos, Sudan, Vietnam, Yugoslavia and Zaire during the same years.

During 1973-74, of the 18 top exporters listed by the Council, 14 were from Bombay; while during 1974-75, of the 15 top exporters listed by the Council, 12 were from Bombay. The Council during 1975-76 participated in two specialised exhibitions abroad viz., OPTICA-75 and K-75. The former was a specialised exhibition for the optical industry held at Wiesbaden in which one firm of Bombay participated and the latter was International plastics and rubber exhibition held at Dusseldorf—in which 17 member firms from Bombay participated.

(ii) Engineering Export Promotion Council: The regional office of the Council was opened at Bombay in 1959 with main objectives to support, protect, maintain, increase and promote the exports of engineering goods. The Council has been highly instrumental in achieving an objective of increasing and promoting the export of engineering goods.

The Council's leading member enterprises have the requisite capabilities to provide turn key jobs and to undertake major engineering construction works not only in the country but also abroad. During 1976, there were as many as 1,289 ordinary members and 968 associated members in the regional office at Bombay. These members represent Maharashtra and Gujarat States. The commodities exported by the Bombay office may be grouped broadly under four categories *viz.*, (i) capital goods comprising textile and jute mill machinery and fabricated steel structural, wires of cables etc., (ii) primary steel and pig iron, (iii) non.ferrous products, and (iv) consumer durables comprising diesel engines, pumps, etc. Most of the commodities are exported by sea.route and air. South-Cast Asia has been the biggest market for engineering goods exported through the Council. Exports to the Continent of Africa have been growing at a steady pace. Some of the markets where engineering products have been supplied in large quantities are Nigeria, Tanzania, Kenya, Zambia and Zaire.

The export performance of the member firms in Bombay during 1973-74, 1974-75 and 1975-76 was of the value of Rs. 6,931.49; Rs. 9,514.47 and Rs. 77,136.65 lakhs, respectively.

The exports of 29 member.firms of the Council in Bombay for the supplies made to the projects in India during 1973-74,1974-75 and 1975-76 amounted to Rs. 541.80 lakhs; Rs.541.25 lakhs and Rs.11,86.32 lakhs, respectively.

State Trading Corporation: The State Trading Corporation was registered in May 1956 under the Companies Act, 1956 as a private company with the capital of Rs. one crore and a paid-up capital of Rs. five lakhs which was subsequently raised to Rs. two crores. As a private limited company, the State Trading Corporation was acting as the agency mainly for exporting mineral ores such as iron ore, manganese ore, etc.; and some consumers goods such as woollen fabrics, shoes, salt and jute goods to foreign countries. It also used to undertake imports of manufactured articles like nonferrous metals, steel, chemicals, fertilisers, etc. In pursuance of the decision of Government of India, another private company viz.; Minerals and Metals Corporation of India was registered in September 1963, for undertaking the exports from India of mineral ores and imports into the country of semi.manufactured articles and allied commodities. The company took over the business and trade activities of the State Trading Corporation of India Ltd., pertaining to minerals, ores and other allied metal products from October 1963.

The declared purpose of the State Trading Corporation, when it was set up in May 1956, was to organise and effect exports from and imports into India of all such goods and commodities as may be determined by the company from time to time, and to undertake the purchase, sale and transport of in such goods and commodities in India or anywhere else in the world.

The State Trading Corporation has its head office at New Delhi and 24 branch offices all over India including one at Bombay and 18 overseas offices.

The objectives of the Corporation were subsequently enlarged from time to time to cover a much wider field. Its present main objectives cover (i) developing foreign trade, particularly exports by expanding existing markets and exploring new ores; (ii) organising trade with the State Trading countries; (iii) handling export and import of bulk commodities essential for the economic and industrial development of the country by the system of commodity exchange under barters, and link deals; (iv) supplementing private trade in spheres where private trade has a difficulty in functioning effectively; (v) undertaking import and distribution of commodities in short supply; (vi) undertaking price.support and buffer-stock operations in specific commodities with high export potential; and (vii) undertaking processing, conversion and manufacture of exportable products.

Now, the group of State Trading Corporations consists of State Trading Corporation, Project and Equipment Corporation of India Ltd.; Handicrafts and Handlooms Export Corporation of India Ltd., Cashewnut Corporation of India Ltd., State Chemicals and Pharmaceuticals Corporation of India Ltd., and Central Cottage Industries Corporation of India Ltd.

The Project and Equipment Corporation of India Ltd., is engaged in activities pertaining to marketing of engineering and railway equipments; while the Handicrafts and Handlooms Corporation of India Ltd., is entrusted with the export of handicrafts and handlooms from India and the Cashewnut Corporation of India Ltd. handles the imports of cashewnut into India.

The State Trading Corporation as the main agent acting in foreign trade of the country is divided into two divisions *viz*,, commodities division and advisory and services division.

The total sales by Bombay branch of the Corporation amounted to Rs. 215.59 crores during 1974-75. The same included imports, exports as also domestic sales.

The total exports of Bombay Branch (Source.—STC-Group Performance Budget, 1974-75 and Performance Reviews, 1973-74, State Trading Corporation.) of State Trading Corporation amounted to Rs. 88.80 crores during 1974-75. Of this, the exports of oils and fats accounted for the highest i.e. Rs. 27.50 crores; while the exports of leatherware amounted to Rs.17.50 crores. The exports of other articles viz., textiles, food, general products, chemicals and drugs amounted to Rs. 9.00 crores, Rs.1.41 crores, Rs.1.15 crores, Rs. 57 lakhs and Rs. 55 lakhs, respectively. The total exports of Bombay branch were 23 per cent of the total exports by the State Trading Corporation.

The imports by the Bombay branch amounted to Rs.1,26.21 crores, and accounted for 46 per cent of the total imports by the State Trading Corporation. The imports of different commodities by the Bombay branch during 1974-75 are given below:—

(Rs. in crores)

(•
Imports	1974- 75
Chemicals I (Plastics and Petrochemical)	14.50
Chemicals II (Rubber, soap etc.)	14.56
Drugs and Pharmaceuticals	16.77
Oils and Fats	49.22
Foods	0.88
Agricultural Produce	0.90
Textiles I (Natural Fibres)	3.50
Textiles II (Nylon Yarn etc.)	12.37
General Products (News print and syntheti c rubber)	15.88
Industrial Raw Materials Assistance Centre(IRMAC).	1.13
Total	1,29.71

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The domestic sales by the branch included only the sale of imported cars and the same amounted to Rs. 58 lakhs during 1974-75.

INLAND TRADE

The total domestic trade of Bombay includes the merchandise brought from the hinterland for export as also for domestic consumption. The physical facilities available for the movement of export cargo from originating centres to the port are the same as those for the doiriestic movement of goods and passengers, except in case of ores.

While road and rail play an important role in the movement of export cargo from Bombay, two other modes of transport *viz.*, airways and coastal shipping are also used for export cargo.

The following statement shows percentage (Survey of Domestic Transport of India's Export Cargo, Vol. II, May 1971, Operations Research Group, Baroda.) distribution of export cargo of all commodities to Bombay port during 1969-70:—

	By value			By weight				
	Road		Inland water ways	l	Road		Inland water ways	Others
Bombay port	81.41	17.76		0.83	53.61	34.94		12.05
All ports	61.43	18.20	19.74	0.63	14.17	50.12	34.89	0.82

However, the volume of export consignments to Bombay port by rail, road and other modes of transport during 1969-70, formed 85.1, 14.3 and 0.6 per cent of the total, respectively.

Excluding the traffic from within 25 kilometres of Bombay port, which normally has no alternative to road transport, the share of different modes of transport in the total export cargo of all commodities during 1969-70 was as follows:—

	By value			By weight				
		Rail	ways	l	Road		Inland water ways	Others
Bombay port	64.56	53.44			28.39	71.61		
Total of all ports	57.04	31.25	10.94	0.77	7.51	56.69	35.80	Negligible

The share of the three modes of transport in the movement of selected commodities to Bombay port during 1969.70 by value and weight was as follows:—

Commodity		har		tage value orts	1		ge share of of exports
	Ro	ad		Inland water ways		Rail	Inland waterways
Cotton Textile	91	.2	8.8		88.6	11.4	
Oil-cakes	41	.7	58.3		38.5	61.5	
Engineering goods	95	.1	4.9		93.5	6.5	
Iron and steel products	58	.1	41.9		60.4	39.6	
Raw cotton	33	.2	66.8		44.5	55.5	

Rail-borne Trade: Bombay now serves as an entrepot trade centre mainly due to the net.work of railway routes emerging from Churchgate on Western: Railway and Victoria Terminus (V.T.) on Central Railway.

The former Great Indian Peninsula Railway was opened for traffic for 1,258 miles (2025km.) in 1870. The Bombay, Baroda and Central India, Railway company incorporated in July 1855 entered into contract with the East India Corrlpany for the eonstruction of railway line and the railway was opened for trafficfor 312 miles (502 km.) in 1870.

The Great Indian Peninsula (G.I.P) railway gradually started to serve southern, eastern and north-eastern portions of India and the Bombay, Baroda and Central India railway to serve Gujarat, Rajputana, Central India, United Provinces and the Punjab.

Statistics of goods carried during the first few years after the opening of these two railways are not available. In 1880, the traffic on both these railway lines increased in consequence of the new rail-routes.

The following statement reveals the statistics of imports and exports excluding the railway company's materials from and to stations on the two railway lines in Bombay Island for a few years from 1886:—

(Figures in tonnes)

Year	Great Indian Per	ninsula Railway		and Central India way
	Imports	Exports	Imports	Exports
1886	11,55,152	3,32,671	4,55,407	1,66,298
1890	9,38,445	3,16,829	2,71,871	1,86,015
1900	7,16,610	5,60,447	1,87,561	6,97,551
1907	16,27,503	5,86,754	7,31,147	3,58,745

The value of the rail.borne trade of Bombay Island according to the returns published by Government was as given below:—

(Figures in '000 Rs.)

Year	Imports		Exports	
	External	Internal	External	Internal
1888- 89	1,81,668	1,07,171	61,386	65,639
1890- 91	1,40,488	1,15,716	84,352	77,752
1900- 01	1,84,529	95,170	1,34,068	1,35,038
1907- 08	2,59,587	1,76,055	2,12,962	1,38,909

Of the total rail.borne trade of Bombay carried during 1907-08 nearly 40 per cent represented trade with other parts of the Bombay Presidency, 17 per cent with the Central Provinces and Berar, 11 per cent with the United Piovinces, about 5 to 8 per cent with Punjab; 4 per cent with Madras and one per cent with Bengal.

The article-wise imports and exports carried by the railway to and from Bombay city during 1888-89 and 1907-08(*The Gazetteer of Bombay City and Island, Vol. I. 1909, p. 449*,) are shown in Table No. 16.

TABLE No. 16
Chiff Articles of Imports and Exports Carried by Railway to and from Bombay City
(Quantity in Mds.(1 Maund = Q.037 Tonnes,) and Value in '000 Rs.)

	1888-89		1907-08	
Articles	Quantity	Value	Quantity	Value
raoi n		J'ttall'		1201
Imports—	38,442	2,88,839	56,602	4,35,642
1. Coal and coke	160	140	725	438
2. Cotton raw	6,374	1,17,649	10,785	2,21,029
3. Cotton Mfrs. European	6	259	9	510
4. Cotton Mfrs. Indian	330	11,300	321	12,984
5. Dyes and tans	497	2,291	1,413	4,200
6. Wheat	15,364	39,667	2,360	8,656
7. Other food grains	2,751	6,759	4,446	15,098
8.Gunny bags and cloth	23	238	226	3,022
9.Hides and skins	17	609	181	5,126

10.Liquors	6	112	2	83
11. Metals	114	1,173	10,035	
12.Oils	91	1,632	108	1,777
13. Oil-seeds	9,100	39,065	11,707	63,823
14. Opium	59	46,586	33	20,719
15. Provisions	824	6,466	860	11,845
16. Railway plant and rolling stock			84	441
17.Spices	121	2,438	376	5,289
18. Sugar	69	391	130	900
19. Wool,raw	121	3,986	130	4,277
20. Others	2,415	8,078	12,671	44,989
21. Gold coins (Seperate figures of bullion and treasure trade are avalibale from 1896-97)				35,962
22. Silver coins and bullion				13,073
Exports-	14,958	1,27,025	31,327	3,51,871
1. Caol and coke	5,639	4,934	6,371	4,601
2.Cotton, raw	74	1,448	357	4,069
3.Cotton Mfrs. European	1,080	47,589	1,790	1,21,223
4. Cotton Mfrs. Indian		9,468	224	9,445
5.Dyes and tans	87	1,918	264	6,159
6.Wheat	36	128	58	276
7.Other foodgrains	651	3,033	3,321	18,381
8.Gunny bags and cloth	445	4,864	497	7,417
9.Hides and skins	4	180	47	1,313
10. Liquors	93	3,323	214	7,605
11. Metals	1,961	12,791	4,042	47,358
12.0ils	495	3,016		14,240
13.0il-seeds	35	191	163	1,112
14. Opium	1	1,057	2	1,773
15.Provisions	1,026	4,647	1,254	19,147
16.Railway plant and rolling stock			1,663	7,270
17. Spices	296	4,943	496	8,883
18.Sugar	987	7,707	2,847	19,560
19.Wool, raw	1	33	1	35
20. Others	692	15,755	5,240	55,002
21.Gold coins (Seperate figures of bullion and treasure trade are avalibale from 1896-97)				7,528
22. SIlver coins and bullion		1++		1,32,323

During 1975-76, 12,51,053 tonnes of goods were imported in Greater Bombay at different stations on the Western Railway, whereas 9,14,559 tonnes of goods were exported from the same stations, the details of which are shown in the following statements.

(1) Western Railway : The following statement shows the statistics of imports and exports by Western Railway (Public Realtions Officer, Railways, Bombay) during 1974-75 :—

		ports		ports
Station / Goods Depot	No of wagons	Weight in tonnes	No of wagons	Weight in tonnes
1	2	3	4	5
Dadar	4,953	96,955	732	12,212
Mahim junction	1,598	23,478	871	7,406
Bandra	10,887	39,791	3,606	33,739
Andheri	6,536	1,26,864	690	11,195
Jogeshwari	45,147	2,42,699	8,516	93,707
Goregaon	2,078	11,805	540	5,908
Kandivli	3,303	74,927	840	15,932
Borivli	2,272	85,598	388	1,808
Carnac Bunder	37,251	5,08,956	44,567	7,32,652
Total	1,14,025	12,11,073	60,750	9,14,559

(ii) Central Railway: The following statement shows the turnover of goods traffic from different depots in Bombay on Central Railway (Divisional Superintendent, Central Railway, Bombay.) during 1975-76 and 1976-77:—

(Figures in tonnes)

Goods Depot	Load	ding	Unloa	ading
shtr	1975-76	1976-77	1975-76	1976-77
1	2	3	4	5
Wadi Bunder	11,94,227	14,15,703	16,20,282	16,71,056
Sion	46,920	71,392	1,82,400	3,69,340
Kurla	4,828	3,685	2,647	9,008
Trombay	17,89,272	21,62,029	6,11,891	1,59,602
Vidyavihar	25,348	22,835	3,67,366	3,53,592
Ghatkopar	5,555	3,952	70,260	1,00,720
Vikhroli	13,863	14,628	81,320	1,25,703
Bhandup	37,601	39,036	94,185	83,016
Total	31,17,614	37,33,260	30,30,351	28,72,037

During 1975-76, 31,16,614 tonnes of goods were exported by Central Railway from different goods depots within Greater Bombay revenue limits. The same increased to 37,33,260 tonnes during 1976-77. The imports by Central Railway arriving in different goods depots within Greater Bombay area amounted to 30,30,351tonnes during 1975-76 and the same increased to 42,82,037 tonnes during 1976-77.

The railways operate different schemes for the movement of goods such as quick transit service, container service and ordinary goods movement. In addition some of the export consignments are moved by passenger trains.

The quick transit service is operated between selected pairs of stations, and the delivery of goods booked under this scheme is guaranteed, the stipulated delivery period being observed in 95 per cent of the cases. The container service has been introduced to provide door to door service, thereby offering facilities comparable to those offered by road transport.

The commodity-wise tonnage of export movement from origin connected by quick transit service (Q.T.S.) with Bombay Port in 1969-70 is shown in Table No. 17.

TABLE No. 17
Tonnage of Export Movement from Origins connected by Quick Transit Service with Bombay Port in 1969.70(Survey of the Domestic Transport of India's Export Cargo, Vol II, May 1971; by Operations Research Group, Baroda.)

		Tonnage	of export	traffic
Origin	Commodites		Moved by rail including	Moved by
			service	
1	2	3	4	5
Hyderaba	d Oil.seeds, textile yarn, cotton textiles, fruit preserved.	20,774		
Ahmedab	ad Iron and steel, oil.cakes, cotton textiles, textile fibres, engineering goods.	29,207	22,309	1,893
Vanara sindabad	Crude vegetable material, engineering goods.	3,436	30 G 8	az(
Cochin	Tea	988	988	
Bhopal	Artware	3		
Mysore	Cotton textiles, wood manufactures, textile fabrics excluding cotton and jute, artware.	1,945	107	
Bangalore	Fruits- preserved, cotton textiles, engineering goods, artware	1,597	2	
Amritsar	Oll-cakes, tea, spices	26,344	26,178	2,648
Jullundur	Engineering goods	1,858	191	191
Ludhiana	Engineering goods	1,536	980	980
Coimbtore		434		

Madras	Cotton textiles, readymade garments	5,698	55	
Madurai	Cotton textiles	9		
Kanpur	Crude animal material, cotton textiles, oil- cake	21,368	19,818	12
Saharanpur	Artware	763	236	236
Moradabad	Artware	2,636	2,043	1,481
Calcutta	Tea, cotton textiles, engineering goods, building material, floor covering	7,914	5,712	2,531
Delhi	Iron and steel, engineering goods, cotton textiles, fruits and nuts, hides, readymade garments, toys, spices, yarn, artware	14,148	7,025	1,469
	Total	1,40,658	85,674	11,441

The commodity wise composition of rail movement of export goods through Bombay Port during 1969-70 (*Ibid*) is shown below:—

	Commodities	Tonnage	Percentage to total through Bombay port	Average lead (km.)
1.	Oil.cake	1,99,659	45.6	785
2.	Iron and steel	80,745	18.4	1,064
3.	Sugar	45,000	10.3	N.A.
4.	Crude minerals	39,069	8.9	896
	Crude animal material	22,678	5.2	1,151
	Textile fibres and waste	18,539	4.2	1,655
7.	Others	32,230	7.4	1,188
	Total	4,37,920	100.00	948

Table No. 18 reveals the quantity and value of principal commodities arriving in Bombay from various places on different rail-routes, for export.(Survey of the Domestic Transport of India's Export Cargo, May 1971, Vol. II, Operations Research Group, Baroda)

TABLE No. 18 Quantity and Value of Principal Commodities arriving in Bombay by different Rail Routes for Export, 1969-70

Route/O	rigin Distance from Port (km)	e Principal commodities	Tonnage	Value (Rs.in lakhs)
(1)	(2)	(3)	(4)	(5)
1. Amritsa Bombay–	ar-Jullundur-De -	elhi-Baroda-		
Amritsar	1,834	Oil-cake	26,178	200.17
Dewas	790	Oil-cake	26,062	176.10
Ganaur	1,455	Iron and steel products	24,700	244.59
Abohar	1,652	Textile fibres and waste	8,361	297.70
Delhi	1,388	Cotton textiles, iron and steel products, engineering goods.		297.70 *(97.94)
Ratlam	653	Crude animal materials	5,603	64.92
Indore	707	Iron and steel products	5,005	37.43
Jagadhri	1,534	Paper	3,541	43.06
Rajapura	1,612	Crude animal materials	2,773	31.18
Gaziabad	1,408	Iron and steel products	2,209	21.87
Chandiga	rh 1,632	Textile fibres and waste	1,226	45.56
Ludhiana	1,698	Engineering goods	980	48.33
Giddarbh	a 1,607	Textile fibres and waste	962	41 03
Jullundur	1,755	Toys, engineering goods	190	45.38
Moradaba	ad 1,477	Artware		* (291.56)

Saharanpur	1,569	Artware		*(33.60)
2. Bhatinda-(Ahmedabad.		agar-Kankroli.Jaiļ y—	our-	
Bhilwara	869	Crude minerals	30,069	30.03
Ahmedabad	492	Oil cake, cotton textiles, iron and steel products	22,308	412.10
Sangaria	1,482	Textile fibres and waste	5,003	192.16
Baroda	392	Iron and steel products	2,603	21.58
Bhatinda	1,579	Textile fibres and waste	2,504	345.62
Jaipur	1,117	Perfumery	2,114	40.78
Wankaner	696	Building materials, cotton textiles	1,220	13.16
Kankroli	942	Mica waste	1,140	0.48
Ganganagar	1,523	Textile fibres and waste	658	38.22
Deesa	653	Crude animal materials	453	6.20
Gosunda	852	Crude animal materials	340	4.65
3. Kanpur-All	ahabad	-Satna-Itarasi-Bh	usawal	-Bombay-
Kanpur	1,348	Crude animal materials,oil- cake		198.51 *(4.75)
Satna	1,180	Engineering goods	956	46.46
Gwalior	1,255	Cereals	908	7.96
Fatehgarh	1,624	Cotton textiles	498	7.27
4.Howrah-Na	gpur-Bl	husawal- Bombay		
Akola	584	Oil-cake		374.26
Dhule	383	Oil-cake	38,407	128.02
Amravati	673	Oil-cake	15,616	84.53
Badnera	663	Oil-cake	12,932	
Pulgaon	729	Cotton-Textiles	372	27.56
Tumsar	917	Ferro-	10,000	73.00
Bhilai	1,102	manganese Iron and steel products	10,000	1,964
Calcutta	1,964	Tea		297.48
Kanhan	856	Iron and steel		49.50
		products		

Jamshedpur		Iron and steel	3,235	26.43			
		products					
Kamptee		Crude animal materials	2,037	27.90			
Ballarshah	892	Paper	1,721	23.06			
5.Madras-Gเ	5.Madras-Guntakal-Bangalore-Pune-Bombay						
Devangere	871	OII-cake	13,400	71.42			
Raichur	691	OII-cake	5,276	44.85			
Amarnath	60	Chemicals	2,206	9.00			
Cochin	1,830	Tea	988	103.56			
Dandeli	704	Paper	784	8.11			
6.Others-		Sugar	45,328	561.51			
				*(2.15)			

^{*}Figures in parenthesis give only value of artware export.

(iii) Bombay Port Trust Railway: When the traffic between the port and the hinterland developed, the two main railways G.I.P. and the B.B. & C.I. laid out capacious goods yards in close proximity to and connected with the Prince's and Victoria Docks by three sidings crossing the Frere Road. As these sidings were capable of accommodating only a fraction of the traffic, the bulk of traffic had to be conveyed from ship to rail and vice versa by the cumbersome and expensive method of transportation by bullock carts which involved double handling and storage. The arrangements for connecting the goods yards of the main railways with dock sidings were extremely defective. Therefore a scheme for the construction of port railway was mooted in 1894. The Bombay Port Trust railway is connected to the broad.gauge main lines of the Central and Western Railways at its interchange railway yard at Wadala. The railway runs foi about 11 kilometres of straight route between Ballard Pier and Wadala. The Bombay Port Trust railway serves the docks as well as the important installations and factories on the port trust estates. It handles over 4 million tonnes of traffic annually which represents about 60 per cent of total rail.borne goods traffic of Bombay city.

Table No. 19 gives the statistics (*THe directorate General of Commercial INtelligence and Statistics, Minnistry of Commerce, Govt. of India, Calcutta.*) of inward and outward movement (by rails) of important commodities into and from Bombay Port during 1970-71 and 1975-76.

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TABLE No. 19 Inward and Outward Movement (by Rails) of Important Commodities into and from Bombay Port during 1970-71 and 1975-76

(Figures in Quintals)

	1970-71		1975-76		
Commodities	Inward	Outward		Outward	
1	2	3	4	5	
1. Animals (In numbers)—					
(a) Cattle excluding sheep and goats	560	54	1,748	30	
(b) Horses, ponies etc.	19		10		
(c) Sheep and goats	328		99	20	
(d) Other animals			13,447	852	
2. Bones	2,29,902	266	1,84,925	566	
3. Bricks	1,13,929	2,387	1,16,157	1,313	
4. Cement	23,19,552	3,716	44,38,114	16,067	
5. Coal and coke	27,59,738	26,241	23,13,648	3,425	
6. Coffee	3,295	1,094	3,377	124	
7. Cotton twist and yarn—	a Sta	ate	Ga	zet	
(a) Indian	68,670	46,045	12,955	32,902	
(b) Foreign	1,826	2,635	1,071	1,028	
8. Cotton piecegoods—					
(a) Indian	62,363	5,83,887	69,489	3,64,473	
(b) Foreign	273	1,078	433	6,915	
9. Myrobalans	345	1,853	2,564	1,228	
10. Fruits.dried	27,468	32,736	33,979	22,079	
11. Glass	98,437	61,657	90,020	12,504	

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	Commodities	1970-71	70-71 1975-76			
		Inward	Outward	Inward	Outward	
	(1)	(2)	(3)	(4)	(5)	
	12. Grain, Pulses and Flour-					
	(a) Gram and gram products	9,80,922	35,024	7,24,810	24,693	
	(b) Pulses other than gram	13,09,936	76,635	9,64,894	64,449	
	(c) Maize	1,05,553	2,10,849	95,160	76,833	
	(d) Jowar	36, <mark>465</mark>	4,936	9,38,227	4,11,394	
	(e) Bajra	6,62,790	456	3,36,982	2,837	
	(/) Millets	20,884	8,143	2,829	24,90,470	
	(g) Rice in the husk	1,19,054	3,874	3,554	4,908	
	(h) Rice not in the husk	21,88,146	97,477	11,85,584	45,967	
	(i) Wheat	10,05,773	24,69,878	5,21,342	81,78,981	ttoore
	(/) Wheat flour	2,676	1,16,228	2,021	1,34,381	ritee i S
	(k) Other sorts	4,47,628	39,401	6,06,682	2,09,333	
	13. Hemp (Indian)	3,003	1,700	255	185	
	14. Hides, raw	4,406	2,505	9,842	462	
	15. Skins, raw	7,957	1,068	4,028	37	
	16. Hides and skins,tanned and leather.	23,585	10,310	10,720	9,814	
	17. Jute—raw (loose)	677	380	1,027	8	
	18. Jute—raw (pucca bales)	1,942	591	1,063	302	

					1
19. Gunny bags and cloth	3,47,556	28,385	4,20,323	22,865	
20. Iron and steel bars, sheets etc.	54,13,742	17,42,566	3,46,076	19,49,832	
21. Lac of shellac	994	329	2,632	48	
22. Lime and lime.stone	2,46,241	1,498	1,47,811	1,272	
23. Manganese ore	2,78,650	11	741	2	
24. Oil.cakes					
(a) Castor	13,327	1,02,405	17,460	1,02,816	
(b) Others	22,54,454	1,67,372	38,05,743	84,395	
25. Kerosene oil	58,120	9,11,698	1,04,802	4,75,302	
26. Vegetable oils.					
(a) Castor	79,641	1,994	2,82,707	786	ttaars
(b) Coconut	3,023	41,008	5,180	20,257	ittooro
(c) Groundnut	85,292	7,821	68,401	22,254	
(a) Others	1,26,875	7,29,200	3,17,329	80,670	
27. Oil.seeds —					
(a) Castor	1,43,122	859	1,47,520	2	
(b) Cotton	3,79,208	5,444	2,41,139	821	
(c) Groundnut	3,49,718	11	1,83,565	2,418	
(d) Linseed	53,861	672	1,84,726	22	
(e) Rape and mustard	10,902	978	12,777	138	

15,793	695	1,25,996	1,390
144	1,950	18	4,026
24,947	5,980	772	1,357
51,419	56,731	2,82,187	92,424
24,33,993	3,084	30,18,674	2,015
2,28,636	254	17,402	175
3,41,592	1,744	3,48,079	790
19,264	43	3,89,419	202
1,89,458	603	1,27,193	1,186
16,113	24,042	25,522	12,902
36,000	1,158	14,654	3,750
77,118	9,664	1,00,005	519
15,33,288	1,05,630	15,33,096	1,25,552
9,857	67,974	6,624	27,957
4,90,266	47,495	8,22,375	30,208
3,866	15,063	6,839	562
25,920	22,457	20,960	57,072
	144 24,947 51,419 24,33,993 2,28,636 3,41,592 19,264 1,89,458 16,113 36,000 77,118 15,33,288 9,857 4,90,266 3,866	144 1,950 24,947 5,980 51,419 56,731 24,33,993 3,084 2,28,636 254 3,41,592 1,744 19,264 43 1,89,458 603 16,113 24,042 36,000 1,158 77,118 9,664 15,33,288 1,05,630 9,857 67,974 4,90,266 47,495 3,866 15,063	144 1,950 18 24,947 5,980 772 51,419 56,731 2,82,187 24,33,993 3,084 30,18,674 2,28,636 254 17,402 3,41,592 1,744 3,48,079 19,264 43 3,89,419 1,89,458 603 1,27,193 16,113 24,042 25,522 36,000 1,158 14,654 77,118 9,664 1,00,005 15,33,288 1,05,630 15,33,096 9,857 67,974 6,624 4,90,266 47,495 8,22,375 3,866 15,063 6,839

The total volume of through traffic from and to the trunk railways registered a fall of about 2.38 lakh tonnes during 1980-81, as compared to the volume of 3.35 lakh tonnes during 1970-71. The decrease was mainly due to the fall in traffic in commodities, such as, asbestos, fibres, chemicals, fertilisers, iron and steel, salt, sulphur, molasses, oil-cakes, cement, charcoal, raw cotton etc.

The following figures reveal the statistics of total volume of commodities unloaded *i.e.* booked from the trunk railways to B,P.T. railways and loaded by B.P.T. railway for trunk railway stations during 1970-71 and 1980-81. (Administration Reports, 1971-72 and 1980-81, Bombay Port Trust.)

	Volume of commodities handled		
Year	Loaded (hundred tonnes)	Unloaded (hundred tonnes)	
(1)	(2)	(3)	
1970-71	15,994	17,551	
1980-81	17,253	11,697	

Air-borne Trade (Domestic): Air transport is the fastest means of carrying passengers and goods and speed is the key-note of all industrial, economic and other activities in modern age.

The year 1953 recorded the nationalisation of air transport in India and as a result witnessed the birth of two national air carriers, one for domestic services and another for the 'International"services which were intended to discharge their national obligations, These corporations were Air India International and Indian Airlines. The services operated prior to nationalisation, by the private airlines, were profit oriented. The Indian Airlines Corporation operates on all important routes with national interest and the overall development of air transport in view.

Principal commodities moved by domestic air transport consist of costly commodities such as art silk goods, woollen and silk carpets, fur goods, readymade garments, jewellery, fresh fruits, perfumery, essential oils, chemicals and drugs, etc.

During 1969-70 the quantity of 4811(Survey of the Domestic Transport of India's Export Cargo, Vol. I, May 1971, Operations Research Group, Baroda) tonnes worth Rs.30 crores was arrived at Santa Cruz Airport through domestic air-routes for export. The domestic airport at Bombay during 1969-70 accounted for 56.6 per cent in quantity and 54.09 per cent of value of the total imports followed by Calcutta, Madras and Delhi airports.

The following statement shows the route-wise quantity of goods carried by Indian Airlines from Bombay to various destinations and the revenue earned on the same during 1975-76:—

Route	Weight in kg.	Revenue in Rs.
Bombay-Delhi	16,40,509	79,76,497
Bombay-Calcutta	10,05,962	66,92,149
Bombay-Bangalore	6,20,569	22,96,205
Bombay-Porbundar	5,839	11,678
Bombay-Madras	6,71,689	30,89,769
Bombay-Rajkot	84,405	1,30,985
Bombay- Goa	4,01,459	7,62,771
Bombay- Hyderaba <mark>d</mark>	3,20,708	9,76,951
Bombay-Co <mark>chin</mark>	87,070	4,41,668
Bombay- <mark>Bhavnagar</mark>	41,607	60,330
Bombay- Ahmedabad	61,242	1,19,423
Bombay-Jamnagar	85,901	1,80,373
Bombay-Pune	1,14,479	85,859
Bombay-Baroda	48,386	77,422
Bombay- Aurangabad	9,779	13,691
Bombay-Belgaum	27,474	49,627
Bombay-Mangalore	32,228	1,02,076
	52,59,306	2,30,67,474

Coastal Trade: Bombay assumed importance as a port of import-export trade since the middle of the 18th century. But the real impetus to the growth of trade was offered by the Cotton Boom of 1861-65 and the opening of the Suez Canal in 1869. The coastal trade was mainly carried through country crafts. (For the history of Coastal trade see Gazetteer of Bombay City and Island, Vol. 1, 1909, pp.438-45)

In the beginning of the nineteenth, century, the value of total coastal trade from Bombay amounted to Rs. 2,30 lakhs, of which the value of imports amounted to Rs. 1,28 lakhs and of exports to Rs. 1,02 lakhs. The ports of Gujarat and Cutch accounted for the largest proportion of exports and also of imports.

The principal articles of trade were raw cotton which was collected from Gujarat and Cutch for export to China; cotton piece-goods brought from Gujarat, Cutch, Bengal and Goa for export to Persian Gulf and Arabia; rice from Goa, Gujarat and Cutch; and Bengal sugar brought to Bombay for export to Persian Gulf and to various districts in the then Bombay Presidency.

The coastal trade maintained steady progress in the early thirty years of the nineteenth century, except a temporary depression in 1811-12 because of unfavourable conditions in the China market and great scarcity in Cutch and Gujarat. Again in 1827, the commercial position in Bombay was far from favourable as Calcutta monopolized much of trade and commenced to import arid export the commodities directly. In spite of this, as a result of the abolition of company's monopoly in 1813, the trade in general received a considerable impetus arid the coastal trade of Bombay was valued at Rs. 5,26 lakhs in 1830-31. Between 1835 and 1850, the then Bombay Government made many efforts to enlarge both the coastal and the foreign trade by removing restrictions such as inland sugar duties in 1836 and cotton duties in 1848. However, the course of trade during this period was not smooth. By the end of 1850, the coastal trade of Bombay had advanced in value to Rs. 11,78 lakhs; of which Rs. 7,57 lakhs represented imports.

As cotton received high prices during the period of American War, Bombay enjoyed an unusual amount of prosperity during 1861-65 and both the foreign and coastal trade increased immensely. The other reason for this prosperity was the commencement of seven cotton mills in Bombay between 1854 and 1860.

Railway communications with the interior were opened up in 1867. Due to the growth of road and railway communications, the value of coastal imports rose from Rs. 3,64 lakhs in 1860-61 to Rs. 49,31 lakhs in 1870-71. From 1880 to 1906, the value of coastal trade fluctuated between Rs. 16 and 25 crores.

The pre-war average of coastal trade (1909-14) was valued at Rs. 32,30 lakhs as against the foreign trade of Rs. 1,13,15 lakhs. During 1980-81, *i.e.* after about seventy years, the value of coastal trade stood at Rs. 1,38,22 lakhs.

(i)Imports: The value of coastal imports showed a declining trend as the imports decreased considerably from Rs. 38,60,35 thousands in 1918-19 to Rs. 18,54,75 thousands in 1935-36 and again further declined to Rs. 14,40,54 thousands during 1937-38. The value of coastal exports fluctuated from Rs. 31,34,04 thousands in 1918-19 to Rs. 2,28,72 thousands in 1935-36 and then to Rs. 20,46,96 thousands in 1937-38.

In the pre-Independence period the principal commodities of trade originating from Bombay Port comprised foreign cotton-twist and yarn, Indian cotton twist and yarn, foreign as also Indian cotton piece-goods, woollen piece-goods, iron and steel bars, kerosene, salt, jowar and bajri, wheat and flour, sugar, etc., while the main articles received at Bombay Port in the pre-Independence period included coal, raw cotton, cocoanuts, copra, rice, wheat, gunny bags, liquors, spices, etc.

During 1960-61, the quantity of coastal exports and imports at Bombay amounted to Rs. 20,53,300 and 13,62,900 metric deadweight tonnes, respectively. In 1965-66, the coastal exports and imports at Bombay were 30,16,300 and 14,66,400 metric deadweight tonnes, respectively.

The comparative figures of total imports and exports for certain years are given below:

(In metric deadweight tonnes)

Year	Coastal Imports	Coastal Exports
1965- 66	14,66,400	30,16,300
1970- 71	13,09,800	15,83,400
1974- 75	10,38,900	19,60,800
1975- 76	9,73,200	13,45,200
1980- 81	11,34,200	18,26,000

The decline in coastal imports and exports may be explained as the result of opening up of new rail routes and roads connecting Bombay with distant and far-off places in India.

The heavy wharfage charges, cumbersome formalities and custom regulations might also have adversely affected the coastal service as the same became unattractive to exporters, who prefer to send their goods by rail or road transport. Another reason for the decline in coastal trade, since 1965-66, may be the decline in the coastal exports of petroleum oil, decline in iron and steel imports as a result of the growth of indigenous production, decline in foodgrain imports and the virtual disappearance of the iron ore traffic as a consequence of the development of other ports for pre export. In 1980-81, the coastal imports and exports showed an increase in quantity compared to 1975-76.

Table No. 20 shows the commodity-wise break up of coastal imports into Bombay Port.

The commodity-wise coastal imports in Bombay Port also varied from 1970-71 to 1975-76 and again in 1980-81. The imports of building material decreased from 6,55,600 metric deadweight tonnes in 1970-71 to 3,46,000 metric deadweight tonnes in 1975-76 and to 2,47,200 metric deadweight tonnes during the year 1980-81.

The building material imported in Bombay from different ports in India accounted for 50.05 per cent of total imports in 1970-71; and the same decreased by 35.59 per cent in 1975-76, and further by 21.79 per cent in 1980-81.

The quantity of imports of metals and metal products increased from 11,100 metric tonnes in 1970-71 to 23,600 metric tonnes in 1974-75, while it declined to 7,300 metric tonnes in 1975-76 and further to 600 metric tonnes in 1980-81. The quantity of salt accounted for 13.32 per cent of total imports in 1970-71, 20.71 per cent in 1974-75 and 21.44 per cent in 1975-76. Even though the percentage of salt imported in 1975-76, showed an increasing trend in 1975-76, the actual figures reveal the decline from 2,15,200 metric tonnes in 1974-75 to 2,08,800 metric tonnes in 1975-76. In 1980-81, the import of salt further decreased to 1,01,700 metric tonnes accounting for 8.66 per cent of the total coastal imports in Bombay Port.

TABLE No. 20 Coastal Imports (Domestic) into Bombay Port Trust (Annual Administration Reports, Bombay Port Trust; 1971-72,1976-77 and 1981-82.) (Docks and Bunders combined) in Metric Tonnes

(Rounded off to hundred)

Commodities		1970-71	1975- 76	1980- 81
1.	Building material	6,55,600	3,46,400	2,47,200
2.	Chemicals	22,500	16,100	15,100
3.	Clay	44,600	6,500	
4.	Copra	35,100	3,900	
5.	Coir and coir products	2,100	te	Ga
6.	Cocoanut	10,100		
7.	Cotton-raw	700		
8.	Dates	400		
9.	Drugs and medicines	1,000		
10.	Fertilizers	100		19,300
11.	Earth and earthenware		9,900	7,500
12.	Fish—dried and fresh	35,300	45,400	17,100
13.	Foodgrains	300	300	5,000
14.	Foodstuffs N. O. S.	500	1,100	



	Grand			
26.	Miscellaneous	2,21,300	1,80,700	6,59,800
25.	Fibres— synthetic	100	te	Jaz
24.	Wood and timber	11,40,600	1,28,800	60,700
23.	Rubber-raw	21,300	5,500	
22.	Salt	1,74,500	2,08,800	1,01,700
	Paper and paper products	200		
20.	Oil and fats N. O. S.	16,300	900	100
19,	Oilseeds	11,400	12,200	100
	Metals and metal products	11,100	7,300	600
17.	Gunnies and hessians	8,600		
16.	Machinery N. O. S (Not otherwise specified.)	100	400	
15.	Fruits—dried and fresh	1,500	800	

(ii) Exports: The total coastal exports from Bombay to other centres in India though increased in 1974-75 over those in 1970-71 they declined in 1975-76. However the quantity of exports of different commodities recorded varied changes. The coastal exports of fertilisers were not specifically mentioned in 1970-71 statistics, but the same formed a large amount in 1974-75 (22,600 tonnes).

The exports of commodities, such as, building materials, chemicals, cotton, drugs and medicines, foodgrains, metals and metal products, spices including pepper, oil-seeds, etc., showed declining trend. On the other hand, a very few commodities such as asphalt, bitumen, pitch tar, and creosote, recorded an increase from 8,100 tonnes in 1970-71 to 12,700 tonnes in 1974-75 and again to 24,000 tonnes in 1975-76. The commodities grouped under miscellaneous recorded the highest percentage of total coastal exports, and the percentages to total exports under this group during 1970-71, 1975-76 and 1980-81 were 90.48,94.80 and 98.88, respectively.

Table No. 21 shows the statistics of coastal exports from Bombay Port.

TABLE No. 21 Statistics of Coastal Exports from Bombay Port (Metric Tonnes)

(Figures rounded off to hundred)

Со	mmodities	1970- 71	1975- 76	1980- 81
1.	Asbestos and asbestos material.	100		
2.	Asphalt, bitumen, pitch tar and creosote	8,100	24,000	1,300
3.	Beverage and drinks—non-alcoholic	600		100
4.	Bicycles and bicycle parts			
5.	Building materials	8,400	1,800	800
6.	Chemicals	6,300	1,100	100
7.	Cotton	2,700	300	
8.	Drugs and medicines	800		
9.	Dyes and colours of all kinds .	200		
10.	Fodders	1,700	1,200	900
11.	Earth and earthenware	ite	100	iaz
12.	Foodgrains	49,800	14,900	1,600
13.	Foodstuffs N.O.S.	1,700	200	400
14.	Fruits and vegetables	7,100	2,600	1,500
15.	Gunnies and hessians, jute manufactures and hemp.	4,700	1,400	
16.	Fertilisers		9,100	10,600
17.	Glass and glass products		100	
18.	Instruments etc.	100	100	100

19.	Lac, gums and resins	900	400	100
20.	Leather and leather Mfgs.			
21.	Machinery N.O.S.	600	300	
22.	Manures	18,300		
23.	Metals and metal products	28,600	4,300	800
24.	Oil-seeds	1,700	700	1,900
25.	Oil and fats N.O.S.	600	300	
26.	Paints and paint materials	300		100
27.	Spices including, pepper	1,600	600	
28.	Sugar	500	400	
29.	Textiles	400	100	
30.	Woodpulp		4,500	
31.	Miscellaneous	14,32,700	12,76,300	18,05,700
	Grand Total	15,78,500	13,44,800	18,26.000

FORWARD TRADING

Futures trading plays a key role in the marketing of many important agricultural commodities and processed products.

Apart from U.S.A. and U.K., India is a large country which has had active futures markets over a long period. As soon as the cotton exchanges were established in U.K. and the U.S.A. (1880), the cotton merchants in Bombay followed suit. Quite a large proportion of the Indian cotton crop found its way to Bombay and the city became the largest cotton market in the East. After the American Civil War, in addition to this spot trade, a good deal of futures business was conducted on a large scale. But the first step in the evolution of an organised futures market was taken with the establishment of Bombay Cotton Traders' Association in 1875, by the buyers who were mostly Europeans. Before the establishment of this association, the trading was erratic and uncontrolled. Soon-afterwards, a rival body known as the Bombay Cotton Exchange which was predominantly Indian, was set up. However, the dissatisfaction on the part of the dealers led to the emergence of a third body in 1915, called the Bombay Cotton Brokers' Association, mainly for regulation of futures business.

In 1918, the Government of India constituted a Cotton Contracts Committee to control the cotton trading in Bombay, A clearing house was established and periodical settlements were effected. In 1919, the Committee was replaced by a Cotton Contracts Board which in turn founded a central cotton association in 1922 under the name of East India Cotton Association.

In oil-seeds, a futures market was established in Bombay in 1900. Subsequently, numerous other futures markets in oil-seeds came into existence in Gujarat, Saurashtra and Punjab. A futures market in bullion was also established in Bombay in 1920.

Prior to World War II, forward trading in this country was carried on in various agricultural commodities such as cotton, grains, oil-seeds, jute, spices, sugar, shellac, etc., and in non-agricultural commodities such as bullion, metals, cotton yarn and cloth, jute goods etc. During the early years of World War II, as a result of shortages, the prices of various commodities rose to high levels. The Government of India, hence issued orders under the Defence of India Act prohibiting forward trading in several commodities such as raw cotton, cotton cloth and yarn, oil-seeds, vegetable oils and oil-cakes, foodgrains, spices, sugar and gur, etc. Some of

these orders under the Defence of India Act, in respect of foodgrains, edible oil-seeds and oils, raw cotton and spices were kept in force under the Essential Supplies (Temporary Powers) Act, 1946, and similar orders about cotton-seed and sugar were issued under the latter Act. In the case of raw cotton only, a general exemption was granted, subject to certain conditions, with respect to forward trading conducted under the auspices of the East India Cotton Association, Bombay.

Among the States, Bombay was the only State which had enacted legislation for the regulation of forward trading. The Bombay Forward Contracts Control Act, 1947, was a comprehensive piece of legislation empowering the State Government to regulate forward trading in commodities and securities and many of the provisions of the draft Futures Markets (Regulation) Bill had been taken from that Act. (Report of the Expert Committee on the Futures Markets (Regulation) Bill, 1950, Ministry of Commerce, Govt, of India, 1951.)

The draft bill alongwith the comments received from State Governments, Chambers of Commerce and the Reserve Bank of India was referred to an expert committee appointed by the Government of India in the Ministry of Commerce on 27th July 1950. One of the cardinal principles of this legislation was to cause the minimum inconvenience to legitimate business activities. After passing through various stages and references to Select Committees, the bill was ultimately passed as the Forward Contracts (Regulation) Act, 1952. This led to the establishment of the Forward Markets Commission in September 1953.

Thus, for the first time in India, the problem of regulating commodity exchanges was tackled on a countrywide basis. The Act is based on the view that strict regulation of forward trading is essential as otherwise the forward trading may lead to excessive speculation which may accentuate price fluctuations to the detriment of the interests of producers as well as consumers.

The Forward Contracts (Regulation) Act, is principally designed to exercise control over those forward contracts which have inherently an element of speculation in them and which are generally known as futures or hedge contracts. The actual day-to-day regulation of such contracts is undertaken by recognised associations. However, the Act also provides for the regulation of forward contracts lequiring the actual delivery of goods, known as non-transferable specific delivery contracts, when Government considers that they are or may be misused and their regulation is necessary. The Act authorises Government to notify from time to time the commodities in which forward trading shall be regulated through recognised associations and those m which it shall be prohibited altogether. It also provides that no association shall be concerned with forward trading in any commodity except under the conditions of a certificate of registration granted by the commission. Recognised associations generally function with a degree of autonomy, but the measures imposed by them or regulation of hedge trading require the consent of the commission. The control is very nominal in the case of registered associations. But their fields of activity are considerably restricted by the ban imposed on forward trading in many commodities.

The main distinction is made between spot and ready contracts on the one hand and forward contracts on the other, the basis being the period of time that elapses between the signing of contract and the contemplated delivery of goods. Under spot or ready contracts, the delivery has to be taken immediately or within a specific number of days. When delivery is contemplated after a longer period of time, the contracts are called forward contracts.

As per this Act, "Forward Contract" means a contract for the delivery of goods at a future date and which is not a ready delivery contract. Forward contracts are further classified into two categories: futures contracts which are used for the purpose of hedging or speculation and specific delivery contracts which are used for marketing merchandise. In futures contracts, though delivery may be contemplated, it rarely takes place. In specific delivery contracts, on the other hand, delivery is a more common feature. Forward contract for specific delivery or specific delivery contract means a forward contract which provides for the actual delivery of specific qualities or types of goods during a specified future period at a price fixed thereby or to be fixed in the manner thereby agreed and in which the names of both the buyer and the seller are mentioned.

Specific delivery contracts are further sub-divided into transferable specific delivery contracts and non-transferable specific delivery contracts depending upon whether the contracts can change hands from one party to another. The Act defines the non-transferable specific delivery contract as a specific delivery contract rights or liabilities whereunder or under any delivery order, railway receipt, bill of lading, warehouse receipt or any other document of title relating thereto are not transferable. When the specific delivery contracts are of the transferable variety, they closely resemble futures trading. The only feature which distinguishes them from futures contracts is that if and when delivery has to be made it has to be in terms of a specified quantity instead of in terms of a prescribed unit of trading and a prescribed basis of contract. Ready delivery contract means a contract which provides for delivery and payment of price either immediately or within such period not exceeding eleven days after the date of the contract and under such conditions as the Central Government may from time to time, by notification in the *official Gazette*, specify in this behalf in respect of any goods.

Forward Markets Commission: The Commission, with headquarters at Bombay was established in September, 1953 by the Ministry of Commerce and Industry to administer the Forward Contracts (Regulation) Act, 1952 which has among its objects, the regulation of forward contracts, the prohibition of goods and matters connected therewith. Besides, the Commission also undertakes economic measures intended to restrain steep rise or fall in prices of regulated commodities in which forward trading is permitted during that period.

The functions of the Commission are wide as they include all matters arising out of the administration of the Act and such other duties and powers as may be assigned or prescribed. Broadly, the functions of the Commission fall into four categories viz., (i) promotional and exploratory: that is the study of forward market

in a particular commodity with a view to inquire whether the market should be brought within the regulatory provisions of the Forward Contracts (Regulation) Act; (ii) enquiry into claims of associations for recognition to conduct forward trading; (iii) supervision and inspection of recognised associations; and (iv) collection of factual data and keeping the different forward markets under observation. Thus, the duties of the Commission are both *quasi*-judicial as well as executive, in character.

If the Central Government is satisfied, after making such inquiry as may be necessary in this behalf and after obtaining such further information, if any, as may be required that the rules and bye-laws of a association are suitable in the interest of the trade and are in the public interest, it grants recognition to the association.

On 31st December 1976, in all 33 associations from different parts of the country were recognised under the Forward Contracts (Regulation) Act, 1952, of which 5 were in Bombay. The names of these recognised associations, and the commodities in which the forward trading was regulated by them are given below:—

Na	me of Association	Commodity
(1)	East India Cotton Association Ltd.	Cotton.
(2)	Bombay Oil-seeds and Oils Exchange Ltd	Castor-seed, ground-nut, groundnut oil, cotton-seed, linseed.
(3)	Pepper and Ginger Merchants' Association	Pepper.
(4)	Grain, Rice and Oil- seeds Merchants' Association.	Groundnut kernel.
(5)	Vanaspati Manufacturers' Association of India, Bombay.	Groundnut oil.

As a rule, only one association is recognised for regulating forward trading in any commodity in a particular area.

Futures trading is considered as a device for protection against the price fluctuations which normally arise in the course of marketing of commodities. Stockists, processors and manufacturers utilise the futures contract to transfer the price risk faced by them, and this use of the futures market is commonly known as hedging. Whenever a futures market is organised two markets operate side by side *viz.*, the spot and futures.

However, widely divergent views are heard from the academic circle and the world of business whenever the effects of such speculation and consequently of futures trading on commodity price levels and price variations are discussed. While a few are convinced that commodity futures trading tends to stabilise prices and reduce price variations, others not only disagree with this view, but on the contrary vigorously allege that more often than not, futures trading aggravates the price fluctuations and increases both the magnitude and the frequency of price variations.

Four types of effects on price can be had by futures trading *viz.*, average prices received by producers and paid by consumers, seasonal price variations, inter and intra-seasonal fluctuations in prices and short-term oscillations in prices. The effect of futures trading on prices can be observed from the following statistics pertaining to average yearly prices of groundnut and linseed at Bombay expressed in constant rupees for the years with little or no futures trading and for the years with futures trading.

Year	Average yearly price				
A-Years with little or no futures trading					
1951-52	63.38				
1952-53	80.42				
1953-54	61.33				
1954-55	46.67				
1955-56	61.90				
1960-61	76.54				
1963-64	74.57				
1964-65	77.80				
1965-66	104.15				
B-Years with fu	tures trading				
1956-57	61.48				
1957-58	62.30				
1958-59	64.07				
1959-60	70.22				
1961-62	72.37				
1962-63	66.99				

The analysis of seasonal price indices(A. S. Naik, Effects of Futures Trading on Prices.) showed that both in groundnut and hessian, the amplitude of seasonal price fluctuations as well as the co-efficient variation of seasonal indices were smaller for years with futures trading than for years with little or no futures trading. In linseed, however, the statistical results disclosed that the seasonal fluctuations tended to increase in the presence of futures trading than in its absence.

The activities of the five associations recognised under the Forward Contracts (Regulation) Act, 1952 are described below.

Grain, Rice and Oil-seeds Merchants Association: The Grain Merchants' Association which is now known as the Grain, Rice and Oil-seeds Merchants' Association was established in 1899. Before the establishment of this association in the latter half of the nineteenth century, there was no commercial body worth its name to control grain, and oil-seeds trade in the city of Bombay. In the beginning, the ready trade ingrain and all kinds of oil-seeds was regulated by the association. However, with the passage of time, the necessity to sell forward position was felt and in the year 1911, with the co-operation of buyers who were mostly Europeans, the forward delivery contracts of almost all kinds of oil-seeds like groundnut seeds, linseeds, castorseeds etc., and foodgrains like wheat, jowar, lentils, gram, etc. were formulated. The contracts were at seller's option and the sellers were allowed to give delivery of the goods on any day from the date of the contract. The future delivery date was stipulated to enable the sellers to fetch goods from upcountry centres. But these specific forward delivery contracts had to be suspended when the Bombay Forward Contracts Control Act, 1947 was applied to the trade of oil-seeds in the city of Bombay on the 19th December 1950. Till that time, this was the only association in the city of Bombay, under whose auspices, the forward delivery

contracts in oil-seeds were traded.

In the year 1931 the hedge contracts for cotton seeds and groundnut seeds were introduced in Bombay market. These hedge contracts were suspended in the year 1943, when futures trading was banned by the Government of India.

In 1955, the Forward Contracts (Regulation) Act, 1952 was applied to oil-seeds trade in Bombay and the association started regulating non-transferable specific delivery contracts in groundnut seeds, linseed, castor-seed, etc. In 1960, the association was granted registration by the Forward Markets Commission for regulating contracts in principal varieties, such as, oil-seeds and oil-cakes in the year 1965. Even though, the association has been recognised by the Government of India to regulate futures trading in groundnut kernels, at present futures as well as forward specific delivery business in groundnut are banned by the Government since last few years. The association has its constitution like that of a limited company, and has also formulated trading bye-laws.

The number of members of the association during 1979-80 stood at 578 who were generally the wholesalers. The trading in oil-seeds and grains is mostly concentrated in Bhat Bazar area at Mandvi and Dana Bunder. The merchants who actually deliver or receive delivery of at least 8,000 bags per year and pay subscription on them at a fixed rate are enrolled as ordinary members of the association. Of course, those businessmen who cannot reach this limit are allowed to be enrolled as associate members. Besides, the association enrolls brokers and *mukadams* under the rules and regulations of the association.

The association has an arbitration board which arbitrates in trade disputes submitted by its members.

The weekly groundnut seed rates in Bombay on certain dates are show in the following statement:—



Maharashtra State Gazetteers

		Variety		
Date	Khandesh	Khandesh Quality	Madras	Kanpur Bold
4th October 1976		172.00	171.00	168.00
11th October 1976	180.00	179.00		
18th October 1976	156.00	155.00		
25th October 1976	156.00	155.00		
1st November 1976	162.00	161.00		
8th November 1976	163.00	162.00		
15th November 1976	169.00	168.00		
22nd November 1976	180.00	179.00		
29th November 1976	176.00	175.00		
31st December 1976	180.00			
22nd October 1979	207.00	205.00		
12th November 1979	208.00	207,00		
19th November 1979	208.00	207.00		
26th November 1979	215.00	214.00	Jd.	zelle
3rd December 1979	218.00	218.00		
10th December 1979	223.00	222.00		
17th December 1979	217.00	216.00		
24th December 1979	213.00		217.50	
31st December 1979	215.00		212.50	

The following statement shows the highest and lowest ready prices of groundnut kernels in Bombay during 1976-77 and 1979-80;— $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2$

Year , (November to October)	Highest/ Lowest	Date	Groundnut kernels (Karad- Bold) (Rs. per 100 kg.)
1976-77	Highest	28th December 1976	358.00
	Lowest	16th December 1976	316.00
1979-80	Highest	14th July 1980	512.00
	Lowest	12th January 1980	390.00

Pepper and Ginger Merchants' Association: The association was established in 1937, and in 1963 it received the sanction from the Forward Markets Commission for forward trading in pepper.

The membership of the association comprises dealers, exporters and associate members. At the end of the year 1976 (i.e. upto 22nd October 1976); there were on the roll of the association, 38 dealers, 14 exporters and 22 associate members. The total number of brokers registered with the association upto the end of the; year 1976 was 61; The number of member traders dealing in forward trading changes with existing conditions and future prospects of the trade. About fifty percent of the member traders deal in forward trading in pepper.

The Government of India has authorised the association: to issue certificates of origin in respect of shipments of spices and seeds for export. During the year 1975-76, the association issued 20 certificates to the exporters.

The following Table No. 22 gives details regarding futures trading in pepper undertaken by the association in a few years.

TABLE No. 22
Futures Trading in Pepper undertaken by the Pepper and Ginger Merchants' Association

			No. o	of opera	ntions ho position	lding	of o		ortion open sition	
Month ending	Delivery	tonnes)	Above below 50 tonnes	50 tonnes	Above below 50 tonnes	Short 50 tonnes	tonnes)	held by the group above 50 tonnes		
								Long	Short	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
January 1972	January 1972	0.7	22				Nil			
	March 1972	0.8		1	23	1	0.3	33.3	11.1	
February 1972	March 1972	0.7	31	1	23	1	0.3	27.5	13.3	
	May 1972	0.2	7	1	12		0.1	50.0		
March 1972	March 1972	0.8	1				Nil			
	May 1972	0.7	32	1	27		0.3	19.0		
October 1976	November 1976	1.3	28	ı S	30	е	0.2	Zθ	ett	
	January 1977	0.4	13		18	1	0.2		40.6	
November 1976	November 1976	0.6					Nil			
	January 1977	1.4	24	3	43	1	0.4	41.0	16.8	
December 1976	January 1977	1.4	26		36	1	0.3		17.1	
	March 1977	0.3	9		7		0.1			

The turnover of trade of the association was as follows:-—

Delivery Contract	Period	Volume of transactions (sales in quintals)		
November 1975	26-10-75 to 29-11-75	8,625		
January 1976	16-10-75 to 31-1-76	19,575		
March 1976	1-12-75 to 30- 3-76	17,575		
May 1976	2-2-76 to 31- 5-76	20,400		
July 1976	1-4-76 to 31- 7-76	20,325		
Septemb <mark>er</mark> 1976	1-6-76 to 30- 9-76	18,200		
November 1976	2-8-76 to 16- 10-76	21,950		
January 1977	1-10-76 to 16- 10-76	850		

The price of pepper in delivery contract was Rs. 1,330 on 5th November 1975, which increased to Rs. 1,410 per quintal on 27th November 1975 due to demand from Communist countries and short supplies because of damage to the crop by excessive and unseasonal rains. The rate for January 1976 delivery contract was Rs. 1,260 per quintal, which declined to Rs. 1,230 on 5th December 1975 due to arrival of new crop of pepper in the terminal markets, and increased to Rs. 1,325 per quintal on 15th December 1975 and closed at Rs. 1,270 per quintal on 31st January 1976.

March 1976 delivery contract, after opening at Rs. 1,275 per quintal on 20th December 1975, declined to Rs. 1,220 per quintal on 25th February 1976 and advanced to Rs. 1,475 per quintal on 29th March 1976, and closed at Rs. 1,447 per quintal on 30th March 1976.

May 1976 delivery contract opened at Rs. 1,285 per quintal on 3rd February 1976, declined to Rs. 1,225 per quintal on 27th February 1976 and advanced to Rs. 1,535 per quintal on 2nd April 1976 due to demand from Communist countries, and closed at Rs. 1,514 per quintal on 31st May 1976.

July 1976 delivery contract, after opening at Rs. 1,485 per quintal on 6th May 1976, rose to Rs. 1780 per quintal on 15th July 1976 due to reported fall in pepper production, and closed at Rs. 1,710 per quintal on 31st July 1976.

September 1976 delivery contract opened at Rs. 1,730 per quintal on 30th June 1976 and advanced to Rs. 1,850 per quintal on 15th July 1976, and declined to Rs. 1,635 per quintal on 4th September 1976 and closed at Rs. 1,656 per quintal on 30th September 1976.

The commencement of trading in the November 1976 delivery was permitted with effect from 2nd August 1976. However the first transaction took place on 25th August 1976, at Rs. 1,697 per quintal and the rate declined to Rs. 1,585 per quintal on 9th September 1976. The delay inthe arrival of new crop of pepper pushed up the price. The rate at the close of the year was Rs. 1,820 per quintal.

January 1977 delivery contract after opening at Rs. 1,590 per quintal on 1st October 1976 declined to Rs. 1,553 per quintal on 6th October 1976, and the rate at the close of the year was Rs. 1,800.

The delivery order rates and quantity tendered for delivery against the transferable specific delivery contracts during 1975-76 are given below (Source.—The Pepper and Ginger Merchants' Association Limited, Annual Report 1975.):—

Contract	Delivery order rate	Quantity tendered for delivery (Quintals)		
November 1975	1,370	25		
January 1976	1,270	50		
March 1976	1,447	475		
May 1976	1,514	500		
July1976	1,710	600		
September 1976				

Bombay Oilseeds and Oil Exchange Ltd. The association under the present title was established on 19th July 1976. Prior to this, it was known as the Seeds Traders' Association which was registered under the Indian Companies Act, on 12th October 1938. The name of the Seeds Traders' Association was changed to the Bombay Oilseeds Exchange Limited on 24th April 1950. The Oil Merchants' Chamber Limited which was regulating trading in Vegetable oils was amalgamated with the Bombay Oilseeds Exchange Limited on 7th August 1956 and the name of the exchange was thereupon changed to the Bombay Oilseeds and Oil Exchange Limited on 8th November 1956. The Exchange was also recognised for forward trading in groundnut oilcake.

The Exchange was recognised by the then Government of Bombay for forward trading in oilseeds in 1950. The Forward Contracts (Regulation) Act, 1952 was applied to oilseeds on 25th January 1965: The Exchange has been recognised by the Government of India for forward trading in groundnut, castorseed, linseed, cottonseed, groundnut oil and groundnut cake (expeller) under the Forward Contracts (Regulation) Act, 1952. Trading in delivery contracts and ready contracts in oilseeds and oils is also being regulated by the Exchange. All forward trading in groundnut, groundnut oil, and cottonseed, have been suspended by the Government of India. Futures trading is permitted only in castorseed and linseed which are non-edible oilseeds.

The membership of the exchange comprises crushers:, exporters, stockists, commission agents and brokers. At the end of the year 1963, the total number of members was 611, which decreased to 414 at the end of 1973 and stood at 416 at the end of 1975.

The members are divided into four panels *i.e.*, crushers, exporters, dealers and brokers. At the end of 1975, there were 29 members in crushers' panel, 37 in exporters' panel, 92 in dealers' panel and 258 in brokers' panel.

The exchange is a member of the (i) Federation of Indian Chambers of Commerce and Industry, (ii) Indian Merchants' Chamber, (iii) Indian Standards Institute and (iv) Central Organisation for Oil Industry and Trade. The Exchange has an up-to-date and well-equipped analytical laboratory of its own which undertakes analysis of oilseeds, oils, oilcakes and allied products at reasonable rates. The laboratory of the Exchange is recognised by the Government for the work of grading under AGMARK of vegetable oils meant for export. The survey department carries out survey of oilseeds for determining or deciding their exact quality and grade. The Government has authorised the Exchange to issue certificate of origin in respect of shipment of oilseeds, oils and oilcakes exported to foreign countries. During 1974-75, eleven certificates were issued by the Exchange.

The terms and conditions imposed by the Forward Markets Commission on the Exchange in respect of hedge contracts 1975-76 are given in Table No. 23.

TABLE No. 23
Terms and Conditions imposed by the Forward Markets Commission in respect of Hedge Contracts in 1975-76

				Margin	on long	open po	sition	Exemption to the exporters		
Hedge	permission	Date of commence	member	First marginal	arginal Rate Second Rated		Rateof margin			
contracts	and mention- ing the terms and conditions	hedge contracts	and non- member in metric tonnes.	on	margin per quintal (Rs.)	line on closing rate of (Rs.)	per quintal (Rs.)		Limit of 2,000 metric tonnes on open positi on granted or not	
1	2	3	4	5	6	7	8	9	10	
Castorseed —										
April 1975	22-8-74	23-8-74	2000	230	46	250	100	Granted	Granted	
July 1975	29-3-75	31-3-75	2000	200	40	220	90	Do.	Do.	
September 1975	13-6-75	17-6-75	2000	190	35	G	a7	Do.	Do.	
April 1976	19-8-75	20-8-75	2000	180	35		9.2	Do.	Do.	
Linseed										
April 1975	24-8-74	30-8-74	2000	350	70	375	150	Do.	Granted by order, dated the 6th February 1975	
July 1975 —	29-3-75	31-3-75	2000	280	56	300	120	Do.	Granted.	
September 1975	13-6-75	17-6-75	2000	260	50			Do.	Do.	
April 1976	19-8-75	20-8-75	2000	250	50			Do.	Do.	

Note:—No margin free limit was granted.

The volume of trading in castorseed hedge contracts and linseed hedge contracts made by the Exchange during the year 1974-75 are shown below separately :—

(Figures in '000 tonnes)

Month ending	April 1975	July 1975	September 1975	April 1976
November 1974	53.7			
December 1974	64.2			
January 1975	101.8			
February 1975	122.6			
March 1975	63.6	4.3		
April 1975	8.5	78.4		9
May 1975		51.9		
June 1975		43.6	8.7	
July 1975		9.0	115.5	
August 197	5		89.5	19.0
September 1975			4.2	87.2
October 1975	15	ta	te C	118.8
Total	414.4	187.2	217.9	225.0

(Figures in *000 tonnes)

Month ending	April 1975	July 1975	September 1975	April 1976
November 1974	33 1			
December 1974	63.5			
January 1975	153.3			
February 1975	201.8			
March 1975	149.2	7.3		
April 1975	6.7	119.8		
May 1975		92.7		
June 1975		100.7	636.3	
July 1975		6.9	183.6	1
August 1975			99.4	23.2
September 1975			11.9	171.4
October 1975	0	ta	te (222.1
Total	607.6	327.4	931.2	416.7

The Following statement gives the average prices of groundnut oil in Bombay during October to November crop-year from 1962-63 to 1974-75:

Year	Average price per tonne (Rs.)
1962-63	1,785
1963-64	2,138
1964-65	2,445
1965-66	3,988
1966-67	4,155
1967-68	2,957
1968-69	4,089
1969-70	4,685
1970-71	4,330
1971-72	4,013
1972-73	6,712
1973-74	8,096
1974-75	7,619

The castorseed hedge contract of April 1975 commenced on 23rd August 1974 On13th November'1974, the ruling price of castorseed April 1975 hedge contract was Rs. 216.25. (Rates in this account are in Rs. per quintal.) The highest price of Rs.235 was recorded on 26th November 1974 and the lowest of Rs. 164.00 on 21st February The due date rate was fixed at Rs. 187.

The castorseed July 1975 hedge contract commenced on 31st March 1975 at Rs. 178.25. The highest price of Rs. 202.75 was recorded on 16th April and the lowest of Rs. 164.00 on 10th July 1975. The rate on the due date was fixed at Rs. 178.00.

The castorseed September 1975 hedge contract commenced on 17th July 1975 at Rs, 180.25. The highest price of Rs. 187.87 was recorded on 29th July 1975 and the lowest of Rs. 145.50 on 29th September on 1975. The due date rate was fixed at Rs. 145.00.

The linseed April 1975 hedge contract commenced on 30th August 1975. On 13th November 1974 the ruling price of the linseed April 1975 hedge contract was Rs. 341.25. The highest price of Rs. 345.50 was recorded on 26th November 1974, and the lowest of Rs. 224.50 on 21st February 1975. The due date rate was fixed at Rs. 266.00.

The linseed July 1975 hedge contract commenced on 31st March 1975 at Rs. 245.00. The highest price of Rs. 282.50 was recorded on 16th April 1975, and the lowest of Rs. 213.00 on 5th July 1975. The due date rate was fixed at Rs. 242.00.

The linseed September 1975 hedge contract commenced on 17th June 1975 at Rs. 244.25. The highest price of Rs. 256.00 was recorded on 23rd August 1975 and the lowest of Rs. 215.50 on 7th July 1975. The due date rate was fixed at Rs. 235.00.

The castorseed April 1976 hedge contract commenced on 20th July 1975 at Rs. 170.25. The highest price of Rs. 172.00 was recorded on 23rd August 1975 and the lowest of Rs. 141.50 on 30th September 1975. At the end of the year, the ruling price for this contract was Rs. 151.25.

The linseed April 1976 hedge contract commenced on 20th August 1975 at Rs. 231 .00. The highest price of Rs. 237. 50 was recorded on 26th August 1975 and the lowest of Rs. 195.50 on 30th Septembei 1975. At the end of the year, the ruling price for this contract was Rs. 203.50.

The following data reveals the position of futures trading in castorseed at the Bombay Oilseeds and Oil

		Total Volume of	ор	ber of hold en I po toni	ding sition		Total open	open the group above	
Month ending	Delivery	of transactions (in '000	Long Short tion					500 tonnes	
		tonnes)	Below 500	Above 500		Above	tonnes)		
						500		Long	Short
1	2	3	4	5	6	7	8	9	10
October 1976	April 1977	107.9	97	3	130	1	9.8	26.7	15.2
November 1976	April 1977	88.1	38	7	130	2	11.1	78.4	18.8
December 1976	April 1977	82.5	18	6	152	6	16.6	88.2	43.2

The details of futures trading in linseed at the Exchange are given below: .—

Month ending	Delivery	Total volume - of tran-			ding osition		Total open position	open open group above 20	
nara	ash	sactions (in '000 tonnes)	Below 200	Above 200 tonnes	200	Above 200	(in '000 tonnes')		
1	2	3	4	5	6	7	8	9	10
October 1976	April 1977	160.4	103	12	232	14	16.7	50.5	40.5
November 1976	April 1977	115.4	136	13	177	10	12.1	49.5	32.3
December, 1976	April 1977	89.2	113	6	101	8	7.5	32.6	35.5

East India Cotton Association: The association was established in 1922 to provide and maintain suitable premises for cotton exchange in the city of Bombay and elsewhere in India and to regulate administration of the same; to provide forms of contracts and to regulate contracts; to settle by arbitration or otherwise disputes among cotton merchants; to establish and maintain clearing house; and to regulate the import and export of cotton and generally to control, and regulate the cotton trade in Bombay and elsewhere in India. The membership of the Association as on 21st March 1981 was 358.

The association is recognised under the Forward Contracts (Regulation) Act, 1952 on a permanent basis in respect of contracts in Indian cotton in the whole of India. However, the futures contracts otherwise known as hedge trading in cotton is not permitted since 1966. Transferable contracts which end in delivery and known as transferable specific delivery contracts which were allowed to be traded in Bengal Deshi have also not been permitted since 1976-77. At present (1981) non-transferable specific delivery contracts in cotton are permitted by the association with the concurrence of Forward Markets Commission. A clearing house is maintained for settlement of weekly/fortnightly differences and for passing on the tenders during delivery

months. The surveys and appeal on Indian as well as foreign cotton are carried out under the blind survey system by whole-time paid sworn surveyors. The association is a signatory to the Universal Cotton Standards Agreement.

The trading in transferable specific delivery contracts by the association during 1971 and 1975 were as follows:— $\,$

Manada	Cotto ba		
Month	1971	1975	
January	N.T.*	4,450	
February		900	
March		2,200	
April		2,800	
May		N.T.	
June	\	600	
July		N.T.	
August	400	N.T.	
September	4,500	400	
October	8,700	700	
November	10,800	1,000	
December	17,000	200	
Total	41,400	13,250	

* N.T. == Non-Transferable.

There was no trading in cotton at Bombay uring the period February 1971 to July 1971. During 1971, 1,26,782 bales of cotton was purchased and 1,31,348 bales of cotton was sold by the association.

The details of trading in cotton by the association under the nontransferable specific delivery contracts during April 1980 to September 1980 are shown below :—

(In bales of 170 kg. each)

Delivery	April 1980	May 1980	June 1980	July 1980	August 1980	September 1980
April 1980	33,645					
May 1980	10,137	17651				
June 1980	6,325	8,866	12,035*			
July 1980	4,600	2,760	8,580*	13,463		
August 1980		1,200	4,752	7,447	11,589	
September 1980				5,750	4,358	253†
October 1980				554	1,458	986†
November 1980					2,137	2,281†
December 1980						702†

* Revised.

† The figures are provisional and pertain to 15th September 1980.

Vanaspati Manufacturers' Association of India: The association was first constituted on an informal basis in 1936 with 8 members. During World War II, the association was recognised by the Government of India for negotiating supplies of vanaspati to the defence services and for distribution of scarce raw materials. Price control on vanaspati was introduced in October 1944. The association regularly furnished information to Government for fixing vanaspati prices. Vanaspati being the only processed oil, its prices had to be revised with changes in oil prices. In 1946, the association adopted a formal constitution as a result of which the membership increased from 21 to 51.

The association remained the primary instrument of consultation between Government and vanaspati manufacturing industry on price control, regulation of quality of vanaspati, research on vanaspati, etc.

In 1965, the Government of India decided to regulate non-transferable specific delivery contracts in groundnut oil because of their misuse for illegal speculative activities, and therefore, the association was recognised under the Forward Contracts (Regulation) Act, 1952 to regulate nontransferable specific delivery contracts of traders in groundnut oil. The association being an all-India body, the members enter into contract with any party in the country. Since October 1971 the Government suspended non-transferable specific delivery contracts in groundnut oil. The manufacturers are therefore required to buy groundnut oil only on ready delivery terms. In six years of regulation *i.e.*, from 1965 to 1971, the members of the association had purchased 906,300 tonnes of groundnut oil under transferable specific delivery contract.

During 1976-77, the membership of the association was 64, of which eight had their factories in Bombay.

The prices of groundnut oil in 1976 are given below :—

Week ending	High	Low
3rd January 1976	4,950	1,825
7th February 1976	4,525	4,400
6th March 1976	4,150	3,775
3rd April 1976	4,650	4,400
1st May 1976	4,550	4,475
5th June 1976	4,325	4,200
3rd July 1976	5,675	5,075
28th Au <mark>gust</mark> 1976	6,450	6,450
4th September 1976	6,450	6,450
2nd October 1976	6,400	6,400
6th November 1976	6,400	6,350
4th December 1976	6,900	6,400

WHOLESALE TRADE

Bombay being the largest trading and distributing centre, the wholesale trade carried out here is also on the largest scale in the State. The peculiarity of the wholesale trade is mainly concentrated within Bombay city limits. However, a few persons are engaged in wholesale trade in western and eastern suburbs. The main reason for the concentration of wholesale trade mostly within the limits of Bombay city is the proximity of the area to railway termini of Central and Western railways and also to the Bombay Port which make the transport of bulky commodities very easy. The Airport at Santacruz, on the other hand, helps the transport of costlier or perishable goods in a short period. In the past the wholesale trade in specific commodities was concentrated only in specific areas of the city, which have remained unaffected even now.

In 1909, wholesale business in cloth was conducted mainly in Mulji Jetha Market, while that in copper at Pydhoni; in drugs at Ganeshwadi; in food-grains, sugar, ghee at Mandvi; in silver and gold on Sheikh Memon Street; and the trade in opium and machinery in Fort. There were about 40 big merchants in Bombay who used to deal in pearls.

Now, along with the old centres of wholesale trade in Bombay there is a tremendous increase in the number of centres and also in the quantity and variety of commodities traded on wholesale basis.

The wholesale trade in fruits, vegetables, mutton, eggs and flowers is mostly undertaken in municipal markets. (For details of wholesale trade undertaken in these markets refer to a sub-section on 'wholesale markets 'in this Chapter.) At present the wholesale trade in vegetables is undertaken in three municipal markets of which two are at Byculla viz., Sant Gadge Maharaj Market and Sant Sawata Mandai, and one at Dadar near Plaza theatre. In addition, a private market at Byculla viz., Meher Market also deals in wholesale trade of vegetables. The wholesale business in fish is undertaken in a municipal market on Palton Road viz., Chhatrapati Shivaji Market; in eggs and mutton and flowers in Mahatma Jyotiba Phule (former Crawford) Market. The wholesale business in fruits is undertaken in two municipal Markets viz., Jyotiba Phule Market and Sant Gadge Maharaj Market at Byculla. The wholesale trade in cloth is now undertaken in Mulji Jetha Market, Mangaldas Market, Swadeshi Market, Hindamata Cut Piece Wholesale Cloth Market and its surrounding area; tobacco on Clive Street, motor parts and accessories on Jagannath Shankarsheth Road,

i.e., Opera House and its vicinity, Huges Road, Queen's Road; consumer goods in 15 wholesale consumer stores; medicines at Dawa Bazar on Princess Street; food-grains and pulses at Dana Bunder near Masjid Road Station; perfumery on Mohammed Ali Road and its vicinity; hardware in Lohar Chawl, Null Bazar and Chor Bazar, Nagdevi Street and Abdul Rehman Street; jewellery in Zaveri Bazar; brass, copper and aluminium vessels at Tambakata, Mumbadevi and Mohammed Ali Road.

In addition to the aforesaid commodities, the wholesale business in a variety of articles is carried on in Greater Bombay. The following statement reveals the variety of such commodities traded on wholesale basis:

	,
Commodities traded on wholesale basis	Wholesale trade centres in Greater Bombay
Glass bangles and plastic articles Books of all types	Null Bazar, Phule Market. Dhobi Talao, Girgaum Road, Dada- bhoy Naoroji Road.
Readymade garments for children.	Zaveri Bazar, Bhuleshwar.
Cutlery	Lohar Street, Abdul Rehman Street, Jumma Masjid, Null Bazar, Chakala.
Crockery and pottery	Phule Market, Lohar Street, Null Bazar, Grant Road;
Show-pieces and presentable articles.	Phule Market, Null Bazar.
Toys	Cutlery Market, Phule Market.
Dry fruits	Phule Market, Null Bazar, Grant Road,Masjid Bunder Road.
Distemper and oil paint	Abdul Rehman Street, Null Bazar, C. P. Tank, Masjid Bunder, Nagdevi Street, J. J. Hospital area.
Cotton	Sewri.
Film projection and Electronic goods.	Opera House.
Dyes (for dyeing cotton fibre and cloth).	Tambakata.
Coloured clay	Nagdevi Street.

Cycles and its spare parts	Kalbadevi Road, Dadabhai Naoroji Road.	
Electrical goods	Lohar Street.	
Furniture	Mohammed Ali Road, Chor Bazar.	
Shoes and leather goods	Carnac Road, Phule Market, Bhendi Bazar, Pydhoni, Leather Bazar.	
Account books	Pydhoni, Zaveri Bazar.	
Mirrors	Abdul Rehman Street.	
Guns	Abdul Rehman Street.	
Handloom cloth	Kalbadevi Road, Prarthana Samaj, Dadabhai Naoroji Road.	
Hats	Dhobi Talao, Bori Bunder, Phule Market.	
Musical instruments	Dhobi Talao, Fort, Sandhurst Road.	
Rubber packing material	Mohammed Ali Road, Chakala, Masjid Bunder, Phule Market.	zetteers
Weights, measures	Nagpada, Mohammed Ali Road, Abdul Rehman Street.	
Mats of all types	Abdul Rehman Street.	
Mattresses	Phule Market.	
Pipes and plumbing material	Nagdevi Street, Lohar Chawl, Medows Street.	
Paper and cardboards	Sutar Chawl,, Abdul Rehman Street, Parsi Galli, Kandevadi.	
Artificial flowers	Phule Market, Charni Road.	
Photo frames	Abdul Rehman Street.	
Plywood, hardboard	Abdul Rehman Street.	

Raincoat	Fort area, Phule Market.
Sports goods	Dhobi Talao.
Stoves	Phule Market, Pydhoni, Abdul Rehman Street, Hamam Street.
Stainless steel utensils	Tambakata, Mumbadevi.
Stationery	Abdul Rehman Street.
Wood of all types	Reay Road, Tank Bunder.
Umbrellas	Phule Market, Abdul Rehman Street, Null Bazar, Old Hanuman Galli.
Time-pieces, watches and spare parts.	Abdul Rehman Street, Bhendi Bazar, Dadabhoy Naoroji Road.
Iron suitcases	Abdul Rehman Street.
Wires and Grills of all types	Abdul Rehman Street, Lohar Chawl, Null Bazar.
Silk cloth (art-silk)	Kalbadevi.

The Maharashtra Agricultural Farm Produce Corporation which was incorporated in 1970 as a subsidiary of the State Industrial and Investment Corporation of Maharashtra Limited, became an independent organisation in 1972. Besides, the Maharashtra Agricultural Farm Produce Corporation deals in wholesale as well as retail trade of processed and unprocessed pork, poultry, buffalo meat, mutton, fruits and vegetables, fish.products and canned food. The corporation links the agricultural producer with the consumer in a fair price deal. In 1977, the corporation owned 18 farm fairs and 150 dealer outlets in Greater Bombay.

As per the 1951 Census 59,031 persons were engaged in different activities of Wholesale trade in Greater Bombay. The number of persons however, decreased to 44,129 in 1961. The percentage share of workers in wholesale trade to total workers in commerce in 1951 and 1961 stood at 22 and 14.05, respectively. Even though the percentage share of workers in wholesale trade in 1961 showed a decreasing trend, it surpassed the State average of 8.5 per cent and ranked first in all the districts of the State. The 1971 Census classified the wholesale trade in five major groups and enumerated 41,270 persons (Census of Maharashtra, 1971, Industrial Classification) as engaged in wholesale trade in the city.

The group-wise classification of persons engaged in wholesale trade in Greater Bombay in 1971 is shown in the following statement:—

Group	Total	Percentage of workers in the group to the total in wholesale trade	Employers	Employees		Family workers
1	2	3	4	5	6	7
(1) Wholesale trade in food, textiles, live animals, beverages and intoxicants.	11,055	26.8	3,110	5,685	1,685	575
(2) Wholesale trade in fuel, light, chemicals, perfumery, ceramics, glass.	6,150	14.9	2,010	3,145	715	300
(3) Wholesale trade in wood, paper, other fabrics, hide and skin and inedible oils.	5,780	14.0	1,060	4,090	450	180
(4) Wholesale trade in all types of machinery and equipment including transport and electrical equipment.	3,170	7.7	860	1,810	345	155
(5) Wholesale trade in food and miscellaneous manufacturing.	15,115	36.6	3,905	8,600	1,850	760
Total	41,270	100.00	10,945	23,330	5,045	1,970

The percentage share of workers engaged in five major groups mentioned above reveals that the wholesale trade in food and miscellaneous manufacturing ranked first 36.6 whereas the wholesale trade in all types of machinery and equipment including transport and electrical equipment ranked last (7.7) in the list. The classification of persons engaged in wholesale trade by class of work reveals that the percentage of employees to total workers stood at 56.28 which was the highest in all the groups. The class of employers *i.e.*, those who hired one or more persons accounted for 26.27 per cent of the total persons engaged in wholesale trade in Greater Bombay. The tendency to engage the family members in the activities of wholesale trade was very rarely found and accounted for only 4.77 per cent of the total. The class of single workers *i.e.*, those who are participating in the activities of wholesale trade without employing others except casually and without the help of other members of the family except casually accounted for 12. 22 per cent of the total.

The percentage of wholesale business establishments in Greater Bombay in 1971 to the establishments of wholesale trade in all the urban areas of the State in 1971, reveals the concentration of wholesale trade activities in Greater Bombay. There were in all 10,541 establishments (*Census of India, Series II-Maharashtra, Part III-B; 1971.*) dealing in wholesale trade of various commodities as against 20,709 establishments dealing in wholesale trade in urban areas of the State. The same accounted for almost 50 per cent of the total establishments dealing in wholesale trade in urban areas of the State. This percentage reveals that Greater Bombay occupies an important position in the volume of wholesale trading in the State. The following statement shows the number of establishments (*The Census of India, 1971, Establishment Tables, defines*

establishments of wholesale trade as those trade places where people work in a building.) dealing in wholesale trade of different commodities and persons engaged therein:—

		Establishments								
Category	Total	1 Person	2-9 Persons	10-19 Persons	20 and above	persons unspecified				
(1) Wholesale Trade in food, textiles, live animals, beverages and intoxicants.	4,977	661	3,888	361	66	1				
(2) Wholesale trade in fuel, light, chemicals, perfumery, ceramics, glass.	1,335	118	1,077	107	33					
(3) Wholesale trade in wood, paper, other fabrics, hide and skin and inedible oils.	615	93	451	45	26					
(4) Wholesale trade in all types of machinery and equipment including transport and electrical equipment.	1,108	165	779	116	46	2				
(5) Wholesale trade in food and miscellaneous manufacturing.	2,506	408	1,928	138	28	4				

Out of 12,451 wholesale trade establishments dealing in food, textiles, live animals, beverages and intoxicants in the urban areas of the State in 1971, Greater Bombay alone accounted for 39.97 per cent. Of 1993 wholesale establishments dealing in fuel, light, chemicals, etc. in urban areas of the State, 1335 or 67 per cent were situated in Greater Bombay. A still higher percentage of 85.49 was recorded in wholesale trade establishments dealing in machinery, including transport and electrical equipment as there were 1,108 establishments in Greater Bombay, out of 1,296 in the urban areas of the State. In other two major groups, viz., wholesale establishments dealing in wood, paper, other fabrics, hide and skin and inedible oils; and those dealing in food and miscellaneous manufacturing, Greater Bombay showed higher percentage of 54.32 and 67.35 per cent respectively.

Wholesale Markets(*The information pertains to the year 1976*): The wholesale business in fruits, vegetables, fish, eggs, fowls and mutton is undertaken in various municipal markets as also in some private markets.

The wholesale trade in fruits is now undertaken irj two municipal markets: Sant Gadge Maharaj Market or the Gold Mohur Castle Market, Byculla, and Mahatma Jyotiba Phule Market, formerly known as Arthur Crawford Market. The wholesale transactions of vegetables are undertaken in three municipal markets *viz.*, Sant Gadge Maharaj Market, Sant Sawata Mandai at BycuUa, and Dadar (new) market, and a private market *viz.*, Meher Market.

The wholesale transactions in fish are carried in Chhatrapati Shivaji Market on Palton Road, and in eggs, fowls, and mutton in Mahatma Jyotiba Phule market.

New Dadar Market: It was established in 1963 behind Plaza theatre, and covers an area of about 1,875 sq. metres.

About 5,000 consignments of vegetables excluding fruits arrive daily in the market in bags and baskets. The vegetables mainly arrive from Pune, Saswad, Chinchwad, Jalgaon, Nasik, Delhi etc. by trucks or by railway.

The functionaries in the market include 217 licensed stall-holders, 13 *hundekdris* and brokers. The broker charges 6 to 8 per cent as commission rate and has to pay Rs. 50 per annum as licence fee. The rent charged for the stall-holder varies from Rs.185 to Rs. 600 per quarter. Besides, there are 60 spaces which are allotted to the traders on daily charges, the daily charges for space being 50 paise.

Sant Sawata Mandai: Sant Sawata Municipal wholesale market was constructed in 1968 on an area of 1,031 sq. metres near Jijamata Garden, Byculla.

Almost all types of vegetables arrive in the market from Pune, Nasik, Sangamner, Junnar, Saswad, Indore, Delhi, Ahmedabad, Bangalore, etc. Daily 6,000 bundles of vegetables of all types including pumpkin, snake gourd, elephant gourd, red pumpkin, cucumber, cabbage, carrots, etc. arrive in the market. Besides, seasonal leafy vegetables such as fenugreek, coriander and radish also arrive in the market. The vegetables are sold in bulk such as a basket or a gunny bag. It is an open market and as such no *hatta* system is allowed in the market.

The market is equipped with 15 underground godowns and 15 *pedhis*. The rent of a godown varies from Rs. 180 to Rs. 340 per annum, while the rent of a *pedhi* varies from Rs. 180 to Rs. 300 per annum. Besides the market is equipped with 10 spaces given to sellers on daily charges. As many as 234 persons are given the licences to receive the commodities from 11 *hundekaris* through coolies. The rate of commission charged by the broker on the sale of commodities is 8 per cent. The broker has to pay licence fee of Rs. 250 per annum to the market authority.

The weighing charges fixed by the Municipal Corporation on the arrival of the commodities are similar to those fixed in the Gadge Maharaj market. About 100 trucks arrive daily in the market and the commodities from these trucks are distributed to three markets in Byculla and a wholesale market at Dadar.

Sant Gadge Maharaj Municipal Market: Sant Gadge Maharaj market is a wholesale fruit and vegetable market situated near Byculla bridge on its west side. The market then known as Gold Mohur Castle market was opened by the Bombay Municipal Corporation in 1939 covering an area of 8,309 sq. metres.

Almost all kinds of fruits, sugarcane and vegetables arrive in the market.

The market consists of 300 permanent vegetable stalls and 200 permanent fruit stalls. Besides, there are 100 *kothimbir* (coriander leaves) and leafy vegetable sheds. The trader in a permanent stall has to pay monthly rent varying from Rs. 20 to Rs. 200 and a trader in temporary stall has to pay fifty paise.

The total number of sellers in the market are about 700, of whom 500 are licensees and 200 squatters. A licensee has to pay Rs.50 per year as the licence fee to the Bombay Municipal Corporation. Besides, there are 100 hundekaris and hamals. The brokers play a vital role in the market activities as they act as a link between the agriculturists and the sellers. About 500 persons act as brokers in this market and charge 8 per cent commission rate. The broker has to pay weighing charges to the Municipal Corporation for the commodities brought by him in the market, the charges varying from 10 to 20 paise per bag below 40.kg. and Rs. 15 for a load of lorry.

The daily average arrival of commodities in this market is shown below:—

Type of commodity	Weight	No. of baskets arriving daily in the market
Vegetables	Below 40 kg.	450
	Above 40 kg.	550
Fruits	Below 40 kg.	5,500
	Above 40 kg.	750

Besides, on an average 5 lorries of sweet lime and oranges, 5 lorries of banana and 10 lorries of sugarcane arrive in the market daily.

The sale of fruits accounts for about 75 per cent of the daily arrival and the sale of vegetables accounts for about 90 per cent of the daily arrival.

Shri Chhatrapati Shivaji Market: Shri Chhatrapati Shivaji municipal fish market was started in a newly constructed building opposite Mahatma Phule market in 1971 covering the carpet area of about 3,251 sq.

metres. A fish section of the Mahatma Phule market was also shifted in the same year. The proposal for shifting the wholesale fish section in a separate building was put forward formerly in the Development Plan for Greater Bombay prepared by the Bombay Municipal Corporation in 1964.

The fish market is on the ground floor of the building, while the other floors are occupied by different municipal and government offices. The market includes 22 fish *pedhis*, 6 ice stalls, 4 outside shops, 1 canteen and a waiting room. Besides, the market provides for 24 spaces which are hired on daily basis. The fish arrives in the market from the seashores in Bombay such as Versova, Vasai-Arnala as also from ports outside the limits of Greater Bombay such as Jamnagar, Bharucha, Ratnagiri, Goa, Karwar, etc. The daily total turnover of the market amounts to about Rs. 2 lakhs. The income of the market through taxes amounted to about Rs. 5 lakhs during 1975-76; while the expenditure on maintenance amounted to about Rs. 1 lakh and 50 thousand.

The retail trader has to pay 25 to 50 paise per basket as municipal charges; while the wholesaler has to pay 60 paise for a big basket, 30 paise for a small basket and Rs. 60 for a full lorry.

Ghamaji Manaji Market: This municipal wholesale plantain market was established in the year 1948 in a cattle shed near Byculla railway station. The area occupied was 1,46,659 metres. As the market was inadequate an adjoining area of 1,185 sq. metres was designed for the expansion of the market in 1964. The market is equipped with 33 stalls and 14 spaces.

Jyotiba Phule Market (Arthur Crawford Market): The market was built upon a triangular plot of land, bounded by Carnac, Palton and Dadabhai Naoroji Road in 1865 at the cost of Rs. 19,49,700. It was named after the then Municipal Commissioner, Arthur Crawford. The fruit and the vegetable section of the market was opened on the 16th January 1868, whereas the beef market was opened in 1869. The market was completely opened for the Bombay populace in 1869. The market contained 888 rent payers' compartments out of which 765 were occupied in 1909. It consisted of three divisions, the green and general market with the Superintendent's office, and the clock tower, 120 feet high, situated on the north-west; the godowns, the purveying shops and fowl rooms on the south. The green and general market was divided into a fruit section and vegetable section, the central portion of it being surmounted by a clock. The fruit section was in the masonry wing and was equipped with 171 stalls in 1909, the larger number of these were the fruit stalls and the rest were the flower stalls. The vegetables section of the market was situated in the iron wing and was equipped with 401 stalls. Besides, vegetables of all kinds, flour, grain, bakery products, confectionery, groceries, sugar, stationery, cutlery, hosiery, footwear and many other fancy goods were also traded in this wing. The mutton and the beef sections situated on the other side of the Central garden were divided into three sections viz., the Mundi or head bazar, the fish and mutton market and the beef market. The fish and beef sections comprised 119 and 84 stalls, respectively. At the western end of the market was a covered weighing shed, where consignments arriving in the market were first weighed before being distributed to the stalls for sale.

Arthur Crawford market was renamed after Mahatma Jyotiba Phule in 1962. The market is now equipped with wholesale and retail sections for fruits, eggs, beef and mutton as also with fowl rooms, bird-shops, godowns, cold storage and many other Sections such as grocery, stationery, bakery products, leather wear, footwear, etc. It now covers an area of about 22,472 sq. metres. It is rightly said that one could get anything from pin to peacock in this market. The fish section of the Mahatma Jyotiba Phule Market was shifted in the newly constructed Shri Chhatrapati Shivaji Maharaj market in 1971. The wholesale transactions in the market in respect of mutton, beef, poultry, and eggs meet the demands of a large number of retail markets in the southern and central parts of the city. The wholesale trade in fruits takes place on a large scale. Quality fruits like Alphonso mangoes are exported to foreign countries.

In 1922, a refrigeration and cold storage building was also constructed in the market premises for the proper storage and preservation of perishable articles especially fish, fruit and meat.

The cold storage plant (*The cold storage plant at Jyotiba Phule Market has been demolished (1985) and a new cold storage at Chhatrapati Shivaji Market is under construction*) consisted of three chambers, one for storing fish at 28°F to 31°F; one for mutton at 30°F to 37°F and one for vegetables etc. at 35°F to 40°F. The area of cold storage chambers was 1,677 sq. metres with a storing capacity of 21 tons of fish or 33 tons of fruits. The approximate quantity of perishable goods deposited and the amount realised during 1965-66,1970-71 and 1972-73 are given below:—

Commodity	Quantit	y deposit	ited (Kg.) Amount realis					
	1965-66	1970-71	1972-73	1965- 66	1970- 71	1972- 73		
Fruits and vegetables.	14,13,000	18,70,400	12,43,300					
Mutton	5,00,500	2,36,400	1,40,258		34,570			
Fish	20,65,000	8,80,700	88,035	47,990		17,869		
Eggs	6,74,200	4,90,800	38,792					
Milk and milk products.	3,28,000	1,10,800	N.A.					

Wholesale Fruit section at Mahatma Phule Market: This is known as Scale Shed and includes 8 sheds, spaces and a passage covering an area of 86,428.12 sq. metres. In this section, the brokers are charged entrance fee against the consignment received by them. The brokers recover entrance fee from the growers while paying them the value of the produce. These brokers are not charged any rent for the space they occupy, while the sub-brokers are charged rent for the space they occupy, at the rate of 25 paise per day, per unit of 3' x 3'.

The brokers charged about 10 per cent as brokerage during 1974-75.



Licence fee	Brokers	Rs. 100
	Sub-brokers	Rs. 75
	Hundekaris	Rs. 100
	Empty collectors	Rs. 50
Entrance fee	Per parcel upto 40 kg.	15 paise
	Per parcel above 40 kg.	25 paise
	Lorry containing loose stuff	Rs. 30
	Cartload loose stuffs	Rs. 3
Space charges per	Sub-broker, empty collector,	25 paise per unit
day.	parcel packers and space	of 3' X 3'
	for storage.	Rs. 10.
Encroachment fee	State	Rs. 10.

From October 1974 to September 1975, about 70,91,120 baskets of fruits were received in the section. About 34 different types of fruits arrive in the market from various fruit-growing areas in the country.

In 1975-76, the licence fee recovered in the scale shed section amounted to Rs. 86,175, while the total amount recovered as entry fee, space charges and encroachment charges amounted to Rs. 16,31,370.50.

In 1975-76, there were about 6,500 persons working in this section in various capacities such as brokers, sub-brokers, hundekaris, empty collectors, servants etc. Besides, about 100 handcarts and 15 transporters used to carry the commodities from this market and supply the same to various markets in Greater Bombay. The staff of the section comprised one Head Inspector, 16 Inspectors, 12 peons, 28 labourers and 2 mukadams.

Deonar Abattoir (The information pertains to the year, 1976-77): The Deonar Abattoir was commissioned on 16th August 1971 and after demolition of the slaughter house at Bandra in April 1973, all the units were shifted to Deonar. It is the most modern and biggest abattoir in the country. The abattoir at Bandra was established in 1865, the area then being outside the limits of the city of Bombay.

Since commissioning of the Abattoir at Deonar, all the municipal and private slaughter houses and various slaughtering chambers attached to the municipal markets have been closed and all the slaughtering operations are done by the butchers absorbed in the municipal Abattoir. This fully modernised slaughter house complex, for its various slaughtering and processing operations, is equipped with necessary up-to-date mechanical and electrical equipments and has rendering plants and ancillary industrial units.

The various types of plant and machinery installed in the Abattoir and cost thereof is shown below :—

	Type of Plant and Machinery installed in the Abattoir	Total cost (Rs.)
(1)	Slaughtering machinery and electric equipment (imported).	56,40,483.00
(2)	Slaughtering machinery and electric equipment (indigenous content).	67,27,360.00
(3)	Suction tanks and pumps	4,83,176.00
(4)	High and low pressure pumps	2,58,707.00
(5)	Hot and cold water pipe- line system	17,77,780.00
(6)	Waste treatment plant	7,49,677.00

The Abattoir is spread over a spacious land of 51 hectares with the main slaughter house structure built on virgin land. Of this, 8.5 hectares are utilized for the layout of slaughtering units with attached pens, rendering plants, administrative building, pumping station, waste treatment plant, laundry, laboratory and stores building and meat-van garage. 7.7 hectares are utilized for live-stock markets; 9.7 hectares are being separately developed as grazing yard-cum-resting ground; 5.26 hectares occupied by peripheral roads varying from 18m. to 27m. in width. Besides 1.82 hectares, are proposed to be utilized for providing quarters to the administrative and executive staff on the west and 3.43 hectares are proposed to be utilized for providing 900 staff quarters for the slaughter house workers on the east of the slaughter house compound. On the north side of the slaughter house, 14.56 hectares of land is reserved for setting up ancillary industries of various products of the slaughter house and the plots are being offered to prospective industrial concerns.

The following statement gives information regarding various units and their slaughtering capacity:—

Maharashtra State Gazetteers

	Unit	Date of commissioning of units at Deonar Abattoir	Slaughtering capacity			
(1)	Pig unit	16-8-1971	100 pigs in 6 hour shift.			
(2)	Cattle unit (Kurla)	9-1-1972	300 cattle in one shift of 6 hours.			
(3)	Cattle unit (Bandra).	Cattle unit (Bandra). 7-5-1973				
(4)	Jhatka unit	13-1-1972	100 sheep and goats in one shift.			
(5)	Jewish unit	14-3-1972	200 sheep and goats and 4 cattle heads in one shift.			
	Main sheep and goats units (Bandra).	12-5-1973	600 sheep and goats on 3 lines per 8 hours shift.			
(7)	Emergency slaughtering unit.	N.A.	100 sheep and goats in one shift.			
(8)	Emergency cattle slaughtering unit.	N.A.	10 heads of cattle in one shift.			

On an average, 6900 sheep and goats worth Rs.9 lakhs are slaughtered per day. The total sale value of 650 horned cattle slaughtered here per day amounts to about Rs. 5 lakhs, whereas the total sale value of 50 pigs slaughtered per day comes to about Rs. 6,000.

The stunning arrangement for horned cattle is by captive bolt method, whereas the stunning of sheep and pigs is done by electricity. Main slaughtering unit is provided with the most modern slaughtering facilities with human method of slaughtering. Besides this general unit, where *halal* method of slaughtering is followed by Muslims, other ritual slaughtering houses to meet the requirements of other religious practices are also maintained.

The basic practices of slaughter houses adopted in all modern slaughter houses of Internationa] standards, are fully observed at Deoriar. Separate arrangement is made to ensure maximum standards of hygiene. At various points on the dressing floor as well as other operational centres, laboratory and sterilizer units are provided within the reach of every operator for sterilizing his knives and other instruments.

All the slaughtering units are provided with individual hanging halls for accommodating number of animals slaughtered in the respective units The main sheep and cattle units are provided with chiller units and chiller stores at 10°C for accommodating 5 tons *i.e.*, five per cent of the daily output for fifteen days. Similarly a freezer unit at freezer stores at 15°C is provided for about 5 per cent of daily output.

Meat carcasses are brought from their hanging hall to delivery hall by means of lowerators. Inter-connecting overhead rail work is provided so that meat carcass from one rail can be transferred to other rail. Telescoping loading rails are provided for loading the meat into the meat van.

A fleet of 45 meat delivery vans transport the meat from the Abattoir to the various meat markets and meat shops at prominent places.

The rendering plants—blood rendering, edible rendering and inedible rendering are housed in a separate building along with the boiler unit. The steam required in the rendering plant and for converting cold water into hot water is generated by means of 4 automatic packaged type boilers, each having a capacity of 200 H.P. with an evaporation rate of 6900 lbs. steam per hour at 150 lbs. pressure. A separate 60 H.P. boiler is

provided for supplying steam to Jewish *jhatka* and pig slaughtering unit.

A very well-equipped pumping station with two spacious storage tanks of 4 lakh gallons each, 3 high pressure pumping units, 2 lowpressure pumping units and one separate fire-fighting unit with a separate storage tank with the capacity of 30,000 gallons are provided. A separate waste treatment plant comprising of mechanical settling tank and manual hopper unit is also provided on the north side of the slaughter house.

The main market functionaries in the abattoir are dealers of animals, brokers, shroffs, caretakers of animals, butcher licensees, etc. The brokers and the shroffs levy a commission of Rs. 1.40 per sheep and goat sold through them and they share the same equally. The *gawals* charge Rs. 1 per sheep and goat per day for taking care until the same are sold. The brokerage charge for a big animal is Rs. 5 per animal.

The licence fee for the cattle broker, shroff, sheep and goat broker and skin and hide dealers is Rs. 500 per annum, respectively. The licence fee per annum for the gut dealer (mutton) are Rs. 350 and Rs. 300 respectively. The cattle as also the sheep-goat dealer has to pay Rs. 100 per annum.

As a result of the up-to-date modern amenities available at Deonar Abattoir, and the highest standard of hygienic conditions maintained therein, the export of buffalo-meat has been tremendously increased. The cattle unit is required to run in two shifts and the total number of the animals slaughtered per day is over 550 cattle. Of these, nearly over 150 carcasses of buffaloes are daily exported to the Middle East countries, by the refrigerated cargo ship. Government, on an average, earns foreign exchange of over a lakh of rupees every day from export of buffalo-meat. MAFCO, a State Government enterprise, also continues to export mutton and beef procured from the Abattoir to Middle East and other countries. Since 1974-75, the export of mutton by air to Middle East countries has increased prodigiously and during that year, about 835 tonnes of mutton was exported from the Deonar Abattoir. During 1975-76, the export of meat increased tremendously especially in case of chilled mutton which was mainly air-lifted and the country has gained the foreign exchange worth Rs. 5 crores from these exports.

A number of major pharmaceutical concerns like Messrs. Sandoz Ltd., Messrs. Griffon Laboratories, Messrs. Haffkine Institute and many others are taking benefit of the facilities provided at the Abattoir to collect various glands and other products, etc., for manufacturing important medicines. A demonstration-cumtraining centre for processing guts, started by the Government of India continued the training programme successfully. The blood powder produced at inedible plant was of international standard. However, the production thereof had to be suspended since January 1976 as it ceased to be profitable.

The income and expenditure of the Abattoir during 1976-77 amounted to Rs. 2,03,19,576.46 and Rs. 1,55,08,410-81, respectively.

Wholesale Stores: The wholesale consumer co-operative stores play a vital role in the co-operative movement in general and wholesale trade in particular in Bombay.

While some of the municipal markets in Greater Bombay are engaged in the wholesale trade of vegetables, fruits, mutton, fish, etc, the wholesale trade in consumer goods is undertaken by private wholesalers and the co-operative wholesale stores. The latter are registered with the District Deputy Registrar of Co-operative Societies, Bombay. There are in all 15 wholesale co-operative consumer stores in Greater Bombay of which 10 are State sponsored.

Even though, these stores are registered as wholesale stores, they also transact retail trade of consumer goods. These stores deal in wholesale and retail sale of both controlled and also non-controlled commodities. They are generally overcrowded by consumers as all types of consumer goods are available here at cheaper rates than in the shops of private dealers. This results in the large sale of commodities as can be seen from Table No. 24.

TABLE No. 24

Working of the Wholesale Consumer Co-operative Stores in Greater Bombay as at the end of June 1976

(Rs. in Thousands)

			Number	of stores	Nu	mber of brar	nches			
	ame of the vholesale store	Total	Those doing processing activities	State sponsored	Total	Department stores	Others	Membership	Paid- up capital (Rs.)	Deposits (Rs.)
	1	2	3	4	5	6	7	8	9	10
(1)	Mumbai Kamgar	2	1	1	23	2	21	8,699	19.59	17.52
(2)	Supari Baug	1		1	8		8	3,489	4.14	1.92
(3)	Ishanya Mumbai	1		1	13		13	2,655	1.11	0.00
(4)	Mastan Baug	1			3		3	1,087	1.25	0.38
(5)	Rashtriya Mill Mazdoor	1						1,201	1.19	0.00
(6)	Kalavihar	1		1	10	1	9	2,689	3.21	4.97
(7)	Shri Vaibhav	1		1	12	1	11	5,219	9.66	0.56
(8)	Laxmi	1	aehi	1	12	oto	12	2,844	7.40	ire
(9)	Sahyadri Sahakari	1	aoi n	TO C	3	atto	3	1,021	0.44	
(10)	Colaba Central	1		1	2	2		8,887	14.97	0.74
(11)	North Bombay	1		1	1	1		6,926	15.00	11.73
(12)	Pragati Mandal	1			5		5	13,711	5.59	3.78
(13)	South India	1		1	7		7	10,776	4.26	6.85
(14)	Bombay University	1		1				163	2.68	
(15)	Chembur Central	1						1,450	0.70	0.32
	Total	16	1	10	99	7	92	70,817	91.19	48.77

TABLE No. 24- -contd.

(Rs. in Thousands)

								Sales			
	me of the esale store	Total liabilities	Working capital	Total assets	Purchase	Total sales	Of which sales through Department stores	Food grains	Sugar	Others	Wholesale non- controlled
		(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
	1	11	12	13	14	15	16	17	18	19	20
(1)	Mumbai Kamgar	141.22	142.43	142.43	1,109.03	1,159.39	364.91	440.23	59.78	0.82	19.36
(2)	Supari Baug	17.76	18.52	18.62	140.82	143.71		4.70	0.80	0. 11	31.04
(3)	Ishanya Mumbai	8.55	8.93	8.33	305.30	307.65		179.88			
(4)	MastanBaug	2.23	2.47	2.47	19.59	20.53					
(5)	Rashtriya Mill Mazdoor	1.21	1.21	1.21							
(6)	Kalavihar	16.88	14.91	14.91	83.28	87.39		41.26			
(7)	Shri Vaibhav	35.58	34.62	34.62	204.47	210.33	5.82	84.42	11.34		5.80
(8)	Laxmi	24.45	24.63	24.63	128.43	134.07		7.35			
(9)	Sahyadri	1.65	1.79	1.79	20.28	20.48					
(10)	Colaba Central	76.21	83.34	83.34	357.39	372.12	340.88	31.24			
(11)	North Bombay	65.11	55.08	55.08	212.00	384.00	150.00	46.00	15.00		34.00
(12)	Pragati Mandal	20.55	21.75	21.75	356.95	363.80		203.47	26.08		97.76
(13)	South India	50.16	43.32	43.32	71.45	89.51		4.23	0.59	0.10	17.36
(14)	Bombay University	7.98	8.00	8.00	12.00	13.01					
(15)	Chembur Central	1.26	1.29	1.29	8.15	7.62					
	Total	471.80	462.24	461.74	3,029.14	3,213.63	861.61	1,012.78	113.59	1.03	205.32

TABLE No. 24- -contd.

(Rs. in Thousands)

				Sales		No.	Pr	ofit	L	oss	No. of
	me of the holesale	Retail	ed con	trolled	Retail	of fair					- stores
	store	Food- grains (Rs.)	Sugar (Rs.)	Others (Rs.)	non- controlled (Rs.)	shops	No. of stores	Amount (Rs.)	No. of stores	Amount (Rs.)	profit or loss
	1	21	22	23	24	25	26	27	28	29	30
(1)	Mumbai Kamgar	114.49	0.86		158.94	19	1	1.21			
(2)	Supari Baug	30.12			76.94	6	1	0.86			
(3)	Ishanya Mumbai	107.83		8.47	11.47	12			1	0.22	
(4)	Mastan Baug	11.27			9.26	1	1	0.24			
(5)	Rashtriya Mill Mazdoor.										1
(6)	Kalavihar				46.13				1	1.97	
(7)	Shri Vaibhav	54.49	2.00	4.80	41.66	6			1	1.96	
(8)	Laxmi	6.96	as	m	119.76	2	alg	0.18	a	zet	tee
(9)	Sahyadri	16.10			4.38	3	1	0.14			
(10)	Colaba Central					1	1	7.13			
(11)	North Bombay				39.00	1			1	10.03	
(12)	Pragati Mandal	36.49				5	1	1.20			
(13)	South India	34.73			32.10				1	6.84	
(14)	Bombay University				13.01		1	0.02			
(15)	Chembur Central				7.62		1	0.03			
	Total	412.48	2.86	13.27	560.27	56	9	11.01	5	21.02	1

Agricultural Produce Market Committee, Bombay: Being a metropolitan city and terminal market in the State, agricultural produce from all corners of the State and also from outside the State is consigned to Bombay either for sale or export. Before the establishment of the agricultural produce market committee in Bombay, the trade was solely in the hands of commission agents and big traders. There were no regulations or restrictions on the sale of agricultural produce. Moreover while selling agricultural produce, the commission agents used to sell it by secret system (hatta system) and not by open auction. In the circumstances the agriculturists or consignors were always kept in dark about the rates quoted in the sale transactions by the commission agents and purchasers. There was no restriction on the commission agents so far as charging the commission and deducting various amounts from the sale proceeds.

As such, it was a matter for consideration before the Government as to whether the market committee should be established for Greater Bombay under the provisions of the Maharashtra Agricultural Produce Marketing (Regulation) Act, 1963. This Act could not be implemented earlier in Greater Bombay as the traders' community was totally against the regulations of transactions in agricultural produce. However market committee was established and started its functioning from 1st March 1977.

This market committee has removed the secret system. The sales are made by open auction system or by one of the systems as envisaged in rules. Besides, the unusual deductions are not allowed in the market. The committee also takes care to remit the sale proceeds to the agriculturists and consignors at the price obtained in the open auction after deducting legal charges. The weighment or measurement is done in the presence of licensed weighmen. The commission agent in the market has to charge at the prescribed rate of commission. In the market committee, the bills, account slips, and goods receipts are prepared and sent to the respective persons and weighment slip is prepared on the spot while delivering the commodity to the purchaser.

The market committee consists of 28 members, representing agriculturists from the State, nominees of the Bombay Municipal Corporation, traders and consumers.

The committee has implemented the regulation of wholesale transactions of onions and potatoes with effect from 1st March 1977, that of *Santra* (orange) and *Mosambi* from 1st April 1977 and of mangoes from 1st July 1977.

In 1977 Maulana Azad Road Maiket (onions and potatoes), Sant Sawata Mandai (onions and potatoes), Mahatma Jyotiba Phule market {Santra, Mosambis and mangoes} and Sant Gadge Mabaraj Market {Santras, Mosambis and mangoes} had been declared as sub-market yards in addition to the main market yard at Washi (MAFCO marke).

The market functionaries operating in these markets are commission agents, purchasers (traders), assistants of commission agents and traders, hamate, weighmen, hatha-gadiwalla, hundekari, etc., and they are supposed to obtain licences from this committee, and to renew them every year.

Wholesale Trade in some important commodities: (1) *Paper*: With the continuous and substantial drop in imports, the dealers in paper trade had to switch over from imported stuff to indigenous goods. As a result, the fortunes of paper trade are interlinked with the fortunes of paper industry in the country. The main sources of supplies are from paper manufacturing units located in different places in the country such as Ballarshah in Maharashtra State, Jagadhari, Dandeli etc.

The wholesale trade establishments of paper are concentrated in Sutar Chawl and on Pherozeshah Mehta Road in Bombay. As per the 1971 Census, 845 persons were engaged in the different activities of wholesale trade in paper and other stationery articles in Bombay.

(2) Textiles: The wholesale tiade in textiles depends entirely on the textile mills located in Bombay as also outside Bombay such as those located in Hyderabad, Ahmedabad, Mysore, Madras, Bangalore, Calcutta and Delhi.

All types of textile fabrics are obtained by the wholesalers and semi-wholesalers from the manufacturers and in turn by the retailers from these wholesalers and semi-wholesalers. The commission agent acts as an intermediary for financing semi-wholesalers and retailers.

The wholesalers are doing the business on their own and therefore are keeping a margin of profit according to competitiveness of the product, but in no case the margin of profit is less than seven per cent. A commission agent on the other hand receives about one per cent commission from the wholesalers which is included in the margin of profit of the wholesaler.

The turnover of wholesalers and semi-wholesalers exceeds about 500 crores of rupees per year.

The wholesale traders, who get their supplies from the textile industry, have to depend on credit facility for selling the goods. Even though, the duration of credit is extended to more than six months, the payment is not received from the retailers. On the other hand the wholesalers do not get their supplies from the mills without clubbing. In fact many a time, textile mills force the wholesalers to handle the contracts entered into at lower price and to accept new contracts at higher prices.

(3) Automobiles: The automobile dealers, a vital link between the manufacturer and the customer, have agreements with manufacturers for the sale of cars, scooters, commercial vehicles etc. The success of a franchised automobile dealer is tied up with the growth of automobile industry.

The profit margin allowed to an automobile dealer currently ranges from 2 per cent to 5 per cent as compared to 20 to 50 per cent in the case . of cars and commercial vehicles which existed prior to April 1955.

The demand recession which hit the car and jeep sectors in 1973, subsequently affected the commercial vehicles sector also and has now affected the scooter industry also. Many of the existing dealers have started diversifying their trade activities by entering into allied lines like running petrol pumps and body building and even non-allied lines like trading in refrigerators, T.V., air-conditioners, etc.

In 1973 the distribution and sale of cars and scooters were subject to the control of the Union Government. There was, however no such control on commercial vehicles. However, a franchise dealer was allotted a specific area for distribution of commercial vehicles and was allowed to appoint a sub-dealer with the approval of the manufacturer in any specific area included in his territory.

(4)Pipes and Fittings: The trade in pipes and fittings is mostly concentrated in Nagdevi street area which is also known for quality engineering products. Some of the merchants are manufacturer-cum-traders, while

some are only stockists and distributors of the products of certain specific companies and some are only importers and exporters of pipes and fittings.

The first World War proved a blessing in disguise to the pipes and fittings merchants due to rising demand. The trading opportunities were fully utilized by the pipes and fittings merchants and even indentors who had been previously indenting on behalf of merchants were tempted to undertake direct imports on their own. This resulted in a glut of pipes and fittings and the traders and merchants were faced with a new problem. The depressed conditions continued for a long period even after the First World War and it was necessary for the merchants and traders to think of ways and means in meeting the situation. Within a few years after the outbreak of Second World War severe shortage of pipes and fittings in the market developed on account of short supply in imports, particularly from the United Kingdom which was prominently involved in war operations. Towards the end of 1942, the trading in pipes and fittings was controlled by the Government. As a result the merchants were not allowed to sell the controlled commodities directly to the consumers, and on the contrary they had to submit a list of stocks held to the authorities. They had to release the material only against the release orders received by the Government. Since 1942 no direct imports by merchants were permitted and the imports of pipes and fittings dealt by the Government were allowed to be handled by a private firm. In 1947 the Bombay Registered Pipe Dealers' Syndicate Private Limited was formed, consisting of quota holders and non-quota holders. The syndicate was the only distributing agency of pipes and fittings upto 1953, when the control order was lifted. Since 1953 imports were liberalised and merchants were permitted to import pipes on their own, but as the foreign exchange position became critical, the import quota of pipes was again restricted. Since 1957, the import quota of pipes was further reduced by about 20 per cent. The shortage of the materials caused the prices to rise considerably.

As there were only two companies dominating the Indian market, one of these adopted a sales policy according to which special discounts were allowed to bulk buyers. Subsequently a number of units came into production and owing to competition amongst the manufacturers the scheme of special discount was discontinued.

(5)Cereals, Pulses and Oilseeds: Bombay has a well-organised market in pulses and oilseeds at Dana Bunder near Masjid Road Station where godowns of Bombay Port Trust are situated. As per 1971 Census, 845 persons were engaged in wholesale trade of cereals and pulses in Greater Bombay and 1545 in the wholesale trade of food stuffs other than cereals and pulses.

The traders buy goods from various upcountry producing centres, bring those goods and sell them in the market and charge prescribed rate of commission. They also receive goods from their upcountry agents for sale on commission basis. The annual turnover of a wholesale trader of cereals and pulses is approximately two million bags which is worth about twenty crores of rupees. The rate of brokerage varies from half per cent to one per cent and the rate of commission on the sale of goods ranges from 1 to 2 per cent.

The average annual arrivals of groundnut and groundnut oil in the market are about 3 lakh tons and 1 lakh tons, respectively.

(6)Electrical Goods: The trade in electrical goods was confined to very limited articles. But with the passage of time various new types of electrical goods used for domestic as also industrial purposes are coming in vogue. Majority of electrical shops are situated in Lohar Chawl area. As per 1971 Census, 685 persons were engaged in the wholesale trade of electrical machinery and equipments.

These wholesalers deal in cables and wires, cable joining material, wiring accessories, conduit pipes, all types of domestic appliances, fans and radios and industrial equipments, insulating materials and enamelled winding wires, lighting equipments, switchgears, motor control gears, etc.

The annual average turnover of a dealer varies from Rs. 5 lakhs to 10 lakhs.

The dealers have formed associations to solve their problems.

(7) *Timber*: About 500 timber wholesale merchants are found selling timber in Greater Bombay. The group includes importers of various species of timber from other States in India and supply them to different industries and Government departments against contracts. Besides, there are traders who undertake timber business on purely commission basis, rates of commission varying from 5 to 7 1/2 per cent. Timber contractors and saw-millers outside Bombay consign the timber to these commission agents who sell them in Bombay. This practice is mostly prevalent at Darukhana Lakdi Bunder where the goods arrive by country crafts and at Byculla Goods Depot and Wadi Bunder where the goods arrive by rail.

Junglewood is consigned to Bombay from various places in South India such as Mangalore, Calicut, Ernakulam, etc; teak fromNagpur and Chandrapur in Maharashtra State and Jabalpur in Madhya Pradesh; and fir and chir from Pathankot in Punjab State and from Assam.

About two lakh tons of junglewood logs and sawn sizes worth Rs. seven crores; about 40,000 tons of teakwood logs and sawn sizes worth Rs. 4 crores and about 25,000 tons of fir and chir sleepers and logs valued at Rs. one and a half crores arrive in Bombay every year for sale.

Maharashtra State Co-operative Marketing Federation: The Maharashtra State Co-operative Marketing Federation was registered in 1958 as a State-sponsored and State-participated apex organization for marketing co-operatives in the then bilingual Bombay State with its head office at Bombay. The federation howefer started its functioning in 1959 with the Board of Directors nominated by the State Government. The federation is mainly entrusted with the objectives to create an institutional agency for marketing agricultural produce, to supply farm requisites to farmers, to co-ordinate the working of affiliated marketing agencies; to provide market intelligence and guidance etc. All these objectives are set to bring about improvements in farming techniques, to boost agricultural production and strengthen and develop co-operative marketing in the State.

The paid-up capital of the Federation as on 30th June 1973 amounted to Rs. 155.25 lakhs. The details of the financial position of the Federation in 1970 and 1975 are given below:—

(Rs. in lakhs)

Particulars	1970	1975
Share Capital (including Government contribution).	1,14.00	6,49.00
Reserve and other funds	64.00	2,26.00
Bank loan	14,36.00	7,10.00
Working capital	17,23.00	15,85.00
Gross profit	96.00	
Net profit	30.00	
Net loss		114.00
Total—turnov <mark>er</mark>	34,63.00	32,84.00

The Board of Directors which governs the administration and functioning of the federation consists of 32 representatives representing taluka and district co-operative marketing societies, central co-operative banks, co-operative sugar factories, apex co-operative bank, other State co-operatives, the Commissioner and Registrar of Co-operative Societies.

During 1974-75, there were 608 'A' class members; 213 'B' class members; and 123 associate members.

The trade activities handled by various departments of the federation are described below.

(1) Foodgrains: The Federation plays a major role in the purchase and distribution of foodgrains other than jowar, and rice. The State being a deficit State in foodgrains, it necessarily has to import foodgrains from other surplus States like Punjab, Uttar Pradesh, Madhya Pradesh, etc. Besides, during harvest season, the federation purchases cereals, pulses, oil-seeds etc, from the local markets and distributes these foodgrains to consumers through the channel of co-operative consumer societies at reasonabk prices. The Federation also undertakes the distribution of controlled commodities like sugar, wheat products to the nominees and retailers appointed by Government of Maharsahtra, mainly in Bombay. The sales of these commodities in the year 1973 were to the tune of Rs. 5.80 crores, of which levy sugar amounted to Rs. 5.17 lakhs (264,000 quintals) and wheat products of Rs. 63 lakhs (73,000 quintals). The Federation supplies agricultural produce to consumers' co-operatives at reasonable prices including those organised for industrial workesr. Similarly, the Federation also supplies agricultural produce to the jails in the entire State. During the year 1972-73, the total value of such supplies amounted to Rs. 1 crore, A number of consumers' co-operatives and industrial canteens buy foodgrains from the wholesale shop at Masjid Bunder maintained by the Federation for this purpose. During 1974-75, the Federation purchased 695 quintals of mung through the sale purchase societies and distributed the same to Mumbai Kamgar Sangh and Samarth Co-operative Society.

The Marketing Federation which has the agency of the Indian Oil Corporation, meets the demand for mineral oils required by processing units, growers, and their co-operatives. With a view to supply superior kerosene and light diesel oil from ready stocks, Federation has opened a depot at Wadala.

During 1971-72, 14,914 kilolitres of superior kerosene oil, 680 kilolitres of crude oil and 98 kilolitres of mobile oil, was sold from this depot. In 1974-75, the sale of Wadala Depot increased to 46,185.50 kilolitres of superior kerosene oil valued at about Rs. 4 crores. The depot earned the gross profit of about Rs. 2 lakhs during 1973-74 and approximately Rs. 4 lakhs during 1974-75.

The Federation has also opened two shops, one each at Duncan Road and Byculla for the sale of vegetables and fruits on consignment basis, despatched by member societies. The goods handled in these shops include grapes, mangoes, *papayas*, brinjals, lady's fingers, bananas, potatoes. The vegetables and fruits are supplied regularly to institutions like Indian Institute of Technology, Powai; Beggar's Home; Jails, etc. During 1971-72, the Byculla branch supplied vegetables, and fruits of the value of Rs. 2,85,583 to 9 such institutions. During 1974-75, it supplied mangoes, sweet potatoes, tomatoes, etc., worth about Rs. 2 lakhs and suffered the loss of about Rs. 29 thousand. During 1974-75 the annual sales of the Byculla branch approximately amounted to Rs. 181 thousand and earned the gross profit of about Rs, 18 thousand.

The Duncan road branch in 1971-72 supplied onions and potatoes to various canteens and institutions worth about Rs. 117 thousand during the year 1971-72 and thereby received a commission of Rs. 6,400.

During 1974-75 the value of supplies increased to about Rs. 354 thousand and thereby earned the net profit of Rs. 8,201.05.

The total value of sales of the Duncan Road branch increased from about Rs. 24 thousand in 1973-74 to about Rs. 354 thousand in 1974-75 and thereby earned the gross profit of Rs. 4,226.53 in 1974-75.

The Federation also supplies pulses, etc. to the National Agricultural Co-operative Marketing Federation, During 1974-75 the value of pulses, *gul*, onion, etc., supplied to the National Agricultural Co-operative

Marketing Federation amounted to Rs. 33.45 lakhs.

(2)Procurement of Foodgrains: The co-operative machinery of the Federation is being used for the procurement and distribution of food-grains. The monopoly procurement scheme for jowar was initiated in 1964-65 and that for paddy and rice in 1965-66. The Marketing Federation is working as an agent of Government in implementing the scheme. In case of jowar, the number of such purchasing centres rose from 87 in 1964-65 to 490 during 1972-73 and the number of sub-agents rose from 257 during 1964-65 to 308 during 1972-73 in Maharashtra. In case of paddy, the number of purchasing centres and number of sub-agents decreased from 710 in 1965-66 to 538 during 1972-73, and from 241 in 1965-66 to 153 in 1972-73, respectively in the State. The quantity of jowar thus purchased through all these centres during 1964-65 was 2,47,181 tonnes, worth Rs. 12.95 crores. During 1972-73, the total quantity of jowar purchased however decreased to 33,227 tonnes, valued at Rs.1.93 crores. The Federation purchased 1,12,618 tonnes of paddy, worth Rs. 5.97 crores during 1964-65. Like jowar the purchase of paddy also showed a decrease during 1972-73 as only 84,142 tonnes of paddy was procured during 1972-73 at a cost of Rs. 5.37 crores. The difference in value of paddy in 1964-65 and 1972-73 might be due to rise in prices.

(3) Fertilisers: Realising the difficulties of the co-operatives in catering to the needs of the agriculturists in the State, the apex marketing federation handles the distribution of fertilisers through cooperative societies. It has taken up the agencies of five companies of which two are in Bombay viz., the Fertiliser Corporation of India Limited, Trombay and Dharamsi Morarji Chemicals Co. Limited, Ambarnath. During 1971-72, the Federation purchased 12,302 tonnes of Urea and 10,068 tonnes of Suphala from the Fertiliser Corporation of India, Trombay.

Since 29th March 1972, Dharamsi Morarji Chemicals Company Limited, handed over the distribution of single superphosphate to the Federation. Since then the Federation is acting as the agent in distributing single superphosphate, and it distributed 2,848 metric tonnes of single superphosphate of Morarji Chemicals Company during 1972.

(4) Machinery: The Federation, among its multifarious activities, is also undertaking the distribution of agricultural machinery, particularly electric engines, oil pumps and Government tagai loans to farmers. The Federation has also taken up the agencies of almost all popular types of oil engines, electric motors and pumping sets for the entire State.

(5)Cotton: The Monopoly Cotton Procurement Scheme was started from 1st July 1972 in the State. Under the Maharashtra Raw Cotton (Procurement, Processing and Marketing) Act 1971, the Federation was appointed as a chief agent for procurement, processing and marketing of cotton in Maharashtra. The scheme was suspended in the cotton seasons of 1973-74 and 1977-78. However, it was extended upto 30th June 1986 subsequently, and was restarted from November 1986.

FAIR PRICE SHOPS

The office of the Controller of Rationing regulates the distribution of commodities which are scarce in the market, through fair price shops.

The statutory rationing was introduced for the first time in the city of Bombay during the Second World War in 1943. In the beginning ration cards were issued, and the area of operation was restricted only to the then Bombay city. In 1954, as a result of the improved overall situation of foodgrains, the statutory rationing was discontinued. Since November 1957, due to conditions akin to scarcity in the State Government introduced foodgrains distribution system in Greater Bombay. This system was not executed under any statutory orders, but only on the basis of agreements executed between the fair price shopkeepers and the Government.

There were 17 zonal offices in Greater Bombay for the execution of the foodgrains distribution system and the area of operation was extended up to Borivli on western side and Mulund on eastern side. In this distribution system, family ration cards were introduced in Greater Bombay and the foodgrains were distributed according to fixed quantum and fixed price to the cardholders, who were the heads of the families. Even though, the availability of foodgrains on cards was ensured, the foodgrains were also available in open market for the consumers in Bombay. This system had a good impact on controlling the prices of foodgrains in open market.

Again after the failure of monsoons which resulted in the shortage of foodgrains, Government introduced statutory rationing in Greater Bombay from April 1966, under the Maharashtra Foodgrains Rationing Order, 1966. Initially, the foodgrains like rice, wheat, jowar, bajri, maize and millo were distributed as rationed commodities and they were also included in the initial statutory order.

At the beginning of 1974, after the acute shortage of kerosene, Government decided to distribute kerosene oil at fixed quantum and price to the cardholders on ration cards. This system was adopted from September 1974

In 1977, as per the schedule of the Maharashtra Rationing (Second) Order, 1966, only rice and millo were the rationed commodities. However, for the convenience of the cardholders, wheat and jowar were also issued on cards.

Statutory rationing has been withdrawn recently, though the articles are distributed through the public distribution system.

There were in all 2076 authorised ration shops during 1977 in Greater Bombay. The category-wise information of these authorised ration shops is as follows:—

	Category	No. of authorised retail shops
(1)	Scheduled Castes, Scheduled Tribes and Other Backward Class societies.	2
(2)	Other co-operative societies	451
(3)	Employees' shops	102
(4)	Freedom fighters	59
(5)	Ex-servicemen	1
(6)	Scheduled Castes and Scheduled Tribes persons	4
(7)	Other individuals	1454
(8)	Hotel associations and societies	3
	Total	2076

The quantity of foodgrains distributed through the authorised ration shops in Bombay during 1974, 1975 and 1976 was as follows:—
(Figures in metric tonnes)

Year	Rice	Wheat	Other Food grains	
1974	1,64,085	4,31,942	24,747	6,20,774
1975	1,14,700	5,37,572	9,690	6,61,962
1976	1,85,537	3,82,269	4,939	5,72,745

In 1977, the number of ration cardholders in Greater Bombay was 16,12,437; while the total number of units in these ration cards was 1,22,65,337. The general quantum fixed per adult i. e. 2 units varied according to the stock available with the Government. In 1977, the quantum of rice, wheat, jowar and sugar fixed per adult per fortnight was: rice 1 to 2 kg; wheat 5 kg; jowar 1 kg; and sugar 300 grams.

The profit margin allowed to be taken by the ration shopkeeper varies according to the commodity. In case of rice and sugar, the profit margin permissible is fixed at Rs. 5 per quintal and in case of wheat, bajra, and jowar, it is fixed at Rs. 4 per quintal.

RETAIL TRADE

Even for a long period after the possession of the island by the East India Company, the local trade was comparatively small. The factors responsible for its slow .growth were lack of adequate capital, external warfare, epidemic diseases and the absence of trading class. The Company's Government then appointed persons called *Kacharas to* trade in rice and grain. However, these persons were supposed to sell small quantities of grain in public market. In 1741, the Bombay Government appointed a clerk of the markets to undertake retail sale of grain.

Trade other than grain trade was free from Government interference in the middle of the 18th century, and encouragement was given to the fishermen, cultivaters to bring their produce in the market. During the first half of the 19th century, the local trade profited by the increase in the foreign trade which induced rich merchants, Parsi Hindu and Englishmen, to open agencies and shops.

Besides many persons engaged in banking, agency and brokerage, Bombay had in 1847, 201 *dal* and rice dealers, 152 confectioners, 491 cloth merchants, 203 dealers in brass and copper, 253 tobacconists and 439 pawn brokers.

In the context of the retail trade in Bombay, the Shops and Establishments Act of 1948 assumes importance which becomes evident from the fact that it roughly covers about one-half of the total firms and about one-third of the total employment in the city of Bombay.

The Bombay Shops and Establishments Act, 1939, was the first attempt by the Government of Bombay to regulate the conditions in this large but neglected field. Its administrative and substantive provisions were however found to be inadequate both from the point of view of content and coverage and a need for a more comprehensive measure was felt. The Act was therefore replaced by the more comprehensive Bombay Shops and Establishments Act, 1948, which came into force from January 1949. The Act divides the establishments into five categories, viz., shops; commercial establishments; residential hotels; restaurants and eating houses; theatres and other public amusement or entertainment.

Retail trade in Greater Bombay is carried on by numerous shops located in various wards of the city and suburbs. Their number and concentration depend on the bazar locality and the demand for the goods kept for sale. Many a time these shops keep a variety of goods for the convenience of their customers and thus secure handsome business. Their stock-in trade is usually limited but is rapidly replaced when sold out. Retailers usually purchase from wholesalers.

Of the total number of firms in Greater Bombay, the shops in retail trade constitute the major percentage *i.e.* about 45 to 50 per cent. The retail trade firms can be divided into following major categories: cereals and pulses, vegetables and fruits, eggs and poultry, cooked food, dairy products, tobacconists and pan-bidi shops, other food articles, fuel, textiles, wearing apparel and made up textile goods, precious stones and jewellery, chemists, metal utensils and glassware, building material, electrical goods, etc.

Most of the shops which cater to the daily needs are scattered over all the localities of all the wards in Greater Bombay. But there are many bazars specializing in a particular type of commodity. The following statement reveals the number of retail trade establishments in Greater Bombay as per the 1971 Census:—

Ca	tegory	No. of establishments	Persons employed
(1)	Retail trade in food and food articles beverages, tobacco and intoxicants.	33,527	70,500
(2)	Retail trade in textiles	5,578	18,742
(3)	Retail trade in fuel and other house- hold utilities and durables.	10,962	28,077
(4)	Retail trade in others	11,847	33,541
	District Total	61,914	1,50,860

About one-fourth of the total retail establishments in Greater Bombay are located in Ward ' C' which covers the areas of Khara Talao, Kum-bharwada, Bhuleshwar Market (area around the Mulji Jetha and Mangaldas markets), Dhobi Talao and Fanaswadi; about 13 per cent establishments are located in Ward ' B' covering the areas of Mandvi, Chakala, Umarkhadi and Dongri; about 12 per cent establishments in Ward 'A' covering the areas of Upper Colaba, Middle and Lower Colaba, Fort (South), Fort (North) and Esplanade; about 11 per cent in Ward ' G' covering the areas of Dadar, Mahim, Prabhadevi, Worli, Chinch-pokli and Love-grove; about 10 per cent in Ward ' D ' covering the areas of Khetwadi, Girgaum, Chowpatty, Walkeshwar and Mahalaxmi; about 9 per cent in Ward ' E' covering the areas of Tardeo, Mazagaon, Tadwadi, Nagpada, Kamathipura and Byculla; and about 8 per cent in Ward ' F ' covering the areas of Parel, Sewri, Naigaum, Matunga and Sion. The suburban area constitutes about 12 per cent of the total shops and establishments in Greater Bombay. During 1975, there were as many as 1,06,334 shops and 46,602 commercial establishments registered under the Shops and Establishments Act, 1948, in Greater Bombay.

Some of the important municipal (The details of retail municipal markets are given under ' Municipal Markets) retail markets in Bombay are described below:

Colaba Market: This is a composite retail market situated at Lala Nigam Road, Colaba. This was started in 1895 and covered an area of 917 sq. yards. The market is particularly convenient to the fishermen working in Sassoon Dock area. The market consists of 45 stalls and is well-patronized and overcrowded.

Fort Market: This is strictly a retail market situated at Mint Road. It was remodelled in 1939 and extended over an area of 1905 sq. yards. As the market area was found to be inadequate during peak hours, the adjoining area of 1955 sq. yards was reserved for the extension of this market under the Development Plan prepared in 1964. The market is equipped with 46 mutton stalls and 108 vegetable stalls.

Dongri Municipal Market: The market established in 1954 is situated near Sandhurst Road railway station. This is a composite retail market and covers an area of 2593 square yards.

Erskine Road Municipal Market: The market popularly known as Null Bazar market is one of the oldest municipal markets in the city opened in 1837 for the sale of fruits and vegetables. The present building was

built in 1867.

The market is situated between Sardar Vallabhbhai Patel Road and Erskine Road and is now a full-fledged composite retail market dealing in vegetables, fruits, flowers, mutton, fish, poultry and eggs. The market is considered to be the second important market in the city and covers an area of 5494 sq. yards. Fruit and vegetable vendors have formed a street market on Erskine Road. A small piece of land admeasuring 304 sq. yards was earmarked for the extension of the market.

Bhuleshwar Municipal Market: This is an old market constructed in the year 1897 and is situated at the corner of Bhuleshwar Road and 1st Bhoiwada Lane. It occupies an area of about 1419 sq. yards. The market is equipped with 189 vegetable stalls, 13 outside shops and 16 spaces. In the development plan it was proposed to start an open market to relieve the congestion in the market.

Chowpatty Municipal Market: This is a composite municipal retail market constructed in the year 1927 off Babulnath Road to serve Chowpatty, Walkeshwar and Malabar Hill area. The market covers an area of about 4164 sq. yards. The building of the market is constructed on modern lines and serves the rapidly developing areas of Malabar Hill and Walkeshwar.

Mahatma Gandhi Market: The market was constructed in about 1960 at King's Circle near the King's Circle railway station. It is on a plot admeasuring 3648 sq. yards. Two cloth markets have been accommodated in the front portion of the building while in the rear portion, vegetables, mutton, fowls, eggs and fish sections are situated. The total stallage capacity of the market is about 250. The market consists of 171 cloth shops, 14 outside shops, 50 vegetable stalls, 6 mutton stalls, one ice stall, one fowls and eggs stall. Besides, the market is also equipped with a department store, a canteen and a store.

The shopkeepers trading in cloth sell ready made garments, sarees etc.

Pork Market, Marine Lines: This is an old municipal market situated on Cowasji Hormasji street with an area of about 122 sq. yards. Prior to the establishment of Arthur Road Slaughter House in 1915, pig slaughtering was also undertaken in this market. The market has only three stalls. For its expansion, the adjoining area admeasuring about 660 sq. yards was reserved in the Development Plan of the Municipal Corporation.

Worli Municipal Market: This composite retail market was established in 1942 to cater to the needs of the newly developed localities in the vicinity of Worli Hill, Worli Sea-face, and along Dr. Annie Besant Road.

Andheri Market: This is a composite retail market with an arrangement for local wholesale business. It is situated on Swami Vivekanand Road, a furlong away from Andheri railway station. The area admeasures about 7250 sq. yards and is occupied by several structures. The main structure is utilized as vegetable market. An open space admeasuring approximately 60' x 60' at south-west corner is kept for wholesale business in vegetables. The fish squatters are provided platforms in an open shed in the rear, behind which is a mutton section is housed in a masonry structure. Under the Development Plan, the adjoining area admeasuring about 2 acres is reserved for the expansion of this market.

Consumer Co-operative Societies: A co-operative enterprise is one which belongs to the people who use its services, the control of which rests equally with all the members and the gains of which are distributed to the members in proportion to the use they make of its services, A consumer co-operative society associates consumers on this basis for the supply of some of the goods and services necessary to satisfy their needs.

During the Second World War, India like other countries, naturally faced an acute shortage of food, and for the first time in the nation's annals, food had to be distributed on the rationed basis. Tendency towards hoarding and blackmarketing had reached its climax. It was at this critical time that some social workers felt it necessary to organise formation of several co-operative societies. This helped to certain extent in overcoming the difficulties experienced during the war time.

Mumbai Kamgar Madhyavarti Grahak Sahakari Mandal Ltd.: The Mandal decided to form and organise a consumers' co-operative society. Accordingly, Mumbai Kamgar Central Consumers Co-operative Society was started in the year 1948 with a working capital of over 5,000 rupees and 77 members on its roll. The special feature of this society was that the workers in the textile mills took a leading part in collecting working capital of the society.

Soon after Independence, in view of the increase in agricultural production, controls were lifted, as a result of which a number of co-operatives suffered losses, Some of the societies which had suffered a loss were taken over by the Mumbai Kamgar Society, and slowly the activities of the society extended all over Bombay. The society after its working of 15 years was selected as a central wholesale society by the Government and all primary societies from the central part of Bombay were affiliated to the society and it came to be known as the Mumbai Kamgar Central Wholesale Consumers' Co-operative Society.

In March 1968, the society started a departmental store known as Apna Bazar situated at Naigaum. In March 1969, another departmental store (although of small size) was started in Fort area. The membership of the society during 1975-76 stood at 8699, of which 8664 were individuals, 34 primary societies and Government. The list of activities of the Mumbai Kamgar Society in 1975 comprised 2 departmental stores (Apna Bazar (Recently three more departmental stores have been established at Mulund, Matunga and Andheri)), 2 medical stores, 20 grocery and provision shops, 46 primary societies affiliated to the society, 1 spices factory at Taloja-Panvel, 1 wholesale section and 1 dairy at Chalisgaon. The society sells about 3500 litres of milk every day brought from Chalisgaon Dairy. The society also undertakes seasonal sales of various kinds such as grapes, mangoes, pineapples, umbrellas, crackers, woollen blankets, etc. The society has also recently undertaken the work of distribution of text books published by the Maharashtra State Text Book Bureau.

The total turnover of business of the society during 1975-76 was Rs. 11.5 crores which included wholesale as well as retail trade and supply of the material to canteens in factories.

Apna Bazar—Departmental Stores: The main departmental stoie of the society is situated at Naigaum in Central Bombay. Apna Bazar at Naigaum was started in 1968 whereas at Fort was started in 1969. The store at Naigaum has twenty-four sections which include grocery, leather products, medicines and various articles ranging from textiles to T.V. sets.

The building of the Apna Bazar at Naigaum is owned by the society and the total cost of the premises is about Rs. 14 lakhs. The departmental store at Naigaum also runs a health centre where doctors and specialists in different spheres of medical science offer their services at nominal charges. The optical section of the departmental store offers free eye examination. Besides, it also organises exhibitions and documentaries for the benefit of the consumer.

The details of turnover of the two departmental stores viz., Apna Bazar at Naigaum and Fort are given below:

_

(Rs. in lakhs)

	Total Sales					
Name	1973-74	1974- 75				
Apna Bazar, Naigaum	2,27.91	2,79.81				
Apna Bazar, Fort	70.41	98.57				

The total turnover of the branches amounted to Rs. 2,81.42 lakhs during 1974-75, representing an increase of Rs. 51.57 lakhs over the turnover during 1973-74.

The wholesale section of the society was established in 1963, the sales of which amounted to Rs. 1,82.02 lakhs during 1974-75. The turnover showed a steep rise of Rs. 40.37 lakhs over the previous year's figure. The business in this section includes supplies made to the primary societies as well as other wholesale business. Besides the society has started various new schemes such as Apna Bazar bonus stamp scheme, savings scheme for purchases of utensils, etc.

The position of membership and paid-up capital of the society as on 30th June 1975 was as follows:—

Type of Member	Number	Paid-up Capital (Rs).
Government	1	12,54,000
Affiliated Societies	33	12,330
Individuals	8,351	5,24,520
Total	8,385	17,90,850

Besides, there are many other departmental stores run by private owners in the city.

Hawkers: The problem of hawkers in Bombay is as old as the process of urbanisation. The hawker is a person who hawks or exposes for sale in any public street any article under Section 313A of the Bombay Municipal Corporation Act (III of 1888). Similarly a person who uses his skill in any handicraft for rendering service to the public in any public place or a public street is also considered as a hawker, such as cobbler, barber, typist etc. under Section 313B of the Bombay Municipal Corporation Act.

In Bombay, the control over hawkers was first contemplated in 1910, when the then Government of Bombay pointed out that the hawkers were causing obstruction on footpaths. However, actual licensing of hawkers was not thought of till 1921. Now, the hawkers are issued licences under Section 313A or 313B of the Bombay Municipal Corporation Act. Goods of the unauthorised hawkeis are removed under Section 314, and the same are redeemed on payment of removal charges fixed under the Act. The number of hawkers increased after 1947-48 when many refugees took to this profession. Marketing facilities in Bombay are also inadequate as compared to the demand of population. Therefore a section of those unemployed and those who could not start their business in a shop have resorted to hawking. With the rapid urbanisation the problem of hawkers and especially the removal of unauthorised hawkers is becoming more and more complex. The unauthorised hawkers are mainly found in front of municipal or private markets, schools and railway stations, at traffic junctions and in commercially congested and thickly populated areas, and the people find it cheaper and convenient to purchase the goods from the hawkers than from the shops and markets.

In Greater Bombay, there are more unauthorised hawkers than authorised hawkers. It is not possible for the Bombay Municipal Corporation to remove all of them or to regularise all of them by giving licences. The present problem of unauthorised hawkers is not a new one. In fact it started in 1921, and from time to time stringent actions against hawkers, by way of encroachment removal action, with limitation of issue of licences, have been alternated with liberal issue of licences. But neither of these measures has been able to deal with the problem of removal of unauthorised hawkers effectively. Whatever policy has been followed, the problem has remained unsolved.

In February 1964, the problem of hawkers came up before the Bombay Municipal Corporation and a declaration was made by the then Commissioner about suitably modifying the policy in respect of issue of licences so as to provide more and more licences for hawkers by creating more reserved areas. A committee was appointed by the Corporation in March 1964 and again in May 1969, but the problem remained

unsolved.

The problem of unauthorised hawkers is tackled in two ways by issuing licences, and by removal of the goods of the unauthorised hawkers. To solve the problem of hawkers by way of issuing licences, licence fees are prescribed under rules. These authorised hawkers are given folder licences with their photographs. For the implementation of removal of goods of unauthorised hawkers, every ward has been given one encroachment removal van. The goods of unauthorised hawkers are seized by the municipal staff with the help of encroachment removal van and the seized goods are removed to the godowns. The seized goods are allowed to be redeemed if the parties pay resumption charges. Besides, at focal points, where the nuisance is at its peak a preventive squad is posted so as to prevent hawkers from encroaching upon the roads and footpaths.

The following list gives an idea about the rate of licence fee charged by the Corporation:—

Schedule of fees for squatters and hawkers in 1972



Maharashtra State Gazetteers

	Category	Rate Rs.
1.	Itinerant Hawkers	2.00
2.	Roving Handcarts—	
	(i) For 1 sq. metre (i.e. new size of 4' x 2 1/2') (ii) For 1.5 sq. metre (i.e. old size of 5' X 3')	10.00
3.	Itinerant hawkers using vehicles moved by machinery or drawn by animals.	10.00
4.	Stationary Handcarts—	
	(i) For 1 sq. metre (i.e. new size of 4' X 2 1/2')	15.00
	(ii). For 1.5 sq. metre (i.e. old size of 5' x 3')	20.00
5.	Squatters in Reserved Area—	
	(i) For area upto 1 sq. metre	10.00
ní	(ii) For every additional 0.1 sq. metre or part thereof. [Squatters at Chowpatty reserved area are charged at double the above rates]	1.00
6.	Cobbler	5.00
7.	Fees when <i>nokarnama</i> is granted the usual	Double fees.
8.	Fees when a substitute is allowed during the leave period.	5.00 in addition to usual fees.
9.	(i) Change in commodity (ii) Change in pitch (iii) Change in name	5.00 every time per application.
10.	Additional charges when fees are paid on quarterly basis but after the 10th day of the quarter or monthly basis.	5 paise in a rupee.

In case of squatters, sale of fifteen kinds of foodstuffs and 26 types of non-foodstuffs have been allowed by the Corporation; while for the moveable hawkers, hawking in only 6 types of foodstuffs and 16 types of non-foodstuffs have been allowed by the Corporation.

The Table No. 25 shows the ward-wise statistics of hawkers in Greater Bombay as on 31st March 1972. (Hawkers' Problem in Bombay (Licence Department, Municipal Corporation of Greater Bombay, 1972).

TABLE No. 25 WARD-WISE STATISTICS OF HAWKERS IN GREATER BOMBAY AS ON 31ST MARCH 1972

Ward	Total No. of reserved areas in	Total ap the res	proved s erved ar Ward	trength of eas in the	Number of licences granted			Number of existing vacancies		
	the	Pitch licences	Stall licences	Stationary handcarts	Pitch licences	Stall licences	Stationary handcarts	Pitch licences	Stall licences	Stationary handcarts
A	68	859	155	19	458	135	19	401	20	
В	52	596	94	65	420	93	61	176	1	4
С	75	436	321	70	394	321	70	42		
D	33	217	628	16	126	614	16	91	14	
E	54	90	271	30	82	270	26	8	1	4
F/North	46	179	1,339	6	128	784	6	51	555	
F/South	21	15	182	11	15	179	11		3	
G/North	27	165	379	4	136	361	4	29	18	
G/South	22	265	163	10	162	162	10	103	1	
Н	21	83	130	80	83	130	80			
K	26	146	163	8	130	161	8	16	2	ire
L	12	14	56		7	45		7	11	
M	7	3	205		3	49			156	
N	8	124	56		106	56		18		
Т	4	3	184	9	3	183	9		1	
Р	5	32	1	1	32	1	1			
R	6	6	5	1	6	5	1			
Total	487	3,233	4,332	330	2,291	3,549	322	942	783	8

MUNICIPAL MARKETS

Every municipal ward is equipped with one or more markets. Some are owned and managed by private owners while the remaining are owned by the Corporation. The establishment and development of markets in Bombay have a long history. The first market in Bombay appears to have been established for the sale of fruits, vegetables and flowers in 1696 within the Fort. The dealers handling the sale of those commodities were permitted to occupy the market, free of rent or any other impost. In 1769, two large sheds were constructed on the same site, one for meat and fowls and another for fruits and vegetables. After seven years, a market known as Mohamed's market was established at Sheikh Memon Street, which was later destroyed in fire, and rebuilt in 1809 as Duncan Market. In 1794, a mutton market was erected at a cost of Rs. 2,940. In 1803, after the great fire at a site in the Fort, the Governor's old horse stable was converted into

a mutton and vegetable market. In about 1837, a market for fruits and vegetables was erected at Erskine Road. A number of markets gradually sprang up, and upto 1865 there were five municipal markets and one private market in Bombay. They were: (i) Green Market on Sheikh Memon Street, (ii) fish and mutton market at Bori Bunder, (iii) beef market and slaughter house on Butcher Street, (iv) a composite market at Null Bazar, (v) a private market on Abdul Rehman Street, and (vi) an enclosure which was known as bread market on Mody Street for the provision of the North Fort which was constructed in 1847. In 1865, the then Municipal Commissioner, Mr. Arthur Crawford helped in improving the marketing facilities by erecting a general market known as 'Arthur Crawford Market' on the plot obtained from Government. In 1868, the private market at Bhuleshwar was gutted by fire and a new municipal market was built in its place.

In 1893, three more markets were built to meet the wants of the populace in different localities and four others were subsequently erected. In 1909, the city had 12 municipal markets, the chief of which were Arthur Crawford Market, the Erskine Road (or Null bazar) Market and Bhuleshwar Market. Similarly, the first slaughter house was constructed in the year 1867, just outside the then limits of the city, at Bandra. It used to meet the local demand for 500 sheep and goats and 50 cattle per day. Later, in 1915, a slaughter house was established on Arthur Road. In 1927, a composite municipal retail market known as Chowpatty Market was constructed on Babulnath Road. In 1933, the Garamkhana Market was started at Lalbaug as a private market, and afterwards in 1958, the same was taken over by the Municipality. Subsequently, quite a number of composite markets as well as the wholesale markets were constructed by the Municipal Corporation in various parts of the city. As a result of the merger of suburban and extended suburban areas new markets have also been constructed in various parts of Greater Bombay. With a view to rehabilitate the refugees from Pakistan, who migrated to Bombay and who were mainly dependent on cloth business, a separate market was constructed near King's Circle Station and was named as the Mahatma Gandhi Market. This market is how considered as an important market for the purchase of cloth in the northern part of the city.

In 1983-84, there were in all 96 markets in. Greater Bombay, of them 79 were owned and managed by the Municipal Corporation. Almost every municipal ward is equipped with two or more municipal markets, 'K' municipal ward being equipped with the largest number of municipal markets.

The relative position of markets, during 1983-84 is given below:—

Unit		No. of		Licences issued		Expenditure			
		Municipal Markets		(110)	Revenue (Rs.)	Establishment (Rs.)	Maintenance (Rs;)		
(1)	City	35	10	413	1,74,27,400	81,11,225	66,97,205		
(2)	Eastern Suburbs.	14	2	314	17,78,460	12,23,485	3,83,290		
(3)	Western Suburbs.	30	5	399	3,42,180	30,46,750	3,05,30,530		
		79	17	1,126	2,23,27,670	1,23,81,460	3,76,11,025		

The following list of ward-wise markets gives an idea of the dispersal of municipal markets in Greater Bombay, during 1984:—

Municipal Ward	No. of Municipal Markets	Municipal Ward	No. of Municipal Markets			
A	4	G/South	4			
В	2	К	10			
С	4	Р	4			
D	2	R	5			
E	8	L	3			
F/North	3	М	3			
F/South	5	N	5			
G/North	5	Т	2			
Total number of Municipal Markets 79						

The distribution of outside meat shops in different municipal wards in 1984 is given below:—

Maharashtra State Gazetteers

	Sr. No.	Ward	Mutton	Beef	Pork	Cold storage	Total
	1	А	15	11	3	43	72
	2	В	17	12	2	38	69
	3	С	13	8	2	54	77
	4	D	9	6	2	40	57
	5	E	16	50	2	3	71
	6	F/South	8	6	1	14	29
	7	F/North	9	7		_ 10	26
	8	G/South	15	10	2	7	34
	9	G/North	27	22		28	77
	10	Н	35	28	2	63	128
	11	K	74	38	3	25	140
	12	Р	42	14		9	65
	13	R	15	7		7	29
Maharaa	14	L	30	57		4	91
Manaras	15	#I a	34	15	LE.	7	56
	16	S					
	17	Т	31	8		12	51
		Total	424	362	19	398	1,203

Stall-spaces in the Municipal Markets: In addition to the regular stalls, there are stall spaces in the municipal markets. These spaces provide the facility to those persons who undertake day to day business. Spaces provided on daily payment basis are also continuously occupied throughout the year. Table No. 26 showing statistics of municipal markets in Bombay city throws a light on the size and composition of the markets, in 1976.

TABLE No, 26 STATISTICS OF MUNICIPAL MARKETS IN GREATER BOMBAY, 1976

	Municipal Market	Number		Municipal Market	Number
	A Ward—		2.	Fort Market—	
1.	Colaba Market—			(a) Outside shops	11
	(a) Vegetable stalls	2		(b) Spaces	5
	(b) Mutton stalls	17		(c) Mutton stalls	46
	(c) Spaces (d) Beef stalls	22 4		(d) Vegetable stalls	108
	(e) Number of spaces on daily charges.	14		(e) Number of spaces on daily charges.	12
	Mahatma Jyotiba phule market			(d) Eggs and Fowls	8
		F.7.0		(e) Number of spaces on daily	
	(a) Vegetable stalls	570		charges	8
	(b) New spaces at scale shed	4		C Ward -	
	(c) Spaces	3	1.	Mirza Galib Market -	
	(d) Mutton stalls	44		(a) Old vegetables stalls	356
	(e) Outside Shops at fish section.	2		(b) Outside shops	78
	(f) Beef- (retail)	104		(c) New vegetable stalls	117
	(g) Beef (wholesale)	37		(d) Mutton stalls	110
	(h) Godowns	20		(e) Head and liver stalls	74
	(i) Fowl rooms	33		(f) Egg stalls	8
	(j) Old office rooms	35		(g) New spaces	46
	(k) New office (New Building)	14		(h)No. of spaces on daily charges	9
	(I) Bird shops	18			
1	(m) Number of spaces on daily charges	48	2.	Bhuleshwar Market-	apro
	arian ao ma		-	(a) Vegetable stalls	189
	Chhatrapati Shivaji Maharaj Market-			(b) Outside stalls	13
	(a) Fish <i>pedhi</i>	22		(c) Spaces	16
	(b) Ice stalls	6		(d) Number of spaces on daily charges	6
	(c) Outside shops	4	1		
	(d) Canteen	1	3.	Pork Market (Dhobi Talao)-	
	(e) Waiting rooms	1		Stalls	3
	(f) No of spaces on daily charges	24			
			1	D ward	
	B ward -		1.	Chowpatty market (new) -	
				Vegetable stalls	49
	Masjid Bunder Market -		2.	Chowpatty market (old) -	
	(a) Vegetable stalls	4		(a) Vegetable stalls	82
	(b) No. of spaces on daily charges	80		(b) Outside shops	31
	Dongri Market-			(c) Mutton stalls	19
	(a) Vegetable stalls	82		(d) Eggs and fowls	8
	(b) Outside shops	31		(e) Number of spaces on daily charges	7
	(-) M+++ - II -	19	\top	3	
	(C) Mutton stalls			+	
	(c) Mutton stalls Lokmanya Tilak market-				
	Lokmanya Tilak market-			(c) 'F' line fruits	143
· _		155 19		(c) 'F' line fruits (d) 'C' line fruits	143 60

(d) Fowls cutting stalls	2	6.		mathipura Market -	
(e) Space for fowls cutting	1			- 5	10
	├			·	5
E ward -	_	L			3
Babu Genu Market -					32
(a) Beef stalls	6	┝		Number of spaces on daily charges outh Ward -	/
1		1		Shah Market -	┝
(b) Mutton stalls		μ.			1 1
(c) Pork stalls	4	L			18
(d) Fowl stalls	3	L	, ,		8
(e) Tea Stall	1	L		,	6.
(f) Poultry stalls	2	L		9	6
(g) Number of spces on daily charges	35			Number of spaces on daily charges	4
Tank Bunder Market -	<u></u>	2.		hinstone Road Market -	L
(a) Outside shops	10			- 3	1
(b) Mutton stalls	3				2
(c) Number of spaces on daily charges	6				2
Ghamaji Manaji Market -				Terr egg stan	1
(a) Total stalls	33		(e)	Number of spaces on daily charges	1
			Se	wri <mark>Marke</mark> t -	Г
(b) Number of spaces on daily charges	14	3.			1
			(b)	Number of spaces on daily charges	4
Sant Sawata Market -			FI	lorth Ward -	Г
(a) Pedhis	15	1.	Ма	hatma Gandhi Market -	Г
(b)Canteen	1		(a)	Cloth stalls	1
(c) Godowns	15		(b)	Outside shops	1
(d) Number of spaces on daily charges	10				5
Sant Gadge Maharaj Market-					6
(a) 'A' line vegetables	152		-		1
(b) 'B' line vegetables	90		(-)		F
(f) Ice stall	1	4	Go	pi Tank Market -	H
(g) Fowl Egg	1	-			1
(h) Departmental store	1				1
Lal Bahadur Shastri Market-	-				6
(a) Inside stalls	147				8
(b) Outside shops	16	H	-		5
(c) Canteen	1	┝			4
	NI:I	H		South Ward-	4
(d) Number of spaces on daily charges	IVII	1			
Hemant Manjarekar Market -	100	_		w Worli Market -	1
(a) Cloth stalls	100	_	_		4
(b) Fish stalls	11	_			6
(c) Vegetable stalls	11	L			1
(d) Number of spaces on daily charges	44	L			2
					1
			1, ,		4
		L			1
G North Ward		2.		antabai Hule Market (Prabhadevi)-	L
Old Dadar Market-	-				8
(a) Mutton stalls	12			Outside shops	1
(b) Vegetable stalls	203				3
(c) No.of spaces on daily charges	10	3.		l Worli Market -	
Agar Bazar Market -			(a)	Mutton stalls	2
(a) Tatal stalls	89		(b)		4
(a) Total stalls	3				5
(b) No. of spaces on daily charges				33	1
(b) No. of spaces on daily charges					_
(b) No. of spaces on daily charges New Dadar Market -		\vdash	(e)	Number of spaces on daily charges	4
(b) No. of spaces on daily charges New Dadar Market - (a) Vegetable Stalls	186			Number of spaces on daily charges f. D. Khamkar Market -	4
(b) No. of spaces on daily charges New Dadar Market - (a) Vegetable Stalls (b) Mutton stalls	186 2		Pro	f. D. Khamkar Market -	
(b) No. of spaces on daily charges New Dadar Market - (a) Vegetable Stalls	186		Pro (a)	f. D. Khamkar Market - Mutton stalls	16

Markets and slaughter houses are a good source of revenue to the Municipal Corporation. In the year 1970-71 there were 45 markets in Bombay city, of which 31 were municipal and 14 private markets. The licence fees recovered from the owners of the private markets amounted to Rs.93,660 and from stalls and shops in Municipal Market amounted to Rs. 19,404. In the same year there were 21 municipal and 2 private markets in the suburbs. One open air market was also started at Jogeshwari from 1st November 1969. The licence fees received from the markets in the suburban area amounted to Rs. 42,344.40, while the licence fees

received from markets in extended suburbs amounted to Rs. 17,757.10. In the extended suburbs, there were 10 municipal markets including three open air markets and six private markets licensed by the Corporation.

A licence fee of Rs. 24 is charged (1983-84) for each stall in the municipal market. The charges are also levied on the commodities brought in the market for sale. These charges are generally based on the weight of the load brought for sale. A licence fee of Rs. 250 per annum is charged for a mutton beef pork stall in the private market. Market-wise rates of licence fees charged for stalls in some of the private markets are given below:—

Name of Private Market	Locality	Licence fee in 1983- 84 (Rs.)
Gujari Bazar	Dr. Ambedkar Road	3602.50
Chira Bazar	Jagannath Shankarshet Road	9168.50
Habib Market	Baburao Jagtap marg	2318.80
Bhoiwada Market (Shetye Market)	Bhoiwada	4615.15
Fancy Market	Morland Road	4229.50
Upper <mark>Mahim</mark> Market	Near Savarkar Marg	3411.10
Dadar Market	Dadasaheb Phalke Road (C.R.)	2416.70
Wadala Market	Katrak road	4620.00
Meher Market	Byculla	64047.50
Open Air Market	Lamington Road	312.40

The total revenue from all the markets in Greater Bombayis steadily increasing every year and in 1983-84 the total revenue from markets amounted to Rs. 2,23 crores

WAREHOUSING

Storage is important from the point of view of timely supply of goods, controlling market fluctuations and good returns to the traders. The warehouse receipts are a security on the basis of which the producers get money from the banks. At present the Central Warehousing Corporation and the Maharashtra State Warehousing Corporation provide various storage facilities. The Government of Maharashtra since the introduction of statutory rationing in Bombay and Thane areas have entrusted the storage of rationed foodgrains to these corporations.

Maharashtra State Warehousing Corporation: It possesses three godowns in Bombay at Dadar, Wadala and Sewri. The godowns at Dadar and Wadala were established on 22nd and 24th February 1966 with the storage capacity of 14,908 and 8,097 tonnes, respectively, and the godown at Sewri was established on 1st June 1969 with a storage capacity of 3,097 tonnes. In these godowns are stored wheat, rice, jowar, bajara, sesame, oil-seeds, and vegetable oil.

As the Corporation is working as an agent of Government of Maharashtra for handling and storage of foodgrains under public distribution scheme, no other party is allowed to store foodgrains in these godowns. The foodgrains are supplied from the central pool by Food Corporation of India from its various depots as well as from the docks directly. The State Government some times bring locally procured foodgrains from the surplus districts. Besides, the Corporation also makes arrangements to bring food-grains from the other surplus States such as Punjab, Haryana, Andhra and Madhya Pradesh. These foodgrains are then delivered through the organised bodies to the rationing shops in Bombay and Thane rationing areas, for distribution.

The Maharashtra State Warehousing Corporation follows modern methods of scientific storage and also gives preventive treatment to the stock. Besides, wherever necessary cleaning is undertaken and stocks are arranged in such a way that no inconvenience for handling and inspection of stocks is caused. The activities of the Corporation include loading and unloading of trucks and wagons, 100 per cent weighment of stock, scientific storage, standardisation and issues of foodgrains for public distribution.

Central Warehousing Corporation: The Central Warehousing Corporation has its regional oflBce and 13 warehouses in Bombay. The details of these warehouses such as their location and storage capacity are given below:—



Maharashtra State Gazetteers

1	cation of arehouse	Year of establishment	Commodity stored	Storage capacity (in standard bags)
	1	2	3	4
1.	Wadala	July 1971	Chemicals, skim milk powder, steel bar.	71,250
2.	Matunga	April 1971	Dairy, machinery cases and stainless steel coils.	6,335
3.	Elphinstone Road	September 1971	Ferrous metals	42,000
4.	Cotton Green-TW-I	October 1975	Imported goods	2,69,834
5.	Cotton Green-TW- II	October 1973	Exported goods	96,400
6.	Bhandup	July 1975	Skim milk powder, chemicals and newsprint reels.	44,200
7.	Mulund (West)	July 1975	Skim milk powder, N.P reels.	1,52,200
8.	Mulund	June 1977	Bonded goods	55,000
9.	Andheri	September 1975	Electronic goods	51,640
10.	Goregaon	April 1977	Exported goods	37,220
11.	Borivli	February 1966	Foodgrains	2,50,690
12.	J-Shed, Fosbery Rd.	February 1966	Foodgrains	79,050
13.	New Parel	June 1966	Foodgrains	99,030

The commodities in all these warehouses are stored in a scientific way. The State Government, Government undertakings (State and Central), co-operative organisations as also private parties are allowed to store their commodities in these warehouses.

The Central Warehousing Corporation besides storing, offers a number of other facilities to its depositors such as credit, handling and transport, clearing and forwarding, insurance and disinfection extension service.

TRADE ORGANISATIONS

The system of different categories of traders representing their problems through one or different organisations is very old. The first chamber of commerce was established in India in 1834. During the nineteenth century, only nine trade organisations existed in Bombay. The chief among these commercial associations was the Bombay Chamber of Commerce established in 1836 .But as these organisations were mostly founded with the aims and objectives similar to those of British Chamber of Commerce, they mainly

helped British traders and thereby developed the British trade in India.

The period between 1860 and 1875 marked the establishment of three associations *viz.*, Native Share Brokers' Association (1868), Underwriter's Association (1872), and Bombay Millowners' Association 1875. As the traders' representation in the Millowners' Association was weak and as there was no other association dealing with problems of clothtraders, Bombay Native Piece-Goods Merchants' Association was founded in 1881 at Bombay. The association helped to solve the problems of local cloth dealers through proper representation.

In 1896, the Marwadi Association now known as the Hindustan Chamber of Commerce was founded at Bombay. This was followed by a number of associations in Bombay: the important among them were the Grain Merchants' Association established in 1899, Sugar Merchants' Association (1900), and Saraf Merchants' Association established in 1901. With almost the same aims in view as those of the above cited association was founded the Marwadi Chamber of Commerce which is now known as the Western India Chamber of Commerce. Upto 1907, the trade associations in Bombay were dominated by Europeans but the establishment of Indian Merchants' Chamber and Bureau at Bombay established in 1907 helped to a great extent to put an end to this practice. Its objective was confined not only to solving problems of local traders but to help traders and industries all over the country.

Before World War I, a large number of trade associations were founded the important amongst them being the Bombay Native Piece-Goods Merchants' Association and the Hindustani Native Piece-Goods Merchants' Association. The former used to represent the sellers of cloth, whereas the latter used to represent mainly the commission agents. The other associations though small in membership also used to play an important role in trade and commerce. They were: Bombay Hosiery Merchants' Association, Memon Chamber of Commerce, Woollen Merchants' Association, Yarn Merchants' Association, Bombay Commission Agents' Association, Bombay Shroffs' Association, Copper Merchants' Association etc. These associations used to hold mutual discussions, meetings, and joint arbitration. Besides, as the hundis were in common use in the trade activities, these associations also used to formulate the rules for hundis through compromise or joint agreement.

The Chambers of Commerce and trade associations are of great importance to the country in general, but more so to the commercial operations of the individual businessmen in particular; It is therefore proposed to furnish the history and functions of a. few leading chambers of commerce and trade associations in Bombay.

Chambers of Commerce: There are about 14 Chambers of Commerce in Bombay of which some are described as under:

Maharashtra Chamber of Commerce: The Maharashtra Chamber of Commerce was established with its head office at Bombay in October 1927 with the object of establishing friendly relations among merchants and factory owners in Maharashtra, and to safeguard their interests. Thus the idea of establishing a chamber of commerce for the first time for the region comprising the Marathi speaking districts and the neighbouring Princely States in and around the Bombay Presidency was materialised. The founder members who were 36 in number mostly included well-known personalities in business and industry.

The affairs of the chamber are conducted by a managing committee comprising a president, vice-presidents, trustees and members. There are various sub-committees of the chamber. The chamber is affiliated to the Federation of Indian Chambers of Commerce and Iudustry, New Delhi and various all India and international bodies.

The Maharashtra Chamber is represented on important public bodies such as Bombay Port Trust, Zonal Railway Users' Consultative Committees for Central and Western Railways, Divisional Railway Users' Consultative Committees for Central and Western Railways; R. A. Podar College of Commerce and Economics Advisory Committee; Central Excise Regional Advisory Committee, at Bombay and Pune; Post and Telegraphs Regional Advisory Committee; Wadi Bunder Consultative Committee, Central Railway; University Employment Information and Guidance Bureau; Station Consultative Committee; Standing Committee for State Industrial Advisory Committee; State Advisory Committee on Food and Drugs; and Income Tax Advisory Committee, Pune Region. The members of the chamber comprise big industrialists, trade associations, exporters, importers and merchants dealing in different types of trade. The members are dispersed throughout the State and numbered 2,047 in 1976. Of these 655 were in Greater Bombay.

Bombay Chamber of Commerce and Industry: The Chamber of Commerce, as it was then called, was established in 1836 as an unregistered association under the auspices of Sir Robert Grant who was then the Governor of Bombay Presidency. The Chamber was incorporated under the Indian Companies Act, 1913 in 1924 as a Company limited by guarantee. In 1956, the name of the Chamber was changed to the Bombay Chamber of Commerce and Industry. Next to the Bombay Branch of the Asiatic Society, the Bombay Chamber is the oldest institution of its kind in Western India.

The aims and objectives of the Chamber are, (i) to encourage and promote a friendly feeling and unanimity among businessmen and industrialists in the general interests of the State and the country; (ii) to collect and circulate information on all matters of general commercial and industrial interests; (iii) to obtain the removal of all acknowledged grievances affecting mercantile and industrial interests; (iv) to receive and decide references on matters of usage and custom in dispute; (v) to communicate with Government and other public authorities, with similar associations in other places and with individuals on all subjects of general mercantile and industrial interests; and (vi) to arbitrate between parties willing to refer to and abide by the decision of the Chamber. The Chamber is the mouthpiece of its members and their most effective intermediary with Government.

The work of the Chamber can be reviewed from three aspects. Firstly, that of providing definite tangible services to the commercial and industrial communities on a purely material basis such as for example dissemination of information including Government notifications and the like. Secondly, by providing forum for redressing grievances in all matters governing relations between customers, merchants and many other authorities and organisations. Finally, as convenient medium for the exchange of ideas on matters bearing on the policies and procedures of Government where they affect the commercial and industrial community.

The present rates of annual subscription are Rs. 1,250 per annum for ordinary members and Rs. 1,000 per

annum for associate members. There is also entrance fee in the case of both the types of members. The esteem in which the chamber is held is evident from the steady annual growth in its membership. When the Chamber was set up in 1836, there were 25 members, of whom 10 were Indian firms. The increase in its membership from 25 original members in 1836 to 81 in 1839 to 100 in 1906, and to almost 200 in its centenary year of 1936 and 800 in 1976 seems to be parallel to the emergence of Bombay as the financial capital of the country. The Chamber is administered by a committee consisting of a president, a vice-president, and ten ordinary members. The committee is assisted by 16 sub-committees dealing with various subjects.

In 1860 the Chamber was placed in sole charge of all returns concerning the external trade of Bombay port, which resulted in reducing considerably the time involved in preparing the weekly trade returns from 45 to 13 days.

The Chamber initiated activities such as submitting an annual report, preparing reports regarding returns of trade, maintenance of machinery for settlement of disputes and arbitration. The primary function of the Chamber, as it is at present constituted, is to act as a liaison between members and State and Central Governments. The representations of the members are compiled and forwarded to Government and information is collected from Government and disseminated to members.

The various service departments of the Chamber started so as to implement its objectives effectively and efficiently include information, labour advisory service, statistics, trade introductions, certificate of analysis and origin, weighment and measurement, arbitration, secretarial service, conducting of commercial examinations, etc.

The Chamber performs secretarial services for 9 manufacturers, and traders organisations *viz.*, the Tractor, Earthmoving, and Construction Equipment Distributors Association Ltd.; the Indian Engineering Association (Western Region); the Pharmaceutical and Allied Manufacturers and Distributors Association Ltd.; the Indian Paint Association (Western Region); the Chemical Plant and Machinery Association of India; the Automobile Dealers' Association of Maharashtra Ltd.; the Industrial Diamond Association of India; the Aviation Suppliers' and Equipment Manufacturers' Association; and the Overseas General Insurers Association (Bombay branch). *Hindustan Chamber of Commerce*: The Hindustan Merchants and Commission Agents Association was established in 1897 which was then known the as Marwadi Association. This association was taken over by the Hindustan Chamber of Commerce alongwith its Marwadi Commercial High School Bhavan Trust, Bombay Hospital Trust, and Marwadi Commercial High School Education Trust.

The main object of the Chamber, besides taking the overall responsibility of Hindustan Merchants and Commission Agents Association, is to settle disputes amongst its members and also between its members and non-members. For the implementation of this objective, the Chamber has got a panel of well experienced arbitrators. A large number of traders throughout India are benefited by the arbitration machinery of the Chamber. The Chamber also guides and assists its members in their dealings with Government departments and also in matters of income tax, sales tax and railway claims.

The membership of the Chamber mostly consists of commission agents, wholesalers and semi-wholesalers in textile trade. In 1972 the number of member-firms in Greater Bombay was over 950. The Chamber is represented on the various organisations and on the sub-coinmittees of the Federation of Indian Chamber of Commerce and Industry, New Delhi.

The annual income and expenditure of the Chamber during the year 1976-77 was the same and it amounted to Rs. 1,02,703.21. Its social activities include running of a high school and donations to Bombay Hospital and a large sum for the construction of hostel and a training centre in Navy Nagar, Colaba for the dependents of martyrs of *I.N.S. Kukri*. Besides, the Chamber has always tried its best to solve the different problems suffered by its member dealers in the undertaking of cloth trade. The Chamber has appointed a Cloth Markets and Shops Board. The Board had increased the levy from 8 per cent in 1971-72 to 12 1/2 per cent during 1976-77.

During 1972-73, the Chamber received 1435 *hundis* of the value of Rs. 28,32,156.46, out of which only 609 *hundis* were accepted by the Chamber.

Indian Merchants' Chamber: The Indian Merchants' Chamber was established in 1907 in Bombay in the midst of political and economic discontent then prevailing at all levels of Indian society. The pre-Inde-pendence period was marked by adverse influences which under a foreign rule were entirely uncongenial to the growth of industry, banking, trade, insurance and transport. The Chamber, while extending its support and sympathies to the political movement, itself set to the task of arousing the economic consciousness of the people through the organisation of commercial conferences and the Indian Industrial and Commercial Congress.

Its chief contribution soon after Independence lay in examining the implications of the various policies of Government under its new socio-economic programme. Since its inception, the Chamber while playing the role in the process of promoting the economic advancement and industrial development of the country has helped to enhance the position of Bombay as the neerv centre of trade, commerce and industry of the country. Today, the activities of the Chamber have expanded in diverse directions.

The Chamber has an information department which furnishes factual information on all matters concerning commerce and industry, and assists in stimulating fresh and increased trade contacts. Since 1941, the Indian Merchants' Chamber has a full fledged measurement department which is nowjointly managed by the Indian Merchants' Chamber and its counterpart the Bombay Chamber of Commerce. The measurement department of the Chamber functions in the docks for measuring and weighing export cargo on the basis of which steamship companies recover the freight charges due to them from the shippers.

The Chamber has the privilege of having on its roll not only individuals, firms, joint stock companies, but also associations interested in a variety of trade a.nd industrial activities comprising heterogeneous types of enterprises of diverse sizes and lines. At the end of 1975, there were 2,175 members and 153 associations on the roll of the Chamber.

The Chamber also tries to enrich its contribution to economic matters not only by organising business conventions, conferences, seminars and symposia but also by holding discussions with individual economists, administrators, high officials of Governments, and delegates from abroad, on different subjects dealing with transport, communications, finance, tariff, trade, industry and taxation. The Economic Research and

Training Foundation was establised in 1959 by the Chamber with a view to conducting intensive research studies in current economic problems.

The Chamber started a service centre in September 1975 at Mandvi with a view to produce better liaison between the Chamber and its constituents and to pay better attention to the difficulties and problems of trade in that area. Any trader in Mandvi area whether a member or a non-member can seek the advantage of the centre. A ladies wing of the Chamber also has been instituted. The Chamber alongwith the other organisations and leading industrialists sponsored the formation of the Fair Trade Practices Association. The Chamber possesses a well-equipped library which is open to all.

The Chamber is represented on 24 important public bodies such as State Advisory Council of Industries, Maharashtra Economic Development Council, State Board of Export Promotion, Bombay Port Trust, Advisory Council on Trade, Government of India, and other public bodies concerned with education, transport and communications.

Indo-German Chamber of Commerce: The Indo-German Chamber of Commerce, a bi-national chamber was established in 1956 under the Indian Companies Act of 1913 with its head office at Bombay. Besides, the Chamber has its branches at New Delhi, Calcutta, Madras and Bangalore. The main object of the Chamber is to promote trade, commerce and industrial relations between India and the Federal Republic of Germany.

The Chamber aims at promoting and protecting the interests of all firms and persons engaged in reciprocal commerce between India and Germany, expanding the scope of private investment in India and increasing the volume of trade with particular emphasis on the expansion of Indian exports to Germany. Besides, the Chamber also aims at settling disputes arising out of business transactions through arbitration.

The Chamber offers a four-phased service *viz.*, (i) assistance in finding suitable partners in India and Germany; (ii) giving advice in drafting of collaboration agreements, information about Government policies and regulations on industrial collaboration, assistance in negotiations with partners advice on legal and taxation problems; (iii) assistance in negotiating collaboration agreements with Government authorities; and (iv) assistance in settling disputes arising out of collaboration agreements. The Chamber offers its own arbitration.

The activities of the chamber include services through publications, legal advice, legal assistance, information about trade fairs in Germany and other services such as undertaking translation of German papers in to English and issuing of certificates of origin.

The Chamber publishes a bi-monthly bulletin in German and English. The English edition contains economic news of interest to Indian members whereas the German edition gives news of interest to German members, regarding the economic situation and regulations in India.

The Chamber represents some of the leading German organisers of trade fairs in India. In 1977, the Chamber had a membership of 1282, of which 406 was mainly from Bombay and Pune.

In 1976, 60 Indo-German collaborations were sanctioned by the India Government of which 22 collaborations were in Bombay and Pune. Of these 22 Indo-German collaborations, two were of a financial nature.

Belgo-Indian Chamber of Commerce and Industry: The Bombay office of the Chamber started functioning from 1st May 1966 with a full-time officer in-charge to take care of the general administrative and office management work. The Belgium Government very kindly granted a subsidy to start the office, and it was mainly due to this financial support that the Bombay office started to function as a useful organisation for the promotion of trade between Belgium and India.

Since its inception the Chamber has been regularly publishing a monthly journal "Belgo-Indian Trade Review" giving information on the current trade conditions between the two countries as also on items of interest affecting export/import, business.

At present the Chamber has about 290 members on its register representing various trades and industries of which 126 are in Greater Bombay.

The chamber has an advisory committee consisting of ten members, which meets periodically to review its working and offers advice and guidance for effective functioning.

Indo-American Chamber of Commerce: The Indo-American Chamber of Commerce was established in October 1968 with its headquarters in Bombay and four regional offices at Bombay, Calcutta, Delhi and Madras. Businessmen from all parts of India are on the Executive Council of the Chamber.

The Chamber was set up for closer business dialogue between the United States and India and to promote trade and investment. The broad objectives of the Chamber are the establishment of companies based on Indo-U.S. collaboration, promotion of products and activities of its members in India and United States, collection and dissemination of statistics and other information necessary for feasibility studies and projects and representation of the views of its members to the Government in relation to legislation and other trade measures.

The total membership of the Chamber in 1977, was 717 of which about 120 were in Greater Bombay. The Chamber is divided into east, west, north and south regions each having its own office bearers and committees to promote the objectives and activities of the Chamber. The office of the West India Council of the Chamber is at Bombay.

The Chamber publishes survey reports, booklets and news-letters regularly. It also organises seminars and symposia on wide range of topics and has a well equipped library consisting of latest Indian.and U.S. publications on industries and trade. Besides, the Chamber identifies products for Indian and American exporters to sell in the United States and Indian markets, respectively. The Chamber participates in industrial fairs, exhibitions, conferences and catalogue shows. The Chamber assists engineers in India and those desirous of returning to India with suitable employment opportunities through schemes initiated for unemployed engineets by member companies. It institutes awards for outstanding export performance. The Chamber also maintains close liaison with chambers of commerce, trade and investment organisations abroad and in India.

Iron, Steel, Hardware Merchants and Manufacturers' Chamber of India: The Chamber was founded on 1st April 1949 by a band of traders, for most of whom iron and steel business was a family tradition. Since its inception, it has been able to bring into its fold importers and industrialists, exporters and manufacturers in all spheres of activity in the steel world. So as to induct within its orbit all facets of the steel community's activities the Chamber in 1961 was renamed as the Iron and Steel Hardware Merchants and Manufacturers'

Chamber of India.

In 1977, the Chamber had on its roll 850 members. The membership is open to all individuals, companies, corporations, and fraternal associations who are directly or indirectly connected with iron, steel and hardware trade, in India.

The Chamber plays an important role as an information exchange and as a clearing house. The important circulars, notifications etc. are for ready reference. In addition it also publishes a bulletin every month. The Chamber has also set up its own reference library.

Whenever a dispute is referred to the Chamber for arbitration, the same is taken up for consideration by the special panel of arbitrators appointed for the purpose. The Chamber has also formulated its own approved arbitration bye-laws and has introduced its own standard contract form.

TRADE ASSOCIATIONS

Federation of Bombay Retail Cloth Dealers' Association: The Federation was established in 1943 as an apex body of the various associations of retail cloth merchants in Greater Bombay. Apart from looking after the interests of its members, the Federation has made valuable contribution to the idea of public distribution of cloth since 1944 by puting it into practice systematically through its members within the limits of Greater Bombay District.

In 1962 the Federation with the co-operation of millowners started fair price shops. In 1965, the federation also arranged for conducting fair price cloth shops approved by Government. The Federation is running 160 fair price cloth shops throughout Bombay city for distributing controlled cloth to the masses under the revised scheme of cloth distribution since 1972.

Bombay Motor Merchants' Association: The association was founded in 1921 as the Indian Motor Traders Association for dealing in petrol, tyres and to a certain extent motor accessories and spare parts. In 1928 when the strength of its membership was hardly 30, the name of the association was changed to the Bombay Motor Merchants' Association. In 1943 when its membership was 112, the Association was converted into a registered body.

During 1921 to 1942 the activities of the Association were confined to routine type of work and small complaints of its members. After the Second World War, price controls, import trade controls and other types of controls were imposed on trade, and the members needed, guidance of the Association in all these matters. The present activities of the Association include dissemination of information regarding import, customs, sales tax, income tax and such other matters which affect the trade in general. The Association makes suitable representations to the authorities about difficulties of the trade in general and of its members in particular. It also undertakes arbitration of disputes amongst its members and with dealers outside Bombay.

The membership of the Association is confined to Bombay city and suburbs only. At the end of 1975, the strength of the Association was 494 members and 11 associate members.

The Association, at the instance of the Federation of All India Automobile Spare Parts Dealers' Association was able to arrange for canalised imports of ball roller and taper roller bearings worth lakhs of rupees through licences from the State Trading Corporation for distribution to its members.

The Association has its nominees on the Indian Merchants' Chamber, All India Importers' Association and Indian Roads and Transport Association. At the end of December 1975, the balance sheet of the Association showed an excess of income over expenditure to the tune of Rs. 12,595.63.

Petrol Dealers' Association: The Petrol Dealers' Association was established in 1935. The total membership of the Association on 31st December 1975 stood at 137, representing 156 stations. The products sold by the members comprise petrol high speed diesel oil, lubricants and greases, tyres and tubes, batteries, and other accessories. Some petrol pumps also sell auto spare parts, car radios and various auto gadgets.

Petroleum Products Dealers' Association: The Association was formed in 1971. The total number of members in 1977 was 128. The members usually deal in lubricating oils, grease, petroleum jelly, light diesel oil, furnace oil, etc.

Federation of Paper Traders' Association of India: The federation was established in 1959 to promote cooperation among its members. It strived for adopting a common policy and measures as may be necessary to safeguard the interests of the members of the Association. The Federation disseminates statistical and other useful information and knowledge amongst the members and helps them by such means as providing with library facilities, publishing or subsidising publication of technical and trade journals, books and periodicals, leaflets and such other material as may be necessary.

The Federation makes representations to State and Central Governments, public bodies and private institutions for any matter affecting paper trade in particular and takes all steps by lawful means for promoting, supporting or opposing legislation or other actions affecting the trade. In 1977, about 19 associations were affiliated to the Federation.

Electric Merchants' Association: The Association was founded in 1937. In 1977, the membership of the association stood at 486 consisting of manufacturers, wholesalers and retail dealers. The member traders are faced with various problems such as high incidence of taxation, high rate of octroi, tight money conditions, central excise, etc.

Bombay Grain Dealers' Association: The Association was established in 1913 to look after the business activities, to act as a liaison body between the members and the Government and such other activities for the welfare of the members. The membership of the Association in Greater Bombay in 1977 comprised 5000 retail dealers dealing in grains, pulses, and grocery. The Association also accepts indents and delivers foodgrains and sugar issued by the Government to about 850 authorised ration shops in Greater Bombay.

Fair Trade Practices Association: The Association was established on 2nd October 1966. The main objects underlying the establishment of the association are to codify the existing fair trade practices, set up an effective machinery for their implementation in an organised manner and thereby create greater public confidence in and goodwill towards the business community.

By the end of December 1972 the membership of the Association was 970, of which 79 were public limited companies, 44 private limited companies, 276 individuals and business firms, 418 affiliated members and

153 associated members.

The Association undertook two surveys on 'Vanaspati' and 'Image of Indian businessmen among the housewives of Bombay'. In 1971 it was decided that the Association should select certain compact areas where a considerable amount of shopping activity takes place and to enrol as many members from amongst shopkeepers in that area as possible with the objective of ensuring maximum possible satisfactory service to the consumers residing in that area. Accordingly Dadar (West) was selected for the purpose in 1971. Based on the experience gained in Dadar area, similar effort was made in Girgaum area in 1972, and about 120 members from the surrounding areas of Prarthana Samaj, Thakurdwar, Charni Road and Vallabhbhai Patel Road were enrolled.

The Association undertakes self-regulation schemes for the supply of certain essential commodities. On the problem of ensuring equitable distribution of paper to the consumer at reasonable prices, considerable progress has been made and a scheme has been evolved in joint consultation with representatives of the Association, joint-committee of the paper industry and the Federation of Paper Traders' Association of India, as well as bulk consumers.

A self-regulation scheme for equitable distribution of truck tyres amongst truck operators in Maharashtra was introduced in 1970. Wheri Vanaspati was in short supply, the association evolved a satisfactory arrangement to ensure fair and regular distribution of Vanaspati at fixed price. The association has been working in close co-operation with the Consumer Guidance Society. In October 1972, films on consumer interest were exhibited under the joint auspices of the Consumer Guidance Society and the Association.

The association during 1972, suffered from excess of expenditure over income, amounting to Rs. 2233.

Bombay Mudibazar Kirana Merchants' Association: The Association was established in 1909 for the promotion and regulation of wholesale kirana trade in Bombay city and also for the settlement of disputes between the various constituents of the trade. The association solves thousands of disputes between the buyers and sellers, agents and brokers every year. It has successfully organised the wholesale trade of grocery articles.

In 1972, the Association had on its roll 68 members, 224 brokers and 58 registered buyers.

The Association has framed rules for weighment, payment and various trade practices and has evolved machinery for the solution of various trade disputes.

PATENTS, DESIGNS AND TRADE MARKS

A patent, a design or a trade mark confer an exclusive right upon an owner or an inventor by Government. A patent relates to the invention underlying the manufacture of a vendible product, while a design relates to the external features of that product as they appeal to the consumer's eye. A trade-mark, on the other hand, relates to the good will of the manufacturer or dealer trading in the product. A patent is a grant made by the Government conferring on the grantee for a limited period of the right to exclude others from making use or selling the invention without his consent.

The origin of the modern patent system in so far as it is based on a recognition of the economic aspects of patent grants, can be traced back to the monopolistic grants made in England and certain European countries in the Middle ages in exercise of prerogative powers of the Crown. Thus a large number of patents came to be granted for the manufacture of articles of daily consumption. This led to strong condemnation of the system of granting such monopolistic privileges by the Crown and led to enactment of statutes limiting the powers of the crown. But under a modern patent system a patent is granted in accordance with the law of the country and not as arbitrary grant made by the Government. As such a patent is said to be essentially in the nature of a recognition of a proprietary right of an inventor over his invention rather than a monopoly as it is generally understood. Patents are of great value not only to the inventor but also to the manufacturer and to the general public.

Substantial legislation for the protection of inventions in India was enacted in 1856, 1869, 1888 and 1911. In the first three enactments instead of the word 'patent', the expression exclusive privilege was used. Otherwise the enactments corresponded to the legislation then in force in U.K. There was no provision for sealing a patent but the exclusive privilege which was virtually the same as a patent right, automatically accrued to the applicant on his filing a specification. The earlier enactments did not make the provision for the establishment of a patent office or for an examination of the specification or for any opposition proceedings prior to granting leave for filing the specification.

The Act of 1911 made important departures in these respects and for the first time provided for the granting of a patent and the establishment of a patent office for matters incidental or supplementary to the granting of patents. On the basis of the final recommendations of the committee the Patent Bill, 1954, was introduced with a hope of enacting a legislation which would result in a more modern and adequate patent system for the country as early as possible.

Accordingly to regularise the patent system, Government passed in 1970 a legislation *viz.*, the Patents Act. A patent granted under the Patents Act, 1970, confers upon the patentee where the patent is for an article or substance the exclusive right by himself, his agents or licensees to make use, exercise, sell or distribute such article or substance in India.

Under the provisions of the above mentioned Act, three kinds of patents are granted: (a) an ordinary patent; (b) a patent of addition for improvement in or modification of an invention for which a patent has already been applied for or granted, and (c) a patent granted in respect of a convention application which is based on an application for patent in respect of the same invention made in a convention country. The term of every patent granted under the Act in respect of an invention in food, medicine or drug is for 5 years from the date of sealing of the patent or for 7 years from the date of patent, whichever is shorter. In respect of any other invention, the term is for 14 years from the date of the patent. For granting of patents for new inventions under the Patents Acts, 1970, and for the registration of new industrial designs under the Designs Act, 1911, and for other purposes specified in these two Acts, Government of India has established a patent office at Calcutta with a branch office at Bombay.

During 1976-77, 468 applications for patents were filed in the branch office at Bombay.

WEIGHTS AND MEASURES

The unit value of old weights and measures differed from place to place and also sometimes for each commodity at the same place. The English units were also used in certain transactions.

The weights and measures in Bombay were inspected and stamped at Crawford Market by the staff maintained by the Municipality under Section 49 of the Municipal Act. Prior to 1888, this duty was performed by the police.

The ser was the standard Unit of weight and measure, but the measure differed according to the commodity weighed. The Bombay ser was equal to 4900 grains Troy or 27 tolas and 4 grains. The ser measure for grain, etc. was 49.14 cubic inches and was equivalent to 1b. and 8 oz. avoirdupois of common rice. Sixty standard tolas weight of water was estimated to give the capacity of a vessel to contain one ser measure of milk. In case of oil, the ser measure contained only 30 tolas weight of water. Besides, English weights such as pounds and ounces were sometimes used by wholesale and retail dealers in case of articles such as ice, flour and meat. The old measures for oil and milk were 30 1/4 and 63 tolas, respectively.

Even though the measures of length were the *var* (yard) and the *gaj*, only the former was rapidly becoming the standard unit and was equivalent to 36 inches. The weights used for the wholesale or retail sale of metals, cotton, butter, fuel, spices and other articles were of two types. The large weight measures for the above mentioned articles were : *maund* 40 seers, *khandi* of 800 seers, whereas the small weight measures for the weighing of those articles were *nautak*, *payser* and *adhser*. Besides, certain classes of articles were sold by special weight *e.g.*, cotton by bale which was equivalent to 392 lbs; wool by bale equivalent to 336 lbs; wheat by bag equivalent to 2 cwt, and seeds were sold by bags of varying capacity.

The weights used by the goldsmith were *gunj, val, masa,* and *tola,* the *tola* being a trifle heavier than the British Indian rupee. The pearl weights in vogue were the *vassa, rati, val, tank* and *tola.*

The large dry measures were the *payali* equivalent to 4 sers, phara equivalent to 64 sers and *khandi* equivalent to 512 sers; of these the latter two were rapidly falling into disuse and it was a practice to altew more than 16 payalls to the phara according to the kind of grain to be measured. However, there was only one small dry measure and that was *tipri*.

Metric weights and measures: In order to avoid the confusion resulting from the multiplicity of weights and measures and to bring about a uniform system for the whole country, the Government of India enacted the Standards of Weights and Measures Act in 1956. This Act laid down the basic units under the metric system which derive its nomenclature from the primary unit of measurement the metre. The various unit values were set in decimal proportions.

On the lines of the above Act, the then Government of Bombay enacted the Bombay Weights and Measures (Enforcement) Act, 1958, so as to enforce the standard units based on metric system in the State. The enforcement of the system was started in 1956 and was completed in 1966. Accordingly all the trade transactions in the district, wholesale as well as retail, are undertaken in terms of metric units.

TABLES

TABLE No. 14

REGION-WISE PRINCIPAL ITEMS OF TRAFFIC FROM 1ST APRIL 1980 TO 31ST MARCH 1981 Imports

(Based on audited returns in Metric Tonnes rounded off to hundreds)

Serial No.			Australia and New Zealand	Canada	Far- Eastern Countries		Other American Countries	Other Asian Countries
1	2	3	4	5	6	7	8	9
1	Asbestos and Asbestos Material	3,900	10,900	25,000	100			
2	Building Material : Cement				2,54,300	16,100		
3	Carbon black		3,800		2,200	700		
	Chemicals: (i) Sulphur			70,100				1,01,100

	(ii) Other kinds	1,500		8,000	8,800	16,600	200	1,500
5	Copra	4,400			8,000			
6	Drugs and Medicines	100	100		1,000	1,400		700
7	Dyes and Colours	1,900	300		1,500	3,000		
8	Earth & Earthenware				5,300	200		
9	Fertilisers: (i) Rock Phosphate							
	(ii) Urea	20,000					-57	58,600
	(iii) Other Chemical Fertilisers.			1,57,100				J
10	Fibres- Synthetic		500	300	7,400	29,800	200	
11	Foodgrains	1,600	2,000		17,800			
12	Foodstuffs, N. O S.		500		400			
13	Fruits—Dates	ras	hi	ra	Si	at	e	28,600
14	Hair and Wool	100	17,300		200	100		
15	Industrial Alcohols and Spirits-non- potable				500	3,200		
16	Instruments etc.				2,400	2,600		100
17	Lac, gums and resin	3,000			1,500	100		
18	Machinery, N.O.S.	100	700	100	400	14,300		500
19	Metal and Metal Products —							
	(i) Ingots Aluminium		100	2,000			5,500	11,800

	(ii) Ingots Lead	800	5,300					
	(iii) Ingots Zinc	7,100	7,300	4,000	1,300			
	(iv) Iron and steel material	100	56,600	70,200	76,100	215,500	9,100	1,900
	(v) Scrap and dross	1,800	5,300	1,400	18,400	100		31,700
	(vi) Tin plates		500	100	300	13,900		
	(vii) Other Metal and Metal Products	31,800	9,000	9,200	33,200	46,000	11,400	700
20	Motor Vehicles				100	2,700	100	100
21	Moulding Powder		200	1,600	1,800	5,200		
22	Oilseeds			1,300				
23	Oils and Fats, N.O.S.	1,000		65,400	272,000	2,300	133,500	1,100
24	Paper and Paper Products	100	2,300	51,800	3,700	5,700	6,600	2,000
25	Plastics and Plastic Manufactures	1,000	100	1,800	31,000	15,300	100	1,400
26	Railway Wagons, Carriages and Loco- motives, parts of.		400		200	2,100	1,200	
27	Rubber-Raw	snt	ra	800	300	1,600	az	еш
28	Salt							
29	Sugar						50,900	
30	Tallow		19,800					
31	Wood pulp			4,600				
32	Wood and Timber—							
	(i) Timber, other sorts including poles, etc							
	(ii) Wooden Products, N.O.S.				600			
33	Miscellaneous	27,400	2,900	2,100	1,02,500	43,400	22,300	47,44,400
	Grand Total	107,700	145,900	476,900	853,300	441,900	241,100	4,986,200

TABLE No. 14 contd.

Serial No.	Commodities	Other European Countries	U.K.	U.S.A.	U.S.S.R.	West Germany	Middle East	Total Tonnes
1	2	10	11	12	13	14	15	16
	Asbestos and Asbestos Material	300	200	600	11,900	100		53,000
	Building Material : Cement							2,70,400
3	Carbon black	100		2,200		200		9,200
	Chemicals : (i)Sulphur	21,700		63,400		300		2,56,600
	(ii) Other kinds	1,42,100	6, <mark>300</mark>	29,200	5,700	27,700	3,600	2,51,200
5	Copra			A				12,400
	Drugs and Medicines	2,900	200	1,700	100	1,200		94,000
7	Dyes and Colours	4,600	3,700	2,800	600	3,200		21,600
ı ×	Earth and Earthenware		100	11,100		200	3,800	20,700
	Fertilisers : (i) Rock Phosphate	10,700					3,22,200	3,32, 900
IVI	(ii) Urea	1,67,400	ra	64,300	8,100	19,700	ze	3,38,100
	(iii) Other Chemical Fertilisers	80,000		1,71,300	10,500	3,500		4,22,400
10	Fibres-Synthetic	6,200	7,700	6,000	100	800		59,000
11	Foodgrains			5,300			13 600	40,300
12	Foodstuffs, N.O.S.	9,000	400	25,500		4,100		39,900
13	Fruits—Dates							28,600
14	Hair and Wool	500	1,600	100				19,900
15	Industrial Alcohols and Spirits—non- potable	1,400	100	2,800		4,900		12,900
	Instruments etc	3,300	1,300	1,500	200	1,600		13,000

17	Lac, gums and resin	100	100	100		100		5,000
18	Machinery, N.O.S.	18,000	8,400	5,100	1,100	6,900		55,600
19	Metal and Metal Products—							
	(i)' Ingots Aluminium	2,500		18,400			4,300	44,600
	(ii) Ingots Lead	100	200	800				7,200
	(iii) Ingots Zinc	200	100		3,100		100	23,200
	(iv) Iron and Steel material	3,18,600	62,300	64,000	10,500	2,78,600	500	11,64,000
	(v) Scrap and dross	29,100	37,600	71,500	4	1,200	100	1,98,200
	(vi) Tin plates	36,500	17,900	10,200		2,200	100	81,700
	(vii) Other Metal and Metal Products	62,300	12,400	26,500	3,200	31,600	100	2,77,400
20	Motor Vehicles	2,500	5,400	3,200	1,500	2,000		17,600
21	Moulding Powder	1,100	300	7,800		400		18,400
22	Oilseeds							1,300
23	Oils and Fats, N.O.S.	41,000	100	144,600	ota	1,200	2,100	664,300
24	Paper and Paper Products	94,800	1,600	2,000	31,300	5,800		207,700
25	Plastics and Plastic Manufactures	29,100	3,600	19,800	200	7,300		110,700
26	Railway Wagons, Carriages and Locomotives, parts of.	3,200	600			2,700		10,400
27	Rubber-Raw	2,600	100	1,600		600		76,00
28	Salt							
29	Sugar							50,900
30	Tallow			7,400				27,200
31	Wood pulp	1,500		11,600				17,700

32	Wood and Timber							
	(i) Timber, other sorts including poles, etc.	100						100
	(ii) Wooden Products, N.O.S.	2,800	100	100		200		3,800
33	Miscellaneous	258,700	37,000	76,900	244,300	11,100	129,800	5,702,800
	Grand Total	1,355,000	209,400	859,400	332,400	419,400	480,300	1,09,08,900

Note —Figures of imports from Sri Lanka and Pakistan and the group of miscellaneous countries are not included
Source —Bombay Port Trust, Annual Administration Report, 1980-81.

TABLE No.15

Region-wise Principal Items of Traffic, (Docks and Bunders combined, excluding Coastal and Overside)

FROM 1st April 1980 to 3 1st march, 1981

Exports

(Based on audited returns in Metric Tonnes rounded off to hundreds)

Sr. No.	Commodities	African Countries	Australia and New Zealand	Canada	Far Eastern Countries		Other American Countries		Other European Countries
1	2	3	4	5	6	7	8	9	10
1	Antiques, Artware and Curios.	500	900	500	500	1,300	200	5,600	5,700
2	Animals, birds etc.—All other animals not in cages.							84,500	
3	Asbestos and Asbestos Material.	200			100			10,000	
4	Asphalt, Bitumen, Dammer, Pitch etc.								
5	Beverages and drinks nonalcoholic, N.O. S.	1,000						3,700	
	Bicycle and Bicycle Parts	15,700			6,100		500	10,200	2,200

7	Building Material	1,300	3,400		20	02,700		50,500	6,800	
8	Chemicals	3.900	1,500	200	6.80	01,400		23,900	1,200	
	Coffee beans	-,520	100					3,900		
10	Cotton—(i) Raw	200			51,200	12,000			8,800	
	(ii) Twist, Waste				2,100	1,700		100	600	
11	Drugs and Medicines	2,800	200	200	1,800	500		3,100	16,300	
12	Dyes and Colours	1,000	200		2,600	300		5,900	1,900	
13	Earth and Earthen ware	3,600	400		1,200	100		4,900	2,400	
14	Fertilisers—						>			
	(i) Bone and Bonemeal				100	13,000			9,100	
	(ii) Others				200	100	=/-			
15	Fish and Other Marine Food Products —									
	Fish—Fresh	ITa	S	ntra	300	3,700	ite	3,500	2,100	
16	Fodder including oil cakes	5,400			57,400	8,700		29,000	1,32,100	
17	Foodgrains—									
	(i) Rice	12,900		700	14,200			63,600	7,200	
	(ii) Wheat				14,400					
	(iii) Others							5,500		
18	Foodstuffs, N.O.S.	5,200	900	1000	1,400	1,400		66,600	11,600	
19	Fruits and Vegetables—									
	(i) Fruits Dried and Fresh		500					6,300	900	

	(i'i) Vegetables Dried and Fresh.	1,500			18	3,300	10	0		78,500	
20	Glass and Glass Products	1,900	100		4	l,600				9,900	900
21	Hosiery, Haberdashery, Millinery, etc.	1,900	2,000	600		500	60	010	0	6,400	9,500
22	Instruments, etc.	3,400	1,000	100	2	,100				7,100	700
23	Lac, Gums and Resins	500				200	30	0		300	1,700
24	Leather and Leather Manufactures.	200	1,000	100						3,100	2,000
25	Machinery, N. O. S.	13,300	1,00	0 6	500	5,7	00	100	100	21,500	800
26	Metal and Metal Products —										
	(i) Hardware	1,300	10	0 2	200	2	00			3,100	200
N	(ii) Iron and Steel Material	4,200		h-	+ 1	5	00	100	+-	53,800	400
27	Scrap and Dross	IC				0			LC	100	100
28	Wires and Cables	300	D			1,6	00	200		3,200	1,800
29	Other Metal and Metal Products.	13,800	2,30	01,5	00	18,3	00	400	100	71,400	7,800
30	Molasses										33,400
31	Motor Vehicles										
	(i) Weighing 1½ tonnes or more.	5,700)			2	00		100	2,100	100
	(ii) Parts of M. V.	4,000	30	0 2	200	4,6	00			9,300	1,000
32	Oil- seeds		10	0		2	00	500		800	2,300

33	Oils and Fats. N. O. S.	100	500	1,100	200	600		400	3,000
	Paints and Painters' Material	1,400	200		1,600	200		1,400	300
35	Paper and Paper Products	700	100	100	200			1,600	
	Plastic and Plastic Manufactures.	1,400			200			4,000	100
37	Rubber Manufactures	400	300	200	200			1,900	700
	Spices including pepper	2,000	300	400	5,000	2,600	200	16,600	1,600
39	Sugar				219				
40	Tea	200						21,600	1,500
41	Textiles— Cotton	1,300	3,000	500	500	800		3,000	12,000
42	Tobacco-Raw, Country	1,000		1				7,800	1,400
43	Tobacco- Manufactures		- L	Luc				10,100	
44	Toilet preparations and perfumes	400	300	ЦС	200	ld	æ	2,400	200
45	Wood and Timber—								
	(i) Timber, other sorts including poles etc.							400	100
	(ii) Wooden products, N.O.S.	500	100		400	200		7,400	600
46	Miscellaneous	6,100	3,100	3,600	7,100	3,000	400	36,800	9,500
	Grand Total	1,21,200	23,900	11,800	2,33,200	56,600	1,700	7,66,800	3,03,000

Note.— (i) N.O.S. = Not otherwise specified; (ii) shown separately.

Figures of exports to Burma and group of Miscellaneous countries are not included.

TABLE No. 15 -- contd.

Sr. No.	Commodities	U.K.	U.S.A.	U.S.S.R.	West Germany	Middle East	Sri Lanka	Pakistan	Bangla Desh	Total Tonnes
1	2	11	12	13	14	15	16	17	18	19
1	Antiques, Art ware and Curios.	1,600	9,100	2,800	3,500	500				32,700
2	Animals, birds etc.—All other animals not in cages.									84,500
	Asbestos and Asbestos Material.			100	200	100				10,700
4	Asphalt, Bitumen, Dammer, Pitch, etc.									
5	Beverages and drinks nonalcoholic, N.O.S.			2,700						7,400
6	Bicycle and Bicycle Parts 	200	100	100	1,300	2,600	3,300			42,300
7	Building Material	300	200	300	200	100	100	Ga	ZE	66,100
8	Chemicals	900	2,500	400	200	2,800	2,000		200	47,900
9	Coffee beans		200	2,000		300				6,900
10	Cotton—(i) Raw	100		9,100	2,200	100	3,200			86,900
	(ii) Twist, Waste	300	100		100					5,000
11	Drugs and Medicines	1,700	6,500	15,700	1,300	100	1,300	100		51,600
12	Dyes and Colours	600	1,100	1,600	300	1,800	100	100	400	17,900
13	Earth and Earthenware	400	100		800	1,100	400		100	15,500
	Fertilisers— (i) Bone and Bonemeal	2,100	4,600		100					29,000

	(ii) Others									300
15	Fish and Other Marine Food Products— Fish-Fresh	1,400	600		100					11,700
	Fodder including oil cakes	500		28,200	15,500	11,200	900			2,88,900
17	Foodgrains— (i) Rice	6,600	500	35,500						1,41,200
	(ii) Wheat									14,400
	(iii) Others									5,500
18	Foodstuffs, N.O.S.	5,800	17,200	300	4,700	3,000	1,400			1,20,500
19	Fruits and Vegetables :									
	(i) Fruits, Dried and Fresh	1,500		300	100	1,200				10,800
	(ii) Vegetables Dried and Fresh.			40,900			9,800			1,49,100
20	Glass and Glass Products 	100	300	500	300	200	300	Ö	300	19,400
21	Hosiery, Haberdashery, Millinery, etc.	3,200	5,200	13,100	5,800	200	100		100	49,300
22	Instruments, etc.	200	1,900	6,700	200	2,200	1,700		200	27,500
23	Lac, Gums and Resins	1,000	3,100		400	100	100			7,700
24	Leather and leather Manufactures.	700	300	1,600	200					9,200
25	Machinery, N.O.S.	1,300	1,500	2,300	500	12,700	2,200		800	64,500
	Metal and Metal Products —									
	(i) Hardware 	500	3,500		500	900	400			10,900

	1				T			-			
	(ii) Iron and Steel Material	100		800	100	1,700	600 10	00	3,800	66,300	
27	Scrap and Dross	200								400	
28	Wires and Cables		20	010,100	100	900	300		300	19,300	
29	Other Metal and Metal Products.	4,200	15,60	0 2,700	2,7001	2,800 1	,900		200	1,55,700	
30	Molasses									33,400	
31	Motor Vehicles — (i) Weighing 1½ tonnes or more.					800	1,800			10,800	
	(ii) Parts of M.V.	600	1,500	400	40	0 2,300	1,000		100	25,700	
32	Oil-seeds	100	4,400		70	0				9,100	
33	Oil and Fats, N.O.S.	1,500	100		30	0 100				7,800	
34	Paints and Painters' Material	100		5,700		Q+	ot			10,900	
35	Paper and Paper Products 	100	100		a		100			3,000	
36	Plastic and Plastic Manufactures.	100		500			100			6,400	
37	Rubber Manufactures	600	500	600		200				5,600	
38	Spices including pepper	1,600	5,800	700	80	0 1,700)		100	39,400	
39	Sugar	9,300				11,700	4,200			25,200	
40	Tea					800		900		25,000	
41	Textiles— Cotton	7,000	7,000	14,800	3,70	0 200	200			54,000	
42	Tobacco-Raw, Country	1,900				400				12,500	

	Grand Total	62,700	96,400	2,40,100	68,500	76,500	41,100	<mark>1</mark> ,800	7,700	21,13,000
46	Miscellaneous	3,900	2,200	26,600	21,100	1,500	3,500	600	1,100	1,30,100
	(ii) Wooden products, N.O.S.	200	300	500	100	100	100			10,500
45	Wood and Timber— (i) Timber, other sorts including poles etc.									500
44	Toilet preparations and perfumes.	200	100	10,600		100				14,500
43	Tobacco- Manufactures			1,900						12,000

Maharashtra State Gazetteers

COMMUNICATIONS



Maharashtra State Gazetteers

INTRODUCTION

BOMBAY'S LOACTION AS A CAPITAL OF MAHARASHTRA, the finest major port on the western coast of India, and as the international business centre, has indeed given it a distinct character; and acted as a catalytic agent for a quick development of various modes of transport and communications. Lying on the way to the heartland of the western coast of India, it has continuous trend of prosperity of industries and trade, establishment of office premises as also the continuous flow of migrants from all parts of India. It offers them a permanent place of residence and provides a vital link of communication between Bombay and other parts of India. From the transport standpoint Bombay constitutes a centre of international importance, and is also a metropolitan regional centre for a considerable portion of Western India and an urbanised area requiring movement of both persons and goods.

The Bombay Harbour, described by Antonio Bocarro for the first time in 1634, provided the nucleus for the growth of the city. In Bombay the most important factor which contributed to the initial concentration of the cotton textile industry was the availability of excellent transport facilities both in regard to raw materials and consumers markets. Other industries such as engineering, chemicals, etc. in Bombay developed in the subsequent period. The industrial development of Bombay would not have taken place if there were no transport facilities. Millions of persons are engaged in these industries and a large capital has been invested. Transport has, thus, contributed to Bombay's development.

RAILWAYS CENTRAL RAILWAY

Before regrouping of railways, this railway line was popularly known as the Great Indian Peninsula Railway. The following account traces its history in brief:

The general scheme for railway construction in India was formulated in 1843 and plans were prepared for a line from Kurla to Thane, to be called "The Bombay Great Eastern Railway ". The permanent way was proposed to consist of wrought iron rails. Passengers, cattle, sheep, etc. were proposed to be carried by two daily trains in each direction, all goods being conveyed by horse-traction. Eventually horse agency was rejected in favour of locomotives for all trains, which were not to exceed a speed of ten miles an hour. This scheme was investigated by a special committee and was finally approved by the citizens of Bombay. At a public meeting in the Town Hall (now housing the Central Library) on 19th April 1845, an " Inland Railway Association " was formed for the purpose of promoting enquiries into the applicability of railway communication to this side of India. Meanwhile, the Great Indian Peninsula Railway Company was formed for the same purpose in London. In response to its suggestions an influential committee was also formed in Bombay in July 1845 to work in conjunction with the London Committee, and in the August of the same year an officer was despatched to Bombay to make enquiries on the spot. After the countryside upto the ghats as also the ghat areas had been thoroughly surveyed by him, the Great Indian Peninsula Railway Company was incorporated by an Act of 1st August 1849. The East India Company entered into a contract with the Great Indian Peninsula Railway Company, London for laying down railway lines in India in 1851. Accordingly the first railway line in India was opened for traffic from Bombay to Thane on 16th April 1853. The opening of this railway line was one of the most important landmarks in the economic development not only of the Bombay-Thane region but also of the outlying areas and hinterlands. An account of the opening ceremony is given below (" When First Train chalked out "—an article by K. R. Vaidyanathan in the Economic Times of 13th April 1975.).

"It was a warm sticky, sultry Saturday (16th April 1853) afternoon with the sun shining rather unkindly. That time there steamed from a little wooden station (that was Bori Bunder, 122 years ago), a little train that heralded the introduction of Railway to India and the East. It was a different Bombay which witnessed momentous scene—a Bombay bereft of its architectural beauties and its industrial horrors, of its hurtling trains and roaring buses—a Bombay which one would have to see to believe.

- "The railway between Bombay and Thana was opened with all due pomp and ceremony...........
- " Soon after 2 O'clock the awning and shed began to be filled with all the beauty, rank and fashion of Bombay. A large number of honourable persons amounting in all to nearby five hundred individuals, helped by their presence, to give eclat and honour to the occasion.
- "The day was declared a public holiday. A space around the railway shed was thickly thronged with people of all classes, creeds and colours. Bands played, guns fired from the fort's rampart, when, at the signalled moment, the train with 400 guests comfortably started was set in motion and went majestically along its course to the astonishment and wonder of the assembled thousands.
- " The whole line densely crowded with spectators from the terminus to the flats beyond Byculla, tier after tier of the houses in the native town were tilled as thickly as they could be by men, women and children. The scene altogether was one of the great beauty and excitement.
- " On crossing the flats and getting into the country between Mahim and Sion Causeway, spectators from the neighbouring villages were still found lining both sides of the rail, thus it continued more or less all the way to Thana, the approaches to which were also densely crowded.
- " Including a short halt beyond Sion, for the purpose of taking in water, the trip to Thana was accomplished in 57 minutes.
- " At Thana in a suite of Durbar Tent covers were laid for 400 peoples, where some eminent persons delivered

speeches."

An interesting account of railways during the 19tb century upto the first decade of this centuryis reproduced below from the Gazetteer of Bombay City and Island published in 1909. (For detailed history of Railways see Gazetteer of Bombay City and Island, Vol. I, 1909, pp. 342-58.)

"On April the 16th, 1853, the first twenty-one miles of rail from Bombay to Thana were opened for traffic. The day was kept as a public holiday, and the Commander-in-Chief placed the garrison band at the disposal of the Company and arranged for the firing of salutes. This year also witnessed the registration of a second contract providing *inter alia* for the construction of a line ' from Kalyan to Shawpoor ' (now Asan-gaon, 54 miles from Bombay). On the 1st May 1854, the extension to Kalyan was opened; and towards the end of the year Mr. Berkley submitted a report in favour of the Thai *Ghat* incline for a trunk line towards Khandesh, and added in the following year a second report which advocated the construction of a locomotive incline over the Bhor *Ghat*. New year's day 1861, witnessed the opening of the line to Kussarah at the foot of the Thali *Ghat*, the three termini at Nagpur, Jubbulpore and Raichur being respectively reached on the 20th February 1867, the 8th March 1870 and the 1st May 1871."

" The Thal *Ghat* incline was opened in January, 1865. The subjoined table shows the magnitude of the work accomplished on the two inclines:—

	Thal Ghat	Bhor Ghat
Total Length of Incline	9 miles, 26 chains	15 miles, 69 chains
Total Rise	972 feet	1831 feet
Number of Tunnels	13	25
Longest Tunnel	490 yards	437 yards
Number of Viaducts	6	8
Largest Viaduct	250 yards long 200 ft. high	168 yards long , 139 ft. high
Total Cost	Rs. 55,12,217	Rs. 1,05,00,297

"The incalculable benefits conferred upon the country by the two main lines of the Great Indian Peninsula Railway were so quickly manifested that, even before those lines were completed, fresh railways were projected which have gradually been linked up to the Great Indian Peninsula system since 1871."

"On the 1st January 1885, an agreement was entered into between the Bombay, Baroda and Central India Railway Company and the Great Indian Peninsula Railway Company for the interchange of coaching and goods stock. Each line also acquired power to run over the track of the other *via* Dadar Junction, so that the former company could send its goods trains direct to Carnac Bandar and the latter obtained the same privilege in respect of Colaba. Further it was mutually agreed that, if at any future date it appeared expedient in the interest of the public service to do so, a local passenger train service should be established between Bandra on the Bombay, Baroda and Central India Railway and the Victoria Terminus *via* Dadar Junction."

- " On the 1st July 1900, the Secretary of State, in accordance with the terms of the contract of 1848, exercised his right of purchase; and the railway passed from the hands of the company into those of Government, the purchase-price being £ 34,859,217 payable by means of annuities extending over a period of 48 years and 48 days. Further by virtue of indentures of the 21st December 1900 between the Secretary of State and the Great Indian Peninsula and Indian Midland Railway Companies, the Great Indian Peninsula Railway Company undertook to manage, maintain and work the two systems as one, thereby adding to the 1,562 miles of their own line a further mileage of 1,239."
- "When the construction of the line was commenced the Chief Engineer's office was situated in the Bombay Green (now Elphinstone Circle), being subsequently transferred to Mount Castle in Victoria Road, Mazagaon. About 1863, it was located in a lane leading off Grant Road, and was again moved in, 1866 to Byculla Villa, now the G.I.P. Railway Infirmary. During this period the Agent's and Accountant's offices were housed in Shankarsett's bungalow, opposite the Synagogue at Byculla. In 1869, the Chief Engineer's office was moved to the building in Church Gate street, known as the old B.B. & C.I. Railway offices, whilp the Agent's and Accountant's offices were accommodated for a short time in the present Temple Bar Hotel, facing the King's Equestrian Statue. In 1870, all three offices were removed to Messrs. Remington & Co.'s building in

Elphinstone Circle. The Traffic offices had been located from the commencement in the old station buildings at the Bori Bandar; while the headquarters of the Locomotive department were at Byculla...... being eventually removed to Parel in June, 1882. Finally in 1886, all the offices, except those of the Locomotive department, were transferred to the splendid building at Bori Bandar known as the Victoria Terminus. (For history and details of Victoria Terminus, see Chapter 19 on Places in Vol. III.) The Company's workshops at Parel were opened in 1879."

" The following table shows the earnings of the Company at quinquennial intervals since 1854:—

(In thousands; 000s omitted)

Year	Total receipts	Net earnings	Year	Total receipts	Net earnings
	Rs.	Rs.		Rs.	Rs.
1854	2,28	1,03	1884	3,36,56	1,60,42
1859	18,27	8,92	1889	3,70,69	1,80,09
1864	71,60	19,44	1894	3,62,74	1,63,83
1869	1,58,01	52,97	1890	3,58,09	1,59,44
1874	2,01,66	82,34	1904	4,82,41	2,41,80
1879	2,52,48	1,01,90	1908	4,68,33	1,76,86

"The total receipts and net earnings of the company in 1908 amounted to Rs. 4,68,32,971 and Rs. 1,76,86,213 respectively. The most prosperous year was 1891, when the total receipts amounted to 452 lakhs, and the net earnings to about 234 lakhs. In the same year the highest tonnage of up traffic only, dealt with in a single day at Bombay, was 11,260 tons; while the daily average for the first six months of the year was 5,638 tons."

"In 1870, through communication was established with Calcutta, and in 1871 with Madras, which led to a large increase in both passenger and goods traffic. From 1880 onwards the goods traffic has steadily expanded, owing in large measure to the rapid growth of the European factory system in Bombay and the consequently increased traffic in cotton. The quantity of cotton imported into Bombay by the railway has been more than trebled since 1880, the quantity carried in 1905 amounting to 339,047 tons as compared with 89,115 tons in 1880. The general increase in the goods traffic is also largely attributable to larger export from Bombay of grain and oilseeds, while the railway has carried out of Bombay to other parts of India an ever-increasing quantity of piece-goods, twist, yarn and European machinery. A great reduction in the rates of fares since 1871 has been the chief cause of the increased passenger traffic; for whereas in 1871 the rates for 1st class, 2nd class, 3rd class, by mail-trains, and 3rd class by ordinary trains, were respectively ii annas, 9 pies, 4 pies, and 2 1/2 pies per mile, in 1908 they stood respectively at one anna, 6 pies, 3 pies and 2 1/2 pies per mile for the first 50 miles and 2 pies per mile over 50 miles. For local trains the 3rd class fare is calculated at 2 pies per mile."

The subjoined table gives the average number of passengers conveyed and the average tonnage of goods carried to and from Bombay City from 1870 to 1908:—

Number	1870	1880	1890	1900	1908
Of passengers booked to and from stations in Bombay City.	1,507,421	2,250,822	7,798,154	14,363,703	15,479,854
Of passengers booked to stations in Bombay City.	721,144	1,108,690	3,874,496	7,109,945	7,647,426

Of Tons of goods booked to and from stations in Bombay City.	339,771	693,373	1,261,124	1,277,087	1,825,007
Of Tons of goods booked to stations in Bombay City.	212,905	307,013	938,455	716,610	1,247,111

The following table shows the number of passengers daily conveyed between Victoria Terminus and Dadar, Sion, Thana and Kalyan since 1870:—

Betw	Number of Daily Passengers					
Station	Station	1870	1880	1890	1900	1908
	Dadar	37	32	672	1,391	1,142
	Sion		25	221	477	441
Victoria Terminus		160	223	966	1,416	1,376
	Kalyan	71	88	582	919	1,051
	Total	268	368	2,441	4,203	4,010

The harbour branch of this railway was opened for traffic in 1915. There is an important viaduct at Sandhurst Road Station for Harbour line which is flying over the main lines. It is located between kms 1.18 and 2.12. It has 39 spans of various lengths.

An increase of passenger traffic was also likewise noticeable between the city and its suburbs. Excluding the terminus there are 28 stations within the limits of Greater Bombay, *viz.*, (1) Masjid, (2) Sandhurst Road, (3) Byculla, (4) Chinchpokli, (5) Currey Road, (6) Parel, (7) Dadar Junction, (8) Matunga, (9) Sion, (10) Kurla, (11) Vidyavihar, (12) Ghatkopar, (13) Vikhroli, (14) Kanjur Marg, (15) Bhandup and (16) Mulund on the Bombay-Kalyan section; and (1) Dockyard Road, (2) Reay Road, (3) Cotton Green, (4) Sewri, (5) Vadala Road, (6) King's Circle, (7) Mahim Junction, (8) Guru Teg Bahadur Nagar (former Koliwada), (9) Chuna-bhatti, (10) Chembur, (11) Govandi and (12) Mankhurd on the harbour railway. Between all these and the Western Railway's (Bombay-Bandra railway line) stations a very large number of commuters travel daily; and perhaps the most noticeable increase is between the terminus and suburban places outside the Bombay city and also places outside the Greater Bombay area. The difficulties in obtaining house accommodation within the city has of late years become so acute that many persons have built, and are still building houses in the northern and eastern portions of the city or aie seeking accommodations at places as far distant as Vasai, Virar, Kalyan, Karjat, Kasara, etc. The local train service was introduced in 1870. To meet the above mentioned outward movement, the railway has arranged an excellent local train service.

The suburban services of the Central Railway in Bombay area are run on three independent sets of double line. The main suburban section extends from Bombay to Kalyan. This quadruple route is provided with automatic signalling. There is another set of suburban line *viz.*, Harbour branch line. It originates at Bombay V.T. and serves the Dock area in the eastern part of the city. It bifurcates near Vadala with one branch running towards Mankhurd and another to Bandra connecting Western Railway. The daily number of local

trains was only 13 in 1870. This increased to 904 in 1984. The railway line is quadruple upto Kalyan and serves the needs of heavy traffic of local trains and through trains as well as goods trains. The entire length of railway on this line is electrified and all the trains are operated by electric locomotives while local trains are operated by electric motor coaches. (Details of suburban trains are given in the Addenda to this Chapter.) Besides the local trains from Bombay to suburban termini, a number of mail, express and passenger trains are run on this route daily. At present (November 1984) they are: (1) Bombay-Howrah Gitanjali Express, (2) Dadar-Varanasi Express, (3) Bombay-Gorakhpur Express, (4) Vidarbha Express, (5) Punjab Mail, (6) Calcutta Mail via Nagpur, (7) Calcutta Mail via Allahabad, (8) Bombay-Howrah Janata Express (twice in a week); Bhagalpur Janata Express (four times in a week) or Muzaffarpur Janata Express (once in a week), (9) Howrah Express via Nagpur, (10) Amritsar Express, (11) Panchavati Express, (12) Mahanagari Express and (13) Bhusawal Passengers (two in number) towards Bhusawal; and (1) Deccan Express, (2) Udyan Express, (3) Koyana Express, (4) Hyderabad Express, (5) Dadar-Madras Express, (6) Sinhagad Express (The Sinhagad double decker express was introduced on 12th April 1978 with an intention of providing accommodation to more travellers between Bombay and Pune. It was introduced instead of the Bombay-Pune Janata Express.), (7) Deccan Queen Express, (8) Sahyadri Express, (9) Madras Mail, (10) Siddheshwar Express, (11) Trivendrum Jayanti Janata Express, (12) Mahalaxmi Express, (13) Minar Express, (14) Madras Janata Express, (15) Bombay-Daund-Manmad Passenger and (16) Pune Passenger towards Pune.

Out of these above mentioned 30 pairs long distance passenger trains plying on this division, 25 pairs are dealt with at Bombay V.T., and remaining pairs are dealt with at Dadar. To meet the increasing traffic on this division, various efforts are made to increase the passenger accommodation by running additional trains, attaching additional coaches to the trains by dieselisation of trains, and remodelling of V.T. yard and Mazgaon yards to deal with longer trains. These measures have helped in increasing the train services thereby easing the overcrowding on the long distance trains to a considerable extent. During summer holidays special arrangements are made at Bombay V.T. for booking of passengers and by running Holiday Specials.

Table No. 1 shows the statistics of daily passenger traffic of the local suburban trains on Central Railway in Greater Bombay.

TABLE No. 1

Daily Passenger Traffic of Suburban Trains on Central Railway in Greater Bombay (March 1975)

			ber of outg			ber of incom	ning	Grand total of outgoing and
	Station	To C.R. stations	To W.R. stations	Total	From C.R. stations	From W.R. stations	Total	incoming passengers handled
	1	2	3	4	5	6	7	8
1	Bombay V. T	2,94,812	42,305	3,37,117	3,11,668	42,941	3,54,609	6,91,726
2.	Masjid	40,765	3,455	44,240	36,540	3,147	39,687	83,927
3.	Sandhurst Road	28,852	3,006	31,858	23,150	3,113	26,263	58,121
4.	Byculla	74,936	6,881	81,817	76,486	6,785	83,271	1,65,088
5.	Chinchpokli	21,914	1,594	23,508	22,214	1,405	23,619	47,127
6.	Currey Road	20,663	129	20,792	17,106	117	17,223	38,015
7.	Parel	30,323	92	30,415	30,828	97	30,925	61,340
8.	Dadar	73,838	2,974	76,812	72,073	3,333	75,406	1,52,218
9.	Matunga	21,600	2,160	23,760	21,217	2,025	23,243	47,003
	Sion	36,159	4,148	40,307	34,186	4,972	39,158	79,465
	Kurla	80,083	5,893	85,970	76,394	6,197	82,591	1,68,567
	vidyavihar	9,691	759	10,450	10,796	730	11,526	21,976
	Ghatkopar	96,802	7,337	1,04,139	98,456	7,002	1,05,458	2,09,597
	Vikhroli	46,252	4,386	50,638	45,707	4,251	49,958	1,00,596
	Kanjur Marg	26,127	2,750	28,877	27,330	2,689	30,019	53,896
	Bhandup	45,806	5,924	51,732	50,618	5,879	56,497	1,08,229
	Mulund	52,891	2,446	55,337	52,351	2,088	54,439	1,09,776
	Dockyard Road	11,557	2,590	14,147	9,784	2,223	12,007	26,154
19	Reay Road	16,131	2,554	18,695	15,117	2,677	17,794	36,479

			er of outg		passengers			Grand total of outgoing and incoming passengers
	Station	To C.R. stations	To W.R. stations	Total	From C.R. stations	From W.R. stations	Total	handled
	1	2	3	4	5	6	7	8
1 -	Cotton Green	19,966	2,584	22,490	19,866	2,399	22,265	44,755
21	Sewri	25,264	3,233	28,497	24,927	3,471	28,398	56,895
	Vadala Road	33,407	3,664	37,071	36,090	3,864	39,954	77,025
23	King's Circle	14,199	5,827	20,026	14,491	5,418	19,909	39,035
24	Mahim	11,281		11,261	11,095		11,095	22,376
25	Bandra	23,545		23,545	23,232		23,232	46,777
	Guru Teg Bahadur Nagar.	19,401	65	19,466	,	57	18,126	37,592
27	Chunabhatti	7,043	72	7,115	6,094	71	6,785	13,880
28	Chembur	41,401	3,011	44,412	41,634	2,883	44,517	88,929
29	Govandi	27,724	2,082	29,806	25,366	1,949	27,215	57,121
30	Mankhurd	13,486	692	14,178	14,047	889	14,936	29,114

C.R. = Central Railway. W.R. = Western Railway.

Table No. 2 shows the statistics of season tickets and card tickets sold from each of the Central Railway stations in Greater Bombay for suburban trains during 1976-77.

TABLE No. 2
Number of Season Tickets and Card Tickets sold in Greater Bombay, 1976-77

Station	Season tickets	Card tickets
1	2	3
1. Bombay V.T.	3,73,10,050	74,02,692
2. Masjid	61,62,300	65,96,400
3. Sandhurst Road	65,96,050	48,85,336
4. Byculla	1,54,90,900	68,33,047
5. Chinchpokli	44,20,700	21,20,184
6. Currey Road	61,76,800	24,34,843
7. Parel	6,48,800	25,26,167
8. Dadar	1,46,86,050	90,59,719
9. Matunga	48,47,200	24,66,342
10. Sion	1,13,53,300	42,17,599
11. Kurla	3,45,63,132	1,14,31,617
12. Vidyavihar	22,22,850	32,95,008

Station	Season tickets	Card tickets
1	2	3
13. Ghatkopar	3,78,28,850	1,06,34,259
14. Vikhroli	1,77,26,600	50,09,190
15. Kanjur Marg	77,97,850	20,08,307
16. Bhandup	1,90,31,050	42,99,882
17. Mulund	1,84,21,000	56,43,982
18. Dockyard Road	35,68,100	19,53,493
19. Reay Road	30,26,650	18,25,493
20. Cotton Green	65,22,950	22,24,468
21. Sewri	77,86,000	30,23,069
22. Vadala Road	1,15,61,850	12,58,666
23. King's Circle	60,56,750	21,71,370
24. Guru Teg Bahadur Nagar	70,51,550	23,99,498
25. Chunabhatti	24,25,250	9,62,780
26. Chembur	1,43,01,600	29,58,976
27. Govandi	91,03,750	37,83,421
28. Manjkhurd	69,28,200	12,76,172
29. Mahim	13,30,900	14,15,288
30. Bandra	37,22,350	27,40,477

The following statement shows the through train passengers' traffic on Central Railway in Greater Bombay for the year 1976 -77 :—

	Station	Number of through train tickets sold 1976-77		Station	Number of through train tickets sold 1976-77
1.	Bombay V. T.	23,56,888	12.	Vikhroli	3,527
2.	Masjid	8	13.	Bhandup	8,561

_					
3.	Byculla	65,025	14.	Mulund	42,822
4.	Currey Road	6	15.	Vadala Road	1
5.	Parel	48	16.	Chembur	1
6.	Dadar	15,24,013	17.	Girgaon Central	17,666
7.	Matunga	4		Booking Office.	
8.	Sion	5	18.	Kalbadevi Central Booking Office	22,491
9.	Kurla	83,401			
10.	Vidyavihar	3	19.	Mohammad Ali Road Central Booking Office	22,932
11.	Ghatkopar	6,873			

The division serves the largest industrial complex in the Bombay-Thane industrial belt, besides the port of Bombay. Consequently, the bulk of the goods traffic is in the form of terminal traffic rather than through traffic. The goods traffic from Bombay is handled at the following important yards and goods sheds: (1) Goods terminal at Wadi Bunder; (2) Byculla goods yard serving goods shed and sidings; (3) Interchange yard at Dadar for Central and Western Railways; (4) Goods yard at Trombay serving the Fertilizer Corporation sidings, Bharat Refineries sidings, Hindustan Petroleum Corporation sidings, Tata Thermal Power Station sidings, Indian Oil Blending Ltd. sidings, Union Carbide of India Ltd. sidings, and Calico Chemical Ltd. sidings; (5) Kurla goods yard serving all the industrial sidings and goods sheds from Sion to Bhandup area; and (6) New Mulund Goods Terminal.

The following statement shows the goods traffic of wagons loaded with tonnage in terms of four wheelers from each of the stations in Greater Bombay for 1975-76 and 1976-77 :—_

Sation	Year				
	1975-76		1976-77		
	Total No. of wagons	Total tonnage*	Total No. of wagons	Total tonnage*	
Wadi Bunder	75,331	11,94,227	74,088	14,15,703	
Sion	2,796	45,920	4,067	71,392	
Kurla	311	4,828	281	3,685	
Trombay	86,784	17,89,272	1,05,319	21,62,029	
Vidyavihar	1,060	25,348	920	22,835	
Ghatkopar	298	5,555	267	3,952	

Sation	Year				
	197	5-76	1976-	77	
	Total No. of Total tonnage* Total No. of wagons		Total tonnage*		
Vikhroli	2,093	13,863	2,044	14,628	
Bhandup	1,891	37,601	1,924	39,036	
	1,70,564	31,16,614	1,88,910	37,33,260	

*In metric tonnes.

Number of wagons unloaded from each of the stations in Greater Bombay for 1975-76 and 1976-77 are as under:—

	Station	Year				
		1975-76		197	6-77	
		No. of wagons	Tonnage*	No. of wagons	Tonnage*	
1.	Wadi Bunder	97,082	16,20,282	99,142	16,71,056	
2.	Sion	9,120	1,82,400	18,467	3,69,340	
3.	Kurla	2,140	2,647	2,456	9,008	
4.	Trombay	26,694	6,11,891	29,862	15,69,602	
5.	Vidyavihar	10,729	3,67,366	11,161	3,53,592	
6.	Ghatkopar	3,513	70,260	5,036	1,00,720	
7.	Vikhroli	4,016	81,320	7,243	1,25,703	
8.	Bhandup	4,489	94,185	4,149	83,016	
9.	Mulund yard	570	13,913	7,474	2,59,657	
	Total	1,58,353	30,44,264	1,34,990	45,41,694	

* In metric tonnes.

Workshops: There are three Central Railway Workshops in Greater Bombay, whose brief description is given below:

(1) Signal and Telecommunication Workshop, Byculla: This workshop undertakes repairs, periodical maintenance and manufacture of signal and telecommunication equipments. It also undertakes repairs of medical equipments. The manufactures of this workshop are self-printing ticket machines, C. P, valves, AWC-2 Zincs, wagon retarders, moped trolleys, multiplexing equipments, axle counters, etc. A full-fledged maintenance and repair cell for ultrasonic flaw-detectors and rail testers has been set up in this workshop. The strength of staff during 1976-77 in this workshop was approximately 950.

(2)Locomotive Workshop, Parel: Periodical overhauling, major repairs and special repairs to steam, electric, diesel hydraulic, diesel electric engines and cranes are undertaken in this workshop. A comparative statement of some important works done in this workshop is given below:—

	Year		
	1974- 75	1975- 76	1976- 77
(1) Number of locomotives overhauled and repaired	241	248	264
(2) Number of cranes repaired and overhauled	33	40	40
(3) Number of non-loc boilers reparied	5	54	66

Locomotive components are also manufactured and supplied to different divisions of Central Railway. During 1976-77, the total strength of staff in this workshop was approximately 6,900.

(3) Carriage and Wagon Workshop, Matunga: This workshop undertakes major repairs, and periodical overhauling of carriages and wagons. Some important works undertaken during the past three years are given below:—

		Year			
	1974- 75	1975- 76	1976- 77		
(1) Number of locomotives overhauled and repaired	3,263	3,568	3,609		
2) Number of cranes repaired and overhauled	3,189	4,341	4,113		

During 1976-77, the total strength of staff employed in this workshop was 5,900 approximately.

(4) Electric Multiple Unit Car Shed, Kurla: As on 1st Nov. 1984,904 suburban trains were run on the suburban sections of Bombay Division. All the rakes and coaches required for running these suburban trains are maintained in this shed. Periodical overhauling of electrical equipments of electric multiple unit coaches are also undertaken here. As on 31st March 1977, the capacity of holding of electric multiple unit coaches of this car shed was 718 of which motor coaches numbered 284.

The number of electric multiple unit coaches periodically overhauled and repaired at Kurla car shed during the three years was as under:—



Year	Periodically overhauled	Special repairs	Total
1974- 75	303	23	326
1975- 76	434	18	452
1-76- 77	444	21	465

In 1976-77, the total strength of staff in this car shed was 2,300 approximately.

(5) Diesel Loco Shed, Kurla: This loco shed undertakes the repairs of diesel hydraulic engines. In 1976-77, 54 diesel hydraulic engines were maintained in this loco shed. These locomotives are utilised mainly for yard shunting and for running pilots and shunters on Bonabay-Kalyan section. The total strength of staff at this loco shed was 400 approximately.

There is a direct current electric loco shed at Kalyan where about 125 direct current electric locomotives are being maintained. These locomotives are utilised for running goods and passenger carrying trains on Bombay Division. There is a maintenance shed at Bombay V.T. for undertaking repairs to passenger train engines. There is also a maintenance shed at Kalyan yard where goods train engines are repaired. A small servicing depot is also functioning at Wadi Bunder to attend to electric engines. Besides, there is also a steam loco shed at Kalyan which repairs and maintains 17 WG type steam engines. These steam engines are utilised mainly for yard shunting and pilot running.

The Thermal Power Station at Thakurli generates power for consumption on Central Railway lines. It also purchases power from other companies, transforms it into direct current and distributes to Central Railway lines. During 1976-77, it generated 26,39,52,000 KWH power and purchased 23,26,80,000 KWH power from other companies and distributed 49,66,32,000 KWH power to Central Railway.

There is a general stores depot located at Currey Road and a scrap stores depot located at Haji Bunder.

Important Railway Buildings:

Victoria Terminus Station building: It is a two-storeyed building with stone masonry, load bearing structure

built in Gothic-Saracenic style. This building was built in 1888 and named after Queen Victoria in honour of her Golden Jubilee on the 20th June 1887. It has a series of well proportioned and delicately ornamental arches, giving it the look of a ground cathedral. This effect is further heightened by a central dome set off by a number of smaller domes and conical towers reminiscent of Westminster Abbey.

This building is the administrative headquarters of Central Railway. Two multi-storeyed buildings were constructed later at Bombay V.T. to accommodate all the offices of the Railway on account of expansion of the activities of Central Railway.

The Divisional Headquarters of Bombay Division is also located near the old administrative building. Bombay V.T. is one of the biggest terminals in India. There are thirteen platforms at Bombay V.T. out of which five platforms are exclusively utilised for dealing with long distance passenger trains. In 1984-85, 25 down and 25 up mail/express/passenger trains were handled daily at these platforms. Eight platforms are exclusively available for dealing with suburban trains which arrive and leave V.T. on the three corridors *i.e.*, harbour branch, local lines and through lines. In 1984, 904 suburban trains (452 down and 452 up) were handled at Bombay V.T.

Both the suburban and main line stations at Bombay V.T. have waiting halls, Station Masters' office, booking offices, book-stalls, canteens, cloakrooms, etc. The main line station building contains a post and telegraph office, reservation and enquiry offices, retiring rooms, restaurants, cloakrooms, etc.

The office of the Divisional Superintendent is also situated in the divisional headquarters office at Bombay V.T. The passenger, goods and suburban trains' operation of the entire Bombay Division is controlled from this control office.

Central Railway Printing Press and Stationery Depot, Byculla: This is the only printing press of Central Railway where all printing work of Central Railway is undertaken. The printing work done and the stationery items manufactured amounted to Rs. 98.45 lakhs and Rs. 10.25 lakhs, respectively during 1975-76. The total strength of staff of this printing press was approximately 1,100.

Railway Hospital, Byculla: This is the headquarters hospital of the Central Railway where medical facilities are available for treatment of railway employees and their dependents. There are as many as 315 beds available in this hospital. During 1976-77, 10,053 patients were treated in this hospital.

Besides, there are Jour health units and four Lock-up dispensaries in Greater Bombay area. Health units are located at Bombay V.T., Parel, Matunga and Kurla. Minor cases are treated in these units. Lock-up dispensaries are located at Trombay, Dock Yard R,oad, Guru Teg Bahadur Nagar and Wadi Bunder.

New Schemes:

Optimisation of Suburban Services: The existing suburban train services are short of transport requirements. In order to meet the increase in the suburban counter traffic, it is planned to increase the frequency of train services from the present 6 minutes to 5 minutes and ultimately to 3 minutes in the peak periods on all the three corridors, *i.e.* through lines, local lines and harbour branch lines. The work on the first phase for introduction of 5 minutes service had been sanctioned by the Railway Board and active measures were taken for increasing frequency of trains (1977). This involved mainly respacing of signals, modification in the level crossings, elimination of certain level crossings, construction of a new maintenance car shed at Kalwa for electric motor unit coaches and acquisition of more electric motor unit rakes.

A separate study has also been made by the Metropolitan Transport Project (Railways) for an additional corridor between Goregaon and Fort Market involving an investment of Rs. 154 crores with a new underground terminal near Fort Market. The study also envisages an additional pair of lines between Bhandup and Kurla as an extension of the present Harbour Branch line. Its implementation is under consideration.

In connection with the optimisation of suburban services, certain proposals are also under consideration of the Railways for implementation. They include (a) remodelling of V.T. suburban platforms for double discharge facilities similar to Churchgate station (i.e. platforms on both sides of a train) and speedier outlet through the suburban concourse; and (b) doubling of Chembur-Mankhurd single line section (4 kms) to facilitate an increase in the number of trains on Chembur-Mankhurd section.(This work has been completed.)

Remodelling of Mazgaon Yard: As V.T. yard is space bound and no major expansion is possible to deal with longer trains of more than 12 bogies, the Railways have developed Mazgaon Yard as an auxiliary yard to deal with longer trains. The work of remodelling of Mazgaon yard is being undertaken phasewise. Certain remodelling works are already being completed and some more phases are required to be undertaken at the earliest. The total estimated cost of remodelling Mazgaon yard is Rs. 1.03 crores.

Development of New Mulund Goods Terminal: A large number of industries has been set up in and around Thane area. In order to meet the needs of the same, a new goods terminal is being developed at Mulund, at an estimated cost of Rs. 1.41 crores. Certain works in the first phase have been completed and the goods shed at present is open for inward traffic of certain commodities like iron and steel.

WESTERN RAILWAY

This railway was originally constructed and owned by the Bombay, Baroda and Central India Railway Co., which was found in 1855. The first survey of the line from Bombay to Baroda was completed by Col. Kennedy in 1854. Afterwards the Bombay, Baroda and Central India Railway Co. was incorporated by an Act of Parliament dated 2nd July 1855, and on 21st November in that year concluded with the East India Company a

contract for the construction of railway line from Surat to Baroda and Ahmedabad. On the 2nd February 1859 a further contract was entered into for the construction of a line southwards from Surat to Bombay. The work of constructing the Bombay, Baroda and Central India Railway was commenced in May 1856, and the first section from Amroli to Ankleshwar, 28 3/4miles was opened for traffic in February 1860. In January 1861, a line of 43 3/4miles was opened from Baroda to the south and before the end of the year, communication between Bulsar and Baroda (123 miles) was established. This line was not connected with Bombay until November 1864, when the main line to Ahmedabad may be said to have been completed. The railway lines between various stations within the limits of Bombay had been opened on the following dates: (1) from Colaba to Marine Lines on 18th January 1870, (2) from Marine Lines to Charni Road on 19th June 1869, (3) from Charni Road to Grant Road on 3rd September 1868 and (4) Grant Road and beyond on 28th November 1864. The whole line from Bombay (Colaba) to Wadhwan was opened for traffic in 1872. There is a major bridge across the Mahim Creek between Mahim and Bandra.

The portion between Colaba terminus and Church gate was dismantled in 1936 and since then Churchgate was made a terminus of suburban train services. The local train service was introduced on this railway in 1918. The dates of first opening for public service of electrified sections in this area are (1) Colaba to Borivli on 5th January 1928 (two tracks), (2) Borivli to Virar on 1st September 1936, (3) Bandra to Andheri (through, line tracks) on 15th April 1953 and (4) Andheri to Borivli (through line tracks) on 1st April 1955. Quadrupling between Borivli and Grant Road was completed in 1925; while the quadrupling between Churchgate and Grant Road was completed in 1972.

With effect from 1st January 1942, the lines worked by Bombay, Baroda and Central India Railway came to vest in the Government of India and the present zone viz., Western Railway was formed on 5th November 1951. From 1880 onwards the goods traffic has steadily expanded, owing to the rapid growth of industries, trade and commerce in Bombay, An increase of passenger traffic was likewise noticeable between the city and its suburbs. Excluding the terminus of local trains i.e., Churchgate, the Western Railway has 21 stations within the limits of Greater Bombay, viz., (1) Marine Lines, (2) Charni Road, (3) Grant Road, (4) Bombay Central, (5) Mahalaxmi, (6) Lower Parel, (7) Elphin-stone Road, (8) Dadar, (9) Matunga Road, (10) Mahim Junction, (11) Bandra, (12) Khar Road, (13) Santacruz, (14) Vile Parle, (15) Andheri, (16) Jogeshwari, (17) Goregaon, (18) Malad, (19) Kandivli, (20) Borivli and (21) Dahisar. Between all these stations a large number of persons travel daily, and perhaps the most noticeable increase is between the terminus and suburban places outside the Bombay city area and also the places outside Greater Bombay. Due to shortage of accommodation within the Bombay area many persons reside in the suburban area as also in the adjoining area of Thane district and daily attend their duties in Bombay. The suburban services of the Western Railway in Bombay area are run on the two independent sets (corridors) of double line. The main suburban section extend from Churchgate to Borivli. These quadruple lines are provided automatic signalling. The local trains are run by the electric multiple unit coaches. The trains running on this line at present are: (1) Gujarat Express, (2) Ferozepur Janata Express, (3) Saurashtra Express, (4) Jammu Tavi Express, (5) Pashchim Express, (6) Flying Ranee, (7) Rajdhani Express, (8) Saurashtra Janata Express, (9) Valsad Express, (10) Ahmedabad Janata Express, (11) Saurashtra Mail, (12) Frontier Mail, (13) Gujarat Mail, (14) Dehradun Express, (15) Vadodara Express, (16) Ahmedabad Express, (17) Vadodara Passenger, (18) Ahmedabad Passenger and (19) Viramgaon Passenger.

The local train service is provided from Churchgate to Virar. The daily number of local trains was 758 in 1984. The average service frequency of the Western Railway suburban trains was 3 1/2minutes during 1969 which increased to 2 minutes in 1977.

During 1969-70, the Western Railway ran the suburban train services with the fleet of 37.1/3 rakes of the electric motor unit stock and with an average punctuality of 88 per cent. Of this fleet, comprising 16 rakes of 8 coaches commissioned in 1928 and 21.1/3 rakes of 9 coaches commissioned after 1951, 31.1/3 rakes were given for traffic, four rakes for periodical overhaul, one rake for ten day inspection and one rake for heavy repairs

Table No. 3 shows the statistics of passenger traffic from each of the stations on Western Railway situated within the limits of Greater Bombay during 1974-75.

TABLE No. 3
Passenger Traffic on Western Railway in Greater Bombay,
1974-75

Station	No. of card tickets sold*	No. of season tickets sold*
(1) Churchgate	47,63,288	4,99,329
(2) Marine Lines	23,28,178	62,482
(3) CharniRoad	28,05,042	1,29,599
(4) Grant Road	57,17,317	2,11,704

Station	No. of card tickets sold*	No. of season tickets sold*
(5) Bombay Central .	67,82,376	1,31,650
(6) Mahalaxmi	16,89,495	62,869
(7) Lower Parel	25,02,899	1,65,605
(8) Elphinstone Road .	26,36,410	1,55,615
(9) Dadar	80,53,689	2,91,094
(10) Matunga Road	17,66,539	85,356
(11) Mahim Junction	34,78,336	1,78,728
(12) Bandra	50,2 <mark>7</mark> ,366	3,12,928
(13) Khar Road	34,35,600	2,16,404
(14) Santacruz	55,96,533	3,49,684
(15) Vile Parle	40,37,493	1,89,175
(16) Andheri	92,11,752	7,29,433
(17) Jogeshwari	30,02,060	3,13,574
(18) Goregaon	45,27,329	3,91,531
(19) Malad	54,44,736	4,29,294
(20) Kandivli	25,26,415	1,05,420
(21) Borivli	51,50,206	6,02,044
(22) Dahisar	7,88,922	96,109

^{*}Includes Tickets for Suburban and Through Line trains.

The following statement shows the statistics of goods traffic from the important stations on Western Railway within the limits of Greater Bombay during 1974-75:—

Station	Goods traffic received		Goods traffic booked		
	No. of wagons	Tonnage*	No. of wagons	Tonnage*	
(1) Dadar	4,953	96,935	732	12,212	
(2) Mahim Junction	1,598	23,478	871	7,406	
(3) Bandra	10,887	39,791	3,606	33,739	
(4) Andheri	6,536	1,26,864	690	11,195	
(5) Jogeshwari	45,147	2,42,699	8,516	93,707	
(6) Goregaon	2,078	11,805	540	5,908	
(7) Kandivli	3,303	74,927	840	15,932	
(8) Borivli	2,273	85,598	388	1,808	
(9) Carnac Bunder	37,251	5,08,958	44,567	7,32,652	
*In metric tonnes.					

Workshops (For detailed history of Railway Workshops in Bombay, see Chapter 5 in this volume.):

Loco Sheds: There are two loco sheds situated in the Greater Bombay area on the Western Railway. They are at Parel and Bandra which cater to servicing facilities like coaling, turning, cleaning, greasing, oiling, etc. along with running repairs and scheduled repairs to the locomotives of Western Railway.

Parel Loco Shed: This loco shed homes about 40 engines, out of which 75 per cent engines are utilised for working mail, express and passenger trains on the lines of the Bombay and Baroda Divisions. The shed is equipped with a number of machines for undertaking jobs required for the maintenance of these engines. The staff engaged in this shed was about 675 during 1969-70. In addition to the mail, express and passenger train engines, this shed also homes some small engines which are utilised for shunting services.

Bandra Loco Shed: It homes about 50 steam and diesel engines, steam engines mainly utilised for shunting services in the Bombay area. During 1970, out of 13 diesel locomotives, 11 were shunting locomotives. This shed is also equipped with a fleet of machinery for maintenance of these engines. The diesel shunters are also periodically overhauled here. About 1,050 persons were engaged in this shed during 1970.

Carriage Shops: There are two carriage shops situated at Lower Parel and Mahalaxmi. The Lower Parel carriage workshop was built in 1900 by the ex-Bombay, Baroda and Central India Railway, as a central workshop for repairs to broad gauge locomotives, carriage and wagon stock. The workshop being situated in the heart of Bombay had limitations to further expansion. As such with the increase in holding of various types of stocks, the repair work of locomotives was shifted to the newly built workshop at Dohad during 1928. Similarly a new wagon repair shop was constructed at Kota during 1962. After the transfer of workload of loco and wagon repairs to Dohad and Kota respectively, the Lower Parel and Mahalaxmi workshops are presently undertaking the work of periodical overhaul repairs to the broad gauge coaching stock only. The Lower Parel workshop possesses an area of 2,56,309 square metres, while the Mahalaxmi workshop possesses 1,70,484 square metres. These shops are under the incentive scheme based on the Chittaranjan pattern.

Electric Car Shed, Bombay Central: All the maintenance of the electric motor unit stock, except the mechanical periodical overhaul, which is attended to in the Parel workshop, is dealt with in the car shed at Bombay Central. The maintenance of electric motor coaches comprises casual inspection, washing and painting of electric motor unit coaches, brake block changing and stabling inspection, periodical inspection,

overhaul of equipments, special repairs, and periodical overhaul.

The car shed is divided into two portions, *viz.*, workshop and running shed. The workshop consists of machine shop, fitting shop, pantograph overhauling section, armature winding section, auxiliary machine section, control equipment overhaul section, north lifting shed for wheel changing, south lifting shed for equipping new coaches traction motor section, and fan and light section. There are two electrically operated overhead travelling cranes in the lifting sheds, of them one is of 25 tonnes and another of 5 tonnes. The running section consists of a covered shed with 8 inspection pit lines and two electrified stabling lines outside the covered area.

Inspection of Electric Motor Unit Coaches: During 1970 inspection was carried out on 11 rakes per day. There are five depots for stalling the rakes at Churchgate, Bandra, Andheri, Borivli and Virar. Number of equipments fitted on the electric motor unit coaches require periodical overhaul at intervals lesser than the general overhaul.

Periodical Overhaul of Electric Motor Unit Coaches: The periodical overhaul of electric motor unit coaches is carried out at intervals of 17 months. The electrical equipment is stiipped first in the car-shed and then the coaches are sent to Mahalaxmi, where the body work and mechanical equipment are attended to. After the coaches are received back from Mahalaxmi, the electrical equipment, which in the meanwhile has been duly overhauled, is re-equipped on the coaches and the coaches are sent on trial runs and then into service.

A mechanical coach washing machine was built up and commissioned in April 1958 in the car-shed to facilitate the external washing of electric motor unit coaches. Electric motor unit coaches are painted in the Lower Parel shop every 17 months, during the periodical overhaul.

Important Railway Buildings:

Administrative Office building, Churchgate: The Administrative Office Building at Churchgate Railway Station was built by the former Bombay, Baroda and Central India Railway between 1894 and 1899. The annexe was built in 1927. The carpet area of these buildings is about 63,000 square feet. This building is considered to be a very good specimen of architectural work in Gothic style and depicts the glory of that time.

Churchgate Terminal Station: Due to tremendous expansion of industry and trade in this metropolis, traffic on the suburban section has increased a good deal and old station had to be remodelled. The first station, a small humble structure was built as early as in 1876 when the old Bombay, Baroda and Central India Railway, the forerunner of the Western Railway of today, extended its line from Surat to Bombay. This station building was rebuilt in 1931. This rebuilt structure was to be pulled down in September 1956 to make way for the enlarged station of today to cater to the needs of suburban passenger traffic. Three platforms with double discharging facilities were built in 1956. The fourth platform with double discharging facilities was built in 1972 at the time of quadrupling of railway lines between Churchgate and Grant Road. It is a seven-storeyed building and is 108 feet high. It was constructed in 1956 at the cost of Rs. 65 lakhs. It has a spacious concourse hall 116' X44', booking offices, refreshment rooms, wash basins, water closets with modern sanitary fittings. The station has been provided with route relay interlocking system, and this was the first of its type to be commissioned in India.

Bombay Central Station: This terminus station building was constructed in 1930. The old Bombay Central Station, which is now utilised for suburban train services, is situated just north of Bellasis bridge. The new station consists of an imposing 3-storeyed structure. The cost of the scheme including acquisition of land, siding accommodation and accessories amounted approximately to Rs. 156 lakhs. The main entrance leads to a lofty and spacious concourse on one side of which are the platforms and on the other side on the ground floor, there are waiting rooms including a buffet for light refreshment.

Jagjivan Ram Hospital, Bombay Central: It marks an important stage in the planned expansion of medical facilities on the Indian Railways. The hospital was planned to cater for 150 beds. The total area of the hospital compound is 3.63 acres and the plinth area occupied by the hospital building is 28,203 square feet. It has four floors and a basement in the rear wing.

Printing Press, Mahalaxmi: The Western Railway Printing Press building at Mahalaxmi was constructed during 1968-69 at a cost of Rs. 44 lakhs. The building has 3 floors with a, basement pf 10,000 square feet.

PORT TRUST RAILWAY

Prior to 1914, the docks were not served by rail. As the traffic between the port and the hinterland developed, the two main railways laid out capacious goods yards in close proximity to and connected with the Prince's and Victoria Docks by three sidings crossing the Frere (now the P. De'Mello) Road. It was, however, found that the sidings could accommodate only a fraction of the import and export traffic. The bulk of the traffic was conveyed from ship to rail and *vice versa* in bullock carts. This expensive method continued until the completion and opening of the Port Trust Railway on 1st January 1915. In planning the railway layout the designers had the advantage of ample land which enabled them to adopt the best aUgnment and the most modern principles of railway transportation without disturbing the existing interests. In consequence the port today is well equipped as regards terminal railway facilities. The Port Trust Railway provides a link between the docks, the bunders and the various depots in the Port area and the two contiguous Main line railway system.

The excellent terminal railway facilities provided by the Bombay Port Trust have contributed materially to the development of the port. Though small in size, the Port Trust Railway carries a large volume of traffic. In 1969-70, the inward and outward traffic amounted together to 3.70 million tonnes. In addition to through

traffic, the Port Trust Railway handles a sizable quantity of local, or station to station traffic. Such traffic amounted to 1.67 lakh tonnes in 1969-70. The Port Trust Railway handles about 60 per cent of the total rail-borne goods traffic of Bombay city.

The Port Trust Railway has a route kilometrage of 11.3 and a track kilometrage of 312. There are 10 stations serving the docks and depots *viz.*, Wadala Oil Depot, Stores and Coal Depot, Manganese Depot, Grain Depot, Cotton Depot, Panton Bunder, Prince's and Victoria Docks, Alexandra Dock and Ballard Pier.

Wadala is at the extreme north end and is a junction station. It is mainly a marshalling yard for the despatch and receipt of goods trains. Trains are received in the Up Arrival Yard and sorted out for the various depots over the hump by gravity, the wagons being rolled down the hump and then are diverted along different lines by hand points. Outward loaded traffic from depots is received in the Down Arrival Yard and is sorted out over the Down Gravity Hump on the different lines where trains are formed for the Western and Central Railways and beyond.

The steam loco and the diesel loco sheds are situated at the south end of the Wadala Yard. There is also a small goods shed where traffic is handled.

Tables Nos. 4 and 5 show the goods traffic on the Bombay Port Trust Railway:—

TABLE No. 4

Commodities loaded on Bombay Port Trust Railway for Trunk Railway Stations during 1973-74 and 1974-75

Commodities	Metric Tons (Fig. in '00)		
	1973-74	1974- 75	
1 Animal food	13	*	
2 Asbestos fibres	50	94	
3 Asbestos-raw	49		
4 Blended food	51	37	
5 Barytes	*	*	
6 Bricks, tiles and stones	*	*	
7 Bulgar wheat	*	*	
8 Chemical fertilizers other than rock phosphate	4,188	5,410	
9 Chemicals and insecticides	168	78	
10 Clay, chunam, lime and sand	16	*	
11 Coal	183	35	
12 Colour	*	*	

	13 Corn soya mixture	18	*	
	14 Cotton-raw	29	*	
	15 Eaith	*	21	
	16 Empty gunny bags	19	*	
	17 Flour	27	14	
	18 Government and military stores	502	696	
	19 Grains and pulses	2,460	2,034	
	20 Greas <mark>e</mark>	20	16	
	21 Iron and steel	1,101	1,686	
	22 Machinery	323	281	
	23 Manganese ore	*	30	
	24 Manure	*	28	
	25 Milk powder	25	10	
	26 News prints	221	107	
	27 Oil seeds	29	*	
	28 Oilcakes	65	36	
	29 Old newspapers, etc.	17	*	
	30 Pipes	*	13	
	31 P.O.L.—			
	(i) Light distillates	8,256	5,400	
	(ii) Middle distillates	937	834	
	(iii) Others	504	517	
	32. Railway materials	124	61	
	33 Rice			
	34 Rice bran	16	20	
	35 Road surface	128	74	
	dressing			
	36 Rock phosphate	436	159	

	*
*	10
111	102
*	*
485	492
29	*
79	113
*	
367	69
1,766	3,063
31	19
72	107
108	135
20,080	22,141
	111 * 485 29 79 * 367 1,766 31 72

* Included in miscellaneous

TABLE No.5 PRINCIPAL COMMODITIES BOOKED FROM TRUNK RAILWAYS TO B.P.T RAILWAY DURING 1973-74 AND 1974-75

		Metric (Figs in	1
Serial No.	Commodities	19 7 3- 74	1974- 75
1	A.C.Sheets and boards	38	170
2	Barytes	367	333
3	Bonemeals, crushed bomes, hides and skins	447	383
4	Bentonite powder	50	122
5	Bricks, tiles and stones	748	735
6	Cables and cable drum	*	61
7	Calcium carbonate	*	*
8	Cables clinkers and slag	856	1,207
9	Charcoal	690	950
10	Chemical fertilizers other than rock phosphate	85	28
11	Chemicals, insecticides.etc	*	34
12	Clay, chunam, lime and sand	122	77
13	Coal and coke	1,167	1,161
14	Dolomite lump an dpowder	35	*
15	Earth (Red Oxide etc.)	20	*
16	Empty tins, drums, casks,etc	26	30
17	Ferro manganese	238	213
18	Fibre glass	10	
19	Grain and pluses (other than wheat and rice)	331	138
20	Government and military stores	140	198



21	Gunny Bags	57	14
22	Gynsum	45	32
23	Iron and steel (including tinplate)	1,469	2,094
24	Iron scrap	34	66
25	Machinery	186	17
26	Manganese ore	91	*
27	Mica waste and powder	40	39
28	Molasses		
29	Oil-cakes	2,584	1,672
30	Oilseeds	174	264
31	Ochre lum, powder, etc	21	13
32	Newsprint	*	59
34	Paraffin wax	75	55
35	P.O.L		
	(i) Light distillates	863	1,086
	(ii) Middle distillates	88	
	(iii) Others	391	326
36	Piece goods	13	27
37	Pig-iron	*	*
38	Railway material	28	*
39	Raw cotton	1,241	647
40	Rice	1,482	1,373
41	Rice barn	60	81
42	Rosin	30	14
43	Soda bicarbonate	13	14
44	Soda ash	32	*
45	Soap and soap stone powder	159	113
	Starch powder	12	*
47	Sugar	1,234	1,476
48	Tallow	*	
49	other ons	621	592
50	Wheat	2,162	53
	Wood pulp		*
52	Wood and timber	152	309
53	Miscellaneous	76	67
	Total	18,793	16,340
	•		

* Included in miscellaneous

During 1974-75 the volume of through traffic from and to the Trunk Railways registered a marginal decrease as compared to that of the previous year. The figures in terms of wagons and the tonnage handled during two years are given below:—

	Wa		
	Inward	Outward	Tonnes
1973- 74	93,476	1,02,201	38,87,300
1974- 75	83,642	1,11,235	38,48,100

The local traffic during the year 1974-75 registered a decrease mainly due to fall in export of oil cakes and manganese ore from Bombay Port. The comparative figures for the two years are given below:—

	Wa		
	Inward	Outward	Tonnes
1973- 74	12,498	12,498	4,37,400
1974- 75	9,730	9,817	3,10,000

TRANSPORT BY AIR

The period from 1877 to 1910 was a period of experiments in the history of civil aviation in India. On November 27, 1877 Mr. Joseph Lynn made a flight from Lai Baugh Garden in Bombay at 4-40 p.m.(*Transport Development in India by Dr. S. K. Shrivastava.*) He ascended to an altitude of 7,500 feet and landed near a stone quarry at Dadar. On November 30 of the same year he made another balloon flight from the same place. Flying began in India in 1911 when Sir George Lloyd undertook the organization of air flying between Bombay and Karachi. The First World War established, beyond doubt, that India was lagging behind in civil aviation. When the air service between Bombay and Karachi was started, it was purely a Government venture and was established as a temporary and experimental measure during the fair weather season with the object of testing the extent to which the air mail service was likely to be used by the public. It was closed down as soon as sufficient data as to running expenses had been collected and its continuance as a purely commercial concern was not advocated.

The general attitude of the Government was that as no air services in the world had yet been run without a government subsidy and as India had no money available for the development of civil aviation, she must wait for some prosperous time. The pressure of external conditions in favour of Indian aviation enterprise gradually increased.

In 1927, the Civil Aviation Department was opened, aerodromes were established; and flying clubs were founded at certain places. The Imperial Airways Service started a regular weekly air service between Croydon and Delhi. In 1932, internal services were started by the Tata Airways Ltd., between Allahabad, Calcutta and Colombo. It was an effective Indian enterprise which organised an air service between Karachi and Madras once a week with calls at Ahmedabad, Bombay and Hyderabad. From the beginning of 1935 the Imperial Airways' London-Karachi service and with its Trans-India Service to Calcutta and the feeder services Karachi-Lahore and Karachi-Bombay-Madras, were operated twice a week. Among the three first air routes taken for development after 1935, the Karachi-Bombay-Madras-Colombo was the major air route.

The progress of air transport in India was very slow in the initial stages. Air transport has developed so much as to warrant a special treatment, and the importance of Bombay calls for a careful consideration as there are future possibilities of further development.

Bombay Airport: Bombay is one of the principal international airports, which is connected by air service to almost all important cities in the world. Bombay's position in the international air traffic is very significant as it is located on the main air trunk routes to the European countries, Far East countries, South-East Asian countries, other Asian countries, Australia, African countries, Gulf countries, etc.

At present there are three aerodromes in Bombay viz., Juhu aerodrome, Santacruz Airport and Sahar International Airport.

On October 15, 1932, a tiny aircraft, Puss Moth, landed at the airport at Juhu with mail bags from Karachi. It was pilotted by J. R. D. Tata (On occasion of the Golden Jubilee of Air India on 15 October 1982, J.R.D. Tata pilotted an old tiny aircraft of Puss Moth type at the age of 75.) an eminent industrialist. This was the beginning of civil aviation from Bombay which is today the biggest and the most modern airport in India.

The Juhu airport, two and a half kilometres from the present domestic terminal, is still in existence. It is now used by a Flying Club and private operators. From all standards Juhu airport in the thirties of this century was a good airport, and continued to be used by the airlines till 1945. At Juhu Airport a small terminal building handled the passenger traffic. The modest control tower was good enough to guide the small aircrafts of those days. Night flight was rare as the airport was not equipped well for the same. When essential kerosene goose-necks were used for guiding aircrafts at night.

New Airport at Santacruz: During the World War II, the bigger fighters and aircrafts of the Air Force, bombers and other large transport planes, required longer and stronger runways. Their operation also warranted better ground equipment and electronic devices. Juhu airport located at the sea edge could not cope up with these requirements, neither there was any space for the essential expansion. It was therefore, decided to build a spacious airport at Santacruz with the necessary equipments The Santacruz Airport covered an area of about 1,500 acres (607 hectares). It had three runways initially. It was operationally a good airport for the requirement of those days. After the end of the Second War the airport was handed over to the Director General of Civil Aviation for Civil operations.

Two abandoned Royal Air Force old hangars, which are still in exis-tance and are being used by private operators, were converted into a terminal for passenger traffic. When commercial aviation shifted to the present Bombay airport, one hangar was used as a domestic terminal and the other for international traffic. It had counters for customs and immigration checks on either side and a lounge in the centre. Air India International was handling its passengers in its own terminal, adjoining the two hangars. It was a tiny red brick tiled building, tucked in a corner.

With the tremendous growth of air services and more modern airlines coming to Bombay, the need for a proper terminal building to provide comfortable lounges and passenger handling areas was felt. The modern aircrafts could not be operated with ease from the airport. Besides, there was a tremendous increase in the number of passengers, domestic and international. A new terminal was therefore planned and construction began in 1950 at Santacruz. The year 1958 was a landmark in the history of Bombay airport when the new terminal building was opened with all the fun-fare.

April 18, 1971 was by far one of the most important landmarks in the history of civil aviation in India. The Air India International's first Boeing 747 landed at Bombay airport, ushering in the era: of Jumbo travel. A series of modifications and extensions of the terminal building and improvement of operational areas were essential to meet the new requirements. The Tata committee set up in 1967 to examine the issues, recommended the construction of a new international terminal at Bombay to meet the requirements of traffic in the seventies. The present terminal was to be used for domestic traffic alone. The International Airport Authority of India which was set up in 1972, started planning the construction of a new terminal building for handling international passenger traffic. Accordingly construction of the new International airport at Sahar to the north-east of Santacruz was taken up. The estimated cost of this airport was Rs. 11 crores, and it was proposed to be completed by 1981. Government sanction was received in early 1976, construction of the Phase-I of the terminal complex began at Sahar immediately; The new terminal at Sahar was opened for traffic in 1980.

New Terminal Complex, Sahar: The new complex is located near Sahar Village in Bombay on the east of the old terminal building and north of the main east-west runway og/27.

The two runways, the main runway og/27, 3,489 metres long, and secondary runway 14/23, 2730 metres long continue to serve the airport. The apron of the new terminal building has been connected to the runway system through taxi links.

The terminal building designed on modular concept will be completed in three phases. Each module has a capacity of handling 2.5 million international passengers. When completed the terminal building will have 1,20,000 sq. metres of covered area; 750 sq. metres long with a width of 65 metres. It will have a total capacity of handling 7.5 million international passengers per annum. The apron will have capacity for parking 15 aircrafts in contact and 12 in remote position.

The first phase of the international passenger terminal complex, completed at a cost of Rs. 180 millions, has a passenger terminal cargo complex, apron and airfield pavement areas for taxi links. The passenger terminal has capacity for handling 2.5 million passengers annually or 2,100 passengeis during peak hours, in greater comfort and ease. The apron can park 15 aircrafts; six nose-in, seven remote and two freighters.

The Government of India has sanctioned the second phase, costing Rs. 220 millions. It involves construction of one module with a capacity of 2.5 million passengers and apron for 4 in-contact and three remote parking stands. The project was completed in 1984.

The approach to this new terminal is from the north from Kurla-Andheri road. Passengers going to Thane and Ghatkopar areas can take advantage of the short route *via* Powai. Those passengers going to the southern and northern part of the city, can avail of the Western Express Highway *via* Kurla-Andheri road. The new link is being constructed to connect the terminal with the Sahar Cargo terminal road.

The highlights of the New Bombay Terminal (Phase I) at Sahar are given below:—

- (1) Terminal—Length—249 metres Width—65 metres
- (2) Covered area, four floors—41,800 sq, metres.
- (3) Passengers handling capacity—Annually 2.5 million persons. Peak hour—2,100 persons.
- (4) Custom counters-—Arrival—52
 - Departure—10
- (5) Immigration counters—Arrival—20
 - Departure—14
- (6) Health counters—6
- (7) Airlines counters-40
- (8) CC-TV monitors—100
- (9) Public announcement speakers—900
- (10) Fire/smoke detectors—1,000
- (11) Light fittings—6,000
- (12) Cable/wiring-260 kms.
- (13) Baggage conveyors' length—620 metres.

A cargo terminal is an integral part of the new complex with a separate aircraft parking apron. It handles both export and import cargo. It is a multiple occupancy terminal in which all cargo coming in and going out of the Bombay airport is processed in the complex. Various Government agencies connected with the clearance of the cargo are housed in the terminal building. The terminal has two separate parking bays for Boeing 747 type freighter aircraft.

The major problems of modern air transport system are experienced on the ground rather than in the air. In order to solve them, a difficult task for any airport, an entirely new approach has been made to avoid bottlenecks and ensure smooth processing of passengers and their baggage in the new terminal building at Bombay airport which will have a total capacity of about 7,000 persons at any time. The flight information system, pictographs, baggage handling system and escalators, aerobridges have all been designed to meet

the requirements of passengers as per the latest standards.

The monthwise traffic statistics for the year 1980-81 from the Santacruz (domestic) and Sahar (international) airport are given in Table No. 6, while Table No. 7 gives the percentage of principal items of Imports and Exports from both the airports.

The Santacruz airport is known as Terminal I, while the Sahar International airport is known as Terminal II.



Maharashtra State Gazetteers

TABLE No.6 INTERNATIONAL AIRPORT AUTHORITY OF INDIA, BOMBAY AIRPORT TRAFFIC STATISTICS - 1980-81

	April 80	May 80	June 80	July 80	August 80	September 80	October 80	November 80	December 80	January 81	February 81	March 81	Grand Total
I. AIRCRAFT													
MOVEMENT													
(i)International										7			
(a) Scheduled	2,501	2,522	1,655	1,805	1,748	1,698	1,708	1,683	1,820	1,746	1,593	1,723	22,202
(h)Non			_									_	
scheduled	96	74	42	75	67	83	100	99	167	64	120	67	1,054
Total	2,597	2,596	1,697	1,880	1,815	1,781	1,808	1,782	1,987	1,810	1,713	1,790	23,256
(ii) Domestic -													
	1,690	1,264	1,710	1,894	1,856	1,848	1,870	1,756	1,908	1,856	1,674	952	20,278
(b)Non-	30	22	14	177	172	202	214	205	286	52	33	141	1,548
scheduled	1 720		1 704	2.071						1.000	1 707	1.002	
	1,720 4,317	1,286 3,882	1,724 3,421	2,071 3,951	2,028 3,843	2,050 3,831	2,084 3,892	1,961 3,743	2,194 4,181	1,908 3,718	1,707 3,420	1,093 2,883	21,826 45,082
Other flights	4,317	3,002	3,421	5,931	3,043	3,031	3,092	3,743	4,101	3,710	3,420	2,003	43,062
u u													
II. PASSENGERS-							The last						
(i) International													
-													
(a) Embarked	93,835	98,072	82,726	89,856	1,02,851	1,05,979	87,468	86,702	86,729	1,13,947	99,783	1,07,193	11,55,041
(b)Disembarked	,		91,140	87,481	85,301	66,863	83,329	86,938		88,539	71,041	79,902	9,87,510
(c)Transit	56,203	47,818	7,007	52,064	39,369	34,339	29,470	31,300	16,969	44,657	41,241	44,311	4,44,748
Total	2,16,643	2,18,319	1,80,873	2,29,401	2,27,521	2,07,181	2,00267	2,04,940	2,11,640	2,47,143	2,12,065	2,31,406	25,87,399
(ii)Domestic -													
	1,03,721		92,785	92,156	90,448	85,272	1,33,283	1,08,638	1,24,353	1,16,734	1,04,435	1,03,736	12,62,717
(b)Disembarked			82,484	83,866	85,124	89,522	90,331	97,810	1,05,481	1,47,636	1,00,622	1,01,529	11,52,928
Total	1,83,958	7 7	1,75,269	1,76,022	1,75,572	1,74,794	2,23,614	2,06,448	2,29,834	2,64,370	2,05,057	2,05,265	24,15,625
	4,00,601	4,13,761	3,56,142	4,05,423	4,03,093	3,81,975	4,23,881	4,11,388	4,41,474	5,11,513	4,17,122	4,36,671	50,03,044
III.CARGO													4 4
HANDLED - (in tonnes)		- I	0		H 10.								. +++
(i)International													
(i)international													
(a)Loaded	3,936.719	4,424.786	3,458.981	3,594.433	3,270.508	2,924.116	1,299.204	1,223.920	3,697.290	3,753.401	1,325.149	343.735	33,252.386
(b)Unloaded	1 410 570	1,318.986	475 101	1 262 720	1 012 005	1,474.190	1 660 204	1 010 002	1 722 520	1 205 064	1 060 003	1 672 162	16,503.495
													49,755.881
(ii)Domestic	5,550.209	3,043.772	5,954.002	4,337.102	5,102.003	4,330.300	2,307.400	2,243.903	5,429.019	5,139.303	2,300.131	2,010.037	49,733.001
(kgs)-				l	l	l	l .		l .				
	1		l .		1	ı							
	935.492	871.057	821.603	904.780	328.971	892.097	1.026.291	109.719	1.105.775	1.012.333	928.337	512.982	9.449.437
	935.492 751.785	871.057 710.836	821.603 246.501	904.780 911.891	328.971 947.760	892.097 909.823	1,026.291 884.861	109.719 726.564	1,105.775 1.101.715	,		512.982 487.355	9,449.437 8.778.516
(a)Loaded	751.785	710.836	246.501	911.891	947.760		,	726.564	1,101.715	97.816	1,001.609	487.355	9,449.437 8,778.516 18,227.953
(a)Loaded (b)Unloaded	751.785 1,687.277	710.836 1,581.893	246.501 1,068.104	911.891 1,816.671	947.760 1,276.731	909.823	884.861 1,911.152	726.564 836.283	1,101.715 2,207.490	97.816 1,110.149	1,001.609 1,929.946	487.355 1,000.337	8,778.516 18,227.953
(a)Loaded (b)Unloaded otal Grand Total	751.785 1,687.277	710.836 1,581.893	246.501 1,068.104	911.891 1,816.671	947.760 1,276.731	909.823 1,801.920	884.861 1,911.152	726.564 836.283	1,101.715 2,207.490	97.816 1,110.149	1,001.609 1,929.946	487.355 1,000.337	8,778.516 18,227.953
(a)Loaded (b)Unloaded otal	751.785 1,687.277	710.836 1,581.893	246.501 1,068.104	911.891 1,816.671	947.760 1,276.731	909.823 1,801.920	884.861 1,911.152	726.564 836.283	1,101.715 2,207.490	97.816 1,110.149	1,001.609 1,929.946	487.355 1,000.337	8,778.516 18,227.953
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in	751.785 1,687.277	710.836 1,581.893	246.501 1,068.104	911.891 1,816.671	947.760 1,276.731	909.823 1,801.920	884.861 1,911.152	726.564 836.283	1,101.715 2,207.490	97.816 1,110.149	1,001.609 1,929.946	487.355 1,000.337	8,778.516 18,227.953
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International	751.785 1,687.277 7,043.566	710.836 1,581.893 7,425.665	246.501 1,068.104 5,002.186	911.891 1,816.671 6,773.832	947.760 1,276.731 6,459.334	909.823 1,801.920 6,200.226	884.861 1,911.152 4,878.560	726.564 836.283 3,080.186	1,101.715 2,207.490 7,637.309	97.816 1,110.149 6,249.514	1,001.609 1,929.946 4,316.077	487.355 1,000.337 3,017.234	8,778.516 18,227.953 67,983.834
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International - (a)Loaded	751.785 1,687.277 7,043.566	710.836 1,581.893 7,425.665	246.501 1,068.104 5,002.186	911.891 1,816.671 6,773.832 213.077	947.760 1,276.731 6,459.334	909.823 1,801.920 6,200.226 192.708	884.861 1,911.152 4,878.560 163.631	726.564 836.283 3,080.186	1,101.715 2,207.490 7,637.309 216.551	97.816 1,110.149 6,249.514 273.296	1,001.609 1,929.946 4,316.077	487.355 1,000.337 3,017.234 198.405	8,778.516 18,227.953 67,983.834 2,455.580
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International - (a)Loaded (b)Unloaded	751.785 1,687.277 7,043.566 176.725 131.958	710.836 1,581.893 7,425.665 184.053 130.133	246.501 1,068.104 5,002.186 188.026 143.280	911.891 1,816.671 6,773.832 213.077 102.070	947.760 1,276.731 6,459.334 192.077 299.698	909.823 1,801.920 6,200.226 192.708 141.509	884.861 1,911.152 4,878.560 163.631 119.830	726.564 836.283 3,080.186 156.400 43.824	1,101.715 2,207.490 7,637.309 216.551 162.187	97.816 1,110.149 6,249.514 273.296 466.393	1,001.609 1,929.946 4,316.077 300.631 305.094	487.355 1,000.337 3,017.234 198.405 316.369	8,778.516 18,227.953 67,983.834 2,455.580 2,272.345
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International - (a)Loaded (b)Unloaded Total	751.785 1,687.277 7,043.566	710.836 1,581.893 7,425.665	246.501 1,068.104 5,002.186	911.891 1,816.671 6,773.832 213.077	947.760 1,276.731 6,459.334	909.823 1,801.920 6,200.226 192.708	884.861 1,911.152 4,878.560 163.631	726.564 836.283 3,080.186	1,101.715 2,207.490 7,637.309 216.551	97.816 1,110.149 6,249.514 273.296	1,001.609 1,929.946 4,316.077	487.355 1,000.337 3,017.234 198.405	8,778.516 18,227.953 67,983.834 2,455.580
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International -(a)Loaded (b)Unloaded Total (ii)Domestic -	751.785 1,687.277 7,043.566 176.725 131.958 308.683	710.836 1,581.893 7,425.665 184.053 130.133 314.186	246.501 1,068.104 5,002.186 188.026 143.280 331.306	911.891 1,816.671 6,773.832 213.077 102.070 315.147	947.760 1,276.731 6,459.334 192.077 299.698 401.775	909.823 1,801.920 6,200.226 192.708 141.509 334.217	884.861 1,911.152 4,878.560 163.631 119.830 283.461	726.564 836.283 3,080.186 156.400 43.824 200.224	1,101.715 2,207.490 7,637.309 216.551 162.187 378.738	97.816 1,110.149 6,249.514 273.296 466.393 739.789	1,001.609 1,929.946 4,316.077 300.631 305.094 605.725	487.355 1,000.337 3,017.234 198.405 316.369 514.774	8,778.516 18,227.953 67,983.834 2,455.580 2,272.345 4,727.925
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International - (a)Loaded (b)Unloaded Total (ii)Domestic - (a)Loaded	751.785 1,687.277 7,043.566 176.725 131.958 308.683 336.697	710.836 1,581.893 7,425.665 184.053 130.133 314.186 335.825	246.501 1,068.104 5,002.186 188.026 143.280 331.306 334.405	911.891 1,816.671 6,773.832 213.077 102.070 315.147 352.604	947.760 1,276.731 6,459.334 192.077 299.698 401.775 844.582	909.823 1,801.920 6,200.226 192.708 141.509 334.217 1,202.008	884.861 1,911.152 4,878.560 163.631 119.830 283.461 313.533	726.564 836.283 3,080.186 156.400 43.824 200.224 298.871	1,101.715 2,207.490 7,637.309 216.551 162.187 378.738 357.272	97.816 1,110.149 6,249.514 273.296 466.393 739.789 326.792	1,001.609 1,929.946 4,316.077 300.631 305.094 605.725 301.029	487.355 1,000.337 3,017.234 198.405 316.369 514.774 226.393	8,778.516 18,227.953 67,983.834 2,455.580 2,272.345 4,727.925 5,230.011
(a)Loaded (b)Unloaded otal Grand Total IV.MAIL (in tonnes) - (i)International - (a)Loaded (b)Unloaded Total (ii)Domestic - (a)Loaded (b)Unloaded	751.785 1,687.277 7,043.566 176.725 131.958 308.683	710.836 1,581.893 7,425.665 184.053 130.133 314.186 335.825 211.443	246.501 1,068.104 5,002.186 188.026 143.280 331.306	911.891 1,816.671 6,773.832 213.077 102.070 315.147	947.760 1,276.731 6,459.334 192.077 299.698 401.775 844.582 262.737	909.823 1,801.920 6,200.226 192.708 141.509 334.217	884.861 1,911.152 4,878.560 163.631 119.830 283.461	726.564 836.283 3,080.186 156.400 43.824 200.224	1,101.715 2,207.490 7,637.309 216.551 162.187 378.738 357.272 286.001	97.816 1,110.149 6,249.514 273.296 466.393 739.789	1,001.609 1,929.946 4,316.077 300.631 305.094 605.725	487.355 1,000.337 3,017.234 198.405 316.369 514.774	8,778.516 18,227.953 67,983.834 2,455.580 2,272.345 4,727.925

TABLE No. 7 Percentage of Principal Items of Imports and Exports from Bombay Airport (1979-80)

Principal Items of Exports -	Percentage of Total
(a) Perishables	44.69%
(b) Garments	36.10%
(c) Leather	5.37%
(d) Machinery	2.63%
(e) Miscellaneous	11.21%
Major Items of Imports -	
(a) Machinery	39.88%
(b) Medicines	14.68%
(c) Electricals	8.48%
(d) Miscellaneous	36.96%

A number of International airlines are operating through Bombay, the list of which is given below:

(1) Alitalia, (2) B.O.A.C, (3) Trans World Airlines, (4) Sabana Belgian Airlines, (5) Air India, (6) Air France, (7) Garuda Indonesian Airlines, (8) East African Airlines, (9) United Arab Airlines, (10) Iran National Airlines, (11) Kuwait Airways, (12) Swiss Air, (13) Czechoslovak Airlines, (14) B.A.S.C.O., (15) Air Ceylon, (16) Middle East Airlines, (17) Transmeridian Airlines, (18) Saudi Arab Airlines, (19) Pan America and (20) K. L. M. Besides, the Indian Airlines operates domestic airline services.

The total passengers traffic (both international and domestic) carried from Bombay was as follows:—
Passenger traffic from Bombay:—

Passenger	traffic	from
Bombay:-		

Year	Passenger traffic
1960	1,98,025
1965	3,71,316
1969	6,74,884
1973-74	22,62,377

Goods traffic handled from

Bombay :-

(in kg)
36,77,261
54,07,011
96,19,600
3,87,49,000

Mails handled from Bombay:-

Year	Mails carried (inkgs)
1960	14,52,952
1965	25,898,278
1969	34,64,700
1973-74	65,64,000

The following statement shows the statistics of aircraft movements, passengers, cargo handled and mail at Bombay Airport during 1973-74:—

17	\ A : £L	Movement:—
/ /	1 Aircraft	WIOWAMET'

(a) International—

(i) Scheduled	15,507

(ii) Non-Scheduled 1,181

(b) Domestic-

(i) Scheduled 16,613

(ii) Non-Scheduled 4,027

(2) Passengers:- (a) International—	
(i)Disembarked	3,43,496
(ii) Embarked	3,45,622
(iii) Transit	4,01,939
(b) Domestic -	
(i) Disembarked	5,57,536
(ii)Embarked	6,13,784
(3) Cargo Handled (in tons):- (a) International -	
(i) Disembarked	29,221
(i) Disembarked (ii) Embarked	9,528
(ii) Embarked (4) Mails handled (in tons)	
(ii) Embarked (4) Mails handled (in tons) (a) International -	9,528
(ii) Embarked (4) Mails handled (in tons) (a) International - (i) Disembarked	9,528
(ii) Embarked (4) Mails handled (in tons) (a) International - (i) Disembarked (ii)Embarked	9,528

ROADS

History:—During the time of the Shilaharas there were no roads except some footsteps in a cluster of islands of Bombay. S. M. Edwardes in his " *Rise of Bombay* " gives an interesting account of the old routes in the city which is summarised below.

Before the Portuguese landed at Bombay (at Mahim *en-route* to Diu in January 1509), it was a cluster of seven islands, *viz.*, Mahim, Parel, Worli, Mazagaon, Bombay (W&lkeshwar and Girgaum), old Woman's Island (Lower Colaba) and Colaba. In 1532, the Portuguese seized the city of Bassein (Vasai), and in 1534 Bassein and Bombay Island were ceded to the king of Portugal. In 1661 the Island and the port of Bombay weer generously ceded to the British Crown as a dowry to Prince Charles II of Great Britain from the Princess Infanta Catherine of Portugal, and during 1668 it came under the rule of the East India Company.

As early as 1668, an exodus of weavers from Chaul had necessitated the opening of a street, stretching from the Custom House (North-West of the Mint) to the fort.

According to Mr. Grose, in 1750, there were groves with shaded roads and pathways, thickets with houses, but wanting in air, and as the displacement of the people progressed, new roads and burial grounds were opened. During the 17th century land was taken for a public road from Parel to Sion.

The English first connected the cluster of islands to each other. The idea of reclaiming submerged ground dates from a very early period, for in the middle of the sixteenth century a Portuguese financier advised the King of Portugal to substitute for the grant of villages to deserving individuals the allotment of submerged lands in perpetuity, to those who drained and reclaimed them, while after the transfer of the island from the British Crown to the East India Company, the Court of Directors ordered their representatives at Bombay to encourage to stop breaches where the sea overflowed the island. Nevertheless, with the exception of small patches of reclamation here and there, no serious attempt to check the inroads of the sea was made for about a century after Bombay became a British possession.

The first work of magnitude designed to meet this object was the construction of the vellard between Mahalaxmi and Worli, present Haji Ali Causeway, during the governorship of Mr. William Hornby. Upto the seventies of the eighteenth century some attempt was made to resist the encroachment of the sea. The dam in between the area of Mahalaxmi and Worli was scarcely stout enough to wholly check the wanton inrush of

the sea waves. So during the governorship of William Hornby, the great vellard was built, which rendered available for cultivation and settlement the vide stretch of the land, and resulted in the welding of the eastern and western shores of the island with one united area. Mr. Grose who visited the island in 1772 points out that prior to the building of the vellard " the sea had so gained upon the land with its irruption that it almost divided the island in two and made the roads impassable." After the construction of the vellard the development of the island of Bombay and the system of roads began in the true sense.

During the subsequent period a vellard between Cooperage and Colaba was constructed. The Railway Committee proposed to reclaim land between Wadi Bunder and Chinch Bunder. The Government reclaimed the area of Apollo Bunder, Mody Bay, Elphin stone, Mazgaon, Tank Bunder and Frere reclamation. The adjoining area of the B.B. & C.I. and the G.I.P. railways were reclaimed by the lailway authorities. The areas within which reclamation was carried out by the Bombay Port Trust since 1873 were the Sewri Bunder, Frere Estate, Tank Bunder, Mazgaon Estate, Elphiristone Estate, Mody Bay Estate, Customs Bunder, Wellington Bunder, Apollo Bunder, Apollo Reclamation, Colaba Bunders, etc.

An interesting account of roads during the 19th century and the beginning of this century is reproduced below from the *Gazetteer of Bombay City and Island*, Vol. I, pp. 361-64, published in 1909:

" The roads and streets of Bombay at the commencement of the 19th century were for the most part extremely narrow and were constantly being encroached upon by house-owners. This led in 1806 to the issue of a Government order in which the Governor-in-Council directed that Parel road and Breach Candy road (Girgaum road) should be gradually widened to sixty feet, Sheikh Memon and Dongri streets to forty feet and all other public streets to 30 feet. All roads branching off the Parel and Breach Candy roads were to be forty feet wide and all cross streets were to be not less than twenty feet wide (Bombay Courier, 24th October, 1807.) This order was followed six years later by Rule, Ordinance and Regulation III of 1812, which pointed out that the roads throughout the island and the streets, lanes and passages within the Fort were " extremely narrow and incommodious for carriages and passengers, " and ordered (Article I) that " the main street through the bazaar should be enlarged to the breadth of 40 feet from house to house; Mody's street should be enlarged to the breadth of 35 feet; Bora's street shall be enlarged to the breadth of 25 feet; and all cross streets within the Fort should be of the breadth of 16 feet."(Bombay Regulations, 1799-1816, pp. 344-352.) Article II laid down that all the streets comprised in the area of the great fire of 1803 should be 60 feet wide; while Article III enacted that " the great roads through the island, commonly called the Parel road and Breach Candy road respectively, shall be enlarged to the breadth of 60 feet each, and that the roads or streets commonly called Sheikh Memon and Dungaree shall be in like manner enlarged to the breadth of 40 feet each, and that all other principal streets without the walls of the Fort and within the island of Bombay be made of the breadth of 30 feet; that all roads branching from either of the greater roads aforesaid be made of the breadth of 40 feet, and all lanes, cross streets and passages, now hereafter to be made without the said walls, be of the breadth of 20 feet clear from house to house, and not less."(In 1808 a special officer styled Surveyor of Roads was appointed. Before this, the office was combined with that of the Superintendent of Police, and Government paid part of the expenses of the repairs of roads. In 1809 Government advanced the Board Rs. 12,000 for repairs of road.)

" These orders were apparently productive of good; for Major-General Sir John Malcolm writing of Bombay between 1827 and 1830 remarked that admirable roads had been formed throughout the island of Bombay, the streets of the native town had been widened and a communication by a causeway with Salsette much increased in width. He further referred to " an excellent road made to Malabar Point, the temporary bungalows at which have been made permanent, so as to afford excellent accommodation for the Governor." (The Government of India by Malcolm, 1833. The construction of a road to Malabar Point enabled the Governor to make over his old residence in the Fort, which had not been regularly used for many years, to the Secretaries to Government.) Another new road constructed about this date was one to Sewri, which was much frequented as a country drive (Bombay Courier, 12th March 1825.). The main thoroughfares were also kept in good condition and were described in 1832 as" beautifully macadamized " (Hall's Voyages, p. 7.) and in 1838 as " wateied, tolerably lighted, clean, and void of all offence." (Postans' Western India, p. 75,I.) On the 1st October 1839, " Grant road" from the obelisk to the garden-house of Jagannath Shankar Sett at Girgaum " was thrown open to the public, and was described as requiring a parapet-wall on either side owing to its great elevation above the adjoining lands. (Bombay Times, October 19th, 1839.) As the population increased and the town expanded the public view regarding the suitability of the island's communications underwent alteration. The streets in the native town were described in 1845 as " very narrow " (Von Orlich's Travels, I.) and the road along the line of the present Rampart and Hornby roads, which was regarded in 1850 as a fashionable thoroughfare, would rank in these days as " little better than a narrow lane."(Times of India, 26th October 1901.) The decade 1860 to 1870 marks the point at which the broad modern thoroughfares of the island were planned and commenced. An " eastern boulevard " from Elphinstone Circle to Bazaar Gate and a Foras road from the Victoria Gardens to Mahalakshmi were completed in 1868; Apollo street was widened and a hundred-foot road from Bazaar Gate to the native town was commenced in the same year; a new road from Babula Tank to the Elphinstone overbridge, the Bellasis road, Gilder street and several other well known thoroughfares were completed about the same date. In all some 35 big roads were either newly constructed or converted from old narrow tracks during the period 1860-70, and many of these were 80 feet in width and were provided with broad footpaths bordered with trees. (A complete list of these roads is given in " Maclean's Guide to Bombay " (revised to 1900), pp. 206, 207.) Ripon road, Fergusson road and a widened Girgaum road were under construction in 1884-85.

"In 1887, the total mileage of the roads in-charge of the Municipality was 136 1/2 miles, which rose to 147 3/4 miles in 1897 and is now (1907) 156 3/4 miles. Since the establishment in 1898 of the City Improvement Trust, one of the duties of which is to open new roads through thickly populated areas, Municipal activities have fallen somewhat into abeyance as regards schemes for new thoroughfares. A few minor road schemes, such as those in Colaba village, Chandanwadi, Cavel, Hamalwadi, Piru lane, etc., have

been put into execution, and a certain amount of road-widening and road-improvement has been completed out of funds provided by the Corporation. Two of the most useful roads recently constructed are Princess street and Sandhurst road which afford direct communication from east to west. Hughes road has proved a boon to the residents of Malabar and Cumballa hills. "

Table No. 8 gives particulars of the chief bridges as they existed at the beginning of this century. (The Gazetteer of Bombay City and Island, published in 1909, Vol. I, pp. 506-09.)

Most of the big roads were either constructed newly or converted from old narrow tracks during the first few years of the 20th century. A remarkable development in roads took place after Independence. During 1887 the total mileage of the roads of Bombay island within the jurisdiction of the municipality was 136 1/2 miles, which rose to 156 3/4 miles during 1907 and 301 1/4 miles during 1947. In 1898, the City Improvement Trust was established, one of the duties of which was to open new roads through densely populated areas. The total mileage of roads of Bombay City, Suburbs and the Extended Suburbs measured to 1419.90km. in 1982, the details of which are shown below:—

City / Suburbs	Length (in km.)										
	Cement concrete		Others	Total							
(1) Bombay City	78.66	411.63		490.29							
(2) Bombay Suburbs and Extended Suburbs	114.09	783.02	32.50	929.61							
Total	192.75	1,194.65	32.50	1,419.90							

The following is the account of a few important road routes in Greater Bombay: (The years of construction of some important roads are given in Chapter 2.)

Nariman Point to Walkeshwar (Malabar Point): This route is divided into two sections, viz. (1) Nariman Point to Girgaum Chaupati, and (2) Chaupati to Walkeshwar. The first section known as the Marine Drive was renamed as the Netaji Subhash marg, while the

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TABLE No.8 IMPORTANT BRIDGES WITHIN THE CITY OF BOMBAY (AT THE BEGINNING OF 20TH CENTURY)

	Name of brigde	Named after	Nature of construction	Purpose for which constructed	Length		way Spans Spans		Gradient		Foothpath	Tramway	Ward	Inscription	
1	Fere Bridge	Sir Bartle Frere	Iron and Masonry	Carries Grant road over B.B aor C.I Railway (now know as Western Railway)	East 584'-10"	West 476'-3"	45	9	12'-6"x13'-9" 12'-9"x17'-8" 28'-8"x17'-8" 13,-9"x13'-9", X 12'-6"	I in 32	I in 28	Nil	NoTram line	D	Bombay, Baroda and Central India Railway, His Excellency the Hon'ble Sir Henry Bartle Edward Frere K. C.B., Governor of Bombay. ERECTED A. D. 1866 (The same inscription in Marathi and Gujarathi).
2	Kennedy Bridge	Sir M.Kennedy	Do.	Carries Girgum Back Road over B.B and C.I. railway	North 439'-5"	South 405'-1"	29'-6"	3	10'x28'-l"x 9'-8"	South I in 37	N.W I in 29	Nil	Do.	D	Bombay, Baroda and Central India Railway ERECTED A. D. 1866 (The same inscription in Marathi and Gujarathi.)
3	Bellasis Bridge	Maj-Genl. Bellasis	Do.	Carried Bellasis Road over B.B and C.I Railway	East 654'-3"	West614'-9"	33'-0	1	28"	l in 34	I in 33	Nil	Do.	D& E	D The Bellasis Road & was made A.D. E 1795 by the Poor, driven from the city of Surat in that year, of famine, out of funds raised by public subscription and takes its name from Major General Bellasis under whose orders it was constructed.
4	Wodehouse Bridge	Sir Philip Wodehouse	Do.	Carried Wodehouse Road over B.B and C.I. Railway	East 695'	South 767'	50'-0"	3	20'x38'.6"x20"	N.E I in 38	S.W I in 41	7-0" on either side of road	Do.	A	Bombay, Baroda and Central India Railway, Wode-house Bridge. ERECTED 1875. His Excellency the Right Hon'ble Sir Philip Wode- house G.C. S.I., K.C.B., Governor of Bombay (with corresponding translation in Marathi).
5	Carnac Bridge	Sir J.R.Carnac	Iron and MAsonry	Carries Carnac Road over G.I.P Railway	east 542'	West 352"	60'-0"	1	32'		l in 50	7'-0" on both sides	Double Tram line	А	Carnac Bridge 1868. For Public Traffic.

Serial No	Name of brigde	Named after	Nature of construction	Purpose for which constructed	Length		Width of road way		Width of Spans	Gradient East West		Foothpath	Tramway	Ward	Inscription
6	Elphinstone Bridge	Mr.Mountstunasrt Elphinstone	Do.	G.I.P	East 612'	West 63'-6"	50'-0"	3	52'.5"x 16'-6" x12'.3"	I in 30	west	10'on both sides	No Tram line	В	1868
7	Byculla Bridge	From being situated near the Byculla Rly Station	Do.	Railway Carries Parel Road over G.I.P Railway	North 693'	South 600'	60'-0"	1	59"	I in 40	I in 40	7' on boith sides	Double Tram line	E	G.I.P. Railway,Byculla Bridge,1885. Contractors Messrs Narsoo Syboo and Co.
8	Ollivant Bridge	Sir Charles Ollivant	Do.	Carries Nesbit Lane over G.I.P Railway	East 620'	West 565'	40'-0"	1	51'	I in 35	I in 35	Nil	No Tram line	E	Ollivant Bridge1887. Cost Rs.2,15,000. Constructed by G.I.P. Railway at the cost of the Municipality.
9	French Bridge (A new bridge was subsequently built near the French Brdge in connection with the Sandhurst road.)		Do.	Carried French Road over B.B and C.I.Railway	East 322'-8"	West 390'	30'-2"	3	9' x 28'-l" x 9'	I in 28	l in 27	NII	Do.	D	Bombay, Baroda and Central India Railway. ERECTED A.D 1886. (The same inscription in Marathi and Gujarathi.)
10	Masjid Bridge	From being near a Masjid	Masonry	Carries Dongri Street over G.I.P Railway	East 457'	West 192'	60'-0"	3	52- 5"x25'x8'	I in 30	I in 30	12' on both sides	Do	В	
11	Hancock Bridge	Col.Hancock	Iron and Masonry	Carries Mazgaon Road over G.I.P Railway	North 241'	South 298'	50'-0"	2	52'x 52'		S.Side I in 28	Nil	Double Tram line	В	
12	Falkland Bridge	Lord Falkland	Do.	Carries Flakland Road over B.B and C.I Railway	East 582'	West 753'	35'-0"	1	56'-6"	I in 26	I in33	5' on both sides	No Tram	D & E	
13	Gibbs Road Bridge	The Hon. Mr. Gibbs	Masonry	Carries Gibbs Road Over two passages one for conveyance of the Parsi dead and the other for wat	182'	ta	30'-3"	е	G	a	Zθ	4'-9" on one side	Do.	D	S

second was famous as Chaupati road, now renamed as Dr. Purandare marg. The section from Chaupati to Walkeshwar bears the name of Walkeshwar road. This route is famous for its scenic view, the beautiful sky-scrapers to the east and the unfathomable Arabian sea to the west. At the midst of this road *i.e.* at the Fly-over bridge off the Princess street near Marine Lines Railway station it appears like a bow (*It is known as the Queen's Necklace.*), and exhibits the magnificence of its design. This road is also one of the famous places of interest in Bombay. The alluring view of sun-set to the west of this road and the beautiful view of lighted running cars at night on this road is a pleasure to the wayfarers.

It starts from the Backbay reclamation area of Naiiman Point at the junction of Madame Cama road where many sky-scrapers such as the Air India building, the Hotel Oberoi building, the Nirmal building, the Express Tower building, the Mafatlal Group building and others have come up. The total length of this route is about 4.5 km. with a width surface of 140 feet from Nariman Point to Chaupati and of 120 feet from Chaupati to Walkeshwar.

The objects located on the east of this road are: Hotel Bombay International, Brabourne Stadium, Iran Airlines, Hotel Natraj, University Ground, Wankhede Stadium, Princess Street Fly-over Bridge, Parsi Gymkhana, Islam Gymkhana, Hindu Gymkhana, Wilson College Gymkhana, Grant Medical College Gymkhana, Taraporewalla Aquarium, Smt. Kamaladevi Gauridatta Mittal Ayurvedic Hospital, Mahatma Gandhi Memorial Building, Savitribai Phule Govt. Ladies Hostel, Government Printing Press and Book Depot, Women's Garden and Wilson College; while on the west side of this road are: the Swimming Tank, the Birla Krida Kendra and the Girgaum Chaupati.

The following important roads take off from it: (1) Madame Cama road, (2) Dinshaw Vachha road, (3) Veer Nariman road, (4) Princess Street Fly-over, (5) Sardar Vallabhbhai Patel road, (6) Pandita Ramabai road, (7) Babulnath road and (8) Walkeshwar road.

Further, this road is extended upto Walkeshwar Point, the extended portions being known as the Walkeshwar road and the Upper Walkeshwar road. At the ending point Raj Bhavan or the Governor's bungalow is located. Many sky-scrapers, the Malabar Hills, the Hanging Garden, the Kamala Nehru Park, etc., are located in its vicinity. The important road emanating from Walkeshwar road is the B.G. Kher marg.

Cooperage (Lower Colaba) to Afahim Causeway: This route can be divided into eight sections viz., (1) Maharshi Karve marg from Cooperage to Charni Road railway station, (2) Mama Paimanand marg from Charni Road railway station to Opera House (Paluskar Chauk), (3) Paluskar Chauk to Nyayamurti Sitaram Patkar marg junction point (i.e., the portion of Sardar Vallabhbhai Patel road), (4) Nyayamurti Sitaram Batkar marg upto Kemp's Fly-over bridge, (5) Gopalrao Desh-mukh marg upto V. Desai Chauk (Haji Ali Chauk), (6) LaJa Lajpatrai marg upto Nahru Planetarium, (7) Dr. Annie Besantroad upto Century Bazar junction, and (8) Veer Savarkar road upto Mahim Causeway. This route starts from Cooperage i.e., from the Lower CoJaba and traverses Fort (south), Esplanade, Dhobi Talao, Fanaswadi, Girgaum (west), Malabar Hill (east), Cumballa Hill, Mahalaxmi, Lovegrove, Worli, Prabhadevi and Mahim. The total length of this route is about 15 km. Many long route buses emanating from the western suburbs of Greater Bombay and terminating at South Bombay ply on this route. The route is famous for its speedy motor-car traffic. It has not only relieved the heavy burden on many important roads in the south-eastern part of city but also facilitated very speedy car-traffic between south Bombay and the middle Bombay as well as the north-western suburbs of Greater Bombay. Many office-premises and the old glorious buildings are located in the vicinity of the southern sections of this route, while many skyscrapers are erected in the vicinity of its middle sections, i.e., the Gopalrao Deshmukh marg where many wealthy persons, top officers, and the elite reside.

The following important roads either take off from it or are crossed by it: (1) Madame Cama road, (2) Dinshaw Vachha road, (3) Veer Nariman road, (4) Princess street (Samaldas Gandhi marg), (5) Anandilal Podar road, (6) Dr. Babasaheb Jaykar road, (7) Raja Ram Mohan Roy marg, (8) Sardar Vallabhbhai Patel road, (9) Jagannath Shankarshet road, (10) Babulnath road, (11) August Kranti marg, (12) Bhulabhai Desai road, (13) Madan Mohan Malaviya marg, (14) Keshavrao Khade marg, (15) Maulana Abdul Gafar Khan road, (16) Dr. E. Moses road, (17) Worli road No. 13, (18) Worli road No. 10, (19) Pandurang Budhkar marg, (20) Keluskar road, (21) Shivaji Park roads, (22) Lady Hardinge road, (23) Sitaladevi Temple road, and (24) Lady Jamshetji road.

The following important objects are located along either side of this route: (1) Cooperage, (2) Mantralaya, (3) Oval Maidan, (4) K. C. College, (5) Eros Theatre, (6) Western Railway Headquarters, (7) Church-gate railway station, (8) India Government Tourist office, (9) Central Excise department, (10) Smt. Nathibai Damodar Thackersey University and College, (11) Income Tax department, (12) Accountant General office, (13) Bombay Hospital, (14) Princess Street Fly-over bridge, (15) Marine Lines railway station, (16) Mullanathbhai Cemetery, (17) S. K. Patil Garden, (18) Byramjee Jeejeebhoy Institution, (19) Saify Hospital, (20) Charni Road railway station, (21) Roxy Cinema, (22) Akruti (25 fl.) building, (23) Opera House, (24) Babulnath Temple, (25) Kamala Nehru Park (east side), (26) Kemp's Fly-over bridge, (27) Woodlands building (24 fl.), (28) Sterling Apartments (20 fl. building), (29) Jaslok Hospital, (30) Mahalaxmi Temple, (31) Heera Panna (24 fl.)building, (32) Haji Ali Dargah, (33) Children's Orthopaedic Hospital, (34) Lala Lajpatrai College, (35) Race Course, (36) National Sports Club, (37) Sardar Vallabhbhai Patel Stadium, (38) Nehru Planetarium, (39) Tata Show Room, (40) Sandoz buildings, (41) Happy Home and School for the blind, (42) Podar Ayurvedic Hospital and College, (43) Bombay Television Centre and TV Tower, (44) Glaxo Laboratories, (45) Dunlop House, (46) Century Bazar, (47) Siddhivinayak Temple, (48) Ravindra Natya Mandir, (49) Catering College, (50) Kirti College, (51) Shivaji Park, (52) Dadar Chaupati, (53) Bombay Mayor's bungalow, (54) Bombay Scouts' Gymkhana, (55) Vanita Samaj Hall and (56) Mahim Fort.

Colaba to Maheshwari Udyan: This route is the most heavy traffic route in Bombay which runs along the eastern harbour *i.e.*, the Bombay Port. The loaded heavy trucks and vehicles carrying goods to and from the Bombay Port ply over this route. It can be divided into six sections vfz., (1) Colaba road (6,400 ft.) from

Afghan Church to Sassoon Dock, (2) Shahid Bhagatsingh marg (10,800 ft.) from Sassoon Dock to G.P.O., (3) P. De'Mellow road (9,600 ft.) from G.P.O. to Wadi Bunder, (4) Reay Road (8,500 ft.) from Wadi Bunder to Jakaria Bunder road junction, (5) Jakaria Bunder road (6,880 ft.) from Reay Road junction to Golanji Hill road junction (Sewri Church), and (6) Rafi Ahmad Kidwai marg (11,600 ft.) from Sewri to Maheshwari Udyan (King's Circle). The total length of this route is about 16.20 km. The last section *i.e.*, the Rafi Ahmad Kidwai marg has an Express highway standard surface.

It traverses through Colaba, Fort, Esplanade, Mandvi, Dongri, Mazgaon, Sewri, Naigaum and Matunga.

The following important roads either take off from it or are crossed by it: (1) Dumyne road, (2) Shivaji Maharaj marg, (3) Mahatma Gandhi road, (4) Veer Nariman road, (5) Shoorji Vallabhadas marg, (6) Sir Pherozeshah Mehta road, (7) Mint road, (8) Walchand Hirachand marg, (9) Lokmanya Tilak road, (10) Masjid siding road, (11) Sardar Vallabhbhai Patel road, (12) Zinabai Rathod marg, (13) Dockyard road, (14) Sant Savta marg, (15) Messent road (Cotton Avenue), (16) Jerabai Wadia road, (17) Dattaram Lad marg, (18) Road No. 26, (19) Road No. 18, and (20) Road No. 16 etc.

The following important objects are located along either side of the route: (1) R. C. Church, (2) Afghan Church, (3) Sassoon Dock, (4) Defence Services Cinema, (5) Regal Theatre, (6) Museum, (7) Hotel Celeste, (8) Astoria Hotel, (9) Colaba Village, 0) Colaba BEST bus depot, (11) Old Council hall, (12) Electric House, (13) Lion Gate, (14) Jehangir Art Gallery, (15) Old Custom House, (16) Horniman Circle, (17) Town hall and Red Cross Society, (18) Reserve Bank of India, (19) Fort market, (20) General Post Office, (21) Saint George's Hospital, (22) Hotel Regal, (23) Warehouses and sheds of Indira Dock, (24) B.P.T. Railway—General goods station (Indira Dock), (25) Carnac Bunder goods station, (26) Rex Cinema, (27) Red Gate, (28) Warehouses and sheds of Victoria and Prince's docks, (29) Merewether Dry Dock, (30) Wadi Bunder goods yards, (31) Dockyard Road railway station, (32) Reay Road railway station, (33) Victoria Fly-over bridge near Reay Road railway station, (34) I.C.L., (35) Cotton Green railway station, (36) Sewri railway station, (37) T.B. Hospital, (38) Wadala railway station, (39) Five Gardens and (40) Aurora Cinema.

Museum to Sion: This route can be divided into seven sections viz.,(1)Mahatma Gandhi road from Museum to Hutatma Chauk, (2)Dr. Dadabhai Naoroji road and Palton road upto Lokmanya Tilak road junction, (3) Mohammad Ali road from Lokmanya Tilak road junction to Ibrahim Rahimtulla road junction, (4) Ibrahim Rahimtulla road upto junction of Sir Jamshetjee Jeejeebhoy road, (5) Sir Jamshetjee Jeejeebhoy road upto Byculla bridge, (6) Dr. Babasaheb Ambedkar marg upto Maheshwari Udyan and (7) Sion road upto Sion railway station.

Many statuesque buildings and places of interest in Bombay are located at the southern sections of this route. Generally, old buildings, banks, private and Government offices, well esteemed colleges and the University are located at the south *i.e.*, from Museum to Mahatma Phule Market (Crawford Market), while the route traverses through the most bustling business area of Bombay from Crawford Market (Mahatma Phule Market) to Byculla where fruits, vegetables, stationery, cutlery, clothes, hosiery, engineering goods, etc., are traded on wholesale basis. From Byculla to Sion it traverses through the residential areas. Few textile mills are also located in this area.

This route traverses through Fort, Esplanade, Mandvi, Bhendi Bazar, Nagpada, Tadwadi, Byculla, Parel, Naigaum, Dadar, Matunga, and Sion. The total length of this route is about 14 km.

The following important roads which either take off from it or are crossed by it:(1) Madame Cama road, (2) Shivaji Maharaj marg, (3) Shahid Bhagatsingh road, (4) Veer Nariman road, (5) Mahatma Gandhi road, (6) Walchand Hirachand marg, (7) Hazarimal Somani marg, (8) Lokmanya Tilak road, (9) Yusuf Meher Ali road, (10) Ibrahim M. Merchant road, (1.1) Ibrahim Rahimtulla road (the section from Mohammed Ali road junction to Kalbadevi road junction), (12) Sardar Vallabhbhai Patel road, (13) Erskine road, (14) Maulana Shaukat Ali road, (15) Ram-chandra Bhat marg, (16) Dimtimkar road, (17) New Nagpada road, (18) Shepherd road, (19) Sardar Balwantsingh Dhodi marg, (20) Mirza Galib road, (21) Dr. S. S. Rao road, (22) Sant Savta marg, (23) E. S. Patanwala marg, (24) Sane Guruji path, (25) Mahadeo Palav marg, (26) Acharya Donde marg, (27) Jagannathrao Bhatankar marg, (28) Wadia road, (29) Dadasaheb Phalke road, (30) Gyani Jivandas marg, (31) Mumbai Marathi Grantha Sangrahalaya marg, (32) Tilak road, (33) Lady Jehangir road, (34) Horsmusji Adenwalla road, (35) Bhandarkar road, (36) Bhau Daji marg, (37) Matunga road, and (38) Eastern Express highway.

The following important objects are located along either side of this route: (1) Lion Gate, (2) Museum, (3) Jehangir Art Gallery, (4) Old Council Hall, (5) Cowasji Jehangir Hall, (6) Elphinstone College, (7) Institute of Science, (8) Regal Cinema, (9) University of Bombay, (10) British Consulate, (11) New India Assurance building, (12) Flora Fountain (13) Davar's College, (14) Central Telegraph Office, (15) Parsi Fire temple, (16) Siddharth College of Commerce and Economics (An-and Bhawan), (17) Bai Pisobai Dadabhai Vachha Fire Temple, (18) Khadi and Village Industries Emporium, (19) Handloom House, (20) Empire Hindu Hotel, (21) Capital Cinema, (22) V. T. Station and Central Railway Headquarters, (23) Bombay Municipal Corporation building, (24) Times of India building, (25) Anjuman-I-Islam high school, (26) Sir J. J. Institute of Applied Arts, (27) Police Commissioner's office, (28) Chhatrapati Shivaji market, (29) Mahatma Phule market (Crawford market), (30) Manish market, (31) Mohta market, (32) Mandvi Telephone Exchange, (33) Zakaria mosque, (34) Minara mosque, (35) J.J. Hospital, (36) Dick's Garden, (37) Magen David Synagogue, (38) Sant Gadge Maharaj dharmashala, (39) Traffic Institute, (40) Sewa Niketan, (41) Bombay Fire Brigade, (42) Sant Gadge Maharaj market (Gold Mohur market), (43) Mahadev Temple, (44) Palace Cinema, (45) Sant Savta market, (46) Gloria Church, (47) Bai Jeejeebai baug, (48) Central Railway Hospital, (49) Parsi Agiary, (50) Veermata Jeejabai Bhosale Udyan (Victoria garden), (51) Signal and Telecommunication workshop, (52) New Great Eastern Spinning and Weaving Mills, (53) Jai Hind Cinema, (54) Voltas Ltd., (55) Godfrey Phillips Ltd., (56) Digvijay Mills, (57) Bharatmata Cinema, (58) Morarji Mills, (59) India United Mills No. 1, (60) I. T. C. Ltd., (61)

Central Railway playground, (62) Central Railway's Loco Workshop, (63) Tata Memorial Cancer Hospital, (64) Dharati talkies, (65) Hindmata talkies, (66) Chitra talkies, (67) Naigaum telephone exchange, (68) Mumbai Marathi Grantha Sangrahalaya, (69) Sharada talkies, (70) Kohinoor Mills, (71) Dadar BEST workshop, (72) Ruia College, (73) Datta Mandir, (74) Sahastrafana Parshwanath Bhagavan Jain Mandir, (75) Aurora Cinema, (76) Matunga telephone exchange, (77) Mahatma Gandhi cloth market, (78) King's Circle railway station, (79) Lokmanya Tilak Hospital, (80) Roopam talkies and (81) Sion Bus Depot.

Cooperage (Lower Colaba) to Haji Ali: This route can be divided into four sections viz., (1) Karmaveer Bhaurao Patil marg from Cooperage to Cross Maidan, (2) Mahatma Gandhi road (a section of Mahatma Gandhi road from Cross Maidan to Vasudeo Balwant Chauk (Dhobi Talao), (3) Jagannath Shankarshet marg from DhobiTalao to Nana Chauk, and (4) Javji Dadaji marg (Nana Chauk) to V, Desai Chauk (Haji Ali junction). The total length of this route is about 6.5 km. It traverses through Fort (South), Esplanade, Dhobi Talao, Fanaswadi, Girgaum, Tardeo and Mahalaxmi. This route crosses the Western Railway between Charni Road and Grant Road railway stations i.e. between Opera House and Nana Chauk where there is a bridge across the railway known as the Kennedy bridge.

The following important roads either take off from it or are crossed by it: (1) Madame Cama road, (2) Veer Nariman road, (3) Hajarimal Somani marg, (4) Anandilal Podar marg (Marine Lines—first street), (5) Kalbadevi road, (6) Lokmanya Tilak road, (7) Mahapalika marg, (8) Samaldas Gandhi marg, (9) Sonapur street, (10) Dr. Viegas street, (11) Dady Shet Agiary street, (12) Dr. Babasaheb Jayakar marg, (13) T. Gharpure path, (14) Khadilkar road, (15) Raja Ram Mohan Roy marg, (16) Dr. Dadasaheb Bhadkamkar marg, (17) Mama Parmanand marg, (18) Sardar Vallabhbhai Patel road, (19) French road, (20) Vitthalbhai Patel road, (21) Gamdevi road, (22) Maulana Shaukat Ali road, (23) August Kranti marg, (24) Falkland road, (25) N. Bharucha marg, and (26) Jehangir Boman Behram marg.

The following important objects are located on either side of this road:

(1) Cooperage, (2) Oval Maidan, (3) Rajabai Tower and Bombay University, (4) High Court, (5) Cross Maidan, (6) O.C.S. Tower, (7) Azad Maidan, (8) Bombay Gymkhana, (9) Prabhu Seminary high school, (10) Gora Ram temple, (11) Kala Ram temple, (12) Vishnu temple, (13) Portuguese Church, (14) Bhatia Hospital, (15) Ganga and Jamuna talkies, (16) Maruti temple, (17) Tardeo bus station, (18) Famous Cine Laboratory, (19) Airconditioned market and (20) Commerce Centre.

Walkeshwar to Haji Ali: This route is divided into two sections, viz., (1) Lady Laxmibai Jagmohandas marg and (2) Bhulabhai Desai road. It starts from the Walkeshwar temple, and runs towards the north and traverses through Walkeshwar and Mahalaxmi area for a total length of 3.2 km. Many sky-scrapers are located on either side of this road. The August Kranti marg emanates from this road near Kemp's Corner, while the Gopalrao Deshmukh marg meets this road near Mahalaxmi temple.

The following important objects are located on the either side of this route: (1) Walkeshwar temple, (2) Hanging garden, (3) Tower of Silence, (4) Kemp's Corner, (5) Bhulabhai Desai Memorial Institute, (6) Breach Candy Hospital and (7) Mahalaxmi temple.

Opera House to Chinchpokli: This route can be divided into three sections viz., (1) Bhadkamkar marg (5,200 feet), (2) Dr. Anandrao Nair marg, and Arthur road (3,600 feet), and (3) Sane Guruji path (4,400 feet). It traverses through Girgaum Khetwadi, Tardeo, Byculla and Chinch-pokli. The total length of this route is about 4 km. It runs towards the north upto Sant Gadge Maharaj Chauk and then north-east upto Chinch-pokli railway station. It crosses the Central Railway line near the Chinchpokli railway station to meet Dr. Babasaheb Ambedkar road.

The following important roads either take off from it or are crossed by it: (1) Sardar Vallabhbhai Patel road, (2) Maulana Shaukat Ali road, (3) AJlibhai Premji marg, (4) Annesley road, (5) Falkland road, (6) Guilder road, (7) Bellasis road No. 3, (8) Jehangir Boman Behram road, (9) Club road, (10) Club back road, (11) Gell street, (12) Keshavrao Khade marg, (13) Maulana Azad road, (14) Jagtap marg, (15) N. M. Joshi marg, and (16) Ambedkar marg.

The important objects located on either side on this route are: (1) Opera House, (2) Swastik Talkies, (3) Naaz Cinema, (4) Minerva Cinema, (5) Apsara Cinema, (6) Novelty Cinema, (7) Guilder Tank Maidan, (8) Y.M.C.A. Club, (9) Bombay Central railway station, (10) Bombay Central S. T. Station, (11) Maratha Mandir Theatre, (12) Nair Hospital, (13) New Shirin Talkies, (14) Arthur Road Jail, (15) Arthur Road Hospital and (16) Chinchpokli railway station.

Chaupati to Mazgaon (Dongri): This route, known as the Sardar Vallabhbhai Patel road, emanates from the Chaupati on the Netaji Subhash road and crosses the Western Railway near the Opera House where there is bridge across the railway lines known as the Sandhurst Bridge. It also crosses the Central Railway lines between Masjid and Sandhurst Road railway stations, where there is a bridge known as the Dongri Bridge. It runs in easterly direction for 3414 metres (3.4 km.) and meets the P. De'Mellow road in Mazgaon area. It traverses through Khetwadi, Kumbharvada, Khara Talao, Umarkhadi and Dongri.

The following important roads either take off from it or are crossed by it: (1) Nyayamurti Sitaram Patkar marg, (2) Mathew road, (3) Mama Parmanand marg, (4) Jagannath Shankarshet road, (5) Dr. Dadasaheb Bhadkamkar marg, (6) Vitthalbhai Patel road, (7) Raja Ram Mohan Roy marg, (8) Khetwadi main road, (9) Nanubhai Desai road, (10) Falkland road, (11) MauJana Azad road, (12) Erskine road, (13) Ibrahim Rahimtulla road, (14) Narsinatha street, (15) Jail road, (16) Dr. Keshavji Naik road, (17) Maheshwari road, (18) Argyle road and (19) P. De'Mellow road.

The important objects located on either side of this route are: (1) Opera House, (2) Servants of India Society

building, (3) Parekh Hospital, (4) Gol Pitha, (5) Alankar Theatre, (6) Edward Theatre, (7) Gol Deul, (8) Nullbazar market, (9) Bhendi Bazar, (10) Dongri jail and (11) Wadi Bunder goods yard,

Dhobi Talao to Bhendi Bazar: This route popularly known as the Kalbadevi road starts from the Vasudeo Balvant Chauk at Dhobi Talao (near the Metro Cinema) and runs towards the east to meet the Ibrahim Rahimtulla road. The total length of this road is 1341 metres. It traverses through the very busy area having shops of brass and stainless steel utensils, furniture, cloth and cutlery.

The following important roads either take off from it or are crossed by it: (1) Mahatma Gandhi road, (2) Mahapalika marg, (3) Lokmanya Tilak road, (4) Jagannath Shankarshet road, (5) Marine Lines 1st street, (6) Samaldas Gandhi marg, (7) Kantilal Sharma marg, (8) Dr. Velkar street, (9) Babu Genu road, (10) Dhirubhai Parekh road, (11) Sheikh Memon street, (12) Dady Shet Agiary lane, (13) Abdul Rehman street, (14) Bhuleshwar road, (15) Kika street and (16) Ibrahim Rahimtulla road.

The following important objects are located on either side of this road: (1) Jain temple, (2) Dady Shet Agiary, (3) Mumbadevi temple and (4) Kalbadevi temple.

Kemp's Corner to Wadi Bunder: This route can be divided into two sections viz., (1) August Kranti marg and the Maulana Shaukat Ali road and (2) Ramchandra Bhat marg (Babula Tank road), Shivdas Chapsi marg (Mazgaon road) and the Zinabai Rathod marg (Wadi Bunder road). It starts from the Kemp's Corner i.e., the north end of the Hanging Garden at the junction of the Napean Sea road and the Bhulabhai Desai marg and runs towards the east to meet the P. De'Mellow road near Wadi Bunder. It traverses through Gowalia Tank, Nana Chauk, Grant Road, Khetwadi, Nagpada, Bhendi Bazar and Umarkhadi for a length of about 6 km.

The following important roads either take off from it or are crossed by it: (1) Bhulabhai Desai road, (2) Jagmohandas marg, (3) B. G. Kher marg, (4) Pandita Ramabai road, (5) Javji Dadaji road, (6) Jagannath Shankarshet road, (7) Allibhai Premji marg, (8) Dadasaheb Bhadkamkar marg, (9) Balaram street, (10) Raja Ram Mohan Roy marg, (11) Falkland road, (12) Maulana Azad road, (13) Ibrahim Rahimtulla road, (14) Babula Tank cross lane, (15) Umarkhadi Jail road (north), (16) Umarkhadi Jail road (east) and (17) Dr. Mascarenhes road. It crosses the Western Railway lines near Grant Road railway station where there is a bridge across the railway lines known as the Frere Bridge, and the Central Railway lines between the Sandhurst road and Byculla railway stations where there is also a bridge.

The important objects located on either side of this route are: (1) Kemp's Corner, (2) Malabar Hills (Hanging Garden), (3) Tejpal Auditorium, (4) August Kranti maidan, (5) Kranti Stambh, (6) Grant Road railway station, (7) Maruti mandir and (8) J. J. Hospital.

Byculla Bridge to Mahim Causeway: It can be divided into three sections, viz., (1) N. M. Joshi marg (12,800 ft.), (2) Gokhale road (6,640 ft.) and (3) Lady Jamshetji road (6,800 ft.). It starts from Byculla Bridge and runs towards the north upto Mahim Causeway and traverses through Byculla, Chinchpokali, Worli, Dadar and Mahim for about 8 km. It crosses the Western Railway lines near Lower Parel railway station where there is a bridge known as the Lower Parel Bridge.

The following important roads either take off from it or are crossed by it: (1) Jagtap marg, (2) Sane Guruji path, (3) Currey Road railway station road (4) Gopalrao Kadam marg, (5) Senapati Bapat marg, (6) Carrol road, (7) Dadasaheb Bhatankar marg, (8) Sayani road, (9) Kakasaheb Gadgil marg, (10) Bhavanishankar road, (11) S. K. Bole marg, (12) Dnyanmandir marg, (13) Ranade road, (14) Shivaji Park road, (15) N. C. Kelkar road (16) Lady Hardinge road, (17) Sitaladevi Temple road and (18) Veer Savarkar marg.

The important objects located on either side of this route are as follows: (1) Curshetjee Manekjee statue (Khada Parsi), (2) Byculla fire brigade, (3) Khatav Mills, (4) Byculla railway station, (5) Chinchpokli railway station, (6) Currey Road railway station, (7) Lower Parel railway station, (8) Western Railway workshop, (9) Crown Mills, (10) Portuguese Church, (11) Shivaji Park, (12) Kohinoor Mills, (13) Sitaladevi temple, (14) City Light Cinema, (15) Barakha Talkies, (16) Badal Talkies, (17) Bijali Talkies, (18) Shree Talkies, (19) Paradise Theatre, (20) Mount Mary Church, (21) Victoria Church, (22) Ram Mandir, (23) Mahim fort and (24) Mahim BEST bus depot.

Race Course to Mahim Causeway: This road formerly known as the Tulsi Pipe line is now renamed as the Senapati Bapat marg. It starts from Race Course, runs towards the north and traverses through Chinchpokli, Worli, Prabhadevi, Dadar and Mahim. The total length of this road is about 8.5 km.

The following important roads either take off from it or are crossed by it: (1) E. Moses road, (2) Ganapatrao Kadam marg, (3) N. M. Joshi marg, (4) Carrol road, (5) Bhatankar marg, (6) Sayani road, (7) Kakasaheb Gadgil marg, (8) Dadar road, (9) N. C. Kelkar road, (10) Lady Hardinge road, (11) Sitaladevi Temple road, (12) Mori road and (13) Dharavi road.

The following important objects are located on either side of this road: (1) Mahalaxmi Race Course, (2) Famous Cine Laboratory, (3) Globe Mills, (4) Western Railway workshop, (5) Sewage purification plant, (6) Dadar railway station, (7) Tilak Bridge, (8) Ruparel College, (9) Matunga Road railway station, (10) Sitaladevi temple, (11) Mahim railway station and (12) Mahim BEST bus depot.

Eastern Express Highway: To relieve the acute traffic congestion on the Bombay-Thane road, which was the only highway leading to and from Bombay, it was decided in concurrence with the Government of India and the Bombay Municipal Corporation, to construct two Express Highways, viz. (1) the Eastern Express Highway and (2) the Western Express highway. The Eastern Express Highway is an important artery of traffic from and to Bombay which has not only relieved the transport bottleneck on the Bombay-Agra road but also facilitated very speedy traffic from Bombay to Thane. It has been constructed in conformity with the standards of an

Express Highway and has the least number of obstructions in the form of road crossings or approach roads. It starts from Sion from the Sion Road No. 3-A, Scheme No. 6, runs towards the north-easterly direction and leaves for Thane district at km. 18.92. Total length of this road is 24.14 km. of which the length of 18.92 km. (62,040 feet) is within the jurisdiction of the Greater Bombay area. This road traverses through Sion, Chembur, Ghatkopar, Vikhroli, Bhandup and Mulund. It meets the Bombay-Agra road near Thane. The entire length of this road has a black-topped surface and has a width of 108 feet throughout its length. It crosses the V.T.-Kurla Harbour Branch line of the Central Railway near Chunabhatti and the Kurla-Mankhurd Harbour Branch line near Chembur where there are bridges. It crosses many branches of the Thane creek where there are drains.

The following important roads either take off from it or are crossed by it: (1) Vitthal Narayan Purao road, (2) S. G. Barve road, (3) Ghatkopar-Mahul road and (4) Vikhroli-Kannamwar Nagar road.

Western Express Highway: This Express Highway is also an important artery of traffic from and to Bombay which has relieved the traffic load on the Swami Vivekanand road (Old Ghodbundar road) and also facilitated speedy traffic from Bombay towards the north. It starts from the Swami Vivekanand road at Mahim Causeway, crosses the Western Railway lines near Bandra, where there is a over bridge, and runs in north direction parallel to the Western Railway lines upto Dahisar and meets the Swami Vivekanand road at fthe border of Greater Bombay from where the Bombay-Ahmedabad National Highway emanates. It traverses through Bandra, Khar, Santacruz, Vile-Parle, Andheri, Jogeshwari, Goregaon, Malad, Kandivli, Borivli and Dahisar for a total length of 25.6 km. (84,480 feet). The entire length of this road has a black-topped surface with a throughout width of 108 feet.

The following important roads either take off from it or are crossed by it: (1) Sion-Dharavi road, (2) Nehru road (Vile-Parle), (3) Andheri-Sahar road, (4) N. Vasanji road (Andheri-Ghatkopar), (5) Aarey road (Goregaon-Mulund road), (6) Quarry road, (7) Akurli road and (8) Swami Vivekanand road.

The main objects of interest alongside are: Santacruz aerodrome, Sahar International Airport, Hotel Centaur, Aarey Park, National Park and Kanheri Caves.

The Santacruz aerodrome is located at the east side of this road. From Borivli east, the Kanheri Caves road emanates from this highway and runs in eastern direction for a total length of about 4.75 km. to reach the famous caves of Kanheri. The Kanheri Caves road traverses through the famous National Park of Borivli.

Sion to Mulund (Lai Bahadur Shastri marg): Formerly this road was known as the Bombay-Agra road. This important road is a connecting link between Bombay and Maharashtra as well as the central, eastern and southern parts of India. Before construction of the railway line this road was used as a route of military movements from Bombay to Nashik. Before constructing the Eastern Express highway this was the only important highway leading to and from Bombay. Even after construction of the Eastern Express highway, it has retained its importance. This road starts from the road junction to the west of Sion Bridge near Sion railway station, runs in north-easterly direction, somewhat parallel to the Central Railway lines and leaves for Thane district at km. No. 22 near Mulund Check Naka. This road traverses through Kurla, Ghatkopar, Vikhroli, Bhandup and Mulund for a total length of 22 km. The entire length of this road has a black-topped surface with a width of 30.48 metres. This road traverses through the industrial belt of North Bombay.

The following important roads either take off from it or are crossed by it: (1) Sarveshwar Mandir road, (2) Belgrami road, (3) Sitaram Bhairav lane, (4) S. G. Barve marg, (5) Magan Nathuram road, (6) Son-apur lane, (7) Premier road, (8) Kale marg, (9) Vidyavihar road, (10) Nari Sewa Sadan road, (11) Chirag Nagar road, (12) Parsiwadi road, (13) Karani lane, (14) Jeevdaya lane, (15) Mahatma Gandhi road, (16) Rifle Range road, (17) Hirachand Desai road, (18) Kacharapatti road, (19) Sanghavi Estate road, (20) Sainath Nagar road, (21) Vikhroli Municipal Colony road, (22) Vikhroli station road, (23) Powai road, (24) Kanjur Marg road, (25) Quarry road, (26) James Beaching road, (27) Bhandup station road, (28) Tank road, (29) Bhattipada road, (30) Khot road, (31) Lake road, (32) Bhandup village road, (33) 100 feet link road, (34) Rallifan road, (35) Devidayal road, (36) Sindhi Colony road, (37) Rajendra Prasad road, (38) Bal Rajeshwari road and (39) Pandit Deendayal Upadhyaya marg.

The objects of interest nearby this road are the Powai and Tulsi lakes.

Mahim Causeway to Dahisar: This road formerly known as the Ghodbundar road is now renamed as the Swami Vivekanand road. It starts from Mahim Causeway and runs towards the north somewhat parallel to the Western Railway upto Borivli railway station. Afterwards it crosses the Western Railway lines between the Borivli railway station and the Dahisar railway station. The road traverses through all the western suburbs of Greater Bombay, viz. Bandra, Khar, Santacruz, Juhu, Vile Parle, Andheri, Jogeshwari, Goregaon, Eksar, Pakhadi, Malad, Kandivli, Borivli and Dahisar, for a total length of 17.70 km. The entire length of this road has a black-topped surface.

The following important roads either take off from it or are crossed by it: (1) Western Express Highway, (2) Bandra Bazar road, (3) Hill road, (4) Bandra Station road, (5) Turner road, (6) Vallabhbhai Patel road, (7) 30th Municipal road, (8) Khar-Pali road, (9) 1st Municipal road, (10) South Avenue road, (11) Church road, (12) Main Avenue road, (13) North Avenue road, (14) Makarand Ghanekar marg, (15) Juhu road, (16) Vaikunthlal Mehta road, (17) Jaiprakash road, (18) Caesar road, (19) Prabhat Nagar load, (20) Behram Baug road, (21) Motilal Nagar road, (22) Aarey road, (23) Chincholi road, (24) Jakeriaroad, (25) Marve road, (26) Mathuradas road, (27) Mahatma Gandhi road, (28) Akurli road, (29) Manori road and (30) Versova-Dahisar road.

The following important objects are located on either side of this road: (1) Bandra Mosque, (2) Bandra Talkies, (3) N. M. Munshi Udyan, (4) Sacred Heart Church, Khar, (5) Milan Talkies, (6) Santa-cruz bus depot, (7) Nanavati Hospital, (8) Juhu Aerodrome, (9) Mithibai College, (10) Andheri Fire brigade, (11) Triveni Theatre, (12) Andheri railway station, (13) Saint X'avier's Church, Amboli, (14) Hanzer Cinema, Jogeshwari,

(15) Jogeshwari railway station, (16) Ram aur Sham Theatres, (17) Patkar College, (18) Jain Siddhashram, (19) Malad Telephone Exchange, (20) Dalmiya College, Malad, (21) Milap Talkies, (22) Kandivli Masjid, (23) Jari Mari Mandir, Kandivli, (24) Kandivli bus station, (25) Poisar bus depot and (26) Borivli railway station.

Besides the above mentioned objects, the following are the famous places of interest in the adjoining areas of the Swami Vivekanand road :

(1) Mount Mary's Church, Bandra, (2) Bandra Talkies; (3) Juhu beach, (4) Versova beach, (5) Jogeshwari caves, (6) Aarey Milk Colony, (7) Marve and Manori beach, (8) Madh island and beach, (9) Kanheri eaves, (10) National Park, Borivli, (11) Mount Poisar and (12) Mandapeshwar temple and caves.

In view of passenger traffic, this is the most important road traversing the western suburbs of Greater Bombay as many long distance city buses ply over this road.

Sion-Panvel route: This route starts from Sion i.e from LaxmiChauk, runs in common with the Tatya Tope marg (the southern section of the Eastern Express Highway) upto the junction of the Choitram Gidwani marg where it bifurcates to the right and further runs in easterly direction towards Panvel. It leaves Bombay at the Thane creek bridge. This is a very important route joining Bombay with New Bombay and further with Konkan, Pune and southern India.

From the junction of Eastern Express Highway to the junction of Panvel road it is known as the V. N. Purao marg. It crosses the Harbour railway line twice near Chunabhatti railway station and near Mankhurd railway station. The Thane creek bridge on this highway is a wonder in civil engineering.

The following important roads either take off from it or are crossed by it: (1) Tatya Tope marg (Eastern Express Highway), (2) Choitram Gidwani marg, (3) R. C. Chemburkar marg, (4) Gowandi station road, (5) Sion-Trombay road (section of V. N. Purao marg) and (6) Kolwada- Borla road.

The following important objects are located on either side of this route: (1) Chembur Garden, (2) R. K. Film Studio, (3) Golf Club, (4) Deonar bus depot and (5) Mankhurd railway station.

Kurla to Tulsi lake: This route can be divided into three sections, viz. (1) Powai road upto Saki Naka, (2) Saki-Vihar road upto the junction of Aarey road and (3) Aarey road upto the junction of Borivli-Mulund road. This route traverses through the industrial belt of Andheri (East) and Kurla (West). The first two sections of this route run parallel to the Mithi river upto the Vihar lake. The route meets the Borivli-Mulund road at Tulsi lake.

The following important routes either take off from it or are crossed by it: (1) S. G. Barve marg, (2) Sahar road, (3) Mathuradas Vasanji road, (4) Vihar Lake road (Goregaon-Vihar road), (5) Aarey road and (6) Borivli-Mulund road.

The following important objects are located on either side of this route: (1) Powai lake, (2) I.I.T., (3) Chinmaya Ashram, (4) Vihar lake, (5) Aarey Milk Colony, (6) Film City, (7) Dewarpark and (8) Tulsi lake.

Santacruz to Juhu: This road popularly known as the Juhu road, starts from the Swami Vivekanand road, runs towards the west upto Juhu Tara and thence towards the north upto the junction of the Vaikunthlal Mehta road. The total length of this road is 5.25 km. Juhu beach is located to the west of this road.

Andheri Railway Station to Saki Naka: Formerly this road was known as the Andheri-Kurla road, now renamed as the Mathuradas Vasanji marg. It starts from Andheri station and runs towards the east upto Saki Naka for 6 km., where it meets the Powai road. The important roads which either take off from it or are crossed by it are given below:

(1) Šahar road, (2) Old Nagardas road, (3) Suren road, (4) Western Express Highway, (5) Mahakali Caves road, (6) Chakala road, (7) Marol-Maroshi road and (8) Saki-Vihar road.

The following important objects are located on either side of this road: (1) Gondvali Church, (2) Sangam Talkies, (3) I. I. T., (4) Powai lake and garden.

Andheri Station to Versova: This road is known as the Versova road. It starts from Swami Vivekanand road near Andheri railway station and runs towards the west upto the Versova village. The section from Andheri railway station to Sat Bungalow Park is named as Jai Prakash road. Total length of this road is about 5.8 km.

The following important roads either take off from it or are crossed by it: (1) S. V. road, (2) Dadabhoy road, (3) Veera Desai road and (4) Church road.

The following important places are located on either side of this road: (1) Navrang Cinema, (2) Bhawan's College, (3) Dhake Colony, (4) Char Bungalow, (5) Sat Bungalow park, (6) Versova Church and (7) Versova beach.

Goregaon Station to Vihar Lake: This road also known as the Aarey road, starts from Goregaon railway station and runs towards the east to meet the Saki-Vihar road at Vihar lake. The total length of this road is 9.25 km. It crosses the Western Express Highway near New Zealand hostel. The Mahakali Caves road meets this road at picnic spot of Aarey Colony, while the Marol-Maroshi road meets this road near Maroshi village. The following important objects are located on either side of this road: (1) Modern Bakery, (2) Aarey picnic spot, (3) Powai lake, (4) Chinmaya Ashram, (5) Maroshi and (6) Vihar lake.

Malad to Madh: This road starts from the Swami Vivekanand road at Malad. It is divided into two sections, viz. (1) Malad-Marve road and (2) Marve-Madh road. The former runs towards the west, while the latter towards the south. This road has a fine view of the greeneries with some old monuments located at both the

sides. A long belt of Marve greeneries with coconuts and other swamp bushes and the beaches of Akasa, Erangal and Madh islands are alluring and picturesque. Marve beach and Madh island are picnic spots where many visitors from Bombay and the adjoining areas spend their holidays.

It traverses through Malad (West), Marve and Madh for a total length of 13.4 km.

The following important roads either take off from it or are crossed by it: (1) Swami Vivekanand road, (2) Versova-Pahisar road, (3) Liberty Garden road, and (4) Versova-Madh road.

The following important places are located on either side of this route: (1) Orieni Church, (2) Kharodi village, (3) Malvani Church, (4) Marve village and beach, (5) Yogashram, (6) Erangal village and beach, (7) Madh island and fort.

Borivli station to Manori: Starting from Borivli station, this route runs in western direction upto Gorai and thence towards the south upto Manori. Further it crosses the Manori creek to meet the Malad-Marve road near Anand village. It traverses through Borivli (West), Gorai and Manori island for a total length of about 14 km. It was proposed to construct a new aerodrome on Gorai island near this road. (This proposal has still not materialised.)

Kanheri Caves road: It starts from the Western Express Highway at Borivli (East) and runs in south-easterly direction upto Kanheri caves for a total length of 6.4 km. It traverses through National Park at Borivli and the thick forest near the caves. It crosses the Dahisar river near Gandhi Dham in National Park.

Besides the above described major routes in Bombay, there are as many as 79 other important roads, the account of which is given in table No. 9.

Bridges: There are as many as nine major bridges in Greater Bombay built in this century, the account of which is given in table No. 10.

Besides the major bridges mentioned in table Nos. 8 (Table No. 8 gives information of major bridges as in 1909.) and 10 there are many small bridges in Greater Bombay. An account of a few important among them is given in table No. 11.

Bombay Road Development Programme: It is proposed to connect the Eastern and Western Express Highways by constructing various link roads in order to help efficiently in relieving the congestion in the suburbs of Bombay. After carrying out extensive surveys and studies, M/s. Wilbur Smith and Associates submitted a report in 1963 on Bombay Traffic and Transportation Study and recommended a plan of Rs. 96 crores (1963 estimates) consisting of a network of freeways, expressways and major street improvements to provide for the needs of the anticipated growth of traffic by the year 1981 in Bombay. It was proposed to complete this plan in four stages of about five years each. As a special programme for implementing the recommendations of Wilbur Smith Report, the survey of Bombay city was taken up in 1966-67. According to this programme Bombay island is proposed to be encircled by freeways and bisected by an expressway.

The following statement shows the details as per the Wilbur Smith Plan :—

Name		Cost (Rs. in la	khs)	ZE
	Length (in km.)	Construction	Right of way	Total
1 East Island Freeway	14.34	29,72	3,16	32,88
2 Cross Island Connector	1.52	4,80	5	4,85
3 Mahim Creek Connector	2.96	1,63	6	1,69
4 West Island Freeway	16.61	23,42	70	24,12
5 Western Expressway	6.44	1,35	0	1,35
6 Eastern Expressway	4.02	1,02	0	1,02

7 Tardeo Expressway	1.09	17	1,80	1,97
8 Central Island Expressway	12.38	3,27	2,47	5,74
9 Sewri Island Expressway	7.87	2,61	1,55	4,16
10 Major Street Improvement	119.68	6,68	11,46	18,14
Grand Total	186.91	74,67	21,25	95,92

The following 25 major routes were taken up under " Major Route Improvement Programme " of the Wilbur Smith Plan :

(1) Maulana Shaukat Ali road, (2) Kalbadevi road, (3) Princess street, (4) Carnac road, (5) Sardar Vallabhbhai Patel road, (6) Hughes road, (7) Bellasis road, (8) Delisle road, (9) Victoria road, (10) King Edward road, (11) Tulsi Pipe road, (12) Elphinstone road, (13) Tilak road, (14) Gross Esplanade road, (15) Waudby road, (16) Lady Jehangir road extension, (17) Santacruz-Chembur link road, (18) Sion-Trombay road (Diversion), (19) Andheri-Ghatkopar link road, (20) Jogeshwari-Vikhroli link road, (21) Goregaon-Mulund link road, (22) Swami Vivekanand road, (23) Mahim Causeway, (24) Borivli-Mulund link road, and (25) Thane-Belapur road.

The following six freeways of 44.8 km. were included in the "Freeway Programme " of the Wilbur Smith Plan :

(1) East Island Freeway, (2) Gross Island connector, (3) Mahim Creek connector, (4) West Island Freeway, (5) Western Express highway and (6) Eastern Express highway.

Besides, the following three expressways of 25.6 km. were also included in the Plan:—

(1) Tardeo Expressway, (2) Central Island Expressway, and (3) Sewri Expressway.

According to the Wilbur Smith Plan Programme, the following works costing about Rs. 27 crores were proposed to be taken up as 1st phase works, out of which Rs. 18 crores were to be spent in IVth Five-Year Plan and an amount of Rs. 9 crores was proposed to be spilled over to Vth Five-Year Plan (Of the roads planned, only Bandra-Dharavi link is completed, the rest being under progress.):—

- (1) East Island Freeway from Carnac Bunder to Reay Road junction,
- (2) West Island Freeway from Chaupati to Haji Ali (including Malabar Hill Tunnel),
- (3) Major street improvements including link roads—
- a. Bandra-Dharavi link road,
- b. Andheri-Ghatkopar link road,
- c. Goregaon-Mulund link road,
- d. Chembur-Mankhurd link road,
- e. Engineering surveys.

In addition to the above it had been decided to include Santacruz-Chembur link road and Jogeshwari-Vikhroli link road in the First Phase Programme which was to be taken in the IVth Five-Year Plan.

TABLE NO. 9 OTHER MAJOR ROADS IN GREATER BOMBAY -1973-74

Serial No.	Name of the road	Starting Point	Ending Point	Area through which it traverses	Lenght (in feet) or metres	Width (in feet)	Bridges on it	Roads which emante from it or meet it	Important junctions
L	2	3	4	5	6	7	8	9	10
L	Cuff Parade road (General J. Bhonsle marg)		Madame Cama road	Backbay Reclamation	8,000	60		(1) Pandya road, (2) Wodehouse road	
2	Babulnath road	Junction of Dr.N.A. Purandare marg and Walkeshwar road	Sitaram PAtkar marg	Baulnath temple	1,600	70		(1)Babulnath cross road, (2) Chaupati road	Nayayamaurt Sitaram Patkar marg junction
3	Wodehouse road	Colaba road	Museum junction	Backbay	3,000	50		(1)Cuffe Parade road, (2) Maharishi Karve road (3)Cooperage road, (4)Kitridge road	
1	Chhatrapati Shivaji Mahraj marg	Museum	Gateway of India	Museum to Gateway of India	1,200	60 and 80			
5	Madame Cama road	Museum	Netaji Sibhash road (Nariman Point)		3,800	90 and 120		(1) Cooperage road, (2) Mayo road, (3) Maharishi Karve road	(1) Cooperage (2)Mantralaya
5	Jamshetji Tata road	Madame Cama road	Churchgate Junction	Backbay	5,060	80 and 120		(1) Veer Nariman road, (2) Maharishi Karve road, (3)Dinshaw Vachcha road	Churchgate junction
7	Veer NAriman road	Netaji Subhash road	Horniman Circle	Churgate Hutatma Chauk	3,680	80 and 120		(1)Netaji Subhash road, (2) Maharshi KArve road, (3) Jamshetji Tata road, (4) Mayo road, (5) Mahatma Gandhi road	(1)Netaji Subhash road junction. (2) Churchgate junction. (3)Mayo road junction
3	.,.	Junction of M.G. road and Mayo road	V.T. Junction	Azad Maidan	1,000	60		(1)Dr.D.N.road. (2)Mahapalika road, (3)M.G.road	V.T.Junction
9	Walchand Hirachand marg	Nagar Chauk, V.T	Ballard road	Nagar Chauk, G.P.O.,Indira dock, Yello gate	3,610	80 and 60		(1)Mint road, (2)P.De'Mellow road, (3)Shahid Bhagatsing road. (4) Nicol road.	(1)G.P.O., (2)P.De'Mellov road junction
10	MInt road	Fort Market	G.P.O	Ballard Pier	900	80			
11	Mahapalika marg	Nagar Chauk	Dhobi Talao	Azad Maidan and Esplanade Court	2,240	100		(1)D.N.road, (2)M.G.road (3)Lokmanya Tilak road	Nagar chauk
12	Lokmanya Tilak Marg	Dhobi Talao	P.De'Mellow road	Crawford market	4,400	100	Carnac bridge	(1) D.N.road, (2)Palton road, (3)Abdul Rehman street, (4) Mohammad Ali road	Crawford market junction
13	Ist Marine Lines road	Maharshi Karve road	Dhobi Talao	Dhobi Talao	1,000	60		(1) M.G.road, (2)Maharshi Karve road.	Vasudeo Balwant Chauk
14	Drainage	Arthur road	Clerk road	Tulsiwadi &	2,960	80		Tardeo road	
15	Channel road Keshavrao Khade marg (Clerk road)	haji Ali	N.M.Joshi marg	Mahalaxmi Race Course and Gadge Maharaj		80	Mahalaxmi bridge	E.Moses road	Gadge Maharaj Chauk
16	Dr.E.Moses road	Worli Naka	Gadge Maharaj Chauk	Chauk Race course	7,440	80	Mahalaxmi bridge		(1) gadge Maharaj Chauk, (2)Worli Naka
17	Mori road	Senapati	Mahim	Mahim	2,000	60		L.J.road	L.J.road
18	Yusuf Meherally road	Bapat marg Mumbaidevi road	Causeway P.De'Mellow road	Masjid station	3,520	60	Masjid bridge	(1) Abdul Rehman Street, (2)Mohammad Ali road.	Junction Masjid junction
19	Maulana Abdul Gafarkahn road	Dr. Annie Besant road	Worli village	Worli Seaface	9,200	120		(1)Worli road no.10, (2)Dr.Annie Besant road	Atre Chauk

				7					
20	Fergusson road	Worli Naka	N.M.JOshi mar	Worli and Lower Parel	4,700	40		(1) Senapati Bapat marg, (2) N.M.Joshi marg	
21	Pandurang Budhkar marg (Globe Mill Passage)	Dr.A.Besant road	N.M.Joshi marg	Worli	4,250	80			
22	N.C.Kelkar road	S.K.Bole road	Lady Jamshetji road	Dadar (West)	3,200	60		Ranade road	Shivaji Park
23	Bhawanishankar road	S.K.Bole road	Gokhale road	Dadar	3,000	60			
24	Tilak road	N.C.Kelkar road	G.D.Ambekar road	Dadar and Wadala	4,000	60	Tilak Bridge	Babasaheb Ambedkar road	Khodadad circle
25	Samaldas Gandhi marg	Maharshi Karve orad	Janjikar street	Kalbadevi and Grigaum	2,600	60		(1)Jagannath Shankar shet road (2)Kalbadevi road.	enere
26	Maulana Azad road	Kika Street	Gadge Maharaj Chauk	Null bazar and Nagpada	8,900	60			Nagpada Junction
27	Jehangir Boman Behram roaod	Tardeo	Maulana Azad road	Bombay Central and Nagpada. Tardeo, Golpitha	4,400	90	Bellasis bridge	(1)Anandrao Nair road, (2)Maulana Azad road, (3) Foras road	Bombay Central
28	Patthe Bapurao Street (Falkland road)	tardeo	Kika street	Tardeo, Golpitha	6,400	60 & 40	Falkland bridge	(1)Dadasaheb Bhadkamkar marg, (2)R.S.Nimbkar road,	D.B.marg junction
29	R.S.Nimbkar marg (Foras road)	Falkland road	Jehangir Boman Behram road		2,200	60		(1)Falkland road, (2)J.B.Behram road	
30	Dadasaheb Phalke road	Dr.Ambedkar road	Kohinoor road	Dadar	3,200	50		(1)Naigaum cross road	
31	Mirza Galib Street (Clare road)	Maulana Azad road	Byculla bridge Nagpada	Nagpada	1,900	80	e	(1)j.B.Behram road, (2)Maulana	Byculla bridge junction
32	Lakhamsey Napoo road	Kohinoor road	Bhandarkar road	Matunga and Dadar	4,800	60 & 70			
33	Sitaladevi temple	Veer Savarkar marg	Senapati Bapat marg	Mahim	1,100				Lady jamshetji road junction.
34	Rao Bahadur S.K.Bole road	N.C.Kelkar	Veer Savarkar road	Prabhadevi and Dadar	2,650	60		(2)Gokhale	Gokhale road junction
35	Prabhadevi new road	Gokhale road	Veer Savarkar road	Prabhadevi	2,400	50		Appasaheb Marathe marg	
36	Sayani road	Vere Savarkar road	Senapati Bapt road	Prabhadevi	3,000	80& 60		(south), (3) Shankar Ghanekar marg.	(1)Senapati Bapat marg junction, (2)Gokhale road junction
37	Acharya Donde marg	Babsaheb Ambedkar road	R.A.Kidwai road	Parel	5,000	80		(3)Thackersey Jivaraj road,	
38	Bal Gangadhar Kher marg	Walkeshwar road	Kemps Corner	Hanging garden	7,280	60,40 & 30			Gowalia Tank road junction
39	Dattaram Lad road	Chincpokli sation	Reay road	Chincpokli and Lalbaug	2,900	60		(1)Babasaheb Ambedkar road	Kala Cahuky
40	Road No.19, Scheme 6 of Sion	Sion road,No.26 A and B		Dharavi	2,290	100	Sion Hospital bridge	(1)Bandaji road extension	Синику
41	M.Palav marg (Currey road)	N.M.Joshi marg	Babsaheb Ambedkar road	Lower Parel, Lalbaug	1,700	60	Curry Road Bridge	(1)Babasaheb Ambedkar road	Bharatmata junction

	,			,		,	,			
42	J.Bhatnakar marg	Senapati Bapat marg	Babasaheb Ambedkar road	parel	2,330	60	Elphinstone bridge	(1)Babasaheb Ambedkar road	Parel T.T	
43	Appasaheb Marathe marg	New Prabhadevi road	Dr.Annie Besant road.	Prabhadevi	7,400	80			Century Bazar	
44	Thackersey Jivraj marg	jakaria Bunder road	Golanji Hill	Sewri	N.A.	40		Acharya Donde marg.		
45	Choitram	extension Ghatkopar	V.N.Purao	Chembur	5,280	120				
16	Ghatkonar	Mahul road Rajawadi 7th road	marg Eastern Express highway	Ghatkopar	3,600	60 & 78		(1) V.N.Purao road, (2) C.Gaidwani road	Eastern Express highway junction	
17	Mahatma Gandhi Road	Rajawadi 7th road	Lal Bahadur Shatri marg	Ghatkopar	4,700	60 &78			Eastern Express highway junction	
18	Dayanand Saraswati marg	Chembur staion	V.N.Parao road	Chembur	2,360	80			janeaon	
49		V.N.Purao road	Kalina	Chembur and Kurla	15,840	25 & 45	* (Since there is no bridge over Railway near Kurla station throught vehicular traffice is not possible))	(1)Eseatern Express highway, (2)Lal Bahadur Shastri marg.	Lal Bahadur Shastri marg.junction	
50	Mahatma Gandhi road	Mulund railway station	Rajendra Prasad road	Mulund (W)	3,475	60	7	Devidayal road	Panchrasta	
51	Netaji Subhash road	Muluns	Rajendra Prasad road	Mulund (W)	3,140	60		Rajendra Prasad road		
52	Rajendra Prasad road	Netaji Subhash road	Lal Bahadur Shastri marg	Mulund (W)	5,300	60		(1)Netaji Subhash road, (2)M.G.road		
53	Devidayal marg	M.G.Road	Lal Bahadur Shastri marg	Mulund (W)	3,380	60				
54	Turner road	bandra station	Perry road	Bandra	4,000	50 & 90		Swami Vivekanand road	S.V.road junction	
55	Hill road	S.V.road	Mount Mary road	Bandra (W)	6,200	40		Waterfiled road	S.V. road junction	
56	Perry road	Turner road	Mahadeobhai Desai road	Bandra (W)	2,600	50			,	
57	Linking road	S.V.road	Juhu road	Bandra (W), Khar (W)and Santacruz (W)	7,600	60	State	(1)30th Khar road, (2) 1st Kahr road, (3)South Avenue road, (4)Juhu road	S.V.road junction	
58	Byramjee Jeejibhoy road	Hill road	Badra Bandstand	Bandra sea- shore	4,000	30		(4)Juna roud		
59	Mahadeobahi Desai road(Carter road)	Perry road	Khar Danda	Bandra sea- shore	8,000	30		Perry road		
60	Waterfiled	Hill road	Linking road	Bandra (W)	3,100	40		(1)TUrner road, (2)30th Khar road		
61	1st Khar road	Carter road	Khar station	Kahr (W)	6,000	50		(1)Linking road, (2)Ambedkar road		
62	South Avenue road	S.V.Road	Khar Danda	Khar (W)	2,650	40		Linking road	Khar junction	
53	Church road	Khar subway	S.V.road		900	60	Subway			
64	Vaikunthbhai Mehta road	S.V.road	Juhu road	Vile-Parle (W)	4,620	100				
65	Andheri- Sahar road	Andheri railway station	Sahar	Andheri (E) and Sahar	12,210	70		(1)M.Vasanji road, (2)Western Express highway, (3)M.G.road, (4) Chakala road	Western Express highway junction	
66	Dashrathlal Joshi marg	Vile-Parle station	S.V.road	Vile Prale (E)	1,500	60				
67	Marol- Maroshi road	Mathuradas Vasanji road	Arey colony	Marol andMaroshi	10,560	40				
68	Nehru road	Santacruz station	Military cantonment	Santacruz (W)	7,920	100		Western Express highway	Western Express highway junction	
					1	_	I.		y 2 2 2 0 1 1	

69	Quarry road	S.V.road	Malad quarry	Malad (E)	9,570	60		Western Express highway	
70	Mahakali Caves road	Mathuradas Vasanji road	Mahakali caves	Andheri (E)	9,240	40 & 60		M.I.D.C road	
71	Motilal Nagar road	S.V.road	Motilal Nagar	Goregaon (W)	3,960	60			
72	M.G.road (Goregaon)	S.V.Road		Goregaon (W)	N.A	60			
73	Malad Pushpa Park road	Malad Station	Pushpa Park	Malad (E)	N.A	50			
	Eksar road	Gorai road	Eksar village	Borivali (W)	N.A	40			
75	M.G.road and Charkop	S.V.Road	Charkop	Kandivali (W)	11,880	80			
76	Akurli road	Kandivli station	Western express highway	Kandivili (E)	3,690	60			
77	M.G.road (Borivali)	Borivali station	Western express highway	Borivali (E)	3,300	60			
78	Kausturba road	Borivali station	Western EXpress highway	Borivali (E)	2,000	40			
79	Mahatama Gandhi road and Ramkrishna Chemburkar marg	LKal Bahadur Shastri marg junction	Burmahshell refineries	Ghatkopar and Chembur	8 km		Railway bridhges near Ghtkopar and hembur railway statoins	marg) (6) V.N.Purao marg (7)S.G.Barve (8) Chotiram Gidwani marg.	(2) Shraddhanand road junction (3)Jawahar road junction (4) EXpress highway junction (5) Chembur Govandi road (6)Chembur naka

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TABLE NO 10 MAJOR BRIDGES IN GREATER BOMBAY 1973-74

Serial no		Name of the roads on which the bridge is constructed	Names of the roads that bridge links	Area in which located	Structural aspec	ts			Cost of construction (in Rs.)	Year of construction	Year of opening	Remarks
					Туре	Lenghth	Height	Width				
1	Corner Fly Over	(Kemp's Corner Junction) Dr. G.Deshmukh amrg and N.S.Patkar marg		Cumbala Hill	Prestressed concrete construction	910'	17'	49'	14.5 lakhs	1-10-64 to 13-4-65	14-4-65	
2		Samaldas Gandhi marg, E2 road,H Road ,N Subhash road, M.Karve road	Samaldas Gandhi marg, E2 road, H road, N.Subhash road		Prestressed concrete construction	2050'	22' on Rly 18' on road	441	53 lakhs	1-11-64 to 2-11-67	3-11-67	
3		Over Western Railway tracks	Swami Vivekanad road and Teli gally	Andheri	N.A	700'		90'	66,53,205	1965 to 1971	1972	
4		Swami Vivekanad road	Swami Vivekanand road and Akurli road	Poisar	Arch masonary			90'	4,95,657	1971	1971	
5	Oshivara Bridge	Do.	S.V.Road	Oshivara	Arch masonary			90'	22,44,947	1972	1973	
6	Dahisar River Bridge	S.V.Road	S.V.Road	Borivali East	Arch masonary	125'	25'					
7	Ghatkopar Bridge	Connects Mahatma Gandhi road on each side	M.G.Road	Ghatkopar	(Not kn <mark>ow</mark> n bein	g Rai lway	Bridge	•)				
8	Bridge	Mahul Ghatkopar road	V.N.Purao marg (NOrthern area beyond Kurla- Mankhurd Rly)	Deonar	R.C.C	400mts	5.5M over rail		27.43m	52,00,000	1973-74	
9		Bombay- Pune road	V.N.Purao marg and Thane- Belapur road	Near Mankhurd	(a)Foundation:-(i)2.5 meters dia. well (ii)2.15 meters dia.Hochstrasser type piles anchored as rock. (b)Substructure- Precast prestressed concrete.	l .	: 33mts	13.4mts	5024 crores including approches	1971	27Jan1972	(1) 39 sapns varying from 36 meters to 53.4 meters. (2)high tidal level +13.00mts (3) Maximum depth of water 17.7 meters (4) Maximum depth of oundations 19 mts. below bed, (5)Navigational structure 901 mts. above high tide level.

Recently a new R.C.C.railway over-bridge is conmstructed at the north of Ghatkopar railway station. It connectsLal Bahadur Shastri marg and Eastern Express highway. A bridge between Bhandup and Mulund Station railway station is also constructed. It connects Lal Bahadur Shastri marg and Eastern Express Highway.

TABLE NO.11
OTHER IMPORTANT BRIDGES IN GREATER BOMBAY, 1973-74

Seria	Ward	Name of Bridge	Location and escription	
No.		l l		
1	А	Carnac bridge	This bridge is located at Lokmanya Tilak road (Carnac road). It goes east-west over the Central Railway tracks. The bridge is maintained by railway authorities.	
2	В	Elphinstone bridge	This bridge was constructed by the Railways in 1868, connecting Sardar Vallabhbhai Patel road and P. De'Mellow road. It was named after the late Governor of Bombay, Mountstuart Elphinstone.	
3	С	Masjid bridge	It was constructed by Railways in 1868, connecting Yusuf Meherali road and P. De'Mellow road. It is named after Jakeria Masjid.	
4	С	Bellasis bridge	This bridge connects Tardeo junction with Dr. Dadasaheb Bhadkamkar marg.	etteers
5	D	Falkland bridge	This bridge connects Tardeo T. T. with Dr. Dadasaheb Bhadkamkar marg.	
6	D	Frere bridge	It connects Nana Chowk with Dr. Dadasaheb Bhadkamkar marg junction, Maulana Shaukat Ali road.	
7	D	Kennedy bridge	This bridge connects Nana Chowk with Sardar Vallabhbhai Patel road and Mama Parmanand marg.	
8	D	French bridge	This bridge connects Sardar Vallabhbhai Patel road with Nyayamurti Sitaram Patkar marg.	

9	D	Rridge	This bridge connects Sardar Vallabhbhai Patel road with Dr. N. A. Purandare marg.	
10	D	Pedestrian foot over bridge at Charni road station.	This bridge connects Charni Road with Dr. Bhalerao marg	
11	D	known; as Patel	This bridge connects Dr. N.A. Purandare marg with Mathew road.	
12	E		From N. M. Joshi marg to Dr. Ambedkar road.	
13	E	Byculla bridge	From Sir J. J. road to Seth Motishah lane.	
14	E		Joining Dr. Babasaheb Ambedkar road and Reay road.	
15	E	Nesbit Road bridge	From Sir J.J.road to Mazagaon road junction	
16	E	Nawab Tank bridge	From Reay road to Mazagaon Pakhadi road.	
17	F/S		From Elphinstone road (Parel) to Senapati Bapat marg (junction with Sayani road).	
18	F/S	Curry road bridge	From Elphinstone road (Parel) to Senapati Bapat marg (junction with Sayani road).	ottoore
19	F/S	Sane Guruji road bridge	from Sane guruji marg to N.M.Joshi marg (above Central Railways Chinchpokli station)	elleers
20	F/N	Tilak bridge	Khodadad Circle to N. C. Kelkar road. This is a flat girder bridge passing over Central and Western railway lines. It forms a very important link joining south and west parts of Bombay with eastern area.	
21	F/N	100 ft. wide bridge over Central Railway lines starting from Sion road by the side of Lokmanya Tilak Memorial General Hospital.		

22		Railway lines starting from	This bridge with approaches was completed in 1964. At present it leads to Raoli area, Central Government Colony and Antop hill, Wadala.
23	F/N	Sion Station bridge	This bridge joins Sion with Agra road, Dharavi and Eastern Suburbs.
24	G/S	Lower Parel bridge	Opposite Lower Parel Railway station between Senapati Bapat marg and Currey Road.
25	G/S	Currey Road bridge	Opposite Currey Road Railway station joining N. M. Joshi marg.
26	G/S	Chincpokl <mark>i</mark> bridge	Opposite Chinchpokli Railway station joining with junction of N. M. Joshi marg and Sane Guruji marg.
27		Mahalax <mark>mi</mark> bridge	Opposite Mahalaxmi Railway station between Dr. E. Moses road and Jacob circle.
28	G/N	Mahim Causeway bridge	This bridge is over the creek dividing the city and suburbs on west side.
29	L	C.S.T road bridge	This bridge is between Lai Bahadur Shastri marg and Kurla Railway station over S. G. Barve marg (west). This bridge makes Old Agra road a continuous one to join Lai Bahadur Shastri marg which is the trunk road.
30	L		This bridge connects Kurla and Andheri and serves the whole of the Industrial Complex along Kurla-Andheri road, Marol village, Chandivli and Saki Naka.
31	М	Eastern Express Highway bridge	This bridge is on Kurla- Mankhurd Railway track, near Chembur level crossing. It is steel framed structure constructed in 1961-62.

32	N	Bridge over the nalla at Mahatma Gandhi road near cemetery adjoining sewage purification and pump-house, Ghatkopar.	This bridge was widened and reconstructed in 1969-70.	
33	N	Bridge over the waterpipe line, Lai Bahadur Shastri marg (Agra road), Ghatkopar.	This bridge is near Municipal Water Department and Workshop, Ghatkopar.	
34	Р	Ram Mandir road bridge across Ram Mandir <i>nalla,</i> Goregaon	The length of this bridge is about 100 feet and width 40 feet	
35	Р	Marve road bridge	This is constructed across a creek	
36	R	Charkop bridge at Kandivli (west)	This is on main Charkop road. Present width is about 14 feet. This is a masonry bridge, constructed during pre-Independence era.	
37	R	Dahanukar wadi bridge on Mahatma Gandhi road, Kandivli (West).	This is on Poisar river. Present width is about 36 feet. Pillars of masonry superstructure.	
38	R	Bridge behind Fish market, Kandivli (West).	This is about 12 feet wide. Pillars are of masonry.	
39	R	Bridge on Swami Vivekanand road across Dahisar river near Daulatnagar, Borivli (East).	This is about 18 feet wide old masonry bridge constructed during pre-Independence era.	etteers
40	R	Portuguese bridge on Dahisar river, Dahisar (West)	this is an old bridge of masonry for pedestrain traffic only.	
		Bridge at Gorai Creek, Borivali (West)	This is 13 feet wide constructed newly on old site	
42	R	Bridge on Dahisar river, Borivali (East)	This is 14 feet wide bridge. Pillars are of masonry and superstructure is R.C.C.slab	

The following statement indicates the works in progress with revised estimated cost, expenditure incurred in IVth Plan and spill over to Vth Five-Year Plan (Latest information not available.): —

Spill over works in the Vth FiveYear Plan	Revised estimated cost (Rs. in crores)	Expenditure incurred in th IVth Plan(Rs. in crores)	Spill over the Vth Plan (Rs. in crores) April 1974 to March 1979
(I) West Island Freeway including grade separated junction at Chaupati, Malabar Hill tunnel, reclamation and sea wall, etc. for portion between Chaupati to Haji Ali	11.50	1.28	6.00
(II) Link roads:— (a) Bandra- Dharavi (b)Santacruz- Chembur (c)Chembur- Mankhurd (d)Andheri- Ghatkopar (e)Jogeshwari- Vikhroli (f)Goregaon- Mulund	8.28	1.45	3.50
(III) Engineering Surveys	0.21	0.08	0.10
Total	19.99	2.81	9.60
(IV) Sion-Mahim link road	0.75	0.25	0.50
Grand Total	20.74	3.06	10.10

⁽I) West Island Freeway: The work of sea wall and reclamation of land along the shore from Petit Hall to Haji Ali was started in IVth Five-Year Plan. Few hectares of land of the total of 48 hectares has been reclaimed so far. Nepean Sea road over bridge is also completed.

(II) Link roads: The details of link roads according to the Wilbur Smith Plan are as under:—

		Cost
Link road	Length in km.	(Rs. in lakhs)
(i) Goregaon- Mulund	12.38	175.00
(ii') Jogeshwari- Vikhroli	10.43	74.11
(iii) Andheri- Ghatkopar	8.26	144.00
(iv) Santacruz- Chembur	6.03	56.37
(v) Bandra- Dharavi	2.54	49.00
(vi) Sion-Mahim	2.58	74.84

Besides, there was a provision of Rs. 80 lakhs for other purposes during the IVth Five-Year Plan.

- (a) Bandra-Dharavi link road: The work including the bridge across Mahim creek was completed and the road was opened for traffic in January 1973.
- (b) Santacruz-Chembur link road : Stage I of 2466 metres from Western Express Highway to Agra Road. There will be one over bridge in this section near Kurla railway station.

Stage II of 160 metres from Western Express Highway to C.S.T. Road. The work is in progress.

- (c) Chembur-Mankhurd link road: The work of the road is in progress though it was expected to be completed by 1976.
- (d) Andheri-Ghatkopar link road : Stage I of 1.4 km. from Eastern Express Highway to Agra road. The work of 1 km. is completed.

Stage II—From Western Express Highway to Agra road—The work is in progress.

- (e) Jogeshwari-Vikhroli link road: Stage I (1.4 km.) from Eastern Express Highway to Agra road, and Stage II from Western Express Highway to Agra road—The work is in progress.
- (f) Goregaon-Mulund link road : Stage I (2 km.) from Eastern Express highway to Agra road—work is in progress.

Stage II-A—Western Express Highway to Film City—The work is completed.

Stage II-B—National Park—To maintain the vegetation in National Park it is decided to drop this work.

Stage II-C—From Agra road to National Park—This portion is also dropped in view of the decision to maintain forest in National Park.

- (III) Engineering Surveys: All majoi surveys for the first phase work are completed.
- (IV) Sion-Mahirn link road (2.47 km.): The length of 0.67 km. from Dharavi to Bandra-Dharavi link road is completed.

Provision of New Works in Vth Five-Year Plan: The following new works were proposed to be taken up in Vth Five-Year Plan. The estimated cost and the Plan provisions during the Vth Five-Year Plan are indicated below:—

(Rs. in crores)

New works during Vth Five-Year Plan	Estimated cost	Provision in Vth Five Year Plan
(I) East Island Freeway including Carnac Bunder Flyover, Sewree Flyover and elevated portion between Wadi Bunder and Victoria bridge.	15.30	1.60
(II) Sewree Expressway	4.70	1.00
Total	20.00	2.60

Bridges under the Bombay Road Development Plan: The following major bridges are proposed to be constructed in the Bombay Road Development Plan:—

- (a) Railway over bridges: Across Central Railway (joining Eastern Express Highway and Agra Road)—
- (i) Santacruz-Chembur link road—north of Kurla station. (Construction of this bridge is in progress.)
- (ii) Andheri-Ghatkopar link road—north of Ghatkopar station.
- (iii) Goregaon-Mulund link road—between Bhandup and Mulund station.

Across Western Railway (joining Mahim and Dharavi)— (i)Sion-Mahim link road—north of Mahim station.

- (b) Bridges on roads:
- (i) Bandra-Dharavi link road—Mahim creek bridge. (ii) Nepean Sea over bridge—Nepean Sea road bridge over existing road for the facility of Malabar Hill tunnel and West Island Freeway.
- (c) Flyovers I Grade separated Junctions (Construction of these bridges is in progress.) (in numbers):
- (i) East Island Freeway—1 to 11.
- (ii) West Island Freeway—12 to 21.
- (iii) Central Island Freeway—22.
- (iv) Eastern Express highway—23 to 27.
- (v) Western Express highway—28 to 34.
- (d) Underground Roadways:(Construction of these bridges is in progress.)
- (f) Malabar Hill tunnel.
- (ii) Subway on Central Island Expressway near Sion Circle.

Of the above mentioned bridges included in the Bombay Road Development Plan, some have been completed and are opened for traffic.

Reappraisal of Bombay Road Development Scheme: Due to a number of changes that have taken place since the submission of the report by M/s. Wilbur Smith and Associates in 1963, such as, land use plan of Bombay, proposed New Bombay, proposed development of Bombay Metropolitan Region, proposed Bombay-Uran link, proposed Mass Rapid Transit System, etc., it became necessary to have a re-appraisal of the Bombay Road Development Plan and integrate it with the Plan for Mass Rapid Transit System proposed by Railway organization.

The work of carrying fresh traffic studies of the Greater Bombay and the Bombay Metropolitan Region was entrusted by the Government to Central Road Research Institute, New Delhi. The targets for the Bombay Road Development programme are likely to be amended from time to time based upon the recommendations that may be made by the C.R.R.I., New Delhi in their final report after completion of the traffic study.

Truck Terminal Project, Wadala: In order to reduce the transport load and the traffic congestion in Bombay and particularly in the busy areas, the Bombay Metropolitan Regional Development Authority (BMRDA) has prepared a scheme to establish a truck terminal at Wadala. The BMRDA has selected the premises near Wadala, popularly known as Wadala-Anik. The scheme for truck terminal at Wadala-Anik was sanctioned by the Government on 22nd April 1976. A open space of about 125 acres (excluding the area of entry roads) is reserved for this scheme. Though it is away from the business area it will be convenient to the truck owners and the booking agents whose offices will be shifted to the proposed truck terminal area as new markets will be nearer. The proposed area of the Truck Terminal is at the north-end of the Eastern corridor and will be easily connected to the East Island Tollway after its construction. As the proposed area of the

Truck Terminal is located near the junction of the Eastern Express Highway and the Sion-Panvel road it can be easily joined to these roads. Nearly 75 per cent of the total truck transport is carried out by these two roads only. Besides, the trucks from the Western Express Highway can reach the terminal easily by the linking roads. The Municipal Corporation has decided to construct a new road from Wadala to Mahul-Ghatkopar road. After the construction of this road truck terminal area can be easily connected to South Bombay.

To the north of the truck terminal area it is proposed to reserve an area of 100 acres for the construction of warehouses and godowns.

The proposed area of the truck terminal is shown below:—

Land use	Proposed area (acres)	Percentage to total proposed area
(1)Plots reserved for truck companies	47.18	25.51
(2) Combined space for parking trucks and internal roads	80.63	43.59
(3)Space for Petrol pumps, garage and vehicle weighers	9.82	5.30
(4)Area under architecturally controlled building blocks.	16.35	8.84
(5)Organised greeneries	31.00	16.76
Total	184.98	100.00

The truck terminal will be beneficial to the truck transport owners also as most of the big markets in Bombay are located within the radius of about 10 km from the site.

HARBOUR

The port of Bombay has traditionally been known as the "Gateway of India" Located in the bay between the mainland on the east and the island of Bombay on the west, the port is endowed with one of the finest natural harbours. Bombay's central position on the west coast of India, its advantageous position with respect to the Suez Canal and Europe and its accessibility to a vast hinterland by three broadguage railways running north, east and south and a network of National and State highways, have made her the main distributing entrepot for the overseas trade from the western and central region of India. Bombay's claim as the premier port of India is based on the fact that it is the leading oil port with over 50 per cent of the oil traffic of India, the leading general cargo port with about 38 per cent of the traffic, the leading port for import of food-grains with 35 per cent of the traffic, the leading port for overseas passenger traffic and the main base of the Indian Navy.

The harbour proper, which excludes the open sea within port limits south of Colaba Point, extends over 18,000 hectares in area and provides secure and ample shelter for shipping throughout the year. The approaches to the harbour are well lighted with the unattended outer light vessel (Bombay floating light), visible from 15 km. The Prongs Lighthouse to its north is visible from 27 km. and the Kennery Lighthouse to the south is visible from 29 km. The Port Trust pilot vessel is generally stationed at the entrance of the harbour. The entrance of the harbour, which is approached from the south-west between Prongs Reef off Colaba Point and the Thull Reefs lying off the mainland to the southeast, is at a distance of about 9 km. About 19 km. in length, the harboifcr runs south-west and north-east and is bounded on the north by the Trombay Pir Pau area of the city. Proceeding up the harbour to the docks, a distance of about 7 km. from the entrance, the mainland, with the Karanja Hills in the foreground, lies to the east, and the city to the west, the width of the harbour narrowing down to about 6 km. Further up the harbour and to the north-east is the Butcher's Island. About 4 km. to the north and running east-west lie Trombay and Pir Pau, which mark the northern extremity of the harbour. To the east of Pir Pau are the wide mouths of two large tidal creeks, the Thane creek and the Panvel creek.

The port limits falling within the jurisdiction of the B.P.T. enclose a water area of approximately 180 sq. km. The southern and western port limits are delimited by a line starting from Malabar point on the western foreshore of the city and running southwards to the Bombay floating light (About 8 km. south-west of Prongs Reef Lighthouse) and thence in a south-easterly direction to Kennery (Khanderi) Island and the village of Navegaon on the mainland. The northern and eastern limits of the port are delimited by a line starting from the eastern tip of Trombay Island and running across Thane Creek, to the northern tip of Nhava Island and thence southwards along the coast line and across Dharamtar creek, terminating at Navegaon.

The tidal variation in the harbour is mainly semi-diurnal with an appreciable diurnal element. The mean range of tides is 12 feet at springs. The normal maximum currents inside the harbour are about 2 to 3 knots, though the strongest currents which run between Elephanta and Butcher's Island have a maximum velocity of 4 to 5 knots. The Arabian sea is subject to infrequent severe tropical revolving storms known as '

Cyclones', which sometimes pass over Bombay in May/June and October/November. The last cyclonic storm which passed directly over Bombay was in 1948, when a wind speed of over 150 km/ hour was recorded in the Bombay suburbs. The main navigational harbour channel is, for the greater part, a natural deep water fareway. It has a depth of 9.9 m. at mean low water springs. The northern half of the channel has been deepened to 10 m. and the southern half has also been dredged. With a mean high water neep tide of 3.3 m. the channel is adequate to meet the requirements of the large number of cargo vessels, passenger ships and deep drafted tankers visiting the port.

Brief history of the Harbour (For a detailed history of the Harbour and Docks see Gazetteer of Bombay City and Island, Vol. I,1909, pp. 47-64.): Although the port of Bombay, as we know it today, is a comparatively modern creation, its magnificent harbour which is the key-stone of its prosperity has held a pride of place for centuries. As early as the beginning of the 17th century, though the trade of Bombay Islands, as the place was then known, was inconsiderable, the natural advantage of the harbour as a maritime base and a haven for shipping of the western sea-board of India were realised and there was considerable manoeuvring for its occupation. In 1652 Surat Council of the East India Company, realising the geographical advantages of the port, urged its purchase from the Portuguese. Their wish was gratified nine years later, when, under the Marriage Treaty between Charles II of Great Britain and the Infanta Catherine of Portugal, the port and island of Bombay were transferred to the King of Great Britain. In this treaty the place was primarily described as a port and it was as a port that the place developed in the next two hundred years.

In 1668 the port and island were transferred by a Royal Charter to the East India Company. The company immediately undertook measures for the encouragement of trade, such as the construction of a Custom House, a warehouse and a mole capable of berthing small ships. The port had good anchorage and was then described as the fairest, largest and securest in western parts of India, where a large number of ships could safely take refuge throughout the year. It became the first Port of call for the company's ships from Europe to Madras and Bengal. The 18th century saw the development of a flourishing ship building industry at the port. The first dry dock, projected so far back as in 1686, actually came into being in 1750. By 1811, four more dry docks, the largest having a capacity of 286 ft. by 63 ft. with a depth of 23 ft. were added. In 1775 the shipping facilities were described as " two marine gates with a commodious wharf and cranes built out from each gate, besides a landing place for passengers daily ". Extensive reclamations on the western foreshore of the harbour were commenced in 1858 (For details see account of Reclamation in Chapter 1, and for detailed history, see Ibid., pp. 64-70 (1909).).

Up to 1813, the foreign trade of Bombay was a close preserve of the East India Company, but in that year the company's commercial monopoly was ended by an Act of the British Parliament. This resulted in a great spurt in the trade of the port. By 1835, the foreign trade of the port was valued at seven million pounds sterling.

The age of steam dated from about 1815. The first steamship to operate in Bombay waters was the *Hugh Lindsay* of 411 tons, which sailed on her maiden voyage to Suez on March 20th, 1830. By 1838 regular monthly communication between Bombay and England by the overland route *via* Suez and Alexandria was established, the period of the journey being 43 to 46 days. By 1843 Bombay had been brought within 30 days of London and two years later a fortnightly mail service was introduced.

The Table No. 12 shows the statistics of average number of ships entered and cleared from the port from 1801 to 1841.

The history of Bombay in the second half of the 19th century is a remarkable record of progress in every direction. Railway communication with the interior was opened up in 1853. Seven cotton mills commenced working between 1854 and 1860, steam coastal ferry services were inaugurated in 1866 and the opening of the Suez canal to traffic in 1869 revolutionised the maritime trade of Bombay. Meanwhile, the lack of proper dock accommodation was beginning to be felt severely.

In the following is given a description of various docks :

DOCKS

Sassoon Dock: This is the oldest wet dock of Bombay situated at Colaba which was opened for traffic in 1875. Formerly it was a small dock excavated out of solid rock and constructed by private enterprise. During 1875 it had a water area of only 1.4 hectares. It is a tidal dock, with a quay length of 430 metres served by an entrance of 12.2 metres width and 6 metres depth on sill HWOST(HWOST—High Water Over Springs Tides.). It is maintained at 1.82 metres below Chart Datum. The original gates of this dock have been removed and it is now used as fish landing dock. Now it has a water area of 3 1/2 acres and limited facilities for five ships of 1000 tons. Its quayage is 1758 feet.

Prince's Dock: As the cargo and passenger vessels grew in size and draft, larger docks were needed, the Prince's dock, with a water area of 12.15 hectares capable of accommodating vessels of 6.4 metres draft was constructed in 1879 and opened for traffic on the 1st January 1880.

TABLE No. 12 AVERAGE ANNUAL NUMBER OF SHIPS WHICH ENTERED AND CLEARED FROM THE PORT OF BOMBAY

Period		Entered					Cleared					
	Fore	eign	Coas	sting	Total		Foreig	n	Coas	sting	Tot	tal
	Vessels	Tons	Vessels	Tons	VesselsTons		VesselsTons	Tons	Vessels		Vessels	Tons
1801 to 1810	58	29,640	66	27,435	124	57,075	72	36,205	60	23,684	132	59,889
1810 to 1820	81	37,890	38	13,593	119	51,483	67	33,672	51	18,201	118	51,873
1820 to 1830	116	51,137	27	10,721	143	61,858	97	44,875	45	16,284	142	61,159
1830 to 1841	165	74,620	37	13,400	202	88,020	157	70,679	56	19,824	213	90,503

There are 10 berths with a berthage of 1580 metres inside the wet basin and 3 berths with a berthage of 213.5 metres along the outer wall. The jetty is located at one end of the harbour wall with a berthage of 213 metres' length. It is served by an entrance of 20.1 metres and is maintained at 4.7 metres. Its depth is about 9 metres on sill HWOST. Bottom of the dock is 1 metre below the sill. The dock was constructed with a murum and puddled clay coffer dam, the rubble masonry being quarried at Elephanta. Granite was obtained from South Wales and the sand from Panvel river. The Merewether dry dock admeasuring 180 metres in length and 20 metres in width was added as part of this dock and opened in 1891. So rapid was the growth of Bombay's trade in 1880's that within 18 months of its opening, the Prince's dock was found insufficient to meet the needs of shipping. Vessels can also enter or leave this dock for about three hours before HW to HW. This dock is connected by a communication passage, and has a single pair of Mitro gates. It is a semi-tidal dock.

Victoria Dock : As the Prince's dock was found insufficient to meet the needs of the shipping, the Victoria dock with a water area of 10.12 hectares and a capacity to accommodate vessels of 7.3 metres draft was constructed in 1885-88. It has a quay length of 1725 metres in 13 berths, served by an entrance of 24.40 metres width and is maintained at 5.2 metres. The depth of this dock is 9.14 metres on sill HWOST. Bottom of dock is 3 feet below the sill. This is a semi-tidal dock, connected by a communication passage, and has a single pair of Mitro gates.

Indira Dock : With the growth of shipping and advent of vessels of deeper draft, the Prince's dock and the Victoria dock were found inadequate and accordingly, at the beginning of the present century, the Port Trust authorities decided to construct a new dock, the Alexandra dock (*It was renamed as the Indira dock after Mrs. Indira Gandhi, Prime Minister of India, in 1972.*) of larger size, with deeper berths. The work of construction of the new dock, to the south of Victoria dock was started after the monsoon of 1904. It took ten years to complete and its cost amounted to about Rs. 9 crores. It was opened on the 21st March 1914, almost on the eve of the First World War, the first ship to enter the dock being *S. S. Lhasa* of 2185 GRT (*GRT=Gross registered tonnage.*). It had a water area of 20 hectares, 17 berths in the wet basin and 6 berths along the harbour wall including three ferry wharf berths. It was equipped with an entrance lock admeasuring 228 metres in length and 30 metres in width, and the dock was designed to accommodate vessels drawing upto 9.14 metres of water in the wet basin. A second dry dock, called the Hughes Dry dock, admeasuring 304.8 metres in length and 30 metres in width and divisible into two compartments, was also constructed as a part of Alexandra dock, running parallel to the entrance lock.

The Ballard Pier, constructed at the same time as part of the Alexandra dock, was a southward extension of the west arm of the entrance lock and provided a 243.84 metres long berth for accommodating large passenger vessels, drawing upto 10.36 metres of water.

Besides the above mentioned four docks, there are government docks situated on the west side on the Harbour. These docks have an area of about 4 3/4 acres, entrance width of 60 feet and the depth of 23 feet on the sill HWOST. These docks are available only for the Government vessels.

Table Nos. 13, 14 and 15 show the number of vessels, which entered in the docks or were berthed at the harbour walls during the past few years.

TABLE No. 13 VESSELS ENTERED THE DOCKS OR BERTHED AT THE HARBOUR WALL 1965-66 TO 1974-75

Year	Vessels which entered the Docks		Vessels	berthed at the Harbour wall	Total Vessels		
	No.	Net registered tonnage	No.	Net registered tonnage	No.	Net registered tonnage	
1965-66	1806	90,06,192	416	16,93,867	2222	77,00,059	
1966-67	1879	61,92,790	316	13,10,033	2195	75,02,823	
1967-68	1701	56,00,751	316	13,20,121	2017	69,20,872	
1968-69	1683	50,65,194	288	11,83,140	1971	62,48,334	
1969-70	1591	50,52,688	229	10,12,539	1820	60,65,227	
1970-71	1643	53,37,607	238	10,19,753	1881	63,57,360	
1971-72	1633	53,42,185	248	11,13,366	1881	64,55,551	
1972-73	1593	53,31,557	286	12,73,481	1879	66,05,038	
1973-74	1512	53,10,842	270	11,44,530	1782	64,55,372	
1974-75	1542	54,69,586	214	7,56,470	1756	62,26,056	

Number and Tonnage of Vessels entered the Port during 1973-74 and 1974-75

Class of	No.	98	74-75 inage	No.	Gazet		
vessels		1011	mage		Tonnage		
		Gross	Net		Gross	Net	
1	2	3	4	5	6	7	
(a) Steam ships other than tankers:							
(1) Foreign—							
(i) above 3,500 GRT	977	91,82,156	12,17,524	986	90,37,353	52,59,050	
(ii) 3,500 GRT & less	268	4,74,216	2,38,753	212	3,85,450	1,93,712	

(2) Coastal—						
(i) above 3,500 GRT.	124	11,40,438	6,88,343	123	9,94,153	5,51,842
(ii) 3,500 GRT & less	544	7,24,140	3,82,430	645	7,59,454	3,95,033
(b) Tankers	375	75,75,032	47,62,144	412	79,84,790	48,92,983
(c) Colliers	1	8,397	4,777	3	15,858	8,801
	2,299	191,04,379	1,12,83,971	2,381	19,77,667	113,01,430
(d) Sailing vessels:						
(i) Foreign	514		57,649	138		18,210
(ii) Coastal	11,130		4,23,035	23,699		5,35,618
Total	13,933	191,0 <mark>4</mark> ,379	117,74,655	26,218	1 91,77,067	1,18,55,258
	L					

TABLE No. 15 NUMBER OF VESSELS (EXLUSIVE OF FERRY STEAMRS), WHICH ENTERED THE DOCK OR WENT ALONGSIDE HARBOUR WALLS AND THEIR TONNAGE

	Docks	No.	197	4-75	No.	197	3-74
			Tonr	nage		Tonr	nage
Maha	rashtr	9	Gross	Net		Gross	Net
	Prince's Dock	364	11,60,544	6,21,820	270	10,20,217	5,65,096
	Victoria Dock	365	10,59,789	5,58,902	478	14,37,881	7,65,819
	Indira Dock	813	74,54,314	42,88,864	764	68,06,521	39,79,927
	Prince's Dock, Harbour				1	1,161	481
	Wall (K.L.M. berths).						
	Victoria Dock Harbour Wall (Nos. 14 15 berths;	2	1,776	913	8	21,750	11,172
	Indira Dock, Harbour Wall (Nos.18,19,20,21,22 and 23 including TankSteamers).		14,84,499	7,55,557	261	19,78,151	11,32,877
	Ballard Pier	272	21,30,104	11,59,601	263	22,94,900	13,24,569

Butcher's Island Berths Nos.1, and 3.	366	76,18,944	45,08,397	398	77,64,678	52,48,198
Pir Pau Oil Pier	30	3,22,831	1,89,294	41	4,79,563	2,76,910
Total	2,424	2,1232,801	120,83,258	2,484	218,04,822	133,05,049

Note.—Many of these vessels had entered a Dock or berthed alongside a Harbour wall more than once during their stay in port.

Capacity of the Port: The cargo handling capacity of the Bombay port is 16.45 million tonnes. Details regarding the cargo handling capacity of the docks, marine oil terminal including Pir Pau and bunders or open wharves are given in the following statement:—

Dock	Cargo handled	Capacity in million tonnes
1	2	3
(1) Indira dock	General cargo	4.55
(2) Prince's and Victoria docks	General cargo	2.20
(3) Marine oil terminal including Pir Pau	Petroleum products	9.00
(4) Bunders or open wharves	General cargo	0.70
	Total	16.45

Berths outside the docks: The deep water berths outside the docks are as shown in the following statement:—

(Figures in Metres)

Berth	Depth maintained below Datum of soundings	Depth below mean high water spring tides	Length of quayage
1	2	3	4
(1) Ballard Pier	9.14	13.56	244
(2) Ballard Pier extension	10.36	14.78	231.6
(3) Ferry terminal	4.89	9.19	340.17 (Three berths along harbour wall of Prince's dock and one berth offshore.)
(4) Pir Pau Oil Pier	884	13.26	174
(5) Marine OII terminal, Butcher's Island	10.97	15.39	(Three berths cach for 198 meters long tankers)

Marine Oil Terminal: One berth at Pir Pau Oil Pier at north end of harbour where tankers upto O. A. length of 560 feet with draft 27 feet handle white oil. Pipeline system handling 150-200 tons per hour connects the pier to refineries at Trombay and installations at Wadala and Sewri. Three berths in Indira dock are provided for handling non-dangerous petroleum including kerosene and black oils. Marine oil terminal at Butcher's Island provides three berths for tankers upto 700 feet in length and is connected to oil refineries at Trombay by submarine pipelines. Tankers upto 800 feet in length, could be accommodated if adjacent berths are occupied by medium size tankers. Tonnage and draft restrictions at these three beiths are shown below:—

Berths	Draft	Tonnage
No. 1 Butcher's Island		Displacement tonnage 70,000
No. 2 Butcher's Island		Displacement tonnage 48,000
No. 3 Butcher's Island	38'— 00"	Displacement tonnage 70,000 tonnes

Dry Docks : The Bombay Port Trust owns two major dry docks *viz.*, the Hughes dry dock and the Merewether dry dock which are connected to the Indira dock and the Prince's dock, respectively. Besides, there are eleven other dry docks within the limits of the port, the details of which are given in Table No. 16.

TABLE No. 16 Dry docks in Bombay Port

Dry docks and their ownership	Overall length (in feet)	Entrance width (in feet)	Depth on sill at HWOST (in feet)
1	2	3	4
Government—			
(1) Lower Bombay	256	51	16 1/2
(2) Middle Bombay	183	51	16 1/4
(3) Upper Bombay	200 3/4	46	14 1/2
(4) Lower Duncan	316 1/2	59	24
(5) Uppei Duncan	302 1/2	59	24
(6) New <mark>Torpedo</mark>	160	25	12
(7) Hughes (Port Trust)	1,000	100	36 1/4
P. and O. S. N. Company—)la	le	Jo
(1) Old Mazgaon	154	55	5
(2) Ritchie	493	66	18
B.I. S. N. Company—			
(1) Mogul Lower	217	60	18
(2) Mogul Upper	196	47	15 1/2
(3) Merewether (Port Trust)	525	65 1/2	28 1/4
(4) Patent Slip	250	25 1/2	12 1/2

The following table No. 17 shows the tonnage handled and vessels docked in the Merewether and the Hughes dry docks since 1965-66 to 1974-75.

TABLE No. 17
Number and Tonnage 6f Vessels docked in the Merewether and Hughes dry docks

Year	ar Mere wethe Dry Dock			es Dry ock	Total		
	No. vessels	Gross tonnage	No. vessels	Gross tonnage	No. vessels	Gross tonnage	
1965- 66	53.	77,519	61	3,26,492	114	4,04,011	
1967- 68	70	1,18,304	62	3,44,665	132	4,62,969	
1970- 71	56	1,02,586	72	4,00,253	128	5,02,839	
1972- 73	53	1,04,342	56	3,19,184	109	4,23,526	
1973- 74	47	89,530	62	445,706	109	5,35,236	
1974- 75	60	1,32,298	56	3,19,704	116	4,52,002	
1975- 76	56	82, <mark>990</mark>	68	5,04,001	124	5,86,991	
1980- 81	54	93,280	50	3,46,470	104	4,39,750	
1981- 82	48	55,694	34	1,83,838	82	2,39,532	
1982- 83	48	68,044	31	1,78,618	79	2,46,662	
1983- 84	60	72,727	39	2,12,068	99	2,84,795	

Dock Expansion Scheme: The main features of the Dock Expansion Scheme, which is a truncated version of the dock modernization scheme are as follows:—

- (i) The east arm of the Indira dock basin to be extended by 300 metres, so as to provide four new deep water barths:
- (ii) The strip of land remaining between the extended arm of the Indira dock and the Victoria dock to be used for diverting rail and road communications and other underground services intercepted by the extension;
- (iii) The excavated material from the extended arm to be used for filling up a part of the Carnac basin and for reclamation of the area east of it;
- (iv) The ferry traffic to be transferred from its existing location at the Indira Dock Harbour Wall to the Prince's Dock Harbour Wall (KLM berths);
- (v) The existing ferry berths to be dredged to provide cargo berth of medium depth (7.93 metres);
- (vi) Five modem transit sheds to be constructed in the Indira dock.
- (vii) A dredger berth constructed of concrete blocks realised from the temporary coffer-dam and two barge berths of similar construction to be provided at the northern end of the reclamation [referred in item (iiii) above]; and
- (viii)Two inside berths at Prince's dock to be converted into ship repair berths.

The scheme is estimated to cost Rs. 15.23 crores and will result in an addition of 1.5 to 2.0 million tons dry cargo handling capacity annually at this port. The four new berths in the extended basin of Indira dock were completed in 1969. A new ferry wharf of the Prince's dock was put into commission immediately after the monsoon of 1969.

Ballard Pier extension: Along with the Dock Expansion Scheme, the Port Trust also undertook a scheme of

extending the Ballard Pier southwards by 231.6 metres so as to provide a second passenger berth of the Mole station, equipped with a spacious, modern passenger terminal building, the existing Ballard Pier building being reconstructed and converted into a cargo handling shed capable of handling passengers when required. Consequent on the closure of the Suez Canal after the Israel-Arab hostilities in 1967, the growing competition of the air-lines and the exodus of people of Indian origin from the East African countries, it was apprehended that the overseas passenger traffic of the Bombay Port, which had already been declining for some years, was not likely to revive in the foreseable future. It was accordingly decided that the new terminal building on the extended berth should be redesigned on a modest scale as a passenger-cum-cargo handling facility, the existing building being reconstructed and converted into a full-fledged cargo handling shed. The revised scheme for the extension of Ballard Pier is in progress. The estimated cost of the scheme is Rs. 6.50 crores.

Equipment: There are 55 hydraulically operated movable cranes of 1 1/2 to 6 tons capacity in the Prince's dock. Besides, there are ten capstans of 11 ton capacity for warping vessels at the entrance of the Prince's dock and oil pipelines are connected at six berths and at Harbour wall of the Prince's dock for bunkering. The Victoria dock has 60 liydraulic movable cranes, four 11 ton capstans and oil connections to nine berths. The Indira dock has 90 electric cranes. It has also fourteen 11 ton and ten 2 1/2 ton capstans. All berths of the Indira dock have oil pipeline connections.

Storage: There are six sheds (with an area of 75,300 sq. metres) and four warehouses (6,800 sq. metres) at the Prince's dock. The Victoria dock has 6 sheds (33,100 sq. metres) while, the Indira dock has 16 sheds (1,35,600 sq. metres) and three warehouses (37,800 sq. metres). In addition there is a large four-storeyed warehouse at Indira dock for cargo awaiting clearance with stacking area of 17,500 sq. metres.

In addition there are a few warehouses outside the dock having an area of 54,000 sq. metres. All multistoreyed sheds and warehouses have either hydraulically or electrically operated hoists.

Plan Expenditure on Port: The following statement shows the plan provision, actual expenditure and percentage of actual expenditure to plan provision on Bombay Port during various five-year plans:—

(Rs. in crores)

Plan	Plan provision	Actual expenditure	Percentage of actual expenditure to plan provision
shtra	St	ate i	Gaz
	2	3	4
1. First Five-Year Plan—			
(1951-52 to 1955-56)	22.82	10.92	47.9
2. Second Five- Year Plan—			
(1956-57 to 1960-61)	25.18	5.22	20.7
3. Third Five-Year Plan—			
(1961-62 to 1965-66)	25.53	12.94	50.7

Annual Plans—			
4. 1966-67	13.11	4.69	35.8
5. 1967-68	10.28	5.60	54.5
6. 1968-69	9.48	9.01	95.0
7. Fourth Five- Year Plan (1969- 74)	46.14		
Mid-term appraisal (1969- 74)	22.70	16.96	
Year-wise break- up—			
1969- 70	4.69	4.69	
1970-71	3.48	3.48	5 - 1 5 - 1
1971-72	3.96	2.29	
1972-73	5.94	2.42	
1973-74	4.63	4.08	
8. Fifth Five-Year Plan Original (1974- 79)	ta	te	Ga
Revised (1974- 78)			
Annual Plan: 1974-75	2.99	1.66	
1975-76	6.50	1.68	
1976-77	5.99	1.83	
1977-78	6.86	2.69	
9. Annual Plan, 1978-79	7.54	8.46	
10. Annual Plan, 1979-80	8.37	1.18	

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11. Sixth Five- Year Plan (1980- 85)	68.73		
12. Annual Plan, 1980-81	21.01	8.07	
13. Annual Plan, 1981-82	17.91	8.63	
14. Annual Plan, 1982-83	23.55	18.30	
15. Annual Plan, 1983-84	46.20	23.05	

Bunders: In addition to docks mentioned above, there are along the harbour front, what are known as, bunders or open basins with jetties serving sailing vessels. These cover an area of 55.44 hectares and provide an aggregate quayage of 12,500 metres. These bunders are: (1) the Jam-shetji, (2) the Apollo, (3) the Carnac-Mody, (4) the Malet, (5) the Kassara, (6) the Lakdi, (7) the Coal, (8) the New Tank, (9) the Brick, (10) the Hay, (11) the Haji, (12) the Sewri, (13) the Chaupati, (14) the Worli and (15) the Mahim. Under the Customs Act, 1963, the bunders or jetties are notified for the landing and shipping of certain types of commodities. Broadly speaking, building material and fuel oil are handled at the bunders in the north; sand, chunam, bamboos, timber and fire wood at Lakdi bunder; tiles at New Tank bunder; bricks and clay at Brick bunder and coal at Coal bunder. Non-dangerous fuel oils such as diesel oil, kerosene and lubricating oils are shipped from Kassara and Sewri bunders and petrol from Sewri Petrol Wharf. Hay and grass are discharged at New Tank bunder. The extensive timber ponds at Sewri, covering an area of over 24.28 hectares, form an important feature of the bunders.

Frere basin, to the north of Prince's dock, since its development in 1949-50 for lighterage traffic, has become an important adjunct to the docks.

Lighthouses: Lighthouses in general are beacons of light to guide the marine for indicating the coastline, approaches of harbour, marking major shoals and rocky areas.

The lack of proper guidance to shipping entering the harbour had been a matter of complaint for a long time. There is no record of the Portuguese having created any distinctive guiding points and for about a century after the advent of the English, the only landmarks for shipping for finding the entrance of the harbour were a few tombs at Colaba and a house on Mazgaon hill known as a Mark House which was kept regularly whitewashed so as to be visible to shipping (The Port of Bombay— A Brief History, Publication of Bombay Port Trust, p. 21.). A lighthouse was erected on Old Women's island (Colaba) on a natural mound, probably on the ruins of an old Portuguese watch-tower, in 1768-71 and the lighting apparatus was improved in 1799-1800 and again in 1844. The Colaba Lighthouse, as it later came to be known, was the first major lighthouse in British India and the only one of its kind till 1844 when the Madras Lighthouse was completed. In 1842, the Outer Floating Lightship " Colaba, " specially built to mark the fairway to the entrance of the harbour, was placed in position and in the next year, the "Shenon", which was originally built as a war brig in 1832, and converted into a Light vessel, took up station as the Inner Light vessel near Sunk Rock (The object of guarding the Sunk rock is now served by the unattended lighthouse constructed on the rock in 1884). In 1852, a beacon was constructed on Kennery Island, this was demolished almost immediately afterwards as, due to its similarity to the Colaba Lighthouse, or from inadequate publicity being given to its construction, it was reported to have caused the wreck of two vessels. In 1856, a lighthouse or more correctly a beacon, was constructed on Dolphin Rock. The Kennery (Khanderi) Island Lighthouse was constructed in 1867. The construction of Kennery lighthouse has achieved its purpose as the frequency of ship wrecks at the entrance of the harbour was considerably reduced thereafter. The Colaba Lighthouse which had become obsolete, was later replaced by a new and taller lighthouse, constructed more to the seaward, on south-west Prong. The Prongs Lighthouse as it is called, was constructed by the Government at its own cost during the period 1870-75. (For detailed history see Gazetteer of Bombay City and Island, Vol. 1,1909, pp. 57-64.)

The foundation for the lighthouses depends upon their location. Some lighthouses are located on islands formed of hard rock while there are lighthouses which are constructed near the shore, the foundation of which depends upon the soil conditions. There are five lighthouses and two beacons within the jurisdiction of the Bombay Port. They are as follows:—

Lighthouse or Beacon	Position
(1) Kennery Lighthouse	18°42.1'N72°48.8' E.
(2) Prongs Lighthouse	18°52.7'N72°48.0'E.
(3) Bombay Floating Lighthouse	18°49.51'N72°44.5'E.
(4) Sunk Rock Lighthouse	18° 53.4' N 72° 50.0' E.
(5) Dolphin Lighthouse	18°54.8'N72°50.2'E.
(6) Tucker Beacon	. 18° 56.0'N 72° 52.5' E.
(7) Butcher Beacon	18° 56.8'N 72° 54.3'E.

Of the above mentioned lighthouses and beacons the first two are the major and manned lighthouses while others are unmanned lighthouses.

Explosions in the Port: On the 14th April 1944 the Bombay Port experienced a major disaster from two explosions in an ammunition ship berthed at No. 1, Victoria dock. The unlucky ship was the S.S. Fort Stikine, which carried 1,200 tons of high explosives and ammunition together with a cargo of cotton bales. Transit sheds, warehouses and other structures in Prince's and Victoria docks were set ablaze and razed to the ground, and port equipment including cranes, hydraulic gear, water mains, rail tracks, etc., were reduced to twisted and tortured heaps of steel and rubble. An area of 100 acres adjacent to the Victoria and Prince's docks was gutted; fragments of blazing steel weighing upto 100 tons travelled laterally at incredible velocities, spreading death and destruction in their paths. The actual seat of the explosions revealed two huge craters and hundreds of feet of shattered quay wall. The loss in human life was appalling. The explosion took a toll of 231 lives, apart from injuring about 476 others.

Another explosion occurred on the 28th June 1972 at the harbour wall of the Indira dock. It occurred on the M. V. Tarsos, a Libarian tanker resulting in 30 persons being killed and 21 being injured. Most of the dead and the injured were employees of M/s. Mazagon Dock Ltd., and of the Bombay Dock Labour B0ard.

Employment in Bombay Port: The Port is one of the largest employers in Bombay, having on its pay roll 30,895 employees of various categories. Following statement shows the number of persons engaged in Bombay Port in 1975-76:—

1. Class I and II	472
2. Class III (Other than wharf crane	11.378
drivers)	,
3. Class IV (Other than price rated	12,580
shore workers)	12,300
4. Wharf crane drivers	577
5. Piece rated shore workers -	
(i) Category 'A'	4,702
(ii) Category 'B'	1,186
Grand Total	30,895

SHIPPING

Goods Traffic: There has been a continuous rise in the traffic handled by the Bombay Port. This rise has been more pronounced with the setting up of the two oil refineries at Bombay and the commissioning of the Marine Oil Terminal in 1954-56. The traffic handled at this port in 1950-51 was 7.44 million tons which rose to 18.4 million tons in 1973-74.

The table No. 18 shows the goods traffic of the Port for the last few years.

TABLE No. 18 GOODS TRAFFIC AT BOMBAY PORT

(figures in '000' D. W.tonnes)

Year	Import	Export	Total
1945-46	4,621	1,932	6,553
1951-52	5,900	1,700	7,600
1961-62	10,413	4,135	14,540
1966-67	13,227	5,039	18,266
1969-70	11,434	3,601	15,035
1972-73	12,319	3,221	15,540
1974-7 <mark>5</mark>	13,861	3,866	<mark>17,</mark> 727
1980-81	13,277	4,294	17,571
1982-83	11,499	13,602	25,101
1983-84	10,748	13,993	24,741

The table No. 19 shows the total cargo handled at docks and bunders of Bombay Port.

Passengers' Traffic (Overseas and coasting communications): The overseas communication from the Bombay Port is carried with the ports in Europe, Red Sea, Australia, East Asian countries, East Africa, South Africa, Persian Gulf, America and Jeddah, Karachi and Colombo while the coasting communication is done with the ports on West Coast, Saurashtra, Cutch and East Coast of India. Table No. 20 shows the overseas and coasting routes with their inward and outward passenger traffic during 1970-71 and 1974-75.

TABLE NO 19 CARGO HANDLED AT DOCKS AND BUNDERS DURING 1969-70 TO 1974-75

(figures in '000' D. W.tonnes)

Year		Imports	5		Exports		Total tonnage of Imports and Exports			
	Docks	Bunders	Total	Docks	Bunders	Total	Docks	Bunders	Total	
1	2	3	4	5	6	7	8	9	10	
1969- 70	42,67,791	71,65,814	1,14,33,605	18,72,122	17,29,414	36,01,536	61,39,913	88,95,228	1,50,35,141	
1970- 71	35,36,499	72,94,993	1,08,58,492	20,18,997	15,26,537	35,45,534	55,82,496	88,21,530	1,44,04,026	
1971- 72	42,02,958	82,22,602	1,24,25,560	17,50,680	19,56,274	37,06,954	59,53,638	1,01,78,876	1,61,32,514	
1972- 73	39,62,529	83,56,160	1,23,18,689	17,05,780	15,15,766	32,21,546	56,68,309	98,71,926	1,55,40,235	
1973- 74	48,22,657	94,23,409	1,42,46,066	19,65,757	22,51,079	42,16,836	67,88,414	1,16,74,488	1,84,62,902	
1974- 75	52,06,142	86,55,131	1,38,616,273	18,56,836	20,10,229	38,67,065	70,61,978	1,06,,65,360	1,77,27,338	

TABLE NO.20 NUMBER OF PASSENGERS ARRIVED AND DEPARTED FROM BOMBAY PORT EXCLUSIVE OF PASSENGERS CARRIED BY HARBOUR FERRIES AND SAILING VESSELS

		Inward	d l					Outwa	ard						
Serial No.	Routes	Saloor	1	Dock		Total		Saloo	Saloon Dock				Total		
NO.		1970-	1974-	1970-	1974-	1970-	1974-	1970-	1974-	1970-	1974-	1970-	1974-		
		71	75	71	75	71	75	71	75	71	75	71	75		
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
	Overseas-														
1	Europe (U.K Ports, Geneva, Marseilles and other ports).	2,569	201			2,569	201	1,750	505			1,750	505		
2	red sea Ports (Aden, Djidonti, Assab, Massawa, Port Sudan excluding Jeddah).	183	57	1,259	1,331	1,442	1,388	55		1,005		1,060			
3	Jeddah	659	772	14,274	15,786	14,933	17,260	578	907	10,681	12,285	11,259	18,192		
4	(Pilgrims)	10	185	<u> </u>				20	1	· ·			1		
4 5	Karachi Colombo	11	1,300		417	10 11	1,300	28	1,201	2		28 11	1 201		
J	Australia	111	1,300	-		11	1,300	3	1,201			11	1,201		
6	(Brisbane, Sydney, Melbourne))	35	11			35	11	40	12			40	12		
7	Far East (including Singapore, Bangkoik, Hong Kong and Japan)	17	77		804	17	881	100	724	207	551	307	1,275		
8	Africa East (Mombassa, Zanzibar, Dare-salam, Mozambique, Beira and Loureneo Marques)	3,536	651	8,074	2,225	11,610	2,876	2,018	259	4,787	1,946	6,805	2,205		
9	Africa South (Durban, Grahmstone, Port Elizabeth, Cape Town and Moossel Bay)	1,886	785	1,691	1,034	3,557	1,819	934	857	2,215	2,480	3,149	3,337		
VI	Persian Gulf (Khoromshahr, Minal Ahmadi,	Ic	15		d		l.d	te		Jd	4	JU	Et		
10	Abadan, Ras Tanura, Bahrein Duabi, Doha, Bandur, Mashurs and Basarah)		468	17,783	17,651	19,354	18,119	1,415	1,831	25,788	30,357	27,203	32,188		
11	America (San Fransisco, New York, Vancouver, BOston, Montreal and Houston)	387	53			387	53	60	18	2		62	18		
12	Other Ports		671		246		917		231				231		
	Total Ports	10,864		43,081		53,925	44,715	6,987		44,687	52,649	51,674	59,165		
	Coasting -														
13	Konkan Coast (Janjira, Shriwardhan, Harnai, Dabhiol, Jaigad, Ratnagiri, Vijayadurg, Malvan and Panjim).	6,072	3,613	2,24,710	74,428	2,30,782	78,041	6,500	4,139	2,42,185	81,786	2,48,685	85,925		
14	West Coast (Karwar, Mangalore, Calicut, Cochin and Tuticorin)	42	318	5		47	318	10		3		13			

15	Surashtra- Cuth ports and Other ports.	27	8	4		31	8	19	19	5		24	19
16	East Coast of India (Calcutta and Madras)	18				18		24		11		35	
17	Other ports		167				167						
	Total Coasting	6,159	4,106	2,24,719	74,428	2,30,878	78,534	6,553	4,158	2,42,204	81,786	2,48,757	85,944



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Formerly the coastal passengers' traffic was done by the Chougule Steamships, Bombay. It had stopped its passenger carrying business after the shipwreck of *Rohini* at Malvan Port in 1972. Afterwards the Government of India gave a right of sailing passengers' vessels on Konkan coast to Mogul Lines in 1973. It sails ships from Bombay to Panjim *via* Jaigad, Musakaji/Jaitapur, Vijaydurg and Deogad except in monsoon.

The following statement shows the passenger traffic on the Bombay-Panjim route:—

Year	No.of passengers travelled	Earnings (Rs.)
November 1973 to March 1974	1,57,712	36,40,299
1974-75	1,89,868	65,94,113
1975-76	1,70,892	61,46,501
1980-81	2,37,831	N.A.
1981-82	2,73,123	N.A.
1982-83	2,35,087	N.A.

SHIPPING CORPORATION OF INDIA LTD.

The Shipping Corporation of India was formed on 2nd October 1961, by the amalgamation of the two public sector shipping companies, *viz.* the Eastern Shipping Corporation Ltd., and the Western Shipping Corporation Ltd. The Shipping Corporation started with 19 ships with 1.39 lakhs GRT, which was made up predominantly of cargo liners. Since then, it has greatly expanded and diversified its fleet in keeping with the country's requirements and the changing pattern of India's international trade, and today (15th July 1984) it owns a fleet of 143 vessels of 30.25 lakhs GRT (50.28 DWT (DWT=Dead Weighted Tonnage (Penny Weight))) comprising 73 dry cargo vessels, 23 bulk carriers, 10 combination carriers, 2 colliers, 6 passenger-cwm-cargo vessels, 2 timber carriers and 2 others. Besides, 19 vessels with a 8.66 lakhs GRT capacity have also been ordered from shipyards in India and abroad- The Corporation has prepared a plan for further expansion of the fleet by 316 vessels from Hindustan Shipyard.

The Jayanti Shipping Co. was amalgamated with the Corporation on 1st January 1973 with its 16 ships with a total GRT of 2.93 lakhs (4.32 lakhs DWT). Further the Mogul Lines Ltd. was also amalgamated with the Shipping Corporation in August 1984 with its 21 ships of 4.03 lakhs GRT. With the merger of Mogul Lines Ltd., the Shipping Corporation consisted a fleet of 168 ships with a total GRT of 35.41 lakhs.

The Corporation operates cargo services on all the major cargo liner routes in which the sea borne trade of India moves, viz., USA, USSR, Europe, Africa, Japan and Australia. Besides the services of its own, the Corporation also manages the vessels of Government of India, plying between India Mainland-Andaman Nicobar and Laccadive Islands, as also the dredger fleet operating on the Indian coast, and acts as agent for some of the public sector organisations and foreign shipping lines.

The Corporation is the largest shipping company in India and over 47 per cent of the total Indian merchant fleet is under its management. Operating a network of worldwide shipping services, it has helped considerably in promoting the exports of the country and in earning valuable foreign exchange.

The table No. 21 shows the details of various Indian shipping companies located in Bombay.

TABLE No. 21
SHIPPING COMPANIES LOCATED IN BOMBAY (as on 1st January 1977)*

Name of Shipping Company	Total No. of ships owned and GRT			
	Coa	astal	0	verseas
	Number of ships	Tonnage (GRT)	Number of ships	Tonnage(GRT)
1. Shipping Corporation of India Ltd., Bomaby	18	1,60,795	115	23,61,746

Name of Shipping Company	Total No. of ships owned and GRT			ed and GRT
		stal		verseas
	Number of ships	Tonnage (GRT)	Number of ships	Tonnage(GRT)
2. Scindia Steam Navigation Company Ltd.,	2	9,900	46	5,77,495
Bombay. 3. Great Eastern Shipping Company, Bombay.	1	11,066	19	4,28,038
4. Mogul Lines Ltd. Bombay	8	67,418	11	1,47,787
5. Dempo Steamships, Bombay			7	1,32,225
6. Chougule Steamships, Bombay	1	10,525	4	1,20,292
7. Damodar Bullk-Carriers, Bombay			5	1,29,323
8. Seven Seas Transportation, Bombay			4	84,290
9. Surendra Overseas Ltd. Bombay			6	50,902
10. South-East Asia Shipping Company, Bombay	4	22,995	3	24,931
11. Pent Ocean Steamships, Bombay	1	7,659	3	22,973
12. Tolani Shipping, Bombay	2	15,748	1	11,296
13. Mackinnon mackenzie, bombay			2	23,560
14. Malabar Steamships	3	10,336	1	10,132
15.Thakur Shipping Company	2	5,993	1	12,678
16.Varun Shipping Company	1	12,808		
17.Indoceanic Shipping 18.Africaba			2	5,682
Company 19. Western	3	5,663		
Star Lines Provate Ltd.			1	2359
20.Hind Shipping Company	1	2,348		
21.Allana Sons Private Ltd.			1	1,765

Name of Shipping Company	Total No. of ships owned and GRT			
	Coa	stal	Overseas	
	Number of ships	Tonnage (GRT)	Number of ships	Tonnage(GRT)
22 Bombay Marine Engineering Private	1	2,216		
23.Sudarshan Liner Ltd. Bombay			1	1,765
24.John F. Fidele and Company	2	999		
25. Mangala Bulk Carriers Bombay	1	402		
26. Mani Shipping Company,Bombay	1	3,944		

^{*}Details of various shipping companies located in Bombay as on 30th September 1984 are given at the end of this chapter. (Source: Directorate of Shipping, Bombay.)

MINOR PORTS

Source-Chief Ports Officer, Maharashtra State, Bombay.

There are four minor ports within the jurisdiction of the Greater Bombay municipal limits *viz.*, Versova, Bandra, Manori and Trombay which mainly facilitate the transportation of goods by country crafts, and small boats. Cargo is loaded and unloaded by lorries, lighters, barges or by head loads. These minor ports lack berthing facilities and the existing one admit only of small tonnage. These ports are, however, well connected to the hinterland by roads and railways. Following is the brief description of these ports.

Versova: This port is located on the shore of Malad creek on Arabian sea roughly 16 km. north of Bombay harbour. It is located on 19°.08'20" N. latitude and 72°.48' 12" E. longitude. A custom house is provided at this port. Two ramps are also provided on either sides of the creek for ferry boats. A good black-topped road (i.e. Jai-Prakash road) starts from Andheri railway station and terminates at this port. Draft available at this port is 3 metres in the creek and 2 metres at the landing places of padavas.

The navigational aids include (a) flashing age light exhibited on a flag mast near the custom office and Madh Island, (b) a flag staff near the custom office, (c) an unlighted Hervey Patch buoy located at the entrance of the creek and (d) rock marking guide poles near the creek. The following statement shows the passenger traffic and the cargo handled at this port during 1970-71, 1972-73, 1974-75, 1975-76 and 1977-78:—

Year	Passenger traffic			Carg	o handl tonnes	
	Embarked	Disembarked	Total	Import	Export	Total
1970- 71	N.A.	N.A.	N.A.	3,233	36	3,269
1972- 73	N.A.	N.A.	N.A.	4,064	4	4,068
1974- 75	3,19,696	3,23,178	6,42,874	778	15	793
1975- 76	2,56,311	2,55,520	5,11,831	350	13	363
1977- 78	N.A.	N.A.	N.A.	229	2	231

Bandra: It is located on 19°.03' 20" N. latitude and 72°.49' 34" E. longitude just north of the Bombay Island harbour. There is a port office and a custom office at the ferry wharf on this port. A good black-topped road connects this port with the Bandra station.

Two metres drafts are located at 1/5th mile off shore of the port. Among the navigational aid mention may be made of Ureshi Beacon Light located at Khar Danda near the port, and two rock marking poles one each at Khar Danda and Chimbai. The following statement shows the passenger traffic at this port during 1974-75 and 1975-76:—

Year	Passenger traffic				
	Embarked	Disembarked	Total		
1974-75	5,323	4,400	9,723		
1975-76	5,555	5,529	11,084		

Manori: This port is located at the mouth of the Manori creek near the Manori village about 6.5 km. west of the Malad railway station. There is a port office and a custom office at this port. Bus service facility is available upto Malad railway station. There are four jetties attached to this port, belonging to the Bombay Municipal Corporation. Draft of one metre on the bar at the entrance and 3 metres in the creek are available at this port.

There is a rock marking pole at the Manori village. Passenger traffic from this port in 1974-75 and 1975-76 is given below:—

Year	Passenger traffic				
	Embarked	Total			
1974- 75	1,28,000	1,21,500	<mark>2,57</mark> ,500		
1975- 76	1,32,600	1,50,200	2,82,800		

Trombay: This is also an important minor port located to the north of the Bombay Port. The nearest railway station for this port is Mankhurd. There are fish drying platforms with approach roads and a Catwalk jetty at this port. Draft of one metre is available at this port at the landing place.

The following statement shows the cargo handled from this port in 1969-70, 1970-71, 1972-73, 1974-75, 1975-76 and 1977-79:—

Year	Cargo handled		
	Import	Export	Total
1969-70	1,214	8,069	9,283
1970-71	113	22,941	23,054
1972-73	17	17,589	17,606
1974-75		9,303	9,303
1975-76		12,708	12,708
1977-79		11,800	11,800

FERRY SERVICE

The ferry wharf off Prince's Dock harbour wall is popularly known as "Bhaucha Dhakka" from where nearly half a million coastal passengers are carried annually. New wharf was constructed in 1972. Besides the ferry services to Konkan, west and east coast of India, many local ferry services (launch services) are operated frequently from *Bhaucha Dhakka* to Uran, Alibag and Elephanta. The details of three importan ferry services *viz.*, the Versova-Madh ferry service, the Marve-Manor ferry service and the Gorai creek ferry service are given below:

Versova-Madh Ferry Service: This ferry service is managed by M/s. Versova Machhimar Sahakari Sangh Ltd. since 1963. Before 1963 the Bombay Municipal Corporation was managing the same. There are two motor launches with a load carrying capacity of 4.86 tons and 3.48 tons, respectively. The number of persons travelled per day is about 1000, while the quantity of goods carried per day is about 10 tons.

Marve-Manori Ferry Service: The Manori Machhimar Vividh Karya-kari Sahakari Society Ltd. is operating its man-driven ferry boats between Marve and Manori. The number of persons travelled per day is 1,500 approximately.

Gorai Creek Ferry Service: The Bombay Municipal Corporation has given a contract to a private ferry service for operating ferries in the Gorai Creek.

Bombay Harbour Launch Services: The Bombay harbour launch services operated from Bhaucha Dhakka on the outside harbour wall of the Prince's dock are managed by the "Port Organization" of the Maharashtra Government. In 1976 about twelve launches were operating on Mora-Bombay route with 22 schedules from Mora and 22 schedules from Bombay, and about eleven launches were operating on Rewas-Mandwa-Dharamtar-Bhal route. There were 14 schedules on the Bombay-Rewas-Mandwa-Dharamtar-Bhal route. The services for Rewas-Mandwa-Dharamtar-Bhal or Akkadevi are seasonal *i.e.* from September to May. The following statement shows the statistics of passenger traffic of the Bombay harbour launch services from

Year	Passenger Traffic				
	Embarked	Disembarked	Total		
1974-75	5,44,829	6,32,120	11,76,949		
1975-76	6,41,022	5,60,981	12,02,003		
1980-81	1,16,074	1,21,757	2,37,831		
1981-82	1,34,568	1,38,554	2,73,123		
1982-83	1,14,867	1,20,219	2,35,086		

PUBLIC TRANSPORT SATE TRANSPORT

1974-75 to 1982-83:-

After the World War I, the automobile vehicle was introduced as a principal mode of road transport. Its importance in the field of passenger transport grew rapidly during and after the World War II. Consequently a number of private passenger transport services came into existence. However, the keen competition among them resulted in the duplication of services and disregard of rules for the safety of passengers and speed limit. Profit maximisation being the sole object, attention to the passengers in respect of convenience and amenities was hardly given. Moreover, relations between employees and employer were always strained and uncordial.

The state of affairs which was incompatible with the very notion of a Welfare State, could not be allowed to continue. To set the matters right, Government decided to nationalize passenger transport in the State in August 1947 and, initially the services were started departmentally in June 1948, the administration of which was subsequently handed over to a statutory corporation in December 1949 under the provisions of the Road Transport Corporation Act (XXXII of 1948). Since then, the corporation has been reconstituted under the Road Transport Corporation Act LXIV of 1950.

At present (1985) the whole State is divided into twenty-seven viable units called divisions. The transport services from Bombay are provided by the Palghar Division. The Divisional Controller, Palghar Division, Parel, controls the activities of State Transport in Bombay.

Operation of any transport service in Greater Bombay district does not come within the purview of the Corporation as these are run by the Municipal Corporation of Greater Bombay. Two depots and two bus stations are situated at Bombay Central and Parel, respectively. The Bombay bus station and Bombay depot originally came under the erstwhile Bombay Division, the headquarters of which was situated at Tardeo. The headquarters of the division was shifted to Thane in 1957 and the division was renamed as Thane Division.

Stations: A modern bus station has been provided at Bombay Central on the ground floor of the Central Office building. The bus station occupies the ground floor and a part of the first floor covering an area of about 16,500 sq. ft. Six loading platforms are provided to this station which are connected with the waiting hall. In addition, reservation rooms, a parcel office and a canteen have also been provided. A dormitory is provided on the first floor. With the growing traffic originating from Bombay and the subsequent increase in the number of services, an additional depot was started in November 1972 at the Modern Mills Compound at Parel. It has also a spacious waiting hall, a room, and a reservation room. Besides the above two depots, Chembur depot was started in December 1984 with a fleet of 17 vehicles. Besides these stations eight pick-up stands are provided at Byculla, Lalbaug, Dadar, King's Circle (Sion), Kurla, Maitri Park-Chembur, Ghatkopar and Borivli.

The light and heavy repairs are carried out at the Divisional Workshop which is situeted at Tardeo. This workshop was started in January 1950. In addition, the Kurla workshop was started in 1962. After the operation of every 24,000 km. the vehicle are routed to the Divisional Workshop for preventive maintenance. Regular daily and weekly servicing and the 8,000 kilometres docking for maintenance is carried out at depot workshop, situated at Bombay Central.

Operations: Operations were started in the erstwhile Bombay Division from 1st April 1950 on 39 routes with the route distance of 1859 km. As on 31st December 1984, Bombay Central depot had 81 vehicles, while the Parel depot had 69 vehicles. The number of routes operated by these two depots as on 31st

December 1984 was 35 and 29, respectively. Four luxury buses are included in lhe vehicles attached to Bombay Central depot. There were in all 39 routes emanating from the Bombay Central and Parel depots to various places within and outside the State, with a total of 13,598 route kilometres and carrying on an average 6,500 passengers per day in 1976-77. As on 31st October 1976 the Bombay Central depot had on an average 195 departures per day. Out of these 32 departures were on the routes attached to the Bombay depot, 152 departures on routes operated by other divisions and 11 departures on routes operated by other States.

There were ten inter-State routes starting from Bombay Central depot as on 31st October 1976 as shown below:—

Bombay-Panaji
 Bombay-Madgaon
 Bombay- Indore
 Bombay- Indore
 Bombay- Indore
 Bombay- Surat and
 Bombay- Manglore
 Bombay- Baroda

The Modern Mills depot, Parel, had 50 departures per day during October 1976. Out of these, 14 were on routes operated by the depot and 36 were on routes operated by other divisions. There were on an average, about 4,400 passengers travelling per day from Modern Mills depot during October 1976.

Details of the routes emanating from Parel depot and the Bombay depot are given below (as on 31st October 1976) (The details of the routes emanating from Bombay and Parel depots as in December 1984 is given at the end of this chapter.):—

	rial oute No.	Route distance (in km)	cinalo	Average No. of persons travelled per day
(1)		(3)	(4)	(5)
	odern Mills arel) Depot—			
1	Parel-Jambhori	368.2	1	58
2	Parel-Sonsal	360.6	1	71
3	Parel-Ambet	163.5	1	118
	Parel- mbhulni	371.1	1	154
	Parel- sesawali	337.6	1	84
6	Parel-Saikole	250.0	1	151
7	Parel-Shiroda	555.8	1	64
8	Parel-Palghar	145.0	1	134
9	Parel-Tarkarli	515.4	1	68
	Parel- ngurla	512.4	1	63

11 Parel-Pali	145.3	1	88
12 Parel- Dodamarg	545.4	1	58

Serial Route No.	Route distance (in km)	No. of single trips operated per day	Average No. of persons travelled per day
(1) (2)	(3)	(4)	(5)
Bombay Depot—			
1 Bombay-Indore	607.7	1	146 Alternate day.
2 Bombay-Indore (Luxury)	607.5	1	37
3 Bombay-Kelshi	331.3	1	109
4 Bombay-Khopi	257.7	1	109
5 Bombay-Hedavi	349.5	1	84
6 Bombay-Makhajan	307.9	1	140
7 Bombay-Guhagar	323.3	1	103
8 Bombay-Belgaum	523.2	1	103
9 Bombay-Ambet	179.3	1	76
10 Bombay-Pali	138.9	1	85
11 Bombay-Sadashivgad	701.6	1	46
12 Bombay-Panaji (Luxury)	590.7	2	52
13 Bombay-Panaji (Ordinary)	590.7	1	55
14 Bombay-Kalawali	524.7	1	80
15 Bombay-Kase	323.2	1	49
16 Bombay-Jaitapur	440.3	1	72

tteers

17 Bombay- Sagave	485.6	1	61
18 Bombay- Palghar	147.9	2	250
19 Bombay- Talasari	151.7	1	110
20 Bombay- Ganeshpuri	82.0	2	220
21 Bombay- Shirdi	269.5	1	60
22 Bombay- Borivli	30.0	1	110
23 Bombay- Bhiwandi	52.0	7	409
24 Bombay- Madgaon	639.7	1	65
25 Bomb <mark>ay-</mark> Nandvi	162.3	1	141
26 Bombay- Panchgani (Luxury)	ry) 253.3	1	34
27 Bombay- Mahableshwar (Luxury)	. 256.7	te	30

Goods Transport: Goods transport services were started in Bombay with the aid of trucks received under the Canadian Aid Programme in 1953, as regular scheduled services to all the parts of the State. These were gradually discontinued and the trucks were utilized mainly for the work of the Greater Bombay Municipal Corporation, the Bombay Port Trust and the Police Department during emergencies.

With the ageing of the trucks and the consequent difficulty in replacement of parts the goods transport serviced were discontinued from March 1968.

Now the goods transport is done by the routine passenger buses. During 1970-71 on an average 500 parcels were booked. In addition to this on an average 300 newspaper parcels are also sent to various places. There are three booking and delivery offices' situated in the city located at Bombay Central, Chinchbunder and Mandvi. The number of parcels booked and delivered and the revenue earned during 1974-75 and 1975-76 are given in the following statement:—

	197	4-75	1975-76		
Booking and delivery offices	No. ofParcels	Revenue earned in Rs.	No. of Parcels	Revenue earned in Rs.	
(1)	(2)	(3)	(4)	(5)	
Parcels booked—					
1. Chinchbunder	21,147	1,20,844	17,857	1,50,819	
2. Mandvi	37,239	1,78,024	28,508	2,46,563	
3. Bombay Central	45,108	2,52,468	49,944	3,50,758	
Total	1,03,494	5,51,336	96,309	7,48,140	
Parcels delivered—					
1. Chinchbunder	143	3,133	1,261	10,240	
2. Mandvi	498	7,927	315	7,358	
3. Bombay Central	33,721	81,664	33,300	1,19,451	
Total	34,362	92,724	34,876	1,37,049	

BOMBAY ELECTRIC SUPPLY AND TRANSPORT UNDERTAKING (B.E.S.&T.)

The growth of population, trade, industrialisation, etc. in Bombay necessitated the well established and organized modern means of transport. The old means of transport such as *shigrams*, *rekales*, *palkhis*, *chhakadas*, *tongas* (victorias) etc. which were incompatible with requirements for speedy transport in the bustling areas of Bombay were outdated.

Trams: The Bombay tramway was originally projected in 1864. However, the scheme did not materialise for some time. In October 1870, the proposal for the horse-tramway was revived by M/s. Stearns, Hobart and Co. The scheme was accepted and on 6th March 1873 sanction was given to a contract with M/s. Stearns and Kittredge, with the agreement of twenty-one years from the 12th March 1873. The company established Bombay Tramway Company Limited in 1873 for operating trams in the city. Government also passed an Act, the Tramways Act I of 1874.(S. N. Pendse, BEST Upakramachi Katha.) The agreement was renewed by the Municipality in 1894. The administrative offices of the company and the principal stables were at Colaba, and another large stable was maintained at Byculla opposite the Victoria Gardens. The same company started functioning with 200 horses and 20 omnibuses. This concern was taken over by the Bombay Electric Supply and Tramways Co. Ltd. in 1905. The B.E.S. &T. Co. Ltd. had purchased the assets of the Bombay Tramways and Company Ltd. valued at Rs. 98.5 lakhs.

The first tramways from Colaba to Pydhuni *via* Crawford market, and V. T. to Pydhuni *via* Kalabadevi were opened for traffic on 9th May 1874. During the subsequent period tramway routes were laid from Colaba to King's Circle. In the beginning the company had to attract the people to travel by tram cars. It reduced the fare which was three annas in 1874 to an anna in 1899. Electrically operated tram-cars first started running on 7th May 1907 on the Colaba to Crawford market route. The Bombay Electric Supply and Tramways Company Ltd. also undertook the work of supplying electricity in Bombay. During 1920 the company introduced two-storeyed tram-cars in Bombay and tram became a very popular means of transport in

Bombay. Besides, it was the cheapest means of transport. However, its speed was limited, not exceeding 8 km. (5 miles) an hour. After the World War II the industrialization increased very rapidly and people expected speedy means of transport such as cars, buses, railway trains, etc. and slow moving tram-cars became outdated in the epoch of speedy means of transport. Hence, the company had to abolish tram services in 1964. The last tram ran from V.T. to Dadar on 31 st March 1964. Many persons grieved at that time. Really, it was a vehicle of poor people. From the beginning the Bombay Tramways Company Ltd. was famous for its punctual transport, minimum charges of fares and efficiency.

Buses: After World War I, the service of trams seemed very scanty to fulfil the travelling needs of the increasing passenger traffic. Therefore, the Bombay Electric Supply and Tramways Company Ltd. introduced bus transport during 1926. The first bus ran on 15th July 1926. Like tram-cars, people also accepted this new vehicle whole heartedly. In the beginning bus fares differed from two *annas* to six *annas* according to the distance. Half fares for children below 12 years were introduced in 1928. During 1926 there were only 24 buses owned by the company and about six lakhs of passengers took advantage of travelling through these buses during the same year; while during 1927 the number of buses and passengers rose to 49 and 38 lakhs, respectively. The double decker buses were introduced in 1937. The year 1939 is an important year in the life history of the B.E.S. & T. bus service. Due to rationing of petrol and car-tyres during the War period, many car owners used to travel by these buses and hence passenger traffic increased tremendously during the period.

In accordance with the deed of concession granted to the B.E.S.&T. Co. Ltd., the Municipal Corporation exercised on 7th August 1947, its option to acquire the assets of the company in respect of tramways and electric supply section and by mutual agreement the operation of the bus services within the municipal limits of Bombay.

The trolley bus service was introduced in June 1962 and was suspended in March 1971. Before Independence the jurisdiction of the B.E.S.&T.Co. Ltd. was limited to Bombay island only. After Independence it was extended to Greater Bombay areas. The B.E.S. & T. Undertaking had taken all strings in its hands during August 1947, after which many difficulties had given challenges to it, such as, growth of industrialization, torrents of refugees in Bombay, increase in the number of offices in south Bombay and the employees in them, etc. This undertaking accepted many of these challenges and faced them successfully.

The Bandra Bus company was running its fleet in a few of the Bombay suburban areas adjoining Bandra. The Regional Transport Authority ordered this concern to ply its fleets on all the main roads of Bombay's suburbs. As this concern refused, the Regional Transport Authority requested the B.E.S. & T. Undertaking to ply its fleet in the suburban areas of Bombay and the latter accepted this new challenge on the 1st October 1949.

During August 1947 this undertaking owned only 157 buses. This number rose to 582 in 1957. During 1974-75 the undertaking had owned a fleet of 1,530 buses. During 1947 the average daily receipt was Rs. 11,000 which rose to Rs. 41,000 in 1957. During the year 1974-75 the average daily receipts of the undertaking amounted to Rs. 6,96,862. The average number of persons travelled per day was about one lakh in 1957 which rose to 30 lakhs in 1974-75.

The number of buses rose to 2,325 in 1984. During 1983-84, the average daily receipts of the undertaking amounted to Rs. 20,07,731. The average number of persons travelled per day was 36,49,139 in the year.

During 1967 the Undertaking introduced "All Standy Bus" service with a good intention of accommodating more travellers. But the passengers of Bombay objected this new vehicle and this bus service was suspended in 1970. The articulated bus service was introduced in 1967. This double decker bus with separate engine became very popular among the passengers. About 100 passengers or more can travel at a time by this new bus. The trolley bus service was introduced in 1962 with the intention to run these buses on the tramways. This new experiment also failed and the Undertaking had to abolish the trolley bus service during 1971.

Few private companies were also running their vehicles in the eastern and the northern suburbs of the city. The Regional Transport Authority suspended their business according to the Court decision of 1959 and since February 1959 the B.E.S.&T. Undertaking is the sole authority which plys buses in Greater Bombay.

There are 16 bus depots of B.E.S. &T. Undertaking in Bombay. They are located at (1) Colaba, (2) Bombay Central, (3) Santacruz, (4) Kurla, (5) Tardeo, (6) Wadala, (7) Worli, (8) Poisar, (9) Marol, (10) Deonar, (11) Vikhroli, (12) Goregaon, (13) Backbay, (14) Dharavi, (15) Bandra and (16) Ghatkopar.

The railway employees were on strike from 8th May 1974 to 27th May 1974. This affected the suburban services of the Western and Central railways, leaving the B.E.S. & T. Undertaking to provide the mass transport. The role played by the B.E.S. & T. Undertaking during the railway strike came in for praise from all quarters.

	Ye	ear
	1973-74 (Average of 362 days (No operations on three days due to bandhs)	1983-84(No. of routes operated was 197.)
(1) Fleet owned	1478	2,325
(2) Effective fleet	1419	2,279
(3) Average effective fleet	1384	2,289
(4) Average No. of buses in service	1257	2,070
(5) Fleet utilization (average for year)	90.82%	90.43%
(Col. 4 : Col. 3).		
(6) <i>(a)</i> Effective km. (aggregate)	9,91,95,048	15,77,32,060
(b) Daily average (km.)	2,74,019	4,30,962
(c) Vehicle utilization (km.)	218.0	208.2
(7) <i>(a)</i> Passengers carried	 1,06,65,29,827	1,33,67,82,907
(b) Daily average of passengers	29,46,215	36,52,412
(8) <i>(a)</i> Earnings (in Rs.)	18,80,45,197	73,48,29,661
(b) Daily average (in Rs.)	5,19,462	20,07,731
(c) Per vehicle in service (in Rs.)	413.26	969.92
(d) Per seat km. (in Paise)	2.60	6.13
<i>(e)</i> Per km. (in Paise)	189.57	465.87

(f) Per passenger (in Paise)	17.63	54.97
(g) Cost per km. (in Paise)	224.98	609.27

The following statement shows the tickets sold in 1979-80:-

	Sale of Fare Tickets							
Denomination	During the whole year	Average per month	Average per day	Percentage				
10	6,98,87,360	58,23,947	1,90,949	4.60				
20	63,99,90 290	5,33,32,524	17,48,607	42.11				
25	40,15,98,179	3,34,66,515	10,97,263	26.43				
30	4,26,79,768	35,56,647	1,16,611	2.81				
40	18,28,66,755	1,52,47,480	4,99,917	12.04				
50	7,09,4 <mark>6,4</mark> 08	59,12,201	1,93,843	4.67				
60	5,64,05,455	47,00,455	1,54,113	3.71				
80	3,24,07,775	27,00,648	88,546	2.13				
100	1,75,98,174	14,66,514	48,083	1.16				
120	49,91,492	4,15,958	13,638	0.33				
140	2,07,009	17,251	5,66	0.01				
Total	1,51,96,81,665	12,66,40,140	41,52,136	100.00				

Engineering : The B.E.S.&T. Undertaking has its own engineering branch of transportation, which is responsible for maintenance, repairs and overhauling of the passenger bus fleet and internal transport vehicles.

The first engineering workshop was established in 1886 at Colaba to repair the trams. This workshop was shifted to King's Way at Dadar in June 1915.

During 1926 a bus-workshop was opened at Colaba. As this workshop proved to be inadequate to repair the buses, a new workshop was attached to the tram-workshop at Dadar. During 1964 when the tram service was abolished, the tram-workshops were converted into bus-workshops.

Bus routes: There were as many as 141 BEST bus routes (*The No. increased to 1979 in 1983-84.*) in Bombay city, suburbs and extended suburbs, in 1976. Details regarding the bus routes are given in Table No. 22.

TABLE No. 22 BEST Routes as on 30th October 1976

		Ro	ute	No. o round tr per da includi extra operati on rout	rips ly ng s ng	Average No. of passengers travelled per day (including extras operating on routes)
Serial Bus No Route No.		From	То	Scheduled Operated		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1	Colaba Bus Station	Mahim Bus Station	218	216	85,200
2	1 Ltd.	Colaba Bus Station	Mahim Bus Station	91	91	23,400
3	3	Navy N <mark>ag</mark> ar	Jijamata Udyan	92	92	36,000
4	4 Ltd.	Hutatma Chowk	Andheri Station (West)	362	360	77,800
5	5	Mantralaya	M. L. Chowk	207	207	55,600
6	6 Ltd.	Electric House	Refineries	183	183	35,800
7		Electric House	Vikhroli Depot	172	172	39,800
8	8 Ltd.	Hutatma Chowk	Dr. Ambedkar Udyan	186	184	32,800
9	9	Museum	Antop Hill	139	139	34,900
10	ı	Hutatma Chowk	Ghatkopar Station	89	89	24,800
11	41	Ferry Wharf	Pt. Paluskar Chowk	81	79	10,400
12	42	Ferry Wharf	Bombay Central Depot	43	42	6,300
13	43	Colaba Bus Station	Maheshwari Udyan	104	99	27,000
14	44	Museum	Worli Village	115	107	34,600

15	45	Mantralaya	Mahim Bus Station	116	109	29,800
16	47	Museum	Babulnath	123	120	22,800
17	48	Ferry Wharf	August Kranti Maidan.	73	73	11,000
18	49	Fort Market	Wadala Station	2	2	100
19	50	Ferry Wharf	Worli Village	41	41	8,900
20	51	Ferry Wharf	Mahim Bus Station	1	1	100
21	61	Fort Market	Mahim Bus Station	82	82	25,000
22	62	Hutatma Chowk	Mahim Bus Station	116	115	31,300
23	63	J. M. Mehta Road	M. L. Chowk	120	121	48,500

TABLE No. 22—contd.

	Bus Route No.	Route		No. of round trips per diextras operating on rou		Average No. of passengers travelled per day (including extras operating on routes)	
Serial No.		From	То	Operated			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
24	64	Babulnath	Maheshwari Udyan	125 e Gaz	125	31,700	
25	65	Museum	Maheshwari Udyan	157	157	45,200	
26	66	Ballard Pier	M. L. Chowk	258	258	73,000	
27	68	Ballard Pier	WorliChawls	119	118	42,500	
28	69	Museum	Sewree	133	133	34,000	
29	70	Electric House	Mahim Bus Station	95	95	30,000	
30	71	Ballard Pier	Shivaji Park	63	62	16,900	
31	72/73	Pt. Paluskar Chowk	Pt. Paluskar Chowk (via Maheshwari Udyan).	289	273	49,800	
32	74	Ballard Pier	Mahim Bus Station	66	66	19,600	

33	81		Santacruz Police Station.	128	128	39,500
34	82		Worli Seaface (N)	57	57	9,500
35	83	Ballard Pier	.Santacruz Depot	221	221	48,000
36	84 Ltd.	Hutatma Chowk	Andheri Station (West).	270	261	55,000
37	85	Hutatma Chowk	Chunabhatti	118	118	37,800
38	86	Hutatma Chowk	Mahim Bus Station	204	204	36,100
39	87 Ltd.		Govt. Colony (Bandra).	108	108	15,200
40	89	Mantralaya	Worli Seaface (N)	51	50	8,200
41	90 Ltd.	Hutatma Chowk	Deonar Depot	101	101	25,900
42	101	Museum	Walkeshwar	141	139	37,400
43	102	Park	Kamala Nehru Park	78	76	19,500
6	Ish		<i>(via</i> Carnae Bunder).	9 G	18	zet
44	103	R. C. Church	Walkeshwar	102	106	29,600
45	104	Road	M. Mehta Road <i>(via</i> Vijay V. Chowk).	126	122	24,200
46	106	Hutatma Chowk	amala Nehru Park	93	92	11,800
47	107	Colaba Bus Station	Walkeshwar	63	63	15,600
48	122	Fort Market/Museum		124	122	22,900
49	123	R. C. Church	Tardeo	130	129	32,700
50	124		Worli Chawls	131	130	36,100

51	126	Mantralaya	Jijamata	125	122	30,700
		i i arici alaya	Udyan			30,700
52	127	Hutatma Chowk	Prarthana Samaj	113	113	5,100
53	128	Hard Square	M. P. Market	16	16	1,100
54	129	Ballard Pier	Tardeo Depot	62	59	4,100
55	130	Museum	Tardeo	237	218	46,800
56	131	Fort Market	Fort Market (via Carnae Bunder).	59	59	6,700
57		Colaba Bus Station	Colaba Bus Station (via ardeo).	299	298	55,700
58	135	Mazgaon Docks	August Kranti Maidan.	197	190	38,100
59	137	Navy Nagar	Navy Nagar (via M. P. Market).	101	100	13,700
60	152 Ltd	Nair Hospital	Haji Ali	6	6	400

TABLE No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
61	153/154		Byculla Station (West)	132	132	11,800
			(via Lotus Cinema)			
62	161	Sewree	Wadala(E)	56	55	9,700
63	162	Sewree	Worli Village	159	156	33,000
64	165	M. G. Chowk	M. L. Chowk	305	288	73,700
65	166	Antop Hill	Shahu Nagar	111	109	14,600
66	168	Tata Oil Mills	Dnyaneshwar Nagar	184	183	48,400
67	169	Worli Village	Maheshwari Udyan	78	77	10.600

68	171	Worli Dairy	Antop Hill	77	75	21,300	
69	181*	K. G. Chowk.	Kamala Nehru Park	.: 25	25	2,100	
70	182*	Dadar	Juhu Beach	35	28	3,400	
71	183*	M. L. Chowk.	Vihar Lake	61	61	5,000	
72	184*	Andheri Station (East.)	Vihar Lake	44	43	3,800	
73	187*	Borivli Station (East)	National Park	13	12	700	
74	188*	Borivli Station (East)	Kanheri Caves	47	45	3,100	
75	201	Sewree	Goregaon Bus Station	346	341	53,300	
76	202 Ltd	. Mahim	Borivli Bus Station	82	82	21,800	
77	203	Andheri Station (West)	Borivli Bus Station	151	.47	21,200	
78	208	Sainath Road	Borivli Station (East)	62	62	18,300	
79	211	Band Stand	Dr. Ambedkar Road	124	123	22,600	
80	212	Govt. Colony (Bandra)	Bandra Station (West).	227	227	18,500	
81	214	Band Stand	Dr. Ambedkar Road	51	51	4,400	
82	215	Bandra Station	St. Merry's Steps	79	79	6,800	

83	221	Hill Road	Khar Station (West)	217	217	45,400
84	231	Santacruz Station (West)	Juhu Bus Station	214	214	28,900
85	251	Andheri Station (West)	Versova	470	470	49,400
86	252	Andheri Station (West)	Amboli Village	76	76	4,000
87	253	Juhu Bus Station	Goregaon Bus Station	130	130	31,800
88	254	Andheri Station (West)	Veera Desai Road	133	133	14,800
89	261	Goregaon Bus Station	Shastri Nagar	277	274	23,100
90	262	Goregaon Bus Station	Motilal Nagar II	169	169	15,900
91	271	Malad Station	Madh Temple	60	60	7,600
92	272	Malad Station	Marve	140	135	16,000
93	273	Sainath Road	Gaikwad Nagar	209	209	20,300
94	274 (Byculla Station (West))	Malad (West)	Pushpa Park	90	90	4,800
95	281	Sainath Road	Kandivli Station (West)	263	255	24,100
96	282	Kandivli Station (East)	Damu Nagar	111	111	10,700
97	283	Kandivli Station (West)	Kandivli Station (West) (via Mayur Talkies)	81	81	4,300
98	291	Borivli Station (East)	Dahisar Check Naka	119	119	15,800
99	292	Vazira Naka	Vallabh Nagar	142	142	18,600
100	293	Shanti Ashram	Vallabh Nagar	85	85	9,100

101	294	Poisar Depot	Gorai Creek	41	41	3,800
102	295	Shimpoli Village	Vallabh Nagar	54	54	3,700
103	297	Station (East)		47 ch.)	47	900
104	302	M.L. Chowk.	Mulund Bus Station (Mulund Railway Stn.)	192	191	67,200
105	305	M. L. Chowk.	Mulund Bus Station	62	62	22,000
106	311	Kurla Station(West)	Santacruz Station (East)	239	237	39,000

^{*} Sunday and Holiday Services—Data for 31-10-1976.

TABLE No. 22—concld.

			_		
(2)	(3)	(4)	(5)	(6)	(7)
312	M. L. Chowk.	SEEPZ	114	113	29,700
313	Kurla Station (West)	Santacruz Stn. (East)	165	165	29,600
314/315	Govt. Colony (Bandra)	Govt. Colony (Bandra) <i>(via</i> M. L. Chowk)	275	275	50,800
322	Vidya Vihar Station	Hanuman Road	74	74	18,300
326/327		Andheri Station (East) <i>(via</i> Chakala Cig. Fac.)	48	48	3,200
331	Sahar Village	Marol Village	173	171	37,200
332	Kurla Station (West)	Andheri Station (East)	390	377	76,600
333	New Quarters	Holy Spirit Hospital	111	111	18,300
336/337		Andheri Station (East)	355	355	72,400
		(via Ghatkopar Station)			
339	Pump House	Juhu Bus Station	104	104	23,400
	312 313 314/315 322 326/327 331 332 333 336/337	M. L. Chowk. Kurla Station (West) Govt. Colony (Bandra) Vidya Vihar Station Andheri Station (East) Sahar Village Kurla Station (West) New Quarters Andheri Station (East)	M. L. Chowk. SEEPZ Santacruz Stn. (East) Govt. Colony (Bandra) Govt. Colony (Bandra) (via M. L. Chowk) Vidya Vihar Station Hanuman Road Andheri Station (East) Andheri Station (East) Sahar Village Marol Village Kurla Station (West) Andheri Station (East) New Quarters Holy Spirit Hospital Andheri Station (East) (via Ghatkopar Station)	M. L. Chowk. SEEPZ 114 Sala Kurla Station (West) Santacruz Stn. (East) 165 Govt. Colony (Bandra) Govt. Colony (Bandra) (via M. L. Chowk) 275 Vidya Vihar Station Hanuman Road 74 Andheri Station (East) Andheri Station (East) (via Chakala Cig. Fac.) 48 Sala Sahar Village Marol Village 173 Kurla Station (West) Andheri Station (East) 390 New Quarters Holy Spirit Hospital 111 Andheri Station (East) Andheri Station (East) 355 (via Ghatkopar Station)	M. L. Chowk. SEEPZ 114113 Kurla Station (West) Santacruz Stn. (East) 165 165 Govt. Colony (Bandra) Govt. Colony (Bandra) (via M. L. Chowk) 275 275 Vidya Vihar Station Hanuman Road 74 74 Andheri Station (East) Andheri Station (East) (via Chakala Cig. Fac.) 48 48 Sala Sahar Village Marol Village 173 171 Kurla Station (West) Andheri Station (East) 390 377 New Quarters Holy Spirit Hospital 111 111 Andheri Station (East) Andheri Station (East) 355 355 (via Ghatkopar Station)

117	2/1	M. I. Chowle	Gorogaan Station	156	156	32,400
		M. L. Chowk	Goregaon Station	156	156	32,400
118	342	Goregaon Station	Goregaon Station (via Central Dairy).	20	20	1,300
119	351	Dadar	B.A.R.C.	196	194	30,600
120	352	M. L. Chowk	Trombay	267	263	34,100
121	353	Wadala Depot	Tagore Nagar	68	68	10,300
122	361	Mahul Village	Kurla Station (East)	118	118	19,200
123	362	Dr. Ambedkar Udyan	Kurla Station (East)	120	118	17,200
124	371	Anushakti Nagar	Bandra Station (West)	147	147	28,800
125	376	Chembur Station	Shivaji Nagar	63	63	7,200
126	377	M. L. Chowk	Deonar Depot	48	48	5,300
127	381	B.A.R.C.	Ghatkopar Station (East)	193	190	36,500
128	384	Ghatkopar (West)	Bandra Station	80	80	29,000
129	384 Ltd	. Ghatkopar (West)	Bandra Station	90	89	800
130	385	Dadar	Ghatkopar Station (East)	115	119	21,200
131	386	Ghatkopar Depot	Ghatkopar Station (East)	43	43	2,200
132	387	Ghatkopar Station (West).	Parksite Colony	62	62	6,800
133	388 Ltd	Ghatkopar Station (West).	Borivli Bus Station	98	98	26,900
134	391	Mulund Station	Shastri Nagar	197	196	18,600
135	392	Vikhroli Depot	Vikhroli Depot <i>(via</i> I.I.T.).	30	30	1,500
136	394	Vikhroli Station (West)	Kannamwar Nagar-II	217	217	20,300
137	395	Mulund Station	Nahur Village	39	39	3,300
138	396 Ltd	Mulund Station	Andheri Station (East)	109	109	20,600
139	School			51	51	1,000
140	Res.					1,000
141	O. Ext.					7,200
				17,927	17,727	33,84,100

Rail-road Competition and Co-ordination: The number of vehicles began to increase after 1920 in accordance with the increasing quantum of business after the cessation of the First World War. The Road

Enquiry Committee suggested that the motor transport should be encouraged in the interest of the road development in India. The number of trucks began to increase after 1930 which provided increased facilities to the businessmen and traders. This created the problem of rail-road competition due to which Indian Railways began to lose many crores of rupees annually.

The Government of India appointed the Mitchell-Kirkness Committee in 1932 to study the problems of rail-road competition. The committee recommended certain measures in 1933 to eliminate this competition which was suicidal to the interest of both. It suggested the creation of Central Advisory Board of Communications. Consequently a Transport Advisory Council was formed in 1935. The Wedgewood Committee (1936-37) and the Road Transport Reorganization Committee (1959) also studied the problems of rail-road competition.

Though there is some rail-road competition in some parts of India, both the modes of transport are complementary to each other in Bombay. They help each other for carrying transport load. Even during the peak hours from 8-00 a.m. to 12-00 a.m. and from 16-00 p.m. to 21-00 p.m. the existing means of both modes are also insufficient for carrying the passenger load.

ROAD VEHICLES

The Motor Vehicles Department deals with the administration of the Indian Motor Vehicles Act, 1939 as amended by the Act C of 1956, the Bombay Motor Vehicles Rules, 1959, the Bombay Motor Vehicles Taxation Rules, 1959, and the Bombay Motor Vehicles Taxation of Passengers Act, 1958 and rules made thereunder. The Regional Transport Authorities control the different categories of transport vehicles in the regions and deal with the issue of permits according to the policy laid down by the State Transport Authority and the State Government from time to time.

The following statement shows the statistics of road vehicles in Greater Bombay licensed under the Motor Vehicles Act, during 1971-1978:—

Number of vehicles

	Type of vehicles	Num	ber of ve	hicles
		1971	1975	1978
1.	Motor cycles, scooters, etc.	32,555	51,955	62,673
2.	Motor cars	93,010	1,23,561	1,37,366
3.	Taxi cars	16,017	20,055	23,701
4.	Auto- rickshaws	6	56	667
5.	Stage carriages	2,558	1,762	2,282
6.	Motor lorries	9,097	12,796	15,251
7.	Public carriers	11,617	10,430	19,675
8.	Ambulances	261	330	378
9.	School buses	364	378	410
10.	Private service vehicles	527	605	828
11.	Trailers	355	517	537
12.	Tractors	548	665	741

	Other vehicles	12,777	11,007	2,129
	Total	1,79,951	2,34,197	2,66,638

ROAD ACCIDENTS

As compared to the other cities in India, the ratio of road accidents in Greater Bombay is higher. The following statement shows the statistics of road accidents in Greater Bombay from 1952 to 1977:—

Year	Accidents								
	Fatal	Serious	Slight	Minor	Total				
1952	252	505	3,929	9,571	14,257				
1957	260	579	4,915	14,420	20,174				
1962	336	424	5,877	23,564	30,201				
1966	517	360	6,548	17,067	24,492				
1970	621	633	7,091	17,631	25,976				
1974	557	294	6,519	15,160	22,530				
1975	507	268	6,496	14,631	21,902				
1976	544			23,433*	24,177				
1977	636			24,624*	25,260				

*including serious and slight injuries.

Since 1952 the highest number of accidents were recorded in 1962 which stood at 30,201, which were reduced to 25,260 in 1977. The factors which enabled in reducing the number of accidents are : widening of roads as per the Wilbur Smith Plan, installation of new automatic signalling system; an intensive special training to pedestrians, school children and bus-drivers; etc.

During 1975 the largest number of accidents *i.e.* 1,543 were recorded at Gamdevi Police Station while the smallest number *i.e.* 10 were recorded at Wadala Police Station. During the same year as many as 1,066 accidents occurred on Dr. Babasaheb Ambedkar road, 1,056 on Swami Vivekanand road, 539 on Sion road and 306 on Netaji Subhash road.

Out of the total accidents of 21,902 that occurred during 1975 the number of cars, taxis, BEST buses, lorries and motor cycles involved in accidents were 8,564; 3,606; 3,490; 2,525 and 1,392, respectively. The total number of persons injured in accidents were 8,230 in 1975, of which 2,140 (26 per cent) persons were from 17-25 age-group; 1,964 (23.9 per cent) were from 16 and below age-group; 1,908 (23.2 per cent) were from 26-40 age-group; 975 (11.8 per cent) were from the 41-60 age-group; 449 (5.4 per cent) were from 60 and above age-group and 786 (9.5 per cent) were from the group—age not traced.

The following statement shows the statistics of persons involved in accidents during 1974 and 1975 :—

Type of persons involved	Number				
	1974	1975			
(1) Drivers	882	784			
(2) Occupants	891	770			
(3) Pedestrians	5,883	5,739			
(4) Cyclists	358	477			
(5) Pillion-riders	177	208			
(6) Others	195	252			
	8,366	8,230			

TOURIST FACILITIES

As a commercial and industrial city, the capital of Maharashtra State, a city of international importance and one of the biggest cities in India as also in the world, Bombay city has acquired considerable importance as a tourist place. Tourists from all over the country and the world visit Bombay to see masterpieces of architecture and sculpture in and around Bombay. Many persons visit for their official as well as business work. Consequently a number of hotels of international standard, five star hotels and modern lodging houses have sprung up in the city. A few famous among them are as under (*This list is not complete*.):—

Hotel Taj Mahal, Colaba; Taj International, Colaba; Oberoi Sheraton, Nariman Point; Hotel Hill Top, Worli; Centaur Hotel, Santacruz Air Port; Hotel Natraj, Marine Drive; Sun-N-Sand, Juhu; Juhu Hotel, Juhu; Hotel President, Backbay; Shalimar Hotel, Cumballa Hill; Air Lines Hotel Ltd., Churchgate; Ambassador Hotel, Churchgate; Apollo Bunder; Fredricks Hotel, Apollo Bunder; Grand Hotel, Ballard Estate; Green's Hotel and Restaurant, Apollo Bunder; Mirabelle Hotel, Marine Lines; Palmgrove Hotel, Juhu; Railway Hotel, Charni Road; Ravi Hotel, Dadabhai Naoroji Road; Regent Hotel, Ballard Estate; Ritz Hotel, Churchgate; Sea Green Hotel, Netaji Subhash Road; Strand Hotel, Apollo Bunder; Waldorf Hotel, Colaba and West End Hotel, Marine Lines. Besides, there are many famous restaurants for lunch and dinner to the travellers. A few famous among the Indian and western type restaurants are given below:—

Airport Plaza; Airways; Ceasar's Palace; Sea Rock; Palm Grove; King's International; Bery's, Veer Nariman Road; Chetna, Rampart Row; Gulmohor; Green's Hotel; Purohit, Veer Nariman Road; York's, Lamington Road; Eros, Churchgate; Gourdon, Churchgate; Falettis, Colaba; Kwality, Colaba; Kwality, Cumballa Hill; Parsian Dairy, Marine Lines; Picnic Cottage, Versova; Rendez; Taj Mahal Hotel; Sea View Restaurant, Juhu; Grill Room-Ambassodor Hotel and Volga, Veer Nariman Road.

The Maharashtra Government has also provided well equipped guest houses for the benefit of Officers on Government duty and V.I.Ps. These guest houses are: Sahyadri Guest House, M.L.A.'s Hostel, Majestic Hotel, Amber Guest House, Avanti Guest House and Suruchi Circuit House.

The Tourism Development Corporation of the Government of India as also the Department of Tourism of the Maharashtra Government provide all the necessary amenities including accommodation, transportation, sight-seeing, guide service, tourist literature and information to the tourists.

Dharmashalas: There are four big *dharmashalas* in Bombay city, of which three are maintained by the Gadge Maharaj Sansthan which are located at: (1) 10A, Sir Jamshetji Jeejeebhoy road, Madanpura, Byculla; (2) 4th Peer Khan Street, Byculla, and (3) 180-B and C Motishah road, Nagpada. The first is attached with Hanuman Mandir, the second is Dharmashala-*cum*-Musafirkhana while the third is attached with shops. The fourth *dharmashala* is located at 579-581, 2-Maulana Azad road, Nagpada which is used for the destitutes. Besides these four *dharmashalas*, three Khoja *musafirkhanas*, one Sunni Bohra *musafirkhana* and Kutchi Lohana *dharmashala* are also located in B Ward.

Private Travel and Tourist Services: During 1974 there were as many as 116 private travel and tourist services operating their fleets of vehicles in Bombay. The list of some of them is given below:—

List of Tourist and Luxury Cab Opera tors

Serial No.	Name and address of the Permit Holder	Tourist	Luxury	A/C Luxury Bus
1	Blue Star Garage, Chinoy Mansion, Warden Road, Bombay-26.	11	2	
2	Modern Garage, Bellasis Road, Bombay-8	26	35	
3	Sure Fleet Motor Services, Chinoy Mansion, Bomanji Petit Road, Bombay-26.	40	19	
4	Pravin Auto Hirers, 15, Saraswat Road, Santacruz, Bombay- 54.		4	
5	Travel Corporation of India Limited, Arthur Bunder Road, Bombay- 5.	14	5	
6	Auto Hirers, 7, Kemp's corner, Petit Road, Nana Chowk, Bombay- 7.	16	4	
7	Trade Ways Private Limited, 30, Rampart Row, Bombay-1.		5	
8	Sanghi Motors Bombay Pvt. Ltd., Hughes Road, Bombay-7.	29	11	1
9	Hind Musafir Agency Pvt. Limited, Khorshed Building, P. M. Road, Bombay-1.	2		
10	Star Motor Company, 25, Fort, Near Mahim Police Station, Bombay-16.	7		
11	K. P. Mohamed, M/s. Auto Fleet, 106, Sassoon Dock, Bombay- 5.	7		
12	Supper Fleet Auto Hire Service, 63, Amin Building, Ibrahim Road, Bombay.	5	ttee	ers
13	Mitan Automobiles, 91/21, Dalai Street, Fort, Bombay-1.	4	5	
14	Comfortkers, Russi House, Nepean Sea Road, Bombay-6.	9	1	
15	Jasvantsingh and Sons, Hargun House, Nepean Sea Road, Bombay-6.	3		
16	M/s. Chromomatie Industries, Prakash Mill Compound, Bombay- 13.	5		
17	Fleet Ways, 41, Waroda Road, Bombay-50.	6		
18	International Tourist Taxi Service, Malabar Hill, Bombay-6.	2	1	
19	M/s. Makharia Trade and India P. Ltd., 203, Kalbadevi Road, Bombay-2.	5	1	
20	Adarsh Trading Company, 206, Kalbadevi Road, Bombay-2.	12		1
21	Shri Ramniranjan Kadia, Chamber Bhavan, 2nd Floor, 266, Kalbadevi Road, Bombay.	10		

Serial No.	Name and address of the Permit Holder	Tourist	Luxury	A/C Luxury Bus
22	Shri Ramesh A. Waizale, 170-D, Khadilkar Road, Bombay-4.	7		
23	Hemraj Garage, 35-A to Z Industrial Estate, Fergusson Road, Bombay- 13.	2		
24	Rajkamal Travel Corporation, 206, Kalbadevi Road, Bombay-2.	7		
25	The Car Mart Pvt. Ltd., Kapoor Mansion, S. Patkar Marg, Bombay-7.	4		
26	M/s. Prince Automobiles, Napean Sea Road, Bombay-6.	4		
27	Kedia Trading Co., 266, Kalbadevi Road, Bombay-2.	4		
28	Raju Hire (International), Baldota <mark>Bhuvan,5th Floor, 117, M. Karve</mark> Road, Bombay-20.	3		
29	Hemraj Motor Company, 35-A to Z Industrial Estate, Fergusson Road, Bombay-13.	3		
30	Mohamad Noor Mehd. Dinath, 20 <mark>2/228, Falkland Road, Bomb</mark> ay-4.	4		
31	India Tourism Development Corporation, 123, Queens Road, Bombay- 20.	8	7	

ALL INDIA RADIO

It was in 1926 that the idea of a regular broadcasting service in India took shape for the first time in the form of an agreement between the Government of India and a private company called the Indian Broadcasting Company Limited. Before that date there weie a number of amateur radio associations which had been permitted to broadcast on very low power transmitters in various parts of the country and were granted a proportion of the licence fees. Under the agreement a licence for the construction of two stations one each at Bombay and Calcutta was granted. Accordingly the Bombay Radio Station was inaugurated on 23rd July 1927, while the Calcutta Radio Station was inaugurated on 26th August 1927. At that time these radio stations were medium wave stations and had a power of 1.5 kW. Their effective range was only 30 miles. When the Bombay station was inaugurated, the number of licensed listeners in India was less than thousand.

After a short life of three years the Indian Broadcasting Company Limited went into liquidation on 1st March 1930. The then Government acquired the assets of the company and decided to run the two stations *viz.*, Bombay and Calcutta on experimental basis for a period of two years from 1st April 1930, and finally in May 1932 the Government had decided to continue the Indian State Broadcasting Service under their management, and placed it under the administrative control of the Department of Industries and Labour. During the subsequent period there was a steady expansion in the Indian State Broadcasting Service. In June 1936, "All India Radio " replaced the earlier name of the " Indian State Broadcasting Service". Besides the increase in the number of broadcasting stations the activities of the department also widened considerably. Broadcasting was transferred to the Department of Information and Broadcasting in October 1941. This department was reconstituted as the Department of Information and Arts from the 23rd February 1946. The name of the department was again changed to the Department of Information and Broadcasting from 10th September 1946.

Studios and Transmitters: After being taken over by the Government of India, the Studio of All India Radio, Bombay, was located in the Central Government offices building, Queen's Road. At the beginning there were only 10 studios available for broadcasting. With the gradual expansion of the programme activities after Independence, it was decided to have a separate building for broadcasting in Bombay, specially for studio and accordingly the present building called " Akashwani Bhavan ", near the Mantralaya, was built in Backbay Reclamation area. The offices of the studios were shifted to the present premises in October 1968.

The Bombay station of the All India Radio operates five broadcast services, three on medium wave and two on short wave. The wave length and frequencies of the medium wave broadcast services are given below:—

Broadcast	l	Frequencies in Kc/s per
service	length in M	secona
Bombay- A	288.5	1040
Bombay- B*	545.5	550
Vividh Bharti*	243.9	1230

^{*}These services are also operated on the short waves, the wave lengths varying according to the season and the part of the day.

The transmitters are located at Malad, a suburb of Bombay about 25 km. from the new broadcasting centre, from where programmes are fed by land lines, though two FM links are available as standby.

As the area of the studios and offices was limited, being only 400 sq. metres, a multi-storeyed building was required to accommodate the 15-production studios, an auditorium to sit 650 persons and office accommodation amounting to 2,000 sq. metres. The layout of the complex has been planned so that functionally related ativities are provided for in three separate main blocks accommodating studios, offices and the auditorium

There are three studios for music, two for drama, two for talks, five for play-back, two for community and rural programmes and one large studio for national programmes in the AkashwaniBhavan, Bombay. The studio for national programmes is designed so as to accommodate an audience of 100 persons. The main control room is located on the third floor almost centially with respect to all the studios on the three floors.

The technical facilities such as, recording, dubbing, servicing, etc. are also attached to these abovementioned studios.

Programmes : Broadcasting services of " All India Radio ", Bombay station consist of broadcasting in Marathi, Gujarati, English, Hindi, Urdu, Kannada, Konkani, Sindhi and Sanskrit. The programmes in all these languages are broadcast in two channels, Bombay ' A' and Bombay 'B'. Marathi being the State language it is given its due importance and is broadcast on Bombay ' B' channel, which has a high power medium wave and a medium power short wave transmitter to give these programmes a better and wider coverage. Programmes in Konkani are also broadcast on the Bombay ' B' channel to enable the listeners at far off places in Maharashtra State to have a better reception of the Konkani progiammes. The programmes in the other languages are broadcast on Bombay ' A' which has a medium power MW transmitter providing adequate coverage to the listeners in and around Bombay. Apart from these, Bombay is also broadcasting "Vividh Bharati" light entertainment programmes on a high power short wave transmitter for a limited duration. For the rest of the period this short wave transmitter is utilised for the broadcast of external services programmes. Commercial broadcasting service attached to Bombay station, however, caters to the needs of the listeners by a variety of entertainment programmes and film music for over fourteen hours a day. The programmes of commercial broadcasting service are broadcast on a medium power transmitter from. Bombay.

Besides, Bombay station is originating some programmes for its overseas listeners in Gujarati, and relays from Delhi the external services programmes in Hindi and Gujarati. News bulletins in Konkani also originate from Bombay for the overseas listeners.

Programmes broadcast from Bombay include music, discussions, plays, and features for the general listeners. Music accounts for a major portion of the programme broadcast and comprises of Hindustani, Karnatak and Western music—both classical as well as light. In addition, programmes for special audience like children, women are also broadcast. Pogrammes for schools are also broadcast on school working days at specific timing. The spoken word and programmes for special audience referred to above are broadcast in Maratbi, Gujarati, Hindi and English. Programmes in Marathi for the benefit of industrial workers and in Konkani are also broadcast everyday.

With a view to creating a sense of involvement of the youth, mass media of communication programmes intended foi the youth by the youth are now being broadcast from Bombay since 1970. *Yuva Vani* programme in Marathi is now being broadcast three days in a week on Bombay 'B' channel, while on Bombay 'A' channel, *Yuva Vani* programmes are broadcast twice in English, once in Gujarati and once in Hindi every week.

Rural broadcasts are originated by the medium wave station and are relayed on Bombay 'B' channel. Short wave coverage is specially given to the Sindhi programmes.

Bombay station is originating two regional news bulletins in Marathi. It also originates two news bulletins in Konkani. The above mentioned bulletins are in addition to the various national news bulletins in Hindi, English, Marathi, Gujarati and Sindhi relayed from Delhi everyday.

BOMBAY TELEVISION CENTRE

Television is a new innovation in India which made its appearance first in Delhi on 1st August 1959 and then in Bombay on 2nd October 1972. This scheme was introduced for the first time in the country as a pilot

scheme, operating from All India Radio's Television Centre. As the most modern media of mass communication the Community Television Scheme is expected to play a vital role.

The Bombay Television Centre was erected with the help of West Germany, which had provided the equipments and technical assistance for setting up this centre with relay facilities at Pune. For relaying the micro-waves a TV tower of about 1,000 feet is erected ai Worli in Bombay. This television centre started with a programme for two hours and fifteen minutes daily, which has now (1983) been increased to 5.00 hours on week days and 7.00 hours on Sundays.

The television equipment was offered to Bombay centre by West Germany as a gift valued at Rs. 1.13 crores.

For relay to Pune station, the micro-wave between Bombay and Pune is set up by the Department of Overseas Communications from satellite communications. The transmitter at Pune is a part of technical configuration of the Bombay station.

POST OFFICES

As early as 1661 letters from London to Western India were despatched in duplicate *via* Leghorn, Marseilles and Aleppo, and answers to them were usually sent at intervals by any merchant-vessel that might be bound for an English port. But no attempt to establish any sort of inland post-office appears to have been made until 1688 when the Couit of Directors desired the Council at Bombay to erect a post-office for all letters to be brought to and delivered. Thus the postal arrangements were introduced in Bombay in 1694.(*G. N. Rane, Mumbaiche Varnan, p. 224.*) The first definite attempt to establish overland and inland communication dated back to the year 1787 when an agent was appointed in Egypt to supervise the interchange of despatch between England and India. On the 30th November every year one of the Company's armed cruisers left Calcutta with the Bengal correspondence, called at Madras and Bombay, and thence sailed to Suez, where the agent took charge of the mails and in due course despatched the cruiser back to India with the home letters. The cruiser carried private letters also. The year 1787 also witnessed the appointment of a postmaster at Bombay for organizing regular communication with Madras. The letters were carried to and fro by *kasids* or messengers, four pairs of whom were stationed at each of the Presidency towns; and once a fortnight one pair in turn set forth from either centre by way of Pune and Hyderabad, taking 25 days to complete the single journey.(*Bombay Town and Island Materials, Vbl. II, pp. 13-16.*)

The next forward step was the establishment of a General Post Office for the Presidency in 1794. Messengers were employed to deliver letters throughout the town and collect a delivery fee. Four years later, on the 1st January 1798, regular monthly communication between Bombay and England via Persian Gulf was established, the mails being regularly despatched on the first day of every month. The opening year of the nineteenth century witnessed further progress in inland postal arrangement. In 1825 a bangy establishment was at work, consisting of 20 hamals or carriers, stationed in pairs at 10 different places between Bombay and Pune who carried the post in covered cane-basket. The head office in Bombay despatched the Pune post three times a week viz., Monday, Wednesday and Friday. A daily dak was opened in the same year between Bombay and Malegaon via Bhiwandi and Nashik and was thereafter used exclusively as a route for letters addressed to Mhow and upper India. For the greater convenience of urban residents the first branch postoffice in the island was opened at Byculla in 1832. In 1850 a commission was appointed to report on the working of the post-offices throughout India, and the result was the promulgation of Act XVII of 1854 (the Indian Postal Act) which marks the commencement of the organization of inland post-office on its present footing. During 1856 conveyance of mails between Bombay and Karachi, thrice a month was commenced. The Indian Postal Act of 1854 was in due course repealed by Act XIV of 1866, under the terms of which the value payable and money-order systems were introduced into Bombay in 1880, and the prepayment of parcel-postage in cash instead of postage labels initiated in the following year. Inland service postcards were first issued in Bombay in 1881-82; the registration fee was also reduced; and in 1882 a postal savings bank was instituted. Finally the Act of 1866 was superseded by Act VI of 1898, which conferred extended protection and powers, and provided for postal insurance, the value payable post, and the money-order system. A detailed history of Postal services in Bombay is given in the Gazetteer of Bombay City and Island, Vol. I, 1909.

At present the Greater Bombay district is served by five postal divisions, viz., (1) South Division, (2) City North Division, (3) City North-east Division, (4) City East Division and (5) City West Division. Besides the chief receiving and disbursing office *i.e.*, General Post Office, the district contained 221 sub-post and branch post-offices including 78 delivery post-offices in Gieater Bombay district during 1975-76. During the same year as many as 3,274 postmen were engaged, and there were 1707 letter boxes.

The Airport sorting office (foreign) deals with inward and outward air-borne letter and parcel mails. It is an office of exchange for all Western countries and part of Eastern countries. During 1975-76, 1,89,040 inward parcels and 11,228 outward parcels were handled at this office. The foreign post' A' section (Ballard Estate) deals with inward and outward sea-borne letter and parcel mails. It also deals with the foreign inward moneyorders. During 1975-76, 2,47,280 inward parcels and 1,43,108 outward parcels were handled by this office. During the same year 1,44,108 foreign inward money-orders were received and disposed off by this post-office.

TELEGRAPHS

In 1852, the Court of Directors of the East India Company sanctioned the construction of lines for electric communication from Calcutta to Peshawar in the extreme North, to Bombay in the West, and Madras in the South. The Assistant Superintendent of the Electric Telegraph in Bombay was appointed during the same year. He had laid an underground wire from his office opposite the old Secretariat to the Esplanade and

gradually it was extended upto the Government House, Parel. This was the first electric circuit established in the town of Bombay. The initial section of the first outward line from Bombay to Thane was completed on the 8th February 1854, and by the 18th May in that year electric communication was established between Bombay and Calcutta. Bombay was put into direct communication with Madras in 1855. The main office was shifted from the Old Secretariat to Apollo Street, afterwards to a spacious building in Tamarind Lane. By 1859 Bombay was linked with other parts of India by four main lines. The first connected Bombay with Matheran; the second linked Bombay with Madras including Pune in its circuit; Satara with a branch to Mahabaleshwar and Kolhapur and Belgaum with a branch to Sawantwadi, Vengurla, Dharwad and Gadag; the third line linked Bombay and Agra with branch offices at Thane, Nashik, Malegaon, Dhule and Shirpur, and the fourth line between Bombay and Karachi allowed telegraphic communication with Thane, Nashik, Surat and some other places of Gujarat and Hyderabad (Sind). The total number of messages disposed off in the Bombay Circle was 43,228 during 1859-60.

On the 15th May 1864 Bombay was put in communication with Europe *via* Turkey and the cable route from Bombay *via* Aden and Suez was opened in the spring of 1870. During 1880 local telegraph offices were established at Masjid and Pydhuni for the benefit of native merchants.(*For detailed history of Telegraphs in Bombay, refer The Gazetteer of Bombay City and Island, Vol.I,1909, pp. 381-88,)*

At present (1977) besides the Central Telegraph office the Greater Bombay district contains 95 telegraph offices including 15 Departmental Telegraph offices, spread over in various parts of Greater Bombay. The Departmental Telegraph offices are located at: (1) Chinchbunder, (2) Kalbadevi, (3) Dadar, (4) Matunga, (5) Khar, (6) General Post Office, Fort, (7) Cumballa Hill, (8) Byculla, (9) Girgaum, (10) Jacob Circle, (11) Parel, (12) Chembur, (13) Santacruz, (14) Air Port, and (15) Colaba.

The following statement shows the statistics of telegrams booked in Bombay city, since 1968-69 to 1982-83:

Vasu	To	la sussina baalaad at	
Year		legrams booked at	
	Central Telegraph office	City Departmental Telegraph offices	Total
1968-69	23,36,261	15,00,056	38,36,317
1969-70	24,3 <mark>7,6</mark> 24	15,27,424	39,85,048
1970-71	29,19,347	16,27,552	41,46,899
1971-72	25,86,448	16,04,177	41,90,625
1972-73	26,84,855	16,03,137	42,87,992
1981-82	36,43,489	18,91,610	55,35,099
1982-83	37,30,637	19,17,380	56,48,017

Wireless Stations: During 1984 there were as many as 15 wireless stations located within the limits of the Greater Bombay Municipal Corporation area.

BOMBAY TELEPHONES

The Bombay Telephone system serves the metropolitan city of Bombay along with Thane. The whole of the area is served by 55 exchanges with a total capacity of 4,60,300 lines (working capacity). All the exchanges are of the automatic type. The vast telephone network of today in this city has developed from a very humble beginning in 1882 when the first telephone exchange using Law's Call Wire Equipment was commissioned at Fort with only 88 lines.

In 1881, the Government of India granted a licence to the Oriental Bell Telephone Co. Ltd. for opening telephone exchanges in Calcutta, Bombay, Madras, Karachi and Ahmedabad. The licence for Bombay was transferred in 1882 to the Bombay Telephone Co. Ltd. which was locally formed with the Bell Telephone Co. Ltd. The first telephone exchange was opened in Fort area on 28th January 1882. Four more exchanges, *viz.*, Colaba, Malabar Hill, Byculla and Mandvi were opened in 1882-83 using the similar equipment *i.e.* Law's Call Wire Equipment. Between 1893 and 1898, the equipment of all these exchanges was replaced by magneto equipment using single wire earth return circuit. During 1905 underground cables were introduced for the first time in Bombay and the earth return circuits were replaced by fully metallic circuits. During 1906, a Central Exchange was opened which gradually replaced all the exchanges previously opened, and by 1910, all the subscribers in Bombay were fed by the central exchange only.(*For detailed history of Telephones in Bombay, see Gazetteer of Bombay City and Island, Vol. I, 1909, pp. 388-89.*)

The first exchange on Salsette island was opened at Bandra in 1910, while another exchange was opened at Ghatkopar in 1911. Both the exchanges were using the magneto equipment. During 1922, the equipment at

Central and Ghatkopar exchanges was converted into Central battery working. Automatic equipment was installed for the first time in Bombay on 24th May 1924 at Central and Gell Street exchanges with a total capacity of 11,000 lines. The Ghatkopar and Bandra exchanges were also converted into automatic working exchanges between 1928 and 1930. Two new automatic exchanges were also opened each at Naigaum and Andheri during the same period. The Kandivli and Colaba automatic exchanges were opened in 1937 and 1940, respectively. An automatic time announcing machine with disc-records was installed at Central Exchange in 1932.

During 1943, the Government of India exercised their option to purchase the assets of the Bombay Telephone Co. and took over the Bombay Telephone system in April 1943. Since then the Bombay Telephone system has come under the control of the Indian Posts and Telegraphs Department. During the period of World War II and the subsequent few years restrictions were put on the expansion of the Bombay Telephone system due to scarcity of imported equipment. An interim short-term scheme to meet the accumulated demands was drawn up in 1948 for the installation of 18,200 lines at a cost of Rs. 3.4 crores. Under this short-term development plan, the then existing exchanges were expanded using the latest type of automatic equipment. The BycuUa Automatic exchange was opened in 1950 and during 1951-59, expansions were undettaken at Naigaum, Andheri, Central and Byculla exchanges. Two new telephone exchanges viz., '26' and '24' (both from Central) were opened in the year 1955 to work on " six-digit" basis. During 1957, a portion of " five-digit" equipment at Central was converted to work on " six-digit" basis, thus opening the ' 25 ' Exchange. The equipment at Colaba was also converted to " six-digit " working in May 1959. The " six-digit" working was introduced in various exchanges to fit into the overall structure of the long-term development plan of the Bombay Telephone system. During 1958 the disc-records automatic time announcing machine at Central was replaced by the tape-record type machine.

The cross bar trunk automatic exchange (TAX) was commissioned in City Telephone Building on 29th March 1969. The subscriber trunk dialling system with Pune was introduced on the same date. Upto 1982(During 1985 the number of STD stations increased to 252.) the subscriber trunk dialling service, with trunk auto exchange, was available with the following places: (1) Agra, (2) Ahmedabad, (3) Ambar-nath, (4) Amravati, (5) Belgaum, (6) Bhiwandi, (7) Bangalore, (8) Bhopal, (9) Calcutta, (10) Chandigarh, (11) Coimbatore, (12) Dombivli, (13) Gandhinagar, (14) Hyderabad, (15) Indole, (16) Jaipur, (17) Jaisingh-pur, (18) Jalgaon, (19) Juliunder, (20) Kalwa, (21) Kalyan, (22) Khamgaon, (23) Kolhapur, (24) Madras, (25) Madurai, (26) Mangalore, (27) Miraj, (28) Nagpur, (29) Nashik, (30) New Delhi, (31) Panaji, (32) Pune, (33) Raipur, (34) Rajkot, (35) Sangli, (36) Surat, (37) Thakurli (MIDC), (38) Vasco and (39) Vashi.

Besides the STD service, the long distance services, the delay trunk working service and the demand services are also available from Bombay. The delay trunk working service (228 positions manual trunk exchange) is available to all exchanges in India. The demand service is available to the following places:—

(1) Bhiwandi, (2) Dombivli, (3) Panvel, (4) Kalyan, (5) Ulhasnagar, (6) Ambarnath, (7) Baroda, (8) Akola, (9) Rajkot, (10) Jamnagar, (11) Dhule, (12) Bangalore, (13) Secundarabad, (14) Kolhapur, (15) Hubli, (16) Solapur, (17) Calcutta, (18) Jaipur, (19) Vashi, (20) Ahmedabad, (21) Ahmadnagar, (22) Alibag, (23) Aurangabad, (24) Vasai, (25) Bhandara, (26) Bhavnagar, (27) Bhir, (28) Buldhana, (29) Chandrapur, (30) Kalwa, (31) Karad, (32) Nanded, (33) New Delhi, (34) Osmanabad, (35) Parbhani, (36) Pune, (37) Ratnagiri, (38) Satara, (39) Vasco, (40) Virar, (41) Wardha and (42) Yavatmal.

The international manual trunk exchange which was at Pune was transferred to Bombay on 15th August 1969 and is located at the Videsh Sanchar Bhavan.

At present (1984) the Bombay Telephone serves the area of Greater Bombay, a portion of Thane district and Thane-Belapur industrial belt, totalling an area of 668 sq. km. It also serves a population of about 8.88 millions. It has as many as 55 exchanges. The equipped telephone capacity of all these exchanges is 4,60,300, while the working telephone lines are 3,86,092. The equipped telex capacity in Bombay is 3,550, while, the working telex lines are 2,599. The number of Private Branch Exchanges and Private Automatic Branch Exchanges was 5,109, while the number of the equipped Private Wires and the Private Wires working was 3,652 and 2,680, respectively in 1975-76.

During 1975-76 the per line calls of local and subscriber trunk dialling came to 16 per day, while the per line calls of manual trunk numbered 2.08 per month. The underground cable length and the underground conductor length of the Bombay Telephones measured to 6,818 km. and 28,34,847 km., respectively, during 1975-76. The number of persons employed during the same year was 12,097 of whom 8,633 were males and the rest were females. The Bombay Telephones had as many as 104 vehicles in operation during 1975-76.

The following Table No. 23 gives the statistics of direct exchange working lines in December 1984:—

TABLE No. 23 TELEPHONE EXCHNAGES, EQIPPED CAPACITY AND WOKING LINES OF BOMBAY TELEPHONES AS ON 31ST DECEMBER 1984

Serial No.	Exchange Code No.	Name of Exchange	Equipped Capacity	Working Lines	Date of opening
(1)	(2)	(3	(4)	(5)	(6)
1	21	Colaba	7,200	6,248	1940
2		Cooperage- III	5,400	4,096	26-3-1980
3	23	Cooperage-I	5,400	4,157	9-4-1977
4		Cooperage-	5,400	4,259	31-7-1978
5		C <mark>oo</mark> perage- IV	10,000	8,019	11-11- 1983
6	25	City-I	10,000	9,038	11-11- 1967
7	29	City-II	10,000	9,008	14-8-1968
8	31	City-III	10,000	9,130	11-11- 1967
9	26	Central	10,400	8,977	1924
10	27	Fountain	5,400	4,675	31-3-1976
11	32	Mandvi-I	10,000	8,971	2-5-1962
12	33	Mandvi-II	10,000	7,301	2-5-1962
13	34	Mandvi-III	9,000	7,137	30-3-1974
14	35	Gamdevi-I	10,000	9,021	28-11- 1965
15	36	Gamdevi-II	10,000	8,712	28-11- 1965
16	38	Gamdevi-III	10,000	8,467	5-9-1970
17		Malabar Hill-l	10,000	8,958	26-5-1978
18		Malabar Hill-II	10,000	9,047	29-11- 1978

Serial No.	Exchange Code No.	Name of Exchange	Equipped Capacity	Working Lines	Date of opening
	828	Malabar Hill-II Extn.	2,800	2,010	25-4-1983
19	37	Byculla-l	8,100	6,343	28-11- 1965
20	39	Byculla-II	8,100	6,190	23-12- 1972
21	89	Byculla-III	10,000	7,841	15-10- 1977
22	86	Mazgaon-l	10,000	8,971	6-9-1980
23	872	Mazgaon-II	10,000	8,215	10-3-1983
24	851	M <mark>azgaon-III</mark>	10,000	4,489	8-6-1984
25	492	Worli-I	10,000	6,663	3-12-1983
26	44	Naigaum	4,000	6,982	1928
27	882	Wadala	10,000	9,478	10-6-1982
28	45	Shivaji Park- I	8,000	7,458	1-5-1965
29	46	Shivaji Park- II	8,000	7,475	30-11- 1974
30	422	Prabhadevi	10,000	8,450	12-3-1981
31	512	Ghatkopar-I	10,000	9,465	29-2-1980
32	513	Ghatkopar-II	10,000	9,200	12-3-1983
33	47	Matunga-l	6,000	5,633	17-11- 1962
34	48	Matunga-II	6,000	5,657	15-8-1972
35	50	Thana-II	6,400	3,352	30-3-1976
36	59	Thana-I	5,300	3,047	21-11- 1964 Manual Exch. replaced by Auto

TABLE No. 23—contd.

Seria No.	lExchange Code No.	Name of Exchange	Equipped Capacity		Date of opening
(1)	(2)	(3)	(4)	(5)	(6)
37	52	Chembur	8,900	7,391	6-4-1983
38	551	Mankhurd	10,000	8,608	30-4- 1983
	555	Mankhurd Extn.	2,000	1,556	10-2- 1984
39	58	Pawai	7,800	5,676	2-2-1963
40	561 560	Mulund-I Mulund-I Extn.	10,000	7,717	7-6-1984
41	53	Khar-I	10,000	9,001	22-5- 1964
42	54	Khar-II	10,000	9,172	31-3- 1973
43	62	Andheri-II	10,000	8,688	3-1-1976
44	57	Andheri-I	9,800	8,341	9-5-1963 Old Exch. replaced.
45	612	Vile-Parle-I	10,000	9,260	31-3- 1982
46	614	Vile-Parle-II	10,000	9,204	1-6-1983
47	632	Marol-I	10,000	8,489	11-10- 1982
	630	Marol-I Extn.	2,000	1,515	10-2- 1984
48	604	Marol-II	10,000	6,765	5-5-1984
49	65	Borivli-II	4,000	3,643	25-10- 1980
50	66	Borivli-l	4,800	4,373	4-5-1963
51	68	Malad-II	6,000	5,469	31-3- 1976

Serial No.	Exchange Code No.	Name of Exchange			Date of opening
52	69	Malad-l	8,600	7,552	25-1- 1965
53	698	Bhayander	700	503	17-11- 1977
54		Washi	1,100	619	6-9-1975
55		Kalwa	700	410	3-12- 1980
		Total	4,60,300	3,86,092	

Note.--1,209 Nos. in Byculla-I and 3,573 Nos. of Naigaum exchanges are working in scrapped group.

TELEX

Telex provides automatic communications through printed words between the subscribers in cities and towns provided with telex exchanges. Telex subscribers establish their own communications to the required party dialling a station code followed by the telex number of the called party. There are as many as 68 telex stations in India including Bombay. Bombay's code No. is '011'. The equipped capacity of the Bombay Telex Station was 3,550 in 1975-76, while the telex working lines of the station during the same year were 2,599, which increased to 3,203 as on 31st March 1977.

OVERSEAS COMMUNICATIONS SERVICE

The Overseas Communications Service with headquarters at Videsh Sanchar Bhavan, Bombay, is under the Ministry of Communications of the Government of India. It is responsible for providing, operating and maintaining the external telecommunication facilities of the country.

Submarine Telegraph Cable Service: Bombay was put in communication with Europe *via* Turkey on 15th May 1864. The London-Bombay Telegraph service *via* submarine cable was inaugurated on 23rd June 1870. (*For detailed history of overseas telegraphs from Bombay to Europe (1864), see Gazetteer of Bombay City and Island, Vol. I, 1909, pp. 385-86.*) Prior to this date, Overseas contact was only through letters by seamail often by sailing ships. However, from 1870 to 1927 cable was the only medium for telecommunications. The Radio Telegraph service was opened for the first time to the West between India and U.K. on 23rd July 1927 and to the East between India and Japan on 10th January 1973 by a private company called Indian Radio Telegraph Co. Ltd. which worked in competition with the cable companies. The British Marconi Co. owned controlling interest in Indian Radio Telegraph Co. Ltd. The radio transmitting station for this purpose was installed at Dighi, about 13 km. from Pune, and the Radio Receiving Station at Daund about 64 km. from Pune.

The radio telephone service with London was established on 1st May 1933.

In July 1945, the Commonwealth Telecommunications Conference was held in London which recommended that all Commonwealth and Empire Governments should own and operate their own overseas telecommunications. Accordingly, the external telecommunication of India operated by the I.R.C.C. Company Ltd. was taken over by the Government of India with effect from 1st January 1947 and formed into a separate department known as the Overseas Communications Service (OCS) under the Ministry of Communications.

Radio Photo Service: In 1943, during the War, a radio photo service was opened from India. During the subsequent years this service was made available from all overseas communications service centres.

Press Broadcast Transmission Service: After Independence the Government desired the means for rapid and cheap dissemination of her news to and through her own embassies and representatives abroad. Therefore, overseas communications service organised the telegraph broadcasts transmission service for this purpose.

By this system the Government summarises the news which are being regularly broadcast on different daily schedules from New Delhi centre simultaneously on two frequencies since July 1948. This information is regularly picked up directly by Indian Missions in about 43 foreign countries for dissemination to the local press.

Press-Cast Transmission/Reception Service: A somewhat similar telegraph news-cast service is

operated on daily schedules from Bombay for the Press Trust of India. The overseas communications service also carries out reception of foreign radio telegraph, telegraph/press broadcasts on behalf of press agencies. At present receptions of nine such foreign press broadcasts are carried out on behalf of three Indian News Agencies, *viz.*, Press Trust of India, United News of India and Samachar Bharati.

Programme Transmission Service: Facilities are provided on the overseas telephone circuits for the transmissions *i.e.* spoken dispatches by representatives and correspondents of broadcast organizations for re-broadcast on their present broadcast networks.

Leased Channel Service : The leasing on private line teleprinter channels to customers began as a new service since December 1957. In 1977 there were as many as 73 such leases.

Installation of First Earth Station : The first earth station of India was established at Arvi, near Pune on February 1971. The Overseas Communications Service now (April 1977) operates 1st voice-grade channels through the satellite system with access to 32 countries for international telephone, telex, telegraph, radiophoto and other services.

Representation on INTELSAT: India had representation on the governing body of INTELSAT (International Telecommunication Satellite Consortium) by partnership with Sri Lanka, Malaysia, Singapore and New Zealand. Each of the members of this group undertakes representation on the Board for one year in rotation.

Reliability of Satellite Channels : Satellite communications are a state-of-the-art technology deriving support from a multiplicity of disciplines. The management of the space as the earth segment requires managerial techniques sensitive to technological changes and responsive to the demands on skilled and unskilled personnel in exploiting the capital intensive facilities to full use. The OCS earth station complex has a record of performance and reliability fully comparable to the international standard, with a normal monthly reliability of 99.9per cent.

Second Satellite Earth Station and Terminal Facilities: The second satellite earth station at Dehra Dun and the associated terminal facilities at New Delhi were inaugurated on 25th February 1977. Initially, direct Satellite Communication links from Dehra Dun have been established with U.K., France and Japan.

Technical Facilities at the Videsh Sanchar Bhavan, Bombay: Exploitation of the wideband, high quality stable telecommunication transmission is by the provision of terminal facilities which are located in Videsh Sanchar Bhavan, Bombay, where initially only manual telex and telephone exchanges were installed in 1971. By the end of 1973, semi-automatic telephone exchange was replaced by the direct operator dialling service. The semi-automatic telex exchange was also replaced by the direct operator dialling service. The semi-automatic telex exchange was pressed into service by the end of 1972, providing for the first time on demand telex service. As a result of these facilities, tremendous increase was registered in the growth of telephone and telex traffic. In order to meet this demand, schemes were initiated for the augmentation of these exchanges. The initial international automatic telephone exchange was planned in 1968 for a capacity of 48 circuits. As per the techniques of that time and prevalent international practices, only semi-automatic *i.e.*, operator dialling facilities were provided.

International Subscriber Dialling Service: Though the original equipment was designed to handle traffic with the assistance of operators, the ingenuity of our engineers was instrumental in providing International Subscriber Dialling Facilities from Bombay to London with effect from 10th October 1976. By this system Bombay is connected with many more foreign countries in the world as also with the several telephone traffic generating centres in India. The capacity of this system was to be augmented to 180 international circuits.

The SPC Telex Exchange Scheme: With the availability of a wideband high capacity satellite communication system since February 1971, the growth of inteinational telex traffic is no longer inhibited on account of limitations of the transmission medium. International telex traffic has registered an increase of the order of 40 per cent, 27 per cent and 55 per cent during the years 1971-72, 1972-73 and 1973-74, respectively.

Schemes under Active Consideration: The OCS has plans for establishment of troposcatter communication links with USSR and Afghanistan. Agreement on the INDO-USSR project has already been signed by India and USSR. The Indo-Afghan tropo link is under study. Proposal for a submarine telephone cable link between Madras and Penang by 1979 was under consideration.

Research and Development in Overseas Communications Service: The Overseas Communications Service recognised the need for having its own Research and Development unit to derive the very essential support for solving operational problems by designing and fabricating individual electronic sub-units for modifying and progressively modernising the operating systems of communications in the field.

Keeping in mind the need for affording departmental training to new entrants also, a Development and Training Section (DTS) was opened within the Pune Branch complex, in 1962. DTS has been making significant contribution and rendering support both in development and training in the field.

ADDENDA

RAILWAYS

The introduction of electric traction in 1925 is an important landmark in the history of Railways. The first electric train rolled out from Victoria Terminus to Kurla *via* the Harbour Branch on the morning of February 3, 1925. Electric traction was further extended from Victoria Terminus to Thane on the main line in 1926. This

was followed by the Raoli-Bandra section linking with Western Railway in the same year. The Thane-Kalyan section was electrified in 1929, while the electrification beyond Kalyan upto Pune and Igatpuri was completed in 1930. Extension of the Harbour Branch service from Kurla to Mankhurd was carried out in 1951, the section being provided with double track electrification in stages upto Chembur in 1959, and upto Mankhurd in June 1980.

The colour light signalling system from Bombay V.T. to Raoli junction on the Harbour Branch and from Bombay V.T. to Byculla on the main line was introduced in 1925. This system was extended upto Dadar in 1956, upto Bhandup in 1961, upto Thane in 1963, and upto Kalyan in 1964.

The daily number of suburban trains to and from Bombay V.T. which were only 150 in 1925 increased to 400 in 1947, 594 in 1962 and 908 in November 1984. The first suburban fast train on the main line was introduced in 1940, when there were only nine such locals in the Down and six in the Up direction. Initially, the local trains from Kalyan to Kasaraand to Karjat were run as shuttle services, and through local trains to these destinations from Bombay V.T. were introduced from 1st April 1965. The shuttle trains from Kalyan to Kasara and to Karjat were abolished in October 1976, which were replaced by through local trains from Bombay V.T. A few suburban trains were operated by electric locomotives from Bombay V.T. Thiss ystem was discarded from April 1970 in favour of EMU coaches.

In the beginning the imported EMU stock consisted of four coaches for each unit. Now, each unit consists of nine coaches.

The growth of population and increase in suburban traffic during the last few decades is given below:—

Year	Popul	lation	Average passengers commuting daily (in lakhs)					
	Lakhs	Index		Western Railway	Total	Index		
1950 - 51	29.9	100	4.1	4.3	8.4	100		
1960 - 61	41.5	138.8	6.1	6.5	12.6	149.9		
1970 - 71	59.7	199.7	13.2	11.8	25.0	297.6		
1980 - 81	82.4	256.6	20.8	21.3	42.3	503.6		

The occupation profile of the users of the suburban trains service is broadly as under :—(1) Students, 8.5 per cent; (2) Self-employed, 22.5 per cent; (3) Government employees, 24.0 per cent; and (4) Private employees, 45.0 per cent.

The average distance travelled by each passenger in suburban train was 14 km. in 1950-51 which increased to 19 km. in 1983-84. Recent traffic studies have indicated that the suburban railways carry about 50 per cent of the total traffic in Bombay.

To cater for future growth in traffic, the Central Railway has planned to optimise the capacity on the existing three corridors in phases to provide the frequency of service of 5 minutes, then 4 minutes to be followed by 3 minutes on every corridor, during the peak period.(Based on information contained in " Diamond Jubilee of Electric Traction-Resume ", prepared by the Central Railway (February 1985).

SHIPPING Shipping Companies in Bombay (as on 30th September 1984)

Serial no	Name of Shipping Company	Co	oastal	0\	/erseas	Total		
110		Ships	G.R.T.	Ships	G.R.T.	Ships	G.R.T	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1	Shipping Corporation of India Limited.	17	1,67,454	130	29,69,899	147	31,37,353	
2	Scindia Steam Navigation Co. Ltd.			33	4,74,961	33	4,74,961	
3	Great Eastern Shipping Co. Ltd.	4	3,908	17	4,00,080	21	4,03,988	
4	Mogul Lines Ltd (Mogul Lines Ltd. was amalgamated with the Shipping Corporation of India in August 1984.)	3	13,420	16	2,26,963	19	2,40,383	
5	Chowgule Steamships Ltd.			6	1,81,279	6	1,81,279	
6	Damodar Bulk Carriers			5	1,37,652	5	1,37,652	
7	Dempo Steamships Ltd			5	1,12,550	5	1,12,550	
8	Essar Bulk Carriers	13	53,382	2	54,529	15	1,07,911	
9	Larsen and Toubro Ltd.	13	33,302	5	85,249	5	85,249	
10				6		6		
	Surrendra Overseas Ltd.				76,246		76,246	
11	Seven Seas Transportation Ltd.			3	72,786	3	72,786	
12	Jayshree Shipping			5	67,772	5	67,772	
13	Tolani Shipping Co.Ltd	Cha		3	47,515	3	47,515	
14	Sagar Shipping Co. Ltd			2	31,508	2	31,508	
15	Continetal Shipping Corporation Ltd.			1	29,966	1	29,916	
16	Pent Ocean Steamships (Private) Ltd.			3	28,318	3	28,318	
17	Hede Navigation Pvt.Ltd.	1	629	2	25,711	3	26,340	
18	Garware Shipping Corporation Ltd.	5	4,405	3	20,789	8	25,194	
19	Varun Shipping Co.Ltd.	5	25,141			5	25,141	
20	Mackinnon Mackenzie and Co,. Ltd.			3	24,958	3	24,958	
21	South East Asia Shipping Co. Ltd			3	21,994	3	21,994	
22	Indoceanic Shipping Co. Ltd.			4	19,263	4	19,263	
23	Century Shipping			3	16,267	1	16,267	
24	Thakur Shipping Co. Ltd			3	15,376	3	15,376	
25	Parekh Ocean Carriers Ltd.			2	14,576	2	14,576	
26	Messers. Jaldoot Shipping Private Ltd.			2	14,257	2	14,257	
27	Maini Shipping Pvt	2	7,819	2	5,992	4	13,811	
28	Tata Chemicals Ltd.			1	13,325	1	13,325	
29	Tolani Limited			1	13,007	1	13,007	
30	Panchsheel Shipping Co. Ltd			3	7,877	3	7,877	
31	West Asia Shipping Pvt.Ltd.			2	7,767	2	7,767	
32	Nirvan Shipping Co. Pvt. Ltd.			2	6,446	2	6,446	
33	Ballarpur Industries Ltd.	1	6,136	1	1	1	6,136	
34	Universal Shipping Co.Pvt.Ltd	1	2,671	1	2,943	2	5,614	
35	Streamline Shipping Co.Ltd	-	-,	2	4,717	2	4,717	
36	Western Star Line Pvt. Ltd	2	3,059	f	.,	2	3,059	
37	Deccan Shipping Ltd.	-	.,	1	2,989	1	2,989	
38	Durga Steamships Pvt. Ltd.			1	2,873	1	2,873	
39	Messrs. allasons Pvt. Ltd			1	2,359	1	2,359	
40	Messers. Arcot Shipping Co.Pvt.Ltd.	1	2000	†	'	1	2,000	
41	Messers. Vijaya Line Pvt. Ltd.	-	1	1	2,356	1	2,356	
42	Morcator Ship Management	1	1,996	-	_,,,,,,,	1	1,996	
43	Messers.Mangla Bulk Carriers Ltd.	2	1,736			2	1,736	
44	Messers. Bombay Marine Engineering	1	499	2	960	3	1,459	
4.5	Works Pvt. Ltd				1 225		1.000	
45	Messers. Reshamwala Pvt. Ltd.	_		1	1,220	1	1,220	
46	T.P.S. Shipping Co.Pvt.Ltd.	1	1,179			1	1,179	
47	Darabshaw B. Cursetjee's Sons Shipping Co.Ltd	2	875			2	875	

Serial no	Name of Shipping Company	Coastal		Ov	erseas	Total	
		Ships	G.R.T.	Ships	G.R.T.	Ships	G.R.T
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
48	Messers. Morcator Lines Ltd.	1	569			1	569
49	Shaparia Dock and Steel Co. Ltd	1	530			1	530
	Sujwala Shipping Co. Ltd			1	489	1	489
	Shaparia Shipping Co. Ltd	1	483			1	483
52	Messers. Atlas Shipping Ltd.		461			1	461
	Total	66	2,98,352	287	52,45,784	353	55,54,927

Source: Directorate General of Shipping , Bombay

STATE TRANSPORT

ROUTES EMANATING FROM BOMBAY AND PAREL DEPOTS (Operated by these depots as in December 1984)

Ser No		Route distance(km.)	Number of return trips per day	
1	2	3	4	
	Bomb	ay Depot		
	Inter-St	tate routes		
1	Bombay-Indore		4	
2	Bombay-Ujjain	666.2	2	
3	Bombay-Panaji	599.6	6	
4	Bombay- Maroshi	640.0	2	
5	Bombay- Nageshi	640.9	2	
Vlaharas 61	Bombay- Madgaon	711.4	2	
7	Bombay- Sadashigad	1,027.8	2	
8	Bombay- Banglore	992.8	2	
9	Bombay- Manglore	506.5	2	
10	Bombay-Panaji (Night)	587.9	1	
	Inter-Re	gion routes		
1	Pombay Chird!	272.2	2	
1	Bombay-Shirdi Bombay-Ale	272.3	2	
2	Fata	194.5	2	
3	Bombay-Kaikali	285.0	2	
4	Bombay-Shirdi (Night)	272.5	1	
5	Bombay- Mahabaleshwai via Pune	284.8	1	
6	Bombay- Mahabaleshwai via Mahad	237.7	1	

S	Serial No.	Route	Route distance(km.)		
-	1	2	3	day 4	
-			vision routes	<u> </u>	
1		Bombay-Karjuve		4	
2		Bombay-Kase	310.5	2	
3		Bombay-Kelshi	232.7	6	
4	+	Bombay-Mapral Ambet	181.0	2	
5			182.1	6	
6)	Bombay-Malvan (Luxury)	505.9	2	
7	7	bombay- Bhiwandi (Luxury)	50.1	4	
8	3	Bombay- Sudhagad Pali	122.4	2	
9		Bombay_velas	266.9	2	
1	LO	Bombay-Uchat	82.0	2	
1		Bombay <mark>-Shiroshi</mark> Kargi	257.4	2	
1	L2	(alternate day)	259.7	2	
1		Bombay-Birmani (alternate day)	260.7	2	
1	L4	Bomba <mark>y-</mark> Bhiwandi	50.1	16	
1	L5	bombay- Lipaniwave- Toradi	200.7	2	
1	L6	(alternate day)	297.0	2	
1		Bombay- Hajimalang	63.0	2	
Manaras	18	Gariesripuri	80.7	Frequencies - as per passengers.	
1	L9	Bombay- Ganeshpuri- Vajreshwari	82.0	Do.	
-		Pare	el Depot		
		Inter S	tate routes		
1	L	Parel-Panaji	582.4	1	
		 Inter-Re	egion routes		
			205.6		
		Parel-Varkute	305.6	2	
2		Parel_Pusesawali	335.7	2	
3		parel-Pussawali (NIght)	314.4	2	
4		Parel Pari	361.5	2	
5		Parel-Bori Parel-Borivli- Shirdi	211.3 291.2	2	
 7	7	Parel-Jyotiba	414.5	2	
F		Parel-			
8	3	Kharasundi	402.8	2	

Serial No.	Koute	Route distance(km.)	day
1	2	3	4
9	Dadar-Pune (Asiad)	154.2	Frequencies as per passengers.
10	Dadar- Pune	154.2	19
11	Mantralaya-Pune	179.2	2
	Inter-Div	vision routes	,
1	Parel-Shirgaon	257.0	1
2	Parel-Arnala	541.0	1
3	Parel-Shirala	535.0	1
4	Parel-Narali	512.5	1
5	Parel-Vengurla	512.2	1
6	Parel-Cherawane (alternate day)	300.6	1
7	Parel- Tamanmala (alternate day)	300.2	1
8	Parel- Devachegothane (alternate day)		1
9		81.0	1
10	Parel-Wakada- Anjorla	236.6	1
11	Parel-Onnawase		1
12	Parel-Unnaware	264.6	1
13	Parel- Dabhilp <mark>angari</mark>	279.4	1
14	Parel-Kumbhral	540.3	1
15	Parel-Khudi	400.9	1
16	Parel-Dawali	224.2	1
17	Parel-Vengurla	512.5	1

MISCELLANEOUS OCCUPATIONS



Maharashtra State Gazetteers

INTRODUCTION

THE FOREGOING CHAPTERS IN THIS VOLUME dealt with the principal sectors of the economy of Greater Bombay. These sectors, however, do not exhaust the entire field of economic activity in this industrial and commercial capital of India. There are numerous other occupations which provide a means of livelihood to a large section of the working population, and also produce several essential goods of daily consumption. They also provide many essential services to the community. Although it may not be practicable to give an account of all such occupations in this chapter, it is contemplated to give a narration of a few of them.

Obviously these occupations are miscellaneous in character because there is no uniformity in their operation, economic status and the size of the individual establishment. But they are not insignificant in view of their employment potential and usefulness to society. In spite of their being scattered, the employers as well as the employees in these occupations have formed associations or unions of their own. Some of the organisations in this field in Bombay attract the attention of the public as well as Government as regards their demands and rights from time to time. No wonder, therefore, that vested interests have come into existence in this field, although smaller it is.

The conditions of work of most of the workers in these occupations are regulated by various enactments, such as, the Bombay Shops and Establishments Act, the Municipal Corporation of Bombay Act, the Minimum Wages Act, and many others.

The information furnished below is based on the previous edition of the *Gazetteer of Bombay City and Island* (1909-1910), various study reports, Census Reports and personal observations made. Although all attempts are made to make the narration authentic, no accuracy is claimed for the observations due to the peculiar nature of the job involved.

HOTELS AND RESTAURANTS

Records left by travellers show that the hotel trade in Bombay existed as early as 1778. A Persian Translator in the Bombay Army recorded that there were good hotels in Bombay and Madras in the last twenty years of the 18th century when Surat and Bombay started flourishing in commerce. Prior to this hospitality of the inhabitants was always exercised towards new comers till they could provide a place of residence for themselves. However, upto the middle of the nineteenth century the hotel trade in Bombay did not make any progress. A few public houses which then used to serve a type of punch made the city notorious. There were no hotels in Bombay worth the name and whatever hotel amenity then existed was low class taverns which were mostly frequented by soldiers, sailors, and low class people. The elite, respectable and god fearing people had to be content with the hospitality of the local residents or with hired tents which were pitched on the Esplanade. In 1837, a series of taverns such as Parsee George's, Portuguese George's, Paddy Goose's and Racquent Court under which drinking dens flourished, spread all over the city. However, within a period of about ten years most of the taverns disappeared and a more respectable type of hotel like Hope Hall Family Hotel began to make an appearance since 1837. The Hope Hall Family Hotel was opened at Mazagaon which for many years served as the principal hotel in Bombay.

The first of the residential clubs was established in the premises adjoining stands at the Byculla Race Course, with the express purpose of providing respectable and reasonably priced lodging.

The development of hotel trade since 1840 was rapid. Mr. Pallanjee Pestonjee opened the Victoria Hotel which was usually known as the British Hotel in 1840. He earned a good name in the trade among the civil and military gentry. As a result he moved to better premises on Clare Road and later on opened another hotel in Fort. The British Hotel has long disappeared. About 1862 the Great Eastern Hotel Company was formed, but it failed to leave a mark on Bombay. In 1871, a silk mercer and draper who had amassed wealth in his trade opened the Esplanade Hotel with 130 rooms.

The Watson's Hotel on the Esplanade described as " something like a bird-cage ", was in imitation of the palatial new hotels then going up in London and Paris.(*Gillian Tindall, City of Gold (Temple Smith, London. 1982)*, p. 175.) It opened a new era in the hotel trade in Bombay. It was distinguished in splendour and convenience. For his galleried hotel Watson imported not only iron but also bricks, from Webster's Manufactory in Burham in England. The Watson's which was exclusively for Europeans, has long ceased to function, and the ghost-like building which once housed it stands facing the building of the Bombay University. This iron-pillared building was one of the good buildings in the city in the nineteenth century.

The Taj Hotel, inaugurated in 1904, was the cherished project of the legendary Jamshetji Nusserwanji Tata, an eminent Parsi of Bombay.It is said that J. N. Tata was once humiliated by asking to leave the then best hotel in Bombay, the Watson's. His pride was shaken, and he decided that he would one day build a hotel of his own which would far exceed the Watson's in its quality. He got it designed in 1896 by a local European firm of architects.(Ibid.,pp.26-27) The Taj is yet the best in Bombay. Next door to the original Taj is a recent annexe, a rare modern building in Bombay.

In 1923, Mr. Shapurji Sorabji built the Grand Hotel. A few years later the Majestic Hotel was opened. Upto this time almost all the hotels were run on western lines. It was with the establishment of the Sardar Griha and Madhavashram in 1900 and 1908, respectively that the Indian style hotels began to make an appearance.

- "Being a port of call, Bombay was readily accessible to artistic talent from abroad, which soon became an attractive feature of local hotel life. As early as 1904, for instance, there was a Criterion Hotel that sported a full-fledged Viennese Orchestra, of nearly 20 members, about 12 of whom were women instrumentalists.
- " Then came the age of palatial structures, to accommodate hundreds at a time, that rose up on the finest sites of the city. Bombay's hoteliers, in this era, were second to none in the luxurious appointments

of their quarters or in an extravagance of the fare they served from champagne and *pate de foie gras* to the rarest of pickles and curries. Much of the catering in these hotels was done by Italians. In the first quarter of the twentieth century, local hotels reached the peak of their splendour as house of entertainment from the standpoint of food, wine and music. Some of the most gorgeous banquets were given in Bombay during this period, when money flowed lavishly from the swollen purses of the Maharajas, the business magnates and the foreign visitors to Bombay. The music was mainly of the Western classical type, though occasional diversions into the lesser realms of dance music were not unknown. The polka, the mazarka, and the waltz were among the dances that roused the enthusiasm of local votaries of Terpsichore.

- " The end of World War I saw the introduction of jazz on a large scale in Bombay. The old classical orchestra went completely out of fashion, and dancing became the rage. The one-step, the tango, the rhumba and the jitterbugs, became in turn, the favourite obsession of local lounge lizards. This was also the era of the cabaret. Some of the finest swing bands in the world, some of the best cabaret artistes and some of the most soulful crooners of dance numbers have taken the floor or stood before the microphone in Bombay's palatial hotels.
- " The two world wars brought a fresh lot of hotels to Bombay. The Ritz, the Ambassador, West End and Airlines were 'war babies'.
- "The post-war world of the late forties of the twentieth century was a world of austerity, of rationing and of strict elimination of luxury and waste. Hotel life in Bombay ceased to be the pageant of extravagant splendour it once was. Bombay's prohibition policy struck another mortal blow at the splendour of this type of existence. Hotels gradually began to serve the sole purpose of accommodating people and of feeding them on the barest of rationed necessities. The age of the champagne dinner, the semi-nude chorus girl and the exotic, sensuous music became a thing of the past.
- "The year 1949 saw a big advance in the hotel trade in India. It was placed on an organised basis by the establishment of four regional hotel and restaurant associations with head offices at India's four major cities, Delhi, Bombay, Calcutta and Madras. These four associations were linked in a federation which is affiliated to the International Hotel Association, Paris. It is given representation on the Central Tourist Traffic Advisory Committee and the Regional Tourist Traffic Committee of the Government of India. A special Hotel Consultative Committee has direct access to the Central Government on all matters relating to the trade.
- "The foremost amenity provided for visitors to this country is air-conditioned accommodation. 'Grill Rooms' are attached to all first class hotels in India which invariably provide two sets of menus, one European and the other Indian." (J. V. Furtado, Bombay the Beautiful (1957), pp. 83-85.)

To train students in the catering line, a College of Catering and Institutional Management was established at Andheri in June 1954. Before 1954 India did not have a single institute imparting training in hotel management, The All-India Women's Food Council with the assistance of the Food and Agricultural Organisation of the United Nations established the college. The Government of Maharashtra recognised it as a technical institution. A scholarship trust has been registered in 1974 by the Hotel and Restaurant Association, Western India, for awarding scholarships for education in catering. The provisions of the Apprentices Act have also been extended to the hotel and restaurant industry since 1968, and about 14 trades such as cook, steward, baker and house-keeper have been brought under its fold.

During the period after 1950, almost four times the hotel industry was subjected to various controls on the serving of meals at parties and functions as also on the courses at a regular meal. During this period rationing was in force for about 12 years at varying levels. In 1966-67 the Hotels and Restaurants Cooperative Service Society Ltd. was established to make separate arrangement for distribution of the rationed articles to the members of the association. With the co-operation of the Federation of Hotel and Restaurant Associations of India, the Department of Tourism of the Government of India evolved a scheme according to which hotels and restaurants are classified. This has enabled the creation of a section in the hotels to offer accommodation and services of an international standard to foreigners of different categories. Such hotels are known as Star Hotels, amongst which can be mentioned the following ones: Oberoi Sheraton Hotel, Taj Intercontinental Hotel, Centaur Hotel, Sea Rock Hotel, Hotel President, Sun-N-Sand Hotel, Sea Green Hotel, Hotel Natraj, Juhu Hotel, Shalimar Hotel, etc. Besides the old hotels referred earlier, viz., Taj Mahal, Grand Hotel, West End Hotel, Ambassador Hotel, Ritz Hotel and Airlines are still in existence. This list is not exhaustive and is only symbolic.

The hotel occupation includes various trades such as owners and managers of hotels, cook shops, sarais, cafes, restaurants, eating houses and their employees. The total number of workers in this occupation returned during various censuses since 1911 in Bombay are given below:

Year	Persons	Males	Females
1911	5,835	5,013	822
1921	8,584	7,573	1,011
1931	21,113	19,503	1,610
1951	48,524	46,725	1,799
1961	54,985	54,083	902

LEARNED PROFESSIONS

Teachers, medical practitioners, advocates, engineers, architects, journalists etc., can broadly be grouped under this category. They have a good educational background and specialisation in their respective fields. They have got their own separate organisations which strive for their common interest. In Bombay there are specialists who have earned a national as well as international reputation in almost every field.

The city provided a congenial home to top-most doctors, advocates, solicitors, structural and 'design engineers as well as architects and journalists. Many of them distinguished themselves in foreign countries as well. It is, therefore, no wonder that patients from various parts of the country as well as from the Gulf countries flock to Bombay for medical treatment. A number of members of the Bombay Bar have adorned the Bench of the Supreme Court of India from time to time and have earned a name abroad. The city gave birth to many of the most eminent architects and engineers and professors. A number of them were co-opted on various international bodies. After the census authorities, these professions have been classified under various small distinct groups like (i) Letters, Arts, Journalism and Science, (ii) Teaching profession, (iii) Medical profession and (iv) Legal profession.

Letters, Arts, Journalism and Science: A number of persons earn their livelihood from fine arts like music, dancing and acting. The census authorities under the group of letters, arts, journalism and science have included such professionals like artists, music composers, players on musical instruments, writers and related workers, painters, decorators, sculptors, journalists, photographers, etc. These persons are either employed by institutions or give instructions independently to the students of arts. There are also a few persons who have been honoured with awards and prizes for proficiency in different arts and service to the people.

Professionals such as music composers, musicians, singers, actors, dancers, as also the managers and employees of places of public entertainment, race courses, societies and clubs also do a great service to the people through recreation, and in a city like Bombay where the life is monotonous, relaxation through recreation is an essential service. Naturally there are good recreational facilities in the city and the connoisseurs avail of them by patronising those who are engaged in art. There are ballad singing parties, tamashas, dramas, cinema theatres, musicians and singers. There are a number of cinema and drama theatres. Bombay city has every reason to be proud of the best theatre in Asia in the Tata theatre run by the National Council of Performing Arts. The city has a long tradition of theatrical performances over the past about 225 years. A few pages in Chapter 18 of Volume III of this *Gazetteer* furnish the history of Theatre in Bombay which the reader would definitely find interesting and informative.

The total number of professionals returned during various censuses since 1911 are given below. The number of persons engaged in recreational activities is given separately.

Persons engaged in letters, arts, journalism and science in the city—

Year	Persons	Males	Females
1911	2,733	2,707	26
1921	900	882	18
1931	1,989	1,901	88
1951	3,369	3,232	137
1961	5,622	5,317	305

Persons engaged in recreational activities—

Year	Persons	Males	Females
1911	1,774	1,436	338
1921	1,631	1,358	273
1931	5,532	5,188	344
1951	15,047	13,777	1,270
1961	14,068	13,122	946

Teaching Profession: The teaching profession includes professors, lecturers, teachers, and research workers. They are employed in the two Universities, 105 colleges, schools and other educational institutions. They meet the growing educational needs of people. The best of education in all the faculties is available in Bombay. Besides general education, professional education is also available. Due to the expansion and quantitative development of educational activities there has been a remarkable increase in the number of persons engaged in this profession which could be seen from the following statement:—

Year	Persons	Males	Females
1911	2,687	2,169	518
1921	2,450	1,914	536
1931	3,350	2,488	862
1951	11,583	7,766	3,817
1961	24,247	10,849	13,398
1971	40,372	15,724	24,648

Medical Profession: Medical practitioners include physicians, surgeons, ayurvedic and homoeopathic doctors, dentists, ophthalmologists, optometrists, oculists, veterinary surgeons, midwives, nurses, vaccinators, compounders, vaids and hakims. It is a lucrative and prosperous profession and an increasing number of persons aspire to get themselves qualified for it. In Bombay the number of medical practitioners is always on the increase which could be seen from the following statement. The most important aspect of the profession in Bombay is the availability of specialised treatment in all branches of medical science in the hospitals owned by the Greater Bombay Municipal Corporation, the State Government, public trusts, the Bombay Port Trust and private practitioners. During the past about two decades a number of polyclinics have been established by enterprising doctors. They provide a number of facilities under one roof. A few co-operative hospitals such as the Sushrusha Hospital at Dadar have been rendering excellent service to the people. The census statistics about this profession are given below:—

	Year	Persons	Males	Females
	1911	3,297	2,423	779
	1921	3,224	2,409	815
	1931	4,383	. 3,109	1,274
Mahara	1951	13,873	9,407	4,466
	1961	17,393	11,674	5,719
	1971	27,346	15,952	11,394

Legal Profession: This is also a very prosperous profession in the city. Bombay gave birth to eminent jurists and advocates such as K. M. Munshi, M. C. Chhagla, Justice Bhagawati, Bhulabhai Desai, M. A. Jinnah, Saklatwala, Narayan Chandawarkar, Badruddin Tyabji, K. T. Telang and a galaxy of them.

Due to the existence of the High Court, the Small Causes Courts, Metropolitan Courts, and many Tribunals, eminent lawyers have got sufficient calling. There is also an increasing tendency among the students to study law. The advocates have got their Bar Associations wherein they discuss subjects of common interests. The sub-joined statement gives the number of lawyers of all kinds besides *Kazis*, law agents, *mukhtiars*, lawyers' clerks, petition writers as per the censuses since 1911. Censuses of 1961 and 1971 have included the number of judges and magistrates in the number of those in the legal profession.

Year	Persons	Males	Females
1911	1,044	1,042	2
1921	870	846	24
1931	1,994	1,974	20
1951	2,769	2,645	124
1961	3,466	3,341	125
1971	5,467	5,242	225

PUBLIC ADMINISTRATION

Bombay, the capital of Maharashtra, houses the regional offices and central offices of many of the Ministries of the Government of India. It is the headquarters of the two railway zones, *viz*. Central Railway and Western Railway which provide employment to a huge size of personnel. The Municipal Corporation has also considerable number of employees under its jurisdiction. Consequently there is a huge army of personnel engaged in public administration. Although it may not be scientific to classify the employment in public services into miscellaneous occupations, it is deemed desirable to furnish some relevant information and census data about them in this section.

A detailed analysis of the structure of employment, trends therein, the organised and unorganised sectors of employment in the City and the condition of the working class has been given in Chapter 9 on Economic Development, in this Volume. Hence the information only about a few aspects is given below.

Under public administration the census authorities of 1911, 1921 and 1931 included such categories, as (i) service of the State, (ii) service of the native and foreign States, (iii) municipal and other local service, and (iv) village officials and servants other than watchmen. The 1951 Census under the group of Health, Education and Public Administration, included (i) village officers and servants including watchmen, (ii) employees of municipalities and local bodies of State and Union Government, but not including persons classifiable under any other division or sub-division. The 1961 and 1971 Censuses grouped the employees under administrative, executive and managerial workers, and administrative and executive officials, Government and local bodies, respectively. Moreover, the censuses have excluded persons belonging to the learned professions, like teachers, doctors, lawyers and engineers, some of whom although in the service of Government have been grouped separately under other appropriate headings. The employees enumerated under the heading 'traffic and communications' as also the policemen and the defence personnel have not been taken into account for the discussion of the occupation under consideration. Besides, the total number of public employees taken into account by the 1911 and 1921 Censuses are exclusive of their dependents.

The census statistics of public employees in Bombay are furnished below :—

Number of Public Employees in Bombay since 1911

Year	Persons	Males	Females
1911	9,593	8,980	613
1921	10,373	8,141	2,232
1931	35,141	33,426	1,715
1951	46,521	43,386	3,135
1961	67,816	65,581	2,235

The emoluments and service conditions of these employees have been revised from time to time so as to enable them, as far as possible, to cope up with the increased cost of living. Two pay commissions were appointed during the last thirty years. Of this the recommendations of the first commission known as the Badkas Commission were implemented in 1969. The second pay commission known as the Bhole Commission submitted its report in March 1977 and its recommendations were implemented by the Government of Maharashtra in 1979. Similarly the Government of India revised the emoluments of their employees from time to time.

The problem of accommodation of public employees is very acute in Greater Bombay. A large number of

employees reside in far off places such as Kasara, Karjat, Pune, Panvel, Vasai, Virar and make daily trips to attend offices in Bombay. They are also required to pay exorbitant house rent and advance payment (pagari) running into a few thousands. Of course, Government does provide them accommodation. There are hundreds of tenements for State Government employees at Bandra, Cotton Green, Worli Chawls, Haji Ali, and at many scattered Government buildings. The Government of India and other constituents of public administration have also provided residential quarters for their employees. The problem of accommodation of the public employees in Greater Bombay district, however, is ever increasing.

DOMESTIC AND PERSONAL SERVICES

The occupations described so far do not exhaust all fields of human activity. Some occupations have become indispensable especially in an urban centre like Bombay. They are grouped under domestic servants, tailors, barbers, washermen, hoteliers, florists, etc. Whosoever knows a little bit of technique required for such services finds a job in Bombay, at least such persons will not starve. These occupations are described below.

Those who are engaged in such services have established their own unions. Even the domestic servants have also been unionised. Their union is known as Gharelu Kamgar Sangh. These unions are very alert and always fight for the interest of their members. They often strive to increase their earnings commensurate with the general increase in the standard of living. If their demands are not conceded by the employers they either go on strike or adopt such tactics as 'go slow' or ' work to rule'.

Domestic Servants: Growth of urbanisation, break-up of the joint family system, rise in the standard of living and increase in money incomes have led to a rise in demand for domestic servants. In fact there is a dearth of persons volunteering for domestic servants in the city. The domestic and personal services included the services rendered by cooks, house-keepers, maids, waiters, water carriers, door-keepers and watchmen. These servants generally belong to low income group and come from rural areas of up-Ghat andKonkan. They are paid monthly wages and in addition some of these workers are provided with free food, clothing, and sometimes shelter. The total number of these workers in the city as per the censuses since 1911 is given in the following statement:—

Year	Persons	Males	Females
1911	54, <mark>876</mark>	45,139	9,737
1921	39,070	30,306	8,764
1931	48,501	40,605	7,905
1951	86,875	65,784	21,091
1961	1,00,320	69,626	30,694
1971	1,28,562	95,225	33,337

Hair cutting: The traditional characteristics of barbers serving the clientele have undergone a tremendous change. However, one can see a few itinerant barbers in places like Kalbadevi, Foras Road, Thakur-dwar, Girgaum, Grant Road, as also in suburban areas. They visit the customers' houses with leather bags, or small tin boxes. Beauty parlours have come into existence where women customers get their hair dressed into different styles. They are confined to the areas where the affluent society is housed.

The occupation is generally followed by the persons belonging to the Nhavi community as a hereditary one. Mainly barbers from up-Ghat and Konkan areas are found in Bombay. Many of them have come from Bihar, Uttar Pradesh, Kerala and Gujarat. Persons who have initiative and enterprise have established well furnished hair-cutting saloons. A number of persons from other castes have also started hair-cutting saloons in Bombay. In most of the shops persons are employed either on daily, weekly or monthly wages.

The sub-joined statement gives the number of persons engaged in this occupation during the census years since 1911. The census authorities have included in this occupation such categories as barbers, hair-dressers, beauticians, and wig-makers.

Year	Persons	Males	Females
1911	4,374	4,370	4
1921	4,616	4,590	26
1931	3,612	3,574	38
1951	9,940	9,836	104
1961	10,764	10,657	107
1971	11,772	11,542	230

Tailoring: The occupation has flourished to a very great extent during the last forty years and has been an important avenue of employment which can be seen from the following statement. More and more people are drawn towards it as it provides employment throughout the year:—

Year	Persons	Males	Females
1911	8,980	8,249	731
1921	10,874	10,079	795
1931	12,408	11,135	1,273
1951	24,788	23,549	1,239
1961	35,257	32,934	2,323
1971	51,408	47,909	3,499

The census authorities have included in the occupation of tailoring such persons as tailors, milliners, dress makers, embroiders, hat makers, sewers and cutters, upholsterers, darners, etc. The occupation is no more restricted to the persons belonging to the Shimpi community. In fact the occupation in Greater Bombay is followed mostly by persons belonging to other castes and communities. The Bombay tailors have always been the pioneers in the changing fashions in the wearing apparel. While the bulk of tailors accept tailoring jobs from the individual customers, there are quite a few who perform the job for the makers of ready-made garments. This sector of the occupation is expanding since the nineteen fifties particularly due to the rise in export of garments.

Laundering: About fifty years ago the occupation was mostly followed by Dhobis, traditional washermen. The Dhobis then used to visit the houses of the customers for collecting clothes and again for delivering them. Washing was then done at the Dhobi Talao on a large scale until the new ghat at Mahalaxmi was provided by the Municipal Corporation. Besides Mahalaxmi, clothes are now washed in bulk at Walkeshwar, Banganga and Parel.

The owners of the big laundries get the clothes washed by paid workers. The big establishments such as Band Box, Leach and Weborny and Beauty Arts make use of electricity and modern equipment and machinery and do dry cleaning or petrol washing of terywool, woollen and silk clothes. A few establishments also undertake dyeing work besides washing. The occupation in general provides employment throughout the year.

The following statement gives the number of persons employed in this occupation as per censuses since 1911:-

Year	Persons	Males	Females
1911	6,705	5,597	1,108
1921	5,582	4,775	807
1931	6,255	5,660	595
1951	14,315	13,871	444
1961	15,967	15,301	666
1971	17,687	17,207	480

RELIGIOUS WORKERS

People in Bombay belong to different religions and almost all of them perform various religious rites. In spite of the decline of importance of tiruals and ceremonies, there is a brisk demand for preachers. The demand is at its peak during the month of *Shravan* and the marriage season. Many families have their own family preachers. They are paid in cash, while they receive the articles used in worship such as rice, cocoanut, betel-nut, etc. The earnings of a preacher have increased commensurately with the rise in cost of living.

In the case of Christians religious services have been institutionalised with an hierarchy of ordained religious workers who receive their remuneration from the institutions to which they are attached. Among the Muslims, the *Kazis* and the *Mullas* also receive remunerations both in kind and cash at the time of different festivities.

The census authorities have included in this category such persons as readers, pilgrim conductors, circumcisers, priests, ministers, monks, nuns, religious mendicants, servants in religious edifices, temples, burial or burning ground service, etc. The following statement gives the number of such religious workers since 1911 Census:—

[Year	Persons	Males	Females
	1911	850	800	50
	1921	250	210	40
	1931	2,971	2,869	102
	1951	5,098	4,911	187
	1961	3,502	3,436	66

SWEET- MEATS

The oldest known sweet-meat manufacturer in Bombay was Amichand Govindji, who established his business about 200 years ago at Bori Bunder, at a spot then known as the Three Gates. He was the first man to introduce the manufacture of *halva* in Bombay. It was then exported to many parts of India, China, Europe and Africa. The employees in the business were Marwadi Brahmans who were then paid Rs. 15 to Rs. 20 per month with boarding and lodging.

The following ingredients were generally used in the manufacture of sweet-meats: Flour (rice, wheat, gram), sugar, ghee, dry fruits, saffron, spices, cardamom, nutmeg, rosewater and other essences. The ghee used in the manufacture of sweet-meats then cost from Rs. 15 to Rs. 20 per maund.

Subsequently the business developed considerably and a large number of varieties of sweet-meats were prepared. The number of sweet-meat manufacturers also increased. The 1901 Census returned 350 sweet-meat makers and 1,400 sellers. They earned a good profit. The daily out-turn and sale in 1901 was 12 to 15 maunds. The price of sweet-meats varied from 3 to 4 annas (19 to 25 paise) per *sher* (about 900 grams).

The following statement gives the number of persons employed in this occupation since 1911:

Year	Persons	Males	Females
1911	2,106	1,948	158
1921	298	294	4
1931	580	573	7
1951	4,221	3,874	347
1961	4,849	4,532	317
1971	7,380	7,200	180

The 1951 Census has mentioned two categories *viz.*, (i) bakeries and other food industries and (ii) sweet-meats and confectionery preparations. However, the census has given the total number of persons employed under the first category only. Likewise, there are no separate figures of persons engaged in bakeries and sweet-meat making in 1961 and 1971 as the censuses of those two years have grouped together bakers, confectioners, candy and sweet-meat makers. Although every locality has some sweet-meat shops, a few firms have earned a city-wide reputation. They have a big turnover of trade. Some of them export the products to the Middle East. Besides Maharashtrians, the migrants from Uttar Pradesh, Sindh, Punjab and Rajasthan are found in this business.

BAKERIES

(The history of Bakeries is furnished in Chapter 5 of this Volume.)

The consumption of bakery products which was confined to the Europeans and Parsis in the previous century is not now restricted to a few people of particular classes. To a considerably large number of people bread is now a convenient item of food. The first bakery in the city was established about 170 years ago by a Goanese in the Old Hanuman Cross Lane wherein all the Goanese Christians then used to reside. Besides conducting his bakery, the owner kept an eating house for Europeans, which was well patronised. He started his business with a capital of Rs. 500 and the profit of his trade enabled him to live luxuriously. He then supplied bread to the inmates of the Government House and the Commissariat Department, and had about 300 customers. His staff consisted of 25 Goanese servants and a master baker, besides several Hindu women who were employed in grinding wheat. These Goanese servants besides being paid their wages were allowed to sell bread and thereby used to realise about Rs. 15 a month. The pay of the master baker was about Rs. 35 and that of servants about Rs. 12 per month with boarding and lodging. The price of superfine bread prepared from wheat known aspishi was about 12 paise a loaf.

In the Muhammadan quarters ovens called *tannur* were used for baking *nan* bread. The owners of these bakeries, *nanvais ki dukan*, were mostly Mughals, but a few were owned by Muhammadans also. These *tannurs* are still found in the Musalman *mohollas*.

The consumption of processed foods, canned fish, meat, fruit and vegetable products, food products with protein, cakes, biscuits and breads has become a habit of people in Bombay. Especially, the consumption of biscuits and breads is very common among the well-to-do.

The following statement shows the number of persons employed in this occupation since 1911:-

Year	Persons	Males	Females
1911	1,212	1,131	81
1921	732	698	34
1931	N.A.	N.A.	N.A.
1951	4,221	3,874	347
1961	4,849	4,532	317
1971	7,380	7,200	180

At present the occupation of bakeries is organised on a scientific basis and considerably big undertakings like Modern Bakeries (India), Britannia Biscuit Co. and Aryan Bakery have established their factories in the city. Of these, the Modern Bakeries is a Government of India undertaking. There are also some big biscuit

factories such as Parle Products Private Ltd., and Shangrila Food Products Ltd. These establishments produce a variety of products. The bakers in the city have organised the Bakers' Association, while the employees are also unionised in their own interest.

HAWKERS

The range of economic activity in Bombay is so wide that any effort to classify it into clear-cut divisions and to enumerate them and give an account of each one is just impossible. Here numerous persons earn by selling cowdung or mud, by manufacturing sophisticated machinery as also by practising modfern medicine. A number of women earn their livelihood by selling vegetables from door to door. Some persons go round for selling fruit, fanciful articles like glass bangles and toys. Some collect rags, pieces of papers, worn out foot-wears and sell them. In posh areas like Fort persons earn even by giving directions to the driver to park his car in a place crowded with other cars, by cleaning cars as also by catching an empty cab for a passenger during busy hours. A number of boys earn by selling newspapers. There are persons who earn by delivering tiffin boxes to the office-going population. The head-load workers and the persons who push handcarts are found in great number in the busy business centres of the city. The hand-cartmen are seldom owners of the carts. They often hire them either from the shopkeepers or mukadams. Their earnings and employment conditions are somewhat better than those of the head-load workers. Quite a good number of persons also earn by doing boot-polish, by selling Wada-pav or bhajias, parched groundnut seeds and gram, lottery tickets, etc. There are thousands, of persons working in the docks known as Mathadi Kamgar.

This shows that the persons who have got imagination, and who do not feel shy of doing any work have got immense scope to earn in Bombay. The result is that over a period of time a number of such miscellaneous occupations have come in vogue.

Amongst them hawkers occupy an important place in the occupational structure of the city and its suburbs. They trade in a variety of articles right from bananas to costly imported articles. The general explosion of population after Independence, and the usual influx of people from almost all the States to Bombay have swelled the population of the city. This accompanied by the paucity of business premises and the exorbitant price for obtaining them has encouraged the calling of hawking in the city.

It can generally be observed that persons from southern States and Sindhis form the majority of the hawkers. They are found in the better selling areas and busy streets. The following statement gives the number of authorised hawkers in the city since 1911 as per census statistics. It may, however, be noted that the census authorities have included such persons as itinerant traders, pedlars, street vendors of drink and foodstuffs, canvassers and news vendors into hawkers :

Year	Persons	Males	Females
1911	1,808	1,695	113
1921	3,258	2,812	446
1951	21,943	20,127	1,816
1961	31,837	27,963	3,874
1971	37,525	35,035	2,490

The control over hawkers in Bombay was first contemplated in 1910 when the Government of Bombay pointed out that hawkers were causing obstruction on foot-path. However, actual licensing of hawkers was not thought of till 1921. The hawkers are now by rule required to get licences for doing business. The municipal administration of the city has divided the authorised hawkers into various categories such as itinerant, roving hand carts, stationary hand carts, and squatters. In spite of various measures taken by the municipality a large number of unauthorised hawkers remain.

Both authorised and unauthorised hawkers are now posing a problem of law and order which at times assumes a political tinge also. The problem has got two sides. Firstly, people might think that the hawkers are providing service by making available goods at a lower price. Secondly, the traffic problem in Bombay has assumed such a serious proportion that the occupation of road space or footpath by hawkers is a more serious menace. And hence the necessity of removing the encroachment on the streets and footpaths and of reducing the vast number of unauthorised hawkers.

GOLDSMITHY

The frantic craze for ornaments is found in almost all the sections of the Indian society. The business in gold and gold ornaments is concentrated in Javeri market and in Dadar, Girgaum and Opera House areas. A number of shops and big firms have come up. Quite a few of them are also found in suburban areas.

Making of gold ornaments is a hereditary occupation of the *Sonars* among Hindus. They inherit the skill and craftsmanship from their forefathers. A few of them are employed in big shops, while others set up their own small shops.

According to the first edition of this *Gazetteer* (1909) there were about 4,400 goldsmiths who found constant and lucrative occupation in Bombay. In normal course the number should have increased considerably after a period of about seventy years. However, the Gold Control Rules of 1963 not only affected the business adversely but also threw a number of goldsmiths out of employment. The following statement gives the number of goldsmiths in Bombay since 1931 Census:—

Year	Persons	Males	Females
1931	2,316	2,288	28
1951	6,697	6,624	73
1961	7,860	7,816	44
1971	6,175	6,090	85

PAN-BIDI SHOPS

Pan-bidi shops number about six to eight thousand in the city. These shops neither contribute much to the economy nor do they provide employment to a large number. However, they cater to the need of the citizens. Most of the shops are run by the owners themselves without any paid employees. The earnings of the owners are quite handsome. The total collection of an average shop per day may be between Rs. 50 and Rs. 300. The Maghai betel-leaves are imported from Bihar. The prices of betel-leaves which are available at the *panpatti* shops vary from Rs. 15 to Rs. 25 per hundred and those of betel-nuts from Rs. 15 to Rs. 30 per kilo. Generally Banarasi and Kanpuri catechu (*kath*) which costs about Rs. 100 and Rs. 70 per kilo, respectively, is used in these shops. Tobacco of good quality is imported from Hyderabad, Kanpur and Lucknow. The price of a *masala pan* depends upon the contents used in it, and it may be anything between fifty paise and Rs. 100. The costliest *panpatti* consists of *warkh*, silver foil or gold foil, *kasturi* musk, *keshar*-saffron; and various spices as also invigorant and nourishing articles.



ECONOMIC TRENDS



Maharashtra State Gazetteers

This chapter is contributed by Shri K. K. Chaudhari, M.A., Executive Editor and Secretary, Gazetteers Department

SECTION I - ECONOMIC DEVELOPMENT THE PROLOGUE

BOMBAY HAS BECOME A VERY LARGE URBAN COMPLEX strung out along a seaboard, in a manner such that jurisdictional integration, though not impossible, has become quite difficult. Not only it is heavily settled throughout its length and breadth, but the nature of the terrain precludes smooth communication, excepting along the axis. Economists in Western countries would describe such a urban complex by using the word 'megalopolis' which means a wide-spreading and thickly-populated urban area. It would however be more in the fitness of things to use the more common term 'Metropolitan Area' for Greater Bombay.

In introspection it would appear that this most advanced and most rich city of India is faced with severe troubles, and it is really difficult to get to grips with the socio-economic or even with the sheer physical problems of this metropolitan area. Roads and streets laid down in the past few decades are just insufficient to meet the needs of modern traffic, and a day is not far off when even pedestrian traffic would become extremely difficult. Housing in Bombay is fantastically inadequate to accommodate the flow of immigrants and the growth of the indigenous (By indigenous population is ment local population for the purpose of our analysis.) population. The multiplication of slums and shanties, as also the increase in houseless population is therefore the natural outcome. The resulting congestion has breeded physical and psychological strains and disturbances, as also serious health hazards to the lakhs of citizens. Besides the already over-grown and growing population of the city proper, there is an additional problem arising from the army of commuters, who daily surge into the city for work, but live outside its jurisdiction. Thousands and lakhs of persons from surrounding towns such as Thane, Mumbra, Dombivli, Kalyan, Ulhasnagar, Ambarnath, Badlapur, Neral, Karjat, Titawala, Asangaon, Kasara, Vasai, Bhayander, Sopara, Virar and many others throng Bombay city for attending their work. These factors put a heavy strain on the transport system in the city. Inevitably, the civic services in the city are deteriorating. Law and order, though maintained by an efficient administration and adhered by peaceful citizens, cannot be taken for granted. To put it more precisely, this 'core' city of India is slowly submerging in a mass of unplanned and inappropriate sprawl.

Though the fundamental problems of Bombay are quite similar to those of other Indian big cities, this metropolis is unique in its combination of economic, social, locational and climatic characteristics. The basis of the troubles of the city, one way or another, is the population explosion. During the seventy years from 1901 to 1971, the population of the city increased from 9,27,994 to 59,70,575 i.e., by about 543.39 per cent, or on an average at the rate of about 7.76 per cent per annum. While the population increased by 200 per cent, or on an average at the rate of 4 per cent per annum from 1901 to 1951, even the decadal growth was as high as 43.80 per cent from 1961 to 1971. Population of the city increased at a galloping speed to 8.24 millions in 1981.

The immigrants in Bombay are broadly of two kinds. Firstly, there are persons who are deliberately seeking employment and better wages than they could get in the countryside or in small towns. Such immigrants fully realise that it may be sometime before they get a satisfactory full-time job and in the meantime they will take any odd opportunities that offer. In such cases migration is a calculated risk which brings some results. "Thus in Bombay unemployment is found to be lower among the immigrants than among the indigenous population (if they can be so designated, when most of the families will probably have come from elsewhere). The net reproduction rate of the immigrants is also lower; but this may be partly the result of their transitional situation. In Calcutta by contrast, there are few immigrants and population growth is almost wholly due to the indigenous families. One is tempted to conclude that in Calcutta the calculated risks are too high to be attractive. The second and more traditional type of Indian City immigranls are those who drift in from the country without a definite aim, or even much hope of employment. They come because they hope that urban conditions will somewhat be better; they can hardly be worse for the landless peasant than village life. These hopes can very easily be frustrated."(Ursula K. Hicks, The Large City —A World Problem, pp. 15-16.)

"The special significance of these population movements lies in the way in which they give rise to congestion of people, of houses, of street circulation. And to congestion can be traced, directly or indirectly, most of the troubles of the cities: pollution of various sorts, inadequate housing, serious health hazards, unruly populations and heavy unemployment, especially of young persons. These troubles are present in different degrees in practically all countries. It is this circumstance which gives a unity, to the quest for the diagnosis and cure of the large cities. It is indeed a world problem." (Ibid., p. 16.)

"Bombay received about 1,22,000 immigrants a year. Even with a fairly good rate of industrialisation this is clearly too high a number to be digested without adding to unemployment and shanty settlements and all that these imply is congestion, pollution, health hazards, crime and unrest." (*Ursula K. Hicks, op. cit.*)

In addition to the large number of regular commuters, Bombay has a problem of ' contact population', those persons who visit the city from time to time for particular purposes, such as professional services, cultural opportunities or entertainment. This also contributes to congestion and strain on civic services.

The problems regarding immigrant population are more complicated by disparities between the sexes, as males exceed females to a great extent. " In Bombay city of the intercensus total immigration the proportion of male immigrants was almost double that of females. This sex disparity brings with it a number of difficult social problems. It may have a variety of causes. In India many men leave their wives and families behind in their villages, but keep in close touch with them." (*Ibid.*)

Another aspect of immigration in Bombay is the type and intention of the immigrants. " For instance,

Kerala is increasingly losing population to Bombay rather than to the neighbouring States of Mysore and Tamil Nadu. On the other hand, a certain (and increasing) proportion of the urban immigrants apparently do not drift vaguely into the cities, but attempt some crude but rational calculations of the profitability of getting a good job in two or three years. In the meantime they are prepared to wait, picking up what odd jobs they can and perhaps having some small savings to help eke out over the short period. They reckon that, discounting the future income stream down to the present, benefits are likely to exceed costs. This would conform to Latin American patterns, where, however, incomes are in general larger and living standards higher. It is interesting that in Bombay in recent years the immigrants have experienced a lower unemployment rate..... than the initial inhabitants."(*Ibid.*)

Immigration to Bombay is largely on economic grounds. There are better avenues of employment on account of growth of industrialisation, development of trade and commerce and of the tertiary sector. A patent cause of immigration is also the availability of better educational facilities than in the countryside. Typically immigration is the major cause of population growth. Thus of the addition to the population of Bombay between 1951 and 1961 to the extent of 12,07,000 as many as 5,22,000 were immigrants.

The growth of Bombay as an entrepot centre of trade and commerce, and as an industrial city has created enormous problems of transportand traffic. In fact transport bottlenecks and pressure on street capacity pose a major problem for the authorities, the solution for which is not in easy accession. The problem is partly due to the extreme heterogeneous nature of the transport and the large number of erratic and slow moving vehicles. In addition to cars, buses and delivery vans, many bicycles, bullock carts, tongas and hand-carts cling to the centre of main arteries. Traffic may have to deviate to allow a cow to take its ease in the middle of the street. Millions of pedestrians throng the streets largely because they have particularly nowhere to go. The amount of pollution produced per motor vehicle in Bombay tends to be higher because many of the cars and trucks are extremely old or of obsolete design as compared to those in western countries.

The problems of transport as well as infrastructure are embarrassingly dynamic in the sense that the conditions accompanying them are continually changing. For instance, the volume and flow of traffic, development of public utilities, such as water, severage and power which are related to the streets, and the expansion and decay in certain quarters of the city, are to be dealt with every now and then. Road widening or reorganisation of streets or even of traffic islands pose a continuous challenge, as the street pattern of the city is determined by its topography and physical structure. The traffic problems of Bombay are broadly of two kinds: (i) those concerned with the provisions of the streets themselves and (ii) those concerned with the street users. All these problems are formidable and very difficult for solution. With every year that passes the congestion, delay, pollution and accident rate get worse.

The street system of the city, which by itself is not bad, was originally intended to meet the demands and requirements of an earlier age. A majority of the roads were laid out a century ago or even earlier. The city however grew enormously both in size and complexity during the subsequent period. The peculiar ecological structure and the physical aspect of the city have also added to the traffic problem. The main office and commercial centre, or the core of city, which employs the vast majority of workers in tertiary and secondary sectors, is located in the extreme south- But the most important residential area is situated in the north. This distance between the residence and work-place has resulted in the daily movement of population from north to south in the mornings and from south to north in the evenings. The semi-directional flow of traffic which is on account of the existing ecological structure is one of the basic causes of the transport problem of Bombay.

A very high proportion of commuters in Bombay travel by suburban railway. In fact suburban trains are the principal means of transport which are followed by bus services provided by the Bombay Electricity Supply and Transport Undertaking. The proportion of cars to population is one car to 91 persons in Bombay, while the proportion for India as a whole is one car for 1130 persons.(Information from World Bank Report)

The sense of overcrowding in Bombay is enhanced by its geographical situation, which was once so suitable for a fortified anchorage but now severely restricting expansion in all but one direction—further on to the mainland and further away from the focal point of the city. Lakhs of commuters travel to work each day along the choked arteries of the linear city. The development of the focal point of the city, the Fort area, for offices, hotels, dnd luxury apartments continues, with sky-scrapers and land reclamation. The reclamation of land on the southern and western edges of the city is further overloading the transport network and civic services. The encroachment and further encroachment on sea for finding land for human habitation and office accommodation is putting an increasing strain on the transport system, water supply, electricity supply and many incidental services.

It has therefore become inevitable to disperse industries and housing to the mainland beyond the limits of Greater Bombay. A lot of exercise in dispersal of economic activity and in regional planning is being done since the end of the sixties, at government and municipal levels in the city. Accordingly a Metropolitan Regional Development Plan for the region has been formulated. It is hoped that the construction of a new port and the establishment of the twin city across the bay in accordance with the plan referred to above will set as a counterfocus to ease the congestion in the mother city. A detailed consideration of the Bombay Metropolitan Regional Development Plan will be done later on in this chapter.

Bombay is a premier port on the Western sea board and is the commercial capital of India. It is the most advanced industrial centre not only of Maharashtra but also of India. It has been a leading centre of the cotton-mill industry for a century and quarter, and has provided a congenial home for engineering and chemical industries during the last few decades. A number of modern and technologically advanced industries have been established in Bombay after the fifties. Besides manufacturing, it retains the functions which brought it in existence as an administrative communications and trading centre serving Western India. The registered offices of a number of private sector and public sector corporations and industries are housed in the city, and it has almost become the nerve centre of the Indian economy. It has

been the 'Gateway of India' for Europe, America and Africa.

The strategic location of this metropolis, the agglomeration economies available herein and other locational advantages offered by it have had an effect on its economic growth.

The economies of agglomeration in Bombay have contributed to the concentration of industries and commerce in the city. Entrepreneurs often find it cheaper to locate new investments in this developed centre or on its outskirts than in new centres. Bombay provides the essential infrastructure for industries and commerce. It is a natural harbour, and as said above, is the 'Gateway of India' to Europe, America and Africa. The magnificent and capacious harbour has not been sensibly injured for the last about 275 years, either by the forces of nature or by the hand of man, while it has been explored and defined with greatest accuracy. The bunders and places for the loading and storage of merchandise are extending, and there is little danger of the anchorage being impaired. Naturally hundreds of thousands of tons of merchandise is imported and exported from Bombay. It is advantageously situated as regards railway communication. The Central Railway and the Western Railway both emanating from here have connected Bombay with the rest of the country. These two trunk routes radiating in various directions across the continent of India have also played an important role in the development of Bombay.

Bombay owes its economic growth to a class of enterprising entrepreneurs which included, besides Maharashtrians, Bhatias, Jains, Marwadis, Banias, Parsis, Europeans, Bohoras and Khojas. Though many of them were migrants from Gujarat, Rajasthan and Karnatak, they raised the initial capital by thrift, moneylending and selling their belongings in their native places. They gradually grew in their financial strength, and invested in industries and trade. As things appear at present a number of business houses have either monopolistic or oligopolistic control over certain industries. Such business houses and groups have a nation-wide reputation for controlling organised industries not only in Bombay but also in various parts of the country. Besides, a new entrepreneurial class comprising Maharashtrians and some others has come into existence/This class has also contributed to the growth of Industries and Commerce in Bombay.

In addition to the indigenous entrepreneurs, a number of foreign concerns many of which conform to the description as 'multi-nationals' have also contributed to the economic growth of Bombay. Most of the foreign concerns owned the industrial concerns which they established on their own, in the past. They hardly allowed any indigenous interests in their business and were quite exclusive. In keeping with the industrial policy of the Government of India the exclusive interest of the foreign companies has been curtailed either by compelling them to allow Indian participation in share capital and management or by their nationalisation. Hence, we now find a number of companies which are run with foreign collaboration. In many cases the collaboration is financial and technological but in some it is mainly technological. Such companies have contributed immensely to the growth of the Bombay industries, in particular and of the economy in general.

Besides the harbour and a centre of railways, Bombay is an international airport affording air services to almost all parts of the world. It is also connected by air to all the major cities in the country and a number of national and State highways emanating from the city connect it with almost the entire country. There is also a modern telecommunication service from Bombay to all parts of the country, and an overseas communication service to major cities in the world. All these infrastructure facilities have encouraged localization of industries at Bombay.

The other factors contributing to the concentration of industries and commerce include the growth of banking institutions, a developed money market, the best of educational and medical facilities, a peaceful labour force and an efficient administration at the Government and municipal levels. Besides banks, a number of investment trusts and agencies mobilise funds for lending to small-scale industries. Bombay is also a home of technocrats, qualified technicians and skilled labour, and there is no derth of such personnel to industries. Besides being a centre of industries and commerce, it is a centre of educational and cultural activities which are unique and unparalleled in the whole of India. These factors are quite favourable to the expansion of industries in Bombay.

GROWTH OF BOMBAY

Just about the first quarter of the nineteenth century, the Island of Bombay was emerging from the position of a mere trade settlement into that of the Gateway and Capital of Western India. The trade of the port showed a steady rise. The construction of the Sion Causeway which connected the Island with Salsette gave a further impetus to trade. Naturally, the trading communities migrated to the Island in larger numbers during these years. The Dassa Oswal Jains, particularly from Cutch came in increasing number in pursuit of prospective trade, and generally laid the foundations of one of the most prosperous of our modern commercial classes. The Parsis also equally contributed to the growth of Bombay. Persons like Jamshetji Wadia used to build first class frigates for the Indian Marine and stout vessels for such friendly powers as the Imam of Muscat. (S. M. Edwardes (ed.), Gazetteer of Bombay City and Island, Vol. III, pp. 272-73,1909)

The abolition, in 1813, of the East India Company's monopoly for trade in India gave a decided encouragement to the commerce of the Island. To quote only one item, the export trade in raw cotton increased from 30 million lbs. in 1809 to 90 million lbs. in 1816.

The construction of a good carriage road up the Bhor Ghat during the regimes of Mountstuart Elphinstone and Sir John Malcolm, opened the Bombay Island to the Deccan. This Ghat, opened on 10th November 1830, facilitated the trade of Bombay in a large measure.

Another landmark in the growth of Bombay was the construction of the Golaba Causeway in 1838.(*S. M. Edwardes (ed.), Gazetteer of Bombay City and Island, Vol. II, p. 143.*) The causeway initiated a growth of the areas around it as also that of the Fort area as it joined the Colaba and the Old Woman's Island to the Island of Bombay.

The period between 1860 and 1865 was one of accelerated growth in every branch of economic activity.

The commencement of the first railway line in India from Bombay to Thane on April 16, 1853 and the opening of the Bombay-Baroda and Central India Railway from Bombay in 1864 were the most important landmarks in the development of Bombay. The opening of the Bhor Ghat railway line on 22nd April 1863 facilitated the growth of trade and industry in Bombay. The value of railway in fostering the growth of Bombay has well neigh been incalculable.

While the regular service of coasting steamers from Bombay to other ports of India increased the trade of this city, the opening of the Suez Canal in 1869 effected a complete revolution in the carrying trade of Bombay, which had upto that date been restricted by a lengthy voyage round the Cape. Bombay thus became the imperial port of India conveying British mails and goods. It is interesting to note that, in order to improve communication between Bombay and the rest of the world, a direct submarine cable was laid down from Suez to Bombay in 1870, in connection with the cable from Falmouth to Gibraltar.(*Ibid.*, *p.* 163.)

Another fundamental cause of the growth of Bombay was the enormous increase of the cotton-trade and the subsequent Share Mania of the years 1861-65. The outbreak of the Civil War in America (1861-65) which at once cut off the supply of American staples, is calculated by Mr. Maclean to have given to Bombay roughly 81 millions sterling in five years over and above what she had in former years as a fair price for her cotton.(*Maclean's Guide to Bombay.*) "The produce of all the great cotton fields in India, Nagpur, Berar, Gujarat and the Southern Maratha Country found its way to Bombay in order to be exported to England with all possible despatch, while the high prices ruled and the blockade of the South American ports lasted. So sudden was the demand, so high the range of price, so vast the profits, that an economic disturbance set in. Money seemed to lose its purchasing power, the prices of almost all articles rose simultaneously the wages of labour were enhanced in proportion."(*Sir Richard Temple, Men and Events of My Time in India, 1882.*)

Accumulation of money in the hands of certain classes led to speculation. Adventurers from distant places were attracted to Bombay and all sorts of ingenious schemes were devised for putting the newly acquired wealth to use. The Stock Exchange had a brisk business. In 1863, Bombay shipping companies were started which snatched away business from English ship-owners. Speculation knew no bounds. The Back Bay Reclamation project attracted money in volumes. The value of land had been trebled and quadrupled in Bombay, the population was daily increasing in numbers, and the available space within the island was very little. The Back Bay Company's transactions had proved too great a temptation for the merchants of Bombay.

The cessation of the American War in 1865 however brought conditions of a heavy slump in the commerce of Bombay. The fall in cotton was followed by a depreciation in land prices which brought down shares from 500 or 600 per cent premium to a discount. By the end of 1866 every one of the financial associations had failed and gone into liquidation; all banks, with the exception of those having their headquarters out of Bombay, had also gone out of existence. The Bank of Bombay which had also collapsed in 1866, was however restructured afterwards in 1868.

The Share Mania by good fortune did no permanent injury to the trade of Bombay; while it, at the same time, was responsible for improvements which might reasonably have taken many years to introduce. Handsome works were carried out on either side of the Apollo Bandar, extending south-westwards almost to Colaba Church and stretching from the Custom House to Sewri along Mody Bay and the Elphinstone, Mazagaon, Tank Bandar and Frere reclamations—a distance of at least five miles. On the other side of the island was the great Back Bay reclamation from Colaba to the foot of Malabar Hill, whereon was constructed a good road. The area thus reclaimed amounted to more than 4,000,000 square yards, and resulted by 1872 in an increase of the area of the whole island from 18 to 22 square miles. Simultaneously there was a lot of progress in construction and widening of roads, the chief among them being the widening and rebuilding of the Colaba Causeway in 1861-63, the commencement of the Esplanade, Rampart Row and Hornby Roads, the widening of Cruickshank Road (now known as Mahapalika Road) and Carnac Road (Tilak Road) in 1865 and 1866, and the completion of the Carnac, Masjid and Elphinstone overbridges in 1867.(*S. M. Edwardes, Rise of Bombay—A Retrospect, 1902*)

More striking than new reclamations and communications were the great buildings and architectural adornments of the city which were projected and commenced during Sir Bartle Frere's tenure of office. The embellishment of Bombay was carried out by both Government and private citizens, both equally actuated by the spirit of the age, which demanded that some part of the newly acquired wealth should be allocated to the permanent advantage of the city. The birth of Bombay as a populous and beautiful city is ascribable to the joint labours of Government, the Municipality, private firms and public-spirited citizens.

The first mill in Bombay was projected in 1851 by Mr. C. Nanabhai Davar and commenced work in 1854 as a joint-stock company under the name of the Bombay Spinning and Weaving Company. In 1870, there were 10 mills on the island, in 1875 when the Millowners' Association was first established there were 27; in 1880,32; andin 1890, 70 mills. The opening of each mill augmented the number of industrial workers, so that the census of 1881 recorded 8.4 per cent of the total labouring population as mill-workers.

The formation of the Bombay Port Trust in 1873 was an important landmark in the economic history of Bombay. The Prince's Dock, the first stone of which was laid by the Prince of Wales in 1875, was opened on the 1st January 1880. The Victoria Dock was completed in 1888. Tramway communication was instituted between 1872 and 1877, and by 1880 it had reached from Fort to Girgaum, Byculla and Grant Road.

About the commercial prosperity of Bombay, Lord Reay said as follows in 1887: "The prosperity of Bombay is one of the most remarkable events of the Victoiian reign..... It is one of the most beautiful towns of the Empire, if not of the world. Its sanitary condition is also vastly improved. Fifty years ago the

exports amounted to nearly 60 millions of rupees and the imports to little more than 47. In 1885-86 the exports amounted to more than 419 millions and the imports to nearly 440 millions. In 1885-86 the value of cotton exported amounted to more than 84 millions of rupees, of pulse and grain to more than 43 millions. The municipal income has risen from 18 to 42 lakhs. The Prince's Dock would do credit to any port in the world."

The growth of the mill-industry during 1880-1895 led to development of the northern areas of the island. There was a considerable increase in industrial employment. The disastrous plague epidemic of 1897-99 brought tremendous decline in economic activity as thousands of persons fled away from Bombay. In 1899, the cotton mill industry was at-its worst, and all the mills were closed for three days in a week while some of them were wholly idle. The 20th century however witnessed a reversion of this order of things, and cotton trade improved greatly. The Swadeshi movement launched by nationalist leaders had a great impact on the textile industry. This movement led to increase in demand for cloth manufactured by Indian mills as against imported cloth.

The establishment of the City Improvement Trust during the regime of Lord Sandhurst in 1898 did a great deal towards the improvement and development of Bombay city. It was modelled after the pattern of the Glasgow City Improvement Trust.

The trust was charged with development functions such as, (i) laying of new roads, (ii) improving crowded localities, (iii) reclaiming further lands, (iv) construction of dwellings for the poor and (v) provision of accommodation for the police. The Trust undertook several schemes for improvement of congested areas. A number of road works, including widening of old streets and construction of thorough-fares were taken up. A few among the important roads constructed by the Trust were: Hughes Road, Sandhurst Road, Princess Street, Frere Road and Lamington Road. These thorough-fares opened up many new localities in the city for residential and industrial accommodation. The work of the Trust as regards building construction was quite commendable. It also did a lot for clearance of congested areas and land reclamation. The trade depression and the slump in industries that followed after 1922 restricted the activities of the Trust. The demand for building sites was reduced, and hence, proposals for further reclamation of Back Bay and Walkeshwar were withheld.

The financial strain led to the dissolution of the Improvement Trust on 31st March 1926, and the bulk of the work was entrusted to the Bombay Municipal Corporation. It was finally amalgamated with the Municipal Corporation by the Act of 1933.

The Mahim Development scheme was effectively implemented. Under this scheme Gokhale Road, Lady Jamshedji Road, Dadar-Matunga Station Road and many other roads in the area were developed. Naturally, the entire area between Dadar and Mahim came under the development fold. The Shivaji Park was laid out in 1929. The Municipal Corporation was faced with financial difficulties and strains during the Second World War. The Government therefore empowered the Corporation to postpone the execution of development work till the end of the War.

To plan the Post-War Development, Government appointed a Committee presided over by the Adviser to the Governor. The Committee recommended, among many other measures, the expansion of the territorial limits of Bombay for dispersal of the development of Bombay, and preparation of a Master Plan. The outline of Master Plan which was prepared in 1947 (approved in 1948) was really not a complete Master Plan but a preliminary guide for further development of the city, suburbs and satellite towns.

The growth of Bombay gathered further momentum after 1950. There was unprecedented development of industries and commerce. Since there was no space available to new industries they hurried to establish themselves in the suburbs. The accelerated rate of growth created unforeseen problems due to heavy concentration of industries. The territorial limits of the city were expanded in February 1957 (*The present area of Greater Bombay after the expansion in February 1957 is 603 sq. km. as per the Surveyor General of India.*) upto Dahisar on the Western Railway and upto Mulund on the Central Railway and the whole city agglomeration came to be known as Greater Bombay.

There was an increasing demand from the enlightened citizens that the development of this most important city of India must be properly planned in order to save it from haphazard growth. The Bombay Municipal Corporation therefore prepared a Development Plan for Greater Bombay in 1964. It was followed by the Gadgil Committee's Plan and the Regional Plan for the Bombay Metropolitan Region prepared by the Bombay Metropolitan Regional Planning Board. These plans are dealt with separately in this chapter.

THE ECONOMY OF BOMBAY

The economy of Bombay can be properly undeistood by making a rough and broad distinction between its organized and unorganised sectors. The organized sector is conceived to include large manufacturing firms in the private sector and the employment in Union Government, State Government, Municipal Corporation, Banks, Railways, Bombay Port Trust, Life Insurance Corporation of India and other quasi-Government activities which together form the public sector. The unorganized sector is conceived to include a very large number of producers who employ monthly paid or casual labour; it also includes a substantial amount of household employment and self-employment and cultivators as also agricultural labourers. A salient feature of the organized sector is its relatively organized work-force which is covered by labour legislation and trade union protection.

The criterion for the distinction is made further precise by accepting the employment criterion set by the Directorate of Employment and Training, Bombay. Since the Directorate of Employment collects data for the organized sector, defined as all public sector establishments and all privately owned establishments with more than 25 employees, this is certainly a dividing line and it has been used below for our purpose.

The Statement No. 1 shows the composition and growth of the organised sector employment from 1951 to 1971. It is evident that the organized sector provided employment to about half the work-force in Bombay in 1961 and that this proportion showed no sign of rising over the period of 20 years. The overwhelming majority of other workers were in the unorganized sector, employers being small in number. As regards the composition of the work-force in the organized sector, it is seen that a substantial but diminishing majority was found in the private sector. Of these, more than 80 per cent were employed in factories while the rest were employed mainly in offices. The size of the organized sectot was of the same order or magnitude as that of the unionized labour force in 1961. Registered trade unions claimed a membership of. 7,03,542 in 1961 in Bombay. (L. K. Deshpande, Evolution of the Wage Structure in Bombay City, 1950-60, (Unpublished Doctoral Thesis, Bombay University, 1964))

The Statement No. 2 gives the distribution of the work-force residing in Bombay into employers, organized workers and unorganized workers. It may be noted that the statistics are rough estimates based on data from the 1961 Census and the Directorate of Employment and Training.

Manufacturing accounted for about half the organized employees, of which a furthei three-fifths were engaged in the textile industry. The subdivisions in manufacturing other than textiles were distributed almost equally among the organized and unorganized sectors. As it is most natural, organized workers in transport and communication services were principally in the public sector and covered the employees in the B.E.S.T., railways, docks, shipping, postal services and telecommunications. The organized workers were mainly in government administration, education and medical services which were largely in the public sector. In private sector they were engaged in various professional and business enterprises and in larger hotels and catering concerns. Domestic servants who were not at all organized constituted about half the unorganized sector.

UNORGANIZED SECTOR OF EMPLOYMENT IN BOMBAY, 1961

About half the employment in the unorganized sector was that of self-employed persons and those engaged in household industry. Of the 4,45,000 wage employees, about 1,00,000 were employed as household servants and cooks, and the rest of them, viz., 3,45,000 were employed in very small establishments, employing on an average of about four workers each. This is evident from the fact that there were 96,000 'employers' according to the Census who are defined as persons at work who regularly hired other workers to assist in that work; on the other hand there were only 2,325 private establishments in the organized sector, according to the Directorate of Employment, and it can be assumed that these establishments accounted for approximately one employer each. Thus there were about 93,500 employers in the unorganized sector employing 3,45,000 workers, about four employees per employer.

The Statement No. 2 shows that the ratio of employees to employers in retail trade was less than two. Manufacturing units in the unorganized sector, small as they were, had an average of four employees to one employer. There were 27,500 employers in manufacturing as a whole. Of them, 1,400 were organized sector factory owners and about 2,500 small registered factories employing 10 to 25 workers each and employing a total of about 50,000 workers. This left about 23,500 employers employing about 72,000 employees, *i.e.* about three employees per employer.

STATEMENT No. 1

Employment in Organized Sector in Greater Bombay, 1951-71

(D. T. Lakdawala and Others, Work, Wages and Well-being in an Indian Metropolis, Economic Survey of Bombay City, 1963. Directorate" of Employment, Bombay, Quarterly Returns, 1961,1966 and 1971, cf, Heather and Vijay Joshi, Surplus Labour and the City, 1976.)

(Figures in thousands)

	1951	1961	1966	1971
1.Private Sector-				
(a) Factories	358	458	523	531
(b) Other	N.A a	94	116	97 d
Total	445 b	552	639	628
2. Public Sector -				
(a) Union Government	55	67	88	90
(b) State Government	28	41	57	61
(c)Municipal Government	52	70	89	94
(d) Banks	3	6	10	30
(e) Railways	51	91	96	105
(/) Post	18	25	27	

(g) Life Insurance	N.A.	6	8	10
(h) Other quasi-Government	N.A.	24	38	
Total	215 b	330	413	390
3.All Organised Sector Establishments	660b	882	1052	1111
4.All Workers (Census) ^C	1304	1687	N.A	2198

Notes,—(a) Figures for Shops and Establishments given in the source are not used here as they appeared to cover many small establishments and family workers.

(b)Based on a very rough estimate of missing categories of organized workers. (c)Note changes in Census definition of workers. The 1951 statistics are roughly comparable with those for 1961. They include secondary earners and all principal earners except those with unproductive sources of income. The 1971 definition is more restrictive.

(d)Reduction due to nationalization of banks in 1969.

STATEMENT No. 2 Estimated Employment in the Organized and Unorganized Sectors by Major Industry Divisions and Selected Industries, **Greater Bombay, 1961** (Figures in thousands)

Industry	Organized Employees	Unorganized Sector			Employers	Total work- force
		Total	Employees	Others		
	(1)	(2)	(3)	(4)	(5)	(6)
Primary Production	0.5	30.1	15.9	14.2	1.4	32.0
Manufacturing	466.7	194.3	122.1	72.2	27.5	688.5
Of which—						
Food and Beverages	14.5	10.4	6.5	3.9	1.9	991
Tobacco	2.3	7.9	2.2	5.6	0.6	
Textile	267.7	27.6	7.7	19.9	6.3	
Printing	14.7	8.0	6.8	1.2	2.0	
Petroleum	11.2	5.4	5.0	0.4	0.4	
Chemicals	29.4	11.5	9.6	1.9	2.4	
Non-Metallic Minerals	13.2	9.1	7.3	1.8	0.5	
Metals and Engineering	95.5	41.0	31.5	9.5	7.6	
Miscellaneous	18.2	73.3	45.4	27.9	5.8	
Construction and Utilities	57.3	14.2	2.3	11.8	2.5	73.9

Industry	Organized Employees	rees			Employers	Total work- force
		Total	Employees	Others		
	(1)	(2)	(3)	(4)	(5)	(6)
Trade and Commerce	56.6	200.3	88.0	112.3	47.5	303.8
Of which—						
Wholesale Trade	16.8	18.8	7.7	11.1	8.5	
Retail Trade	5.0	173.8	80.3	93.5	33.6	
Finance and Commerce	34.3	7.7	0	7.7	5.4	
Transport and Communications	101.2	85.5	44.6	40.8	2.6	189.3
Services	154.5	226.5	170.7	55.8	14.7	395.7
Of which—						
Public Administration	81.9	0	0	0	0	
Education	31.0	1.2	0.1	1.1	0.7	001
Medicine	9.5	11.4	8.5	2.9	1.8	CCI
Personal services	8.2	174.5	142.4	32.1	9.4	
Other services	23.9	39.4	19.7	19.7	2.8	
Unclassified	1.3	2.0	1.3	0.7	0.1	3.5
	837.6	752.3	444.9	307.4	96.0	1686.7

Notes-

Col. 1—Employees in the public sector and private sector establishments employing more than 25, including identifiable military personnel and excluding identifiable non-residents.

Col. 2—Col. 3 + Col: 4.
Col. 3—Difference between 'Employees in Non-Household Industry 'given by the Census and Col. 1.

Col. 4—Single workers, family workers, workers in household industry, cultivators and Agricultural Labourers as reported in the Census.

Col. 5—Employers as reported by the Census.
Col. 6—Total workers reported by the Census, sum of Cols. 1, 2 and 5.

Sources.—(1) Census of India, 1961, Vol. X, Part X (1-B), Greater Bombay Census Tables: Primary Census Abstract, and Table B, IV, Parts A, B and C. (2) Directorate of Employment, Bombay.

Domestic servants, other services, medicine and education which constituted services accounted for about 30 per cent of the unorganized work-force or 2,26,500 workers. The rest of the workers under services constituted dhobis (13,000), workers in small hotels and catering houses (50,000), casual labour in film industry and film extras, priests, astrologers, shoeshiners,, masseurs, private tutors, self-appointed car-attendants, snake-charmers, street-dancers and acrobats.

The unorganized sector included 2,00,000 workers in trade and commerce, and they were about four times the number of organized workers. The majority of them were small shopkeepers and hawkers either self-employed or employees.

The majority of the workers in the unorganized sector of manufacturing were employees (1,22,000), but the number of those working on their own account was quite substantial *viz.* 42,600. Workers in household industry were 22,900 and family workers 6,600. They work in small establishments, but they are of considerable economic importance. Textile units in the unorganized sector covered more than 27,000 workers.

Garment-making is largely an unorganized activity carried by tailors working in small shops, and they numbered about 20,000. A majority of them were not employees but were self-employed persons, similar being the case with bidi makers. The workers in petroleum and rubber products were engaged mainly in retreading tyres and making of rubber goods; those in chemical establishments mainly produced soap, matches and common salt, while those in the non-metallic products sub-division produced building material, pottery and miscellaneous glass products. The metals and engineering sub-division which is by and large ancillary to large scale industry accounted for 41,000 workers, 75 per cent of whom were employees. The miscellaneous sub-division accounted for about 35,000 workers engaged in making wood products, leather goods, jewellery, watch repair and stationery articles.

"Two salient features of the unorganized work-force in manufacturing may be noted. First, it is clear that the ratio of non-wage labour to wage employees is higher in the more traditional industries such as tobacco, textiles, leather and food-preparations; in the more modern industries, the mode of production favours hired labour. Second, the unorganized sector is not entirely composed of extremely unskilled people. There is a very wide range of skills present and there is reason to believe that the low incomes earned are the result of lack of resources rather than of skill, effort or enterprise." (Heather and Vijay Joshi, Surplus Labour and the City, A Study of Bombay (Oxford University Press, 1976),)

Workers in transport and communications including lorry-drivers and cleaners, taxi-drivers, scooter-rikshaw drivers, *mathadi* workers, coolies, porters, tiffin carriers, etc., were estimated at 85,000, about half of whom were wage employees. Construction and utilities accounted for 14,000.; and primary industries for 30,000 of whom about 8,000 were fishermen.

GROWTH OF THE ORGANIZED SECTOR, 1961-71

The following statement shows the growth of population and employment in Greater Bombay from 1961 to 1971(Census of India, 1961 and 1971 and Directorate of Employment, cf. Heather and Vijay Joshi, op, cit.):—

STATEMENT No. 3
(Figures in '000 except percentages)

Year	Population		Organized workers	Workers in manufacturing as	Organized workers in manufacturing
				per Census	
1961	4,152	1,687	883	689	467
1966			1,046		536
1967			1,041		539
1968			1,036		527
1969			1,039		527
1970			1,078		556
1971	5,969	2,198	1,111	930	571
Percentage decade variation.	43.8	30.3	25.8	35.0	22.3

* The criterion used by the Census to identify workers was altered in 1971 to become most conservative. The decadal change observed is an under-statement of employment growth on consistent definitions.

It can be observed from Statement No. 1 that employment in the organized sector as a proportion of Bombay's total work-force did not increase between 1951 and 1971. However the statistics for 1951 are rather uncertain and not suitable for detailed comparison, unlike those for 1961 and 1971. Organized employment did grow fairly steadily in the first half of the sixties. However conditions of economic recession and stagnation adversely affected employment in private sector industries. Recession and stagnation were arrested by the end of the sixties, but the increase in employment in the organized sector over the decade as a whole was only 26 per cent. During the same period the change in the total numbers at work must have been at least as great as the 30 per cent difference between the two Census counts of workers. The increase in the labour force during the decade was estimated at 34 per cent. Thus, not only had the number of workers outside the organized sector in the city remained substantial, but also they increased in terms of number and as a proportion of labour force. While the population of the city increased by nearly 20 lakhs and the total labour force by about 6 lakhs, the additional number of jobs increased by only 2.5 lakhs, in the organized sector. It means that the rest of the 3.5 lakhs additional workers found a means of livelihood either in the unorganized sector of the economy in Bombay or in the expanding industrial zone in the adjacent areas, or they were unemployed. (Heather and Vijay Joshi, Surplus Labour and the city)

It may be explained here that growth of employment in Bombay was adversely affected by a number of factors. Firstly, there was a recession in the economy in general and industries in particular. The cotton textile industry which is by far the biggest industry in Bombay was faced by market glut and a heavy reduction in production. A number of textile mills were closed, while many others were working at undercapacity. Though the demand recession was almost nation-wide, its effects were felt very acutely in the employment situation in Bombay. Secondly, government policy of discouraging further growth of industries in Bombay city and of decentralization of industries out of Bombay also affected the employment opportunities in Bombay proper. As a result, many new industries found a congenial home on the outskirts of the city, while a number of old factories in Bombay found it convenient to shift to the Thane area which offered better facilities for expansion of factory sites, etc.

As the new areas on the outskirts of Bombay, but within the Bombay Metropolitan Regional Development area, offered better incentives and better avenues, further growth of industries was diverted out of Bombay. During all these years industrial expansion was diverted to Thane, Belapur, Kalwa, Dombivli, Kalyan, Ulhasnagar, Ambarnath, Shahad, Ambivli, etc. To sum up, Bombay city lost, to some extent, its share of the further growth of industries and employment to the industrial complex in Thane region. The metropolitan economy expanded rapidly, not in the city, but in the adjacent areas in the Bombay Metropolitan Region.

It is seen from statistics that while there were only 32,000 new jobs in the organized sector in Bombay from 1966 to 1970, an addition of about 3 per cent over four years, Thane area gained 45,000 new jobs which meant an increase of over 45 per cent. Of the new jobs, manufacturing industries accounted for 20,000 in Bombay and 40,000 in Thane. In Bombay and Thane taken together, factory employment grew faster than that in the rest of the organized sector in the second half of the decade as also in the entire decade.

CHANGE IN ORGANIZED SECTOR EMPLOYMENT IN BOMBAY, 1961-1971

STATEMENT No. 4
DECADE CHANGE IN ORGANIZED SECTOR EMPLOYMENT, BY INDUSTRY AND SECTORS IN GREATER BOMBAY, 1961 TO 1971

	Estimated E	Employment	Decade change		
Industry	1961 ('000)	1971 ('000)	Absolute No. ('000)	Percentage increase	
	(1)	(2)	(3)	(4)	
Agriculture, Fishery etc. 	0.3	0.4	0.1	27	
Mining and Quarrying	0.2		-0.2	—97	
Manufacturing	466.7	570.6	103.9	22	
of which— Cotton mills	229.0	226.3	-2.7	-1	
Chemicals	29.4	52.9	23.5	80	

	Estimated E	mployment	Decade change		
Industry	1961 ('000)	1971 ('000)	Absolute No. ('000)	Percentage increase	
	(1)	(2)	(3)	(4)	
Engineering	95.5	133.0	37.5	39	
Other Manufacturing	112.8	158.4	45.6	40	
Construction and Utilities	57.3	53.5	4.0	— 7	
Trade and Commerce	61.8	79.8	-17.9	29	
of which— Banking, Insurance, Commerce, etc	. 40.1	56.8	16.7	42	
Transport and Communication	156.7	199.5	42.9	27	
Services	139.8	207.3	67.5	48	
of which— Public Administration	67.2	87.5	20.3	30	
Education	31.0	58.8	27.7	89	
Health	9.5	26.0	16.4	172	
Total Public Sector	330.4	472.8	142.5	43	
Total Private Sector	552.4	638.0	85.6	15	
Grand Total	882.8	1,110.9	228.1	26	

Note.—*No* attempt has been made to adjust these figures for non-Residents or military personnel, hence 1961 figures are not identical with those in Statement No. 2. Cols. 3 and 4 calculated on the basis of unrounded figures.

Source.—Directorate of Employment, Bombay, Quarterly Employment Returns, and The Bombay Labour Market, 1966.

Some of the salient features of the changes in employment situation in Bombay are given below:—

(1) Recession in Cotton Mill Employment: Cotton mills by far the oldest established factory industry of Bombay provided employment to nearly half the industrial workers in Bombay, in 1961. Their predominance as a source of employment was more in earlier times than that in 1961. The decade 1961-71 witnessed a considerable decline in employment in cotton mills. There was an acute recession in demand and production as also replacement of workers by machinery. The average levels of output and inputs of the Bombay cotton mills between 1968-70 as indices of those in 1958-60 show that the ratios of capital and material inputs in relation to labour have increased. The figures for the Bombay cotton mills as per the Millowners' Association Annual Report, 1971 are as under:—

INDEX OF INPUTS AND OUTPUTS, 1968-70 (1958-60 = 100)

Average daily working		Cotton consumption (Bales)	Daily employment	Yarn (Tons)	Cloth (Meters)
Spindles	Looms				
108	95	96	89	93	84

The trend in the production of the various qualities of cloth by the mills in Bombay from 1961 to 1970, as furnished in the *Indian Textile Bulletin* (1961 Annual and Monthly Bulletins in 1971) is shown below:—

Quality	Thousand	l metres	Percentage of total		
	1961	1970	1961	1970	
All	13,71	11,20	100	100	
Coarse	2,41	1,36	18	12	
Medium	9,90	6,74	72	60	
Fine and superfine	1,40	3,11	10	28	

During this period the entire cotton textile industry in India was losing ground in the world markets, but the decline in mill employment was more conspicuous in Bombay than in the rest of the country. This could be attributed partly to the greater weight of high quality cloth in the output of Bombay mills and partly to the higher level of wages in Bombay as compared to other parts of India.

An interesting phenomenon as regards employment situation in Bombay is that while there was a decline in cotton mills, the growth of employment was much faster in a newer industry like chemicals. Pharmaceuticals, accounting for about 50 per cent of the decade increase in chemicals industry, more than doubled. Other members in the manufacturing group expanded employment at a rate comparable with other sectors of production. The highly sophisticated and technologically advanced industries such as petro-chemicals and electronic also expanded rapidly.

The Faster Growing Sectors: Another salient feature of the growth of the economy and employment in Bombay in the sixties was the difference in growth in the public and private sectors. Although the private sector still remained the larger sector of the economy providing larger employment, the employment in public sector increased by about 43 per cent while that in private sector by only 15 per cent during the period 1961-71. Recession had affected mostly the private sector; employment in private sector declined between 1966 and 1968, and failed to regain its 1966 level until 1971. Although the public sector also did not escape the effects of the recession during the period, the impact of recession was only marginal. The public sector recorded a faster growth than the private sector even prior to 1966, by 24 per cent as against 15 per cent. An important event in this period was the nationalization of 14 commercial banks in 1969 which naturally increased the employment in the public sector. But apart from this transfer of employment from private to public sector, the decade growth in the public sector was 39 per cent while that in the private sector was only 18 per cent.

Women workers: The proportion of female workers is much less than males in the organized sector of employment. Their proportion however increased from 6 per cent in 1961 to 8 per cent in 1971, *i.e.*, from 53,000 in 1961 to 88,000 in 1971 which means an increase by 66 per cent over a decade.

LABOUR FORCE OUTSIDE THE ORGANIZED SECTOR, 1961-1971

The labour force outside the organized sector such as employers, unorganized workers and the unemployed persons also forms a large proportion. An indication of unemployment is provided by the number of persons registered on the live-register of the Employment Exchange, which increased from 44,037 in December 1961 to 90,654 in December 1971. This indicates that open unemployment increased markedly. It may however be noted that the correspondence between the openly unemployed and the registered job-seekers is far from correct. It therefore cannot give a conclusive evidence about the proportion of unemployment to the total labour force. A rough and broad picture of job-seekers and unemployment from 1961 to 1971, in Bombay can be seen from the following statement:—

STATEMENT No. 5 Organized Employment, Registered Job-seekers and Unemployment in Bombay, 1961-71

(Figures in thousands)

		1961	1965	1968	1970	1971
	Organized Sector Employ- ment.	883	10,09	10,36	10,78	11,11
2.	Registered Job-seekers	44.0	55.5	60.9	70.2	90.7
	(a) Educated	18.4	19.7	25.2	29.6	43.5
3.	Surveyed Unemployed	80.4*	N.A.	N.A.	N.A.	N.A.
	(a) Educated	14.2*	N.A.	N.A.	N.A.	N.A.
4.	Unemployed as percentage of Labour force.	4.55	2.32	N.A.	N.A.	N.A.

^{*} As per 1961 Census.

Notes.—(1) 'Organized Sector' includes public sector and private sector establishments employing more than 25 persons.

- (2) 'Registered Job-seekers' include number on Live Register of Bombay Employment Exchange at the end of December.
- (3) 'Educated' include those attaining secondary level or above.
- (4) 'Unemployed' include those seeking work but out of work for 15 days prior to enumeration.

As regards work-force in the unorganized sector, it is observed that it also increased as rapidly as that in the organized sector, if not at faster rate. It can be seen from the Statement No. 6 that at least in manufacturing and trading, the unorganized sector grew faster than the organized sector.

EMPLOYMENT DENSITY

It is interesting to study the employment density in Bombay which reveals peculiar characteristics. Employment density in many areas of the city does not correspond to population density. The 1968 study of employment density shows that of the 18.69 lakh jobs in Greater Bombay more than 75 per cent were located in the small area in the island city.

STATEMENT No. 6
Workers outside toe Organized Sector in Greater Bombay in 1971 and comparison with 1961

Industry	19	71 (thousa	nd)		1-1961 of 1961			
	Workers reported in Census	Organized	Non- organized	Census counts	Organized sector		Interpretation	
Primary Sector	28	1	27	-15	-25		Negligible	
Household manufacturing	29		27	27		}	organized sector	
Non-Household manufacture	900	571	329	35	2	}	unambiguous increase of non-	
Trade and Commerce	492	78	413	62	38	3	organized	
Construction	67	29	38	49	1	Ţ	Organized	
Transport and Communication	237	137	100	25	35	}	sector figures subject to error	
Services and Public Utilities	446	276	169	4	50		Probable increase in organized sector notwithstanding note (a)	
Total	2198	1091	1107	30	30		Probable relative increase of non- organized sector	

Notes.—(a) True changes in numbers at work are understated because of changed definitions. Those excluded by new procedure are unlikely to have been in organized employment. Hence increases outside the organized sector are understated. (b) Adjusted for comparability with Census.

Source.—Heather and Vijay Joshi, Surplus Labour and the City, p. 70.

The following statement shows the employment distribution and population density in various parts of Greater Bombay in 1968(Bombay Metropolitan Regional Planning Board, Regional Plan for Bombay Metropolitan Region, 1970-91, Vol. I, p. 31.):—

STATEMENT No. 7
Density of Employment and Population in Greater Bombay in 1968

Area	Jobs	Percentage to total	Jobs per hectare	Population per hectare
1. Colaba	39,030	2.1	65	149
2. Fort	2,98,271	15.9	663	252
3. Bhuleshwar, Girgaum, Kalbadevi	3,09,467	16.6	467	1,090
and Mandvi.				
4. Malabar Hill and Cumbala Hill.	12,547	0.7	40	313
5. Tardeo, Byculla and Mazagaon	2,05,933	11.0	265	717
6. Woili, Parti, Elphinstone Road	3,47,384	18.5	230	522
and Sewri.				
7. Dadar and Wadala	1,46,325	7.8	142	406
8. Mahim, Matunga, Sion and Koliwada.	64,775	3.5	46	289
9. Chembur and Trombay	43,705	2.4	9	42
10. Kurla, Ghatkopar and Vikhroli.	1,16,772	6.3	23	99
11. Bhandup and Mulund	53,481	2.8	9	27
12. Bandra, Khar and Santacruz	65,970	3.5	27	177
13. Vile Parle, Andheri, Jogeshwari	1,01,988	5.5	14	68
and Goregaon.				
14. Malad to Dahisar	63,261	13.4	6	33
Total	18,68,909	100	43	122

EMPLOYMENT EXCHANGES

Employment Exchanges play an important role in providing employment to the educated unemployed as also to skilled workers. The directorate of Employment of the Government of Maharashtra have established three employmay, viz., Regional Employment Exchange (in Fort Area), Sub-Regional Employment Exchange (at Grant Road) and Employment Exchange at Ghatkpopar. The Regional

Employment Exchange provides employmenunities to educated candidates while theSub-Regional Exchange ism eant for unskilled workers and menial services. It is wiorking as a full fledged emplyment bureau. The statistics of emplyment exchanges in Bombay between 1959 and 1976 given below in Statement No.8 are self-evident and need no comments

STATEMENT No. 8
Employment Exchange Statistics for Greater Bombay, 1959-60 to 1976

Year	No. of registration	Vacancies notified		Candidates on live register at the end of the year
1959-60	69,437	13,638	7,257	46,915
1966-67	99,953	33,404	16,869	48,827
1970-71	110,391	35,579	14,205	79,304
1972	102,521	38,676	15,004	136,128
1973	111,269	33,555	12,739	888,436
1974	95,124	24,053	10,644	149,030
1975	102,473	23,848	8,964	16,303
1976	44,578	7,433	1,047	21,004

PUBLIC AND PRIVATE SECTOR EMPLOYMENT

Besides being the capital of Maharashtra State, Bombay has provided a congenial home to a number of public sector offices including offices of the Central Government, commercial corporations, quasi-government bodies and local self-government bodies. In fact the proportion of employment in Central Government offices is very much larger than that in State Government offices. This is accounted for by the fact that Bombay is the headquarters of the two railway zones, *viz.*, Central Railway and Western Railway, the navy establishment, income-tax offices, the Bhabha Atomic Research Centre and a number of administrative and executive wings of the Government of India. The employment in local bodies in Bombay is also higher than that in the State Government. This is attributable to the fact that the Bombay Municipal Corporation is a mammoth organisation providing civic amenities to this premier city of India, and that if employs a huge personnel for manning its services and civic amenities. In keeping with Bombay's character as the commercial capital of India, there are several quasi-government bodies including commercial corporations and public sector undertakings which provide employment to a considerably large number of persons.

The private sector is here conceived to cover establishments which are not in the public sector and which ordinarily employ 25 or more workers for remuneration. Being a centre of industries and commerce, employment in the private sector in Bombay is bound to be high.

The following figures reveal the growth of employment in public and private sectors in Bombay :—

STATEMENT No. 9 Employment in Public and Private Sectors

(Employment in '000)

Year	Central Government	State Government	Local Bodies	Quasi- Government	Т	otal
					Public Sector	Private Sector
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1961	158	41	70	61	330	N.A.
1965	184	51	91	79	405	N.A.
1970	195	62	95	121	473	N.A.
1975	207	65	113	232	617	N.A.
1977	214	65	115	194 (10)	588	609
1978	218	65	119	199(11)	601	611
1979	226	68	124	214 (12)	632	610

The figures in brackets indicate the employment in quasi-State Sector. Source.—Directorate of Employment [under "Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959"].

INDUSTRIALISATION

(For detailed history of industrialisation and analysis of structure of industries refer Chapter 5.)

Bombay has a comparatively long tradition of industrialisation. Under the influence of the British rulers and an enthusiastic class of entrepreneurs both foreign and indigenous, a good many mechanised industries grew up during the latter half of the last century. With the establishment of the first cotton mill in Bombay in 1854 a momentous growth of the textile industry was initiated. The first mill in Bombay was projected in 1851 by Mr. C. Nanabhai Davar and commenced work in 1854 as a joint stock company under the name of the Bombay Spinning and Weaving Company. Soon Bombay became the home of the textile industry. By 1865 there were ten mills in the city, working with 2,50,000 spindles and 3,380 looms. They provided employment to 6,600 persons and consumed about 42,000 bales of cotton per annum. It is noteworthy that a director of the Manchester Chamber of Commerce, speaking of the Bombay mills in 1867, pointed out that the long cloths, T-cloths and domestics produced by them had been steadily gaining favour with consumers in all districts and were actually preferred to Lancashire goods of the same class owing to the fact that the Bombay goods lasted longer than the finer and heavily sized cloth produced in England.

Between 1870 and 1875 seventeen new mills had been established, thus making a total of 27, working with 7,52,634 spindles and 7,781 looms, the capital invested in the industry being Rs. 224 lakhs. The industry received a great impetus from 1875. The number of mills increased from 27 in 1875 to 32 in 1880; to 49 in 1885 and to 70 in 1890. The subsequent quinquennium witnessed a fall in the number of mills. However the reduction in number of mills was accompanied by a rise in employment, spindles, looms as well as consumption of cotton by the mills. The outbreak of plague in 1896-97, coupled with the severe famine of that year exercised for several years a most depressing effect upon the industry. The first epidemic resulted in a general flight of mill workers from the city. This necessitated open bidding for labour at street corners and the shattering of the tie hitherto binding the employer and the employed. This trouble was minimised by about 1898 as the industrial population felt that the chance of dying of plague in city, while in receipt of good wages was preferable to the prospects of starvation in up-country homes. This ensured revival of the cotton textile industry. The conditions of revival were followed by the inevitable consequences of over-production. Between 1892 and 1898 the number of mills in the island city rose from 119 to 136. The increase being almost entirely due to the establishment of new textile

mills. Surprisingly this had taken place in spite of the belief that a fall in silver had exercised an adverse influence upon the trade and despite the fact that the China market, which was by far the chief outlet for Bombay's production of yarn, was being rapidly quitted. In 1899 the position of the industry was "most critical ".(Sir George Gotton.) By the end of that year nearly all the mills closed for three days in the week, while some of them were wholly shut down. Subsequent to 1902 however, the condition of the industry began to assume a more satisfactory aspect. The industry experienced excellent seasons in 1905 and 1906. The general progress of cotton spinning and weaving may be gathered from the fact that in 1908 the city contained 85 mills, having 27,34,863 spindles and 35,967 looms, employing daily on the average 1,01,536 workers and consuming about 12 lakhs of bales of raw cotton.

The general progress of the industry had been well sustained throughout the first decade of this century. The Bombay mills had many comparative advantages over western producers. The hinterland of Bombay extending over parts of Khandesh, Vidarbha, Marathwada and Gujarat provided the necessary raw cotton to the Bombay mills. In fact Bombay in those days was the biggest cotton market in Asia. The market for the manufactured articles was in the neighbourhood of Bombay. Labour too was very abundant and cheaper. These comparative advantages of the Bombay mills over the mills in European countries weighed higher than the high cost of machinery.

The statistics of cotton textile mills from 1865 to 1908 as given in the former edition of the *Bombay City Gazetteer* are quite revealing. Thetotal number of factories increased from 119 in 1892 to 128 in 1896, to 138 in 1901 and to 166 in 1908. The rise in the number of factories by 47 over a period of only 16 years though not spectacular from present day standards, was really impressive in the hey-days of industrialization when the entire country was still in an agricultural-*cum*-pastoral stage.

In 1908, there were 166 factories registered under the Factory Act of 1881 (amended in 1891). They provided employment to 1,35,663 workers. The bulk of the employment was in the cotton textile industry which was followed by iron works and foundries.

The following statement gives the number of factories by classes in Bombay city in 1892, 1896, 1901 and 1908:—

STATEMENT No. 10

Category	1892	1896	1901	1908
Cotton Mills	64	68	76	83
Silk Mills	1	2	2	2
Woollen Mills	2	2	1	3
Hosieries	3	2	2	2
Cotton Presses and Gins	11	9	8	7
Dye Works	2	2	2	4
Flour Mills	3	5	5	5
Oil Mills	2	2	1	1
Gas Works	1	2	2	2
Gun Carriage Factory	1	1	1	
Arsenal	1	1	1	
Mint	1	1	1	1
Dockyards	4	4	3	3
Printing Presses	. 7	9	10	16
Power Generator*				1

Bone Mill				1
Tannery		1	1	1
Saw Mills and Timber Works	1	2	2	2
Iron Works and Foundries	8	8	8	15
Locks and Cutlery Works			1	1
Metal Works				2
Tin Works			1	3
Paper Mill				1
Workshops	1	2	2	2
Art Manufacture	1	1	1	1
Total	114	124	131	159

^{*} Owned by the Bombay Electric Supply and Tramway Company.

In the initial stages of growth the cotton textile industry had to face keen competition with imported Manchester goods. But the *swadeshi* movement which gathered a massive following gave a distinct impetus to local manufacturers. The industry developed at a rapid pace.

The following statistics show the production of cotton textile goods in Bombay during 1904-05 and 1908-09:—

STATEMENT No. 11

Goods	1904- 05(lbs)	1908- 09(lbs)
Grey Goods		
Chadars	10,116,529	9,395,365
Dhoties	6,329,266	11,770,378
Drills and Jeans	1,373,705	2,792,833
Cambrics and lawns	128,722	273,114
Printers	443,998	79,459
Shirtings and long cloths	33,834,436	34,004,115
T-cloths, domestic and sheetings	13,936,806	19,355,423
Other kinds	5,261,658	2,027,051
Total	71,425,120	79,697,638
Figured and coloured goods	20,529,150	27,172,650
Hosiery	571,367	382,475
Miscellaneous goods	393,707	21,817
Grand Total	92,919,344	107,274,580

The Bombay textile mills provided employment to about 98,000 persons in 1908, most ol whom were Marathas from Ratna&iri and Kolaba districts, with a small sprinkling of Muhammadans.

The percentage of employment in cotton textile industry to total population in Bombay increased gradually upto 1921 in which year it reached the maximum of 11.25 per cent of the total population. The diversification of industrial activity after 1921, however, caused some decline in the percentage of employment in cotton textiles to total population.

The following statement shows the trend in the growth of the cotton textile industry and the percentage of textile workers to total population in Bombay from 1865 to 1961:—

STATEMENT No. 12

Year	No.of cotton textile mills	Employment in cotton mills	Population	Percentage of textile workers to population
1865	10	6,557	8,16,562	0.802
1881	32	31,351	7,72,196	4.06
1901	81	82,162	8,12,912	10:112
1921	83	1,40,000	. 12,44,934	11.25
1931	81	N.A.	12,68,206	
1941	64	N.A.	16,86,127	
1951	65	1,93,663	29,66,902	6.52
1961	63	1,97,404	41,52,056	4.75

The sub-joined statement shows the various stages in the gradual diversification of the industrial base of Bombay.

STATEMENT No. 13

NUMBER OF FACTORIES AND EMPLOYMENT IN REPORTING FACTORIES IN MAJOR SECTORS OF INDUSTRIES IN BOMBAY FROM 1923 TO 1957 (For detailed analysis refer Chapter 5.)

Year	Т	extile		tal and ineering		ting and olishing	Che	emicals		d except verages
	No of factories	Employment	No of factories	Employment	No of factories	Employment	No of factories	Employment	No of factories	Employment
1	2	3	4	5	6	7	8	9	10	11
1923	92	1,52,488 (75.0)	92	30,204(14.8)	35	5,115(2.5)	9	759(0.4)	16	1,021(0.5)
1931	89	1,31,700 (73.9)	108	23,617(13.3)	59	5,632 (2.2)	20	4,879(2.7)	29	1,801(1.0)
1941	145	2,04,307(65.1)	329	46,780()14.9	194	8,833(2.6)	46	4,504(1.4)	73	6,031(1.9)
1946	184	2,14,586()59.8	477	64,040(17.9)	210	10,697(3.0)	75	7,510(2.1)	94	8,340(2.3)
1951	427	2,34,818 (61.0)	802	73,031(19.0)	285	13,253(3.5)	176	13,467 (3.5)	199	8,194 (2.1)
1957	458	2,43,654(57.4)	919	91,405(21.5)	317	14,739(3.5)	195	15,855 (3.7)	275	9,997 (2.4)

Figures in brackets represent percentages of the total.

Source.—Dr. Lakdawala, Works, Wages and Well-being in an Indian Metropolis.

Factories and Factory Employment: Bombay is the industrial and commercial metropolis of India, and it would be very much realistic to say that Bombay is miniature India. The major modern industries in India are located in Bombay, as only a few other cities such as Calcutta, Madras, Bangalore, Jamshedpur and the environs of Delhi, share the total extent of industrialisation with Bombay. In keeping with the growth of Bombay, the organised sector provides employment to a large proportion of working population of Bombay. The organised sector, for this purpose, is conceived to include factories, shops and establishments, Railways, State Government, Union Government, Municipal Corporation, Reseive Bank of India, State Bank of India, Bombay Electric Supply and Transport Undertaking, and Bombay Port Trust. The organised sectors of employment conceived as above, provided employment to 9,53,049 persons in 1951. As per the 1951 Census, the total number of earners was 13,23,256 in Greater Bombay. It means that the organised sector provided employment to about 72 per cent of the total employment in Greater Bombay. This organised sector does not cover the persons engaged in primary industries, domestic services, construction, hawkers, porters and those plying taxis and other transport vehicles, as also those employed in private educational institutions and hospitals.

Employment in the organised sector rose to 11,20,567 in 1957 which meant an increase of 17.6per cent over that in 1951. Thus on an average the employment in the organised sectors increased at the rate of 2.6 per cent per annum. It may however be noted that a number of factories did not report information regarding employment provided by them. The following statement gives the statistics of employment in the organised sector as also the estimated employment in the non-reporting factories in Bombay from 1951 to 1957:—

STATEMENT No. 14 Employment in Organised Sector, 1951-57

Year	Employment in organised sector	Estimated Employment in non- reporting factories	Total 2+3	Percentage variation over previous year
(1)	(2)	(3)	(4)	(5)
1951	9,53,049	16,809	9,69,858	
1952	9,61,789	20,553	9,82,342	1.3
1953	9,79,805	31,005	10,10,810	2.9
1954	10,21,409	16,758	10,38,167	2.7
1955	10,56,072	11,785	10,67,857	2.9
1956	11,01,280	8,656	11,09,936	3.9
1957	11,20,567	20,089	11,40,656	2.6

Examination of the structure of organised employment, the term structure being understood in the sense of agencies providing employment, reveals some interesting facts which are given below.

The shops and establishments, in Bombay which provided employment to 3,87,662 persons or 40.7 per cent of the total in 1951 was the largest single sector. This was closely followed by factories (other than government and local fund factories) which employed 3,58,098 persons or 37.6 per cent in 1951. The State and Union Governments and the Municipal Corporation together provided employment to 12.7per cent. The Railways, B.E.S.T. and the Bombay Port Trust provided employment to 83,244 or 8.8 per cent of the total. The combined share of the Reserve Bank of India and the State Bank of India was only 0.3 per cent. This order of comparative importance of the various sectors as regards sources of employment had remained unchanged in 1957, with the exception of the importance of factories, and shops and establishments which had undergone a slight change. The share of factory employment in the organised sector diminished from 37.6 per cent in 1951 to 34.9 per cent in 1957, which meant a slight decline in the importance of factory employment. The share of shops and establishments however increased from 40.7 per cent in 1951 to 43.8 per cent in 1957.

It may however be explained that the share of industries and of shops and establishments in the total employment was somewhat different from that given above. This was mainly because the employment in government and local funds factories and the estimated employment in the non-reporting factories was not included in factory employment. Besides, the employment in industrial units not covered by the Factories Act was also not taken into account, and the persons employed in them were enumerated under shops and establishments, as such units were registered under the Shops and Establishments Act Employment of a purely industrial character which was included under the heading of shops and establishments has to be added to the factory data in order to arrive at the figure relating to what the census authorities termed as the processing and manufacturing sector.

According to the 1951 Census data processing and manufacturing provided employment to 4,56,304 persons which formed 47.9 per cent of the total organised employment.

Factories: A more detailed consideration of the major part of the manufacturing sector, namely factories, is given below.

In 1923, there were 324 working factories which provided employment to 2,03,416 persons. Over a period of 35 years the number of working factories increased to 3,400 while the employment therein increased to 4,24,706. There was thus a more than ten-fold increase in the number of factories. The index number for employment went up to 209 in 1957 with 1923 as the base year. (The Factories Act was amended from time to time from 1891 to 1948. However, the changes were only marginal. The employment data over the whole period are, therefore, broadly comparable. The classification of individual industries adopted from 1950 onwards was however different from that adopted earlier. Attempt is, however, made to rearrange the data relating to some industries for earlier years and presented them in a comparable form.) The trend in development of working factories and factory employment in Greater Bombay by selected industry groups for 1923-1957 is given below.

The number of factories continued to increase from 1923 except for periods of slight set-backs such as in 1927, 1931, 1932, 1946, 1953 and 1954. In spite of changes in the coverage of Factories Act, it can surely be said that the number of factories continued to increase during 1928-36, when the level of factory

employment throughout was lower than that prevailing in any previous year.

The Second World War encouraged the growth of industries in Bombay. All the industries worked to full capacity, and several new factories in the fields of electrical equipment, machine tools, basic chemicals, synthetic resins, plastics, transport equipment, pharmaceuticals and hydrogenated oils were established in Bombay.

Industrialization in Bombay gathered further momentum in the post-Independence period. The number of factories registered under the Factories Act showed a sudden increase in 1949 (2,319) over that in 1939 (940). In fact factories increased by 146.7 per cent in 1949 over those in 1939. The percentage increase in factory employment from 1939 to 1949 was however not commensurate with the percentage increase in number of factories, though factory employment also increased substantially. The lagging of employment behind the number of factories might be attributed to the faster growth of small-scale industries after Independence. The percentage increase in the number of factories and factory employment in Greater Bombay showed a continuously rising trend from 1950 onwards. The growth rate of industries and factory employment was particularly very much higher in 1962 over that in 1939 and 1958. The number of factories increased from 940 in 1939 to 5,412 in 1962, which means a percentage increase of 475.7, while employment increased from 2,21,376 in 1939 to 5,61,782 in 1962, which means a percentage increase of 153.8. There was however a decline in the proportion of employment per factory from 1939 to 1962. This might be partly due to the preponderance of small-scale industries in the increasing number of new factories after Independence, and partly to adoption of more capital intensive and labour saving machinery in modern industries.

The following statement gives the statistics of number of factories and factory employment in Greater Bombay from 1939 to 1962:

STATEMENT No. 15

Growth of Factories and Factory Workers in Greater Bombay from 1939 to 1958 and 1962 (Bombay Municipal Corporation, Development Plan for Greater Bombay, 1964, p. 31.)

Year	No. of	No. of	Percentage increase over 1939		No. of workers per factory
			Factories	Workers	
1939	940	2,21,376			236
1940	1,002	2,29,267	6.6	3.5	230
1941	1,078	3,14,045	14.7	41.8	294
1942	1,154	3,36,975	22.8	52.2	294
1943	1,252	3,75,502	33.2	69.6	300
1944	1,394	3,92,453	48.3	77.2	283
1945	1,482	3,91,081	57.7	76.2	264
1946	1,481	3,58,658	57.6	62.0	243
1947	1,511	3,59,380	60.7	62.3	239
1948	1,820	3,78,440	93.6	70.9	209
1949	2,319	3,77,056	146.7	70.3	163
1950	2,752	3,75,094	192.8	69.9	159
1951	3,064	3,83,892	226.0	73.3	125

Year	No. of factories	No. of workers	Percentage increase over 1939		No. of workers per factory
			Factories	Workers	
1952	3,204	3,73,860	240.9	69.0	117
1953	3,071	3,68,587	226.7	66.7	120
1954	3,117	3,42,519	231.0	54.8	110
1955	3,282	4,11,395	239.0	86.0	125
1956	3,297	4,20,991	250.0	90.0	127
1957	3,400	4,45,005	262.0	101.0	131
1958	3,813	4,67,089	306.0	111.5	123
1962	5,412	5,61,782	475.7	153.8	104

It should however be remembered that before 1948 factories were governed by the Factories Act of 1934 which covered factories employing 20 or more workers and using mechanical power. The 1948 Act was applied to factories employing 10 or more workers using mechanical power and to factories employing 20 or more workers but not using power. The figures in the table since 1949 are according to the 1948 Act. It is estimated that in the year 1949, the amendment in the Act made a difference of only 3,088 workers out of a total of 3,77,056 *i.e.* less than 1 per cent. The comparability of factory employment data over the whole period is, therefore, not vitiated. It has also to be remembered that the limits of Greater Bombay were extended on two occasions, once in 1950 and then again in 1957.

Income generated by Industries: Industries are by far the largest and the most important sector of the economy of Bombay. The industrial sector contributes about half the total income generated in Greater Bombay. The estimates of regional income prepared by the Bureau of Economics and Statistics of the Government of Maharashtra show that factory establishments contributed Rs. 35,825 lakhs to the total income of Rs.69,241.90 lakhs in 1964-65 in Greatei Bombay. The annual average *per capita* income in Greater Bombay was about Rs.1,500 while the *per capita* income generated in the whole of Maharashtra was only Rs. 524. If Greater Bombay is excluded from the calculations the average annual *per capita* income generated in the rest of Maharashtra works out to only Rs. 400 (1964-65). The higher *per capita* income in Greater Bombay can mainly be attributed to the development of industries and lucrative employment in industries.

The following statement gives the estimates of income in the various sectors of the economy of Greater Bombay in 1964-65. The estimates are based on current prices in 1964-65:—

STATEMENT No. 16 Regional Income of Greater Bombay, 1964-65

(Figures in lakhs of rupees)

Sector	Regional Income	
1. Agriculture	112.06	
2. Animal husbandry	189.55	
3. Fisheries	838.50	
4. Mining	28.35	

Sector	Regional Income
5. Factory establishments	35,825.00
6. Utilities:—	
(a) Gas	114.30
(b) Electricity	633.38
(c) Water Supply	19.74
(d) Warehousing	19.16
7. Small enterprises	1,074.00
8. Construction	531.24
9. Communications	244.00
10. Railways	1,790.90
11. Transport:—	
(a) B.E.S.T.	709.16
(b) Air India International	423.06
(c) Indian Airlines	177.90
(d) Water transport	1,530.64
(e) Unorganised road transport	1,408.15
(f) State transport	8.25
(g) Others	27.83
12. Banking	3,456.00
13. Commerce	9,943.56
14. Professions and liberal arts	2,247.30
15. House properties	4,967.10
16. Domestic services	688.80
17. Public administration	2,233.77
Total	69,241.90

Source.— (1) Bureau of Economics and Statistics, Government of Maharashtra. (2) Statistical Wing, Town Planning and Valuation Department, Government of Maharashtra.

Location of Industries : As pointed out in one of the studies on Greater Bombay, the location of industries in Bombay is very defective. In the nature of things the existence of the industrial zone in the heart of the city is highly undesirable. The concentration of industries has also raised the problem of housing of the industrial workers. To say the least, it has generated squalid and sordid conditions of living in Central Bombay.

There is also a growing realization that even from the economic point of view the advantages of localization of industries have reached a stage of saturation.

The Government as well as the Bombay Municipal Corporation appear to be aware of this problem, and

some action for shifting non-conforming industries (with temporary permits) to conforming places at different locations in industrial zones has already been started.

These efforts on the part of the Government as well as the Municipal Corporation however did not bring out any worthwhile results. *Firstly*, the existing and established industries were most reluctant to shift to the new site. Since there is no statutory provision of shifting them to the new location nothing worthwhile could be achieved. *Secondly*, the industrial plots or sheds were allotted to new industries which meant further concentration of industries in Greater Bombay. *Thirdly*, various vested interests including trade unions opposed shifting of established industries out of Bombay, and made a hue and cry that the flight of industries out of Bombay would be in the direction of other States rather than to suitable localities in Maharashtra. The results are therefore what they are. Even the mills which were closed and were subsequently taken over by Government as 'sick mills could not be shifted to cotton producing and cheaper labour areas in the State on government initiative. Contrary to expectations factories burnt in fires were allowed to re-build in the old congested premises. There also appears to be no restriction on the establishment in Bombay of registered offices of factories which are actually out of the city or even out of the State. The dimensions of the problem of concentration and congestion of industries have therefore widened further.

Industrial Growth of Bombay: The saga of industrial growth in Bombay is a glotious tale in the history of industrialisation not only of Maharashtra State but also of the entire country. A number of enterprising men and industrialists of vision have left their mark upon the land, and contributed, in greater or less degree, to the immense growth of this industrial metropolis. With short-lived aberrations, the city continued to attract diverse industries and industrial houses. The saga of industrialisation on modern lines started with the commencement of the cotton textile industry in 1854 which grew in importance and magnitude, and had far-reaching influences on the economic and social life in the city. The mill industry of Bombay has rightly been called the foremost indigenous industry of India. From small beginnings, the industry now is one of international importance and plays a great and important role in the prosperity of Bombay. The history of growth of this industry is already furnished in the earlier pages.

Cotton Textiles: As per the Annual Survey of Industries in 1975-77, the cotton textile industry of Bombay was constituted by 197 registered factories, which formed 19.78 per cent of the cotton textile factories in Maharashtra. The capital investment in these units in Bombay was computed at Rs. 3,00,21 lakhs or 73.20 per cent of that in Maharashtra. The cotton textile units in Bombay provided employment to 1,95,318 persons or 65.04 per cent of the employment in this industry in Maharashtra. The output of the industry in Bombay was worth Rs. 6,91,87 lakhs or 77.60 per cent of that in the State. The value added on manufacture of the cotton industry in the city was as high as Rs. 1,92,06 lakhs or 82.82 per cent of that in Maharashtra as a whole.

Engineering: The lead given by the cotton textile industry was generally followed by the engineering industry. For the general industrial growth of Bombay, it may be said that development of the engineering industry in particular has contributed significantly. There are several hundred manufacturing units producing a variety of both capital goods such as textile machinery, printing machinery, machine tools, etc., and consumer goods like fans, bicycles, scooters, automobiles and several other articles. There are giant manufacturing complexes like, Mukund Iron and Steel, Richardson and Cruddas, Premier Automobiles, Automobile Products of India, etc., in Greater Bombay. Bombay's share in the engineering industry in India is estimated to be about one-tenth of the country's total output.(K. R. Sheshadri, Profits (in Selected Industries of Bombay City and Suburbs), unpublished thesis, University of Bombay.) The actual figures of capital investment in engineering industry of Bombay though not available, are estimated to be around Rs. 150 crores.

The growth of the engineering industry in Bombay gathered momentum mainly after the Second World War in general and Indian Independence in particular. The war provided a stimulus for its initial growth in so far as the supplies of the goods by way of imports were curtailed on account of the war. The defence efforts of the Government of India warranted considerable supplies of the goods to meet the demands of the armed forces. After the Independence of the country various consumer items like bicycles, automobiles, fans, sewing machines, household electrical appliances, etc., and the capital goods like textile machinery, general machinery, machine tools and plant and equipment for other industries received priorities in the strategy of industrial planning. The Government of India encouraged the growth of these industries by granting tariff protection in various ways, by curtailment of imports and by providing many incidental incentives. This acted as a stimulus to incorporation of new units and expansion of the existing ones in Bombay. The development of large scale enterprises provided the stimulus for the growth of ancillary industries which manufacture small parts and equipment.

Infrastructure facilities inclusive of means of easy transport, an excellent harbour, hydro-electric power, technocrats, technical know-how and capital market are directly responsible for the growth of engineering industry in Bombay. In fact, its growth if complementary to the growth of other well-developed industries like textiles in Bombay.

Chemical Products: The chemicals and chemical products industry found a congenial home in Bombay ever since the Second World War. The war efforts of the Government of India provided the necessary impetus to the incorporation of many units as the supply of imported material was drastically cut during the war. The development of other industries, particularly, textiles, engineering, explosives, pesticides, etc. needed a number of chemicals, which encouraged the growth of the chemicals and chemical products industry. The enormous growth of textile industry which needs various chemicals and dyes as also the progress of the pharmaceuticals and drugs industries gave a fillip to this industry during the postwar period.

The important segments of the chemicals and chemical products industry are drugs and pharmaceuticals, petrochemicals, dye-stuffs, paints and varnishes, plastic products, fertilizers and pesticides, organic chemicals, inorganic chemicals, acids, alkalies and a number of other basic chemicals and fine chemicals.

The first pharmaceutical and chemical products factory was established at Bombay in 1887. The industry however took shape only in this century. Besides the vision and efforts of the three dedicated persons, viz. P. C. Ray, T. K. Gajjar and B. D. Amin in Western India a significant development was the establishment of the Haffkine Institute in Bombay in 1904. The Bombay pharmaceutical industry received a fillip during World War I. The establishment of Messrs. Foster & Co., May and Baker and Zandu Pharmacy were important landmarks in the growth of the industry.

The rapid growth of the industry had however to wait till the dawn of Independence. In the immediate post-Independence years from 1948 to 1953 several reputed international companies set up processing facilities in Bombay. A number of new units were commenced not only with the latest technology available from the advanced countries but also with foreign capital participation. The excellent infrastructure facilities coupled with foreign technical know-how stimulated the growth of the industry in Bombay which now enjoys a high reputation not only in India but also in all the continents. The tie-up with multi-national concerns also provided an impetus to research and development in this industry in Bombay. Two of India's best drug research laboratories *viz.*, CIBA-GEIGY and Hoechst Research Centre are located in Bombay. The industry now encompasses the whole spectrum of pharmaceutical operations, research, production, marketing, quality control and professional management. There are about 454 pharmaceutical and drug units in Bombay.

The entire chemicals and chemical products industry is highly research and technology oriented. Its development gathered momentum mainly during the post-war period. But for very short-lived aberrations the industry kept a rising trend of development. As per the Annual Survey of Industries cf 1975-77, there were 454 registered factories in this industry in Bombay which provided employment to 53,479 persons. The number of factories and employment in the industry in Bombay constituted 49.02 percent and 51.24 per cent, respectively of those in Maharashtra State as a whole. The capital investment in the industry was to the extent of Rs. 4,09,17 lakhs or 47.20 per cent of the industry in the State. The capital investment in this industry was more than that even in the cotton textile industry of Bombay (Rs. 3,00,21 lakhs). The output of the industry was valued at Rs. 8,60,37 lakhs or 53.25 per cent of that in the Maharashtra industry. The value added on manufacture in this industry in Bombay was computed at Rs. 2,02,76 or 53.32 per cent of that in the industry in the State. As in the case of capital investment, the value of output and the value added on manufacture by the chemicals and chemical products industry were higher than those in the cotton textile industry of Bombay.

Petroleum: The petroleum industry, which is by far the most vital sector of the national economy, is an important industry in Bombay. It has contributed to the growth of Bombay during the last about 30 years. Of the five oil companies engaged in the refining and marketing of petroleum products in India, three are located in Bombay. Of the three oil companies in this city, the Bharat Petroleum Corporation and the Hindustan Petroleum Corporation, both of which are in the public sector at present, have their refineries at Trombay, while the third public sector company, the Indian Oil Company with its registered office in Bombay, has the headquarters of its Marketing Division in Bombay. The giant refineries of the two companies referred to above process huge quantities of petroleum products and employ a large number of workers and personnel. The Lubrizol India Ltd., a subsidiary of the Hindustan Petroleum Corporation, is another Government of India undertaking on the outskirts of Bombay. It manufactures chemical additives, solubilising agents, engine oil dispersant and intermediate components.

The Burmah Shell Company which was the private sector predecessor of the Bharat Petroleum Corporation was incorporated on 3rd November 1952, and commenced crude distillation on 30th January 1955. The refineries owned by this company along with its industrial and commercial interest were taken over by the Government of India by constituting the Bharat Petroleum Corporation in January 1976. The Bharat Petroleum refinery has a crude processing capacity of 5.25 million tonnes per annum. It has made substantial technological advancements resulting in increased processing capacity, in improved product yields and reduced fuel consumption. It processed twelve different types of crudes, and was the first to process the off-shore Bombay High Crude in 1976.

The ESSO Refineries Co. which was the private sector predecessor of the present Hindustan Petroleum was incorporated in the mid-fifties, and was marketing about 2.5 million tonnes of petroleum products. The Hindustan Petroleum Corporation was constituted as a public sector enterprise after Government take-over of the former ESSO Company along with its refinery at Bombay in 1974. The Corporation amalgamating the Caltex Oil Company (December 1976) and the Kosangas (1979) has a huge processing and marketing capacity of petroleum products. Its Bombay refinery (It has another refinery at Visakhapattam with an annual capacity of. 1.5 million tonnes.) has a capacity of 3.5 million tonnes per annum, while its lubricating oil refinery, viz., the Lubrizol India, is capable of manufacturing about two lakh tonnes of lube oil base stocks and other products annually. The Corporation has made plausible technological advancements and improvements comparable to international standards.

The refineries in Bombay ate the pride of the nation and they have a vital role to play in the national economy. They have several plans and schemes for future development. Details of these Undertakings are given in Chapter 5 on Industries.

The Bombay High is a saga of India's crude exploration efforts, and a glorious tale of the country's strides towards economic prosperity and self-sufficiency in this vital sector of the economy. The Bombay High Oilfields, 686 sq. kilometres in area, were commissioned in 1976. The crude and associated gas were discovered in 1974 and production was started in 1976. The average rate of production from the oil-fields in 1981 was 1,20,000 barrels or 16,000 tonnes of crude oil per day. The annual production of oil was planned to be augmented to twelve million tonnes from 1983. It is remarkable that this will constitute about 40 per cent of the total oil production in India. The details of the Bombay High are given in subsequent pages in this Chapter as well as in Chapter 5 on Industries.

Petrochemicals: The petrochemical industry has emerged as the principal supplier of basic chemicals which were formerly derived from coal, alcohol and vegetable oils ever since the technology using petroleum distillate as the main ingredient was developed. Petrochemicals began to be manufactured in India in 1961, and the industry made rapid progress since then. It emerged as an important industry only

from the sixties. The high cost of crude had an adverse impact on the development of this industry after 1974. However, the industry has kept a good rate of development.

The Union Carbide India Ltd., Trombay, established the first integrated petrochemical complex in India in 1966, which was followed by the National Organic Chemical Industries, Thane. The Naphtha Cracking plant of the Union Carbide with an annual consumption of 60,000 tonnes of Naphtha is worthy of mention. This company also manufactures carbons, midget electrodes, industrial chemicals, dry cells and batteries for radio and telecommunication purposes.

The industry grew rapidly since 1966, and it currently produces raw materials for synthetic fibres, plastics and a wide range of organic chemicals. The availability of orude oil iarid gas from the Bombay High and Bassein fields would lead to an even more rapid development of the industry in the Bombay-Thane-Uran complex in the years to come.

The raw materials required for the petrochemical industry in Bombay are obtained from various sources. Gaseous sources are found in Ankale-shwar, Kalol, Cambay oil-fields near Bombay. Crude oil has so far been ruled out as a source of petrochemicals. Refinery gases and refinery distillates and residues are available in Bombay and its environs. Naphtha cracking is an important aspect of the petrochemical industry as naphtha is a good source of petrochemicals.

The petrochemical industry suffered a slump in production in many countries, including the U.S.A., Japan and Western Europe, in 1980 which was mainly due to the rising cost of crude oil as the latter rocketted by over 170 per cent from December 1978 to December 1980. In spite of the escalating prices of crude oil, the petrochemical industry in Bombay has been growing very fast, and is in fact awaiting a bright future in view of the explorations in the Bombay High and Bassein Oil and Gas fields.

Fertilizers: The fertilizer industry, started in Bombay in 1924 on an humble scale, is an important industry in this city at present. Bombay with an excellent harbour, a network of communications, proximity of oil refineries and the newly developed Bombay High, provides a congenial ground for the growth of this industry. It was therefore in the most fitness of things that the Government of India commissioned a giant fertilizer plant at Trombay. The Rashtriya Chemicals and Fertilizers, Trombay, incorporated during the Third Five Year Plan was originally intended to produce urea and nitro-phosphate in addition to ammonium sulphate. It has now diversified its fertilizer products, and is equipped to produce a range of chemicals including elemental sulphur which is so very rare in the country. It has an installed capacity to produce 99,000 tonnes of urea per annum. It has recently expanded its capacity for production of urea. Its installed capacity for production of complex fertilizers is three lakh tonnes and of ANP 3.61 lakh tonnes per annum. The discovery of the Bombay High and the Bassein Oil-fields promises new vistas of production of fertilizers in Bombay and Thai Vaishet, on the basis of new feedstock which is bound to result in economies of cost. The naphtha and associated gas are to serve as principal feedstocks which are bound to optimise costs. Hence the bright future for the industry in Bombay.

Basic Metals: The basic metals and alloys industry is another important industry in Bombay. The history of this industry is traceable to 1857 in which year Messrs. Richardson and Cruddas engineering works were established. It was then one of the largest engineering works in India, providing employment to about two thousand persons. In 1909, there were 15 foundries and metal works. Besides, there were six other factories in metal, lock, cutter and container manufacturing including the Godrej & Boyce and Co. The basic metals and alloys industry as per the Annual Survey of Industries during the period 1975-77 comprised 294 registered factories in Bombay, which formed 44.55 per cent of the factories in this industry in Maharashtra as a whole. Greater Bombay ranks the first among the districts of the State in respect of the number of factories, invested capital, employment, inputs, output, value added on manufacture, etc. by this industry. The capital investment in this industry in Bombay was to the extent of Rs. 90,80 lakhs or 32.39 per cent of the capital invested in the entire industry in Maharashtra. The employment in this sector of industry stood at 29,663 persons or 45.73 per cent of the total employment in this industry in the State. The output of the Bombay factories was valued at Rs. 2,18,01 lakhs or 43.44 per cent of the output in the metal and alloys factories in Maharashtra State.

The fabrication of metal containers and cans commenced in Bombay during the First World War when supplies of imported containers required by the oil companies became scarce in the country. The growth of the industry gathered momentum after the Second World War. This phenomenon could be attributed to the growth of chemicals and chemical products industry, pharmaceutical industry, vanaspati, petroleum products, paints, dye-stuffs, toiletries and many other industries in Bombay, which require containers of various sizes and types. The industry has underwent technological improvement in recent years which ensures the purity and non-contamination of the products to be packed. The Metal Box Company of India, the Zenith Tin Works, Gannon Dunkerley, Poysha Industrial Co., Mahindra Owen are the principal manufacturers in Bombay.

Automobiles: The automobile industry of Bombay occupies a place of honour in the industrial sector of India. The assembly of cars and trucks from imported components was commenced by General Motors India Ltd. in Bombay, in 1928. This pioneering enterprise was followed by the establishment of the Premier Automobiles in Bombay in 1944. This year can be said to be the most important landmark in the history of the indigenous automobile industry of India. This company was followed by two esteemed companies at Bombay, namely, the Mahindra and Mahindra established in October 1945 which commenced production in 1949, and the Automobile Products of India which was established in 1949 and commenced production in 1955. Besides the three ersteemed companies mentioned above, there are several factories in Bombay manufacturing automobile accessories, ancillaries and parts. The industry in Bombay comprised 145 registered factories providing employment to about, 19,088 persons in 1975-77 period. The value of products of the industry stood at Rs. 1,20,09.63 lakhs and the value of total output at Rs. 1,29,35.35 lakhs per annum during the period of Annual Survey of Industries in 1975-77.

Machine Tools: The machine tool industry which plays an important role not only in providing efficient

consumers goods but also in building up the infrastructure of the economy is one of the major industries in Bombay. The requirements of expanding industrialisation during the Second World War and the scarcity of imports on account of the war acted as a stimulus to the growth of this industry in Bombay. The pace of growth of this industry gathered momentum during the Second Five Year Plan when large composite units in the private sector expanded. Foreign collaboration enabled a rapid progress of the industry in Bombay during the sixth decade of this century. The eminent machine tool manufacturers in Bombay include Godrej and Boyce Mfg. Co., Ralli Wolf, Kramps Hydraulic (India), Vickers Sperry of India, Indian Tool Manufacturing Ltd., Investa Machine Tools and Engineering Co., Garlic Engineering, Siemens India Ltd., Advani Oerlikon, Voltas Ltd., Batliboi and Co., Consolidated Pneumatic Tools Co., Greaves Cotton and Co., Electro Pneumatics, Dee-Key Industries, Bharat Tool Mfg. Co., Horstanann India Ltd., and a number of many others. The Larsen and Toubro Ltd. incorporated in 1946 is one of the pioneers in Bombay. As per the Annual Survey of Industries in 1973-74, there were 35 machine tool manufacturing factories in Bombay which provided employment to 2,371 persons. The capital investment of the Bombay factories was to the extent of Rs. 433.87 lakhs, while the value of their total output was computed at Rs. 798.95 lakhs. The value added on manufacture was of the order of Rs. 280.62 lakhs in 1973-74. Machine tools manufactured in Bombay are exported to the U.K., Europe, the U.S.A., Sri Lanka, Middle East, South-East Asian countries and parts of Africa, after meeting indigenous demand. The IMTEX-82 Exhibition held in Bombay in early 1982, stands testimony to the technological achievements in the machine tool industry in India, and Bombay was the befitting venue for the same.

Small tools, hand tools and accessories were manufactured by a firm in Bombay for the first time in 1937 (*Indian Tariff Board Report, 1949.*), and this was the first firm in India in this industry. It was during the Second World War that a factory for the manufacture of grinding wheels was established in Bombay by Grindwell Abrassives Ltd. in collaboration with Czechoslovakian engineers.(*Kotharis Investor's Encyclopaedia.*) This was a pioneering unit in the country in the field. The small tools and hardware industry in Bombay comprised 162 registered factories which provided employment to 8,528 persons, as per the Annual Survey of Industries of 1975-77.

Steel Furniture: The Godrej and Boyce Manufacturing Company, established towards the end of the 19th century, is a pioneering firm in Bombay, manufacturing steel furniture, locks, padlocks, steel cupboards, refrigerators, soaps, edible refined oils and a number of consumers goods. Besides, there are a number of manufacturers of steel furniture which grew mainly after the Second World War in general and the mid-fifties in particular. There were 29 steel furniture factories in Bombay providing employment to 7,445 persons as per the A.S.I. of 1975-77. The Bombay firms export many items of furniture to foreign countries after meeting domestic demand.

In spite of paucity of land for industrial location the leather goods industry has found a home in Bombay. The Carona Sahu Company, established in 1953 is one of the leading manufacturers of leather-wear not only in Bombay but also in India. Most of the other factories in the industry are in the small-scale sector.

The history of industrial fasteners and screws industry in the city is traceable to 1947 during which year a large unit in Bombay took up production of wire nails and other fasteners. (GovernmentofIndia, Handbook ofCommerciall Information ,1963.) The Guest Keen Williams Ltd., first incorporated in India at Calcutta in February 1937, commenced manufacture of a number of items at Bombay in September 1953.

Bicycle manufacturing industry in Bombay and in India dates back to 1939 when the Hind Cycles Ltd. started manufacture of a complete bicycle in Bombay. It was the pioneer in the bicycle industry in India. The concern was taken over by the Government of India, under the aegis of the National Bicycle Corporation of India, in a recent year. It has two plants in Bombay.

Industrial Machinery: Manufacture of cotton textile machinery is an important industry in Bombay. It caters to the needs of the textile industry in respect of .machinery, accessories and various fabricated equipment which was entirely imported upto the Second World War. In the post-war period, several machinery manufacturers as well as cotton textile mills in Bombay commenced production of the machinery required by cotton mills. The pioneer in this field in Bombay was the Acme Manufacturing Co. Ltd. which commenced production of ring frames in 1947-48.(Ibid.) The lead given by this concern was followed by the Star Textile Engineering Works in 1948 and the National Machinery Manufacturers in 1954.(Kothari's Investor's Encyclopaedia.)

Industrial machinery which constitutes a vital sector of the national economy was entirely imported from the western countries upto the beginning of the Second World War. The growth of this industry was initiated by the private sector in Bombay during the Second Five Year Plan. The infant industry was granted tariff protection in the initial stages, besides restrictions on imports. This encouraged growth of the indigenous industry in diverse directions. The pace of growth of this industry gathered further momentum in the mid-sixties. A number of large-scale manufacturers including machine tool companies undertook production of machinery for other industries as well as machine tools.

Typewriter manufacturing though not a very large industry is an important one from the point of view of utility of the product. The Godrej and Boyce of Bombay can be regarded as a pioneering concern, not only in Bombay but also in India, in the manufacture of this intricate machine. This firm was the first to undertake the job of manufacturing of an All India Typewriter. The birth of the Indian typewriter at a time when even the western countries were also not well-equipped for the manufacture of this high precision job gives tremendous credit to Indian enterprise in Bombay.

A number of industries and factories manufacturing a wide range of consumer goods and capital goods were established during the post-war period in general and the post-Independence period in particular. The war efforts of the Government of India made it imperative on the part of the authorities to encourage the growth of many defence-oriented as well as consumers goods and capital goods industries. The curtailment of foreign supplies also provided a stimulus to the growth of many industries. The cessation of hostilities in 1945 brought about conditions of slump. The competition from imported articles after the war had an adverse impact oft the infant industries in Bombay as in India. A number of industries

appealed to the Government for tariff protection, which compelled the authorities to appoint Tariff Boards and Tariff Commissions from time to time. As per recommendations of these bodies the Government granted tariff protection from time to time. The Government of Independent India adopted progressive policies with a motive to encourage growth of indigenous industries and to attain self-sufficiency. Accordingly not only tariff protection was granted to many industries but also import of many goods was totally banned or highly restricted.

These measures encouraged the growth of manufacturing of all sorts of machinery, metal products, electrical machinery and transport equipment. The statistical information of these four sectors of industry in Bombay as per the Annual Survey of Industries of 1975-77 are given below:

STATEMENT No. 17

	Metal products and parts except machinery	Machinery, machine tools and parts except electrical machinery	Electrical machinery, pparatus,appliances,supplies	Transport equipment and parts
Factories:				
Number	751	630	454	223
Percentage*	67.05	59.38	71.99	66.17
Invested capital:				
Rs. in lakhs	1,00,24	1,12,84	1,43,58	87.53
Percentage	67.12	32.63	60.82	29.90
Employment:				
Number	37,818	39,491	37,277	33,754
Percentage	70.52	39.20	63.86	58.38
Output:	arash	tra Stat	e Gazette	ers
Rs. in lakhs	2,16,91	2,33,23	2,74,99	1,74,93
Percentage	72.32	38.64	65.40	52.72
Value added:				
Rs. in lakhs	57,93	61,54	68,90	49,84
Percentage	72.98	33.86	65.87	54.49

^{*}Note.—The percentage for an industry is worked out in respect of total for that industry in Maharashtra.

TRADE

Bombay acquired considerable importance as an entrepot centre of trade only in the beginning of this century. At the close of the 17th century, indeed, one writer had declared it impossible "that Bombay from its situation could ever become a place of trade notwithstanding the great attention paid to it by the English Government." Nevertheless Bombay grew very rapidly since the close of the last century and the beginning of this century on account of its being a wonderful natural harbour. It was also in close touch with a population which during the dim and prehistoric ages had developed the science of ocean navigation long before its rudiments were known in Europe.

Under the Portuguese rule the trade of Bombay was infinitesimal and was confined to dried fish and cocoa nuts to neighbouring coast towns; and in truth the anxiety of the East India Company to secure the island arose not so much from the idea of converting it into a flourishing mart as from the desire to possess a

secure position on the Western coast. According to Mr. Fryer the trade of Bombay was very small in 1675 which advanced appreciably under the rule of Aungier, the Governor. In the 17th century Bombay was economically so unpromising a possession that in 1668 King Charles II of England transferred it to the East India Company at an annual rate of only \pm 10. King Charles had received it as a dowry at his marriage with the Portuguese Princess, Catherine of Braganza in 1661. The East India Company shifted the headquarters of its trade from Surat to Bombay in 1687. This was however followed by a great depression between 1690 and 1710.

In 1757 Mr. Ives described the town as the most flourishing in the World, "The grand store-house of all Arabian and Persian commerce", while another writer speaks of the sale of woollens and other European goods to the extent of the lakhs a year. Mr. Forbes described the merchants of Bombay as trading with all the principal seaports, inland, cities of India, and as extending their commerce to the Persian and Arabian Gulfs, the coasts of Africa, Malacca and China and the eastern islands. At the opening of the 19th century, Bombay appeared to Milburn " to bid fair to be the most durable of all the English possessions in India ". Basra, Muscat, Ormuz and other ports in the Persian Gulf furnished Bombay with pearls, raw silk, wool, dates, dried fruits, rose-water and scents; Arabia supplied it with coffee, gold, drugs and honey; while a number of ships annually freighted with cotton and bullion for China returned laden with tea, sugar, porcelain, wrought silk, nankins, and a variety of useful and ornamental articles. The exports from Bombay consisted of English woollens, copper, iron, lead, Surat goods, pepper and cotton to Madras, Bengal, China and Gulf areas.

Bombay could not herself furnish any considerable article of export or even food sufficient for her own people; but every European and Asiatic commodity was procurable within her limits. Mr. Hamilton remarked that Bombay was the very best mart for guns, drugs, Mocha coffee, cornelians, agates and Surat fabrics; and besides being the chief emporium for the goods of Persia, Arabia and western India, she possessed a larger trade with England than any other Presidency.

Foreign Trade: Bombay figures in the writings of ancient travellers as a part on the Thane coast which once played a leading part in the foreign trade of western India. It was however in recent times that it acquired considerable importance as a centre of trade. Dr. Fryer recorded that the trade of Bombay in 1675 was very small. Under the rule of Aungier an appreciable advance was made. In 1670 the local trade was confined to bullion. After about four years trade in cloth, serges, lead, copper, red lead, iron and ivory was started with England. The exports from Bombay included cloth, baftas, dungaris, porcolloes, pepper, drugs, etc. General Aungier realised enormous potentialities of the trade of Bombay and he did his level best to advance the trade of this city.

Between 1664 and 1668 Bombay gradually developed as a chief centre of English commerce with western India and considerable impulse to trade was afforded by the decision of the Company in 1687 to transfer the headquarters of Company's trade from Surat to Bombay. Between 1690 and 1710 a period of great depression set in owing to the rivalry between the London and trade languished greatly.

In 1753 Bombay had become the centre of trade between western and upper India and between Malabar coast, the Persian Gulf and Red Sea.

The trade between Bombay and the other ports of the Thana coast between 1660 and 1800 was chiefly in grain, vegetables, fruits, fowls, and mutton for the Bombay market and in teak from Vasai. The trade was much hampered by taxes imposed in Bombay while a regular barrier of custom houses—English, Portuguese and Maratha and the disturbed condition in the Deccan prevented any considerable inland trade. By the close of the third decade of the 18th century Bombay's commerce was in a most flourishing condition. Forbes described the port between 1766 and 1770 as one of the finest marts in India, employing a large number of vessels. The cotton trade with China commenced about 1770. Basra, Muscat, Ormuz and other ports in Persian Gulf furnished it with pearls, raw silk, wool, gold, drugs etc., while from Java, Malacca and Sumatra, Bombay vessels brought spices, perfumes, sugar etc.

The intercourse between India and America was then in infancy and the Portuguese trade with Bombay from Goa, Daman and Lisbon was trifling.

From 1795 a steady increase was noticeable in the external commerce of Bombay. The total value of Bombay trade (foreign and coasting) amounted to Rs. 406 lakhs in 1801-02. Except the decade ending 1819-20 during which the average showed a decrease, the average value of trade always showed a rising trend in the subsequent decades. The average value in 1829-30, was Rs. 566 lakhs. It rose to Rs. 26,20 lakhs in 1859-60 and Rs. 8,506 in 1889-90.

Upto the year 1869-70 the import trade of Bombay was confined chiefly to the United Kingdom, China and the Persian Gulf. Owing to the abolition of the East India Company's monopoly and the opening of the Suez Canal (1869), the current of trade from 1870 showed a disposition to return gradually to the channels used before the discovery of the passage round the Cape of Good Hope. Subsequent to 1870 other European countries commenced to acquire an increasing share. The following figures, in lakhs, show a rising trend of exports and imports of Bombay since 1800-01:—

			Decade		
				1890-91 to 1900-01	1900-01 to 1906-07
Exports	67	210	2391	2748	3308
Imports	29	170	1162	2123	2351

The imports to Bombay consisted of cotton piece-goods, silk manufactures, sugar, machinery, metals, oil, dyes, liquors, coal, cotton yarn, kerosene, etc. The chief contributor to the import trade in cotton piece-goods was the United Kingdom.

In the decade ending 1850, the value of imported cotton piece-goods was nearly 88 lakhs which rose to 723 lakhs in decade ending 1890. During 1901-07 the total value of the trade was nearly 779 lakhs. Other countries which exported cotton piece-goods were Austria, Hungary, France, Belgium, Germany and America, the last one started its export during the decade ending 1890. Until 1870 the silk manufacture were chiefly from China. However after that United Kingdom, France and Italy started to send silk piecegoods. During 10 years ending 1870 imports from England amounted to one lakh and increased to ten lakhs during the period commencing 1900-01. Among Asiatic countries Egypt commenced to send silk piece-goods to Bombay before 1861-70, while Japan joined in 1891-1900. The United Kingdom had monopoly of machinery and mill requirements. The imports from Germany and America were drifting. As regards import of woollen piece-goods, the United Kingdom started exporting at the opening of the 19th century. The other countries which had a share in this were Germany, the chief competitor, Belgium, France, Egypt and Persia. Bombay commenced to import sugar from United Kingdom at the opening of the 19th century. The import from Mauritius was a noticeable phenomenon in the sugar trade. In 1895-96, the German sugar was put on the market in large quantities. Along with China, Jawa had also a small share in the sugar import. In the metal imports also the United Kingdom had a bulk share and had done so since the opening of the 19th century. Bombay received imports of metals from other countries like Austria, France, Norway, Sweden and Germany. Russia was the first to export kerosene to Bombay in 1880. Subsequently America started exporting oil. The import of Sumatra oil became an established fact in about 1900, while in 1903-04, a new feature was introduced into trade by the import of Burma oil. There was no import of coal during the first half of the 19th century. But from 1860 onwards with expansion of railway, steam navigation and telegraphs the trade assumed considerable proportion. Upto 1890 United Kingdom and America were the only partners in exporting coal to Bombay. However, since 1890 Japan entered in this trade.

Bombay was the sole outlet for the cotton produce of Gujarat, the Deccan and the Central Provinces and her export trade was confined for the most part to cotton, wheat and seeds. About 1825 the exports from Bombay became considerable. The heyday of Bombay's exportation of cotton coincided with the outbreak of American war (1861-65). Upto 1890 the United Kingdom was the chief recipient of Indian raw cotton. However from 1891 onwards Japan, Austria, Hungary, France, Italy started importing cotton from India. The export trade of wheat commenced in 1851 and was insignificant until 1871. The United Kingdom, Belgium, France, Germany, Spain shared in this trade. The first shipment of oilseeds occurred in the decade ending 1849-50 and were despatched to the United Kingdom. Austria, United Kingdom, Germany, Holland and France were th emajor countries importing Indian oilseeds. Before the improvements in mill machinery in Great Britain, cotton piece-goods were exported to England in considerable quantities. During the earlier years of the 19th century England, France, Portugal, Arabia, Persia absorbed large quantities of export trade.

In 1854, the first cotton mill was established in Bombay. During 1865 there were 10 mills in Bombay which increased to 85 by the end of 1907. The countries like Arabia, Persian Gulf, Africa absorbed products of the Bombay mills. The exports of cotton goods from Bombay therefore showed a steady tendency to expand in the last decade of 19th century in spite of competition from Japan.

Coasting Trade: The coasting trade of Bombay fluctuated in accordance with increase or decrease of imports and with the demands from foreign countries. The principal articles of trade were raw cotton collected from Gujarat and Cutch; cotton piece-goods from Gujarat, Bengal and Goa; rice from Goa, Gujarat; and sugar from Bengal and other districts of the Presidency.

The coasting trade maintained steady progress except the temporary depression of 1811-12 due to unfavourable conditions in China and great scarcity in Cutch and Gujarat. In 1827, the commercial position in Bombay was far from favourable. Between 1835 and 1850 the Bombay Government strived hard to enlarge coasting and foreign trade by removing restrictions such as inland cotton and sugar duties. During 1854-64, Bombay enjoyed an unusual amount of prosperity as both foreign and coasting trade largely increased. This was due to high prices received for cotton during the American War. The following figures of coasting imports and exports show the substantial increase since 1880-81:—

(Rs. in lakhs)

	1880-81	1900-01	1905-06
Imports	534	1088	1067
Exports-			
Indian	113	231	355
Foreign	284	298	307

Rail-borne Trade: The then Great Indian Peninsula Railway and the Bombay, Baroda and Central India Railway carried a large traffic to and from Bombay serving practically the entire country. The GIP Railway which was opened for traffic for 1258 miles in 1870 booked 2,12,905 tons of goods to stations in Bombay city and Island and carried 1,26,861 tons of goods from stations within the same area. The bulk of trade was in cotton and grain brought from the Deccan and Central Provinces by the GIP Railway and from Gujarat by the BB&CI Railway. In the subsequent decade the rail-borne trade increased in proportion to the increase in foreign trade of the port. The following figures show the increased rail-borne trade of Bombay island since 1888-89 for a few years:—

(Rs. in '000)

Year	Imports		Exports		
	External	Internal	External	Internal	
1888-89	18,16,68	10,71,71	6,13,86	6,56,39	
1898-99	18,75,86	13,64,89	10,60,57	8,88,15	
1907-08	25,95,87	17,60,55	21,29,62	13,89,09	

The chief imports by the BB&CI Railway were raw cotton, grains, pulses and oilseeds; while chief items of exports were cotton piece-goods, sugar and metals. The GIP Railway also carried the same items of exports and imports from and to Bombay.

Local Trade: Even after possession of the island by the East India Company the local trade of Bombay was comparatively small. The factors responsible for this state of affairs were lack of capital, external warfare, epidemic diseases, low strength of traders, etc. The retail trade in rice and grain was in the hands of persons known as the kacharas appointed by the Company's Government. The unfair practices by the kacharas, however resulted into appointment of a clerk of the market in 1741 to undertake retail sale of grain.

Except grain trade, other traders were free from Government interference in the 18th century and cultivators, fishermen, vegetable growers were encouraged to bring their produce in the Bombay market. By the end of 18th century a considerable number of Parsis joined existing trading community of Banias and Musalmans. An English firm, *viz.*, Forbes and Company was opened in 1767 which transacted mercantile business. According to Mrs. Elwood (1830) the retail trade of Bombay was almost wholly in the hands of the Jew community. Bombay in 1847 contained 201 *dal* and rice dealers, 152 confectioners, 491 cloth merchants 203 dealers in brass and copper, 459 liquor dealers, 736 goldsmiths, 253 tobacconists and 439 pawn brokers.

As per 1901 census returns more than 1/10 urban population was engaged in trade of one kind or another. The leading traders were Bhatias, Banias, Jains, Bohras, Memons, Parsis, Jews and Europeans. Marathas dealt largely in fruit and vegetables, while the Kolis monopolised fish supply. Hawkers numbered nearly 2,000 and earned more in the mango season. Retail shopkeepers bought their stock from the wholesalers at Masjid Bandar (grocery), Mulji Jetha Market (cloth and hosiery), Pydhoni (copper), Ganeshwadi (drugs), Mandvi (foodgrains, sugar, *ghi*) Shaikh Memon Street (silver and gold) and Fort (opium and machinery).

The seaborne trade from the Bombay Harbour increased progressively during the post-Independence period. The cargo handled at the port was about 5.18 million tonnes which comprised 3.26 million tonnes of imports and 1.92 million tonnes of exports. The following statistics show the trend of imports and exports handled at the Bombay port during the planning period:—

(Figures in million tonnes)

Year	Imports	Exports	Total
1950-51	5.27	1.73	7.00
1955-56	6.81	3.66	10.47
1960-61	10.79	3.93	14.72
1965-66	12.97	5.14	18.11
1970-71	10.86	3.54	14.40
1971-72	12.43	3.70	16.13

A salient feature of the trend in seaborne trade is that the composition of the cargo and its variety have underwent immense change during the post-Independence period. Petroleum, oil and lubricants now constitute about 55 per cent of the total cargo. In keeping with the progress of industrialization in the country and the priorities fixed for the national economy there had been a larger import of industrial machinery, basic metals, basic chemicals, fertilizers, fertilizer raw materials such as rock phosphate, crude sulphur, urea, etc. Foodgrains also constituted an important item of import trade upto 1975 after which the food imports declined due to favourable conditions in the country itself. During the pre-Independence period a number of consumers' goods, even the most petty articles like pins and hair-pins, were imported from the U.K. which ruled over India. Almost all kinds of machinery, tools, equipment and even screws and bolts were imported from the U.S. The main items of exports from Bombay, at present, are cloth, sugar, tools, industrial accessories, iron and steel goods, oil-cakes, cashew-nuts, etc. In the case of exports also, the composition of the cargo has underwent a formidable change during the last about twenty years. Manufactured articles are progressively taking the place of primary goods. The Government has also undertaken a number of export promotion schemes.

The traffic of Bombay port declined sharply during World War I, despite an increase in the exports during the last two years of the War. The total traffic plummeted from 5.02 million tons in 1913-14 to 4.01 million tons in 1915-16 and stood at 4.15 million tons in 1918-19. Though the declining trend persisted for a short while even after termination of the War in November 1918, the traffic picked up rapidly and the figure for 1919-20 rose to 6.25 million tons, registering a substantial increase over the pre-War level. This increase was maintained till 1929-30 when it reached 6.69 million tons.(Bombay Port Trust, The Port of Bombay—A Brief History.)

The buoyancy of the twenties was, however, succeeded by a decline in international trade as a result of the Great Depression in the early thirties. The Depression affected the foreign trade of Bombay adversely. The volume of trade declined from 6.69 million tons in 1929-30 to 4.69 million tons in 1932-33, and it fluctuated around 5.4 million tons till 1939-40. The fall in exports was more severe than that in imports.

With the outbreak of World War II, the foreign trade of Bombay declined slightly from 5.4 million tons in 1939-40 to 5.1 million tons in 1940-41. However, with the gearing up of the War effort and the revival of industrial activity to meet the War needs, the traffic handled at Bombay port revived to the earlier level of over six million tons from 1941 onwards. The entry of Japan into the World War and her occupation of Burma, virtually closed the Bay of Bengal to shipping. Consequently the country's seaborne trade was diverted to Bombay, Karachi and Cochin. The turnover of foreign trade declined to 5.36 million tonnes in 1946-47.(*Ibid*.) This decline was attributable to the slump in economic activity after the cessation of hostilities of the World War and many other damages due to War.

The volume of trade at the Bombay port increased progressively during the post-Independence period. There has been a tremendous expansion in the world seaborne trade in both volume and value, ever since the launching of planned economic development in 1950-51. The composition of foreign trade has underwent fundamental changes in keeping with the industrial and economic policies of the Government of India.

The statistics of imports and exports from the Bombay port in certain selected years since Independence are given below:—

IMPORT AND EXPORT TRAFFIC AT THE BOMBAY PORT SINCE INDEPENDENCE

(Bombay Port Trust, The Port of Bombay—A Brief History.)

(D. W. tonnes in millions)

Year	Imports	Exports	Total
1947-48	4.76	1.71	6.47
1950-51	5.27	1.73	7.00
1955-56	6.81	3.66	10.47
1960-61	10.79	3.93	14.72
1965-66	12.97	5.14	18.11
1966-67	13.23	5.04	18.27
1970-71	10.86	3.54	14.40
1971-72	12.43	3.70	16.13

The import of petroleum, oil and lubricants increased considerably since 1954-55, and they now constitute, on an average, about 55 per cent of the total traffic of the port. The other items which have contributed to the increase in traffic consist of iron, steel and machinery for plan projects, foodgrains, fertilizer raw materials (rock phosphate, crude sulphur, urea, etc.) and chemicals on the import side. The main items of export are oil-cakes, iron scrap and dross, sugar, iron and steel, and manganese ore. The increase in imports in 1965-66 and 1966-67 might also be due to the appreciable rise in the import of military hardware on account of the experience oi Indo-Pak War of 1965.

The decline after 1966-67 was mainly due to diversion of some traffic of petroleum, oil and lubricants consequent upon the setting up of oil refineries elsewhere in India; decline in iron and steel imports due to growth of indigenous production, reduction in imports of foodgrains and the virtual disappearance of the iron ore traffic as a result of the development of other ports for ore export.

The rail-borne import and export trade from Bombay is immensely large. Lakhs of tonnes of goods are imported and exported by the Central Railway as also the Western Railway to and from Bombay. The turnover of goods traffic on the former is much larger than on the latter. This is attributable to the fact that a larger part of the country comprising the southern, central, eastern and north-eastern regions of India, are connected with the Central Railway than with the Western Railway.

The import and export goods traffic on the Central Railway in 1975-76 and 1976-77 and that on the Western Railway in 1974-75 are given below:—

INWARD AND OUTWARD GOODS TRAFFIC TO AND FROM BOMBAY BY RAILWAYS

(Information received from the Central Railway and the Western Railway.)

(Figures in tonnes)

Central Railway				Western	Railway	
Imp	orts	Ехр	orts	1974-75		
1975-76	1976-77	1975-76	1976-77	Imports	Exports	
30,30,351	42,82,037	31,16,614	37,33,260	12,51,053	9,14,559	

CHAMBERS OF COMMERCE

Chambers of commerce played an important role in the development of trade and commerce, promotion of exports and protection of interests of the trading community in Bombay.

The history of chambers of commerce in Bombay can be traced back to 22nd September 1836 when the Bombay Chamber of Commerce was established.

The important chambers of commerce in Bombay, are Bombay Chamber of Commerce and Industry, Indian Chamber of Commerce, and Industry, Indo-American Chamber of Commerce, Maharashtra Chamber of Commerce, Western India Chamber of Commerce, Bharat Merchants' Chamber, Hindustan Chamber of Commerce, Indo-German Chamber of Commerce, Iron, Steel and Hardware Merchants' Chamber of India, and Indian Merchants' Chamber.(For details refer to Chapter 6— Trade and Commerce.)

By and large, a chamber of commerce functions as a spokesman of industry, trade and commerce. The Indo-foreign Chambers of Commerce in Bombay have a special role to perform. They promote economic co-operation between India and the respective country. They also promote foreign collaboration in industry and trade by negotiating collaboration agreements between interested parties and Government authorities.

BANKING

The history (For details-refer to the Gazetteer of Bombay City and Island; Vol 1,1909, pp. 288-93.) of banking in the city can be traced to 1720 in which year a bank was established in Bombay with the assistance of the East India Company. This bank which was under management of the Bombay Government was however closed in 1778 due to accumulation of debts. During the 19th century banking in Bombay was carried on by about 100 Hindu shroffs until the establishment of the Bank of Bombay. The Bank of Bombay was opened in 1840. Besides usual banking business, it enjoyed the privilege of issuing bank notes upto 1860. İn 1842, the Bank of Western India was established at Bombay in order to facilitate the conduct of exchange and other legitimate banking business from which the Bank of Bombay was excluded by its charter. It had its branches in Calcutta, Colombo, Hongkong and Singapore. A third banking company known as the Commercial Bank of India was formed in 1845 mainly on the suggestion of Indian merchants. It was followed by the establishment of the branches of the Oriental Bank of London, the North-Western Bank of India and the London and Eastern Bank. Many branches were opened during the subsequent period. The year 1863-64 was one of great prosperity, and enormous wealth poured into the city in consequence of the cutting off of the American Cotton supply. This sudden increase of wealth engendered the wildest speculation and resulted in 1863 and 1864 in the formation of numerous banking and financial associations. The old Bank of Bombay was reconstructed in 1868.

Banking made steady progress upto 1890, but during the next 15 years there was stagnation caused by bad seasons and outbreak of plague. Some banks preferred closure to bad survival. In 1908, Bombay contained three local banks, two branches of Indian banks, three of London banks and four other banks. The three local banks of importance were the Bank of Bombay (1868), the Bank of India (1906) and the Indian Specie Bank (1906).

The mercantile and moneyed classes in the city encouraged the growth of commission agents and industrial houses. Thus availability of capital and an entrepreneurial class gave phillip to industrialisation in Bombay.

Krishna Arjunji Nathji, a Gujarati Shroff, was the first financier of the Bombay administration of the East India Company. He lent finances to the company for the first time in November 1759.

In December 1976 there were 795 banking offices in Bombay, while the corresponding number for Maharashtra was 3,370. The commercial importance of Bombay is revealed by the statistics of banking. In December 1975 there were 729 banking offices which had deposits worth Rs. 2,17,078 lakhs and had advanced Rs. 2,03,666 lakhs. The total bank credit issued by the banks in Bombay stood at Rs. 1,56,95,072 lakhs in December 1975 which was granted to 1,32,252 account holders.

Of the 14 nationalised banks, the head offices of four banks, viz., the Central Bank of India (established in 1911), the Bank of India (established in 1906), the Union Bank of India (1919) and the Dena Bank (1938) are located in Bombay. Besides the Reserve Bank of India which is the Central Bank of India has its head office in Bombay. Besides the usual functions of the bank as a central bank, the Reserve Bank of India has been playing a vital role in direction and control of economic development of the country.

The State Bank of India which has also its head office in Bombay is functioning as an instrument of government policy of economic development.

Besides the banks in the public sector, there are a number of commercial banks in the private sector including the foreign banks and in the cooperative sector. They include the Maharashtra State Cooperative Bank and the regional bank branches of the giant banks in the United Kingdom, the U.S.A., Canada, France, Japan, Hongkong, West Germany and many other countries in the world. A detailed account of Banking is given in Chapter 6 above.

INVESTMENT TRUSTS AND FINANCIAL INSTITUTIONS

Prior to Independence bank credit was available mainly to commerce and financial activity only. Commerce and finance by themselves claimed about 51 per cent of the bank credit while only 30 per cent went to the industrial sector by the end of 1949. The percentage of bank credit to industries showed some improvement after 1949. But with the rapid progress in industrialisation in the private sector, the total requirements could not be met by the banks alone. The problem was more acute in the case of long term capital. The scheduled banks followed a policy of caution. The Government therefore felt it imperative to launch a series of stabilised financial institutions to meet the needs of industry. In 1948 came the Industrial Finance Corporation, and it was followed by the State Financial Corporation consequent on the State Financial Corporation Act of 1951. While the IFC was designed to serve the largescale industry, the SFC is to take care of needs of medium and small-scale industries. The National Industrial Development Corporation was formed in 1954 to undertake the responsibilities of encouraging small-scale industries by providing finance for machinery, etc. The Industrial Credit and Investment Corporation of India (I.C.I.C.I.) was founded in 1955 largely due to the suggestion of the World Bank. This was followed by the Refinance Corporation in 1958 which provided refinance facilities to banks to enable them to provide finance to industries. The establishment of the Industrial Development Bank of India (I.D.B.I.) in 1964 was a very important event in the field of finance to industries. It plays a leadership role in expansion of industries and evaluation of industrial projects.

Prior to the establishment of the I.D.B.I. and the I.C.I.C.I. entrepreneurs used to get funds only on the basis of their standing and prestige. There was practically no system of project evaluation in India. The I.D.B.I. and the I.C.I.C.I. introduced a tradition of project evaluation before financial lending. They undertake various functions such as discussion of project ideas, feasibility study, search for etitrepreneural talents, and provision of technical and financial assistance on a consortium basis.

Besides, the Maharashtra State Finance Corporation (M.S.F.C.) which has celebrated its silver jubilee

recently has been providing industrial finance to small and medium State industries.

TRANSPORT FACILITIES

Bombay is most advantageously situated as regards railway communications. Three trunk routes emanate from Bombay which traverse through the length and breadth of the entire country. Thus, Bombay is connected with practically every State in the Indian Union and affords railway communication with almost all industrial and commercial cities.

Important national highways emanating from Bombay are also connected by a number of State Highways, their points of junctions being either on the outskirts of Bombay or a little beyond. (For details refer to Chapter 7 in this volume.)

The Bombay port is the keystone of the prosperity of Bombay City. It is one of the eight major Ports in India, and provides all the facilities as per international standards.

Apart from being one of the finest natural harbours, Bombay's central position on the west coast of India, its advantageous position with respect to the Suez Carnl and Europe and its accessibility to a vast hinterland by three broad gauge railways running north, east and south and a network of national and state highways have made Bombay the main distributing entrepot of the overseas trade for the western and central regions of India. "Bombay's claim to be the premier port of India is based on the facts that it is the leading oil port with over 50 per cent of the foreign traffic, the leading general cargo port with about 33 per cent of the foreign traffic, the leading port for overseas passenger traffic and the main base for the Indian Navy. It bore the brunt of the heavy food-grain imports of the last decade, handling as much as 35 per cent of the imports in the peak period. Bombay's share of the total sea-borne traffic of the country, foreign and coastal, in 1970-71 was over 23 per cent, the highest for any port."

The Bombay Port Trust, which celebrated its first Centenary on 26th June 1973,(Bombay Port Trust, The Port of Bombay.) has contributed immensely to the growth of Bombay as also to the national economy. It undertook a good many schemes for the improvement of the port, and has many schemes of further modernisation and expansion. It has also plans for constructing a satellite port at Nhava-Sheva across the harbour.

Infrastructure in the form of an excellent transport system has immensely contributed to the economic development of Bombay. It is therefore of great interest to give a brief history of the growth of the transport system of Bombay. As a matter of fact the history of Indian Railways starts from the establishment of the first railway line from Bombay to Thane. The twenty-one miles (33.60 km) of rail from Bombay to Thane was opened for traffic on April 16th, 1853 which was a day of rejoicing in the city. The progress of the railway was steadily sustained in the years to follow and Bombay started wielding direct influence in the regions far beyond her own limits. The extension to Kalyan was opened on May 1, 1854. The new year day of 1861 witnessed the opening of the line to Kasara at the foot of the Thai Ghat. The opening of the Bhor Ghat incline took place on the 21st April 1863, amid great rejoicing in the presence of the Governor, Sir Bartle Frere. The Thai Ghat incline was opened in January 1865. The three main railway termini at Nagpur, Jabalpur and Raichur were reached on 20th February 1867, 8th March 1870 and 1st May 1871, respectively.

The two main lines of the G.I.P. Railway from Bombay conferred incalculable benefits upon the country. The immediate benefits were manifested by the projection of fresh railways even prior to completion of the two routes from Bombay. The work of constructing the Bombay, Baroda and Central India Railway (B.B.&C.L) was commenced in May 1856, and the first section from Amroli to Ankaleshwar was opened in February 1860. The railway communication between Bulsar and Baroda was established by the end of 1861. This line was connected to Bombay in November 1864, when the main line to Ahmedabad may be said to have been completed. The whole line from Bombay (Colaba) to Wadhvan was opened throughout in 1872. Thorough communication was established from Bombay to Calcutta in 1870 and to Madras in 1871 which led to a large increase in both goods and passenger traffic. Goods transport steadily expanded from 1880 owing in a large measure to the rapid growth of the factories in Bombay on western model. The quantity of cotton brought to Bombay by the railway trebled between 1880 and 1908.

The Bombay Port Trust railway which was first proposed in 1894 was constructed in 1915; with a length of about 12 km. from Wadala junction to Ballard Pier. It has had a total length of about 175 km. of main lines and sidings. This railway has facilitated the increasing business of the Bombay Port by affording greater facilities for the shipment of produce. It helped transformation of methods of handling cotton. Huge cotton depots covering nearly 50 hectares of land were erected; to the east of the cotton depots are the grain depots, and further north the manganese ore and coal depots. Huge oil installations were also set up in the vicinity of the Port Trust railway in three groups: the liquid fuel and lubricating oil depots at Malet Bandar, the kerosene oil installations at Sewri, and the petrol installations further north at Wadala, all of them being connected by pipelines with discharge berths on the Bombay Harbour Walls and at Pir Pau. This establishment encouraged a tremendous growth of oil trade of Bombay in particular and of Western India in general, which over a decade shot up from a mere half million gallons to about 19 million gallons.

The opening of the Suez Canal in 1869 effected a complete revolution in the trade and consequently in the industrial growth of Bombay. This reduced the distance from Bombay to England to almost half. A direct submarine cable was laid from Suez to Bombay a year later, in connection with the cable from Falmouth to Gibraltar.

All these communication facilities conferred on Bombay the status and proud position as the Gateway of India. The improvement in this infrastructure led to an enormous increase in cotton trade in the beginning and in all-round trade in almost all commodities in later years.

The construction of the Colaba Causeway in 1838 was an important landmark in the growth of Bombay.

This was preceded by construction of a good carriage road up the Bhor Ghat during the regimes of Mountstuart Elphinstone and Sir John Malcolm which connected Bombay to the Deccan. This Ghat was opened on 10th November 1830.

The period 1838 to 1872 was perhaps a very important period in the economic history of Bombay because during these years the old commercial town was transformed into a prosperous commercial and industrial centre. The development of transport facilities was an important contributing factor. The Malum Causeway constructed in 1845 provided a second link between the city island and Salsette, the first one being the Sion Causeway constructed in January 1805.

All these factors have made Bombay the main distributing entrepot of the overseas trade for the western and central regions of India. Bombay's share of the total sea-borne traffic of the country, foreign and coastal, in 1970-71, was over 23 per cent, the highest for any port.

MARINE RESOURCES

The marine resources of Bombay are very rich from ancient times. The *Mahikawati-Bakhar* and *Bombay City Gazetteer* of 1909 refer to the prosperity of the Sonkolis (fishermen) of Bombay when king Bimbadev established his rale at Mahim (Mahikawati) in A.D. 1300 It was in 1766, that the East India Company imposed a tax (*This tax was withdrawn subsequently.*) on fishermen after realising the prosperity of the occupation. The area suitable for fishing extends over 200 kilometres to the west of Bombay. It has largely muddy and sandy bed which is conducive to fast reproduction of fish.

The production of fish in the Bombay sea waters has always been on the increase. The statistics of production of fish at Bombay are given below:—

Production of Fish in Bombay Sea Waters, 1971-76

1971-72	197 <mark>2</mark> -73	1973-74	1974-75	1975-76
63,642	75,448	73,836	94,239	1,24,358

The fisheries department estimated that the gross value of the turnover of fish at Bombay was to the tune of Rs. 36 crores in 1976. A good amount of fish is exported from Bombay to the Middle East Countries.

Salt is another marine wealth available at Bombay. The salt pans at Wadala, Bhandup and Chembur are the main centres of salt production in Bombay. The production of salt has however dwindled due to the expansive reclamation of salt pan areas for residential and other urban development purposes.

By far the most important of the marine wealth of Bombay is now traced at what is known as the 'Bombay High'. It is estimated that the oil wells at Bombay High may yield about 100 million tonnes of petroleum. A detailed account of the Bombay High project is given below.

BOMBAY HIGH

(The account is based on pamphlet Samudra Manthan, 1981, published by the Oil and Natural Gas Commission.)

The oil exploration project known as the 'Bombay High' is one of the most important landmarks in the development for the national economy. The saga of Bombay High is an interesting tale of the Indian offshore effort and a prosperous future of the Indian economy. The first step in offshore oil exploration in India was taken by the Oil and Natural Gas Commission (ONGC) when it conducted an experimental seismic survey in 1963. From 1964 to 1967 regional reconnaissance was undertaken with the help of a Soviet seismic ship which delineated the Bombay High structure, besides others in the Cambay basin. This led to detailed seismic surveys of the Bombay High and adjoining areas. The ONGC which was entrusted with the exploration work obtained a sophisticated jack-up rig of the Mercury class from Japan, viz., the Sagar Samrat. The drilling operation by Sagar Samrat commenced on January 31, 1974. Three weeks later, on February 19, 1974, oil was discovered. Further drilling hinted at the presence of gas bearing sand at about 1160 m. depth and an oil-bearing lime stone reservoir at about 1300 m. depth. This accentuated ONGC's oil exploration and production programme. In order to explore the 3,80,000 sq. km. of the Indian continental shelf, the ONGC purchased in July 1975 its own seismic survey vessel, viz., Anwekshak, which is equipped with a vast range of sophisticated geophysical equipment, a sea gravity meter, a magnetometer, computers and other latest equipment. It is the first of its kind in India and it can navigate and operate in any kind of weather without dependence on shore-based station. The Anwekshak has made several significant discoveries including the South Bassein gas-field and several oil-fields.

Till March 1981, ONGC had drilled 91 offshore exploratory and assessment wells in this region, of which only 35 proved to be dry. Today it owns three Jack-up rigs, *viz.*, Sagar Samrat, Sagar Vikas and Sagar Pragati, with two more on order.

The ONGC has been operating in the Bombay High project with speed and tangible results. The phenomenal growth of this project from 4,300 BPD to 1,50,000 BPD in less than five years is a significant achievement for the national economy. Bombay High has wrought its marine miracle of today (May 1981) through five time-bound and result-oriented phases.

The first phase of the project started with the beginning of installation work in December 1975. The project involved installation of a well-cwm-production platform and other facilities. The target of 40,000 BPD of oil was reached in January 1977. The first barrel of oil was obtained on May 21, 1976.

The second phase was commenced in early 1976 and the facilities were installed in April 1977. The targetted rate of production, *viz.*, 80,000 BPD was achieved in January 1978.

Exclusive oil and gas submarine trunk pipelines (260 km. in length) were laid during the third phase from Bombay High to Uran and further on to Trombay where refineries, fertilizer and power plants are located. This enabled the authorities to continue oil production perennially, to maintain uninterrupted flow of oil to the refineries and to utilise the associated gas on shore. This phase was complted in July 1978 and production touched the 1,00,000 BPD level by the end of 1978.

Boosting the production capacity of the northern part of Bombay High from 1,00,000 BPD to 1,80,000 BPD and building a giant process platform figured prominently in the fourth phase. The platform provides gas compression facilities and can receive hydrocarbons from 19 oil wells and well-cum-production platforms. The platform known as BHN is one of the most sophisticated of its type in the oil producing countries in the world. Initiation of production from the south and central sections of Bombay High is a part of this phase. Two platforms were commissioned in this Zone, while a gas fractionation plant with liquid petroleum gas extraction facilities of 1,98,000 tonnes per annum is in the offing. The oil production rate of 1,40,000 BPD which can be regarded as most spectacular was achieved in January 1981.

The oil and gas produced offshore is transported to the terminal at Uran for stabilisation and delivery to refineries as also for extraction of Liquid Petroleum Gas (LPG) and other constituents before sending it on to the fertilizer and petrochemical plants.

The ONGC has future ambitious plans on the anvil, slated for timely execution. The spectacular plans envisage stepping up of crude production from Bombay High from 1,40,000 to 2,40,000 BPD by the middle of 1982. The Bombay High project exhibits spectacular technological advancement and self-reliance in this vital sector of the national economy.

The distinguishing feature of the Bombay High oil is that its deposits are in lime-stone rocks. The quality and yield of this oil are very much superior to the oil deposits in sand-stone rocks. It is comparable in quality to the oil in Arab countries. The crude-oil at Bombay High yields petroleum four to five times of the one explored at Ankaleshwar. The gas will provide a cheaper fuel for domestic consumption and heavy industries. In fact availability of this gas has prompted the Government to establish a giant fertilizer plant at Thal-Wayshet near Bombay.

BOMBAY METROPOLITAN REGIONAL DEVELOPMENT PLAN, 1970-91

The momentous and uninterrupted growth of Greater Bombay made it necessary to plan the development of the Metropolitan region by sketching on a sufficiently large regional canvas. The accumulated problems of the city including the deficits in social and economic infrastructure made it imperative on the part of the authorities to find out locations for providing these facilities. The geography of the island imposes severe limitations on the optimum growth of the city. The uninterrupted growth of the city and the multiplying population are by themselves a major problem. As said by the planning authorities, "Bombay the beautiful is no more beautiful. Many parts of it are not even tolerably clean and healthy. Housing deficits are everwidening and slums, like a cancerous growth, can be seen anywhere and everywhere. Adequate water is a serious problem; transportation is threatening to break down and serious law and order situations develop on the slightest provocation.... In short, the metropolis is slowly falling to pieces and concerted action is necessary to salvage the situation. No doubt, it offers job opportunities to many and a bright future to a dashing entrepreneur. Similarly its contribution to the national income is significant and it is also the biggest centre of specialised services and expertise. But the deterioration in the physical environments in the city has been so great that it seriously jeopardises the healthy growth of these metropolitan functions and in turn threatens the very existence of the city." (Bombay Metropolitan Regional Planning Board, Regional Plan for Bombay Metropolitan Region (1970-91), Vol. I.)

Need for a Regional Plan: The Bombay Municipal Corporation had prepared a Development Plan for Greater Bombay in 1964 which received Government sanction in February 1967. This plan was confined mainly to the problems of Greater Bombay. Concurrently the Government was thinking that a plan continued to the civic limits of Bombay might not be adequate as a full solution to the complex pioblems of the city. The Government therefore appointed a committee under the Chairmanship of Prof. D. R. Gadgil, a renowned economist and the then Director of Gokhale Institute of Economics and Politics, in March 1965 to formulate broad principles of regional planning for Bombay and Pune metropolitan regions. As a sequel to the Development Plan prepared by the Bombay Municipal Corporation, the Government notified the Borpbay Metropolitan Region, in June 1967, and delimited the area in the region. The Government also appointed a Regional Planning Board in July 1967 for preparing a Regional Plan for the Bombay Metropolitan Region. The enactment of the Maharashtra Regional and Town Planning Act of 1966 which aimed at enabling the Government in the preparation and implementation of regional plans on a statutory basis was brought into force from January 1967. In accordance with the provisions of this Act, the Regional Planning Board had been constructed as a multidisciplinary team representing various experts and interests.

The pressing problems of Bombay and certain areas round about received further attention of the Government and the necessity was increasingly felt for forming these areas into a Bombay Metropolitan Region and for setting up an authority for the purpose of planning rapid development of these areas, in which several local authorities were separately dealing with such matters within their jurisdiction. Accordingly the Bombay Metropolitan Region Development Authority was established under the Bombay Metropolitan Region Development Authority Act of 1974, (The Bombay Metropolitan Region Development Authority Act, 1974, was enforced from October 1975.) for the purpose of planning, co-ordinating and

supervising the proper, orderly and rapid development of the areas in that Region and of executing plans, projects and schemes for such development, and to provide for matters connected therewith.

The main object of the Authority (to be called B.M.R.D.A. hereafter) is to secure the development of the Bombay Metropolitan Region according to the Regional Plan. It is charged with the function of review of any physical, financial and economical plan or any scheme of development in the Region. It formulates and sanctions schemes for the development of the Region, and executes them on the directions of the State Government. It advises the Government on matters pertaining to the development of the Region and can participate in inter-regional development projects. The B.M.R.D.A. has not only to supervise the development projects but it also may finance any schemes. It has to prepare schemes and advise the concerned authorities in formulating and undertaking schemes for development of agriculture, horticulture, floriculture, forestry, dairy development, poultry farming, cattle breeding, fisheries, etc. It is also required to prepare schemes for rehabilitation of persons displaced by certain projects, and to perform other incidental functions by virtue of its being a superior authority for regional planning.

The Bombay Metropolitan region includes Greater Bombay and parts of Thane and Kulaba (Raigad) districts. Originally stretches from the Arabian sea on the West to the eastern limits of Kalyan and Bhivandi talukas and foothills of the Sahyadri in Karjat taluka and the Tansa river in the North to the Patalganga river in the South were proposed. The Metropolitan region was, however, extended subsequently to include besides Greater Bombay, the areas in Thane, Vasai, Bhivandi, Kalyan, Ulhasnagar, Karjat, Khalapur, Panvel, Uran, Pen and Alibag talukas.

The very core of the Regional Plan is that the problems of Greater Bombay cannot be solved by planning only the development of the city itself, but that the proper solution can be sought by shifting some activity and by developing growth centres outside the city.

However the present study is confined to the planning and development of Greater Bombay only. While it might be necessary to study the problems and remedial measures of the peripheral areas around the city, the present study is limited to the analysis of the problems and the prospects of economic development of Greater Bombay. Even the suggestions by the Bombay Metropolitan Regional Development Board are taken here for purposes of analysis in so far as they refer to Greater Bombay.

PLAN PROPOSALS

I. Demographic and Employment Projections: The trend of growth of population indicates that Bombay which had a population of 0.81 million in the beginning of this century is likely to have a population of over 15 millions by the turn of this century. The actual growth of population from 1901 to 1981 and the projection for 1991 and 2001 are given in the following table:—

Growth and Population Projections for Greater Bombay, 1901 to 2001

Year	Population (Millions)	Anuual Growth rate (%)
1901	0.81	
1911	1.02	2.59
1921	1.24	2.16
1931	1.27	0.24
1941	1.69	3.31
1951	2.97	7.57
1961	4.15	3.97
1971	5.97	4.39
1981	8.24	3.74
1991	11.41	3.17
2001	15.19	3.08

The demographic projections for 1971, 1976 and 1981 made earlier by the BMRPB (*Bombay Metropolitan Regional Planning Board.*) as also by other bodies such as the Gadgil Committee, the Demographic Training and Research Centre, Chembur, the Regional Transport Survey Unit and Messrs. Binnie and Partners, based on different assumptions, proved to be gross imderestimates. The speedy growth of

population out-witted all projections. This highly unpredictable and perplexing growth has rendered the job of planners all the more difficult. Perspective planning of the region would therefore have to be elastic so far as population size are concerned.

The labour participation rate (*Percentage of the potential working force to the total population.*) which reveals the economic characteristics of population was 42.56 per cent in 1961. The study group of the BMRDA has projected the labour participation rate in 1991 at 64.32 per cent for males, 9.24 per cent for females and 41.26 per cent for the total population of Bombay. These projections are also based on certain assumptions which are not undoubtable.

Projection of Factory Employment: The Bombay metropolitan region accounts for about 70 per cent of the total factory employment of Maharashtra. The trend in factory employment in the past and projections for the future are given below:—

FACTORY EMPLOYMENT

(Figures in thousands)

	Actuals				Estimated		
	1931	1951	1961	1965	1966	1981	1991
1. Greater Bombay	178	384	505	572	553	962	1,060
2. Rest of Bombay Metropolitan Region	1.5	11	35	67	71	238	340
Total	179.5	395	540	639	624	1,200	1,400

The trend in factory employment given above conspicuously shows that while factory employment rose considerably from 1931 to 1966, the rate of increase was much higher in the rest of the Bombay metropolitan region. Industrial expansion in the Thane-Belapur-Kalwa-Kalyan belt after the sixties is an important factor to be reckoned with. Bombay with all its problems due to concentration of industries is now approaching a stage of saturation. The future growth of industries will therefore have to be diverted to the outskirts. The higher rate of industrialisation and of increase in factory employment in the rest of the metropolitan region than that in Bombay in the future is therefore inevitable.

Projection of Secondary Sector and Tertiary Sector Employment: Since factories constitute only a part of the secondary sector employment, the probable size of the latter can be worked out approximately on the basis of the labour force and the like share of the secondary sector in the occupational pattern. The percentage of the secondary sector employment to total employment was 40.82 in Greater Bombay in 1961. The estimated employment in secondary sector would be 13,94,000 in 1981 and 18,30,000 in 1991 in the metropolitan region.

The rate of growth of tertiary sector employment in Greater Bombay Was 4.4 per cent per year between 1960 and 1965 which increased to about 4.7 per cent per annum between 1966 and 1968. The employment in tertiary sector in Bombay, assuming the continuance of the existing trends of development, would be of the order of 19,18,506.

Change in Occupational pattern of Bombay as a result of Planning: The total labour force in Bombay would increase to 40,46,534 in 1991 on the assumption that the population would increase to 98.07 lakhs and that the existing trends of development are allowed to continue. The employment in secondary sector would be 16,18,400 at the rate of 40 per cent of the labour force. Employment in construction activities which was 2.66 per cent in 1961 may increase to 3 per cent in 1991 and the total employment in construction activity may be to the tune of 1,21,380. The primary sector employment (*Employment in agriculture, forestry, fishing, rearing of animals and allied activities.*) which was about 1.89 per cent in 1961 may decline to about 1 per cent (bringing the total to 40,460) in 1991 because of the progressively larger accent on non-agricultural occupations within the metropolis and gradual reduction in salt pan areas. The remaining 56 per cent of the total labour force would have to be absorbed in the tertiary sector activities inclusive of transport, trade, commerce, offices as well as domestic services, etc. The size of this employment would be 22,62,760 as against 19,18,506 projected on the basis of previous trends. This means that jobs in the tertiary sector would have to grow at a faster rate.

- **II. Alternative Patterns for the Future Regional Structure:** After considering the pros and cons the authors of the plan thought that the future pattern of the regional urban development would have to be a combination of the measures as under:—
- "(i) Immediate internal restructuring (of the metropolis) by the development of alternative commercial centres outside the island city coupled with neighbourhood planning for the suburbs;
- (ii) New towns around the existing and projected industrial areas, in the region which have been planned as dispersed work centres. Without township facilities around these centres, the existing and the projected dispersal of industrial areas will not only be ineffective but would have bad effects;
- (iii) Orderly development of the Bombay-Poona Linear corridor which has more or less been a fait accompli due to the existing establishment of industrial area in a linear fashion in this corridor. The object here should be to regulate and integrate development; and
- (iv) A twin metropolis in the Trans-Thane creek and Trans-Harbour area. The immediate emphasis should be on the twin metropolis."(Bombay Metropolitan Regional Planning Board, Regional Plan for Bombay Metropolitan Region, 1970-91, Vol. II, pp. 32-33.)

Distribution of Population: The most important question in this respect is about the optimum population size of Bombay. Various committees suggested different sizes of population for the city. The Modak-Mayer Plan of 1948 had suggested ceiling of 31 lakh population for Greater Bombay. The Gadgil Committee, in

1966 suggested a ceiling of 55 lakhs for the whole of Salsette island, while the Development Plan of Greater Bombay (1967) was worked out on the basis of a population of 70 lakhs by 1981. The Planning Board's Social Planning Study Group has recommended that over a period of 25 to 30 years the island city should be decongested by about 15 to 17 lakhs, and that a population ceiling for Greater Bombay would be around 65 lakhs.

The population ceilings suggested by the Modak-Mayer Plan or the Gadgil Committee however appear quite impossible to implement at this stage though it may be desirable. The Metropolitan Region Plan therefore proposed a optimum of 70 lakh population to be achieved by 1991. (*Ibid., pp. 34-35.*)

The Plan has suggested physical planning at various locations in the region, as also the orderly development of a Metro Centre in Trans-Thane creek and Trans-Harbour area. The Metro Centre lies on both sides of the Panvel creek, the northern portion between the Thane creek and the Parsik hills, commonly known as Trans-Thane creek area, and the rest of the area is Trans-Harbour area comprising Panvel, Uran and Nhava-Sheva. Planned Development of the Kalyan complex, Kolshet-Balkum complex and a number of other townships has also been suggested for reducing the pressure of population and economic activity in Bombay.

III. Industrial Location Policy: The heavy concentration of industries in Bombay is a well-known fact and has been discussed elsewhere in this chapter. The growth of industries in the Thane-Belapur-Kolshet-Kalyan belt after the sixties can mainly be attributed to the lack of availability of space in Bombay and to other incidental problems. This growth cannot be regarded decentralization or dispersal of industries in the real sense. In fact this industrial belt is a part of the same enlarged agglomeration which becomes obvious from the continuity of the urban mass, complex cross commutation between all the new centres and Bombay, location of the registered offices of the factories in Bombay, common sources of water, etc. The expansion in these areas is therefore more of a peripheral outgrowth of special expansion than dispersal. At the most this can be regarded as the first step towards decentralisation of industries in Bombay.

It would therefore be necessary to adopt a realistic land use zoning policy for the metropolitan region. The regional plan visualises to work out the requirements of industrial area on the basis of an average density of 75 workers per hectare, in the region, and 125 workers per hectare in Bombay. On the basis of an estimate of 14 lakhs of workers to be provided in organised industries by 1991 in the region, the total area required for industrial zone would be nearly 14,000 hectares for the whole region. Since this is worked on a fairly long term basis, the addition of any further area for expansion at this stage may not be necessary. Allowing industries to buy their land requirements for period beyond 1991 and allowing them to keep such lands idle for long periods would not be desirable. If further areas are required these should only be zoned out in 1981 or when the plan becomes due for its first revision. Total gross area of the industrial zones sanctioned in the region including the Taloja industrial area is over 12,950 hectares.

It may be necessary to have a major industrial zone in the Trans-Harbour area for port-based industries and for the proposed metro centre around Nhava-Sheva, so as to provide a good industrial employment to the population. An industrial area of about 1,500 hectares seems to be indicated at this location. Deliberate attempts would be necessary to infuse industries along the Bombay-Agra road (in Bhiwandi Taluka) and in the Vasai taluka to achieve a balanced development within the region. An area of 200 hectares each at both these locations has been suggested in the first instance. The industrial area in Vasai taluka may be located between the Ahmedabad road and the Western Railway within easy walking distance from the stations. An area of about 100 hectares for the development of ancillary industries around Hindustan Organic Chemicals at Apte may also be necessary. With these additions the total area of industrial zones in the region would be around 14,950 hectares. Incidentally, a curtailment of about 800 hectares in the industrial area in Greater Bombay is possible. It is also suggested in the Regional Plan that, "Beyond the above, no further additions to the industrial zones should be made as it would amount to excess zoning for industries which will not be required under any conditions."

After the Bombay Metropolitan Regional Plan came into effect, the Maharashtra Government announced a new policy in January 1975, for location of industries in the Bombay Metropolitan Region. The objective of the new policy is dispersal of industries and to improve the quality of civic life in the region. The salient features of the new policy are given below:

The Metropolitan Region is divided into four zones as follows:—

Zone I: Bombay Island excluding Wadala-Anik industrial aiea.

Zone II: Wadala-Anik area, all suburbs of Greater Bombay, Thane and Mira.

Zone III: New Bombay area.

Zone IV: Remaining area in the Metropolitan region.

It is stipulated that establishment of any new industries large, medium or small scale, or expansion of existing industries would not be allowed in Zone I. An exception could be made only in the case of essential service industries. Zone II is also closed for new large or medium-scale units, while marginal expansion of the existing textile mills, subject to approval of.a High Power Committee, would be permitted. Small-scale industries having an investment in plant and machinery not exceeding Rs. 7.5 lakhs would be allowed in the approved and earmarked industrial areas and industrial estates in Zone II under certain conditions. Expansion of such units in the future would not be allowed. However, factories approved by the Government of India which might be set up in the Electronics Export Processing Zone at Marol may be permitted in view of their importance as export-oriented industries.

New large, medium and small-scale units would be allowed only in the industrial areas at Trans-Thane creek and Taloja which are being developed by the Maharashtra Industrial Development Corporation in Zone III, and also in the Industrial aiea to be developed near Nhava-Sheva. A preference would be given to export-oriented and import-substitution industries. The rest of Zone III would be earmarked for residential purposes.

As regards Zone IV, new large and medium industries would be permitted in Zone IV only in the existing and proposed industrial areas of the M.I.D.C. at Kalyan, Bhivandi, Dombivli, Kalwa, Ambarnath, Apte-Turade, and Vasai. Small-scale factories would also be allowed in areas earmarked for industrial use by the concerned local authorities in conformity with the Regional Plan.

With a view to giving further impetus to dispersal of industries away from the congested Bombay Metropolitan Region, Government has withdrawn certain incentives which were formerly available to certain areas in the region under the package scheme. It is envisaged that areas earmarked for industrial use in Greater Bombay would be reduced by at least 400 hectares. Any land available from shifting of industries would be utilised for housing for public welfare. Government is also considering the question of imposition of a levy on the existing and new industries in the region so as to mobilise finances for incentives to factories to shift from Zones I and II to Zones III and IV and to other areas in Maharashtra.

IV. Transport and Communications: The uninterrupted economic growth of Bombay and the surrounding areas has put a heavy strain on the arteries of transport from and within the city. The physicalf eatures of the countryside also impose a severe limitation on passenger and goods transport from and to the metropolis. A number of schemes in this respect have been taken up while many others are proposed.

Wilbur Smith and Associates, an American firm of traffic consultants, conducted a study on future transportation needs of Greater Bombay, in 1962-63. They recommended a phased programme for the development of a system of free-ways, express-ways and improved arterial streets, then estimated to cost Rs. 96 crores. Intensive operational improvements to the existing roads have also been suggested for removal of deficiencies. They emphasised the need for restrictions on parking and slow moving traffic and for construction of pedestrian safety fences. Several measures have also been suggested for maximum utilisation of the capacity of existing roadways. The Wilbur Smith Plan proposed that the Bombay Island be encircled by free-ways and bifurcated by an expressway so that all points of the island would be within one mile of a free-ways or an expressway. In all 28 miles of free-ways, 14 miles of express-ways and 75 miles of major route improvements were recommended in the plan to be completed.

Subsequent to the submission of the Wilbur Smith Plan in 1963 a number of changes took place. These changes included considerations of a land use plan for Bombay, establishment of the Bombay Metropolitan Regional Development Authority, formulation of a Mass Rapid Transit System, etc. It was therefore necessary to have reappraisal of the Bombay Road. (*Draft Annual Plan for Greater Bombay*, 1978-79, District Planning and Development Council.)

Development Plan and to integrate it with the plan for Mass Rapid Transit System proposed by the Railway authorities. In the meanwhile, preparation of projects as recommended by Wilbur Smith and Associates is going ahead particularly in respect of Link roads connecting the Western suburbs with the Eastern suburbs. (*Draft Annual Plan for Greater Bombay, 1978-79, District Planning and Development Council.*) Their recommendations are detailed below:

Free-way System: (i) The West Island Free-way will connect the south poition of the central business district with northern suburbs, along the west side of Bombay Island. It will pass through Malabar Hill for a total length of 10.32 miles and will cost about Rs. 24 crores.

- (ii) The East Island Free-way will afford easy transport between Byculla and the northern suburbs. It will be 8.91 miles and will cost Rs. 33 crores.
- (iii) The Cross Island Free-way will connect the west and east island free-ways. With a length of about 4,200 feet, it will cost Rs. 4.9 crores.
- (iv) The Eastern and Western Express-ways are proposed to be upgraded to free-way standard.

Express-way System: (i) The Central Island Express-way is proposed to extend from the north of Opera House area upto the Eastern Expressway passing through Haji Ali and Dadar and crossing the east island free-ways.

(ii) The Tardeo Express-way, 0.68 miles long, is proposed to connect the West Island Free-way with the Central Island Express-way.

They also proposed the improvement of 25 major roads which are estimated to cost about Rs. 18 crores.

In partial modification of the Wilbur Smith Plan the Bombay Metropolitan Regional Plan suggested that (1) The Bandra-Kurla reclamation may be taken up on a priority basis for creating an alternative commercial centre; (2) The commercial zone in Backbay Reclamation should be restricted to 20 per cent of the scheme area; and (3) a metrocentre may be developed in Uran-Nhava-Belapur belt which together would considerably reduce the pressure on Bombay island.

The construction of the Eastern Express highway, the Western Express highway and the Thane creek bridge are important landmarks in the economic life of Bombay. The express highways have eased the problem of traffic congestion on the Bombay-Agra road and the Ghodbunder road both of which suffer from bottlenecks at se\eral places and traverse the industrial and residential localities in the suburbs for long distances. They have also facilitated through traffic to the hinterland and the up-country. The Thane creek bridge on the Sion-Panvel read is one of the most important measures for solving the transport problems of the metropolitan region. It has not only reduced the travelling distance from and to Bombay, but also has ensured very speedy and safe motoring.

Another most important proposal for communication between Bombay and its wide hinterland is the provision of a new railway *ghat* to cross the Sahyadri ranges so as to link Bombay with the Daund-Manmad railway route *via* Kalyan. The two existing *ghat* routes of the Central Railway have to climb the

plateau over steep ruling gradients which limits the load and speedy movement of trains. This has restricted the line capacity of the two trunk routes. The Central Railway is striving to increase the line capacity by pressing into service heavier electric locomotives which carry heavier load by over 30 per cent at better speed. This increase in capacity has also been absorbed by uninterrupted growth in traffic. It has therefore been suggested by the Planning authorities that the only way of breaking the bottleneck of inter-city goods and passenger transport for the region is the construction of a ' third ' *ghat* route connecting Kalyan to a convenient location on the Daund-Manmad section between Ahmadnagar and Rahuri. The initial estimate for its construction was put at Rs. 40 to 50 crores.

The study team of the Railways, however, recommended the construction of the one additional line each in the North-East and South-East *Ghat* sections, of the Central Railway. The estimated cost of the additional line on the North-East *Ghat* is Rs. 17.50 crores and that on the South East *Ghat* is Rs. 21.75 crores. (Information from Central Railway (October 1977).)The work on the construction of the additional line on the North-East *Ghat* (Thal *Ghat*) was completed on 12th Aqril 1982, This line runs almost parallel to the existing line from Kasara to Igatpuri.

New Satellite Port at Nhava-Sheva: The transportation of merchandise to and from Bombay to the countryside has become very difficult as the present capacity of the Docks in Bombay is totally saturated. There appears therefore no alternative to set up a new satellite port at Nhava-Sheva on the mainland across the Bombay harbour. It will considerably divert a bulk of the cargo traffic with mainland destination directly into the mainland by-passing the congested routes in Bombay. The new port may initially handle bulk cargo and may be designed for its ultimate functioning as an independent port to handle all types of traffic.

Airport: Bombay is an international airport. However, the operational space available within the airport premises was insufficient to meet the needs of the growing domestic and international flights. It was therefore proposed by experts and the planning authorities that the present airport at Santacruz may be utilized for domestic air services, while a suitable site may be developed for an international airport. Alternative sites at Gorai-Manori and Mandva-Revas were under consideration. The former is within the Bombay Metropolitan Region while the latter is outside the region. Meanwhile the international airport was constructed at Sahar to the north of the Santacruz airport.

Railways: The Central Railway line in Bombay was constructed in 1853 while the Western Railway was opened section by section between November 1864 and January 1870. The quadrupling of the lines was done subsequently, but no major investments have been made in recent years. The Central Railway operates suburban trains upto Kasara 120 km. north-east of Victoria Terminus and upto Karjat 100 km. on the south-east line, besides the services on the Harbour branch upto Mankhurd and Bandra. The Central Railway runs 908 suburban trains daily and carries about 2.3 million passengers daily in 1983-84, Besides the suburban trains traffic which is unimaginably tremendous even by international standards, it runs a number of passenger trains as well as goods trains on its trunk routes to Howrah-via-Nagpur, Howrah-via-Allahabad, the Punjab area, Madras, etc. The Western Railway operates suburban trains from Churchgate to Virar, a distance of 56 km. and runs 745 trains and carries about 22 lakh passengers daily. It runs passenger and goods trains on the trunk railway route from Bombay to Jammu Tawi on the north, to Viramgaon in Gujarat and to various parts of Rajastan.

The capacities of both the railways in Bombay suburban section have been saturated, and there is not much scope for further increase in the utilization of the lines. The railways had estimated in. the seventies that it would be necessary to invest about Rs. 60 crores to increase the suburban surface transportation capacity by about 50 per cent. In the nature of things this would appear to be a gross underestimate as the prices have multiplied and the extent of the problem has increased immensely. As things stand at present commuters have to travel in local trains under the most oppressive conditions and with frayed tempers. Travelling at peak hours is an ordeal which with a little bit of breakdown in services creates chaos, leading to economic loss to the community and also to law and order problems.

One of the major difficulties in increasing the frequency of suburban trains on the Central Railway is the bottleneck between Masjid Bunder and Victoria Terminus, where due to steep curves and several crossovers speed has to be restricted. It is necessary to remodel the yard at Victoria Terminus so as to speed up trains. The straightening of the curves may require the space occupied by the platforms to be brought in the circulation area, and the platforms may have to be re-designed.

The Railway Board has constructed a new link between Central and Western Railway, to by-pass the mainland destined goods traffic from Diva to Vasai. With the completion of this new link in April 1983 the goods yard between Dadar and Parel has become redundant and the area is now available for other uses. It is suggested by some authorities that this area could be utilised for re-locating the mainline terminus of the Central Railway from V.T. If the main line terminus is thus shifted, remodelling of the yard at V.T. can easily be done.

Some experts in transportation planning have made another suggestion that the through trains terminus of the Central Railway at V.T. and of the Western Railway at Bombay Central may be shifted to the site between Sion-Dharavi and Bandra. They have also suggested that there should be a single terminus for through trains on both the railways at this new site. This will considerably reduce the pressure on the railway lines from Sion to V.T. and from Mahim to Bombay Central, and will release a lot of capacity for introduction of additional suburban trains. The railway yards at V.T. and Bombay Central will be available for restructuring so as to facilitate improvement in suburban trains operations. This measure will also facilitate the convenience of passengers who want to change over from Central to Western Railway and vice versa. The proposal is also plausible on account of another important factor that the land proposed for the site is comparatively free at present, and the cost of rehabilitation of the slum dwellers in the locality will not be large.

Some other authorities have suggested a third terminal for suburban railway at Ballard Estate. It is put

forth that utility of the additional corridors of traffic as the possible augmentation of capacity along the existing railway corridors terminating at V.T. and Churchgate will be of a limited order. Hence it may be necessary to provide for a new passenger line in the eastern sector of the metropolitan area along with a third terminal to provide some relief. The terminal is proposed to be located in Ballard Estate near the Mole station. The existing railway lines from Wadala to Ballard Estate *via* the double line tracks of the Port Trust could be the possible alignment for such a railway line. It is also believed that this terminal would ease the heavy traffic congestion on roads in the vicinity of V.T.

Some persons have advocated that in lieu of a third terminal at Ballard Estate better results would be obtained by joining V.T. to Churchgate and simultaneously removing the bottlenecks between V. T. and Masjid. It is suggested that if both these are done more trains could be run on the Central Railway, and in fact there would be no terminal station as trains will pass through both Victoria Terminus and Churchgate. It is believed that the advantage of this proposal is that pedestrian congestion of commuters from both the railway termini on the roads near V.T. and Churchgate would be avoided to a great extent. This would also reduce the demand on bus and taxi traffic by the commuters alighting at the railway termini.

A separate study has been done by the Metropolitan Transport Project (Railways) (*Information from Central Railway (October 1977)*.)for an additional corridor between Fort Market and Goregaon which is estimated to involve an investment of Rs. 154 crores. This is proposed to be an underground corridor with a terminal near Fort Market. It is also envisaged to provide an additional pair of railway lines between Bhandup and Kurla as an extension of the present Harbour Branch line.

The limitations of the Bombay V.T. yard deny a scope for handling of longer trains of more than 12 bogies. The Central Railway has therefore developed the Mazagaon yard as an auxiliary yard to deal with longer trains. The work of remodelling of the Mazagaon yard is being undertaken phase-wise. Some portion of the remodelling work is completed while some more phases are being undertaken. The total estimated cost of remodelling the Mazagaon yard is Rs. 1.02 crores.(Information from Central Railway (October 1977).)

With an immense growth of industries in the Mulund-Thane areas it is felt essential to have a goods shed in the area. The railway authorities have therefore taken up the development of a goods terminal at Mulund, at an estimated cost of Rs. 1.41 crores. A part of the work in the first phase has been completed, and the goods shed is now open for inward traffic of certain commodities like iron and steel. (*Information from Central Railway (October 1977)*.)

The other proposals in the Regional Plan which are not discussed above are outlined below.

Inter-Regional Transport Railways: There were two alternate proposals for providing a link between the Central Railway and the Western Railway, viz., (1) link between Diva and Vasai, and (ii) between Diva and Vangaon, further north beyond the regional boundary. Both the links would be equally good so far as the necessity of serving the growing industrial town of Bhiwandi is concerned. The Diva-Vangaon link was however conceived to yield a better advantage of opening out large under-developed areas in Palghar and Dahanu talukas. The cost of construction of the Diva-Vangaon link was definitely going to be much higher than the Diva-Vasai link, because of longer distance and engineering hazards. The Diva-Vangaon link also showed a relatively lower benefit-cost ratio than that shown by the Diva-Vasai alternative. The railway authorities after considering the various pros, and cons have opted for the Diva-Vasai link, and the work on the construction of the same is completed. It was estimated to cost about Rs. 24.3 crores. (Information from Central Railway (October 1977).) This link is highly advantageous from another point of view as it directly joins the Western Railway route with the Bombay-Konkan-Cochin railway line emanating from Diva which has already been undertaken and a part of which is already under operation.

A part of the Bombay-Konkan-Cochin railway line from Diva to Apta and Panvel to Uran is already under operation and is serving the needs of a part of the Bombay Metropolitan Regior. The work of construction of the section of the Konkan Railway from Apta to Roha has been started recently (April 1978). This railway route will further develop the environs of Bombay besides Konkan region.

The Regional Plan has also proposed the construction of a railway line from Kurla to Karjat which will shorten the distance from Bombay to Pune and will serve the needs of the metropolitan region. This line will meet the industrial and commuter traffic requirements of the Trans- Thane creek area as well.

Roads: The Bombay Metropolitan Regional Plan suggested a number of new roads, bridges and by-passes to meet the pressing needs of transport from and to Greater Bombay and the Metropolitan region. The important of the proposed projects include construction of new bridges across the Thane creek to the north of the newly constructed magnificent bridge near Washi, a new bridge across the Panvel creek in continuation of Thane-Belapur road and an additional bridge from Bombay to the mainland area to its east. Two alternatives in this respect have been suggested, *viz.*, a bridge from Pir Pau to Elephanta and Nhava or a bridge or tunnel from Gateway of India to Uran.

The Regional Plan however accorded priority to the Panvel creek bridge because it coupled with the Thane creek bridge would shorten the distance from Bombay to the metro centre.

The Kasheli bridge on Bombay-Agra road and the bridge on the Bombay-Pune road near Thane which cater to the heavy traffic from Bombay to the rest of the country are due for immediate reconstruction. Diversion of major thorough-fares through Bhiwandi and Kalyan and the by-pass to Kalyan to provide a direct link from the Atale-Shahad and Ambarnath industrial areas to the existing Bombay-Pune road have also been suggested.

Mass Transportation: Mass transportation services in Bombay are provided by suburban trains and BEST buses. The suburban trains carried over 21 lakh passengers, while BEST buses about 20 lakh passengers daily in 1968. The acuteness of the traffic problem of Bombay can be judged from the fact that the number of passengers carried in BEST buses increased from 907.26 lakhs in 1972-73 to 991.95 lakhs in

1973-74, to 1016.74 lakhs in 1974-75, to 1084.95 lakhs in 1975-76 and to 1202.99 lakhs in 1976-77 and 13,367.82 lakhs in 1983-84. The number of buses in the BEST fleet was 1,402 in 1972-73, 1,478 in 1973-74,1,530 in 1974-75,1,639 in 1975-76,1667 in 1976-77 and 2,325 in 1983-84.(BEST Undertaking, Administration Report, 1976-77.)

According to a survey by the traffic cell of the Town Planning Department of the State Government in 1968, the number of persons, trips made by the residents of the surveyed area on an average week-day by using different modes of transport was 47,20,611 of which 38,11,815 or 79 per cent were made by modes of public transport (about 39 per cent each by suburban trains and BEST buses). It is estimated that with the present rate of population growth the number of transit trips by media of public transport would increase from 38,11,815 in 1968 to 60,82,273 in 1981. The passenger traffic on the suburban trains of the Central Railway increased by 163 per cent from 1950-51 to 1966-67 while that on the Western Railway increased by 154 per cent. The increase in the number of trains was however very meagre on the Central Railway *viz.*, 31 per cent, and 117 per cent on the Western Railway during the period 1950-51 to 1966-67. The growth in traffic by buses from 1947-48 to 1967-68 was about 800 per cent while the bus fleet increased to a much smaller extent.

A survey of commuters was taken by counting the commuters at the gates of Victoria Terminus and Churchgate stations in July 1967. The survey revealed that during the morning peak hours as many as 84,000 commuters alighted at Bombay V.T. alone. It was also found that about the same number of commuters boarded the local trains in the evening peak hours at Bombay V.T. The mrmber of commuters alighting at Churchgate in the morning peak hours was about 83,000,while almost an equal number boarded the trains during the evening peak hours.

The statistics of commuter traffic on the stations of the Central Railway, given below, show the formidability of the transport problem of Bombay. The volume of commuter traffic shows a fast and continuously rising trend from 1970 to 1976. There was a significant increase of traffic at every railway station. *Prima facie* it appears that the rate of increase in commuter traffic was higher than that of population growth. The railway stations are given in the descending order of the volume of traffic in 1976.

STATEMENT No. 18
COMPARATIVE FIGURES SHOWING DAILY AVERAGE NUMBER OF SUBURBAN PASSENGER
TRAFFIC HANDLED AT EACH STATION ON BOMBAY DIVISION.

Station	1970	1972	1974	1976
1. Bombay V.T.	4,46,730	5,25,246	5,98,363	6,91,726
2. Ghatkopar	1,56,984	1,76,618	2,01,162	2,09,597
3. Kurla	1,54,591	1,82,636	2,26,130	1,68,567
4. Byculla	1,26,571	1,43,221	1,49,537	1,05,088
5. Dadar	1,40,487	1,30,485	1,88,754	1,52,218 (Excluding cross traffic at DR— 1,69,961.)
6. Mulund	85,708	99,880	1,05,259	1,09,776
7. Bhandup	78,065	93,701	1,00,546	1,08,229
8. Vikhroli	61,204	80,903	90,988	1,00,596
9. Chembur	54,595	60,882	70,622	88,929
10. Masjid	82,519	83,420	80,393	83,927
11. Sion	30,154	58,007	64,497	79,465
12. Wadala Road	50,519	58,953	73,926	77,025
13. Parel	57,439	61,877	63,783	61,340
14. Kanjur Marg	26,823	33,827	44,594	58,896

15. Sandhurst Road	47,292	50,319	55,144	48,121
16. Govandi	29,290	37,290	50,247	57,121
17. Sewri	44,297	46,647	50,741	56,895
18. Chinchpokli	38,703	38,366	41,808	47,127
19. Matunga	41,682	42,387	36,340	47,003
20. Bandra	27,181	40,148	51,101	46,777 (Excluding cross traffic at MM/BA- 1,21,236)
21. Cotton Green	46,504	38,050	44,006	54,755
22. King's Circle	25,251	31,599	34,838	39,935
23. CurreyRoad	33,797	32,583	36,074	38,015
24. Tej Bahadur Nagar	26,489	26,598	30,985	37,592
25. Reay Road	28,306	34,402	36,039	36,479
26. Mankhurd	18,891	23,886	29,112	29,114
27. Dockyard Road	27,798	29,559	28,667	26,154
28. Mahim	15,429	18,281	22,301	22,376
29. Vidyavihar	21,300	22,820	21,850	21,976
30. Chunabhatti	10,141	11,334	13,979	13,880

Note.—Figures include both outgoing and incoming traffic of season tickets and card tickets.

Source—Information from Central Railway (October 1977).

In spite of the efforts of railway authorities, travel in suburban trains at peak hours is hazardous as the trains are heavily crowded. The authorities introduced nine coach trains, and also increased some trains from time to time. A number of new coaches have also been pressed into services. The Western Railway completed the important project of quadrupling the operational lines between Churchgate and Grant Road. This increased the operational capacity of the railway as more trains could be pressed into operation. All these measures provided a temporary relief. But the entire problem is so formidable that it may really be difficult to evolve ready solutions.

In order to meet the requirements of increasing suburban commuter traffic, the Central Railway is planning to increase the frequency of train services from the present 6" to 5" and ultimately to 3" in the peak periods on all the three corridors, *viz.*, through lines, local main lines and harbour branch lines. The work on the first phase for introduction of 5" service has been sanctioned by the Railway Board, and some portion of the work was to be completed by 1978. This involved mainly respacing of signals, modifications in level crossings, elimination of certain level crossings, construction of a new maintenance car shed at Kalwa for E.M.U. (Electrical Multiple Unit) coaches and acquisition of more E.M.U. rakes.

As a measure of optimisation of suburban services certain proposals were also under consideration of the Railways. These proposals included, (a) remodelling of suburban platforms at Bombay V.T. for double discharge facilities, similar to Churchgate Station, and speedier outlet through the suburban concourse; and (b) doubling of the Chembur-Mankhurd single line section (4 kilometres) which will facilitate an increase in the number of trains on Chembur-Mankhurd section.(Work completed on 29th June 1980.)

The Regional Plan for Bombay Metropolitan Region has suggested various measures for augmentation of commuter travel facilities within the metropolitan area some of which are summarised below:—

(i) Reassessment of programme suggested by Wilbur Smith and Associates and carrying out that of the

programme which is essential to relieve congestion.

- (iii) Quadruplication of railway tracks in Borivli-Virar section and sections beyond Kalyan on the Central Railway. (Quadruplication of Churchgate-Grant Road section has already been completed.)
- (iii) Introduction of twelve coach trains on the Central Railway and related improvements.
- (iv) Improvement in frequency of trains by various measures.
- (v) Provision of a third railway terminal at Ballard Estate or alternately joining Bombay V.T. and Churchgate by an underground railway.
- (vi) Shifting of Central Railway's through trains terminus from V.T. to a suitable site between Dadar and Parel
- (vii) Feasibility studies for the underground railway and development of one additional traffic corridor for mass transportation to serve immediate needs.
- (viii) Augmentation of the bus transport capacity by adding higher capacity buses to the fleet and by increasing number of buses, depots and workshops.
- Mr. J. B. D'Souza and Mr. C. D. Jefferis (Bombay Civic Trust, Bombay Development and Master Plan, 1970.) made very valuable suggestions towards creation of a metropolitan transport authority for improvement in transport services. They wrote, " The situation and the prospect clearly demand an immediate and sustained effort towards optimising the use of all the transport resources available so as to meet the needs of citizens to the maximum. High on the list of resources for conservation and careful use, higher, in fact, than vehicles and rolling stock, are good space and rail track length, both of which will probably turn out to be the scarcest of all scare resources in 15 years' time. For this, not only will we need to free our roads from want on encroachment by petty shop-keepers and hawkers, from misuse of by reckless drivers who use up more than their fair share of road space. We will also have to strive to minimise road use by the most careful planning of bus routes and schedules and train schedules, a close co-ordination between train and bus services so that they dovetail into one another instead of competing. Co-ordination and planning of this kind can hardly be achieved by a set of separate authorities such as we now have, even if one were able to bring them together periodically in meetings for this purpose. Nothing less than a permanent Metropolitan Transport Authority, with control over suburban trains, buses, trucks and other vehicles, with responsibility for operation of public transport (trains, buses, etc.) for road maintenance and use, traffic and vehicle taxation and with influence over land use planning, especially the location of housing industry etc. can possibly deal with a problem of such scarcity and therefore of such size.'
- Mr. J. B. D'Souza and Mr. Jefferis (*Bombay Civic Trust, Bombay Development and Master Plan, 1970.*) further advocated for population planning and land use controls. They said, " the influx of the people has been phenomenal, and the speed with which many of the newcomers have established themselves higgledy-piggledy in hideous squatters' colonies wherever space could be found, has made nonsense of whatever city planning has been done." They also very aptly said that the limitless population growth that such cancerous developments make possible, as also the random location of such squatters' colonies, coupled with their very high population density, impose unforeseen burdens on thetransport system, and make transport planning impossible. Hence, the necessity of population planning.
- "There is every reason to believe, however, that the development of a sister city on the mainland across the harbour will accomplish this. It is an objective that must be promoted with the utmost speed and vigour, if the headlong population growth we now see in the city is not to produce a total strangulation of the transport system, reduce the level of commercial and other activities in the city and ultimately produce a blight."
- " Such development would generate substantial volumes of new traffic as there is bound to be a very large addition to the total employment in the Fort area. It is expected that the development of the Backbay Reclamation area alone may create about one lakh new jobs. Most of these employees would be using the already overcrowded mass transportation services. Past experience shows that commercial areas generate far higher amount of traffic than any other urban land use. This will be particularly so when the proposed new commercial area on the Reclamation programme will be contiguous to the central business district of Bombay."
- "The Backbay plans are an incredible essay in deliberate worsening of an already critical situation. They will involve an enormous outlay of the funds of Government and the community in the creation of problems for which enormously greater funds will be needed to solve." (Bombay Civic Trust, Bombay Development and Master Plan, 1970.)

Many other authorities and knowledgeable citizens have expressed similar opinions about the traffic problem of Bombay and the Backbay Reclamation scheme. The Bombay Municipal Corporation has also requested the Government to abandon the scheme as it would put an unbearable strain on the civic services which are already inadequate to meet the existing demand. While many bodies and experts have stoutly advised to abandon the entire scheme, some others have suggested a number of modifications as regards the extent of land to be reclaimed and the pattern of utilization of the land. It is however not the objective of this study to probe into the desirability or otherwise of the scheme.

PLAN IMPLEMENTATION STRATEGY

The Gadgil Committee in its report to Government (1966) emphasised the necessity of setting up an adequate authority for implementation of regional development proposals. It was proposed that the regionaldevelopment authority should supplement and not supersede existing authorities. The Gadgil Committee observed as under: " It is clear that the regional planning and development corporation cannot and is not intended to take over the developmental activity of the authorities in the region. Its principal function would be to work out a frame of general policy related to the needs of the region as a

whole in which development plans of the local authorities are fitted in a co-ordinated manner. To give substance to its policy it will be necessary for the regional corporation to undertake a series of planned major works....."

While broadly accepting the Gadgil Committee's report, the organisational set-up envisaged under the Maharashtra Regional and Town Planning Act of 1966 was somewhat different. The Plan implementation authority was called New Town Development Authority with the object of laying out the development of a new town. The authority was authorised to acquire, hold, manage and dispose of lands and other property, to carry out building and other operations, to provide water, electricity, sewerage and other services, and generally to do anything necessary for the cause of the new town.

Subsequently Government constituted the City and Industrial Development Corporation (CIDCO) for the implementation of the Metro Centre development programme. The object of this body is to create a New Bombay city to reduce the pressure on Greater Bombay by developing an attractive area on the land across the harbour. The planned New Bombay city, also called the Twin city in common parlance, is expected to absorb immigrants as well as some of the existing population of Bombay. While it will take a long time to develop the plan and a still longer time to implement it, some steps have been taken which may help to some extent. A big housing estate has been constructed at Vashi to provide accommodation for about 50,000 persons, with modern amenities. (Details of the development programme of the CIDCO which refer to the reduction in pressure on Bombay are given elsewhere in this chapter.)

After some experimental measures the State Government constituted the Bombay Metropolitan Region Development Authority for the purpose of planning, co-ordinating and supervising the proper, orderly and rapid development of Greater Bombay and the other areas within the defined region. The Metropolitan Authority also called BMRDA, is a corporate body with very wide powers and executive functions. It consists of many ministers of Maharashtra, the Mayor of Bombay, the presidents of Thane and Raigad Zilla Parishads, presidents of municipal councils in the area and many other officials and non-officials. The official machinery of the BMRDA is headed by a Metropolitan Commissioner. The powers and functions of the BMRDA which are already mentioned earlier are quite onerous. The BMRDA is empowered to give directions with regard to the formulation and implementation of any development project or scheme, and it may also under-take any development work in accordance with the Regional Plan It is also endowed with financial powers including taxation, betterment, levies, etc. It excercises all its powers and performs the duties under the Bombay Metropolitan Region Development Authority Act in accordance with the policy guidelines from the State Government.

BANDRA-KURLA COMPLEX

The high rate of population of Bombay as a result of the post-war industrialisation, urbanisation and the influx of displaced persons from Pakistan, made it imperative on the part of the authorities to appoint various committees and study groups. These committees and study groups suggested several measures to deal with the situation. The Modak Mayer Plan Report (1948) suggested stoppage of further activities in the Island and open up areas immediately to the north of the Island. It had made a specific reference to the development of lands in the Bandra-Kurla area. The Barve Study Report (1958) also had recommended establishment of another new centre of activity in the Bandra-Kurla area, somewhat on the lines of Connought Circle in New Delhi, to help decongestion of the Island. The Bombay Development Plan (1964) had also provided for the development of low lying areas in Bandra Kurla for a commercial complex.

The Gadgil Committee (1965) under Chairmanship of Prof. D. R. Gadgil, the noted economist, highlighted the need for overall regional planning, and recommended inter alia, the reduction of concentration of economic activity in Bombay, decentralisation of industries and urgent development of the main land in the environs of Bombay. Accordingly the Bombay Metropolitan Regional Planning Board was set up in 1967. A draft Regional Plan was prepared by this organisation in 1970, which recommended among many other measures, freezing of office and commercial employment in South Bombay, limitation of population of Bombay to seven millions, development of new growth centres like New Bombay, Kalyan complex, etc., to absorb most of the new growth in population and tertiary sector jobs. This Regional Plan was sanctioned by the Maharashtra Government in 1973, and as a follow-up measure the CIDCO took up planning and development of New Bombay as a counter-magnet to Bombay. The Government also set up the Bombay Metropolitan Regional Development Authority (BMRDA) in March 1975 as a planning, coordinating and development financing agency to achieve the objectives of the Plan. The Regional Plan (1970-91) also highlighted the need for certain amount of internal restructuring within the Greater Bombay area itself, particularly to bring about a redistribution of the population as between the city and the suburbs. The Plan focussed mainly on the importance of development of an alternative commercial complex in Bandra-Kurla area aimed at arresting the further growth of tertiary sector employment in South Bombay. This is the genesis of the Bandra-Kurla complex.

About 40 years ago, a large area of open land was available in the Bandra-Kurla complex. However, the unco-ordinated reclamations and encroachments on the periphery in the subsequent period gave rise to adverse environmental conditions besides the loss of area on account of encroachments. In order to avoid haphazard growth and to promote orderly development the Maharashtra Government appointed the BMRDA as a special planning authority for this complex in 1977.

The BMRDA has planned a strategy for the development of this complex on a priority basis. As this is one of the most prestigeous programmes of the BMRDA, it would be of great interest to give an account of the planning strategy for this complex. The strategy is based on the following considerations:—

- (i) Restructuring of the city's pattern of future development by attracting a large number of offices, wholesale trade activity and godowns in order to decongest South Bombay and to relieve the pressure on the transportation system.
- (ii) Make up the deficiencies in social, cultural and shopping facilities in the surrounding areas by providing space for these.

(iii) Improvement of the environmental conditions by channelizing the creeks and providing sufficient parks and gardens, besides ensuring orderly development in the commercial and residential areas in the complex itself.

(iv) Redevelopment of the existing slums in the Dharavi area on the southern side by providing additional new land for serving as transit camp area which would be finally used for residential purposes. Any success in this regard is bound to improve the environment to a large extent.

(v) Development of the area on the basis of a financially self-generating scheme in suitable phases.

This would involve formulation of a proper land use and transportation plan linking the various existing corridors of transport. A suitable balance between the residential and commercial use and exploitation of the aesthetic, architectural and environmental aspects of the situation has to be aimed at. The strategy about the Bandra-Kurla complex serving as a tool for restricting some of the activities in South Bombay would require pursuance of suitable policies like controlling further inflow of offices and other jobs in South Bombay. This would also involve co-ordinated efforts of all the concerned organizations. Simultaneously, urgent actions are also being taken for the development of other major growth centres like Kalyan complex, New Bombay and Mira-Bhayaader areas to ensure that the development of the Bandra-Kurla complex is not undertaken in isolation and that there are simultaneous efforts at decentralization and dispersal. The development of Bandra-Kurla complex is aimed at restructuring Greater Bombay on the principles of town planning.

With the development of the Bandra-Kurla complex as planned, bulk of the jobs would be decentralized by way of shifting the wholesale textile markets and the ancillary activities, like godowns, commission agents from B and C Wards of Bombay Island. This will greatly help in de-congesting that area. Suitable action is initiated on ensuring that the shift actually takes place and that this does not result into coming up of an additional market. Action is also initiated on utilizing the vacated premises for alternative purposes like retail shopping, public utilities, open spaces, schools, etc. Simultaneously, BMRDA has already restricted construction or creation of any new office premises or wholesale establishments in the Bombay Island. Incidentally, the wholesale markets in iron and steel and agricultural produce are also proposed to be shifted to New Bombay.

"It is expected that after completing the proposed channelization and the reclamation, not only the flooding situation but the environment in the area will also considerably improve. Salinity of the water will increase during dry season which will reduce the mosquito nuisance. The increased tidal influx will also enable relatively more dilution of whatever pollutants still find their way into the creek. The area would be turned into a sea water lake. The water in this basin cail be replenished by discharging into the sea at low tides and taking fresh water at high tides with the help of the gates periodically. This will enable the creek area, presently having offensive smell and a filthy appearance, to be kept always under sufficient depth of water abating most of the nuisance. This basin can then be flushed as often as required by a small dredger to stir the muck accumulation; the same can eventually be got rid off completely. The basin and its environ can then become places of recreation, for example, a large lake for boating, with a 15-m wide water-front wooded promenade.

"Thus, the work of channelization which enables further reclamation and development provides an engineering challenge as well as opportunity for internal restructuring of the city's development pattern and improving the environment and ecology of the area. The entire project is not only self-financing but will yield a substantial surplus by disposal of developed plots." (Mr. N. V. Merani, BMRDA, Bandra-Kurla Complex (pamphlet, 1980).)

NHAVA-SHEVA PROJECT

The Union Government has waved the greert signal to the Nhava-Sheva port project (1982). The idea of this port across the Bombay harbour was first mooted two decades ago. The cost estimate of the project has soared from Rs. 50 crores to nearly Rs. 600 crores, A total provision of barely Rs. 13 crores has been made in the Sixth Plan for this project. The project is of national importance, although the Maharashtra Government and the Bombay Port Trust have more than ordinary interest in it. The twin city project, which has yet to show signs of progress, will get a powerful fillip once the satellite port gets going. Indeed, a vast area surrounding the Nhava-Sheva site is readily available for the development of a wide range of port-based industries and trading activities, including a free trade zone. The State Government is addressing itself to the problem of exploiting this opportunity for reducing the pressure on Bombay. The project is designed to handle, among other things, the burgeoning container traffic as also bulk cargo traffic, which cannot be easily catered to by Bombay Port with its limited back-up space and other deficiencies, Experience has shown beyond doubt that Bombay Port cannot easily accommodate vessels requiring a draft in excess of about 28 feet. This is because in the wake of the intensive utilisation of berths dredging on a sustained basis has become difficult, if not impossible. With berth occupancy reaching a very high level of 90 per cent or so as against the desirable optimum of 65 to 75 per cent, it is not surprising that congestion has become a chronic problem and demurrage and the loss of shipdays have been haunting shippers and shippowners alike. It is good to note that the Government has envisaged the setting up of a committee of secretaries to the departments concerned to expedite decision-making and to monitor the progress of work on the project.

DEVELOPMENT PLAN FOR GREATER BOMBAY (BOMBAY MUNICIPAL CORPORATION PLAN)

Planning of the development of Bombay was sought to be done from time to time by the Municipal Corporation and the State Government. The earliest effort in this direction was initiated in 1888 under the Building Regulations in the Bombay Municipal Corporation Act of 1888. During the subsequent period many enactments were enforced for controlling the development of the city. Most of these measures were however in the direction of town planning, and they lacked in many respects. They were not enough for planning the development of a metropolitan city and the commercial capital of India. An outline of a

Master Plan for Greater Bombay was prepared for the first time in 1948 by the Bombay Municipal Corporation. It had however no legal validity and it did not conform to the pattern of a detailed plan as envisaged by the Bombay Town Planning Act of 1954.

The Municipal Corporation therefore prepared a comprehensive Development Plan for a Greater Bombay in 1964 which was sanctioned by Government in 1967. As stated in the draft plan itself, it was prepared in accordance with "the general planning ideals and principles with such modifications as may be necessary to prevent large scale dislocation, and undue hardships to people." The main objectives could be summarised as follows:—

- (1) To protect the best character of the existing character of Bombay, to develop its structure and to remedy several defects.
- (2)To encourage housing activities in the suburban areas with a view to reduce congestion in the city.
- (3)Dispersal of population to the suburbs and decentralisation of industries and commerce from the city with the twin object of redeveloping the congested areas in the city as dso to ease the transport problem.
- (4)Discouragement of expansion of commercial establishments in the southern tip of the island through zoning and floor space index control, and creation of other commercial centres in Greater Bombay.
- (5) Increase in house building, provision of additional sites for schools, playgrounds, parks, hospitals, markets, recreational spaces and public utilities.
- (6) Road widening, construction of new roads in suburbs and improvement of roads in city and suburbs.
- (7) Reclamation of about 27 square miles of low lying areas for development.
- (8) To ensure that all new development in Bombay conforms to the planned pattern.

The authors of the Development Plan appear to be aware of the fact that a comprehensive control on the development in Greater Bombay may lead to haphazard development on the periphery outside the city. This will have its undesirable effects on conditions in Bombay. The authors of the plan therefore pointed to the urgent need for the preparation of a Regional Plan for the planned development of Greater Bombay and the areas around it.

The Draft Development Plan was prepared by the Municipal Corporation and was finalised after giving due consideration to objections and suggestions from various quarters. The Development Plan, contemplated the * designation ' of about 2,718 acres of land in the city and about 12,485 acres in suburbs and extended suburbs for public purposes. The liability of the Corporation towards the total cost of land acquisition in the city would be about Rs. 43.57 crores and that in the suburbs about Rs. 74.73 crores. The Municipal share towards the total expenditure on capital works contemplated in the Development Plan, besides the cost of land acquisition would be Rs. 384.57 crores to be spent over a period of 20 years. In addition to this the authors of the Plan estimated that water works and drainage would ccst about Rs. 137.38 and Rs. 58.07 crores, respectively.

The Development Plan for Greater Bombay has thrown-tight on the problems of the development of this metropolitan city. The authors of the plan are quite aware of the stupendity of the problem of planning the development of this city. A total solution to all the problems lies much further ahead than can be envisaged in any one plan. "The plan, therefore, produces only part solutions preventing recurrences of past mistakes, giving direction to its growth so that it conforms to current trends and avoiding wasteful results of haphazard development. But man's needs change with the times bringing in their wake change in planning ideas. With the passage of time some inadequacies as well as drawbacks in the Development Plan might also be revealed. For all these reasons, periodical reviews of the plan would be necessary." (Bombay Municipal Corporation, Development Plan for Greater Bombay, 1964, p. xxii.)

The authors of the plan have analysed the problems of the various facts of development of the city. They have further proposed a rational industrial location policy based on certain principles of land use planning and industrial zoning. They opine that from the point of water supply, and other socio-economic considerations the population of Greater Bombay should be limited to 8 millions, and it should not be allowed to cross this limit.

The plan proposes a number of measures for improving the condition of transport and for relieving the city of the hazardous transport problems. The measures included the widening of roads in the city and suburbs, construction of new roads, establishment of truck termini at suitable points, and provision of multi-storeyed and additional parking places which will relieve the arteries of traffic. As regards railways, more and more land is proposed to be made available for construction of additional rail lines and yards. They also pointed out to the desirability of tube railways in the city.

Among many other proposals, the Development Plan proposed two new arterial roads along the fringes of the city on practical grounds and the desirability of keeping the through traffic away from the congested parts. The western promenade would connect Netaji Subhash Road with Mahim causeway along the western coast. The project would involve tunnelling through Malabar Hill and construction of a bridge from Worli to Bandra over the sea waters. This would prove a great boon to motorists and would minimise the travel distance by 6.5 km. On the eastern side, the artery of through traffic is proposed to be established by connecting P. D'Mello Road and Reay Road with Rafi Ahmed Kidwai Road.

The Development Plan contains a number of proposals and recommendations pertaining to the development of public utilities, civic amenities, medical and public health facilities and educational facilities. It is an exercise in improving the socio-economic infrastructure of this metropolis of India.

However, like many other large cities of the world, the problems of Bombay are not only formidable but also intractable. No single plan can evolve a solution to the enormous problems. The course open to the concerned authorities lies therefore through the formulation of a series of well thought out pragmatic plans and their effective implementation at the various levels of administration.

DISTRICT PLANNING

The State Government had prepared its own District Plan for Greater Bombay for the period 1974-79 which aimed at providing the essential civic amenities and healthy conditions of life in the city. Under the District Plan the State Government gave grants to the Bombay Municipal Corporation for certain development projects.

The Statement No. 19 gives the plan outlay under the District Plan of Greater Bombay, 1974-79.

The District Plan for Greater Bombay emphasised the necessity of improvement in the living conditions in Bombay by improving water supply and other social overheads. Keeping in view the enormous problems of this city which were particularly aggravated by the continuous influx of population, the plan had accorded priorities to water supply, sewerage, slum improvement, housing and link road which together accounted for 71.81 per cent of the total allotment of Rs.20,47 lakhs for 1978-79. Another important aspect of the Plan was the provision of relief to educated unemployed persons by providing seed money assistance to them, apprenticeship training and more employment opportunities to the weaker sections.

STATEMENT No. 19

OUTLAY UNDER DISTRICT PLAN OF GREATER BOMBAY

(Annual Plan for Greater Bombay, 1978-79.)

(Rs. in lakhs)

Sector / Sub Sector	1974-75 Actuals	1975-76 Actuals	1976- 77 Actuals	1977-78		Outlay proposed for 1978-7		
				Apporoved outlay	Budget	Continuing activites	New schemes	Total Cols. 7+8
1	2	3	4	5	6	7	8	9
Agriculture and Allied Services -								
Fisheries	4.25	3.56	2.10	8.67	8.67	12.00		12.00
Co-operation	1.13	0.05	2.00	2.50	2.30	3.30		3.30
Industry and Mining	4.76	11.67	9.72	29.20	27.20	29.34		29.34
Transport and Communication-		htr		1404		0 7 0	440	o Ko
Ports and Harbour	as	1.72	1.12	1.15	1.15	4.20	ll C	4.20 (Excludes Rs. 1 lakh on inevitable expansion provided in plan.)
Road Transport	23.93	68.73	58.78	67.01	83.59	63.06	10.00	73.06
Social and Community Services-								
General Education	85.57	233.26	213.23	304.22	305.27	275.01	0.71	275.72
Technical Education	0.58	0.09	17.52	12.48	6.69	8.01	16.33	24.34
Medical and Public Health	1.50	9.27	33.36	64.12	64.12	75.43	8.33	83.76
Sewerage and Water Supply	105.51	154.58	488.45	850.00	350.00	900.00		900.00
Housing	119.10	469.62	442.29	246.98	393.04	102.93	150.00	252.93
Urban Development	20.96	85.52	34.79	268.53	40.50	264.33	24.00	288.33
Information and Publicty	0.06	0.33	0.75	0.45	0.45	0.20	0.22	0.42
Labour and Labour Welfare		16.68	12.07	18.41	12.34	15.05	2.20	17.25
Welfare of Backward Classes	0.30	10.89	16.00	19.04	16.44	15.52		15.52

Social Welfare		0.07	3.00	7.55	19.86	17.83	3.00	20.83
Nutrition programme			13.50	25.00	25.00	45.00		45.00
Total	367.15	1,066.04	1,348.68	1,925.31	1,356.62	1,831.21	214.79	2,046.00

Water supply is the single largest and most important item of development under the District Plan. The Bhatsa Project which is of prime importance for augmentation of water supply to the city envisages to supply 300 m.g.d. water to Bombay Metropolitan Region besides providing irrigation to 11,800 hectares of land in Shahapur and Bhivandi talukas, after completion. In its first stage it would supply 100 m.g.d. water to Bombay and 50 m.g.d. for irrigating 5,900 hectares of land. A power house of 15 MW installed capacity is also contemplated at the foot of the dam.

The Bhatsa Project is a joint project of the Maharashtra Government and the Bombay Municipal Corporation. The share of expenditure to be borne by the Municipal Corporation is being met from a loan from the International Development Authority (World Bank) under an agreement between the International Development Authority and the Government and the Bombay Municipal Corporation. The Corporation had committed itself to the World Bank to commission the Project in June 1978. It is therefore obligatory on the part of the Government of Maharashtra to create storage at Bhatsa dam so as to supply water to the Municipal Corporation. The Annual Plan for 1978-79 therefore provided Rs. 400 lakhs for completion of the Bhatsa Head Works.

The other important schemes in the District Plan of Greater Bombay are construction of link roads, grants to Bombay Municipal Corporation for primary education, expansion of Government-aided private schools, development of higher secondary education (junior colleges), housing, environmental improvement in slum areas and urban development schemes.

The District Planning and Development Council for Bombay has accorded a high priority to slum improvement which poses a constant threat to the healthy growth of the city. The slum population in Bombay is estimated at 27 lakhs which includes the slum dwellers on lands owned by the Municipal Corporation, the State Government, the Government of India and private owners. Since the inception of the scheme about 13 lakh slum dwellers staying on State Government and Municipal Corporation lands in Bombay have benefited (up to 1977). The Annual Plan provided an amount of Rs. 150 lakhs for improvement of slum areas in 1978-79. This programme will be confined to slum dwellers on private lands in future.

In order to seek relief in transportation and road congestion it is proposed to implement the recommendations of the Wilbur Smith and Associates who have recommended a system of free-ways, express-ways and major street improvements to meet the demand for future transportation needs of Bombay. The island is proposed to be encircled by free-ways and bifurcated by express-ways so that all points of the island are within a mile of free-way or express-way.

Some of the recommendations of the Wilbur Smith Plan are being implemented and being included in the District Plan for Greater Bombay. The Fifth Plan of the District envisaged an outlay of Rs. 3.50 crores for link roads. It was advocated that link roads between Western and Eastern suburbs of Bombay would help in relieving the congestion in the suburbs and in developing the interiors of the suburbs. They would also help in reducing the travel distance from Western to Eastern suburbs and relieving the transit traffic at Dadar.

The Fifth Plan provision for the link roads was as under:—

Name of link Road	Rs. in lakhs
1. Santacruz-Chembur	50.00
2. Chembur-Mankhurd	75.00
3. Andheri-Ghatkopar	50.00
4. Jogeshwari-Vikhroli	50.00
5. Goregaon-Mulund	125.00
Total	350.00

The Integrated Water Supply and Sewerage Scheme, is another very important scheme, though not from the economic point of view but from the point of view of the living conditions in the city. It has been undertaken with the assistance of the International Development Authority and is a time-bound scheme, the first phase of which is required to be completed soon.

PRICE TRENDS

The study of price trends is very important in the context of formulation and execution of the price policy. Such a study assumes greater importance particularly because price policy is conceived as a long-term continuing policy and the practical administrative and other arrangements are to be planned for the

implementation of such a long-term policy. An empirical study of prices helps formulation of a programme which has to be implemented in its two aspects, *viz.*, first the stabilisation of prices of agricultural produce giving full consideration to the protection and incentive to the agricultural producer and second, holding the price line especially as it impinges on the consumer. Thus, an empirical study of prices is useful for the planners pf the economy and the administrators. Such a study is also of great interest to the students of economic history. For the consumer, who was euphemistically termed as the king in a capitalistic free economy, such a study is only a matter of academic interest.

The trend of prices and the salient features of the market .conditions as they affected the economic life of Bombay from 1737 upto the present time are analysed below.

The supply of provisions was one of the greatest difficulties with which Bombay in early days had to deal. The Portuguese hindered the grain supply and prohibited all provisions being brought from Salsette, in consequence of which the East India Company had to import rice from long distances and to store it in warehouses at Bombay.

The market price of rice varied considerably from year to year, as the following record shows:—

Year	Rs. per Muda	Year	Rs. per Muda
1737	23	1767	20 1/4
1741	13 1/4	1768	15 3/4
1748	29 1/2	1769	15 1/2
1749	25		16 3/4
1750	19 1/2	1772	17 3/4
1758	33.34		

The rates of wheat and gram similarly fluctuated during the middle of the eighteenth century, the price of the former varying from Rs. 24 per *Khandi* in 1743 to Rs. 48 per *Khandi* in 1754, and of the latter from Rs. 21 in 1728 to Rs. 11 in 1768. In 1776 most of the commodities at Bombay were cheaper than in Surat. There was however scarcity of foodgrains in Bombay and a committee was appointed to enquire into the causes of scarcity in 1780. The committee had advised to keep sufficient stocks to keep down prices.

1800-1907: In 1802 the fall of rain having been very scanty famine was imminent in the Bombay Presidency, and prompt measures were accordingly taken to alleviate the impending distress. A temporary grain department was formed in Bombay. Government prohibited the exportation of grain from Bombay and suspended the levy of town duties to encourage imports. Government also authorised 200 bags of rice from their store being daily placed in. the bazar for sale at fixed prices. Rice was also imported from Mangalore and thrown into the market for sale. The famine of the year 1812 extended even further than that of 1802. But fortunately the scarcity continued only for a short time in Bombay and perhaps resulted from the eagerness of the merchants to send their grain to the famine-stricken districts in the hope of realizing large profits.

In 1813 Milburn observed that the prices at Bombay fluctuated continually from uncertain market conditions and they showed a tendency to increase steadily.

The state of the market between 1848 and 1858 may be seen from the following statement showing the average prices during the period :—

STATEMENT No. 20

Articles	1848-52	1858
Wheat per <i>phara</i>	Rs. 13 to 21	17 to 25
Rice per <i>hara</i>	Rs. 22 to 24	30 to 32
Bhat per phara	Rs.6 to 8	8 to 10
<i>Bajri</i> per <i>phara</i>	Rs. 12 to 16	17 to 21
Jowar <i>per phara</i>	Rs. 10-0-0	15-4-0
Gram per phara	. Rs. 12 to 17	17 to 21

Peas per <i>phara</i>	Rs. 14 to 15	16-8-0
Tur per <i>phara</i>	.Rs. 14 to 15	14 to 20
Math per phara	Rs. 13 to 15	15 to 17
Vdid per phara	Rs. 14 to 16	20 to 22
Beef per lb.	Pice 12 to 24	14 to 32
Mutton per lb.	Pice 12 to 17	12 to 18
<i>Ghi</i> per 28 lbs.	Rs. 7-2-0	10-8-0
Sugar per 28 lbs.	Rs. 4-2-0	6-4-0
Cocoanut oil per 28 lbs.	Rs. 2-5-0	4-3-0
Firewood per khandi	. Rs.2-15-0	4-7-0

The above rise was severely felt by the poorer classes and was generally attributed to the pressure of taxes and to speculation and hoarding. In 1861 the War in America began, in consequence of which Great Britain had to depend for her cotton supply mainly oil India. This so raised the price of Cotton that during the five years that the War lasted Bombay profited to the extent of more than 75 millions Sterling. Simultaneously there was further rise in the prices of grain, as will be seen from the following statement (Gazetteer of Bombay City and Island, Vol. I p. 318,):—

STATEMENT No. 21

Grain	Prices beforeAmericanWar	Rise in conjunction with the War	Grain	Prices beforeAmericanWar	Rise in conjunction withthe War
Rice	40	62	Math	24	32
Bajri	26	40	Udid	24	36
Wheat	32	45	Val	20	40
Gram	24	34	Vatana	25	41
Tur	40	60	Jowar	17	29
Mung	28	40			

The years 1893 and 1894 being marked by poor harvests in parts of India, a rise occurred in the prices of grain and specially wheat. In 1897 the demand for wheat for internal consumption quickened owing to continued bad harvests and prices rose rapidly and maintained a very high level, operating even as a check on exports. The price of wheat in Bombay rose to Rs. 7-15-1 in December 1897.

A committee appointed to study the cost of living in Bombay reported in 1907 that there were fluctuations in prices since 1870, but the highest level was reached in 1907. The price rise was more conspicuous in the case of food articles. The committee also reported the rise in house rent in Bombay.

The trend of prices in Bombay as in the entire country from 1913-14 upto the dawn of Independence in 1947 shows certain very interesting features. An empirical study of the behaviour of prices during this period is of immense interest to a student of economics. This was the period which experienced the unprecedented horrors of two World Wars which shattered the economies of many countries in the world. This period also experienced the pangs and agonies of the world-wide Great Depression of 1929-30,

which devastated the economies of the U.K., France, America and the countries under British rule. These fateful events affected the economic life of a major portion of humanity, and gave rise to upheavals of demand, supply, production and prices. These international upheavals were experienced by the Indian economy, with probably the same intensity. The fate of Bombay was in no way different from that of the Indian economy.

The prices at Bombay continued to rise throughout the World War-I. The rise in prices was more in the case of manufactured articles than that of primary products. The prices of imported articles were higher due to the difficulties in importing them. After the end of the World War-I, the prices of almost all commodities saw a declining trend. The decline in price level was in consonance with the milder depression in the international commodity markets. In the case of Bombay, this state of decline was only a temporary phenomenon. Prices started picking up in 1921. In fact the plague famine of 1918-19 which affected parts of the Bombay Presidency had adverse effects on the prices and availability of agricultural commodities at Bombay. The post-war depression was thus shortlived. As a matter of fact the prices of cereals (Rice, Jowar, Wheat and Bajri), cotton and sugar rose very high in 1924. The index numbers of wholesale prices of cotton, sugar and cereals were 252, 208 and 134, respectively with the prices in July 1914 as the base in Bombay. It means that the prices of these articles in 1924 were very much higher than those during the World War-I.

The statement given below furnishes the index numbers of wholesale prices in Bombay, from 1924 to 1943:—

STATEMENT No. 22

Index Numbers (Government of Bombay, Statistical Atlas of Bombay State, 1950.) of Wholesale Prices in Bombay City (Base: July 1914)

Year	Cereals	Pulses	Sugar	Cotton
1	2	3	4	5
1924	134	92	208	252
1925	1 51	107	166	189
1926	147	126	149	140
1927	141	132	134	150
1928	131	135	133	158
1929	144	140	135	133
1930	118	114	119	91
1931	74	81	112	72
1932	84	86	117	86
1933	82	77	108	83
1934	81	73	103	83
1935	82	78	107	94
1936	83	74	104	90
1937	93	84	106	91
1938	81	82	121	67
1939	88	95	140	73

Year	Cereals	Pulses	Sugar	Cotton
1	2	3	4	5
1940	104	94	136	84
1941	109	89	135	88
1942	163	15.1	176	86
1943	175	274	242	94

The period between 1924 and 1947 can broadly be divided into three blocks of years from the point of view of price trends, viz. (i) 1924 to 1929, (ii) 1930 to 1939 and (iii) 1940 to 1947.

The trends of prices) for Bombay during these blocks of years are analysed below :

(i) 1924-29, the period of Buoyancy: The prices of cereals and pulses continued to rise throughout this period. The price rise was more conspicuous in case of grain and tur dal. It is evident from the statement of index numbers of wholesale prices at Bombay, which is given in Statement No. 18, that the index number of prices of cereals increased by 10 points from 1924 to 1929 and that of pulses increased by 48 points in the same period. The prices of cotton which were at the highest in 1924 fell from 252 in 1924 to 133 in 1929. This decline could be attributed to the slump in demand for cotton by Indian as well as foreign textile mills. Similarly sugar prices also registered a declining trend throughout this period. The prices of jowar, bajri, rice and sugar in 1929 were all below their respective prices in 1924. The general picture was therefore one of downward trend in agricultural prices, pulses being an exception. It is interesting to note that the boom in the international economy in 1929 was unable to have any significant impact on the condition of prices in Bombay. The prices in Bombay, it appears, were more in consonance with the conditions in the Bombay Presidency.

(ii) 1930-39, the period of Depression and Revival: This period was characterised by the slump in prices of almost all commodities in Bombay as compared to those in the earlier period. The unprecedented slump in prices was mainly the result of the international slump in demand. The prices of agricultural produce were probably at the lowest on account of lack of demand from foreign countries. The Great Depression which devastated the economies of the free world and the British dominions had a very adverse impact on the Indian economy. The pangs of the Depression were even more severe to the Indian economy as it depended mainly on the export of agricultural produce. Since the demand for agricultural produce in the international market declined severely, the prices showed a precipitous fall from 1930 to the middle of 1932. There was but only a very mild revival in the latter half of 1932.

The international economy showed signs of revival from 1932 onwards, and the process of revival continued throughout this period. In fact prices in the international economy started increasing at a good rate after 1934. It is however interesting to note that the price situation in Bombay was at variance with the international situation. The statement of index numbers of prices at Bombay, and the data on wholesale prices at Bombay market given in this chapter shows that the prices at Bombay touched the bottom in 1931, revived slightly in 1932 and again declined. The decline in the prices of pulses, sugar and cotton was quite conspicuous. As a matter of fact the prices of these commodities were lower in 1933, 1934, 1935 and 1936 than those in 1930 and 1931. The prices of cleaned cotton which was Rs. 54.35 in 1924 and Rs. 17.27 in 1930 fell down to Rs. 3.95 in 1934. (The price index number for cotton was however the lowest in 1938. This, however, cannot be explained in terms of causal relationship.) The 1934 prices of all articles at Bombay were probably the lowest during the entire period from 1930 to 1939, and compared most unfavourably with those in any other year in this century, for which data is available. Between 1938 and 1939, the prices on the whole showed a tendency to rise and, among other factors, the threat of War and its actual outbreak in September 1939, were mainly responsible for this rise. However, all the prices were still below the level 'of 1924. It is also interesting to note that the index numbers of wholesale prices of cereals, pulses and cotton show that the prices of these commodities were lower in 1939 than those in July 1914. The prices of cotton at Bombay continued to be lower even during World War II than in July 1914.

(iii) 1940-47, the period of War and aftermath: With the outbreak of World War II in September 1939, prices of consumers goods started increasing in Bombay. The gradual price rise was perceptible until 1942 in case of all commodities. It may however be noted that though prices in general were rising, the prices of certain commodities were lower in 1942, than in 1924. This was very much conspicuous in the case of cotton, raw sugar, ghee, linseed, tur dal gram, etc. This was quite contrary to expectations. But the reality was what it was.

The price situation in Bombay as elsewhere in the country became adverse from the middle of 1942, the steepest rise in prices being in 1943. The prices of all commodities were very high in Bombay from 1943 to 1947. This was primarily due to the cessation of imports from Burma and other eastern countries, and also due to the fact that agriculturists as well as consumers were anticipating statutory rationing of foodgrains in the beginning of 1943. "Thereafter the free play of economic and other factors influencing the prices more or less came to an end and the prices began to be governed by the policy of the Government." (Governmentof Bombay, Statistical Atlas of Bombay State, 1950.) The prices of tur dal, wheat, linseed, ghee, tobacco, etc. reached a new high in 1947.

The Government had introduced statutory rationing in order to meet the situation of shortage of supply and rising prices of essential commodities. Distribution of such commodities was done through ration

shops. Though the policy of rationing was abandoned from January 1948 in the State, statutory rationing was continued in Greater Bombay along with the cities of Pune and Solapur. The immediate effect of the abandonment of rationing in the State was an increase in prices which continued to rise, contrary to all expectations. The combined index numbers of wholesale prices of foodgrains given in Statement No. 23 for the Bombay province bear testimony to the spurt in prices after relaxation of rationing.

STATEMENT No. 23
Index Numbers of Wholesale Prices in 1948 (Government of Bombay, Statistical Atlas of Bombay
State, 1950.) (Base year 1947 = 100)

Month	Rice	Wheat	Jowar	Bajari
January	193	313	168	190
February	209	273	176	202
March	242	240	176	206
April	266	245	180	209
May	286	250	195	218
June	304	285	207	229
July	306	257	206	229
August	294	250	201	218
September	294	253	203	213
October	294	263	204	212

As a result of the continued steep rise in the price level of foodgrains, the Government of India decided in October 1947 to reimpose controls on prices and distribution.

It may be useful to study the trend of prices in Greater Bombay from the consumer price index numbers for working class, the consumer prices index numbers for non-manual workers and the primary data of prices, in the city. To start with, the consumer price index numbers for working class in Bombay are given in Statement No. 24.

STATEMENT No. 24

Consumer Price Index Numbers for Working Class in Greater Bombay
(Base year : July 1933 to June 1934 = 100)

Year		Fuel andLighting	Clothing	HouseRent		Consumerprice index number
1939	114	100	86	100	97	106
1944	263	289	275	100	230	237
1949	366	306	345	100	281	307
1954	439	292	384	105	348	359
1959	511	349	381	106	414	412
1964	622	427	501	183	521	516

(Base year 1960 = 100)

Year	Food	Fuel and Lighting	Clothing	House Rent	Miscellaneous	Consumer price index number
1969	190	172	150	108	150	173
1970	198	178	157	111	154	180
1976	314	379	290	134	245	294

Consumer Price Index Numbers for Non-Manual Employees in Greater Bombay (Base year 1960=100)

1961	102	1970	167	
1964	122	1973	199	
1967	150	1976	251	

Source.—C.S.O., New Delhi, quoted in Statistical Abstract of Maharashtra.

The average wholesale prices of certain agricultural and other essential commodities at Bombay market in 1970-71 and 1973-74 are given in Statement No. 25.

It is evident from the consumer price index numbers for working class that the prices in 1949 were quite higher than in the base year 1933-34, the only exception being house rent. The outbreak of the Korean War in June 1950, however, caused a further rise in prices. The rising prices were mainly because of the situation in the international commodity markets, and the rising demand on account of a rush for stock piling of essential goods. The prices at Bombay were relatively free from sporadic fluctuations during the First Five Year Plan, though they were higher in 1954 than in 1949. During 1953 they remained fairly steady and recorded only a marginal rise. This was followed by a downward trend in 1954. The prices in March 1955 were lower than in March 1952. The beginning of 1956, however, witnessed a reversion of the downward trend and was in fact, a prologue to the phenomenon of rising prices in subsequent years.

The Second Five Year Plan was also a period of relative stability of prices, though the prices of food articles, clothing material and manufactured goods in 1959 were higher than in any year before. The prices of agricultural commodities in particular were quite high in 1959 which are also reflected in the consumer price index number for the year at Bombay. This year was however followed by conditions of recession in prices upto the outbreak of the Indo-China War in October 1962.

The consumer price index for Bombay attained an all time high in 1964 with the base year of 1933-34. The prices of almost all commodities were more than 400 to 600 per cent of those in 1933-34.

STATEMENT No. 25
AVERAGE WHOLESALE PRICES OF CERTAIN AGRICULTURAL AND OTHER ESSENTIAL COMMODITIES AT BOMBAY MARKET
(Prices in Rs. per Quintal)

Commodity	Variety	1970-71	1973-74
Bajra	U.P.	71.50	172.36
	Punjab	78.33	167.67
	Khandesh No. 2	80.62	154.15
Pulses—			
Udid	Khandesh	121.17	177.98
Moong	Green	111.96	199.17

Commodity	Variety	1970-71	1973-74
Moong	Chinai	149.46	226.19
Masur	Bold	103.33	167.92
Tur	White	126.58	174.58
	Red	114.87	152.09
Math	White	92.08	184.50
Gram	Yellow	105.54	194.68
Chavali	White	111.87	181.14
Dals-			
Green dal		111.12	223.37
Tur Dal		151.66	213.12
Oil-seeds—	A		
Groundnut	Bold	219.36	369.98
	Quality	208.58	346.50
	Khandesh	271.11	334.00
arashti	Madras	225.27	369.37
Castorseed	Bold	149.42	246.25
Linseed	Bold	168.33	284.08
Oils-			
Groundnut Oi		474.58	762.73
Castor Oil	Commercial	346.75	583.75
	B.S.S.	370.83	634.17
Linseed Oil	Raw	397.87	645.42
Copra Oil	White	735.20	1078.75
Cakes—			
Groundnut		68.50	145.70

Commodity	Variety	1970-71	1973-74	
Castor		38.04	64.79	
Gur	Kolhapur—1	146.08	267.83	
	Kolhapur—2	121.16	249.17	
Sugar	D-29 (controlled) D- 30.	154.43	211.00 (C-30)	

STATEMENT No. 25—contd. (Prices in Rs. per Quintal)

Commodity	Variety	1970-71	1973-74
Milk (Per 10 litres)	Buffalo	17.66	22.58
Butter	Khandesh	1187.50	1738.33
	Belgaum	1172.50	1704.17
Chillies	Ghati	514.55	419.58
	Byadgi	621.88	462.92
	Madras	564.58	445.36
ehtro	Sankeshwar	567.86	498.86
Turmeric	Rajapuri	347.58	496.58
Ginger	Bleached	861.33	500.50
Tobacco (Bidi) (Per 40 kg.)	Nipani Bundal bhuki	252 to 283	N.A.
Tobacco (chewing)	Nipani Hundred number	102 to120.40	160 to 190
(Per 40 kg.)			
Tobacco (leaf) (Per 40 kg.)	Nipani Black Mangri	170 to 190	230 to 255
Potatoes (Per 10 kg.)	Talegaon No. 1	9.02	9.87
	Talegaon No. 2	8.43	9.40
Onions (Per 10 kg.)	Nasik-1	3.11	6.95

Commodity	Variety	1970-71	1973-74
	Nasik-2	2.77	6.53
Bananas (Per 10 kg.)	Khandesh	2.84	6.10
Vegetables—			
Cabbage (Per 10 kg.)—		8.19	9.20
Brinjals "		3.67	6.25
Gawar "		7.75	10.46
Poultry (Per dozer —	(۱		
Chicken	12	36.17	52.33
Fowls		68.25	104.00
Eggs (Per dozen)-			
Large	Graded	3.73	4.88
Medium	Graded	3.63	4.79
Mutton		520.83	770.83
Fish	Bing	81.42	89.00
	Palla	44.36	130.33
Copra	Milling	486.67	696.92
	Rajapuri	661.67	916.25
Coconut	Calicut Moist (150)	670.33	1334.00
Cotton	Khandesh Virnar	635.75	N.A.
	Jaydhar—A	582.50	520.25
	Laxmi—A	590.67	906.43
	Kalyan	559.67	634.43
	Digvijaya	820.50	868.88

Commodity	Variety	1970-71	1973-74	
	Moglai Jarilla	634.00	N.A.	
	Vidarbha M. P. Virnar.	727.00	N.A.	

The price situation in Bombay as all over India assumed serious proportions after the Indo-Pakistan War of September 1965. The national economy had to bear an ostensible burden of the War which increased the burden of rising prices. Besides, the conditions of scarcity on account of drought in Maharashtra in 1965-66 aggravated the problem further. Speculative hoarding of essential commodities worsened the price situation. This adverse condition of prices continued throughout 1965-66 and 1966-67 with little relief. The national price situation became still more adverse after April 1967. This had an inevitable effect on the conditions in Bombay. All commodities were costly, and certain articles like sugar and wheat became not only costly but scarce also. The memory of an enlightened citizen of Bombay is still fresh that in June / July 1967 sugar was available at about Rs. 6 per kilogram while wheat and rice of good quality were not at all available.

The general level of prices registered a rising trend throughout 1967, the peak level was reached in January 1968. It however declined slightly in February 1968, and remained almost stable from February 1968 to March 1969. From April 1969 prices started rising gradually and maintained the same trend throughout upto December 1970. The consumer price index number for working class in Bombay touched a high level at 813 (Base year June 1934 = 100).

The year 1971 began with a slight decline in prices, but this was only a temporary phase as a rise in prices started from March itself.

It would thus appear that prices at Bombay as those in the country continued to rise from 1966 with short-lived aberrations. The situation however worsened after the Bangla Desh War of December 1971. The fate of the consumer in 1972 was more gloomy than before.

During this period government took a few measures to reduce prices. These measures included distribution of cereals, sugar, kerosine, etc., through fair price shops, and procurement of rice, wheat, jowar and bajri on a monopoly basis. The monopoly procurement of these items and ban on private trade in these articles added to the difficulties to the consumer. The conditions in the market were very oppressive to the common man who could not get the essential foodgrains in the open market. He had to take recourse to the fair price shops where he could hardly get foodgrains of good quality. The restrictions on transport of rice, wheat and jowar to Bombay from outside added to the difficulties to the consumer.

It would be interesting here to study the consumer price index numbers for the working class in Bombay for the years from 1966 to 1975. (Bombay Chamber of Commerce and Industry, Annual Report, 1975.)

STATEMENT No. 26

Consumer Price Index Numbers for Working Class in Bombay 1966 to 1975 (Bombay Chamber of Commerce of Industries, Annual Report, 1975.)

Average Prices for the year ended June 1934 = 100

Months	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
January	604	670	750	741	777	804	844	910	1070	1323
February	608	675	733	737	777	808	848	924	1079	1332
March	617	679	733	755	781	817	857	941	1106	1336
April	626	684	750	759	795	826	866	963	1150	1345
Мау	626	702	733	768	799	826	870	999	1194	1368
June	630	710	741	790	808	835	892	1021	1230	1372
July	644	715	737	786	813	839	901	1043	1252	1354
August	653	719	737	781	804	844	884	1008	1288	1345

Months	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
September	648	702	741	781	808	852	901	1012	1292	1336
October	653	719	737	781	813	857	901	1012	1319	1354
November	657	728	741	773	813	861	897	1048	1336	1345
December	662	737	737	773	813	848	906	1057	1323	1314

The consumer price index numbers given above are self-evident and self-explanatory, and need no explanation. It would however be interesting to throw light on the situation in general and the hardships to the consumer in particular.

Though the common man is accustomed to rising prices ever since the last about 25 years, he was perplexed at the tyranny of the price situation which he had to face from the middle of 1973. He experienced the pinch of the market conditions and saw no respite. The prices of everything went on rising at a galloping speed from June 1973 to June 1975. There were not even shortlined aberrations from the rising trend of prices. The oppressive nature of prices cast an ominous shadow on the economic situation. Government on its part intervened by imposing informal rationing and restrictions on the movement of goods, such as rice, wheat, jowar, sugar etc. However all the measures were lost in the vortex of a struggle for existence. There was some relief to the consumer as regards the availability of essential commodities during the emergency declared in June 1975. The prices of agricultural products witnessed a slight relaxation. But this was again a temporary phase born out of coercion and punitive measures. This phase was not destined to live longer and died along with the emergency in March 1977. As things appear now in May 1982, the battered consumer grumbles and grudges against the rising prices, but sees no relief or respite from the horrors of inflation.

WAGE TRENDS

A reference in connection with the subject of wages on the records of the Bombay Government was contained in a letter addressed by the Court to the Bombay Council in 1717, in which the court suggested that the Kolis of Bombay, who are described as being more faithful, ingenious and labourious than others, might be encouraged by paying them higher wages. In 1740, the Bombay Government ordered "that the Kolis' wages allowed by the company be increased to a half rupee a month each man". In 1767, it was found that the wages of labourers were very high, and as the price of labour had not been regulated for some years past, a committee was appointed by the Bombay Government for the purpose. This Committee fixed the rate of labour at 12 pice a day or 63 reas for 9 hours for every able bodied labourer and less in proportion to the age and strength of others. This rate was approved by the Bombay Government in 1768. In 1772 labourers received 10 pice a day, smiths from 16 to 21 1/2 pice, carpenters from 22 to 27 pice a day, while domestic servants earned according to their rank from Rs. 3 to Rs. 12 a month.

The condition of the labouring classes, so far as wages were concerned, was decidedly better at the beginning of the century than it used to be before. By about 1860 the daily wages of a labourer, working from 9 a.m. to 6.30 p.m. were on an average 4 annas. During the nineties of the last century they varied from 5 to 6 annas, and they varied from 7 to 8 annas in 1905. Simultaneously with this rise in wages there had also been a similar rise in the prices of food-stuffs, fuel, and in house rent. The wages of *Nowghanis* varied from 8 annas to 10 annas during 1890 but their earnings rose from about 12 annas to one rupee in 1905, the headman earning, at times, from Rs. 1-4 to Rs. 1-6 per day. The ordinary wages of unskilled labourers varied from 6 annas to 7 annas per day for a male labourer, from 4 annas to 5 annas for a female labourer and from 2 annas to 4 annas for children in 1905. In Bombay wages were paid in cash either daily, weekly or monthly. Labourers, who were strangers to this city, were paid daily and were called *Rojandars* (daily workers). In Government establishments payments were made monthly.

The class of hereditary servants were generally known as *Bankotis* and came from such places as Shrivardhan, Harnai, Bankot, Chiplun, Rajapur and Malwan, in the Konkan. This class also included a few Kamathis, Ghatis, Gujaratis, Muhammadans and Mahars. The *Bankotis* performed menial work in Hindu households. They were generally served with meals in the house in addition to monthly wages. Their monthly wages, with meals, generally varied from Rs. 3 to Rs. 6, and without meals from Rs. 9 to Rs. 12. Many of them preferred to work in factories and building operations as these avenues assured them higher wages.

At the beginning of this century the Hindus contributed three-quarters and the Muhammadans one-quarter of the entire mill-hand population of Bombay. The former included the Konkanis, the Ghatis, the Pardesis, etc., and the latter mostly consisted of the Julhais who were hereditary weavers. The average wages earned by mill-hands in a spinning and weaving mill were in the case of men, Rs.14 to Rs.30 per mensem; of women, Rs.7 1/2 to Rs.9 and of children, Rs. 5 to Rs. 7 per mensem. A mill of 30,000 spindles employed about a dozen jobbers whose wages varied from Rs. 30 to Rs. 70 per head.

In 1908 there was an exceptional number of large works going on in Bombay, for example the New Docks with their subsidiary works at Elephanta, and a lot of construction activity including the operations of the Bombay Improvement Trust. The mill industry was also exceptionally active, more than a lakh of persons being employed in it, and the ordinary business-life of Bombay was much more brisk than it had been for

several years. This state of affairs led to an unusual demand for labour which raised the wages of labourers in 1908. In these days wages used to rise from March to May due to larger demand for labour.

The average rates of pay per day which prevailed in Bombay city for the several kinds of skilled and unskilled labour in 1909 were as follows:—

Category	Minimum		Maxi	mum
	Rs.	As.	Rs.	As.
Fitters	0	15	1	13
Machinemen	0	12	1	15
Engine drivers, 2nd class	1	15	1	14
Engine drivers, 3rd class	1	3	1	6
Carpenters	1	0	1	11
Painters	0	12	1	12
Smiths	1	1	1	12
Stokers	0	8	0	11
Smith's coolies	0	7	0	8
Yard	0	6 1/2	0	9
Moulder, Iron	0	14	1	15
Moulder,Brass	0	15	1	10
Gang Mukadam	0	13	1	0
Female Coolies	0	4	0	7
Tin Smiths	0	15	1	4
Sawyers	1	0	1	8
Assistant Sawye <mark>rs</mark>	0	10	0	11
Moulder Coolies	0	6	0	8
Pattern Makers	1	2	1	13
Cranemen	1	2	1	6
Sign Writers	1	6	1	12
Saw Sharpners	0	12	1	4
Polishmen	0	13	1	4

The variation in the wages of mill hands since 1882 to 1908 can be seen from the following statistics:—

Year	Weaver	Jobber	Reeler	Warper	Head knitter
1882	14 to 20	35 to 45	5 to 7	15 to 17	12 to 15
1886	14 to 20	35 to 45	7 to 7.5	15 to 20	14 to 18
1891	14 to 25	35 to 45	7 to 8	12 to 20	7 to 20
1896	12 to 30	30 to 50	7.5 to 9	12 to 20	10 to 20
1901	12 to 30	30 to 50	7.5 to 9	12 to 20	10 to 20
1908	15 to 30	35 to 55	8 to 9	13 to 21	12 to 20

The average annual earnings of workers in Government factories, textile mills, and industries such as engineering, metals and mining, food, drink and tobacco, chemicals and dyes, printing, wood, stone and glass, and skins and hides in Bombay Province during the years between 1939 and 1948 are given in Statement No. 27. The statement shows the comparative wage earnings in the various industries and the year to year changes in wages during the fateful years of the World War II and its aftermath. The indices of average annual earnings in Bombay Province during the period between 1940 and 1948, with the earnings in 1939 as the base are given in Statement No. 28.

A very substantial section of the working population in Bombay live in conditions of poverty. The class of workers engaged in domestic services, daily rated wage earners and casual labourers are below the poverty line. But it is a striking fact that though a substantial section of the workers as stated above are below the poverty line, the wages of almost all classes of workers in Bombay are higher than their

counterparts in rural as also urban areas of the State. Whereas an average able-bodied unskilled worker in rural Maharashtra gets a daily wage of about Rs. 6 and those in towns of the State about Rs. 8.50, a worker in Bombay gets about Rs. 11. A coolie at a railway station in Bombay earns about Rs. 10 to 15 a day. A domestic servant or a maid servant who works for six to seven households earns about Rs. 180 to Rs. 200 a month.

As a matter of fact the prospects of getting higher wages and an assured employment attract thousands of persons to Bombay from Maharashtra and all parts of India. The heavy influx of population to Bombay is mainly due to the possibilities of higher earnings and better opportunities of employment.

STATEMENT No. 27 Annual Average Earnings of Workers in Bombay Province

(Figures in Rupees)

Serial No.	Name of Industry	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
1	Government and Local Fund Factories.	381.11	467.07	477.93	544.32	612.92	721.02	738.65	735.09	831.95	1006.30
2	Textiles—	372.98	382.78	412.08	463.07	823.35	917.13	866.34	768.23	1023.97	1219.22
	(a) Spinning and Weaving	377.23	387.65	417.06	468.83	836.50	932.95	878.49	777.08	1041.25	1245.41
	(b) Hosiery	225.42	210.88	263.64	249.42	820.71	607.45	615.54	525.34	678.11	769.52
	(c) Silk	252.38	207.76	237.05	222.40	353.89	414.17	488.81	556.60	634.63	715.47
	(d) Woollen	271.79	398.84	408.67	505.25	730.49	785.37	768.27	675.01	876.79	1117.82
	(e) Miscellaneous	317.65	326.21	340.20	346.71	531.94	598.78	640.53	630.98	790.93	876.84
3	Engineering	453.27	476.54	496.23	555.25	762.21	822.08	834.85	869.77	995.26	1034.57
4	Minerals and Metals	280.96	324.33	286.97	393.92	545.71	604.67	692.89	763.66	843.37	935.35
5	Food, Drink and Tobacco	302.60	305.69	309.59	404.00	499.51	501.97	622.97	766.18	829.79	905.06
6	Chemicals and Dyes	256.82	269.62	274.59	372.74	567.91	634.59	534.39	663.99	773.32	868.06
7	Paper and Printing	389.83	381.09	374.72	397.70	501.72	585.16	661.96	690.22	876.28	974.98
8	Wood, Stone and Glass	264.25	231.14	297.57	312.49	416.30	544.10	550.29	547.94	638.07	713.64
9	Skins and Hides	202.30	191.80	249.13	248.10	356.83	457.31	534.77	539.53	590.76	690.65

Based on figures supplied by the Office of the Chief Inspector of Factories. Source.—Government of Bombay, Statistical Atlas of Bombay State, 1950.

STATEMENT No. 28 INDICES OF ANNUAL AVERAGE EARNINGS OF WORKERS (Annual average earnings in 1939 = 100)

Serial No	Name of Industry	1940	1941	1942	1943	1944	1945	1946	1947	1948
1	Government and Local Fund Factories.	122.55	125.40	142.82	160.82	.189.18	193.81	192.88	218.29	264.04
2	Textiles—	102.62	110.48	124.15	220.75	295.89	228.59	205.97	274.53	326.89
	(a) Spinning and Weaving	102.89	110.55	124.28	221.74	247.31	232.87	205.99	276.02	330.15
	(b) Hosiery	93.64	116.95	110.64	230.99	269.52	273.06	233.07	300.82	341.37
	(c) Silk	82.32	93.92	88.12	140.22	164.10	193.68	220.54	251.45	283.49
	(d) Woollen	146.74	150.36	185.89	268.77	288.96	282.67	248.35	322.59	411.28
	(e) Miscellaneous	102.69	107.09	109.14	167.46	188.50	201.64	198.64	248.99	276.04
3	Engineering	105.13	109.47	122.49	168.15	181.46	184.18	191.88	219.57	228.25
4	Minerals and Metals	115.40	102.13	140.20	194.23	215.21	246.61	271.80	300.17	332.91
5	Food, Drink and Tobacco	101.02	102.30	133.50	165.07	165.88	205.87	253.19	274.22	294.09
6	Chemicals and Dyes	104.98	106.91	145.13	221.13	247.09	208.07	258.54	301.11	338.00
7	Paper and Printing	97.75	96.12	102.01	128.70	150.10	169.80	177.05	224.78	250.10
8	Wood, Stone and Glass	87.47	112.60	118.25	157.54	204.73	208.24	207.35	241.46	270.06
9	Skins and Hides	94.80	123.14	122.63	176.38	226.05	264.34	266.69	292.02	341.40

Source.—Statistical Atlas of Bombay State, 1950

It is however extremely difficult, and to be more realistic almost impossible, to analyse the structure of wages in Bombay in the absence of proper information. The data of earnings in the unorganised sector of employment is much less reliable than that for the organised sector. Despite the very patchy information available, it is observed that earnings in the unorganised sector are considerably below those in the organised sector.

- "The lowest earnings of any activity which we have recorded were being paid to workers in small hotels *i.e.* Rs. 65 p.m. which includes an allowance for their free food. These workers are largely newly arrived male migrants who are without dependants and who also sleep on the premises, indeed, on such low incomes they would not be able to support or house any dependants."
- "There is also considerable variation in earnings within the organized sector. The highest earnings (more than Rs. 350 p.m.) were those of workers in the partly foreign owned pharmaceutical firms who consciously operate a high wage policy in order to ensure a high quality and committed labour force and

also as a defence against accusations of profiteering. Earnings in the cotton textile industry are also quite high for historical reasons. It has been argued that in the formative years of the Bombay cotton industry, the Millowners used high wages as a means of selecting, out of a potentially large pool of labour, a group who had some experience in the industry. Whatever the validity of this analysis, it is true that wage paid in the cotton mills started off relatively high in spite of the abundance of labour. There has also been a long tradition of trade-union activity in the industry so that wages have remained high though it is now a declining industry. Cotton mill wages are a benchmark for wages in Bombay. The textile dearness allowance (which provides 97 per cent neutralization of cost-of-living changes for unskilled workers) is paid by many other enterprises and wages at the upper (but not the extreme) end of the range of organized sector wages clustered round the cotton-mill level of Rs. 225 p.m. in January 1968. Public sector employment was on a broad band around Rs. 160 per month. The entire spectrum of unskilled wages in the organized sector was very wide-ranging from Rs. 130 p.m. to Rs. 390 p.m." (Heather and Vijay Joshi, Surplus Labour and the City, 1916, pp. 97-98.)

The data available from the Norms Committee Report shows that wages were relatively lower in the older more labour intensive industries, *viz.*, paper, printing, hotels, cinema production and exhibition, glass, wood, cotton-ginning, leather and tanneries and they were relatively higher in the capital intensive industries in Bombay *viz.*, engineering, chemicals and pharmaceuticals.

The following statement gives the average monthly wages of unskilled workers in the engineering industry in January 1968 in Bombay (Wage figures have been worked out from information on awards and agreements contained in the Report of the Norms Committee, Government of Maharashtra, 1969.):—

STATEMENT No. 29
MONTHLY WAGES OF UNSKILLED WORKERS IN ENGINEERING INDUSTRIES IN BOMBAY, JANUARY
1968

Size of Employment	No of Firms	Average monthly wages (Rs.)
0-24	14	127.85
25-49	18	139.34
50-99	12	155.35
100-199	10	171.49
200-299	9	186.20
300+	12	225.76

Roughly 25 per cent of the workers in the organised sector are employed in cotton mills in which the wage of an unskilled worker was Rs. 225 per month excluding bonus. It would vary, including bonus, between Rs. 237 and Rs. 270 depending on the firm concerned. The lowest wages in the public sector were around Rs. 160. Wages of unskilled workers in other sectors of employment vary between Rs. 130 and Rs. 390.

"It appears to be the case that 84 per cent of the workers in the private organized sector in the Bombay-Thane area are employed in establishments employing more than 200 workers. In other words, two-thirds of the non-cotton workers in private manufacturing are employed in establishments employing more than 200 workers. The majority of the workers in the private organized sector are in firms where the pay of the unskilled is between Rs. 180 and Rs. 250 per month. Taking all these facts together, we estimate that the earnings differential between the organized and unorganized sectors is unlikely to be less than 100 per cent and could easily be as high as 150 per cent. If we also make some allowance for the present value of the employers' provident fund contributions and for the monetary value of various fringe benefits, we believe that 150 per cent provides the more likely figure".(Heather and Vijay Joshi, Surplus Labour and the Citv. 1976.)

It is noteworthy that the wages as cost to the employer for employing a worker is much higher than the net monetary wage. This is because the employer in the organized sector has to contribute 11 per cent of wages for provident fund and medical insurance together. Further, privileged leave of a worker is a financial burden to the employer in so far as he has to employ a replacement for the worker during his absence. The following statement gives the statistics about the cost of hiring the lowest paid unskilled worker, in January 1968, in 15 leading firms in Bombay (These firms have their headquarters in Bombay, but may have their establishments elsewhere in the country.

Source. 4 Ibid. p. 102.):—

STATEMENT No. 30 Cost to the Employer of Hiring Unskilled Worker in Selected Leading Firms in Bombay in January 1968

			Rs.per month				
	Name of firm	Size of employment in Bombay area	Monthly Basic Wage+ D.A. in January 1968	Bonus	Employer's provident fund and E.S.I.C. contributions	salary	Total cost to the employer
1.	National Organic Chemicals.	442	200	N.A.	22	25	247.00
2.	Bharat Bijlee Ltd.	492	218.25	24	24	27	293.25
3.	Phillips India Ltd.	750	218.25	43	24	25	310.25
4.	Paper Products Ltd.	450	233.18	28.51	26	27	314.69
5.	Siemens India Ltd.	N.A.	293.00	17.63	32	44	386.63
6.	Mukund Iron and Steel Works Ltd.	539	218.25	33.00	24	22	297.25
7.	Voltas Ltd.	1610	225.00	18.00	25	39	307.00
8.	Poysha Industries Co.Ltd.	728	224.75	20.00	25	27	296.75
9.	Chemicals and Fibres of India Ltd.	101	225.00	45.00	25	33	328.00
10.	National Machinery Manufacturers Ltd.	2777	218.55	6.70	24	27	276.25
11.	Metal Box Co. of India Ltd	1652	244.80	24.00	27	39	334.80
12.	Indian Aluminium Co. Ltd	N.A.	218.77	43.00	24	22	307.77
13.	Crompton Greaves Ltd.	1163	241.80	40.00	27	26.05	335.30
14.	Hindustan Lever Ltd.	2677	227.80	45.60	25	27	325.40
15.	Guest, Keen Williams Ltd.	674	241.50	20.00	27	40	328.50

Since 1968, the entire money-wage structure has shifted upward in pursuit of the cost of living index. As we have seen in the earlier section, the price level in Bombay went on rising continuously from the beginning of 1969. The price situation started deteriorating hopelessly from the middle of June 1973, and the prices in general continued to rise relentlessly upto June 1975. During this period of unprecedented hyper-inflation the cost of living index of the working class went on rising at a galloping speed and it reached the climax in June 1975. The soaring cost of living had a deep impact on the demand for higher wages. The working class became very restive, and agitated for a rise in wages. The agitation became more and more strong throughout 1974 and continued upto June 1975. In fact the demand for higher

monetary wages was a demand for protection to real wages. The unprecedented price rise had made a mockery of the structure of money wages. This created conditions of chaos in the form of strikes, *morchas, bunds, gheraos* and many other forms of acute labour unrest. And the whole situation developed into a crisis. The agitation of the working class for protection to its real wages continued. It was however an irony that wages always lagged behind prices throughout the period upto May 1982.

SECTION II - STANDARD OF LIVING

Introduction: Consideration of the standaid of living of the people over a period of time is difficult in the absence of precise information pertaining to income and expenditure of households. In respect of a vast city like Bombay, the problem becomes all the more difficult. The development of Bombay dates back to the dawn of the nineteenth century. Bombay expanded in width, breadth and length during the latter half of the 19th century. However, Bombay has now reached a saturation point when any further expansion would reduce this beautiful city to the city of slums. The growth of population necessitated the growth of schools, housing and medical facilities in the city. Even though schools and colleges have come up in thickly populated localities and rapid growth is witnessed in this field, still the city faces the problem of inadequacy of educational facilities.

What is true of educational institutions is equally true of medical facilities in the form of hospitals and dispensaries. There is no doubt that there are a number of hospitals and medical institutions either run by government or private or semi-government agencies like the Greater Bombay Municipal Corporation and there is no dearth of philanthropists who have always come forward to meet the needs of the city. However, the growth of medical facilities is not commensurate with the needs of the city. Though Bombay can boast of the most up-to-date and latest medical facilities and though there is no paucity of skilled talent one still comes across a number of short-comings which may be attributed to the enormous proportion of population influx and its accompaniments in various forms.

In spite of the gradual extension of the city to distant suburbs the question of accommodation and inhabitation of the teeming millions of Bombay has always posed and will pose in future a serious problem. Thousands of hectares of land have been reclaimed from deep seas and shallow creeks and marshy lands. Agricultural land with an exception of a few patches of greenery here and there has practically disappeared, and yet the problem has not only been not solved but on the contrary has assumed serious proportions in the past few years. There is absolutely no scope for expansion in the settlement of old Bombay barring the demolition of old buildings and the construction of sky scrapers in their place. Naturally Bombay presents an admixture of variegated construction with slums stinking with garbage and oozing left overs side by side with palatial and towering buildings which always present a contrast in the standard. The extension of the present Bombay also offers no solution.

As a matter of fact the very face of Bombay has undergone a radical change over the last 100 years. The typical tiled houses with compounds and with all kinds of flower and fruit trees surrounding them were found in old Bombay with clusters of mango and palm groves hiding behind them small houses with tiled roofs. The growth of urbanisation has destroyed the vestiges of the past in no uncertain manner. The Bombay of the old had a fantastic and exquisite seashore, with huge and extensive beaches without crowds as at present.

The assessment of the standard of living in Bombay whose history, surroundings, people, and development are unique poses many problems. If the standard of living of different sections of population is to be measured in quantitative terms there has to be some common basis of comparison. The point is that the population of Bombay presents comparisons and contrasts of immeasurable magnitude so that proper assessment on the basis of reliable data, becomes rather difficult. On the one hand we find multimillionaires residing in palatial quarters, availing of all the amenities, comforts and luxuries of modern civilization, whereas on the other hand we find slum dwellers living in the most insanitary and unhygienic conditions and carrying on their daily existence with the baremost necessities of life. The gap between the monetary and real standards in regard to the various sections of population is so enormous that it makes even minimal comparisons of the standard enjoyed by these different sections impossible. As a matter of fact in some sections of population by any standard of comparison it is very difficult to pin point as to where one sector ends and the other begins, whereas in certain other sectors again by any standard of comparison it is well neigh impossible find a common basis of comparison. Under these conditions assessment of the standard of living enjoyed by the people of Bombay over a period of time is rendered impracticable.

Economic Conditions: The study of standard of living in Bombay by conducting a methodical survey is a gigantic task because of inherent problems and complexities. The cosmopolitan nature of the city, a wide variety of occupational groups and a wide range of economic classes in the city render the study all the more complicated and well neigh impossible. It is, however, gratifying to note that the eminent economists of the University of Bombay undertook an indepth study of the economic conditions of the metropolitan city of Bombay. The team of economists under the able guidance and direction of Dr. D. T, Lakdawala, Dr. V. N. Kothari, Dr. J. C. Sandesara and Dr. P. A. Nair conducted a methodical sample survey regarding the economic conditions of the people of Bombay during the year 1958-59. It is pertinent to mention that the economists conducted the sample survey of 13,369 families from various strata of society. The sample families were selected with due considerations to the coverage of families from various income groups, occupational groups, various linguistic sections of the society from practically all the localities in Bombay. They had also given due considerations to the selection of families from all communities and all walks of life. The results of the study on economic conditions are analysed in an extremely methodical and well written report. There is no better study on this subject than this. It is, therefore, pertinent to quote the summary of conclusions on the economic conditions of the people of Bombay from the celebrated book viz., Work, Wages and Well-being in an Indian Metropolis-Bombay, published by the University of Bombay in 1963. The value of the findings and conclusions has not declined even after the span of about twenty years.

- "Conclusions: (1) Of the 63,168 members of our 13,369 sample families, 19,301 or 30.6 per cent were earners. Among the male population of 33,913 slightly more than half were earners as compared to only 6.4 per cent among the female population of 29,255. Most of the males in the age group 25-54 were earning. In the age groups 15-19 and 20-24 among the males, only one-fifth and two-thirds of the total respectively were earning. The proportion of earners among females increased continuously from 4.1 per cent in the age group 15-19 to the highest figure of 16.4 per cent in the age group 45-54.
- (2) The proportion of earners among immigrants was 35.3 per cent as compared to 29.9 per cent among the residents and 25.6 per cent among the displaced persons. This higher ratio of earners among the immigrants was due to a higher male-female ratio, the higher proportion of earners among immigrant males in almost all the age groups, and the lower proportion of males below the age of 15. Among the immigrants only 31.6 per cent of the males were below the age of 15 as compared to 37.2 per cent among the displaced persons and 35.4 per cent among the residents. These are indicative of the tendency to keep the dependents in the native place.
- (3) As is to be expected, the highest ratio of earners obtained in the lowest income group of less than Rs. 50 and the lowest in the highest income group of Rs.1,000 and above. 42.1 per cent among the former and 26.2 per cent among the latter were earners. In the income group Rs. 50-74, 34.5 per cent of the total were earners. In the other groups, the proportion of earners ranged round about 30 to 31 per cent. Thus, though in case of the highest and the two lowest income groups, in verse relationship between the level of income and the ratio of earners was found to be prevailing, in case of intermediate income groups, the ratios did not show any definite pattern of variation.
- (4) In the lowest income group of less than Rs. 50 as many as 37.5 per cent of the women were earning. In the income group Rs. 50-74, this ratio fell to 14.7 per cent, while in the other remaining income groups, the ratio ranged between 4.9 to 6.8 per cent.
- (5) Among the males, in the age groups 15-19, 20-24 and 55 and above whose economic status which is likely to be most susceptible to the influence of income, no very definite pattern of relationship was observed. Thus 40.5 and 30.2 per cent of the males in the age group 15-19 in the income groups of less than Rs. 50 and Rs. 50-74 respectively were earning as compared to 9.1 and 7.2 per cent in the income groups Rs. 500-999 and 1,000 and above, respectively. In the intermediate income groups however, the proportion ranged all the way from 19.4 per cent in case of income group Rs. 75-99 to 28 per cent in case of income group Rs. 150-249. In case of age group 20-24 years also it was found that though the proportion of earners in the two highest income groups was particularly low due to the continuance of the studies, in the income groups Rs. 150-249 and Rs. 250-499 the ratio of earners (73 per cent) was actually higher than that obtaining in all the other lower groups. In case of males, 55 and above it was actually found that the highest proportion (76.3 per cent) of earners prevailed in the income group Rs. 1,000 and above and the lowest (55.6 per cent) jn the income group of less than Rs. 50.
- (6) The prevalence of female labour, education of young persons and retirement of old persons depend, besides income, on the attitudes or opportunities formed by the occupation of the head earner of the family. Our data; showed that among the skilled and semi-skilled manual classes, the proportion of earners among women (6.4 per cent) was lower than that obtaining in the professional classes. Among the clerical classes 4.6 per cent of the women were earning as compared to only 2.5 per cent among the lower administrative classes. In case of males in the age group 20-24 years, the ratios of earners among classes with broadly similar levels of income differed very widely. Thus among the large and medium-scale trading classes 66.9 per cent of the males in the age group 20-24 years were earning as compared to 46.8 per cent among the superior managerial and administrative classes and only 30.7 per cent among the superior professional classes. The proportion prevailing among the large and medium-scale trading classes was actually higher than that prevailing among such less well-to-do classes as subordinate administrative and clerical classes. In case of males of 55 and above also it was found that the ratios of earners varied very widely. Thus among the clerical classes only 54.7 per cent of the old persons were earning as compared to 80.8 per cent among the shop-assistants.
- (7) A community-wise analysis of economic status showed that the proportion of earners ranged from the highest of 33.3 per cent among the Parsees to the lowest of 25.6 per cent among the Jains. The range of variation in case of females was much wider. Among the Christians 15.8 per cent of the women were earning as compared to less than 1 per cent among the Jains.
- (8) Due to the peculiar migration pattern, as high a percentage of earners as 46.5 was found to be prevailing among the Hindi speaking people. The lowest of 24 per cent was reported by the Sindhis. Among all the other linguistic groups the percentage ranged from 28 to 34.7. Among the English speaking people about one-fifth of the women were earning as compared to about 3 per cent each among the Hindi and Urdu speaking people.
- (9) An analysis of economic status on the basis of caste for the Marathi and Gujarati Hindus also revealed some interesting features. Thus among the Marathi speaking people, barring the exceptional case of other backward classes, the percentage of earners in case of males ranged from 59.8 per cent among the pastoral castes to 45.5 per cent among the Brahmins. The participation in economic activity by women differed by as much as 10.5 per cent in case of Brahmins to only 4.8 per cent among the Marathas. Among the Gujaratis the highest ratio of earners in case of males was reported by commercial castes (57.2 per cent) and the lowest by the agricultural castes (36.6 per cent).
- (10) Taking the non-earners between 15-59, there were 4,125 males and 15,186 females. Studies featured prominently as a cause of dependency among the males in the age groups 15-24 years and household work among the females in all the age groups. In all, 2,380 or 57.7 per cent of the males in the age groups 15-60 years were studying and 1,194 or 28.9 per cent were unemployed. Among the females 13,798 or 90.9 per cent in the age groups 15-60 years were engaged in household work and only 1,085 or 7.1 per cent were found to be studying.

- (11) Income-wise in the lowest income group of less than Rs. 50, studies did not feature as a cause of dependency at all. In the next two income groups of 50-74 and 75-99, this cause accounted for about one-fifth of the male dependents but none among the females were studying. In the subsequent income groups the importance of studies as a cause of dependency showed a continuous increase. Handicaps and unemployment accounted for a very substantial proportion of dependent males in the three lowest income groups upto Rs. 100. Handicaps forced as many as one-fifth of the males to dependency in the lowest income group of less than Rs. 50. In the two subsequent income groups also the ratio of handicapped persons was as high as 15 per cent. 46 to 48 per cent of the male dependents in the three lowest income groups were unemployed as compared to 28.9 per cent on the whole.
- (12) Average income per family came to Rs. 268.5 per month. About half of the families received incomes between Rs. 100—249. Only 29.8 per cent of the families enjoyed incomes of Rs. 250 or more. About one-fifth of the families failed to obtain even Rs. 100 per month. The immigrant and the resident families were almost in a similar position but the displaced families were better off. About half of the displaced families had incomes of Rs. 250 or more as against the general average of 29.8 per cent.
- (13) Parsees enjoying the highest family income of Rs. 521.7 were followed by the Jains with Rs. 453.8. Christian families on an average were in receipt of Rs. 310.2 as compared to Rs. 256.2 in case of Hindus and Rs. 207 in case of Muslims. The proportion of families in receipt of Rs. 250 or more was as high as 61.4 and 56.9 per cent among the Parsees and the Jains as compared to 42.8 per cent among the Christians and only 28 and 19.9 per cent among the Hindus and Muslims, respectively.
- (14) English and Sindhi speaking families with average incomes of Rs. 566.9 and Rs. 543.4, respectively were the most well-to-do sections of the population. These were followed with a long lag by the Gujarati and Konkani families with incomes of Rs. 382.4 and Rs. 353.7, respectively. Average income of a South Indian family was Rs. 261.4 as compared to Rs. 233 and Rs. 200.8 among Hindi and Marathi families. Urdu speaking families came the last with Rs. 181.5 per month.
- (15) Among the Marathi Hindus 18 per cent of the Brahmin families and 13 per cent of the Maratha families enjoyed an income of Rs. 500 or more per month. Among other castes such high incomes were either entirely unknown or were extremely rare. Among the artisan class-II, pastoral and agricultural castes and scheduled tribes and other backward classes not a single family reported an income of Rs. 250 or more.
- (16) Among the Gujarati Hindus, as is to be expected, the commercial castes with as many as 31.7 per cent of the families in receipt of Rs. 500 or more, were the most well-to-do. Nearly three-fifths of the Brahmin families had less than Rs. 250. All the scheduled tribe families and three-fourths of the scheduled castes families did not even receive Rs. 100 per month. Majority of the Brahmin and artisan class-I and class-II and slightly less than half of the agricultural and pastoral caste families were in receipt of Rs. 100-250 per month.
- (17) Income and family size seemed to be positively co-related. In the lowest income group as many as 68.5 per cent of the families consisted of 2 members or less as compared to 46.9 per cent in the next income group. The proportion of such families was only 5.6 per cent in the highest income group. On the other hand, families with 9 or more members formed 23.1 per cent in the income group Rs. 1,000 and above as compared to less than 2 per cent in the three lowest income groups. This would indicate that at higher levels of incomes proportionately more dependents were maintained in the city proper and that possibly the joint family system was more widespread among the higher income groups.
- (18) The evidence in regard to the number of earners per family in various income groups indirectly supports the latter contention. Thus the proportion of multi-earner families was less than one-fifth among the families in the income groups below Rs. 150 as compared to 55.4 per cent for the income group Rs. 150-249. The proportion increased to 79.6 per cent in the next income group. In the income group of Rs. 500-999 as many as 88 per cent of the families had more than one earner.
- (19) 12.4 per cent of the families were deriving income from property. The proportion of such families however, varied greatly as between various income groups. In the income groups less than Rs. 50 and Rs. 50-74 as many as 45.1 per cent and 37 per cent of the families were deriving income from property, possibly due to their links with villages. At lower levels of incomes remittances and payments from the paying guests were also important as supplementary sources of income.
- (20) If *per capita* incomes of Rs. 35 and Rs. 25 could be said to be the cut-off points of poverty and destitution respectively, then 36.8 per cent of the families could be said to be poor and 20 per cent destitute.
- (21) The percentages of destitute and poor families were the lowest among the Parsees, 7 and 22.6 per cent, respectively. Destitute families formed about 22 per cent, the highest proportion, each among Hindus and other communities. It was again the Hindus among whom poor families were found in the largest proportion, at 38.5 per cent.
- (22) Language-wise, Sindhis had the lowest proportion in both the destitute and the poor categories, with 7.3 and 13.8 per cent, respectively. Konkanis were second best in this respect with 8.4 and 17 per cent, respectively. On the other hand, Marathis had the highest proportions in both these categories with 24.9 and 42.8 per cent, respectively. They were followed by the Hindi speaking group in the destitute category with 21.1 per cent and the Urdu speaking group in the poor category' with 39.1 per cent.
- (23) Most of the uni-member and double member families were above the poverty line. The extent of poverty and destitution generally increased with the increase in the size of the family.
- (24) 46.7 per cent of the families had only one adult male earner. 39 per cent of the families reported two adult male earners. Only 9.2 per cent of the families were putting either the female or juvenile members

to work. An examination of the data with reference to *per capita* income showed that whenever the adult male earners were joined by other earners it was possibly an adaptation forced by the poverty of the family.

- (25) On the whole, the families spent 82.7 per cent of their incomes. In the three lowest income groups however, expenditure exceeded income. *Per capita* expenditure in these income groups was Rs. 24.9 to Rs. 27.7. Thus it appeared that *per capita* expenditure around Rs. 25 was the barest minimum. Families spent a dimirishing proportion of their incomes at each successive higher level of income. The ratio of expenditure to income fell from 96.6 per cent in case of income group Rs. 100-149 to 50.1 per cent in case of income group Rs. 1,000 and above.
- (26) 31.5 per cent of the families were spending their entire income. 13.6 per cent of the families were spending more than their incomes. Only 53.3 per cent of the families were making some savings. The proportion of the families making some savings increased with every increase in income.
- (27) Food was the largest single item of expenditure accounting for 49.5 per cent of the total expenditure. Rent, clothing, fuel and lighting claimed 7.9, 7.3 and 5.1 per cent of the expenditure, respectively. Thus, more than 2/3 of the expenditure were incurred on basic necessities of lite. Only 7 per cent of the expenditure were devoted to travel, education and medical facilities.
- (28)The proportion of expenses on food tended to decline with every increase in income of Rs.100 or more. In the income groups below Rs. 100 however, the reverse tendency prevailed. Thus the proportion of expenses on food increased from 48.9 per cent in case of income group of less than Rs. 50 to 57.5 per cent in the income group Rs. 75-99. This would indicate that at very low levels of incomes, some economizing on food had to be undertaken in order to accommodate the barest minimum of other necessities of life.
- (29) In all, a little over two-fifths of the families were indebted. Maintenance was the chief cause of borrowing accounting for 55.5 per cent of the indebted families. Most of the loans—62.9 per cent—did not exceed Rs. 500. Friends and relatives supplied loans to as many as 56.7 per cent of the indebted families. Employers helped 8.3 per cent of the families. Loans from the friends and relatives were largely interest-free. About half of the indebted families had obtained interest-free loans. 14.6 per cent of the indebted families had however to pay as high an interest rate as 30 per cent or more.
- (30) Life-cycle of families showed that the family size increased continuously from 4.02 when the head of the family was20-24years of age to 5.06 when he was in the age group 45-49. Family income increased continuously from Rs. 160.8 when the head of the family was 15-19 years of age to Rs. 312.6 when he was between 45-49. For a subsequent decade the families were faced with static conditions. Family incomes reached the highest level of Rs. 358.7 when the heads of the families had passed 54 years. Family income and per capita income moved in the same direction, though not to the same extent. Thus, while the family income increased from Rs. 205.1 when the head of the family was 25-29 years of age to Rs. 239.2 i.e. by 16 per cent, the corresponding increase in per capita income was from Rs. 50.9 to Rs. 52.7 i.e. of less than 4 per cent, as during the same period of life the family size was increasing very rapidly. Generally it appeared that during 45-54 years of age the heads of the families were faced with static conditions in respect of family size as well as income. From the 55th year onwards it appeared that the joining of the other earners unaccompanied by proportionate retirement was possibly responsible for the increase in the family income as well as per capita income. "

Bombay Population, a Profile: Metropolitan Bombay has developed into a vast population sprawl during the last about 200 years. The tiny seven islands of the seventeenth century, inhabited mainly by fishermen have today grown into one of the leading metropolises of the world. The city had population of a little less than a milbon in 1908. Today the population has increased to more than 8.2 millions. In the initial stages, this phenomenal growth was due to the natural harbour, the earliest railway network and the development of cotton textile industry. After independence, this pace of growth gathered further momentum on account of many inter-related growth impulses. Today, it is the leading industrial and commercial centre of national as well as international standing having the headquarters of many public and private sector corporations.

In this prosperous city oppulence and poverty co-exist together. Evidences of urban poverty are ample. There are luxurious skyscrapers which are surrounded by slums and small shanties. The sordid and squalid conditions of living are a sad commentary on the growth of this city. Around 340 new persons enter this city every day in search of livelihood. The majority of them are poor and unemployed.

The trends of growth of population indicate that Bombay is likely to have the population of over 15 millions by the turn of this century. The population growth and its projection is given below :—

Year	Population (million)	Annual growth rate(%)	Year	Population (million)	Annual growth rate(%)
1901	0.81		1961	4.15	3.97
1911	1.02	2.59	1971	5.97	4.39
1921	1.24	2.16	1981	8.24	3.74
1931	1.27	0.24	1991	11.41	3.17
1941	1.69	3.31	2001	15.19	3.08
1951	2.97	7.57			

Economic Conditions: During the last about 40 years Bombay has degenerated into a city of slums. The slums are the result of population growth, population influx and adverse conditions of living. The Government of Maharashtra, therefore, felt it imperative to study the problem of slums and conducted a census of slums. A hut to hut census carried out in 1976 identified 1,680 slum pockets in Bombay. These pockets were found to be inhabited by more than 28 lakhs of people. According to the slum census, the slum population was found in all the municipal wards except the wards B and C. Of the total slum population, about 21.10 per cent was in the island city, 51.40 per cent in the suburbs and 27.50 per cent in the extended suburbs.

The census of slums furnished some interesting information of the Bombay slums. The experts of the Maharashtra Housing and Area Development Authority prepared a paper (Non-Conventional and Alternative Approaches to Shelter the Urban Poor) in January 1981. The Paper gives an analysis of the characteristics of the slums, and selected socioeconomic indicators of the slums in 1976. The Paper also analyses the results of other studies, conducted by various authorities regarding socioeconomic indicators of slums in Bombay in 1979 and an income-wise distribution of slum households in Bombay.

The analysis throws a searching light on the economic conditions of the slum population, which forms a very large section of the city population. In fact the narrative of the economic conditions of over 28 lakh persons (1976 census) is representative of the economic conditions and standard of living of the entire class of economically weaker sections of society as also the low income group population of Bombay. Hence the narrative is applicable to a very great extent to other sections of poor people who share the economic lot of the slum dwellers though they are only a little bit well off due to some kind of accommodation in overcrowded and dirty chawls. The economic conditions of the chawl dwellers are really no better than those of the slum dwellers.

The following account is therefore based on the narrative in the Paper referred to above as it is representative of the economic conditions of not only the slum dwellers but also of the others who are not dwelling in slums but belong to the same economic group.

The huts have an average area of 133 sq. ft. or 12.5 sq. metres. They are constructed with the use of unconventional materials like untreated waste wooden planks, roofing material, gunny cloth, polythylene, bamboo mats etc., for walling as well as for roofing. Some huts make partial use of conventional building materials, clay-tile roofs, brick-walls upto a sill height or IPS flooring etc. Most of these huts are incomplete in their structure at a point in time, but display an incremental process based on factors like availability of finance, security of tenure, nature of job etc.

The hut is mostly a single room enclosure though there are huts with more than one room also. In fact, a recent phenomenon has been that two-storeyed rickety structures of wood planks are increasing in the suburbs as the density and family size increase.

Most of the huts do not incorporate any sanitary facilities like a bathroom or W.C. within the hut. In the far flung, sparsely populated village like slums one does find a tarpaulin or gunny cloth enclosure outside the hut for purpose of bath. The majority do not have independent water taps. All these amenities are meagrely provided by common services which are generally provided as part of the slum improvement by public authorities. It is a general observation that the slums in the suburbs and extended suburbs have mostly come up on lands which at that time were not suitable for development of conventional shelters, *i.e.*, low lying marshy lands, prone to flooding in monsoons, hill slopes, open spaces next to railway tracks, major roadways, etc.

Slums have also appeared on private lands which may be designated for public purpose in the development plan and hence were liable for compulsory acquisition. However, since the compensation payable for such acquisition is far below the real market rate and municipal resources have not been adequate enough to acquire all such lands even at these low; rates, the land owners have either passively allowed the slums. The system of land reservation has thus unintentionally provided land at better locations for housing of the poor.

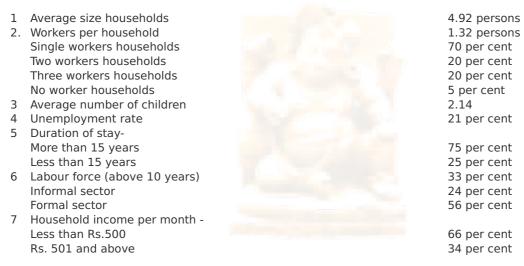
Most of the slum dwellers carry out minor repairs and othermaintenance work to keep the floor and roof together especially so before the monsoon. However, any permanent structural changes are not allowed according to the rules laid down by the Controller of Slums.

Socio-economic Features : The slum census of 1976 enumerates the socio-economic indicators of Bombay slums which are given below:—

3	Average size households Percentage of workers to total persons Average number of workers per household	4.38 persons 32.68 per cent 1.47
4	Average income per month -	Dc 410.00
	(i) per household	Rs. 419.00
	(ii) per person	Rs.94.00
	(iii)per worker	Rs.285.00
5	Average rent paid per thousand	Rs.15.02
6	Females per thousand males	754
7	Percentage of households paying rent for the huts	47.92 per cent

A recent sample survey conducted by the B.M.R.D authorities in four major slums of Bombay portrays the following features:-

Selected Socio-economic INdicators of Slums in Bombay in 1979



It is observed further that irrespective of formal or informal sector employment, the jobs are generally menial or low skilled indicating low levels of acquired urban skills among slum dwellers. The result is low incomes.

Monthly income group (Rs.)	Percentage of slum households
Less than 200	12.12
200—350	28.01
350—600	38.58.
600—1,000	14.14
1,000 and above	3.86
Not recorded	3.29

It may be seen from the above table that 79 per cent of slum households belong to low income groups with monthly incomes below Rs. 600. Median monthly income per household is Rs. 400. Another interesting feature which the above statement brings out, is that 40 per cent of the slum households fall in economically weaker section category and another 39 per cent in low income group category.

Further studies on the unorganised or informal sector of employment which forms a major part of labour force in the slums indicate that not only the incomes in this sector are lower than that of the formal sector

of employment but that they also tend to stabilize at low levels and remain stagnant thereafter. Some studies of slums indicate that such phenomenon is observed for employees in the formal sector as well. In one such study it is observed that the average earning of a wage employee in the age group of 20-24 years is Rs. 267 per month which stabilises at Rs. 350 at the age of 30-34.

The stagnating income also inhibits the mobility of the slum dwellers. It has been observed in a number of studies that the majority of slum dwellers have stayed in the slums for over 15 years. The common notion that shelter is sought in slums by new migrants as a transient accommodation is thus not borne by these studies although it might be partially true.

Income Distribution of Households: Though there is no statistical data available regarding the income and earnings of the people of Bombay, a few surveys were carried out regarding the income-wise distribution of households in the city. For the purpose of this analysis the sample families were classified into four income groups. Firstly, the economically weaker section of the society was conceived to be one with a monthly income upto Rs. 350. This income group was further divided into two sub-groups *viz.*, upto Rs. 200 and from Rs. 201 to Rs. 350 per month. Secondly, the low income group was conceived to comprise those families who have a monthly income of Rs. 351 to 600. Thirdly, the middle income group covered the families having a monthly income of Rs. 601 to 1,500. This income group was divided into two sub-groups *viz.*, those having an income of Rs. 601 to Rs. 1,000 and those having an income of Rs. 1,001 to Rs. 1,500 per month. Fourthly, the higher income group was conceived to comprise those families with a monthly income of over Rs. 1,500. This income group classification accords with the classification adopted by the Maharashtra Housing and Area Development Authority.

As per the surveys carried out by various authorities, the Maharashtra Housing and Area Development Authority (*M.H.A.D.A.*, *Theme Paper for Seminar, January 1981*.) has worked out the house hold income structure in Bombay which is given below:—

	Income group	Monthly household income in rupees	Percentage of households	Ability to pay for shelter
	Economically weaker section	0-200	7	15
	of society.	201-350	12	30
2.	Lower income group	351-600	35	50
3.	Middle income group	601-1,000	25	115
	aorach	1,001-1,500	12	250
4.	Higher income group	1,501 and over	9	400

It is evident from the above statistics that about 35 per cent of the households in Bombay belong to the lower income group. The middle income group comprises about 37 per cent of the households. About 19 per cent of the households are in the economically weaker section of society, while only 9 per cent households form the higher income group. It is remarkable that the middle income group households form the largest single income group in Bombay. The preponderance of the middle income group is attributable to the fact that the earnings of majority of the factory workers and office-goers have now increased on account of the linking of wages with cost of living index. It may, however,be cautioned that the higher level of incomes is obviated by the tremendous rise in prices. The economically weaker section of the society comprises coolies, unskilled workers, domestic servants, street vendors, vagrants and unemployed persons. The lower income group which comprises 35 per cent of the households includes partially employed persons, semi-skilled labourers and low paid employees in offices, factories and shops. The higher income group which forms a small proportion of households covers supervisory staff in factories, establishments, traders and highly paid employees in public sector and commercial establishments.

Household Consumer Expenditure: The National Sample Survey Authorities conducted a sample survey of household consumer expenditure in Greater Bombay in 1977-78. The results of the sample survey reveal some interesting facts about the pattern of consumption of the Bombay people. The average consumer expenditure pattern as per the survey is shown below:—

Item	Monthly household expenditure (Rs)	Percentage	
1. Food	446.40	57.31	
2.Clothing	47.05	6.04	
3. Fuel and light	44.40	5.70	
4.Other non-food items	241.10	30.95	
total	778.95	100.00	

The above statistics lead us to the conclusion that food items form the largest proportion of the household consumer expenditure. Clothing accounts for 6.04 per cent of the household expenditure. It may, however, be pointed out that the expenditure on clothing might be underestimated. This observation is based on the fact that the clothing pattern of the people of Bombay is characterised by latest fashions and colourful clothing.

The Angels' law of expenditure conspicuously comes into operation in the case of low income group. As per this law the percentage expenditure on basic needs like food, fuel and clothing is higher in the case of low income group. The lower the income level, the higher the percentage expenditure on basic needs.

Some of the studies pertaining to factory workers in Bombay have indicated that the expenditure of the lower income group as well as the economically weaker section of the society exceeds their income. This leads to perpetual indebtedness on the part of the people belonging to this group.

Structure of Incomes: Two economists from Oxford, Mr. Heather and Mr. Vijay Joshi undertook an indepth study of Bombay with special reference to the problem of urban unemployment, income distribution and migration patterns in the city and the inter-relationship between these aspects of the economy of Bombay. The authors believe that the conduct of economic policy, has aggravated the employment problem, giving insufficient attention to the absorption and productive utilisation of the country's abundant supplies of labour resulting in stagnating incomes of the large section of the population.

The celebrated work of the authors: *Surplus Labour and the City, A Study of Bombay,* published in 1976, gives an indepth analysis of the structure of incomes in Bombay. The analysis is based on thorough research and scrutiny of official statistics. It is therefore felt necessary to give a brief account of the observations made by the economists regarding the structure of incomes in Bombay.

The earnings in the unorganised sector employment in Bombay are considerably below those in the organised sector. The lowest earnings in any activity recorded were being paid to workers in small hotels, *i.e.* Rs. 65 per month. Indeed, on such low incomes they would not be able to support any dependents. Though the employers are supposed to pay wages as per the Minimum Wages Act of 1948, the enforcement machinery for the Act is extremely weak and the workers are paid much below the statutory minimum. The *mathadi* workers and the metal porters are the highest paid unorganised workers. This is because they have an effective trade union.

There are considerable variations in earnings within the organised sector. The highest earnings (more than 350 rupees per month) were paid to workers in the partly foreign-owned pharmaceutical companies who pay high wages to ensure a high quality and committed labour force. Earnings in the cotton textile industry are also quite high lor historical reasons. Trade union activity in the industry was instrumental in maintaining a high level of wages. Cotton mill wages are a benchmark for wages in Bombay. The textile dearness allowance, which provides 97 per cent neutralization of cost of living changes for unskilled workers, is paid by many other enterprises, and rates at the upper end of the range of organised sector wages clustered round the cotton mill level of Rs. 225 per month in January 1968. Public sector employment was on a broad band ground Rs. 160 per month. The wages of unskilled workers ranged from Rs. 130 to Rs. 390 per month.

Wages were relatively lower in the older more labour-intensive industries, such as paper, printing, hotels, cinema production and exhibition, glass, wood, cotton ginning, leather and tanning industry. The wages were relatively higher in the capital intensive industries, *viz.*, engineering, chemicals and pharmaceutical. Cotton mills paid high wages for historical reasons.

In the unorganised sector average pa,y can be taken to be about Rs. 90 to Rs. 100 per month in January 1968. Wages of cotton mill workers inclusive of bonus vary between Rs. 237 and Rs. 270 depending on the company. Wages in the public sector, which employs about 33 per cent of the organised workers are around Rs. 160 per month. As for the rest, there is a dispersion of starting unskilled wages between Rs. 130 and Rs. 390. The majority of the workers in the private organised sector are in firms where the wages of the unskilled workers are between Rs. 180 and Rs. 250 per month. "Taking all these facts together, we estimate that the earnings differential between the organized and unorganized sectors is unlikely to be less than 100 per cent and could easily be as high as 150 per cent. If we also make some allowance for the present value of the employers' provident fund contributions and for the monetary value of various fringe benefits, we believe that 150 per cent provides the more likely figure."(Heather and Vijay Joshi, Surplus Labour and the City, p. 100.)

The cost of a worker to the employer is substantially greater than the worker's take home pay. This is on account of the employer's contribution to provident fund, medical insurance, privilege leave, etc.

Since 1968, the whole money-wage structure has shifted upward in pursuit of the cost of living index. By mid-1971, cotton mill workers and Government employees were getting about Rs. 30 per month more than the above-mentioned figures. Money wages in the unorganised sector also rose to some extent.

At the time of the Lakdawala Economic Survey (Prof. D. T. Lakdawala, Work, Wages and Well-being in an Indian Metropolis, Economic Survey of Bombay (1963).) (1958-59), the working class cost of living index for Bombay stood at about half its level in 1968. The regularly employed unskilled workers in textile mill received around Rs. 95 per month and the lowest pay in the organised sector seems to have been about Rs. 75 to Rs. 80. The earnings in unorganised occupations were well below this level, around Rs. 50 per month. The occupations with average earnings above Rs. 100 included taxi drivers (Rs. 185), panwallas (Rs. 119), goldsmiths (Rs. 108), tailors (Rs. 106), barbers (Rs. 108), self-employed milkmen (Rs. 129), hawkers and small shopkeepers. The average monthly earnings of predominantly unorganised occupations such as, potters, washermen, newspaper boys were between Rs. 75 and Rs. 80. The average earnings of unskilled workers in the public sector were higher, between Rs. 80 and Rs. 90. As per the Lakdawala Survey, the ratio of women's earning to men's earning was 80 to 90 per cent. As per the Balsara Survey conducted in 1963-64 the lowest regular wage in the organised sector was about Rs. 120.

As per the study of the Oxford Professors the wages of unskilled workers were Rs. 60 to Rs. 350 per month. Salaries in the public sector ranged upto Rs. 4000 per month and those in the private sector were much higher.

The numbers of relatively well-off income receivers were roughly one-fifth of all income receivers. Prices more than doubled, but only organised workers were cushioned against cost of living changes by the dearness allowance system. In the growing industries like engineering and pharmaceuticals unskilled real wages probably increased to some extent. In textile real wages were roughly constant. In other declining industries they may have fallen also. The distribution of the organised workers was changing in favour of the skilled intensive industries which could afford to pay higher wages. Real wages of organised unskilled workers in Bombay were roughly constant during the fifties and sixties. On the other hand the unorganised workers were increasing in number. It is very likely that without D.A. protection they lost in real terms.

Income per Head and Poverty: A somewhat systematic attempt to establish a poverty line was done by A. J. Fonseca in an attempt to calculate the need based minimum wages for industrial workers in various cities. This took rnto account the local cost of purchasing a prescribed diet and made certain conventional allowances for non-food expenditure. The requirements of a family of four, a male earner with wife and two children, in Bombay were calculated to be Rs. 240.88 in 1968. This meant a per capita expenditure of Rs. 60, As we have seen, many unskilled workers were getting less than this at that time although this poverty line is highly artificial and many people subsist with smaller incomes they do give some indications of the low level of living standards enjoyed by the majority of the city population. The following statement gives per capita income in the surveyed households in Bombay as per the Lakdawala Survey and the Balsara Survey:—

Rupees per capita per month (Current	Percentage on per		Person house per ca	hold
prices)	1955-56 1963-64		1955-56	1963-64
0—15	7.3	6.7	6.9	5.9
15—25	19.5(26.8)	17.8(24.5)	6.0	6.2
25—35	21.5(46.2)	15.0(39.5)	5.9	5.9
35—50	16.4(64.7)	17.9(57.4)	4.2	5.2
50—75	14.6(79.3)	14.8(72.22)	4.4	3.8
75—100	7.5(86.8)	8.3(80.5)	3.8	4.4
100—150	6.7(93.5)	9.0(89.5)	3.1	4.4
150—250	3.7(97.2)	5.9(95.4)	3.4	3.9
250	2.8(100.0)	4.6(100.0)	3.7	3.8
Average	Rs. 56.8	Rs. 70.0	4.7	5.0

The households with a *per capita* income of less than Rs. 60 per month were below the poverty line. The most unskilled workers in the organised sector fall below the need based minimum. Comparatively the workers from the unorganised sectors are below the need based minimum in larger numbers. We conclude that while some organised workers live at levels below the need based minimum, a greater proportion of unorganised workers exist at even lower levels.

Ever since the studies mentioned above there has been a tremendous rise in prices. The inflationary trend is so conspicuous that part from short-lived aberrations the prices are rising at a galloping speed. The cost of living index shows a progressive rise. Consequently, the real wages of the working class have tended to remain constant, in spite of rise in money wages. It is a sad fact that though a section of the working class enjoys the protection of dearness allowance linked to cost of living index, the protection is by no means sure and certain. In fact, there is corrosion of real earnings of the salaried class which forms the majority of the workers in Bombay. The inevitable consequence is the decline in the standard of living of a large section of the population.

MAHARASHTRA STATE GAZETTEERS



Sovernment of Maharashtra

GREATER BOMBAY DISTRICT

VOLUME III: 1986

PREFACE

I am very glad to bring out the E-book edition (CD version) of the Greater Bombay District Gazetteer published by the Gazetteers Department This CD version is a part: of a scheme of preparing compact discs of earlier published District Gazetteers.

Greater Bombay District Gazetteer was published in 1986-1987 in three volumes. It contains authentic and useful information on several aspects of the district and is considered to be of great value to administrators, scholars and general readers. The copies of this edition are now out of stock. Considering its utility, therefore, need was felt to preserve this treasure of knowledge, In this age of modernization Information and Technology have become key words. To keep pace with the changing need of hour, I have decided to bring out CD version of this edition that comprises of all the three volumes, with little statistical supplementary and some photographs, I am sure, scholars and studious persons across the world will find this CD immensely beneficial.

I are thankful to the Honorable Minister, Shri. Ashokrao Chavan (Industries and Mines, Cultural Affairs and Protocol), and the Minister of State, Shri. Rana Jagjitsinh Patil (Agriculture, Industries;-and Cultural Affairs), Shri. Bhaushan Gagrani, (Secretary, Cultural Affairs) and Government of Maharashtra for being constant source of inspiration.

Place, Mumbai

Dr. Arunchandra S. Pathak

Executive Editor and Secretary

January 2007

GENERAL ADMINISTRATION



Maharashtra State Gazetteers



INTRODUCTION

BEING THE CAPITAL OF THE STATE OF MAHARASHTRA, the Mantralaya, formerly known as Sachivalaya, the highest administrative organ of the State Government is located in Bombay. The State of Maharashtra is divided into six revenue divisions including the Konkan division. As such Bombay is also the headquarters of the Konkan division and the office of the Divisional Commissioner is located in New Bombay. It was formerly located in the City of Bombay. Greater Bombay has been termed as a district and has two Collectorates, one for the city and the other for the suburban areas. Thus, Bombay claims to be the headquarters of the State, the division and the district.

The traditional function of the Executive is to carry on the administration under the law. During the last few decades there has been an extension of responsibilities on the part of the executive from the maintenance of internal law and order, protection to person and property, raising of revenue for these purposes and the maintenance of social harmony for the promotion of public welfare in the widest possible sense of the term and provision of services to the public in every possible field. There has been shift of emphasis from the police state to a welfare state. Within the executive arm, it is possible to distinguish three elements. The first is the formation of policies and directing and determining repository of ultimate responsibility, *viz.*, the Governor and the Council of Ministers. The second is the secretariat machinery through which the Governor and the Council of Ministers make their orders and decisions articulate. The third is the manifold field organisation through which effect is given to these orders and decisions. In the following is given the description of the State Legislature, the Governor's establishment, the working of Mantralaya and the Collectorate of Bombay and Suburban District. The information about some of the Government offices which play some role in the administration is given in the Appendices I to VI to this Chapter.

STATE LEGISLATURE

The State has a bi-cameral legislature which consists of two chambers, the *Vidhan Sabha* (Legislative Assembly) and the *Vidhan Parishad* (Legislative Council). The former has 289 (Total number increased from 271 to 289 in 1978) members and the strength of the latter is 78. Of the 289 members of the *Vidhan Sabha*, 34 are from Greater Bombay. All Members of the *Vidhan Sabha* except one who is a nominated member are elected members. In Greater Bombay there were six Parliamentary Constituencies, viz., Bombay South, Bombay South-Central, Bombay North, Bombay North-Central, Bombay North-East and Bombay North-West.

The Speaker of the Legislative Assembly is elected in the first meeting of the Vidhan Sabha and his term is co-terminus with the *Vidhan Sabha*. The Chairman of the Legislative Council is elected from amongst the members on the expiry of the term of five years. The Speaker of the Legislative Assembly and the Chairman of the Legislative Council are the guardians and custodians of the rights and privileges of their respective Houses. In the absence of Speaker and Chairman, their duties are performed by the Deputy Speaker and the Deputy Chairman, respectively.

Bombay being the capital of the State, these two Houses are situated in the Fort area close to the Mantralaya. A separate Secretariat has been provided for the Legislature under Article 187 of the Constitution of India. In the Maharashtra State Legislature, there is a combined staff under the joint control of the Speaker and the Chairman. The *Vidhan Sabha* and *Vidhan Parishad*, which were formerly housed in Council Hall near the Museum since the beginning, were shifted to the newly constructed *Vidhan Bhavan* in the Back Bay Reclamation in May 1981. The *Vidhan Bhavan* is a magnificent modern building, a beautiful specimen of architecture. It has imposing halls, and it provides excellent amenities to the legislators.

The Legislature Secretariat consisted, during 1983-84, of two Secretaries, one Joint Secretary, five Deputy Secretaries, one Editor of Debates, one Librarian, two Research Officers, four Private Secretaries, four Assistant Secretaries, 16 Superintendents, and 44 Reporters. The number of non-gazetted staff was 386.

GOVERNOR

The Governor is the chief executive of the State and is the repository of the executive power of the State. He is required to exercise his functions with the aid and advice of the Council of Ministers, except in so far as he is by or under the Constitution required to exercise his functions in his discretion. Under the rules of business made by the Governor under Article 166(3) of the Constitution the business of government is allotted among the Ministers, and subject to the provisions of the rules and regulations issued thereunder, the business of government is transacted in the departments of the Mantralaya under the control of Ministers. The Governor is however kept informed of all decisions of the Council of Ministers relating to

the administration of the affairs of the State and proposals for legislation. In the event of failure of the constitutional machinery in the State and in case of constitutional deadlocks he may make a report to the President of India to enable the President to take action to ensure that the administration of the State is carried on properly. In such cases, the Governor can advice the President of India to take over the administration of the State, and he administers on behalf of the President with the aid of advisors appointed for the purpose. President's rule was imposed in Maharashtra for the first time in 1980 when the Governor had taken over the administration of the State.

In addition to his constitutional responsibilities the Governor is vested by the statutes governing the constitution of various universities in the State with the office of the Chancellor, and by virtue of holding this office, he exercises certain powers of appointment to offices in these universities and also certain other powers, including power to order inspection and issue directions.

The Secretary to the Governor heads the Governor's personal secretariat which handles the secretariat work pertaining to the Governor's office, including correspondence with Central and State authorities, high officials and private bodies and citizens, and arrangements for tours, visits to institutions etc. The office of the Secretary to the Governor includes one Secretary, one Military Secretary, one Deputy Secretary, one Staff Officer, two Under Secretaries, one Private Secretary, one Additional Private Secretary, two Superintendents and one Accounts Officer. The non-gazetted staff numbered 49 in 1983-84. The household of the Governor is under the Comptroller who is responsible for the maintenance of the Raj Bhavan estates at Bombay, Pune and Nagpur for the reception of State Guests, and for arrangements in connection with parties, entertainments and other functions. The office of Comptroller includes one Comptroller, one Additional Comptroller, two Aid-de-Camps to Governor and one Personal Assistant. During 1983-84 there were 155 non-gazetted persons working in the office of the Comptroller.

The Raj Bhavan formerly called the Government House is situated in the beautiful and exhilarating environs of the Malabar Hill, on the edge overlooking the Arabian sea. There are magnificent halls and luscious gardens and lounges. In British days the present Government House was a summer resort of the Governor, while the Government House was situated at Parel in the premises of the present Hafkine Institute. The Government House was shifted to Raj Bhavan in 1885.

MANTRALAYA

The Mantralaya formerly known as the Secretariat or the Sachivalaya is the highest administrative organisation of the Government of Maharashtra.

There is a Council of Ministers formulated from time to time under the Constitution of India. The Chief Minister is the head of the entire State Government machinery. He executes his mammoth functions with the help of Ministers, Ministers of State and Deputy Ministers, their number depending on the choice of the Chief Minister.

The business of government is transacted in the departments of the Mantralaya under the control of the Ministers concerned. This applies only to those aspects of Government business which require the attention of the central executive of the State, since the business is transacted in the numerous other large and small directorates throughout the State. The main functions carried out by the Mantralaya consist among other things of the formation of policy in matters within the constitutional responsibility of the State Government; the framing of new legislations or amendments of existing ones; framing of rules, regulations, orders in exercise of powers conferred by law; issue of instructions, directions and advice to subordinate authorities regarding the action which they are to take; exercise of supervision, direction and control over the executive administration; collection of information required for answering questions in Legislature and in general needed for justifying the policies and actions of Government before Legislature; financial and budgetary control over the activities of subordinate authorities, dealing with Government of India and its offices operating within the territory of the State, with other all-India authorities and with other State Governments; and disposal of appeals, representations and complaints from members of public.

Upto 1758 the. Secretariat of the Bombay Presidency Government occupied certain rooms in the Bombay Castle. In 1874 it was transferred to the Old Secretariat building (*Information about the building is given in Chapters 2 and 19.*) where it continued to function upto 1955 when it was finally shifted to the present building. The main building of the Mantralaya was constructed in 1955 at a cost of Rs. 63,80,219, while the cost of annexe building was Rs. 1,23,79,234. It was completed in 1960. The nomenclature of the Secretariat commonly referred to as the Sachivalaya was changed in January 1976 to Mantralaya.

Under the Rules of Business, the working of the Mantralaya is carried out through various departments. These are:—General Administration; Home; Revenue and Forests; Agriculture and Co-operation; Education and Employment; Urban Development; Public Health; Finance; Public Works; Housing and Special Assistance; Irrigation; Law and Judiciary; Industries, Energy and Labour; Rural Development; Food and Civil Supplies; Planning; Social Welfare, Cultural Affairs, Sports and Tourism; Legislative Affairs; Medical Education and Drugs; Horticulture and Social Forestry; and Tribal Development. The entire business of Government is distributed among these departments but some of these departments do not constitute self-contained ministries. They are merely branches of an organisation which is essentially unitary in structure.

Though each department is under the control of a Secretary to the Government, the Chief Secretary, who is also Secretary to the General Administration Department and *ex officio* Secretary to the Cabinet, has overall authority. Important cases from various departments are submitted to the Chief Secretary by the department concerned before taking orders of the Government. He is also the head of the State Service, and all service matters arising in various departments are decided in consultation with him. The Chief

Secretary further acts as a co-ordinating authority by presiding at meetings of Secretaries and by deciding interdepartmental differences. He also acts as the Development Commissioner for the State. The Additional Chief Secretary is next in hierarchy to the Chief Secretary, and is vested with important policy matters and administrative functions which are not dealt with by the Chief Secretary.

The Mantralaya is concerned mainly with the broader aspects of administration. The responsibility for execution of the policies is entrusted to the heads of departments and their subordinate field staff including technical experts. Each department of Mantralaya is under the control of a Secretary (Some departments have two or three Secretaries, while a few are headed by a Special Secretary.) to Government who is immediately responsible to the Minister. There may, in addition, be an Additional Secretary or a Joint Secretary. Every department has a few Deputy Secretaries of the rank of Collector. Below the Deputy Secretaries are Under Secretaries, who are assisted by Assistant Secretaries and Superintendents. In 1950 the former Secretariat had 109 gazetted officers and a non-gazetted staff of 1,717. This strength increased to 303 officers and 3,111 non-gazetted persons in 1968. In 1978 the Secretariat had 16 departments with a staff strength of 945 gazetted officers and 4,343 non-gazetted persons.

The departmentwise staff strength of Mantralaya as in February 1984 is shown below:-

	Department	Special	Joint	Under	Class II	Class III	Class IV
		Secretary / Secretaries	secretaries, Deputy Secretaries and Officers of equivalent rank	Secretaries and Class I Officers	Officers	Employees	Employees
1.	Agriculture and Co operation.	3	13	25	54	366	73
2.	Education and Employment.	1	6	17	45	224	40
3.	Finance	4	11	22	83	348	85
4.	Food and Civil Supplies	1	4	8	19	141	26
5.	General Administration	3	11	32	56	397	86
6.	Home	3	12	11	49	312	N.A.
7.	Horticulture and Social Forestry.	1	3	3	7	31	11
8.	Housing and Special Assistance.	2	4	8	20	118	26
9.	Industries, Energy and Labour.	3	6	11	28	168	N.A.
10.	Irrigation	2	19	25	71	352	N.A.
11.	Law and Judiciary	2	22	21	26	185	N.A.
12.	Legislative Affairs	1	1	1	5	19	4
13.	Medical Education and Drugs.	1	5	7	12	92	20
14.	Planning	2	6	11	52	110	43
15.	Public Works	2	7	12	55	275	80

	Department	Special Secretary / Secretaries	Joint secretaries, Deputy Secretaries and Officers of equivalent rank	Under Secretaries and Class I Officers	Class II Officers	Class III Employees	Class IV Employees
16.	Public Health	1	6	16	10	120	22
17.	Revenue and Forests	4	9	20	72	349	65
18.	Rural Development 	2	8	21	64	275	49
19.	Social Welfare, Cultural Affairs,Sports and Tourism.	1	4	8	22	100	18
20.	Tribal Development	1	2	-5	11	50	11
21.	Urban Development	1	6	7	25	112	25
		41	165	291	686	4,144	684

The old branch system in Mantralaya departments was replaced by the Desk Officer system in 1975 under which each section is put under a Desk Officer.

DIVISIONAL COMMISSIONER

The State of Maharashtra is divided for the purpose of administration and revenue into six territorial divisions including the Konkan division. The jurisdiction of the Commissioner of Konkan division extends over five districts including Greater Bombay. The Commissioner exercises general control over the administration in all matters. He is invested with wide powers and functions embodied in different acts, codes, manuals, government circulars, etc. He gives co-ordination visits to the offices with particular reference to planning and development.

The office of the Divisional Commissioner formerly housed in the Old Secretariat building has been shifted to Vashi, New Bombay.

COLLECTOR

The first appointment of the Collector of Bombay appears to have been made about the year 1715. He was then called "the Collector of the Honourable Company's Rents and Revenues "and was responsible for the collection of salt and excise revenue. His designation under the Regulation Act, 1827 was changed to "Collector of Bombay ". In 1828 the Land Revenue and Sea Customs departments were consolidated with separate establishments and the officer was styled as "Collector of Customs and Land Revenue, Bombay ".

The Collector of Bombay who is also the Collector of the Bombay Suburban District is directly under the Revenue Department of the Mantralaya, but he, like other Collectors of districts, also works under the general control of the Divisional Commissioner.

Greater Bombay occupies a peculiar position in the administration of the State. The city constitutes for purposes of revenue administration a separate collectorate which is not included in the Konkan division. The suburban area which was amalgamated with the city for the purpose of judicial, police and municipal administration constitutes a district called the Bombay Suburban District which is included in the Konkan division. The two collectorates are held by the same officer who is under the Divisional Commissioner only in the capacity of Collector, Bombay Suburban District.

The existence of two collectorates in Greater Bombay is the result of historical circumstances. The city as a presidency town had in the matter of judicial, police and revenue administration a bet-up which was radically different from that in other parts of the State. In matters of revenue administration in particular, the city was not governed by the provisions of the Bombay Land Revenue Code, 1876, but by a separate statute applicable only to the city. When the suburban area was unified with the city, it continued to be governed under the provisions of the Bombay Land Revenue Code, 1876 and therefore for purposes of revenue administration a separate collectorate had to be retained.

The powers of the Collector of Bombay are somewhat different from those of other Collectors in as much as he does not exercise powers of a District Magistrate under the Code of Criminal Procedure or the Bombay Police Act, 1951, as these powers have been vested in the Commissioner of Police and in the Chief Metropolitan Magistrate. In several respects the Collector is responsible for the administration of statutes which operate in Bombay city only. In several matters the Collector functions as a single authority with jurisdiction over Greater Bombay. Such matters include administration of the Bombay Entertainment Duty Act, 1923; the Bombay Betting Tax Act, 1925; the Bombay Lotteries, Prize Competitions Control and Tax Act, 1948; the Requisition and Acquisition of Immovable Properties Act, 1952; the Land Acquisition Act, 1948; and the collection of dues from various departments of Government including sales tax and income tax.

The Collector is assisted by a Resident Deputy Collector for the city and an Additional Collector in the grade of Deputy Collector for Bombay Suburban District. The Resident Deputy Collector in addition to supervising various sections of the Bombay City collectorate functions as a controller of hotels and lodging houses in Greater Bombay and also as registration officer for preparation of electoral rolls for elections to Parliament and State Legislature. The Additional Collector assists the Collector in administration of the Bombay Land Re\enue Code and the Bombay Tenancy and Agricultural Lands Act which is applicable to a few villages in the district. As a result of rapid industrialisation of the suburban area and the rapid growth of population resulting from this industrialisation, there is a good deal of land acquisition work in the suburban area. Special officers have been appointed to deal with the acquisition cases for the State Government, the Central Government, the Bombay Housing and Area Development Board, the Municipal Corporation, the Railways as well as industrial concerns and public bodies.

For the city of Bombay there is a special officer designated as the Superintendent, Bombay City Survey and Land Records with staff of surveyors, draftsmen, etc. having responsibility of maintaining land records and survey of lands. The collection of entertainment duty in Greater Bombay is the responsibility of a supervisor. The rest of work pertaining to the Bombay city coUectorate is performed under the control of the Resident Deputy Collector in 12 sections or branches. The Additional Collector for income is by assisted а head clerk and Collector Mamalatdar.The for assisted Deputy sales tax recovery is by three Mamalatdars. The establishment of the Bombay Suburban District Collectorate which is separate from that of the Bombay city coUectorate includes field staff for three talukas into which the district is divided viz., those of Andheri, Borivali and Kurla. Each of these talukas has been placed in charge of a Mamaltdar. (There are a few more Mamlatdars for other functions.)

The Collector of Bombay is the Chairman of the Bombay City Sainik Board, and the District Anti-Corruption Committee for Greater Bombay which devises and takes concerted measures to eradicate corruption from the administration. The Collector is also an *ex officio* chairman of the board of management of the properties of the Indian Institute of Science, the Bombay Christian Burial Board and the Regional Employment Advisory Committee. He is a member of the board of trustees of the Prince of Wales Museum, the prohibition committee, the regional telephone advisory committee, the development plan committee, the Beggar's Act advisory committee and the committee of management of the Victoria Memorial School for the Blind.

ADMINISTRATIVE STAFF COLLEGE

(The college has now been reorganised and expanded to meet the growing needs of a developmentoriented administrative machinery. It is named as the Maharashtra Institute of Development Administration (MIDA) and shifted to Pune in May 1984.)

With the assumption of welfare and development activities leading to rapid social and economic change, public administration became more and more complex. It is now realised that for good administration experience alone is not enough, but a systematic training in the art and science of administration is also necessary. The administration is becoming an expert profession and professional training in administration has become absolutely essential. With this realisation, the Administrative Staff College was established.

The college situated in the Fort was started in 1963 in pursuance of a recommendation made by the Administrative Reorganisation Committee to the effect that a new agency may be set up for imparting training in administrative matters to Government servants holding posts involving administrative responsibilities and for supervising, developing and co-ordinating training activities of the various Government departments. During the period 1963-1974, as many as 95 programmes were arranged and 2,316 officers were trained, thus giving an average of 8 programmes with 193 officers per year. The cost of training per day per officer was Rs. 56. During 1982-83, 65 programmes were arranged and 2,364 officers were trained.

The college has made arrangement since 1974-75 for imparting training in Marathi for probationers whose mother-tongue is not Marathi. Earlier this work was entrusted to the Deccan College at Pune.

APPENDIX I MAHARASHTRA PUBLIC SERVICE COMMISSION

The Maharashtra Public Service Commission constitutes an important organ in General Administration of the State as it performs the function of recruitment of personnel in public services. It is established under the Constitution of India since 1950. A Public Service Commission was first established by the Bombay Government in April 1937, with functions similar to those at present entrusted to that body.

Until July 1947 the Commission served the needs of the Province of Sind in addition to those of the Province of Bombay. On 1st August 1947 a separate Public Service Commission was established for Sind, and the Bombay Sind Public Service Commission was reconstituted, on that date into the Bombay Public Service Commission. On the coming into operation of the Constitution of India on 26th January 1950 this body was continued as the Bombay Public Service Commission for the State. After bifurcation of the bilingual State on May 1, 1960, it was renamed as the Maharashtra Public Service Commission.

Besides recruitment and other allied functions for the State Government, the Commission is also entrusted with the functions of recruitment to the posts under the Bombay Municipal Corporation carrying a pay of Rs. 1,200 or more and also the Bombay Electric Supply and Transport Undertaking carrying a pay of Rs. 750 or more.

The Commission consists of a Chairman and four other members appointed by the Governor. The Secretary heads the office of the Commission assisted by one Deputy Secretary and Controller of Examinations, two Deputy Secretaries, eight Under Secretaries and some other officers. The non-gazetted staff in 1982-83 numbered 157.

The work done by the Commission in 1977-78 and 1983-84 is shown below:—

TABLE NO 1
RECRUITMENT BY SELECTION (BY INTERVIEW)

Sector	Year	Posts to be filled		Applications received	Candidates	No. of candidates recommended
State Government	1977- 78	<mark>1,94</mark> 3	1,237	7,070	2,925	979
	1983- 84	1,353	246	5,106	818	213
Bombay Municipal Corporation.	1977- 78	162	36	94	51	19
	1983- 84	46	20	176	69	15
Bombay Electric Supply and	1977- 78	3	1	3	2	1
Transport Undertaking.	1983- 84	2	2	25	10	2

TABLE No. 2
RECRUITMENT BY COMPETITIVE EXAMINATIONS, 1982-83

	Category	No of vacancies	No.of candidates applied	appeared		interviewed	Candidates qualified in final result	
1	Gazetted Posts Non- technical (Preliminary)	209	21,702	15,323	3,846			
2	Range Forest officers	90	2,094	1,564	99	96	96	65
3	Asstt. Conservator of Forests	38	2,375	2,012	164	145	38	38
4	Assistants/ Sales tax Inspectors	100	8,095	5,610	647	665	403	100
5	Examination for Clerks / Clerk- Typists/Typists	800	51,696	41,069	1,681			800

TABLE No. 3

PROMOTIONS, APPOINTMENTS BY TRANSFER AND REEMPLOYMENT, 1977-78 AND 1982-83

		Referre	Referred A		d	Backlo	g
Sector	Year	No.of appointments	No.of officers	No.of appointments	No.of officers	No.of appointments	No.of officers
State Government	1977-78	1,057	1,231	681	765	376	466
Government	1982-83	2,828	3,455	727	847	2,101	2,608
Bombay Municipal	1977-78	259	304	169	188	90	116
Corporation.	1982-83	327	439	292	324	35	115
Bombay Electric	1977-78	16	27	10	14	6	13
Supply and Transport Undertaking.	1982-83	128	271	123	266	5	5

APPENDIX II

MAHARASHTRA REVENUE TRIBUNAL

It is a quasi-judicial body constituted from 1st April 1937. The Bombay Revenue Tribunal Act was enacted in 1939 which was later on replaced by the Bombay Revenue Tribunal Act, 1957, and the same has been incorporated in the Maharashtra Land Revenue Code of 1966 with suitable changes.

The Tribunal has headquarters in Bombay and has regional benches at Bombay, Pune, Nagpur, Aurangabad and Kolhapur. Appeals and revision applications filed before different regional benches are heard by this Tribunal.

The President of the Tribunal is of the rank of a High Court Judge. The Tribunal at present consists of 12 non-official members. The Bombay regional Bench has 3 non-official members. The work done by the Tribunal during 1983-84 is shown below:—

REVISION APPLICATION / APPEALS UNDER VARIOUS ACTS

araontro	Tenancy Act	Celing Act	Restoration of Lands to S.T Act 1974	Other cases	Total
1.Opening balance as on 1st April 1983	361	29	85	61	536
2. Instituted during the year	159	9	35	7	210
3.Disposal during the year	124	4	29	60	217
4.Pending at the year end	396	34	91	8	529

APPENDIX III

DIRECTORATE OF LANGUAGES

To achieve the objective of introduction of Marathi as the official language of the State, the Directorate of Languages was established in 1960. It has been entrusted with the following functions:—

(1) to develop administrative, legal and technical terminology in Marathi; (2) to translate manuals and forms into Marathi; (3) to translate ordinances, rules, laws into Marathi; (4) to translate all budget publications, reports of various committees into Marathi, (5) to conduct language examinations for attainment of proficiency in Marathi and Hindi for Government Servants not knowing those languages; and (6) to conduct Marathi typewriting and Shorthand examinations.

The Directorate is working upon a scheme of translating Central Acts into Marathi. So far 82 Acts have been published under this scheme. The Directorate has brought out many dictionaries called *Paribhasha Kosha*, 17 manuals and also 14 glossaries of scientific and technical terms.

The Director is the head of the organisation and he is assisted by one Joint Director, four Deputy

Directors, four Divisional Assistant Directors, six Assistant Directors, ten Language Officers and a non-gazetted staff of 127 (1983-84).

APPENDIX IV STATE BOARD FOR LITERATURE AND CULTURE

For the purpose of encouraging research in Marathi literature, culture and other fields, the State Government established this Board in 1960. However, from December 1980, it was bifurcated into two bodies, *viz.*, State Board for Literature and Culture and the Maharashtra State Board for Production of Marathi Vishvakosha.

The functions of the Board are to initiate, assist or undertake research schemes in the field of languages, culture and history of Maharashtra; publication of scholarly Marathi literature by scholars and translation of important books into Marathi. In addition, the Government has from 1978-79 entrusted to the Board a scheme for giving incentives to promising authors in Marathi and accordingly the Board has helped 589 such authors. So far 320 books have been published under this scheme. The Board also gives grant-in-aid to reputed institutions for publication of magazines.

The statistics of activities of the Board during 1982-83 are given below:—

	Books on Science	Transla- tion of classics	Publication of Historical records	Books on Fine Arts
(1) No. of authors who approached Board with publications or those who have been given written assignment.	10	32	5	6
(2) No. of publications rejected	3	17		
(3) No. of publications accepted	7	15	5	6
(4) No. of publications brought out	4	10	2	5
(5) Total pages	1,530	3,200	780	930
(6) Production cost (Rs.)	60,022	1,60,000	39,069	45,000
(7) Remuneration-				
a) No. of authors	4	10	4	5
(b) Amount paid (Rs.)	17,784	32,000	11,349	4,660

APPENDIX V MAHARASHTRA STATE BOARD FOR PRODUCTION OF MARATHI VISHVAKOSHA

This Board came into existence in December 1980 when the former State Board for Literature and Culture was bifurcated into two wings *viz.*, the Maharashtra State Board for Literature and Culture and the Maharashtra State Board for Production of Marathi Vishvakosha.

The main activity of the Board is the compilation of the *Vishvakosha* on the lines of the *Encyclopaedia of Britanica* in 20 Volumes of about 1000 pages each. The editorial work of *Vishvakosha* is carried on at the Vishvakosha unit, at Wai (Satara District) under the supervision of a Chairman helped by editorial staff.

The Board published 8 volumes upto 1982-83.

APPENDIX VI

The following statement gives the number of State Government employees in Greater Bombay:—

Particulars	No. as on 1st July 1981
Class I and II	4,833
Class III	56,577
Class IV	18,169
Others	8,666
Total	88,245

REVENUE ADMINISTRATION



Maharashtra State Gazetteers

THIS CHAPTER DESCRIBES IN BRIEF THE FUNCTIONS OF VARIOUS GOVERNMENT DEPARTMENTS ENTRUSTED with collection of revenue and also gives their historical resume. The description of some of the departments is given below.

LAND REVENUE

(For detailed history of Land Revenue refer Gazetteer of Bombay City and Island, Vol. II, 1910.)

Of the system of administration during the epoch of Hindu and Musalman sovereignty no record remains, save the remarks of a few Portuguese writers to the effect that land was rented annually for a fixed sum of money during the period of Musalman rule and this system might have been in vogue at the time of Raja Bimb. When Portuguese obtained possession of the islands they found a land system resembling that which had obtained in Goa. They styled the system *arrendamento* i.e., hiring or renting.

Between 1664 and 1668, while Bombay was under the Crown the attempt to inquire into titles and assess the land-holders caused such serious injustice and discontent that the East India Company instructed their President to forego inquiry into title and in conjunction with the landholders to fix a lump sum as their rent payment, leaving their senior land holders to allot his share to each individual holder. From 1674 onwards as population increased Crown lands were assigned for their accommodation. The building of houses and warehouses was allowed on a lease for a period not exceeding 61 years at moderate quit rent payable half yearly. Marshy lands were drained and rendered fit for cultivation and given on lease. Another important event in connection with the land administration of Bombay was the seizure of lands of the Jesuits who had assisted the Siddi while he was on the island of Bombay. Some of the forfeited lands were in 1694 restored to the proprietors on their paying 1/4 th of value of their estates, after a period varying from 4 to 8 months. After the war many estates were left tenantless. These were assigned to the Hindu soldiers who were placed on half pay but had to remit half the produce of those lands to the Company. A considerable portion of Crown lands had been alienated by the year 1707-08.

The War with Siddi created a new class of tenants who held land on' lease. But there was great default in the payment of revenue and various expedients, such as boat tax in 1684 and a house tax in 1688, were introduced for keeping up the revenues of the islands. In 1718 quit-rent was imposed to reimburse the Company for the charges they were put to for fortifications.

The lands however did not appear to have been allotted on any established system. There was not a single square yard of Crown landupto 1731 leased on conditions clearly descriptive of the nature of tenure or of the intentions of the parties. In 1731 and at intervals throughout succeeding years attempts were made to establish the Crown ownership of land then occupied, to preven' irregularity in collection of quit and ground rent. The land revenue collection about the close of this period was: ground and quit rent, Rs. 5,787; pension, Rs. 7,454 and batty ground Rs. 10,085.

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Attempts were made to reclaim land from sea, lands so recovered being assigned to individuals at a nominal rental on condition of their improving them. These lands were known as salt batty grounds. Regular leases were introduced in 1758 and measures were pursued to ascertain and preserve the rights of public. In order to reimburse expenses which Company had incuired in increasing the fortifications and the works on the islands for the security of inhabitants in general tax was ordered in 1758 to be levied on produce of all landed estates. With this arrangement there was a considerable improvement in the revenue of the islands as in 1750-51 total land revenue was Rs. 21,299 which increased to Rs. 29,297 in 1760-61.

Between 1760-1800 many important events in connection with land administration took place such as survey proposals in 1772, grants of land to noteworthy persons, purchase of lands for public purpose and Government buildings, etc.

The earliest legislation for the purpose of administering land revenue *w* Bombay was Regulation XIX of 1827. This Act was repealed and superseded by the Bombay City Land Revenue Act, 1876. Under this Act the Collector of Bombay was the chief controlling authority in all matters connected with land revenue. The survey of 1811-27 introduced order by removing chaos prevailing since 1803. Finally in 1827 rules for assessment and collection of land revenue were passed and these formed the basis of the Bombay City Land Revenue Act of 1876. The Act was later modified in 1900.

For each of the several items of land revenue denominated pension and tax, quit and ground rent, foras, toka, etc., there was a separate rent roll showing name of each holder and amount due by him. The practice to collect land revenue through the receivers was abolished in 1880 and the holders themselves were required to bring their dues to the Collector's office.

The land revenue was divided into fixed or permanent and fluctuating or miscellaneous. In 1841-42 fixed land revenue was Rs. 65,893 which increased to Rs. 84,569 in 1871-72.

SALES TAX DEPARTMENT

One of the major sources of income of the State today is the sales tax collection. Sales tax though introduced recently is not new to the financial administration of the State, and we find innumerable references to taxes collected on the sale of commodities during the mediaeval and Maratha times.

The heavy trade and commercial activities in Greater Bombay result into major collection of sales tax, as out of Rs. 386.79 crores of total sales tax collection in the entire State during 1975-76, the Bombay city division alone contributed Rs. 301.61 crores. Another factor to be noted in this connection is that a separate division exists for the city area manned by a sufficient number of personnel.

Sales tax was first introduced in the former Bombay Province in 1946. The tax levied under the Bombay Sales Tax Act, 1946, was a single-point tax levied at the last stage of chain of sales from a manufacturer or importer to the consumer. However, during the last few years this levy of sales tax has undergone many changes. In 1952, the single-point levy was replaced by a multi-point levy which continued to be in force upto 1954. From 1954 to 1959 the city alongwith the surrounding regions had a scheme of taxation popularly known as the two-point levy of tax. The system of sales tax under the Bombay Sales Tax Act, 1959, is a composite system consisting of three kinds of taxes.

These are sales tax, general sales tax and retail sales tax. Sales tax is levied at the point of the first sale of any goods by a registered dealer in the State the susbequent release of the said goods not being taxed again. General sales tax is levied at the last stage of sale by the wholesaler to a retailer or to a consumer. Retail sales tax is levied on retail dealers.

Liability to pay Tax: For the purpose of fixing the minimum turnover of sales/purchases for liability to pay tax all dealers are classified into two broad categories *viz.*, importers and manufacturers, and dealers other than importers and manufacturers. An importer attracts liability to pay tax on his turnover either of all sales or purchases in a year exceeding Rs. 10,000, provided that (a) the value of taxable goods sold or purchased by him during a year is not less than Rs. 2,500; and (b) the value of any goods whether taxable or not brought by him into the State or dispatched to him from outside the State during a year is not less than Rs. 2,500. A manufacturer is liable to pay tax on his turnover of all sales/purchases during a year exceeding Rs. 10,000 provided that (a) value of taxable goods sold or purchased by him during a year is not less than Rs. 2,500, and (b) value of goods taxable or not, manufactured by him during a year is not less than Rs. 2,500.

The dealers other than the above two categories are liable to pay tax on turnover of all sales/purchases in a year exceeding Rs. 30,000 provided the value of taxable goods sold/purchased by them during a year is less than Rs. 2,500. In addition to the liability to pay sales tax, general sales tax, retail sales tax and purchase tax as stated above from April 1974, dealers liable to pay tax as above, whose turnover either of sales or purchases exceeded ten lakhs of rupees in a year, the tax payable by him is increased by the levy of an additional tax at the rate of 6 per cent of the tax payable by him for that year.

Types of Documents: A dealer who is liable to pay tax is required to obtain a registration certificate under the Bombay Sales Tax Act, 1959. In addition to this, a dealer may obtain different documents such as licence, authorisation, recognition and permit.

A holder of licence is entitled to make purchases of goods free of general sales tax in schedules B, D and E of the Bombay Sales Tax Act, 1959 for the purpose of resale inside the State or in the course of inter-State trade or for export outside India within nine months from the date of purchases. A holder of an authorisation can purchase any goods free of tax for the purpose of resale in the course of inter-State trade or for export outside India within nine months from the date of purchase. An authorised dealer can also make purchase of goods at a concessional rate of 4 per cent for the purpose of sale at his place of business outside the State for which he is registered under the Central Sales Tax Act, 1956.

A dealer holding recognition can purchase the goods specified in his recognition at the concessional rate of sales tax at 3 per cent for the purpose of use in the manufacture of taxable goods in the State for sale or for use in packing of any goods so manufactured. A permit holder can also make purchases on behalf of his principal who is outside the State at a concessional rate of 4 per cent provided the principal is registered under the Central Sales Tax Act, 1956.

Ordinarily dealers are required to furnish returns for each quarter of a year. However, in the last quarter of the financial year, they have to furnish monthly return. The Commissioner of Sales Tax, however, exempts a section of dealers to furnish quarterly returns if they fulfil certain requirements under the rules. Before furnishing the returns, a dealer is required to pay into the treasury the amount of tax payable according to the return and attach a copy of the chalan. Provision has been made requiring dealers whose turnover of sales/purchases exceeds Rs. 10,00,000 in the previous year to make monthly payment of tax on the basis of average of previous year.

The following statement shows the number of registered dealers in the Bombay City Division registered under the Bombay Sales Tax Act, 1959:—

Name of Ward	Year					
	1960-61	1965-66	1970-71	1975-76		
А	5,951	8,641	8,965	10,049		
В	8,728	8,107	10,634	12,254		
С	7,618	9,896	12,298	16,031		
D	2,573	6,527	8,616	10,440		
E	2,787	3,930	5,273	6,767		
F	1,750	2,565	3,992	5,809		
G	2,289	3,429	5,165	7,105		
H and I	3,473	6,261	13,545	25,656		
Total	35,169	49,356	68,488	94,311		

During 1980-81, there were 1,32,587 registered dealers in Bombay City Division.

Thus it can be seen from the above statement that there is a considerable increase in the number of registered dealers since 1960-61. In 1955-56, there were only 28,424 registered dealers registered under the Bombay Sales Tax Act, 1953 in the city and suburbs of Bombay then included in Bombay Circle. Out of a total of 65,337 registered dealers in the State in 1960-61, Bombay City Division alone claimed 35,169 dealers. The same increasing trend in the number of dealers was noticed in 1970-71 when out of 1,30,344 registered dealers in the State there were as many as 68,488 registered dealers in Greater Bombay.

As regards dealers holding different documents under the Bombay Sales Tax Act, 1959, the position since 1960-61 for a few years was as below:—

	No. of dealers holding					
	Licence	Authorisation	Recognition	Permit		
1960-61	10,289	6,672	6,193	915		
1965-66	10,717	7,876	7,637	648		
1970-71	12,145	8,717	7,440	559		
1975-76	13,898	10,148	9,556	439		
1980-81	18,904	15,577	11,402	461		

The number of registered dealers under the Central Sales Tax Act, 1956 in the Bombay City Division is shown below for a few years since 1960-61:—

	Year							
uasi	1960-61	1965-66	1970- 71	1975-76	1980-81			
Bombay City Division	21,548	35,318	45,997	63,136	94,097			
State of Maharashtra	36,846	54,640	73,577	1,00,637	1,49,605			

The department administers the Bombay Sales Tax Act, 1959; the Central Sales Tax Act, 1956; the Bombay Sales of Motor Spirit Taxation Act, 1958; the Maharashtra Purchase Tax on Sugarcane Act, 1962 and the Maharashtra Agricultural Income Tax Act, 1962. The number of dealers registered under various Acts in Greater Bombay during 1980-81 is shown below:—

Dealers registered under—

 a. Bombay Sales Tax Act, 1959
 ..
 1,32,587

 b. Central Sales Tax Act, 1956
 ..
 ..
 94,097

 c. Motor Spirit Taxation Act, 1958
 ..
 ..
 290

Organisation : The entire State of Maharashtra, for the purpose of sales tax is divided into three main territorial divisions, of which one division, viz., Bombay City Division looks after the work of Greater Bombay area. The Commissioner of Sales Tax is the statutory head of the Sales Tax Department. The Bombay City Division is divided for the proper administration of work into ranges and the ranges are subdivided into wards. In the city, due to the comparatively large volume of work, the divisional functions have been divided into eight administrative units, two for enforcement, and one each for appellate, computer, professional tax, legal, accounts and headquarters. During 1980-81 there were 16 Deputy Commissioners of Sales Tax, of whom eight were entrusted with administration, two with enforcement, one each for headquarters, appeals, computer, professional tax, legal and accounts matters. The Assistant Commissioners of Sales Tax put in charge of ranges numbered 68, of whom 41 were entrusted with administrative work, 7 with legal, 7 for headquarters, 5 with enforcement, four for accounts, 3 with professional tax and one for computer work. The Sales Tax Officer is the original assessing authority under the Act. He is assisted by Sales Tax Inspectors to whom the work of verification of returns furnished by dealers is entrusted.

Enforcement Work: In Bombay it was found necessary to create a special enforcement branch for the detection of evasion of tax and for intensive action against tax evaders. The branch receives a great deal of information relating to malpractices of dealers who carry on business without registration although liable to pay tax, or indulge in various types of malpractices or otherwise wrongfully exploit the provisions of the Sales Tax Laws for unlawful gains. The branch works under the direct control of two Deputy Commissioners of Sales Tax, assisted by 10 Assistant Commissioners.

During 1970-71, 37,776 cases under the Bombay Sales Tax Act were detected and prosecution was launched in respect of 336 eases. Under the Central Sales Tax Act, 13,811 cases were detected and prosecution was launched against 35.

Sales Tax Collection: The revenue realised under various Acts in the Bombay City Division along with the total collection in the State is shown below:—

		Revenue	realised	
Particulars	1960-61	1970-71	1975-76	1980-81
	(Rs.in	lakhs)	(Rs.in	crores)
Bombay Sales Tax Act—				
Bombay City division	1,806.67	8,855.04	197.18	384.49
Maharashtra State	2,293.84	11,156.61	247.76	505.09
Central Sales Tax Act—				
Bombay City Division	413.28	3,249.82	71.94	153.56
Maharashtra State	469.15	3,791.84	86.29	189.79
Motor Spirit Taxation Act—				
Bombay City Division	248.78	922.94	22.24	48.03
Maharashtra State	249.05	922.95	22.24	48.03
Purchase Tax on Sugarcane Act—				
Bombay City Division	Nil	60.95	1.58	0.16
Maharashtra State	Nil	453.60	17.12	17.62
Maharashtra Agricultural Income Tax Act—				
Bombay City Division	Nil	2.85	0.26	
Maharashtra State	Nil	5.13	0.29	0.23

The Sales Tax Department has been entrusted with the work regarding the collection of profession tax recently levied. The collection for a few years is shown below:—

Particulars	1975-76	1980-81 (Rs. in crores)
<i>Profession Tax Act -</i> Bombay City Division	8.41	16.81
Maharashtra State	13.09	31.56

Maharashtra Sales Tax Tribunal: Revenue from sales tax constitutes a major source of revenue for the State. Sales Tax is collected by the Sales Tax Officer who passes an assessment order. An appeal against this order is made to the Assistant Commissioner of Sales Tax. In order to provide a legal remedy

and relief to those tax payers who feel aggrieved, the Sales Tax Tribunal has been constituted.

The Tribunal is a judicial tribunal which was constituted in 1947 under the Bombay Sales Tax Act, 1946. The majority of the members are from judiciary and this inspires due confidence in the tax payers by assuring them that their grievances against the Sales Tax Authorities are redressed quickly and due relief is obtained. It is a final judicial authority in sales tax matters which hears appeals and revisions against the orders of the Assistant Commissioners of Sales Tax. A reference could be made to the High Court on a question of law.

The procedure followed by the Tribunal is generally similar to the one prescribed in the Civil Procedure Code for hearing appeals, revisions and references. It has power of granting stay of recovery of taxes. The working of the Tribunal is so arranged that there is no inconvenience to litigants staying in different parts of the State, although the Tribunal is situated at Bombay. This is done by one or more benches of this Tribunal holding its sittings periodically at the regional headquarters. Thus every region of the State gets the advantage of a sitting, hearing and disposal of matters within the region by a Bench of the Tribunal.

Members of the Tribunal are drawn from the judiciary and include a Senior Deputy Commissioner of Sales Tax as departmental member. The members sit in Benches as {I) President—a High Court Judge, constituting one Bench, and (2) out of the remaining members, one judicial member, usually a District Judge and a departmental member sitting together. During 1977, the strength of the Tribunal was four excluding the President.

In the following statement is shown the work done by the Tribunal for a few years since 1947:—

Description of cases	Period		Last Balance	Instituted during ten years	Disposal during ten years	Balance
	1st September 1947 to 31st August 1957	}		121	121	
Revision, reference and	1st September 1957 to 31st August 1967	}	5	7,861	6,846	1,015
miscellaneous applications, Appeals and second appeals etc.	1st September 1967 to 31st August 1977	}	1015	14,312	13,910	1,417
	1st April 1982 to 31st March 1983	}	3,387	1,380	1,183	3,584

STAMPS DEPARTMENT

The levying of stamp fees was first introduced into Bombay under Regulation XIV of 1815 which provided for the imposition of fees on certain classes of documents. In 1827 a new Regulation XXVIII was passed which provided for the establishment of a Stamp Office which was entrusted with the work of distributing and issuing stamps both to mofussil offices and to vendors in the city.

The present General Stamp Office, Bombay, is concerned with administration of the Bombay Stamp Act, 1958; the Bombay Court Fees Act, 1959; and the Indian Stamp Act, 1899 (so far as it relates to central items only) within the Greater Bombay area. This office also performs certain agency functions in respect of treasuries and post and telegraph offices in the entire State. Its main function is to supply stamps of all kinds to the public through the salaried stamp vendors stationed at the General Stamp Office, High Court, Metropolitan Courts, Small Causes Courts, Bullion Exchange Building, Share Bazar and Income Tax Building. In suburbs where there is no treasury, the sale and distribution of stamps is done by this office through the licensed vendors. The office also determines duty on documents presented for adjudication, certifies documents after the recovery of deficit duties and penalties; grants refund of unused or spoiled stamps; scrutinizes indents from mofussil treasuries and attends to other miscellaneous matters relating to stamps. Under the Bombay Court Fees Act certain duties in the probate and succession matters are entrusted to this office. The Government of India has also entrusted to this office the work of selling central excise duty stamps, insurance agents licence fees, stamps, etc.

Organisation: The General Stamp Office is a local depot of stamps keeping the stock of stamps worth over Rs. 12 crores. The organisation is under the control of the Assistant Superintendent of Stamps. The single lock and double lock stocks of stamps in local depot are under the charge of the Deputy Assistant Superintendent of Stamps and Supervisor. The Collector of Bombay, however, acts as the *ex officio* Superintendent of Stamps, but by delegation of powers and usage for all purposes, the duties are performed by the Assistant Superintendent of Stamps. The General Stamp Office is divided into several branches such as general branch, clearance list branch, adjudication and probate branch, stores branch, accounts branch and sales branch, etc. The Deputy Assistant Superintendent looks after these branches.

Statistics: Tables No. 1 and 2(Given at the end of the Chapter.) give details of receipt on account of judicial and non-judicial stamps. The following statement shows number of vendors and discount allowed to them in Greater Bombay:-

Year	Number of Vendors	Discount allowed (Rs.)
1920-21	10	54,499
1930-31	2	501
1940-41	9	1,108
1950-51	12	664
1960-61	13	7,693
1970-71	17	27,178
1975-76	16	41,846
1980-81	16	26,384
1983-84	13	29,018

REGISTRATION DEPARTMENT

The first registration law in force in Bombay was Regulation 9 of 1827 which required all deeds relating to real property to be registered, the superintendence of registers being vested in the Senior Assistant Judge, The entire law of registration was repealed by Act XVI of 1864 for carrying out the provisions of which six registering officers, including a Registrar were appointed to the island of Bombay.

Upto 1866 the Registration Department was treated as a branch of Judicial Department, but was from that year transferred to the Revenue Department. With this the number of offices of Sub-Registrar was also reduced to two. In 1886 these two offices, situated at Fort and Mandvi, were amalgamated under one Joint Sub-Registrar and the city was formed into one district and sub-district in the following year.

The head of the organisation is the Inspector General of Registration. Maharashtra State, Pune, who is assisted by the District Registrar posted in each district. The working of this department in Greater Bombay is in charge of the Collector who functions as an *ex officio* District Registrar. The District Registrar is assisted in his work by the Sub-Registrar and four Joint Sub-Registrars.

The District Registrar performs functions of registration of documents under the Indian Registration Act, 1908; registration of marriages under the Special Marriages Act, 1954, and the Bombay Marriage Registration Act, 1886; and registration of births and deaths under the Births, Deaths and Marriages Act, 1886. He also hears appeals under the Indian Registration Act against the refusal to register documents by Sub-Registrars. In practice, the Sub-Registrar and Joint Sub-Registrars exercise all the powers of District Registrar except hearing appeals and applications under the Indian Registration Act. The Sub-Registrars of Bombay are empowered to accept documents for registration of properties situated anywhere in India; to condone delays in presentation of documents provided the delay does not exceed 4 months; and to refund in cases of surcharges.

Under the Indian Registration Act, compulsory registration is required in the case of certain documents and optional registration is provided for certain documents. Documents which fulfil the prescribed requirements and for which necessary stamp duty and registration fees are paid can be registered. The record of such registered documents is kept by way of a photo copy. The documents of Bombay city properties are sent to the Superintendent, City Survey Branch of Bombay Collectorate for making mutations. The photo copies of the documents relating to mofussil properties are sent to the District Registrar. Similarly certified copies from the prescribed records of registered documents are also issued to parties who apply for the same.

Generally the District Registrar and Sub-Registrar are appointed for a district and a taluka, respectively. But this organisational set-up is not applicable to Bombay. In the city of Bombay two offices were functioning separately, one for the city area and the other for the suburban area. The Bombay Suburban District was not divided into sub-districts. With the amalgamation of two offices in 1973, the Bombay Suburban District is looked after by a Joint Sub-Registrar. The post of Sub-Registrar was a non-gazetted post till now. But taking into account the heavy work-load in Bombay the Government have converted this post into a Class I post.

Statistics: The total number of documents registered in 1908 was 4714 against 3601 in 1901-02 and 2890 in 1881-82. The fees collected amounted to Rs. 1,12,000 in 1908, Rs. 66,000 in 1901-02 and Rs. 39,000 in 1881-82.

Table No. 3 shows the statistics of registered documents in Greater Bombay, while receipts and expenditure are shown in Table No. 4.(Given at the end of the Chapter)

MOTOR VEHICLES DEPARTMENT

The Motor Vehicles Department with headquarters at Bombay administers various Acts concerning motor vehicles such as the Motor. Vehicles Act, 1939; the Bombay Motor Vehicles Tax Act, 1958; the Bombay Motor Vehicles (Taxation of Passengers) Act, 1958; the Maharashtra Tax on Goods (Carried by Road) Act, 1962; and the Motor Cars, Scooters and Commercial Vehicles (Distribution and Sales) Control Order and rules framed under the above mentioned Acts. The department is headed by the Commissioner of Transport posted at Bombay and is assisted by the Regional Transport Officers in charge of regions. A statutory body *viz.*, the Regional Transport Authority to dispose off applications for permit to ply different types of transport vehicles is constituted for each region. In order to co-ordinate and regulate the activities and policies of these Regional Transport Authorities in the State, the State Transport Authority is constituted, and the Commissioner of Transport acts as its *ex officio* member-secretary.

The Regional Transport Officer looks after the Greater Bombay region. He was assisted, during 1982, by 13 Deputy Transport Officers, 36 Motor Vehicles Inspectors, 24 Assistant Motor Vehicles Inspectors and other ministerial staff. The office of the Regional Transport Officer is divided into five sections which are controlled by the Deputy Transport Officers under the administrative control of the Regional Transport Officer.

The Motor Vehicles Inspectors are entrusted with the duties of inspection of transport vehicles, issuing fitness certificates and learners' licences, carrying out tests of persons applying for conductors' licences, inspection of vehicles involved in accidents, inspection of vehicles for registration, etc. They are assisted in their duties by the Assistant Motor Vehicles Inspectors.

The Greater Bombay region has a heavy work-load with the highes. number of motor vehicles as compared to the other parts of the State To cope up with the heavy work-load, a large staff of Inspectors of Motor Vehicles along with Assistant Inspectors of Motor Vehicles has been provided. With the growth of this city, the executive staff had also been augmented from time to time as can be seen from the following statement:—

	Year				
	1961	1965	1971	1975	
Regional Transport Officers	1	1	2	3	
Assistant Regional Transport Officers	1	5	6	6	
Regional Supervisors	1	2	2	2	
Inspectors of Motor Vehicle	18	30	43	47	
Assistant Inspectors of Motor Vehicle	11	28	32	34	
Prosecutor	-1	1	1	1	

The erring motorists are prosecuted under the Motor Vehicles Act and the Bombay Motor Vehicles Act for breaches of provisions of the same. The relevant statistics of such prosecutions are shown below:—

	1961	1971	1975	1980
Prosecutions under the M. V. Act—				
(1) Cases pending at the beginning of year	2,066	31	299	1405
(2) Convicted during the year	631	44	149	441
(3) Cases pending at the end of the year	2,147	94	63	971
Prosecutions under the B. M. V. Act—				
(1) Cases pending at the beginning of the year	526	1	7,409	1,151
(2) Convicted during the year	102	3	623	504
(3) Cases pending at the end of the year	424		8,450	66

In the following are shown receipts collected under the different Acts during 1971-72, 1975-76 and 1980-81:—

(Figures in Rs.)								
	1971-72	1975-76	1980-81					
Receipts under the Motor Vehicles Act	27,01,483	35,08,723	63,60,030					
Fees and other receipts	631	921	81,132					
Receipts under the State Motor Vehicles Taxation Act	3,76,86,739	6,23,60,536	7,59,41,807					
Surcharge and additional levy		1,57,778	15,23,003					

Motor Accidents Claims Tribunal: The Motor Accidents Claims Tribunal was established in 1962 for the purpose of adjudicating upon claims of compensation in respect of accidents involving death of or bodily injury to persons, arising out of the use of motor vehicles. Prior to the establishment of this tribunal, claims under the Motor Vehicles Act were dealt with by a judge of the City Civil and Sessions Court, Bombay. It is now working as a civil court and disposes of matters of a civil nature arising out of motor vehicles accidents.

During 1972 an additional Motor Accidents Claims Tribunal was created. In the following statement are shown cases instituted and disposed off during a few years since 1965:—

	Cases			
Years	Instituted Dispose			
1965	1,310	1,019		
1970	1,576	1,007		
1975	1,662	2,080		
1977	1,960	1,091		

CITY SURVEY AND LAND RECORDS

(For detailed history refer Gazetteer of Bombay City and Island, Vol. II, 1910)

In the past the entire governmental machinery devolved upon the *jahagirdars* among whom the land was distributed. This distribution was governed under various Acts of the State and special officers were appointed to implement the provisions of the Law. In this context Todarmal's system of land measurement for assessment of revenue or that of Malik Ambar, subsequently modified by Balaji Vishwanath, are noteworthy. History records numerous instances where lands were mapped by offices of government.

The first mention of survey of the island is in 1670-71. This survey was directed to ascertain the rights of property as well as to the works. In 1747 the Collector suggested the necessity of a survey to check encroachments which were being unauthorisedly made on Company's ground. However there is no trace as to whether this survey was carried out. Until 1811 there was no authentic record of survey available, but there is no doubt that prior to 1811 there must have been a survey of some sort.

The revenue survey begun in 1811 was intended for the purpose of ascertaining the number of cocoa-nut, brab, date and betel-nut trees and also names of the proprietors. This survey was completed in 1827. The Fort, the old and new towns were surveyed in considerable detail. The operation of this revenue survey brought to light numerous encroachments and instances of the enjoyment of lands by individuals without payment of rent.

A general survey of the island proposed by the Collector was not sanctioned by the Government. However a survey of Mahim division was begun by the suney department of Collector's establishment in 1857. It was continued upto 1859 when it was discontinued owing to reduction of survey establishment.

The next revenue survey of the island on which was based the land revenue system of Bombay was commenced in 1864-65. The actual work of survey was completed in 1871. The whole of the levelling and contouring was completed. Two sets of maps were prepared, one uriform in size called square sheets and the other of varying dimensions called traverse sheets. The former were 221 in number, of which 118 sheets containing the survey of the crowded parts of Bombay were drawn on a scale of 40 feet to one inch. The traverse sheets numbered 203. These were shown on scales of 40, 50, 80 and 100 feet to an inch according to circumstances. The cost of this survey was Rs. 3,13,062 of which municipality contributed Rs. 50,000.

This survey was known as the Bombay City Survey and the demarcation of lands made thereunder and all records pertaining to it were taken *prima facie* evidence for the purpose of land revenue administration in Bombay.

The Bombay City Survey and Land Records Office is controlled by the Superintendent who works under the control of the Collector of Bombay. This office deals with (1) city survey, (2) land disposal and estate management, and (3) miscellaneous work. Thus in practice the Superintendent of City Survey and Land Records performs the functions of estate management and that of a Deputy Collector.

Survey and maps: The latest cadastral survey known as the Newlands' Bombay City Survey was commenced in 1913 and continued till 1918. Thereafter Government started from 1919 a permanent office called the Bombay City Survey and Land Records Office for the maintenance of survey. This Newlands' city survey has been mapped on a scale of 40' = 1" on more than 700 city survey sheets. There is an index map of these sheets on a scale of 800' = 1". Also a map of city on a larger scale of 400' = 1" has been prepared. Revised editions of the city survey sheets, maps on 400' = 1" and 800' = 1" are prepared from time to time. Maps are also prepared on other scales for special purposes such as a map for police on a scale of 2008' = 1". After the introduction of the metric system, maps are prepared on metric scale.

Disposal of Land: The City Survey and Land Records Office is entrusted with the disposal of Government land and management of large Government estates like the Backbay Reclamation Estate, Queen's Barracks, Cumballa Hill Estate, Old Mahalaxami Battery Site Estate, etc. The work of estate management includes enforcing observance by lessees and licencees of Government of the terms and conditions of the lease or licences; scrutiny and approval of drafts of legal documents prepared by the Solicitor to Government such as conveyances, leases, licences, agreements, deeds of exchange, deeds of surrender, etc. This office also does the work of granting Government land on monthly tenancies, charging licence fees for balcony enclosures, construction of terrace floor and display of sign boards and advertisement hoardings on buildings on Government leased plots. The disposal of Government land involves public tenders or public auctions of plots or disposal by negotiations.

Besides, the City Survey and Land Records Office is entrusted with the work of levy and revision of assessment on lands of different tenures obtaining in Bombay city; attendance of court cases for giving evidence and scrutiny and approval of draft pleadings; issue of solvency certificates, valuation of properties, etc.

TABLES

Table No.1 RECEIPTS FROM JUDICIAL STAMPS

Year	Sale of Court-Fee Stamps	Miscellaneous receipts	Total
	Rs.	Rs.	Rs.
1920-21	33,93,757		33,93,757
1930-31	29,37,048	100	29,37,148
1940-41	24,64,646	40	24,64,686
1950-51	44,15,566	5	44,15,571
1960-61	75,55,998	11,690	75,67,688
1970-71	1,67,73,232		1,67,73,232
1975-76	39,67,823	647	39,68,470
1980-81	4,20,22,573	7,160	4,20,29,733
1983-84	4,78,43,073	48,018	4,78,91,091

TABLE No. 2
RECEIPTS FROM NON-JUDICIAL STAMPS

	(Figures in Rs.)										
Year	Impressed Stamps	Hundis	Impressed Transfer (Section 2)	Foreign Bills Stamps	India Revenue Stamps	Share Stamps	Stamps for Legal Practioner's licences	Notarial Stamps			
1920- 21	2,82,060	3,89,385	31,23,527	6,14,681		16,26,554	23,250	7,204			
1930- 31	1,67,023	54,346	16,60,070	2,26,746		3,70,534	42,000	9,344			
1940- 41	2,70,192	43,138	24,64,186	2,39,568	4,82,196	11,07,247	81,500	4,056			
1950- 51	10,35,480	1,69,495	1,08,93,824	3,05,467	10,59,497	20,34,945	1,59,143	25,110			
1960- 61	16,56,051	10,89,752	100,59,988	3,70,589	28,22,759	31,91,746	2,18,669	29,328			
1970- 71	51,79,992	18,70,683	2,46,13,487	6,31,553	53,51,293	26,54,309	atta	80,331			
1975- 76	1,02,24,448	66,51,413	3,04,74,328	12,35,476	74,92,522	22,68,165		1,61,271			
1980- 81	1,64,80,797	56,49,949	6,58,87,892	74,86,156	1,42,55,350	88,00,259		5,65,273			

	Brokers Stamps	Agreement Stamps	Forms for agreement	Forms for receipt	Insurance Stamps	Miscellaneous receipts	Total
1920-21	3,373		7,469	3,38,053		3,33,064	67,48,620
1930-31	23,705	3,296	5,006	15,553	1,74,248	3,21,098	30,72,969
1940-41	87,591	7,756	22,166	22,456	2,48,321	4,57,840	55,37,303
1950-51	51,448	79,946	12,419	17,695	7,66,949	21,82,943	1,87,94,361
1960-61	1,03,738	75,413			10,04,780	20,96,418	2,27,19,231
1970-71	1,94,297	1,23,674		40,562	28,81,201	1,03,21,358	5,39,42,740
1975-76	2,61,593	1,06,655	4,420		4,41,752	3,47,37,818	9,80,34,881
1980-81	4,64,319	1,07,698			57,81,704	3,24,81,210	15,77,60,572

TABLE No. 3 NUMBER OF DOCUMENTS REGISTERED AND VALUE TRANSFERRED

		O	tal compulsory otional registra fecting immov property	ation	ion affecting movable				Wills		
Year	District	No.	Aggregate Value (Rs.)	Fees (Rs.)	No.	Aggregate value (Rs.)	Fees (Rs.)	No.	Fees (Rs.)		
1951	Bombay City	6,332	17,42,20,306	5,45,846	299	50,66,665	15,724	70	358		
	Bombay Suburban District	1,050	67,84,700	26,500	5	13,660	82	9	39		
1114/11	Bombay City	10,614	1,02,67,99,121	22,04,115	274	26,40,957	17,238	314	5,389		
	Bombay Suburban District	2,944	2,85,30,421	1,17,386	6		107	61	1,039		
1975	Greater Bombay	13,584	91,45,24,920	24,36,110	290	22,00,335	18,185	416	4,160		
11 9201	Greater Bombay	12,001	2,88,27,05,000	77, 47,385	370	<mark>15</mark> ,17,000	26,295	627	12,540		

TABLE No. 4 INCOME AND EXPENDITURE OF REGISTRATION DEPARTMENT

Year	Name of Office	Total receipts	Total Expenditure
		Rs.	Rs.
1951	Bombay City	6,02,930	73,324
	Bombay Suburban District	38,014	11,978
1971	Bombay City	22,89,065	2,40,415
	Bombay Suburban District	1,50,690	46,061
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1975	Greater Bombay	28,24,035	4,08,915
1980	Greater Bombay	85,40,350	5,95,795

LAW, ORDER AND JUSTICE



Maharashtra State Gazetteers

THE FUNCTIONS OF THE GOVERNMENT ARE MANIFOLD and those relating to maintenance of law and order, and security to life and property of people are carried out through Police, Judiciary, Jail and Social Welfare departments. In the following are given the details of working of these departments in Greater Bombay.

POLICE DEPARTMENT

It is the responsibility of the police force to maintain law and order. The institution of police is not of recent origin but is as old as Government itself. In the ancient and historical India the police force was not organised as it is today, functioning as a separate body. It was the revenue officers of the olden days who were asked to do the duties of police officials. The regime of Lord Cornwallis saw the organisation of police in a different perspective, so that *zamindars* were no longer held responsible for doing police work and Government controlled police stations were opened. The period that followed witnessed efforts on the part of the Government to bring about improvements in the efficiency and utility of the force. The Act of 1860 could be regarded as a landmark in the history of police department.

The police organisation has undergone a radical change in recent times with the eclipse of the British rule. The police in the past were a symbol of repression and their operation was more provocative than ameliorative in the context of the common man, in the name of law and order. One can understand the responsibility of police in the maintenance of law and order and adoption of reasonable measures in case of violation of law and order by members of public. But history has shown that during the British regime police had been too sensitive to people's reaction. The high handedness with which matters of common interest were handled did not have any justification. The conditions have now changed with the growth of population, industrial development and rise of industrial cities which in their wake have created many problems for the police especially in big cities like Bombay.

Early mention: The earliest authentic mention of the police occurs during the governorship of Gerald Aungier (1669-77) who organised the Bhandaris into a crude militia under the command of *subhedars* with headquarters at Mahim, Sewri, Sion and other natural divisions of the island. The force was further strengthened in 1694 by the establishment of night patrols. Inspite of these precautions, lawlessness was rampant during 17th and 18th centuries and led in 1771 to conversion of Bhandari militia into regular police force. In 1780, the post of lieutenant of police was abolished and that of Deputy of Police was created and again in 1794 this designation was changed to the Superintendent of Police.

There were constant complaints against the inefficiency of police force which led to the appointment of the Police Committee in 1809 to suggest measures for improvement in the police organisation. In 1812, various rules, ordinances and regulations were promulgated which divided powers pertaining to police between Deputy Superintendent and Divisional Magistrate. The new promulgation also provided for an additional staff. But all these measures failed to place any appreciable check upon crime. The year 1844 saw the establishment of a floating police force under a Deputy Superintendent of Police. Up to 1856 little was done towards checking the incidence of crime though there was appreciable increase in the expenditure on police force. As there were numerous complaints in regard to inefficiency of police the Bombay Government instituted an enquiry in 1856, which led to the passing of Act XIII of 1856 aimed at regulating the police force.

This Act was however amended by another Act of 1860 which gave the police wider powers for regulation and prevention of nuisances. In 1902 all the enactments were annulled by the Bombay Act IV of 1902 which vested the entire control of police in the Commissioner of Police. (The office of the Commissioner of Police, dates back from 1864 when on the recommendation of Colonel Bruce, the Bombay Police was greatly strengthened.) The last quarter of the 19th century witnessed a phenomenal growth in regard to Bombay city, industrially and demographically. This had its effects on the law and order situation in the city. In pre-Independence era the police in the city had to face communal riots and industrial unrest as also satyagrahas in which thousands of citizens participated. (For detailed history of Police Administration see Gazetteer of Bombay City and Island, Vol. II, 1910.)

After 1947, the conditions underwent a radical change. It was not the political movement that the police had to face. In fact there was battle on the economic front due to economic unrest among the working population. To meet the situation the strength of police force was increased from time to time. It was only 6,060 in 1940, which was raised to 14,813 in 1960 and again to 19,334 in 1970. This is an indication of the growth of police force in Bombay. The daily influx of population created problems not only for the local authority but for the police also. One of these problems was the increasing slums which could be regarded as breeding centres of crime.

In spite of these factors, the Bombay Police force has been making constant efforts to maintain law and order situation in the city. The force as a whole is supposed to be one of the best in the country. The services of CID organisation are always utilised by the other district police force. The traffic branch of Bombay Police is also classed as the best in India.

Organisation: At the head of the police organisation in the State is the Director-General of Police assisted by Special Inspector-General of Police, Additional Inspector General of Police, Deputy Inspector Generals of Police, etc. in the performance of his duties. The Police organisation of the Maharashtra State has since long been organised on distinct lines as compared to other States, having two separate wings of police, one for metropolis called city police and other called the district police. The police force in metropolitan city of Bombay is controlled by the Commissioner of Police who is second in the police hierarchy. Unlike the districts, the functions of both District Magistrate and Superintendent of Police are combined in the office of the Commissioner. The post of Commissioner for Bombay was first created in 1864 when on the recommendation of Colonel Bruce the Bombay Police was greatly strengthened to correspond with the forces in Calcutta and Madras.

The Greater Bombay scheme was inaugurated on 1st October 1945 (Amalgamation of greater part of Bombay Suburban District with Bombay City or police purposes was sanctioned in 1939-40), from this date the District Superintendent of Police, Bombay Suburban District, was absorbed into Greater Bombay and the designation was changed to Deputy Commissioner of Police. The designation of Divisional Deputy Commissioners then underwent changes. The Senior Divisional Deputy Commissioner of Police became Deputy Commissioner of Police, Headquarters. At present the Commissioner of Police is assisted by three Additional Commissioners of Police, one each for administration, crime and essential commodities and 17 Deputy Commissioners of Police in charge of zones and 64 Assistant Commissioners of Police controlling divisions.

For the purpose of administration, Greater Bombay is divided into nine zones each in charge of a Deputy Commissioner of Police. These zones are further divided into divisions put under the control of an Assistant Commissioner of Police. Each division is further divided into police stations. An Inspector of Police is ordinarily in charge of a police station except in certain cases in which a selection grade Sub-Inspector of Police is placed in charge of a police station. Each police station has a certain number of Sub-Inspectors, unarmed head constables and constables for the purpose of carrying out various duties.

In addition to the Deputy Commissioner of Police, headquarters, and Deputy Commissioners of Police in charge of zones, there are Deputy Commissioners in charge of various branches, such as special branch and CID, armed forces, traffic branch, motor transport and wireless, port, crime branch (CID), civil defence, etc. Besides, there is one Deputy Commissioner dealing with matters concerning foreigners. This post is borne in the cadre of subsidiary Intelligence Bureau, Government of India.

Police Stations: In 1908 the city was divided into 12 police divisions having 28 police stations and 380 out-posts. A division was managed by a Superintendent and sections by Sub-Inspectors. However after 1908 the number of city police divisions was reduced and in 1950 the number stood at 8. Following statement shows the number of police stations in Bombay for a few years since 1908:—

Year	Police stations	Out-posts
	2 ()	
1908	28	380
1914	22	410
1920	18	
1930	18	
1940	18	
1950	25	1
1960	31	6
1970	40	15
1980	50	16

The increase in the number of police stations after 1940 was due to expansion of city area, growth of population, etc. The industrial growth of Bombay attracted people from rural areas and created additional burden on police to keep law and 6rder situation in the growing metropolitan city. During 1945, four new police stations, viz., Bandra, Kurla, Ghatkopar and Andheri were added to the existing ones. In 1956 a new police station was opened at Dharavi whereas Chembur sub-police station was converted into a fullfledged police station. In the following year police stations located at Borivali, Malad and Mulund were added to Greater Bombay. Bhandup sub-police station was converted into a police station and a new police station at Vile Parle was opened in 1958. This process of upgrading sub-police stations was continued in view of the growing responsibilities of the police force. In 1965 Kherwadi out-post was given the status of a police station. Similarly, Goregaon and Aarey sub-police stations were separated and the former was made into a full-fledged police station, so also Kandivali sub-police station was separated from Borivali police station and was converted into a full-fledged police station in 1963. The Jogeshwari sub-police station was upgraded in 1969 but started functioning in 1970 only. The police zones and divisions have been reorganised since May 1981. Greater Bombay area has been divided into 9 zones and 24 divisions. These divisions have been further divided into 48 police stations and 4 sub-police stations. The zone-wise police stations are as under:-

Zone	Division	Police station
I	Colaba, Kalbadevi, Pydhonie.	Colaba, Azad Maidan, Paltan Road, L. T. Marg, Pydhonie, Dongri.
П	Girgaum, Tardeo, Nagpada.	V. P. Road, D. B. Marg, Gamdevi, Tardeo, Agripada, Nagpada.
III	Byculla, Worli, Bhoiwada.	Byculla, Kalachowki, N. M. Joshi Marg, Worli, Bhoiwada, R. A. Kidwai Marg.
IV	Mahim, Matunga, Chembur	Dharavi, Mahim, Matunga, Dadar, Chembur, Trombay.
V	Ghatkopar	Ghatkopar, Vikhroli, Tilak Nagar, Bhandup, Mulund, Kurla, Saki Naka.
VI	Bandra, Santacruz, Vakola.	Bandra, Kherwadi, Santacruz, D. N. Nagar, Vile Parle, Vakola.
VII	Andheri, Goregaon, Borivali.	Andheri, Jogeshwari, Goregaon, Malad, Kandivali, Borivali. Wadala, Sewree, Yellow Gate.
Port zone	Wadala, Yellow Gate	Wadala,Sewree, Yellow Gate
Airport zone	Airport	Airport Sahar.

Strength: Upto 1930, there was no remarkable increase in the police force. This was perhaps due to the fact that the population and area of Bombay kept a steady growth which in turn did not require the strengthening of force for maintaining law and order situation. The period after 1930 witnessed not only growth of Bombay city but also deterioration of law and order situation on account of freedom struggle movement. Similarly the industrial growth of Bombay city led to an increase in the incidence of crime due to activities of anti-social elements. The merger of some areas of the Thane district posed additional burden on the police force of Bombay. The labour unrest, unemployment and poverty, expansion of area and population are responsible for disturbing peaceful life of city especially after 1960.

The strength of Police officers and men in Bombay is shown below for a few years:—

Category		Year	
	1961	1971	1977
Commissioner of Police	1	1	1
Additional Commissioners of Police		7/ 12	2
Deputy Commissioners of Police	8	13	17
Assistant Commissioners of Police	24*	41	51
Inspectors of Police	87	121	175
Assistant Inspectors of Police	6		228
Sub-Inspectors of Police	908	1,295	1,329
Jamadars	152	252	280
Head Constables	2,080	2,652	4,640
Constables	11,676	15,088	14,270
Total	14,942	19,463	20,993

*In 1961,they were designated as the Superintendents of Police.

The sanctioned strength of Police officers and men as on 1st December 1982 was 3,620 and 22,224 respectively.

During 1940, there were 436 Police officers (374 for city and 62 for CID) and 5,630 policemen (5,489 for city and 141 for CID). A more detailed classification of police force since 1950 is shown below:—

Year		Officers of and above the rank of Asstt. Commissioner	Officers below the rank of Asstt.Commissioner	Head Constables and Constables
1950	City	20	618	11,406
	CID	11	271	771
	Total	31	889	12,177
1960	City	24	863	12,858
	CID	8	281	779
	Total	32	1,144	13,637
1970	City	34	1,015	11,587
	Armed	5	154	4,676
	CID	12	456	1,395
	Total	51	1,625	17,658
1980	City	35	1,348	13,275
	Armed	5	182	5,770
	CID	34	958	1,926
18	Total	74	2,488	20,971

Since 1920 the proportion of police to area and population was as follows:—

	Propor	tion of Police to	Proportion of	
Year	Area (Sq. miles)	Population	cognisable crime investigated to police force	Area in square miles
1920	. 005	312.37	17.78	22
1930	.005	282.67	18.55	22
1940	.006	248.79	33.28	30
1950	.007	129.00	21.14	85.16
1960	.0.01	279.92	35 05	N.A.
1970	2.34 (Sq. km.)	215.00	18.64	453 (Sq. km.)
1980	2.56 (Sq. km.)	356.50	19.96	603.00 (Sq.km.)

Crime: The crime position during post-Independence period, except for a short period, shows a rise. The last couple of decades saw unemployment, influx of persons from other parts of India in search of employment, rise in the cost of living and shortage of food-grains and other necessities of life. Shortage of accommodation resulting in growth of unauthorised hutments in the available open spaces affording shelter to criminals is also one of the main factors, resulting in an increase in certain types of crime. The activities of political parties are also to some extent responsible for disturbing social life in the city. On many occasions, strikes and lock-outs and such other factors contribute to labour unrest which in turn encourage anti-social elements. To this could be added crime resulting from violation of prohibition laws, linguistic and communal troubles, etc.

while Table No. 2 gives classification of cognisable crime as per the Acts in force and Indian Penal Code. The statistics of crime committed in Bombay since 1950 are furnished in Table No. 3.

About the incidence of crime per 1,000 population the following statement gives the position for a few years:—

Year	1950	1960	1970	1975
Incidence of crime per 1,000 population	90.37	123.01	86.80	77.01

Administrative Units: For proper functioning, the Police organisation in Greater Bombay is divided into various branches and units. In the following is given a brief description of some of the branches.

Armed Forces, Motor Transport and Wireless Section: A Deputy Commissioner of Police is in charge of armed forces, motor transport, and wireless section. Armed force is divided into battalions, each under the command of an Assistant Commissioner of Police. A motor transport section consists of workshop for daily repairing and maintenance of vehicles and water craft. The strength of police working in this section was 1,073 during 1977. A wireless section is responsible for providing wireless communications to and from wireless patrolling mobiles in the city as well as with various districts of the State.

CID: The Criminal Investigation Department collects information about crime, and investigates complicated cases of murder, conspiracy, arson, etc. The organisation is divided into crime branch and special branch. The former controlled by the Additional Commissioner of Police deals with all important and complicated cases of serious crime; cases of cheating, social vice, kidnapping; matters relating to kidnapping, extermination maintenance of records of criminals, etc. The special branch under the control of a Deputy Commissioner of Police is divided into 13 sections. It deals with various subjects such as surveillance of political activities, record of political personalities, espionage work, etc.

A finger print bureau is attached to the crime branch. It undertakes the collection of finger impression slips of convicted persons.

Prohibition: A Deputy Commissioner of Police was in charge of the prohibition branch. He was also entrusted with the work of crime branch (controls) where cases under various control orders in connection with essential commodities were taken up. The police department was in charge of prohibition work since 1939 when prohibition was introduced in the Bombay city. During 1975, 46,130 cases were detected by this branch under prohibition and allied Laws.(Since 1980 the prohibition section of the Police Department was disbanded).

Traffic: The traffic branch is controlled by the Deputy Commissioner of Police. This branch is responsible for the regulation of traffic in city and is also engaged in educating the public in road sense. For administrative purposes this branch is divided into south, north and propaganda sections. To tackle the traffic problems and to ease the congestion of traffic, propaganda is carried out through cinema, loudspeaker vans, distribution of leaflets, radio, television and film shows. 24 hours silence zones also exist in certain parts of Greater Bombay. Besides, the entire Greater Bombay area is declared as a silence zone during night from 1 to 6 a.m. Particular attention is paid to cover all hospitals in the 24 hours silence zone.

Automatic signal lights on junctions have been installed which help to minimise heavy work-load on traffic police

The ever increasing road traffic in Greater Bombay has created problems for Bombay Police. A little space available for parking especially from Dadar to Fort area poses problems for through traffic. Clearance of traffic in the morning and evening also puts heavy workload on traffic police. All these factors lead to violation of traffic rules framed under the Motor Vehicles Act. During 1950, 99,264 notices were served on offenders for breach of traffic regulations, of which 5,960 prosecutions were launched. In 1970 the traffic offences showed a continuous rise as there were 3,01,057 offences, of which 1,66,575 cases were filed in various courts. During 1975, 5,49,624 traffic rule violations were recorded under various Acts, of which 3,83,948 prosecutions were launched in the various courts.

Traffic Institute: From a routine and monotonous exercise of regulating vehicular flow, the traffic regulation has become a well defined science. With a view to streamline the work of enforcement of traffic regulations and accident investigation, it was necessary to train police officers to meet these needs. The long felt need of establishing an institute was fulfilled on the establishment of a Traffic Institute at Bombay.

This Institute, only one of its kind in India, was started in 1964. It conducts several courses of studies in the various aspects of traffic. Situated at Byculla, the institute was started intially with the object of training police officers from Greater Bombay and Maharashtra in the investigation of traffic accidents as it was noticed that number of accident cases were disproved in the courts due to want of sufficient evidence or evidence incorrectly recorded by the investigating officer. It was also noticed that mere knowledge of traffic laws was not sufficient to bring home the change. The entire complexion of traffic control has reached a stage where police officers investigating traffic accidents require a more comprehensive training and adequate knowledge of traffic engineering, highway planning, psychology of drivers and pedestrians, methods of accident reporting, etc. To enable them to understand the magnitude of traffic problems and to train to handle traffic systematically and in a scientific way, this course was later on opened to police officers of all States of India.

There are in all seven courses conducted by this institute. A regular course for officers lasts for 4 months wherein officers above the rank of Sub-Inspectors of Police are admitted for training. The duration of a regular course for constabulary is 6 weeks, whereas a course for probationary officers lasts for 2 weeks. In addition to these above courses, additional courses for police drivers, home guards and naval police are conducted in this Institute, the duration of courses being from 2 weeks to 3 weeks. These additional courses are however meant for the personnel stationed in Greater Bombay area only. So far 35 batches of officers, consisting of 35 to 45 officers and 98 batches of 35 to 40 men in each batch have been trained in this institute.

The Institute is headed by an Assistant Commissioner of Police, who is also the Principal, and is assisted by two Inspectors of Police, three Sub-Inspectors of Police and one Police Prosecutor. For specialised subjects, lectures are delivered by the Police Surgeon, the Director of Forensic Science Laboratory, Executive Engineer, Bombay Municipal Corporation and experts from the Bombay Electric Supply and Transport Undertaking.

Road Accidents: The statistics of road accidents are given in the following statement:—

Particulars	Years						
	1920	1920 1930 1940 1950 1960 1970 198					
Fatal accidents	21	6	112	226	282	621	706
Non fatal accidents	387	360	6,531	12,900	24,988	21,395	22,273
Total	408	366	6,643	13,126	25,270	22,016	22,979

During the last about 20 years, the number of fatal accidents has shown considerable rise. The non-fatal accidents which include injuries and minor accidents have also gone up. This is attributed to the increase in number of motor vehicles and carelessness on the part of drivers as also pedestrians. The total number of accidents during 1975 was 21,902 and number of vehicles was 2,34,197. Thus the rate of accidents per 100 vehicles was put at 9.35. Of 21,902 accidents recorded, 507 were fatal accidents.

As regards persons killed in road accidents the following statement shows the figures for a few years since 1930:—

	1930	1940	1950	1960	1970	1980
Persons Killed	97	113	227	288	639	733
Persons injured	2,532	3,842	4,912	6,064	9,086	7,891

Women Police: The women police staff is allotted to CID, harbour police units, etc. The women police perform watcher's duty at various places all over Greater Bombay including railways. They also help the local police in carrying out the searches of women offenders. The staff attached to CID branch is utilised for handling children delinquents and guarding and escorting female prisoners. The women police attached to harbour police are meant for suppressing unlawful activities of female vagrants and women of questionable character frequenting the dock area on some pretext or the other. In 1970 the strength of women police force was 147 which increased to 276 during 1977.

Police Dog Unit: The CID organisation of Bombay Police maintains a police dog unit for detection of crime. This unit also undertakes training to State CID dog unit. In 1980, 480 calls requisitioning the services of this unit for assistance were received for investigation of offences from various police stations in Greater Bombay. The unit also renders help to District Police in the detection of crime.

Police Training School: The Police Training School established in 1912 imparts training to armed and unarmed police. It is one of the oldest teaching institutions, and had a modest start in 1912 when a teacher from the Elphinstone High School was appointed as a Police Sub-Inspector to teach policemen. It was in 1918 when the institution was termed as a Police Training School where armed and unarmed police constables were imparted professional training. In 1939-40, posts of women police constables were created in Greater Bombay Police force and their training was entrusted to this institute. During war time this institution conducted training not only for the constabulary but also for Sub-Inspectors of Police and it continued till 1949, when officer's training was finally centralised at Nashik. Subsequently, in 1960 this school was attached to Naigaum headquarters, and it conducted training for head constables directly recruited. In February 1975 this institution was finally shifted to Marol on the south of Aarey Milk Colony.

The Police Training School was formerly controlled by the Superintendent of Police. However in 1966 an independent post of Assistant Commissioner of Police termed as the Principal was created, and since then the school is functioning as an independent unit feeding the Greater Bombay police force with the required strength of police constabulary. During 1976, besides the Principal, the staff included a Vice-Principal, an Assistant Inspector of Police, 3 PSI Law Instructors, 5 Police Prosecutors and 25 Armed H. C. Drill Instructors. An additional staff to copeup with increased load of training is drawn up from other head quarters and units.

The training for armed constables extends over a period of 6 months, that for unarmed constabulary, 9 months; for women constables, 5 months and for women Sub-Inspectors upto 6 months. The training period of head constables directly recruited is 6 months. The training covers drill, wireless telegraphy, motor cycle riding, traffic control, first aid, civil defence, etc. Occasionally training is also imparted to personnel from Home Guards, Excise department, Custom department, etc.

From 1966 to 1976, 6,176 armed and unarmed constables, 128 women police constables, 8 women Police

Sub-Inspectors and 67 Head Constables, directly recruited, were trained by this school.

Health: The Bombay Police Organisation provides separate medical facilities through police hospitals and dispensaries. The patients treated in police hospitals since 1930 for a few years were as under:—

Year	No. of officers and men treated
1930	4,858
1940	7,665
1950	27,319
1960	48,824
1970	55,006
1980	1,72,322

During 1975, 71,300 patients were treated, out of whom 3,316 were suffering from tuberculosis.

Welfare Activities: A welfare fund started in 1918 is utilised to promote welfare activities of the entire police force. The fund is akin to police welfare fund and is calculated to promote the welfare of police and their families by way of assistance for educational and other purposes and promoting cultural activities amongst them. The welfare activities consist of medical facilities, sewing, montessory and literacy classes and games. Mention may also be made of Greater Bombay Police Co-operative Credit Society Ltd. and Greater Bombay Police Co-operative General Stores Ltd. The total membership of society and that of stores in 1975 was 14,667 and 5,791, respectively.

Police Computer Wing: The Police Department decided to operate a computer of their own to enable to handle speedily and accurately the voluminous data of criminals and allied aspects of police work. Accordingly a police computer wing was opened in 1976 in Bombay. The data collection for the first application relating to *modus operandi* and criminals for the entire State was initiated through nine Police Inspectors. The Police data for crime and criminals for over 700 police stations in the State for 1971 to 1976 compiled as per the computer code received from these police stations is scrutinized by the Police Inspectors in their respective areas and made available to the police computer wing at Bombay.

With the increase in the magnitude of the data to be compiled and processed by the wing, the same has been placed under the control of a Superintendent of Police. The strength of Police Inspectors was also raised from 9 to 19 including four for Bombay city.

FORENSIC SCIENCE LABORATORY

The Laboratory was established in 1958 by merging into it the former office of Chemical Analyser to the Government. It provides comprehensive and prompt scientific aids to the Police in their crime investigation work. Its main functions are examination of diverse physical evidence materials, providing reliable and circumstantial evidence establishing a link or strengthening links in the chain of evidence either to detect the guilty or at times acquit the innocent.

The laboratory has different divisions such as biology, serology, toxicology, physics, general analytical-cum-instrurnentation and prohibition. It undertakes examination of blood stains, seminal stains, hair and other biological material in cases of criminal offences of violence; viscera, blood, etc., in homicidal, suicidal or accidental poisoning; diverse materials like paint, petroleum products, inks, oils, soils, cement, glass, metals, industrial chemicals, etc. in cases of murder, arson, explosions, thefts, vehicle accidents etc. It also undertakes analysis of materials collected under the Bombay Prohibition Act. It was situated in the J. J. Hospital campus, but has been shifted recently elsewhere.

The Laboratory is well-equipped with modern equipments and it has grown into the biggest institution of its kind in the country. A mobile unit has been provided to assist investigating officers at the important scene of crime. Investigating officers are regularly trained in this laboratory. It also provides training to forensic scientists of other laboratories and officers of the State Government departments.

The following statement gives the statistics of work done by the Laboratory during 1976 in Greater Bombay area:—

Divisions	Biology	Toxicology	Physics	Ballistics	Prohibition	General analytical
Cases	794	2,697	171	23	18,796	366

The Laboratory is headed by the Director who is assisted in his work by five Deputy Directory eight Assistant Directors and 39 Assistant Chemical Analysers. The number of non-gazetted staff such as Scientific Assistants and Laboratory Assistants stood at 63.

PUBLIC PROSECUTORS

The main work of public prosecutors is to prepare briefs for the prosecution and to conduct sessions cases. The public prosecutors also sometimes conduct important cases on behalf of departmental heads in the courts of the Metropolitan Magistrates. Proposals for appeals against acquittal and for enhancement of sentences are forwarded to the Government through the public prosecutor along with his opinion. From April 1974 the public prosecutor has to appear on behalf of State in appeals, revisions, transfer applications, bail applications and other miscellaneous applications in the sessions court

(appellate side).

As the sessions cases were tried by the High Court from its inception, a firm of solicitors was appointed as public prosecutors for the State of Bombay. Little and Company Solicitors were public prosecutors upto 1937. With the coming into power of the first Congress Ministry, M/s. Mulla and Mulla, Solicitors were appointed public prosecutors in place of the Little and Company. With the inception of City Sessions Court in 1948, the same firm was continued as public prosecutors upto August 1951. The firm was given a panel of eight counsels to attend sessions cases. This system was however abolished from September 1951 and the public prosecutor's office was reconstituted on the level of the district public prosecutors. A public prosecutor, three additional public prosecutors and a panel of special public prosecutors looked after the prosecution work in Bombay. In addition to this there were special public prosecutors attached to the Central Bureau of Investigation, Bombay.

During 1976 there was one public prosecutor, seven additional public prosecutors, and a panel of about 35 special public prosecutors conducting prosecution cases in the sessions court.

HOME GUARDS

The city of Bombay, the *urbs prima in Indis*, witnessed in the pre-Independence era some of the worst types of communal disturbances endangering the life, property and peace of citizens and it gave birth to the idea of a voluntary force which could be helpful to the authorities in restoring peace and order. Thus was started the Home Guards organisation in the erstwhile Bombay State in 1946. The establishment of Home Guards is a story of the citizen's dedication to the noble cause of peace and safeguarding of life and property.

The organisation which is voluntary in nature comprises men and women who undertake to receive specialised training outside their normal hours of work and agree to place their services at the disposal of the State during times of emergency. The specialised training generally comprises fire-fighting, rescue, communications, first aid, etc. Thus the organisation prepares citizens for national services so as to be useful in any type of emergency and above all makes them better citizens. The Home Guards are neither meant to act as an additional police force, nor are they a part of any military organisation. It is a voluntary body of spirited citizens, who come together and organise themselves primarily for the purpose of not only protection of life and property but to help the citizens in any type of emergency.

The organisation in Greater Bombay is under the administrative control of the Commandant who is an honorary officer. He is responsible to the Director General of Civil Defence and to the Government in all matters concerning the organisation under his charge. He is assisted in his work by several officers, who are also honorary officers, each being responsible for a specialised subject such as administration, training, arms and ammunition, special services, etc.

The set-up of the organisation in Greater Bombay differs somewhat from that in the other districts of the state due to the large area and population of the city. With a view to decentralise the working of the Home Guards organisation in Greater Bombay and to facilitate recruitment, training and also for administrative convenience, Greater Bombay is divided into four areas and eleven zones. The area and zones are put in charge of officers called officers commanding. These officers work in an honorary capacity and are appointed by the Commandant with the approval of the Director General of Civil Defence. Following are the details of areas and zones:—

Area	Zones	Zonal Headquarters			
Area-I	А	Dhobi Talao			
	В	Princess Street			
	С	Lamington Road			
Area-II	D	Jacob Circle			
	Е	Naigaum			
	F	Dadar			
Area-III	Н	Ghatkopar			
	J	Kurla			
	K	Mulund			
Area-IV	G	Andheri			
	I	Kandivali			

In addition to the above, a women's wing, a mobile column, a headquarters staff unit, a band unit, a motorists' unit and a communications and wireless wing also form part of the Greater Bombay Home Guards organisation.

The organisation has as its goal, the dual task of inculcating a sense of civic duty and self-sacrifice among citizens to play a useful and active part in forming a stable society. The organisation in Greater Bombay which had a strength of 4,100 home guards in 1976-77 has served the citizens of the city and the State as well. It has to its credit numerous examples of selfless service to the people. In carrying out the task that is entrusted to the organisation from time to time, the members of the women's wing stood shoulder

to shoulder with their counterparts. On some occasions the organisation went out of its lawful jurisdiction in order to render help, and amongst these mention may be made of duties performed by the members of the organisation during floods in Surat in 1956; civil defence measures organised in the remote parts of the country like Assam in 1962; special services rendered at the exposition of St. Xavier's body in Goa in 1964, etc. They also rendered yeomen's service during several strikes of Bombay Municipal Corporation employees, and fully manned the essential services such as fire brigade, water supply and hospital services for a number of days.

Initial training to the members of the organisation is given at zonal area level. A number of parades are held in a week and hours of training are adjusted to suit the local conditions. The training comprises squad drill, *lathi* training and mob control, weapon training, first aid, rescue operations, fire-fighting, civil defence duties and heavy transport driving. Advance training in the specialised subjects like fire-fighting, rescue, first-aid, etc., is given at the Central Training Institute, Ghatkopar, as well as locally through the offices of fire service. As an essential part of practical training in rendering first aid, the home guards are deployed at casualty wards in various Government hospitals in Bombay during night to render assistance to the hospital staff.

The home guards being a voluntary organisation, its members receive no remuneration. However a nominal parade allowance of Rs. 2 per parade is paid to a home guard for expenditure incurred by him in respect of travelling, subject to a maximum of Rs. 12 per month. Similarly an allowance of Rs. 5 per day is given to a home guard when called out on duty to meet expenses in respect of conveyance, food, etc.

The Central Training Institute of home guards is located at Ghatkopar. It imparts advance training to the members of the organisation in the specialised subjects like fire-fighting, rescue, first-aid, etc., as such training facilities are not available at the district level. At present it is the only institute which imparts such training to the District home guards. Sixteen courses in the specialised subjects were conducted during 1974, and, the number of home guards who attended courses were 1192.

The total strength of civic guards when it was disbanded on 1st December 1945 was 482 in the city and 145 in the suburbs of Bombay. Since 1947 there has been a considerable increase in the number of home guards which can be seen from the following statement:—

	No. of Home Guards						
Year	Male	Female	Total				
1947	NA	NA	2,470				
1950	2,053	57	2,110				
1955	1,295	40	1,335				
1960	1,419	55	1,474				
1965	NA	NA	4,116				
1970	NA	NA	3,228				
1975	NA	NA	3,905				
1980	3,740	523	4,263				

During 1983 there were 4,263 Home Guards. The zone-wise strength was as under:—A Zone—123 Home Guards; B-135; C-207; D-854; E-422; F-582; G-304; H-197; 1-170; J-171; and K-132. The rest of Home Guards, *viz.* 966 were working in women's wing, mobile unit etc.

JUDICIARY

No code or law courts existed in Bombay during the period of Portuguese supremacy. The systematic attempt to introduce courts of law was made in 1669-70 when, for the civil and military administration of the island, two courts of judicature were formed. At the opening of the eighteenth century judicial functions were exercised by a civilian, styled Chief Justice, and the important cases by the President in Council, these two officials being the only Justices of Peace for the whole island. This system was continued until 1728 when the Mayor's Court was established.

The history of judicial system upto the opening of 19th century shows plainly that the meritorious attempts of East India Company to establish satisfactory law courts were negatived by the extreme vagueness of the various charters issued for that object. The Mayor's Court was abolished and replaced by a Recorder's Court in 1798 and it was invested with the whole civil and criminal jurisdiction of the Mayor's Court and the Court of Oyer and Terminer. In 1823 an Act was passed abolishing Recorder's Court and establishing in its place a Supreme Court of Judicature. This new Court was invested with full powers and authority to exercise and perform all civil, criminal, equity, admiralty and ecclesiastical jurisdiction within the island of Bombay and the factories subordinate thereto; it was invested with jurisdiction similar to the jurisdiction of the King's Bench in England; and generally it was granted all the powers formerly exercised by the Mayor's Court and the Recorder's Court. The inferior courts in the island of Bombay at that period were the Courts of Police Magistrates opened in 1830, Court of Petty Sessions established in 1836, and the Small Causes Court modified by Act IX of 1850.

In 1858 Queen Victoria took over from East India Company the direct government of the country. This historic event was followed by the passing of an Act of Parliament in 1861 abolishing the Supreme Court, the Sadr Dewani Adalat and the Sadr Faujadari Adalat and establishing in their stead the High Court vested with the entire jurisdiction, power and authority hitherto wielded by the three abolished courts.

Judiciary, an important organ of the Government, is a custodian of the rights of citizens and protector of the innocent from injustice. An excellence of the judicial department is a measuring rod of the excellence of government machinery, and therefore the efficiency and integrity of the judiciary is an essential condition of democracy and confidence in the administration.

Besides the High Court, the judiciary in Bombay comprises a City Civil and Sessions Court, a Small Causes Court, and Metropolitan Magistrates' Courts numbering 49 spread all over the Greater Bombay area. The details of these courts have been given below. (For a detailed history of the Courts, see Gazetteer of Bombay City and Island, Vol. II, 1910, pp. 204-37)

Chief Metropolitan Magistrate's Courts: The former courts of Presidency Magistrates, Bombay, are now styled as the Courts of Metropolitan Magistrates. In 1812 a Rule, Ordinance and Regulation was passed for good order and civil government of the island of Bombay whereby a Senior and Junior Magistrate of Police and a Court of Petty Sessions were created. In 1846 owing to the gradual increase of criminal work the permanent office of 3rd Magistrate of Police was created. These three Magistrates of Police and the Court of Petty Sessions were finally abolished by the Presidency Magistrates' Act of 1877. The same Act was repealed by the Criminal Procedure Code (Act X of 1882), whereby second and third Presidency Magistrates were placed on the same footing as Magistrates of First Class. The office of the 4th Presidency Magistrate was created in 1892. The four Presidency Magistrates were subordinate to the High Court and were under its judicial supervision.

With the tremendous growth of city's population and its industrial activities the pressure of work in the criminal courts has been steadily increasing and therefore, by 1976 the number of Metropolitan Magistrates' courts increased to 49. These were located at 14 centres, *viz.*, Esplanade, Mazagaon, Girgaum, Dadar, Bandra, Andheri, Kurla, Mulund, Vikhroli, Borivali, Bombay Central, Bombay V.T., Ballard Pier and Umarkhadi.

These courts have been given a distinct status under the Criminal Procedure Code and the provisions of their procedure, record of evidence, judgement, etc. are different from the provisions applicable to the Courts of First Class Magistrates. In view of the important nature of work done by these courts, they are required to be manned by well-trained and experienced magistrates.

Over and above these 49 courts of Metropolitan Magistrates, there are courts of Honorary Metropolitan Magistrates functioning in Bombay. The administration of Metropolitan Magistrates' Courts is carried on by the Chief Metropolitan Magistrate with the assistance of ten Additional Chief Metropolitan Magistrates. Government has also created two courts for trial of cases under the Indian Railways Act, designated as Mobile Courts, one for Central Railway and the other for the Western Railway.

In the following are given statistics of cases disposed off and pending in the Chief Metropolitan Magistrate's Courts:—

Year	Pending in the beginning	Instituted during	Disposed off	Pending at the end of the year				
1974	, .,.	7,88,435	8,11,835	1,47,187				
1978	1,64,194	5,26,165	5,75,519	1,14,840				
1982	2,81,768	7,49,838	8,97,593	1,34,013				

City Civil and Sessions Court (*It was established in 1948*): The main and sole function of this court, as of all courts, is to administer civil and criminal justice within territorial limits of Greater Bombay. It decides declaratory suits, summary suits and commercial causes of pecuniary value of above Rs. 10,000 and below Rs. 50,000 and miscellaneous applications, matrimonial petitions, arbitration petitions, notice of motion, miscellaneous appeals under the Public Premises Eviction Act as also under the Municipal Corporation Act and other Acts. A Judge of this court is appointed as President of Tribunal under the Town Planning Act of 1966.

On criminal side, the court tries sessions cases committed by the Metropolitan Magistrates for trial and also hears corruption cases. This has been made effective from April 1974. The Sessions Court has been invested with jurisdiction to hear criminal appeals and revision applications in cases tried by Metropolitan Magistrates in Greater Bombay and bail applications therein. Bombay city being a commercial and industrial city, the litigations in this court are of varied types and enormous growth of litigation is reflected in the huge volume of work. In the following is given statistics of cases tried by the City Civil and Sessions Court:—

	1974	1975	1976	1980
Civil Side:				
Cases pending in the beginning	39,258	40,796	43,452	40,583
Cases instituted during	10,086	9,752	8,913	7,519
Cases disposed off during	8,528	7,083	8,388	8,276
Criminal Side:				
Cases pending	293	816	1,086	2,099
Cases instituted	244	1,470	1,697	2,002
Cases disposed off	821	1,236	1,387	2,020

The working days of the court during 1976 amounted to 208. The actual strength of judges during the same year was 24, as against 20 in 1974.

Small Causes Court: For the more easy recovery of small debts, courts known as Court of Small Causes invested with summary powers was established in Bombay. Elsewhere in mofussil area the junior and senior civil judges have small cause powers and sit as small cause courts.

The present Court of Small Causes appears to have grown out of the Court of Requests established by Royal Charter in 1753. Under the provisions of the Small Causes Court Act, 1850, the Small Causes Court commenced working in 1852 being empowered to try all suits not exceeding Rs. 500 in value. By 1882 the work of the High Court had so largely increased that a new Act was passed which empowered the Small Causes Court to hear suits amounting to Rs.2,000 in value and to adjudicate upon all civil suits except those of certain specified kinds.

At present all the judges of this court exercise small causes court powers in money matters upto Rs. 3,000. Appeals and petitions under the Bombay Municipal Corporation Act of 1888 are entertained and heard by the Civil Judge or Additional Civil Judge. Appeals against the orders passed by the authority appointed under the Payment of Wages Act, 1936 are also heard by a judge of this court.

The following is the statistics of cases tried by the court in 1980:—



nara	Cases pending at the begning of the year		
Tell el		are e	MAULLU
Main cases	52,852	21,247	21,112
Miscellaneous cases	19,509	21,745	17,802

High Court: The Bombay High Court was established under the Act of Parliament of 1861 by Royal Letters Patent, with a plenaiy and comprehensive jurisdiction, embracing suits and matters of every description, civil, criminal, testamentary, matrimonial, insolvency, etc. It has an original as well as appellate jurisdiction, the former derived from the then Supreme Court and the latter from the *Sadr Dewani adalat* and *Sadr Faujdari adalat* which were merged in the High Court.

By the Government of India Act, 1915, the High Court Act of 1861 was modified and accordingly the High Court was empowered to have superintendence over all courts subject to the appellate jurisdiction. The jurisdiction of the High Court was enlarged by the Government of India Act, 1935, to a greater extent. As per the Government of India Order of 1936, Sind was separated from Bombay Province and thus the jurisdiction of the Bombay High Court, over Sind ceased since then. Immediately after Independence, the appellate jurisdiction of the High Court increased on account of merger of States. Increase in the jurisdiction created many administrative problems for the appellate side. It led to the unification of judicial set-up and absorption of judicial officers from the merged States. However in 1948 the Bombay City Civil and Sessions Court was established and the ordinary jurisdiction of the High Court upto Rs. 10,000 and the original criminal jurisdiction were transferred to that court. In 1951 the jurisdiction of the said court was increased to Rs. 25,000 and thus the jurisdiction on the original side of the High Court was curtailed to that extent.

Many major changes took place after 26 January 1950, *i.e.* after the Constitution of India came into force. The Constitution enlarged the powers and jurisdiction of the High Court. Article 227 of the Constitution empowered the High Court to have superintendence over all courts and tribunals throughout the territory in relation to which it exercised its jurisdiction. Tribunals which were not subject to the jurisdiction of the High Court were for the first time brought under the superintendence of the High Court. As a result of the enlargement of these powers, the constitutional matters have now become one of the most important and exacting part of judicial work. A special civil application branch and the Supreme Court branch of the appellate side were established on account of the increase in the constitutional work. The Bombay

Separation of Judicial and Executive Functions Act, 1951 provided for separation of performance of the judicial and executive functions in the then State of Bombay. This Act transferred magistracy and criminal work of the courts to the administrative control of the High Court. The system of honorary magistrates who used to try petty criminal cases in mofussil came to be abolished.

As per the States Reorganisation Act, 1956, a New Bombay State was created comprising part of the then Bombay State, part of Hyderabad State; part of Madhya Pradesh; and territories then existing in the States of Saurashtra and Kutch. The High Court branches were established accordingly at Rajkot and Nagpur. The second reorganisation took place on May 1, 1960 resulting in the bifurcation of the State into Maharashtra and Gujarat. The territorial jurisdiction of the High Court thus decreased.

The new Code of Criminal Procedure, 1973, came into force in April 1974. The appeals from orders of the Metropolitan Magistrates which used to come to the High Court went to the Sessions Court in Greater Bombay. The Metropolitan Magistrates were made subordinate to Sessions Judges.

Prior to 1960 there was only one office of the Court Receiver and the Official Liquidator, and it was under the control of the original side of the High Court. In 1960, the said office was bifurcated into two different offices. The newly created office of Court Receiver continued to remain on original side. The other office of the Official Liquidator was taken over by the Central Government and attached to the Department of Company Law Administration.

The functions of the High Court comprise dispensation or administration of civil and criminal justice. The High Court has under its charter and codes of civil and criminal procedure, extensive powers of reference and revision in regard to the decisions of all inferior courts. It exercises a general supervision over the working of these courts, both civil and criminal, by reason of its appellate and revisional powers, and by periodic personal visits of judges. The sanctioned posts of Judges were 41 in 1980.

In the following are given the statistics of institution and disposal of cases on original and appellate side since 1961 for a few years:—

	Origina	al	Appel	late
Year	Institution	Disposal	Institution	Disposal
1961	3,028	3,186	17,466	15,526
1964	6,156	5,703	19,776	18,624
1967	6,931	6,018	21,346	18,750
1970	8,567	7,462	21,371	19,101
1973	10,978	8,966	21,895	20,216
1976	13,448	12,392	30,245	29,187
1980	20,526	14,828	25,014	23,803

Sheriff's Court: The Sheriff is an old office in Bombay dating back to 1671. The practice to appoint Sheriffs in the metropolitan cities including Bombay has been continued even after Independence. The office certainly came in the wake of the connection with the British Crown. The first Sheriff in the country was appointed in Bombay by Letters Patent on 24 September 1726. It was believed that the office of Sheriff had probably been created by the local government with the assent of the London company under the Charter 20 of Charles II of March 1665 which made over Bombay to that company and empowered the company to do all things necessary for the complete establishment of justice and enable them or the Governor of Bombay to delegate judges for the purpose.

The complete indemnity to the Sheriff of Bombay from persoual responsibility came to be given only since 1930 though the position had been honorary in 1897. In regard to relation to Mayor of Bombay Municipal Corporation, the Mayor and Sheriff are called respectively, the first and second citizens. The Sheriff is appointed by the Government whereas the Mayor is elected. The significance of the Sheriff can be understood from the fact that the Sheriff has been throughout considered a link between the official hierarchy and the common unofficial public. Thus the dignity and importance attached to the office of the Sheriff arises from the customary and time honoured treatment of it as a position representing the people, in spite of representative institutions having come up.

There are a few items of insignia attached to the office of Sheriff. In Bombay there was only a silver oar first made in 1810 bearing the British Crown and inscriptions that it was given in the 50th year of the reign of George III. In 1966 a new emblem was made in hexagonal shape and has the State emblem on both its sides replacing the Crown and inscriptions.

Though the office of Sheriff is under the administrative control of the Law and Judiciary Department of the Government, by nature of the duties performed it is an executive office and not judicial. The main

functions of the Sheriff are as under: To serve and execute the writs, orders and warrants issued by the High Court and City Civil Court, Bombay; to receive money in execution proceedings and make payments pursuant to the orders of the Court; to serve and return all processes issued by the Supreme Court; to serve witness subpoenas in sessions cases; and to sell attached properties by public auctions. Formerly the Sheriff was closely associated with the selection of Justices of Peace. However, the Code of Criminal Procedure Act of 1973 abolished the institution of Justices of Peace. There is a second category of duties of the Sheriff as a public functionary, which have become really important and which give today the entire justification for the position itself. The direct personal responsibilities of the Sheriff are to meet very important persons on their arrival in and departure from the city, to entertain dignitaries and prominent people, and to convene public meetings. These functions make the Sheriff a valuable link of much practical utility between the official hierarchy and the public.

Among other functions, the Sheriff of Bombay is an *ex officio* member of the Beggar's Act Advisory Committee, Small Savings Scheme, Social Welfare Committee, the Mayor's Fund Committee, the National Integration Council and also the Chairman of Association of Sheriffs and such other Committees as may be set up from time to time. The Sheriff is also an *ex officio* member of Board of Visitors to the common prisons.

The establishment of the Sheriff's office in Bombay is by no means small. There is a lot of work in connection with the serving of processes of the courts, protection of properties attached by the Sheriff in execution proceedings, etc. There are special bailiffs appointed by the Sheriff who are authorised clerks of the solicitors and advocates.

Coroner's Court: As a natural rule, a human being cannot escape from death. Nobody feels it necessary to inquire into causes of a natural death of a person. But if a person meets any unnatural death, it gives wide scope to inquiiy into such matter. To find out the various causes of unnatural death the Government appointed the Coroner's Courts. The inflow of population in Bombay attracted by over flourishing business and trade of this city, resulted into overcrowding of population. The scarcities, slum conditions, etc., were some of the reasons for increasing the incidence of crime which proved a very serious problem both to society and to the police. In order to go into the instances of such unnatural deaths like accidents, murders, drowning etc., the British Government passed a legislation *viz.*, the Bombay Coroner Act of 1871 and accordingly established Coroner's Courts in Bombay and Calcutta. The work of Coroner's Court is based on the system of county councils prevailing in England.

The Coroner is one of the oldest English institutions. It was devised by Hubert Walter in 1194 and its earlier full title was "keeper of the king's pleas". Subsequently the English usage was shortened first to coronarius, then to coronator and now to coroner or crowner. Bombay had a Coroner in 1701, and in 1793 he was vested with the same powers as Coroners in England. The legislature has created the post of Coroner within the local limits of the ordinary original civil jurisdiction at Fort Williams and Bombay. The appointment of the Coroner of Bombay is now made on the recommendations of the Public Service Commission, while the Deputy Coroner is appointed by the Coroner with the approval of the State Government. A police surgeon is attached to the office of the Coroner of Bombay. He performs the postmortem examinations under the directions of the Coroner.

Procedure of Court: The jurisdiction of Coroner of Bombay extends over the limits of Greater Bombay. When he is informed that a person has died a sudden death of which the cause is unknown or has died under any of the circumstances mentioned in the Coroner's Act, 1871, the Coroner proceeds to hold a preliminary inquiry. This includes the examination of a body in the presence of a police officer to whose section the case belongs and if possible in the presence of the relatives or friends. If the Coroner is satisfied with the cause of death and if a postmortem examination in his opinion is not necessary, he orders the body to be released without post-mortem examination. In other cases he orders the post mortem examination to be done by his Surgeon and thereafter the body is released to the relatives.

The Coroner holds an inquest into the causes of an unnatural death. Such an inquest is held with the help of the jury to decide whether the death of a particular individual was homicidal, suicidal or accidental. In case no definite conclusion is arrived at, the verdict is kept open meaning thereby that the circumstances leading to the death are not clear. As soon as the Coroner comes to know the cause of death no matter how information reaches him, he conducts an inquiry. He is thereby in legal terminology " seized of the matter ". There are certain individuals who are statutorily obliged to inform the Coroner about the death of a person in their care. The Coroner also holds an inquest with the prior sanction of the Government in cases where a body is lying in a place from which it cannot be recovered or where body has been destroyed or disposed off in contravention of any law. He also directs the body to be exhumed where there is reason to believe that a person might have died in any of the circumstances mentioned in the Coroner's Act of 1871.

An inquest into cause of an unnatural death is nothing but a public inquiry held by the Coroner with the help of jury. The object of holding such public inquiry is to satisfy the public conscience that such unnatural death is not hushed up. The Coroner cannot proceed to hold an inquest unless there is a reasonable suspicion that there may have been something peculiar in the death and that it may have been due to causes other than natural causes.

The police usually report to the Coroner cases of murder, manslaughter, infanticide and causing death by dangerous driving, etc. In all these cases the jurisdiction of the Coroner is restricted. He merely opens an inquest to take evidence of indentity and then adjourns for a long period to allow time for criminal proceedings to take place. After the conclusion of criminal proceedings, the Coroner resumes the adjourned inquest, and the finding which is consistent with the finding of the other courts is recorded. All accidents are reported to the Coroner no matter how long a time has been elapsed between the injury and death. Deaths in police custody or in prison or in certified schools are reported to the Coroner mainly in order that a full and unbiased investigation may be held to exclude any suspicion or mal-treatment by the custodian. A full inquiry into the facts is necessary to clear the police authority of any suggestion of

negligence or brutal action.

Relation with other Courts: There are two differences between the Coroner's Court and other courts. In a criminal court there is a charge to be answered and in civil action the issue is defined before hearing; but in the Coroner's Court the inquest can be and is often held by the Coroner in the presence of a party concerned causing death of a person and without notice to him. The second difference is that no civil or criminal trial proceeds without adequate evidence but the Coroner must inquire into all cases of deaths which are reported to him.

The daily average number of post-mortems performed under the authority of the Coroner is 32, whereas daily average number of cases reported to the Coroner is 40. On 1st February 1981, the Court of Additional Coroner of Bombay was established at Vile Parle. In the following is given the work summary of the Coroner of Bombay and the Additional Coroner of Bombay:—

Particulars	Work done in 1983
(1) Cases referred to Coroner and Additional Coroner—	
(a) by Police	13,901
(b) by Hospitals	1,566
(2) Post-mortem exam. done by both courts	9,618
(3) Deaths declared natural by courts	5,894
(4) Inquests disposed by both courts	4,158
(5) No. of dead bodies handed over to medical colleges	146

LOKAYUKTA AND UPALOKAYUKTA

This is a statutory organisation set up under the Maharashtra Lokayukta and Upalokayukta Act, 1971 for investigation of administrative action taken by or on behalf of the Government of Maharashtra or certain public authorities such as municipal councils and corporations, zilla parishads, panchayat samitis, other corporations and establishments owned by or controlled by the State Government.

It is an autonomous organisation functioning in accordance with the provisions of the above Act since October 1972. The Lokayukta and Upalokayukta are appointed by the Governor for a period of five years. They cannot hold any office of trust for profit or be connected with the political parties during their tenure. They are required to present their annual report to the Governor and the Legislature.

For the purpose of jurisdiction, the definition of public servant under the Act includes Ministers, excluding Chief Minister, secretaries to the Government, presidents and vice-presidents of zilla parishads, chairmen and deputy chairmen of panchayat samitis and standing or subjects committees, presidents and vice-presidents of municipal councils, persons in the service of any local authority or any corporation and any Government company in which not less than 51 per cent of the paid up share capital is held by the State Government and any society registered under the Societies Registration Act, 1860 which is subject to the control of the State Government.

Functions: The Lokayukta and Upalokayukta investigate complaints involving (1) vigilance and allegations which cover corruption, favouritism, lack of integrity, and (2) grievance involving injustice or undue hardship due to maladministration. They can also start investigations *suo motu*. The jurisdiction of this authority however, does not cover action which is taken by or with the approval of any court, the Accountant General, the chairman and members of M.P.S.C, the Chief Election Commissioner, Chief Electoral Officer, the Speaker of Maharashtra Legislative Assembly and Chairman of the Maharashtra Legislative Council, or any member of secretariat staff of either House of Legislature, etc.

The investigations by the Lokayukta and Upalokayukta are conducted in private and particularly the identity of the complainant cannot be disclosed to the public during or after the investigations. However, subject to the restrictions the Lokayukta may make available substance of cases closed or disposed of which may appear to him of general public or academic interest. They may also refuse to investigate any complaint if in their opinion the complaint is frivolous or vexatious or is not made in good faith or there are no sufficient grounds for the investigations. Persons making such false complaint are liable to be prosecuted with the previous sanction of Lokayukta. The information collected by these authorities for the investigation is treated as confidential, and even a court is not entitled to compel these authorities to produce evidence relating to information.

For the time being, the Lokayukta and Upalokayukta do not have a separate investigation agency of their own. For the purpose of obtaining preliminary reports, they utilise Government machinery such as Director General of Police, Director of Anti-Corruption Bureau, Commissioner of Police, Superintendents of Police, Collectors, Secretaries to the Government; Registrar of Co-operative Societies, etc.

Utility of Organisation: In compliance with the recommendations of the Lokayukta and Upalokayukta the competent authorities of the Government took disciplinary action in respect of complaints involving allegations. Where complaints disclosed certain defects in administrative procedure corrective action was suggested to the Government to streamline administrative procedure and to provide safeguards to eliminate malpractices. The productivity or utility factors worked out on the basis of the effective

complaints which were found to be justified and where corrective action was recommended, were 34 per cent in 1973-74 and 27.3 per cent in 1974-75. This productivity or utility factor of the organisation compares favourably with similar factors reported by ombudsmen of other countries of the world.

The following statement shows number of complaints received by the Lokayukta:—

Year	Grievances	Allegations	Total complaints
1972	114	34	288
1973	356	234	767
1974	333	151	756
1975	519	217	1051

The statistics of complaints received and disposed off in 1977 and 1982 is shown below:—

Period	opening balance	Receipts	Total receipts	Disposed off	Balance
1977	1,235	1,314	2,549	1,132	1,417
1982	672	1,868	2,540	1,691	849

JAIL DEPARTMENT

Upto 1671, no definite reference occurs to the existence of a jail in Bombay. Prior to that period in all probability a portion of the Bombay Castle was utilised as jail. The prisoners were used to be confined in the Dongri fort before 1728. On account of Maratha invasion, the Dongri fort was strengthened and the prison at Dongri was demolished. In 1804, a jail was constructed at Umarkhadi. This too was proved to be insufficient for convicts and the House of Correction at Byculla was accordingly built and prisoners were admitted into it for the first time in 1827.

The Umarkhadi jail at Dongri was known as His Majesty's Common Jail and the daily number of prisoners confined during 1908 were 403. The Civil Jail, formerly known as the Government work house, was located within the walls of H. M.'s common prison. Defaulting debtors, persons who failed to pay Government dues were confined in this jail. The daily average number of prisoners confined were 21 in 1908. The House of Correction which was opened in 1827 at Byculla had accommodation of 262 prisoners. Persons sentenced upto one year and above were admitted in this jail. It also served as a depot for *ex military convicts* awaiting deportation. The average number of prisoners were 216 in 1908.

In addition to the above, there were two government work houses attached to prisons, of which the one for females was established in 1884. Besides, the Bombay city had eight police lock-ups. The number of persons confined in these police lock-ups was put at 20,882 and 27,057 in 1901 and 1908, respectively.

In 1950, there were three prisons in Bombay, *viz.*, the Arthur Road Prison, the Byculla House of Corrections and the Worli Detention Camp. The Arthur Road Prison was subsequently upgraded and came to be known as a central prison while that of Byculla Prison was converted into district prison. The Detention Camp at Worli which was opened under circumstances of emergency was closed down in 1961. The details of these prisons are given below:

Bombay Central Prison: This prison was constructed in 1926 and was named as the Arthur Road Prison. Subsequently this name was changed to the Bombay District Prison. In 1974 it was upgraded as the central prison and since then it is known as the Bombay Central Prison. The superintendent is the officer in charge of management of the prison in all matters including discipline, internal economy, punishment etc. The medical, executive and ministerial staff assist him in his routine work.

Although authoiised foi accommodation of 1,074 prisoners, the average population of criminals housed is generally over 1,500. Generally under-trial prisoners are 2/3rd of the total number. Convicted prisoners are transferred to other prisons located at Pune, Nashik, Amravati, Yisapur and Thane as per the classification of prisoners. The authorised total number of prisoners in 1950 were 17,068 which were reduced to 10,552 in 1960 and again increased to 20,254 in 1970. Of 20,254 prisoners, 3,345 were convicted while the rest were undertrials. The number of convicted and under-trial prisoners spread over the year 1980 was 6,254 and 11,390, respectively.

Byculla District Prison: The authorised accommodation of this prison is for 419 prisoners. Spread over the year 1980, there were 24,901 prisoners in this prison of which 22,323 were convicted prisoners and 2,578 undertrial prisoners.

Worli Prison: In 1945, this temporary prison was closed down. However on account of communal riots which erupted in the city and elsewhere the Government was compelled to re-open it. The short term prisoners were detained in it. During 1950 the population of this prison camp was put at 1,107 which considerably increased to 10,645 in 1955 and again to 11,160 in 1960. As this prison was closed down in 1961, the inmates and staff were diverted to the Arthur Road Prison, Byculla Prison, Thane District Prison and Nashik Road Central Prison.

In addition to the above, there was one hospital prison with an authorised accommodation of 20 prisoners. In 1983 there were 50 male prisoners in this prison.

Organisation: The Inspector General of Prisons, stationed at Pune, exercises general control and supervision over all the prisons and sub jails in the State. The Superintendents of Bombay Prisons come under the direct control of Regional Deputy Inspector General of Prisons, Western Region, Pune. In their day to day work the Superintendents of Bombay Central Prison and the Byculla District Prison are assisted by the executive, ministerial and medical staff.

Recreational Facilities: As per the rules, the prisoners are provided with recreational and educational facilities. Literacy classes and other recreational programmes are organised in the Bombay Prisons. The prisoners are also employed in the prison maintenance service in the prisons. Prisoners requiring specialised medical treatment from prisons all over the State are transferred to the St. George's Hospital, Bombay.

Board of Visitors: A board of visitors comprising of *ex officio* and non-official visitors is appointed as per the rules at the Bombay Central Prison and Byculla District Prison.

DIRECTORATE OF SOCIAL WELFARE

(Correctional Administration Wing and Non-Correctional Wing)

With the industrialisation and concentration of population in this industrial city, social problems like juvenile delinquency, destitution and vagrancy came up. In old days the joint family was capable of meeting all the problems which arose either in respect of children or adults. Until late in last century, in Bombay there was no problem like juvenile delinquency as compared to the other parts of the world. The problem of juvenile crime and destitution was felt in this century only. Bombay was the first along with Madras and Calcutta to have such problems on a large scale. The Government was moved accordingly to establish the effective machinery to deal with this problem, by passing the Bombay Children Act.

The Directorate of Social Welfare is divided into two wings, one dealing with backward class welfare and the other with correctional work, and work relating to welfare of women and children under the social and moral hygiene programme, and of the physically handicapped. To achieve the goal entrusted to Correctional administration wing, various Acts were passed. The same are mentioned below in brief.

The Bombay Children Act, 1948, provides for the protection of destitute, neglected and victimised children below the age of 16 and seeks reformation of delinquent children through training provided in remand homes and certified schools. The earlier Act of 1924 was applied to the city in 1927 and suburban area in 1931. The Bombay Prevention of Begging Act, 1959 applicable to Bombay and Pune, is aimed at elimination of beggary.

The Bombay Probation of Offenders Act, 1938, provides for the probation of offenders in lieu of jail punishment in suitable cases recommended by the probation officers appointed by the Department of Social Welfare. The Act is applicable to the Western region of the State. Another piece of legislation, the Bombay Habitual Offenders Restriction Act, 1959, is also applicable to the Western Maharashtra and deals with the prevention of crime and treatment of offenders. Such offenders are sent to the industrial and agricultural settlements for their rehabilitation. Offenders between age-group of 16 and 21 are dealt with by the Bombay Borstal School Act of 1929. Under the Suppression of Immoral Traffic in Women and Girls Act, 1958, the Directorate of Social Welfare is responsible for starting protective homes and supervising and administration of these homes provided for in the Act. An all India legislation in this field is the Women's and Children's Institutions Licensing Act, 1956, which provides for the licensing of institutions opened by voluntary agencies for the benefit of women and children.

The Directorate of Social Welfare is actively concerned with the after-care programme pertaining to the welfare of women and children. Character building, formal education and crafts instruction methods through which a child is developed are put to the acid test when a child is released on licence to make his way in the world. To assist it, the Maharashtra State Probation and After-Care Association, a State-wide non-official organisation has been formed to organise probation and after-care services for children, adolescents and lads released from the Borstal school.

Socially Handicapped : The State Government has created effective machinery to deal with the problems of socially handicapped persons. Juvenile offenders, destitutes and victimised children are the three main types of socially handicapped persons.

Juvenile offenders are tried for assault, theft or police cases under various Acts and are committed to the Remand Homes. In case a juvenile is in need of institutionalisation, he is sent to a Government certified school. The second category is of the destitute coming under the purview of section 40 of the Bombay Children Act, and includes deliberately abandoned children. These also include a large number of deaf and dumb, mentally deficient and physically handicapped children and such cases are admitted to remand homes by the police. In such cases the juvenile aid police unit is much concerned. When the parents are not traced out these children are committed to some other institutions certified by the Government as fit person institutions. The last category of juveniles consists of victimised children covered under section 78 of the Bombay Children Act. These include victims of rape, kidnapping, cruelty, etc., and such cases are admitted in remand homes. Reconciliation between the juvenile and the parents is effected by the clinic, probation officers, social workers and the psychiatrists.

In the following are given the details of various institutions dealing with socially handicapped.

Remand Homes: It is a place of safety as well as observation. All facilities for observation of child's personality are provided in such home. It is also a place where diagnosis of difficulties of a child is made by a probation officer and the treatment programme is suggested to overcome these difficulties. During 1976-77, there were two remand homes in Bombay, *viz.*, Remand Home for boys and girls at Umarkhadi and the New Remand Home for boys at Mankhurd. Both these homes are managed by the Children's Aid

Society, (This Society is doing an excellent work for the welfare of delinquent, and destitute children. For details refer Chapter 18.) Bombay. The home at Umarkhadi is the oldest institution of its kind and was established in 1927, whereas remand home at Mankhurd was started in 1960. The average population of these two homes during 1970-71 was 580 and 200, respectively. The remand homes in other districts of the State are managed by the District Probation and After-care Association while in Bombay they are away from direct Government control and supervision.

Certified Schools: When it is observed that the delinquent children cannot improve by undertaking methods such as restoring them to their parents, release on probation or good conduct they are committed to a certified school or a fit person institute for a long range treatment lasting upto the age of 18 years. In the institute of this nature, children are housed, fed, clothed, educated and mentally cared for. Vocational training of varied nature is imparted in these institutions. Thus the object of a certified school is character building and all efforts are concentrated towards this object.

During 1956-57 there were eleven certified schools in Bombay City and suburbs with a maximum accommodation for 1,375 children. This number however remained the same during 1976-77. These certified schools are: A. B. Sawla Orphanage, Byculla; B. Jeejeebhoy Home, Matunga; Happy Home for Blind, Worli; David Sassoon Industrial School, Mahim; Shraddhanand Mahilashram, Matunga; St. Catherine's Home, Andheri; Bombay Vigilance Association Shelter, Dadar; Chembur Children's Home, Mankhurd; Home for Mentally Deficient Children, Mankhurd; Rescue Home of the Maharashtra State Women's Council, Umarkhadi; and Salvation Army Home for Women and Children, Sion. AH these institutions are run by charitable trusts including the Children's Aid Society which manages three institutions. The oldest institution is the David Sassoon Industrial School, Mahim, which was established in

Fit Person Institutions: Under the Bombay Children Act, 1948, problematic children, victimised children and youthful offenders are apprehended and are admitted in remand homes for observation and care. Then they are produced before juvenile courts and are sent to Government approved centres, private approved centres and fit person institutions as per the orders of the court for care treatment, training and rehabilitation. The stay of a child in fit person institution is of a long duration upto 18 years in case of boy and 20 years in case of a girl. The programme and services are on firm footing in these institutions with the ultimate aim of rehabilitation of the child by way of release on licence, discharge, restoration, marriage, transfer etc.

The details of these institutions are given below:—

Year	No. of institutions run by voluntary agencies		Admitted during year		Average attendance per day	Rehabilitation	Grant- in aid paid (Rs.)
1978- 79	18	1,500	434	1,882	1,031	480	6,10,000
1983- 84	18	1,420	370	1,628	1,252	386	9,34,000

Reception Centres, etc.: The programme for women's welfare falls in two categories, statutory and non-statutory. Under the statutory part the programme is implemented in pursuance of the provisions of the Suppression of Immoral Traffic in Women and Girls Act, 1956. The State Government has established a protective home at Chembur under the nonstatutory part, for women in distress and in moral danger who are in need of shelter, and protective care and rehabilitation are provided in the reception centres and State Homes. In a reception centre the stay of women and girls is for a short period and they are then sent to the State Homes for long term training and further rehabilitation. These programmes are carried through Government institutions and voluntary institutions which have been given grant-in-aid.

In the following are shown the details of these institutions:—

Year	instit	utions	capa	ake acity	Total Average attendance		Rehabilitation	Per capita expenditure
	Reception Centre	Protective Home	RC	РН	IIIIIates	per day		(Rs.)
1978 -79	1	1	40	100	304	166	355	99
1983 -84	2	1	40	90	248	65	152	331

Rescue Homes: In the field of women's welfare programme voluntary agencies are running rescue homes for giving shelter to destitute, deserted women and women in moral danger. These institutions admit women voluntarily above the age of 18 years. These institutions are paid grant-in-aid at the rate of Rs. 45 per inmate per month. In the following are given the details of these institutions:—

Year	No. of rescue homes	Intake capacity	inmates	Average No. of inmates per day		Grant-in-aid paid
						Rs.
1978 -79	4	915	941	386	503	1,98,000
1983 - 84	4	500	355	325	30	2,10,000

Juvenile Guidance Centres: These centres are opened in slum and semi-slum areas for providing recreational activities for children staying in slum areas. Such organised activities keep the children occupied during their leisure hours and keep them away from falling an easy prey to antisocial elements.

The organisers of such centres keep a watch on the children who show disorderly behaviour and try to help them by contacting their families and schools. Needy children attending the centres are given financial assistance for text books, school uniform, medical treatment, etc. The programme thus aims at prevention of juvenile delinquency. In the following are given the details of these institutions:—

Year	No. of centres	No. of beneficiaries	Expenditure
			Rs.
1978 -79	13	845	37,000
1983 - 84	13	975	17,000

Besides, there were 16 centres run by the Government with a total strength of 100 beneficiaries. The expenditure on this centre amounted to Rs. 22,000 in 1983-84.

Orphanages: Under the non-statutory category of the programme regarding child welfare, Government gives grant-in-aid at the rate of Rs. 45 per month per child to the voluntary agencies who run orphanages which are recognised and given licences under the Women and Children Institution Licensing Act. These institutions are under private control and the children are not court committed. Services of care, medical treatment, and literacy, are provided to the children. Their rehabilitation is tried by way of foster care, adoption, etc.

In the following statement are furnished the details of these centres:-

Year	No. of orphanages			Grant-in aid
				Rs.
1978 - 79	6	900	491	2,10,000
1983 - 84	6	700	550	2,92,000

Beggars' Home: With a view to eradicating the menace of begging in the State, the Government of Bombay enacted Prevention of Begging Act in 1945 which was amended in 1959 and 1976. The Act is not a penal measure but a social legislation for the protection, treatment, care and rehabilitation of the beggars. The Act is presently applicable to the cities of Greater Bombay, Pune and Nagpur. A person committed under the Act is first admitted to a receiving centre for beggars where his case is screened and is classified for commitment for a long term stay to a particular beggar home. Local bodies to which the Act is applicable have to pay their contributions for the expenditure on maintenance of beggars domiciled from their area every year as per the Act. Accordingly the Greater Bombay Municipal Corporation pays Rs.20,00,000.

No estimate of the number of beggars in Maharashtra is available. It is however guessed that Greater Bombay alone harbours between 75,000 to 1,50,000 beggars. With a view to combating the increased menace of beggary in the city of Bombay the Government undertook a massive crash programme for the arrest of beggars, and nearly 23,000 beggars were arrested between April 1976 and August 1977. Out of this nearly 6,000 able bodied beggars were examined and taken to work sites to work on daily wages.

In the following are shown the details of the Government Beggars' Homes:—

Centre	Year	Average No.of inmates	Total (Rs.in'000)	Per capita expenditure (Rs.)
1) Receiving Centre for Beggars, Chembur	1977 -78	900	1,512	1,680
	1982 - 83	378	1,679	1,177
2) Beggars Home for Females, Chembur	1977 - 78	320	1,050	3,281
	1982 - 83	386	1,306	912

With a view to obtaining public participation in the programme, voluntary agencies working in the field are recognised as certified institutions under the Bombay Prevention of Begging Act. There are five institutions maintaining beggars in the State, of which three are located in Bombay. These three

institutions get capitation grant at Rs.45 per month per inmate and 100 per cent grant-in-aid on *pro rata* basis. The details of these three institutions are given below:—

Institution	Institution		Grart-in aid	Per capita expenditure
King George V Memorial, Bombay, and	ب	400	4,00,000	2,000
Lady D.J. Home for Destitute, Bombay	נ			
E. F. A Home for Leprosy, Bombay		50	15,000	300

Special nutrition programme: The special nutrition programme in urban slums was introduced by the Government of India in 1970-71 to combat malnutrition amongst children belonging to the weaker sections of the community whose income is below Rs. 200 per month staying in urban slums and in tribal development blocks. The benefits of this programme were extended to the children in the age group of 3 to 6 years as also to the expectant mothers and nursing mothers living in these areas. From April 1974 it has become a State scheme and funds are required to be provided by the State Government.

In Greater Bombay this programme is assisted by the World Food Programme since 1976-77. In the following statement are shown the details of this programme during 1978-79:—

No.of slum areas		Children below 6		No c	Average cost per			
Total slums	Slums covered	years in	nursing mothers in slums	No.of centres	No.of children		beneficiary (in paise)	
1,812	1,200	2,18,562	21,800	585	11,51,153	1,847	17 to 19 (Food) 1.5 to 1.9 (Transport)	

Juvenile Court: Juvenile Court, situated at Umarkhadi, is a statutory court having special jurisdiction over delinquent and neglected children. It is a court of parental power to protect erring and unfortunate children. The purpose of proceedings is not punishment but correction of conditions, care and protection of a child. The court goes into the circumstances which led the child into trouble. The working of this court is different from that of an adult court as there are probation officers attached to this court. These officers are required to carry out necessary home inquiries in respect of parents and the court depends upon the reports of probation officers. In some cases, the court receives great help from the child guidance clinic, social workers and psychiatrists and the decision of the court to a great extent depends upon their findings and recommendations.

The court is presided over by a Metropolitan Magistrate along with a lady honorary magistrate. In the following is shown the work done by the court since 1960 for a few years:—

Year	No. of				
	Cases admitted	Cases disposed off			
1960	3,831	3,174			
1970	1,931	1,876			
1975	2,600	2,200			
1976	3,436	3,380			

Physically Handicapped: The Directorate of Social Welfare is also in charge of work relating to education and rehabilitation of physically handicapped persons. The main programme under this category is education and training of physically handicapped children and adults, which envisages the opening of special schools. For adult deaf, mute and crippled, sheltered workshops are established which provide them tiaining and jobs in suitable trades under special working conditions, enabling them to earn wages and thereby become self-supporting. Government have started institutions for such persons and grants financial aid to voluntary agencies doing work in this field.

The first school for the physically handicapped, *viz.*, the Bombay Institution for Deaf and Mute was started in Bombay in 1885. It was managed by the Roman Catholic Mission. The progress in this field was very slow, as upto 1954-55 there were only eight institutions in Bombay of which four were for the blind and two each for deaf, mute and mentally handicapped persons.(*For details of institutions serving the cause of the physically handicapped, see Chapter 18.*)

The statistics of voluntary recognised institutions for the blind, deaf and mute, and mentally retarded persons in Greater Bombay in 1978-79 and 1983-84 are given below:—

(1) Institutes for Blind

Year	Institutes		Sanctioned strength		Average No. of beneficiaries		Expenditure (Rs.)	
	Schools Workshops		Schools	Workshops	Schools Workshops S		Schools	Workshops
1978 -79	4	5	350	475	240	400	3,66,757	2,53,040
1983 - 84	3	5	380	500			7,03,000	4,00,000

(2) Institutes for Deaf and Mute

Year	No of institutes		Average No. of beneficiaries	Expenditure by way of grant-in-aid		
1978 -79	9	495	480	4,15,789		
1983 - 84	12	885		13,00,000		

(3) Voluntary recognised institutes for mentally retarded

Year	Institutes		Sanctioned strength Average			beneficiaries	Expenditure (Rs.)
	Schools	Workshops	Schools	Workshops	Schools	Workshops	
1978 - 79	6	1	295	50	280	45	3,56,082
1983 - 84	6	1	750	50			10,75,000

The details of work done by voluntary recognised institutions for the orthopaedically handicapped is shown below:—

Year	No of institutions		Bene	ficiaries	Expenditure	
rear	Schools	Workshops	Schools	Workshops	(Rs.)	
1978 -79	4	2	100	160	1,50,521	
1983 - 84	2	3			4,60,000	

A mention may be made of the Vocational Rehabilitation Centre for Physically Handicapped, Kurla, run by the Government of India. This centre was established in 1968. It evaluates the handicapped vocationally, and examines their physical and mental capacity to perform various jobs. Physically handicapped persons are given necessary counselling and workshop training to adjust them in their work habits. Handicapped persons are placed in suitable jobs with the help of special employment exchange. From 1968 to 1976, the centre rehabilitated 1362 handicapped persons of which 175 were blind.

Special Employment Exchange: A special employment exchange for the physically handicapped was set up in 1959. It registers applicants from among the blind, deaf and dumb, and orthopaedically handicapped and handicapped due to respiratory disorder. The exchange undertakes a careful study of available jobs for identification of those which can be performed in spite of certain physical handicaps, canvassing prospective employers with an approach for consideration of disabled persons on competitive basis as regards performance, introduction of a disabled candidate to the job selected for him in consultation with the employers, getting minor adjustments made to ensure easy physical increments, and follow-up in each case till the candidate is settled in the job to his own satisfaction and that of employers.

Since its inception up to 1977, the exchange registered 5,483 handicapped persons. Of 2,238 candidates placed in gainful employment during the same period, 1,680 were orthopaedically handicapped, 399 deaf and mutes, 152 blind and 7 handicapped due to respiratory disorder.

In the following statement is shown the work done by the exchange in a few years since 1960:—

	No of					
Year	Registrations	Placements				
1960	155	68				
1965	209	77				
1970	324	143				
1975	315	87				
1977	563	276				
1980 1983	1,007	350				

TABLES

Table No.1 STATISTICS OF COGNIZABLE AND NON-COGNIZABLE CRIME, GREATER BOMBAY

Year	Cognizable crime	e reported to	Non-
	Police	Magistrates	cognizable crime
1920	67,013	9,209	22,400
1930	76,822	22,986	23,373
1940	1,55,814	25,913	47,955
1950	2,80,147	2,15,493	1,20,062
1960	5,10,075	3,573	1,59,156
1970	3,60,416	3,064	65,403
1980	4,60,922	1,689	64,961

TABLE NO.2

COGNIZABLE CASES UNDER VARIOUS ACTS, GREATER BOMBAY

	Cases Under					
Year	Indian Penal Code	Local Laws And Special Acts				
1920	12,191	54,822				
1930	NA	NA				
1940	11,354	1,44,460				
1950	22,935	2,57,212				
1960	18,524	4,91,551				
1970	25,763	3,34,653				
1980	36,695	4,25,300				

STATISTICS OF IMPORTANT CRIME, GREATER BOMBAY

Year	Total cognizable crime reported to police (IPC only)	Rioting	Murder	Kidnapping and abduction	Dacoity Robbery		Housebreaking	Cheating	Breach of trust
1950	22,935	172	119	223	27	408	3,264	1,364	1,671
1955	15,888	132	142	166	13	158	1,711	807	1,088
1960	18,041	155	133	152	17	215	1,579	779	1,129
1965	26,304	273	152	196	12	339	1,934	913	1,267
1970	25,464	338	146	173	30	218	1,843	731	1,010
1975	33,265	228	165	172	27	315	2,763	1,022	1,097
1980	35,614	231	217	219	54	382	2,343	1,040	924

OTHER DEPARTMENTS



Maharashtra State Gazetteers

IN THIS CHAPTER IS GIVEN THE WORKING OF SOME OF THE STATE GOVERNMENT departments and corporations functioning in Bombay, along with the list of Central Government departments and some offices of foreign countries.

STATE GOVERNMENT DEPARTMENTS PUBLIC WORKS DEPARTMENT

The Public Works Department was for some time known as the Public Works and Housing Department and was also termed as the Buildings and Communications Department for a few years. It deals with various subjects such as buildings belonging to Government, electrical installations in Government buildings, housing for Government servants, construction and maintenance of roads, communications, minor ports, parks and gardens, etc. The PWD was established in 1854.

Apart from the headquarters of some of the circles, there is a little scope for the functioning of the department in Greater Bombay. The main reason for limiting the scope of activities of the department is the existence of municipal corporation which carries out all sorts of work *i.e.*, construction of roads and bridges, supply of electricity and water in municipal area. The work relating to port is attended by the Bombay Port Trust authority.

The department however has got local offices for execution of its work in Greater Bombay. The Bombay Circle under the Superintending Engineer is responsible for carrying out building construction work pertaining to Government. This circle is divided into three divisions. The Superintending Engineer, National Highway Circle, with 3 divisions under him, carries out construction and maintenance of Eastern and Western Express Highways, bridges across Vasai creek and Ghod Bandar-Manor road. The design circle controlled by the Superintending Engineer prepares detailed designs for major buildings and bridges in the entire State including Greater Bombay. The Superintendent, Parks and Gardens, looks after the maintenance and laying out of parks and gardens attached to Government buildings. Besides, there are located in Bombay the offices of the Chief Port Officer, Electrical Engineer, Technical Examiner's unit, and Architect to Government.

FOREST DEPARTMENT

The forests in Bombay district are under the charge of the Divisional Forest Officer, Thane, and these forests cover an area of 19.18 sq.km. consisting of 8.07 sq.km. of reserved forests and 11.11 sq.km. of municipal forests given for management to the forest department. These forests are included in the Borivali National Park (*Recently named after late Sanjay Gandhi. The Lion Safari providing a natural habitat to lions is an attraction to tourists, Refer Chapter 19.*) for the preservation of scenic, floral, faunal, geological, historical and archaeological features in an unimpaired state. Thus while preserving these aspects, the park provides recreational facilities and a centre for scientific studies.

The major portion of the forests form the catchment areas of Tulsi and Vihar lakes with high hills rising on all sides. The type of vegetation in Tulsi catchment ranges from pure evergreen on hill tops to the marshy vegetation along the fringe of the Jake. The middle zone is represented by the mixed deciduous type with teak and its associates. The seclusion and protection which these forests have enjoyed from all injurious influences has resulted in having well wooded hill slopes and abundant natural regeneration. In the catchment area of Vihar lake, there is a higher percentage of *khair* species.

These forests are declared as reserved forests, after being subjected to regular settlement by the Forest department. Since the forest are included in the National Park, all fellings in these forests have been suspended from 1968-69. The main function of the department therefore lies in protection of the forests, regeneration and improvement of environment and beautification of the park. Other works of development of the park include construction of roads, rope ways, water channels, etc. So far as the relation with the people is concerned, privileges or concessions are granted to the villagers in the reserved forests only. No such facilities are granted as far as the municipal forests are concerned.

The Divisional Forest Officer, Thane, is responsible for the forest activities in Thane division of which the Bombay district forms part. He is responsible to the Conservator, Thane Circle, Thane.

CO-OPERATION DEPARTMENT

Co-operation in its infinitely varying forms offers a vast field for economic development. It was also considered to be the best form for achieving the establishment of the socialistic pattern of society. It has therefore assumed a prominent role in realising the planned development of the country, particularly the agro-industrial economy. The department is associated with the manifold aspects of the movement such as rural finance, agricultural marketing, industrial co-operation, housing co-operatives and regulation of money lending business. These activities are governed under the various Acts such as the Maharashtra Co-operative Societies Act, 1960, the Bombay Moneylenders Act, 1946, etc.

As there is no local sector agency for the district of Bombay, all activities of the department in Greater Bombay are carried through the State sector agency. The District Deputy Registrar of Co-operative Societies looks after the functioning of the department in Greater Bombay. In his work he is assisted by five Assistant Registrars whose charges have been distributed on functional basis. These Assistant Registrars have been entrusted with the work of consumers' stores, urban credit, housing societies,

money-lending, etc.

The Maharashtra State Co-operative Bank functions as the central financing agency. The Greater Bombay District Central Co-operative Bank has been established recently "in 1974. Another district level institution is the Greater Bombay Co-operative Board. The housing societies in the district have their own federation, *viz.*, the Bombay Co-operative Housing Societies Federation Ltd. All housing co-operatives are affiliated to this federation.

The State level apex institutions functioning in the Bombay and Suburban district are the Maharashtra State Co-operative Bank Ltd., the Maharashtra State Co-operative Land Mortgage Bank Ltd., the Maharashtra State Co-operative Marketing Societies Federation Ltd., the Maharashtra Co-operative Housing Finance Societies Federation, the Maharashtra State Co-operative Union Ltd., the Maharashtra State Co-operative Fisheries Society Ltd., the Maharashtra Rajya Sahakari Sakhar Karkhana Sangh Ltd., the Maharashtra State Wholesale Consumers' Co-operative Societies Federation Ltd. and the Brihan Mumbai Doodh Utpadak Sahakari Federation Ltd. (For details refer Chapter 6 of Greater Bombay Gazetteer.)

STATE TRANSPORT

The nationalisation of passenger road transport was effected in August 1947. The Maharashtra State Road Transport Corporation, a statutory body, undertakes the passenger traffic in the State. The bus station and a depot of the MSRTC were under the erstwhile Bombay division, the headquarters of which was situated at Tardeo. Subsequently this headquarters was shifted to Thane in 1957 and the division was renamed as the Thane division. Greater Bombay for the administrative purpose comes under the Thane division. There are two bus depots situated at Bombay Central and Parel.

The operations of the MSRTC were started in the erstwhile Bombay division from April 1950 on 39 routes with a total route length of 1859 km. In 1968 there were 65 vehicles attached to the depot at Bombay. In addition special services are operated by Bombay Central and Parti depots during festivals. Besides regular services, excursion and holiday services are also operated from these depots.

The divisional workshop is situated at Thane where heavy repairs and preventive maintenance are carried out. Regular daily and weekly servicing is carried out at the depot workshop situated at Bombay Central.

For the convenience of travelling public, a modern bus station has been provided at Bombay Central on the ground floor of the central office building. The bus station covers an area of about 1532.90 square metres (16,500 sq. ft.). In addition, reservation rooms, a parcel office, and canteen have also been provided. The bus station at Parel is located in the compound of the former Modern Mills. Pick-up sheds have been provided at Lalbaug, Dadar, King's Circle, Sion and Kurla. (A detailed account of State Transport is given in Chapter 7. Headquarters of the Corporation is at Bombay Central.)

The Corporation also provides welfare facilities to its employees. A recreation hall with facilities fcr indoor games is provided in the main office building. A dispensary has been maintained at Bombay Central.

FISHERIES DEPARTMENT

Fisheries activities in Greater Bombay are looked after by the District Fisheries Development Officer. In Bombay are situated the offices of Director of Fisheries and the Regional Fisheries Development Officer, Bombay Region. The Director is assisted in his work by two Deputy Directors, two Assistant Directors, Fisheries Education Officer, Planning Officer, Statistical Officer and other staff.

The total potentialities in Greater Bombay for inland fisheries extend over 244 hectares, of which 5.70 hectares are utilised departmentally for pisciculture. There are 56 tanks in the district most of them being seasonal.

In the socio-economic field, efforts are made to bring fishermen in the district under the co-operative fold so as to extend them benefits of different schemes of development and assistance to fishing trade. There are about 4,917 active fishermen engaged in fishing. In addition to these there are about 2,000 allied workers engaged in fishing industry. During 1976-77 there were 15 primary and one apex fisheries co-operative societies. Most of these societies have been established at Worli, Khar Danda, Juhu, Varsova, Madh, Manori and Trombay. Some of these societies owned ice factories, fish transport trucks, shops selling fisheries requisites, etc.

Fisheries Training:—Institutions such as the Central Institute of Fisheries Education and the Fisheries Training Centre situated in Bombay provide educational facilities in fisheries activities. The Fisheries Training Centre at Varsova established in 1955 is under the control of the Fisheries Department. It admits 22 candidates for half yearly course. Upto December 1976, 761 trainees were trained. As per the recommendations of the *ad hoc* committee on Fisheries Education appointed in 1959, the Government of India established the Central Institute of Fisheries Education at Varsova in 1961 to impart post-graduate instruction in fishery science to district officers deputed by State Government, Central Organisation and Private Organisations concerned with implementation of fishery development programme. Every year, 30 candidates are admitted for the two year's post-graduate diploma course in fishery science. During the period 1961-77, 216 candidates were trained.

Taraporevala Aquarium:—One of the outstanding achievements of the Fisheries Department is the establishment of Taraporevala Aquarium established in 1951 in Bombay at the cost of Rs. 9 lakhs which included a donation of Rs. 3 lakhs from Shri Taraporevala. This aquarium has become an important research institution where investigators get all necessary facilities. It also acquaints the public with the

ANIMAL HUSBANDRY DEPARTMENT

The Animal Husbandry Department is responsible for prevention and control of contagious diseases in livestock apd for the operation of the Animal Preservation Act, 1948, which does not permit slaughter of useful animal. Other work entrusted to it is the certification of meat for export and certification of damaged foodgrains, unfit for animal consumption and issue of health certificates in respect of birds, small animals and livestock exported from the country.

The office is controlled by the District Animal Husbandry Officer, Bombay who is assisted by four Veterinary Inspectors. He is responsible to the Regional Deputy Director of Animal Husbandry, Bombay.

In Greater Bombay, there are three veterinary aid centres located at Kurla, Jogeshwari and Andheri. Each centre is managed by a Veterinary officer assisted by Livestock Supervisors. All these Veterinary Officers are responsible to the District Animal Husbandry Officer. Under the rinderpest follow up scheme, immunisation of animals against rinderpest is carried out in Greater Bombay and the remaining districts of Bombay region. This scheme is controlled by the Assistant Director of Animal Husbandry with the help of a Veterinary Officer and four Livestock Supervisors. A mobile epizootic control unit at Mulund functions under the Assistant Director which carries out immunisation of animals against various contagious diseases in Greater Bombay and remaining districts of the Bombay region. This unit is managed by the Veterinary Officer with the assistance of four Livestock Supervisors. Another unit, *viz.*, the mucosal control unit managed by the Research Officer is engaged in the control of mucosal diseases, microbial assay of meat and other products. The Gynaecologist, Deonar Abattoir, works under the control of the Regional Deputy Director. He is assisted by two Veterinary Officers in the work of implementation of the Bombay Animal Preservation Act, 1948, and the Bombay Essential Commodities Cattle Control Act, 1958. Under the former Act, useful animals *i.e.*, those fit for draught, milch, young animals likely to be useful are to be prevented from slaughter.

There is a College of Veterinary at Parel which, besides higher education, provides veterinary hospital services. The Bai Sakarbai Dinshaw Petit Hospital for Animals, opened in 1884, is connected with the College.

STATE GOVERNMENT UNDERTAKINGS

The State Government has established many public corporations and boards for the proper implementation of activities undertaken for all-round development. These semi-government organisations with their headquarters at Bombay are: Bombay Housing and Area Development Board, Bandra; City Industrial Development Corporation, Nariman Point; Development Corporation of Konkan Ltd., Fort; HafFkine Bio-Pharmaceutical Corporation, Parel; Khadi and Village Industries Board, Fort; Leather Industries Development Corporation Ltd., Fort; Maharashtra Agricultural Development and Fertiliser Promotion Corporation Ltd., Fort; Maharashtra Agro-Industries Development Corporation, Andheri; Maharashtra Aarthic Vikas Mandal, Fort; Maharashtra Industrial Development Corporation, Andheri; Maharashtra Labour Welfare Board, Worli; Maharashtra Industrial Development Corporation Ltd., Fort; Maharashtra State Co-operative Marketing Federation Ltd., Masjid; Maharashtra State Farming Corporation, Fort; Maharashtra State Financial Corporation Ltd., Worli; Maharashtra State Oilseeds Commercial and Industrial Corporation Ltd., Masjid; Maharashtra State Police and Welfare Corporation, Fort; Maharashtra State Powerlooms Corporation Ltd., Marine Lines; Maharashtra Tourism Development Corporation Ltd., Nariman Point; Maharashtra State Road Transport Corporation, Bombay Central; Maharashtra State Social Welfare Advisory Board; Maharashtra Warehousing Corporation, Dadar; and State Industrial and Investment Corporation of Maharashtra, Nariman Point.

In the following is given the information of some of the organisations whereas details of rest of the organisations have been given in the respective chapters.

Haffkine Bio-Pharmaceutical Corporation (*Details of the Haffkine Institute are given in Chapter 16.*): The production activities of the erstwhile Haffkine Institute were taken over by the Haffkine Bio-Pharmaceutical Corporation Ltd. which was registered in 1974 as a private limited company under the Companies Act, 1956. The Corporation is owned by the Government of Maharashtra.

The corporation undertakes manufacture of biological and pharmaceutical products. The former include antitoxins and sera of tetanus and diphtheria, vaccine, blood products; while the latter comprise vitamin tablets, sulpha tablets, parenteral solution, etc. Nearly ninety per cent of the products go to State Government and Defence forces. It has also started export to Africa, Sri Lanka and the Middle East countries.

After it began to function as an autonomous body, the Corporation launched an ambitious expansion programme and completed parenteral solution project, oral polio vaccine project. It also started a new section for manufacture of injectables. It took over the pyrogen unit of the Small Industries Research Institute, Pune for manufacture of pyrogen free distilled water. A unit located at Pimpri near Pune is under the control of the Corporation where horses are maintained for preparation of anti-toxins and sera.

The Corporation runs a book bank. The principal welfare activities are provided through sports club.

Employees of the Corporation include 17 managers, 128 supervisory staff, 113 ministerial staff, 162 skilled and 476 unskilled labour.

Maharashtra Agro-Industries Development Corporation Ltd.: The Maharashtra Agro-Industries Development Corporation was established in 1965. The activities of the Corporation could be divided into two categories *viz.*, input oriented and output oriented. The manufacture and sale of granulated mixtures, animal feeds, pesticides and supply of tractors are grouped as input-oriented activities. In addition to this the Corporation imparts training to the entrepreneurs under the Government of India schemes. It also deals in distribution of agricultural iron and steel.

Capital base of the Corporation is the equity share capital contributed by the Government of Maharashtra and Government of India in equal proportion. The issued and paid-up capital amounted to Rs. 4 crores as on 31st March 1977. The Corporation has nine manufacturing and four regional agro-service centres spread over the State of Maharashtra. One of the animal feed factories (*Sugras*) having a capacity of 3,000 m.ts. is located at Goregaon, a suburb of Bombay on the Western Railway. The other animal feed factory is located at Chinchwad in Pune district. Factories located at Karad (Satara district) and Rasayani (Raigad district) are engaged in the manufacture and sale of granulated fertilisers. The Corporation deals in procurement, formulation and distribution of pesticides. Distribution of tractors, agricultural implements, servicing, etc, is undertaken through the four regional centres at Pune, Narik, Jalgaon and Kolhapur. Canning of fruits and vegetables, an output oriented activity, is undertaken through the Noga Factory, Nagpur, which was taken over by the Corporation in 1972.

The total turnover of the Corporation, which in 1973-74 was Rs. 1601.07 lakhs, increased to Rs. 1,895.15 lakhs in 1975-76.

The Board of Directors consists of a chairman and eleven directors.

Maharashtra State Khadi and Village Industries Board: The Maharashtra State Khadi and Village Industries Board constituted under the Bombay Khadi and Village Industries Act, 1960, extends financial assistance as per pattern laid down by the Khadi and Village Industries Commission to co-operative societies, registered institutions and individuals. It also arranges technical guidance, training to artisans and marketing of their products. The headquarters of the Board is at Bombay, and it functions through the offices situated at district headquarters. The activities in Bombay district are looked after by the office situated at Thane.

Many of the cottage industries coming under the purview of the Board are suitable for rural areas. Even then the Board has established a few cottage industries in a highly industrialised city like Bombay. Their number in 1977 was 31 and belonged to category of oil industry, leather industry, neera palm, gur, soap, handmade paper, fibre, carpentry and blacksmithy, etc. The Board extends financial help to build up share capital, stocks, equipment etc, at the rate of four per cent

Maharashtra Industrial Development Corporation: The Maharashtra Industrial Development Corporation was established in 1962 under the Maharashtra Industrial Development Corporation Act, 1961, to promote and assist the rapid and orderly establishment, growth and development of industries in Maharashtra.

With the exception of Bombay-Pune area, the rest of the State had largely remained industrially underdeveloped. It was necessary to avoid the haphazard development of industries in Bombay and disperse industries away from Bombay. The Corporation since its establishment has made efforts to establish well-planned industrial areas in as many as 35 cities and towns including Maroland transThane creek in Bombay-Thane region. It provides all facilities such as roads, water supply, power and drainage. It has also constructed industrial sheds for the new entrepreneurs, the number of which stood at 260 in 1973-74. It spent Rs. 14.74 crores on development of industrial areas and Rs. 20.23 crores on execution of major water supply schemes.

Maharashtra Labour Welfare Board: The Maharashtra Labour Welfare Board, a statutory body constituted under the Bombay Labour Welfare Fund Act, 1953, conducts welfare activities for the industrial labour outside the factory premises. These activities are now conducted in over 75 industrial towns and cities including Bombay in the State through labour welfare centres. These centres include *lalit kala bhavans*, *vishishta kendras* and welfare centres.

The labour welfare activities include community and social education, community welfare like *shishu sanskar shalas* and *shishu mandirs*, games and sports, tours, entertainment, household industries and subsidiary occupations for women and unemployed persons. During 1977 there were 37 labour welfare centres in Greater Bombay.

Maharashtra State Social Welfare Advisory Board: The Maharashtra State Social Welfare Advisory Board was established in 1960 to take up the responsibility of effective supervision and direction of social welfare programmes formerly entrusted to the Central Welfare Board.

The programme of the Board consists of various schemes such as family and child welfare services, preschool project in urban areas, urban welfare extension project, condensed courses, holiday homes, foster care homes, general grant-in-aid programmes and special nutrition programme. Assistance is given to individuals and institutions for undertaking welfare activities sponsored by the Board. In order to provide technical information to the workers in the field and to give publicity to its programmes it publishes a monthly journal.

The Board is provided with a staff of 30 persons and the expenditure is shared by the Central Social Welfare Board and the State Government. During 1975-76, grants sanctioned on various programmes of the Board amounted to Rs. 8,941,927. The grant-in-aid institutions in the entire State numbered 1,166 including 84 mahila mandals.

GOVERNMENT OF INDIA OFFICES

Bombay being the State capital and an advanced trade and industrial centre many regional and important offices of the Government of India are situated here. These offices are: Accountant General, Bombay-20; All India Handloom Board, Bombay-20; All India Radio, Bombay-20; Bhabha Atomic Research Centre, Bombay-39; Banking Laws Committee, Bombay-6; Central Bureau of Investigation, Bombay-39; Central Excise Collectorate, Bombay-20; Central Food Technological Research Institute, Bombay-58; Central Government Health Scheme, Bombay-1; Central Industrial Security Force, Bombay-71; Central Institute of Fisheries, Bombay-61; Central Poultry Breeding Farm, Bombay-64; Central Silk Board, Bombay-2; Central Telegraphs, Bombay-23; Commission of Inquiry on Large Industrial Houses, Bombay-1; Company Law Board, Bombay-2; Cotton Development Directorate, Bombay-1; Cotton Technology Research Laboratory, Bombay-19; Customs Collectorate, Bombay-38; Dock Safety Inspectorate, Bombay-1; Drugs Controller, Bombay-1; Economics and Statistics Directorate, Bombay-20; Education and Social Welfare, Regional Office, Bombay-20; Emergency Risk Insurance Scheme, Bombay-1; Employees Provident Fund, Bombay-51; Enforcement Directorate, Bombay-1; Export Inspection Council of India, Bombay-4; Export Promotion Directorate, Bombay-20; Factory Advice Service and Labour Institute, Bombay-22; Family Planning Training and Research Centre, Bombay-4; Film Censors Central Board, Bombay-6; Film Division, Bom-bay-26; Food Department, Bombay-2; Forward Market Commission, Bombay-2; Handicrafts Board, Bombay-1; Import and Export Trade Control, Bombay-20; Income Tax Department and Appellate Tribunal, Bombay-20; Indian Navy (Western Naval Command), Bombay; Indian Space Research Organisation, Bombay-5; Indian Standards Institution, Bombay-7; Iron and Steel Controller, Bombay-20; Khadi and Village Industries Commission, Bombay-56; Labour Commissioner (Central), Bombay-38; Law, Justice and Company Affairs, Bombay-20; Leather Research Institute, Bombay-17; Minor Ports Survey Organisation, Ballard Estate, Bombay-1; Naval Apprenticeship Programme, Bombay-70; National Dairy Research Institute, Bombay-65; National Savings Organisation, Bombay-1; Official Liquidator, Bombay-1; Oil and Natural Gas Commission, Bombay-21; Overseas Communication Service, Bombay-1; Passport and Emigration, Bom-bay-25; Postmaster General, Bombay-30; Press Information Bureau, Bombay-1; Railways (Central), Bombay-1; Railways (Western), Bombay-20; Registrar of Companies, Bombay-2; Shipping Directorate, Bombay-1; Small Industries Service Institute, Bombay-72; Supplies and Disposals, Directorate, Bombay-38; Supplies (Textile) Directorate, Bombay-20; Tariff Commission, Bombay-2; Telecommunication Maintenance, Bombay-23; Telecommunication (Maharashtra Circle), Bombay-30; Telephones, Bombay-5; Television Centre, Bombay-25; Textile Commissioner, Bombay-20; Textile Committee, Bombay-18; Directorate of Tourism, Bombay-20; and Trade Mark Registry, Bombay-20.

FOREIGN CONSULATES

Offices of Consulate Generals of many countries are established in Bombay. The list of such offices is given below :—

Designation	Country representing	Location	
	01_1_		
Consulate	Haiti	Bombay-26	
	Iceland	Bombay-1	
	Indonesia	Bombay-26 Bombay-20 Bombay-20 Bombay-20 Bombay-20	
	Israel		
	Nicaragua		
	Panama		
	Peru		
	Poland		
	Yemen	Bombay-5	

ı		1	
	Consulate General	Afghanistan	Bombay-6
		Australia	Bombay-1
		Austria	Bombay-1
		Baharain	Bombay-20
		Belgium	Bombay-25
		Costa Rica	Bombay-1
		Czechoslovakia	Bombay-26
		Denmark	Bombay-38
	Dominican Republic	Bombay-20	
	Egypt	Bombay-1	
	Ethiopia	Bombay-1	
	France	Bombay-1	
		German Federal Republic	Bombay-20
Maha	rashtra	German Democratic Republic	Bombay-20
		Greece	Bombay-1
		Iraq	Bombay-6
		ltaly	Bombay-20
	Japan	Bombay-62	
		Kuwait	Bombay-20
		Mauritius	Bombay-5
		Netherlands	Bombay-20
		Norway	Bombay-1

	Philippines	Bombay-20
	Sudan	Bombay-20
	Sweden	Bombay-38
	Switzerland	Bombay-20
	Syria	Bombay-20
	Thailand	Bombay-1
	Turkey	Bombay-20
	United Arab Emirates	Bombay-5
	U.S.A.	Bombay-26
	U.S.S.R.	Bombay-6
	Yugoslavia	Bombay-20
Deputy Commissioner	United Kingdom	Bombay-23
Imperial Consulate General	Iran	Bombay-20
Royal Jordan Consulate	Jordan	Bombay-20
Vice Consulate	Spain	Bombay-20

LOCAL SELF GOVERNMENT



Maharashtra State Gazetteers

MUNICIPAL CORPORATION



Evolution (For detailed history of the Municipal Corporation refer to Gazetteer of Bombay City and Island, Vol. III, 1910. pp 1-66): Bombay came into British possession actually in February 1665 as a Royal Gift on the marriage of Charles II. On 23rd September 1668, it was transferred to the East India Company. The civic administration upto 1792 was conducted by the Governor and five senior members of his council who were Justices of Peace. Between 1807 and 1833 several legislative acts were passed for the advancement of civic life. During this period the civic administration was vested in a Court of Petty Sessions. Upto the end of 18th century the administration of Bombay was conducted by the President and Council directly. The administration of town by the Bench of Justices was the subject of frequent comments and it was felt that some better system must be devised for dealing with sanitation and development. By the Act of 1845, all municipal taxes paid into Government treasury were turned into a municipal fund which was administered by an executive body

styled as a Board of Conservancy. However, on account of inefficiency of the board the Government decided to alter its constitution by an Act of 1858. Under this Act, three Municipal Commissioners for the town and island were appointed for carrying out improvement and conservancy.

In 1872, according to provisions of a bill, the powers in connection with the administration of municipal affairs formerly possessed by the Bench of Justices devolved upon two representative bodies, the Corporation and the Town Council. The Corporation consisted of 64 members of whom one-half were elected by the rate payers. The Town Council, on the other hand, consisted 12 members of whom 8 were elected by the Corporation. The Municipal Commissioner in matters of finance was directly under the control of Town Council.

In 1882, came the memorable pronouncement of Lord Ripon on Local Self-Government which envisaged far reaching powers for local bodies. It was followed by an agitation in Bombay for further extension in the elected representation responsible to citizens. This led to the passing of the Bombay Act of 1888. The Act marks an epoch as it is still largely in force, and subsequent amendments have not altered its framework. The outstanding feature of this Act was the creation of three co-ordinating authorities, *viz.*, the Municipal Corporation, the Standing Committee and the Municipal Commissioner. The Act increased the number of councillors from 64 to 72 of which 36 were elected at ward elections by rate payers and graduates of some universities in the British India. It also created for the first time territorial constituencies by dividing the city into seven wards for the purpose of election. (*For detailed history of Growth of Municipal Government refer to Chapter 2-History*-Modern Period in Vol. I of this Gazetteer.*)

Further constitutional changes were effected in 1922 *vide* the Bombay Act of 1922 which did away with representation of the Justices of Peace and substituted the rate payers franchise by the rent payers. This resulted into increase of strength of the Corporation to 106 of which 76 members were elected at ward elections and rest nominated by various bodies including Government. During 1931 the strength of the Corporation was put at 112. The City Improvement Trust created in 1898 *(See Chapter 2—History—Modern Period (ibid.))* as a separate body was amalgamated with the Municipality by the Bombay Act of 1933 after its dissolution in 1926.

The constitutional changes brought about by the Government of India Act of 1935 set the pace for further reforms in local government sphere. In 1936, the franchise was widened by reducing the rental qualification. It necessitated the division of original seven wards in 19 smaller units. This was ejected by the Bombay Act XIII of 1938 which also increased number of councillors from 112 to 117. This enactment did away with the Government nominations except three members who were appointed *ex officio* members. The first general elections on the basis of adult franchise introduced in 1942 were held in 1948. The Bombay Act of 1948 was responsible for the division of city in 34 wards for the general elections of 106 elective seats.

The rapid growth of population and the absence of any scope for further expansion within the city limits, the growing dependence of the suburbs on city for essential services, and the urgent necessity for coordinated development in the suburbs rendered the unification of the municipal government of the entire region of Greater Bombay inevitable. By the Bombay Act of 1950 the limits of the Corporation were extended for the purpose of ensuring co-ordination of efficient municipal government. The strength of the Corporation was increased from 117 to 135. The Corporation became a purely elected body with the general elections that took place in 1952. Further by passing of the Bombay Act of 1956 the strength of the Corporation was increased by seven councillors to enable the extended suburbr being represented on the Corporation. The Greater Bombay area was thus divided into 44 wards for general elections with 131 elected seats. By an Act of 1966 the State Government decided to set up 140 single member constituencies with non-transferrable vote and the House was elected on this basis in April 1968. The Corporation today is the largest and fully democratic civic body in India which is functioning with popular participation through 170 members (1985) (*The Corporation was superceded for the first time from 1-4-1984 to 10-5-1985.*).

The city government was in the beginning restricted mainly to sanitation. As the city expanded both extensively and intensively, additional responsibilities came in. The Corporation expanded its medical relief and health services by extensive preventive measures as also by opening hospitals, dispensaries and maternity homes; expanded their water works by constructing big water storages like Tansa and Vaitarna to meet the demands of the increased population and industrial growth; constructed roads,

sewers and purification plants and provided recreational facilities like playgrounds, gardens, museums, etc. It also undertook several discretionary functions for better civic services.

By the Bombay Act III of 1907, the responsibility of imparting primary education was transferred solely to the Corporation by the State Government. In 1933, came the administration of the Bombay Improvement Trust properties and the further execution of the work of the Bombay Improvement Trust which was abolished in that year. The Corporation took over in 1947, the B.E.S. & T. Company and turned it into a public utility service under the name of the B.E.S. & T. Undertaking. This civic venture, perhaps the pioneering venture in this country, expanded by leaps and bounds under civic management and renders useful service to the citizens.

Jurisdiction: Under the British rule, Salsette was divided into 129 villages and subsequently, it was split into north and south talukas. The former with 54 villages formed a part of the Thane district and the latter with 36 villages was reconstituted into what was called as the Bombay Suburban District. The Bombay Suburban District comprised two divisions, *viz.*, Borivali and Andheri, the former comprising 33 villages and the latter 53. On 15th April 1950, the municipal limits of the city were extended so as to include the Andheri taluka. In February 1957, the Borivali taluka was included into city Of the 53 villages of the Andheri taluka, comprising an area of 65.5 sq. miles, 16 villages with 23.4 sq. miles area were constituted into four municipal boroughs of Bandra including Vile Parle, Andheri, Ghatkopar including Kirol, and Kurla. In Borivali taluka which had an area of 71.3 sq. miles, 15 villages with 28 sq. miles area were formed into three municipal boroughs of Borivali, Kandivali and Malad. Consequent upon formation of the Greater Bombay scheme in 1957, both Andheri and Borivali talukas including the above municipal boroughs were brought under the jurisdiction of the Bombay Municipal Corporation.

The civic government of Bombay renamed as the Municipal Corporation of Greater Bombay has now jurisdiction over a total area of 603 sq. km. with a population of over 8.2 millions as per the 1981 Census. In fact the population has grown at a faster rate during the last two decades bringing in its wake tremendous problems of planning, immediate augmentation of civic services and remodelling of organisational set up to meet the growing needs of the vast metropolis.

Statutory Authorities: The civic government of this great metropolis consists of two wings—deliberative and executive. At the apex of the deliberative wing is the Corporation which elects its various committees— the statutory committees, the special committees and the consultative committees. The executive wing is headed by the Municipal Commissioner under whose executive control function the heads of departments, the Ward Officers and other staff of various civic services.

Definite powers and functions have been prescribed and assigned under the Bombay Municipal Corporation Act to several authorities, *viz.*, the Corporation, the Standing Committee, the Improvement Committee, the Education Committee, the BEST Committee, the Municipal Commissioner and the General Manager of the BEST Undertaking. These collateral authorities work together as checks and balances, and by healthy traditions, the elected representatives of people charged with policy making, budgetory control and giving general direction on civic matters, exercise general supervision and control over the executive in which administrative control and executive authorities are vested. Following is the description of such authorities.

Deliberative Wing: (1) *Corporation:* It is required to meet at least once a month. The first meeting after the general election is convened by the Municipal Commissioner and meetings held thereafter are fixed by the Mayor. Meetings of the Corporation are presided over by the Mayor, who was designated as President upto year 1931, and who is now elected each year at the first meeting in April.

- (2) Standing Committee: This committee was originally set up by the Bombay Act III of 1872 to exercise financial control over the Commissioner. It was known as the Town Council and consisted of 12 members. In 1888 the Town Council was replaced by the Standing Committee and in 1922 its strength was put at 16 including 4 nominations by Government. The Bombay Act XIII of 1938 abolished this nomination. The Chairman of the Standing Committee is elected by members every year. The main functions of the committee are to sanction contracts, to frame budget, services regulations, to prescribe form of accounts and conduct their scrutiny. The committee at present consists of 16 members and meets every week.
- (3) Improvement Committee: In 1897-99, Bombay was a plague- stricken city. In 1898 the City Improvement Trust was created with a view to providing for the improvement of the city. This Trust was amalgamated with the Corporation in 1933 when the Improvement Committee was created under the Bombay Municipal Corporation to replace Board of Trustees.

With the abolition of nomination of members by Government under Bombay Act XIII of 1938, the entire committee was elected by the Corporation. The committee is now charged with all improvement and development schemes, slum clearance schemes, housing schemes, etc. The committee now consists of 16 members and meets once in a month.

(4) Education Committee: Prior to 1888, primary education was under the control of Government. Bombay Act III of 1888 made it incumbent on the Corporation to make adequate provisions for primary education. Under that Act a joint school committee was formed by the Corporation. The Bombay Act III of 1907 made the municipality solely responsible for primary education. Simultaneously the joint committee was abolished and the Corporation was empowered to appoint a School Committee of eight persons to administer the provisions of the Act relating to primary education. The City of Bombay Primary Education Act XV of 1920, was passed and it increased the strength of members to 16 of which four were non-councillors. The Bombay Act XLVIII of 1950 however made some vital changes. It abolished the School Committee and its place was taken by the Education Committee. It consisted of 12 members including four non-councillors. The chairman is elected every year and acts as ex officio member of the Standing Committee. The meetings of the committee are held monthly.

- (5) Bombay Electric Supply and Transport Undertaking: For the purpose of conducting the electric supply and transport undertaking from 1947, this committee was set up by the Corporation. The committee consists of 9 members, one of whom is Chairman of the Standing Committee. The Chairman is elected every year. The committee is required to meet every fortnight.
- (6) Special Committees: In addition to these four statutory committees referred to above the Corporation is empowered to appoint special committees. Such committees were first appointed in 1927. There were 10 committees which were later amalgamated for the sake of convenience of administration. At present there are five special committees, v/z., Works Committee (City), Works Committee (Suburbs), Public Health Committee, Markets and Gardens Committee and Law, Revenue and General Purposes Committee. Each committee consists of 24 members appointed by the Corporation after general elections. Meetings of these committees are held monthly.
- (7) Consultative Committees: The Corporation is also empowered to appoint ad-hoc committees known as consultative committees to which they refer any matter for consideration and advice. There is no statutory limit set on the number of members to be appointed on such committees. The meetings are held as and when fixed by Mayor. At present the committees are appointed for grant-in-aid, implementation of development plans, expeditious implementation of water supply projects, issue of hawkers' licences, suggestion of ways and means to avoid the incidence of fire, etc. Generally the total number of members of these committees is 19. Unless the Corporation appoints any particular councillor as the Chairman of any consultative committee, the Mayor presides over the meetings of each committee.

Executive Wing: (1) *Municipal Commissioner:* The Municipal Commissioner is the head of the executive wing of the Corporation. The post of Municipal Commissioner was created as per the Act XXV of 1858. Under this Act, three Municipal Commissioners for the town and island were appointed for carrying out conservancy and improvement of city. One of these Commissioners was appointed by the Government, and the other two by the Justices. However, this system never worked successfully. Hence in 1865 another Act was passed whereby Justices of Peace were created a body corporate and the entire executive power and responsibility was vested in a Commissioner appointed by Government for a period of three years.

The Municipal Commissioner is the key figure in the overall local self-Government set-up that has developed in Bombay over a century. Today he is not merely the chief executive but also is an independent co-ordination authority. Three sections of the Bombay Municipal Corporation Act ensure the independence and supremacy of the Municipal Commissioner as the executive authority. Section 4 empowers him as an authority for carrying out the provisions of the Act. Section 54 vests power of his appointment in the State Government. Thus, he is not a creature of the Corporation and is not dependent on them. Section 64(3) subjects his executive powers only in certain cases to the sanction of the Corporation or Committees.

The Municipal Commissioner controls the officers who are in charge of different administrative units both functional and territorial. Directly under him are nine Deputy Municipal Commissioners, of whom five have territorial and four have functional jurisdiction.

The appointment of Municipal Commissioner is made by the State Government for a period of three years at one stage.

(2) General Manager: The General Manager of the B.E.S.T. is a full time officer appointed by the Corporation subject to approval of the State Government for a renewable period of not exceeding 5 years. He attends meetings of the Bombay Electric Supply and Transport Committee and takes part in discussion as any other member but he has no voting power. His duties are analogous to those of the Municipal Commissioner in regard to the electric supply and transport undertaking.

The other executive authorities are enumerated in the following paragraphs:—

- a. Municipal Secretary; The deliberative wing of the Corporation and the various committees are assisted in the day-to-day working by the Municipal Secretary, Statutory Officer and requisite staff. The Municipal Secretary is a full time officer appointed by the Corporation and works under the direct control of the Standing Committee. The civic secretariat is responsible for preparing agendas and proceedings of various committees and the Corporation, and assists elected representatives in matters connected with deliberative work. Special secretarial assistance is provided to the Mayor. The Municipal Secretary keeps the seal of the Corporation and is the custodian of all official documents and papers connected with the proceedings.
- b. Municipal Chief Auditor: The Municipal Chief Auditor is the statutory auditor appointed by the Corporation. He is independent of the Municipal Commissioner and the General Manager of the BEST undertaking. The financial capacity of the Corporation to raise and repay loans from time to time is also required to be certified by the Municipal Chief Auditor before the Corporation accords its sanction. He has to audit the accounts of municipal fund, Bombay Electric Supply and Transport fund, water and sewage fund and consolidated water supply and sewage disposal loan fund. In pursuance of an agreement entered into with the International Development Association (IDA) and consequent amendments embodied in the Bombay Municipal Corporation Act, the Municipal Chief Auditor is also required to carry out the statutory audit of the accounts of Water Supply and Sewerage Department and submit his report to the Corporation and the International Development Association.

Mayor: In the early period of the British rule Mayors were also Judicial Officers. The King approved the establishment of Mayors' Courts at Bombay, Madras and Fort William for speedily trying civil and criminal cases. The Mayor's Court in Bombay was subsequently replaced by the Recorder's of Bombay. The period of Mayoral Court for municipal purposes was one of the blackest periods in the history of British India.

Attempts were therefore made to scrape the system and breathe a democratic spirit in local self-Government. The winds of change started blowing in 1802. A fight for citizen's rights was made by Sir Pherozeshah Mehta, Justice K. T. Telang, Justice Badruddin Tayabji and Sir Dinshaw Wacha which ultimately culminated into the enactment of the Bombay Municipal Act of 1872. This Act introduced a semblance of popular control in local administration. At the first meeting of the Corporation on 4th September 1873, Captain G. F. Henry was elected Chairman of the Municipal Corporation. In 1875, Dossabhai Framji became the first elected Indian Chairman of the Corporation.

The office of the Chairman had been changed to the President of Municipal Corporation of Bombay under the Act of 1882. Another change was effected in 1931-32 when the designation of the President of Municipal Corporation was changed to His Worship the Mayor. In 1950, when India became a Sovereign Democratic Republic, all the British honorifices were dropped and His Worship the Mayor became 'the Mayor'.

In the annals of the Corporation there were 18 Chairmen, 46 Presidents and 52 Mayors upto 1981-82. Only one of them was a lady, namely, Sulochana Modi who adorned the Mayoral Chair for a short period of five weeks from 23rd February 1956 to 31st March 1956.

On the wide horizon of the historic Bombay Municipal Corporation can be seen a glittering galaxy of powerful personalities who have occupied the august office of Mayoralty. Many of them were illustrious men of high political stature like Sir Pherozeshah Mehta, the father of municipal corporations in India, Vithalbhai Patel, Dr. G. V. Deshmukh, Yusuf Meherally, Sir Homi Mody, V. N. Chandavarkar, K. F. Nariman, J. M. Mehta, H. M. Rahimtoola and S. K. Patil.

The office of the Mayor combines a functional role of chairmanship which includes mediation and guidance at Corporation meetings as well as ceremonial role with appendages associated, he being the first citizen of the premier city of India. To individuals and groups within and without the Corporation the Mayor symbolizes their corporate spirit.

Councillors: The passing of the Municipal Act of 1865 forms an important landmark in the civic governance of the city. The Act placed the power of purse in the hands of Justices. The Justices were created a body corporate but there was as yet no popular representation in the Corporation as these Justices were all appointed by Government. This lack of popular control in the local administration gave rise to further agitation which led eventually to the enactment of the Municipal Act of 1872 bringing into being the Corporation with 64 members. Since then the number of councillors was as follows:—

Act	No. of Councillors	Elected	Nominated
Municipal Act, 1872	64	48	16
Bombay Act, III of 1888	72	56	16
Bombay Act, VI of 1922	105	90	16
Bombay Act, IX of 1928	108	94	14
Bombay Act, IX of 1931	112	94	18
Bombay Act, XIII of 1938	117	114	3
Bombay Act, VII of 1950	135	132	3
Bombay Act, XLVIII of 1950	124	124	
Bombay Act, LVIII of 1956	131	131	
Maharashtra Act, XXXIII of 1966	140	140	

In the beginning the members of the Corporation were elected by rate payers besides nominated members. In 1922 the rate payer's franchise was substituted by that of rent payers. It was only in 1948 that the first election to the House was held on the basis of adult franchise. Special representation was however dispensed with from 1952 when the Corporation became fully an elected body. A further improvement in its constitution came 16 years later. So far the city was divided for election purpose into a number of electoral wards with plural constituencies and voting was on cummulative basis. On recommendation of the Corporation the State Government modified the Act in 1966, setting up 140 single member constituencies with a non-transferable vote and the House was elected on this basis in 1968.

Ward Offices: With a view to afford more facilities to citizens, 21 ward offices have been set up. The branches of various departments have been brought together at the Ward Office, placed in-charge of a Ward Officer. Collection of taxes and other fees or dues, registration of births and deaths and issue of certificates thereof, and complaints in respect of civic services are now attended to by the Ward Offices. The administration of licensing, factories, shops and establishments divisions has been amalgamated so that citizens can conveniently approach the ward officer for all such purposes.

These Ward Offices are placed under the Deputy Municipal Commissioners for supervision.

Departments: The different activities undertaken by the Corporation are detailed below:—

(1) Water Supply (The details of conservancy, drainage and water supply are given in this Chapter at the end.): The Hydraulic Engineer's Department is entrusted with the work of providing water supply by maintaining water works, conveying and distributing water to citizens. The average per capita daily domestic supply worked out to 134 litres per day. In 1975 Greater Bombay area received total average water supply of 1430 MLD from Vihar, Tulsi, Tansa, Vaitarna, Ulhas and Upper Vaitarna reservoirs. The next source under development is Bhatsai to yield additional 1365 MLD in stages. For purpose of distribution, the Greater Bombay area has been divided into 76 zones. From 1974 a new department, viz., the Water Supply and Sewerage Project Department came into existence. Hydraulic Engineer's Department now forms a wing of this department.

The water samples from each lake are examined for chemical analysis by the Municipal Analyst once in every fortnight. In order to attend emergency work in respect of pipe bursts, fires, etc. wireless system has been introduced recently between controls at Babula Tank, Vihar, Ghat-kopar, Andheri and 3 mobile wireless units. The position of water supply during 1976 was as follows:—

Supply for domestic purposes (metered) .. 31.5% Supply for domestic purposes (unmetered) .. 34.0 % Supply for non-domestic purposes .. 19.5 % Losses 15.0%

(2) Education: The Bombay Municipal Corporation shoulders the responsibility of primary education from 1907. It was made compulsory in 1920 between ages 6 and 11. The School Committee was replaced in 1950 by the Education Committee and the Primary Education Department was placed under the Municipal Commissioner.

During 1980-81 there were 6,64,900 pupils on roll. The education is imparted through 10 different languages. The total number of schools and classes was 1,318 with 18,424 teaching staff. The municipal scout/ guide division, consisting of 15,000 pupils, is one of the largest single units in the State. The Corporation also conducts Bal Bhavan Centres wherein students below 14 are encouraged to prepare useful articles from scrap. A separate medical staff is provided to examine children.

The Corporation has taken up secondary education since 1965. During 1980-81 there were 51 secondary schools with a total strength of 76,102pupils in standards V to X. There were 2,466 teachers. The academy of music and art was established under the Education Department of the Corporation. The academy conducts refresher's classes for teachers.

The Corporation receives grants-in-aid from Government for primary and secondary education. An expenditure of Rs. 26,59,49,298 was incurred on primary education during 1980-81.

The Municipal Commissioner as the chief executive implements policies of Education Department through Education Officer who is in-charge of primary and secondary education.

Health Services: The public health services of the Corporation comprise prevention of adulteration; registration of births and deaths, regulation of places for the disposal of dead, prevention and control of infectious and communicable diseases; medical relief; pest control and health education. These activities are described in brief in the following paragraphs:

- a. Food Sanitation: Food sanitation comprises control and supervision over the premises where articles of food are manufactured, stored and exposed for sale. This control is exercised as per the Maharashtra Prevention of Food Adulteration Act and Rules framed thereunder. There is also a system of medical examination of food handlers in eating houses. For checking adulteration of food a special staff is engaged on work provided under the above Act.
- b. Registration of Births and Deaths: Births and deaths occurred in Greater Bombay area are registered under the BMC Act, with the ward medical officers. There were 180 crematoriums in use, of which 27 were under municipal management in 1980. An electric crematorium at Chandanwadi was constructed in 1954 at a cost of Rs. 4,50,000.
- c. Prevention and Control of Infectious Diseases: This is one of the most essential health services in a congested urban community like that of Bombay. The cases of such diseases except tuberculosis, veneral diseases, leprosy and rabies are isolated and treated at the Kasturba Hospital for Infectious Diseases. Cases of small-pox, plague, cholera are compulsorily removable to this hospital. Persons suffering from veneral diseases are treated free of charge at Municipal Veneral Diseases Clinic. The small-pox vaccinations are carried out free of charge at 85 public vaccination stations, as also municipal dispensaries, hospitals and maternity homes.

Medical Relief: Medical relief was provided in 1981 through 152 municipal dispensaries, 20 mobile dispensaries, 25 maternity homes, 39 maternity and child welfare centres and 19 municipal hospitals.

B.C.G. vaccination and vaccination against small-pox to new born babies are given free at the municipal maternity homes. The children attending primary and secondary municipal schools are examined by the medical staff.

About 53 family welfare centres impart instruction to married men and women in spacing of births. A family planning hospital established in 1971, offers all facilities for tubectomy and vasectomy free of charge. (Details of Medical Relief are given in Chapter 16)

(5) *Pest Control:* An anti-malarial measure is undertaken by control of mosquitos. The pest control measures are carried out against other insects also. Filaria control programme has also been launched on a small scale by appointing additional staff. The city area is covered with passive surveillence under the National Malaria Eradication Programme. In order to assist the public health department a tuberculosis control unit has been established.

Recreational Amenities: The Corporation maintains 278 gardens and 143 playgrounds and open spaces, to relieve the citizens of the stress of life in the congested metropolis of Bombay. There are twelve principal gardens. The water works department has also undertaken laying out and maintaining gardens in addition to the gardens maintained by the Gardens Department. Furnished residential blocks at the holiday camp are available to public on hire.

The Corporation maintains the Victoria and Albert Museum recently renamed as Dr. Bhau Daji Lad Museum. Three swimming pools are maintained by the Corporation.

There were 30 municipal free reading rooms and libraries in 1981.

Utility Services: The passenger transport and distribution of electric supply was taken over by the Bombay Municipal Corporation in 1947. The BEST undertaking since municipalisation has achieved its objectives *viz.*, distribution of electricity in city and operation of buses in Greater Bombay. The BEST Committee conducts the affairs of the BEST undertaking. The total fleet in 1947-48 included 515 buses and trams which increased to 2,291 buses in 1982-83. Today 145 routes are operated which meet the demand of 30 lakhs commuters.

The BEST undertaking distributes electricity to the city area while a private company looks after the suburbs of Bombay. The number of registered consumers in 1982-83 was 6,03,521 with connected load of 15,25,272 kw.

Fire Brigade: Fire brigade has a dual role to perform, viz., to keep vigil to prevent fire and to fight it quickly whenever it occurs. Life and property are not secure in any congested urban community unless its fire brigade is efficient. The fire brigade in Bombay has not only a proud record of rendering efficient services in times of peace as well as local or national emergencies but also has been largely responsible in training men. Never in the history of any city an instance as that of Bombay fire brigade could be cited where so few have served and are serving so many with supreme efficiency. A big force of officers and men remains ready round the clock to serve more than 8.2 million citizens. In their task they are also assisted by the Home Guards to man the auxiliary fire service.

Except the period of five years (1963-68) when the administrative control of the fire brigade was taken over by the State Government for civil defence during emergency, this fire service has been maintained and manned by the Bombay Municipal Corporation within the resources of fire tax at 3/4 per cent which is collected along with property tax.

Within Greater Bombay limits there are 20 fire stations, 12 in city and 8 in suburban area, equipped with modern fire appliances like turn table ladder, escape ladder, crash tender, oxygen and compressed air breathing sets, foam equipment etc. The telephonic communication system has been supplemented with the radio telephony. Each fire station is provided with two wireless sets, one at the station and another fitted to fire engine. This has introduced a marked efficiency in the operational set-up. Apart from main duties of fighting fires and attending to all sorts of rescue operations, the Bombay Fire Brigade maintains a fleet of 16 ambulances posted at different stations.

The number of fire stations increased from 10 in 1957 to 14 in 1971 and to 20 in 1981. The headquarters of fire brigade is at Byculla and the fire stations are located at Andheri, Byculla, Chembur, Colaba, Dadar (East), Deonar, Dharavi, Fort, Gowalia Tank, Indira Dock, Kandivali, Marol, Mandvi, Mominwada, Mulund, Raoli Camp, Shivaji Park, Sewree, Vikhroli and Worli. There were 4,292 emergency calls in 1976-77, 5,334 in 1979-80 and 5,069 in 1981-82.

Shops and Markets: The licensing department controls various activities such as licensing, squatters and hawkers control, advertisement regulation, etc. For the proper administration, a ward is divided into beats put in charge of Beat Inspectors who have to perform all duties connected with licences, advertisement, etc.

The Shops and Establishments Department is responsible for enforcement of the Bombay Shops and Establishments Act, 1948; the Payment of Wages Act, 1936; and the Minimum Wages Act, 1948. The Chief Inspector of Shops and Establishments controls the department with the assistance of Inspectoral Staff. During 1961-62 there were 1,10,755 shops and establishments in Greater Bombay. This number rose to 1,35,545 in 1980-81.

It is obligatory on the Bombay Municipal Corporation to provide market facilities and construct slaughter houses. At present there are 3 big markets in the city and 36 markets in the suburbs including 6 managed by private bodies. The new abattoir at Deonar was commissioned in 1971. Its capacity to slaughter animals is 550 cattle per day.

Assessment and Collection: The main revenue earning department of the Corporation, the Assessment and Collection Department, aptly called the backbone of the Municipal Corporation, collects nearly 90 per cent revenue of the Corporation. The department levies property tax, tax on vehicles and animals, theatre tax and octroi. The collection of water charges, meter hire, municipal and State education cess, and building repairs cess leviable under the Bombay Building Repairs and Reconstruction Board Act, 1969 is also assigned to this department.

(1) *Property Taxes:* These ate levied at a certain percentage of the annual rateable value of lands and buildings. The property taxes comprise of general tax at 25.50 per cent (including fire tax), water tax at 7 per cent, sewerage tax (formerly known as *halalkhore* tax) at 4 per cent, education cess varying between 0.5 per cent to 5 per cent depending upon the rateable value of the property, water benefit tax at 5 per cent and sewerage benefit tax at 3 per cent of the rateable value.

The Corporation levies general tax at a uniform rate irrespective of the quantum of the rateable values of the property. An exception was however made in respect of properties in some villages in the extended suburbs where no local authorities existed prior to their merger with Greater Bombay in 1957. In such

cases, a beginning was made by a levy of the general tax at 8 per cent of rateable value since April 1958 with an increase of 2 per cent after every alternate year, till it reached the level of rates leviable in other parts of Greater Bombay.

The details of the properties in city and suburb areas are shown below :—

	City	Suburbs	Extended Suburbs	Total
No. of properties—				
1961-62	N.A	N.A	N.A	57,385
1970-71	86,546	78,049	41,600	2,06,195
1980-81	61,150	88,255	58,457	2,07,862
No. of properties exempted from general tax				
1961-62	N.A.	N.A.	N.A.	2,153
1970-71	3,223	1,910	1,009	6,142
1980-81	4,466	2,101	836	7,403

The following statement shows the total demand and actual collection of property taxes including water charges for a few years:—

- (HIO	ures	In	cro	resi
٠,	110	Jules		CIO	1001

Particulars	Year		Area	
		Clty	Suburbs	Extended Suburbs
Total net demand	1970-71	24.63	14.60	5.63
	1980-81	68.79	52.13	23.97
Collection	1970-71	19.82	7.86	2.71
	1980-81	48.49	30.17	12.81
Percentage	1970-71	80.47	53.82	48.18
	1980-81	70.49	58.01	53.37

The rateable value of all properties on 31st March 1981 was Rs. 85,70,26,696 in the city; and Rs. 83,53,41,837 in the suburbs and extended suburbs. It worked out to Rs.263.04, Rs.96.83 and Rs.123.84, and Rs. 168.10, respectively per head of population.

(a) Water tax: In the city area the water tax is levied on the basis of rateable value, if water is supplied through unmetered connection. In the suburbs and extended suburbs, the supply is invariably by meter and therefore water charges are recovered by measurement. Rates of water charges vary between Rs. 2.50 and Rs. 30 per 10,000 litres depending upon the user as prescribed by the standing committee of the Corporation.

- (b) Sewerage charges: These are levied at 50 per cent of the water charges billed in lieu of sewerage tax in respect of properties in Greater Bombay which are metered and sewered.
- (c) Education cess: During 1980-81 the rates of education cess were as follows:—

Rateable Value	Rate	
Re.1 to Rs.74	1/2 per cent	
Rs.75 to Rs.299	2 1/2 per cent	
Rs.300 to Rs.4,999	3 per cent	
Rs.5,000 and above	5 per cent.	

The State education cess, on the other hand, is levied at a certain percentage of the rateable value of property, slabwise. In the following are shown demand and collection of State Education Cess for the period 1970-71 and 1980-81:—

(Rs. in lakhs)

Area	Year	State Education Cess			
		Gross Demand	Net Demand	Collection	
City	1970-71	122.19	108.22	87.97	
	1980-81	764.77	686.02	555.34	
Suburbs	1970-71	51.37	45.91	27.42	
	1980-81	385.99	347.10	238.51	
Extended suburbs	1970-71	22.22	20.16	10.33	
	1980-81	225.30	190.30	120.12	

The Corporation gets 2 per cent rebate from Government on the amount of State Education cess collected by it.

In 1981-82 the net demand was Rs. 1,423-46 lakhs, while collection amounted to Rs. 1,283.82 lakhs.

(d) Building repair cess: The repair cess is at present leviable in respect of residential buildings in the city proper. Fot this purpose buildings have been classified into three categories and the rates of the cess leviable in respect thereof are as under:—

Category	Rate
Buildings erected prior to 1st September 1940	34% of rateable value
Buildings erected between 1st September 1940 and 31st December 1950.	26% of rateable value
Buildings erected between 1st January 1951 and 30th September 1969	18% of rateable value

The owner's share in the cess levied is 10 per cent of the rateable value of the property and the balance is recoverable from the occupier in proportion to the rent of premises *i.e.* on *pro rata* basis. The Corporation receives 5 per cent rebate on the amount of cess collected as collection charges.

The total demand and collection of Building Repair Cess is given below:—

	year	Gross demand	Net demand	Collection during the year
	1970-71	331.29	231.43	158.34
1	1980-81	635.62	584.21	226.78

(e) Accommodation tax: The State Government has levied from 1st April 1974 a tax on residential accommodation having an area of more than 125 sq. metres at the following rates:—

Area Amout of Tax

Upto 125 sq. m. and between 125 sq.m. and 150 sq.m Rs. 25 per sq.m. per year

Between 150 sq.m. and 200 sq.m.

Minimum Rs. 62. 50 *plus* Rs. 5 per sq.m. above 150 sq.m. per year.

More than 200 sq.m.

Minimum Rs. 312.50 *plus* Rs. 10 per sq.m. above 200 sq.m. per year.

The work of levy and recovery of this tax is entrusted to assessment and collection department for which it gets a certain rebate on the amount of tax collected by the department.

(2) Wheel Tax: The net demand and collection of wheel tax are shown below:—

(Rs.lakhs)

Area	a Y ear		Net Demand	Collection during the year
City	1970-71	113.59	109.91	62.29
	1980-81	188.35	184.80	103.71
Suburbs	1970-71	24.85	24.31	10.61
	1980-81	71.37	70.39	26.50
Extended suburbs	1970-71	5.78	5.58	2.65
_	1980-81	19.18	18.74	8.11

- (3) Theatre tax: In 1970-71, there were 61 cinema theatres in city and 24 and 12 in suburbs and extended suburbs. The cinema theatre tax is also recovered from various dramatic performances, dances, variety entertainments held at various places in Greater Bombay where admission is on payment. The total income derived from theatre tax during 1970-71 was Rs. 8,06,574 in city, Rs. 3,17,332 in suburbs and Rs. 1,50,653 in extended suburbs. In 1980-81, there were 127 theatres in Bombay, and the tax collected amounted to Rs. 35,40,296.
- (4) Octroi: The octroi which is levied on various items imported into Greater Bombay at the maximum rates as mentioned in schedules appended to B.M.C. Act, is collected through this department. It forms a sizeable part of the civic revenue. The octroi is recovered departmentally in respect of goods by road through the Municipal Corporation Bank Ltd., in respect of goods coming by air and that in respect of goods coming by sea and railway, jointly by the department and the B.P.T. and Railway authorities.

Goods imported as free gifts or for charitable purposes, as shop stores for municipal use, for repairs and processing etc., are not liable to taxation. The octroi paid is also refundable as per rules, if goods are exported within 6 months. There are 61 octroi centres in Greater Bombay.

The Collection from octroi in the years 1970-71 and 1980-81 is given below:—

(Rs. in crores)

Year	Gross collection	Refund		Fees for stamping
1970-71	17.17	2.72	15.04	0.03
1980-81	79.61	7.57	72.04	0.09

Revenue and Expenditure: Total revenue and expenditure of the Municipal Corporation since 1915-16 is shown below for a few years:—

(Rs. in '000)

Year	1915- 16	1925- 26		1945- 46	1955-56	1965-66	1970-71	1980-81
Revenue	13,831	30,531	42,020	58,834	1,27,414	3,80,839	5,20,449	13,49,317
Expenditure	11,203	29,088	42,862	59,518	1,20,483	3,63,018	5,25,776	13,75,519

TOWN PLANNING AND VALUATION DEPARTMENT

The Town Planning and Valuation Department of the State working under the control of the Urban Development and Public Health Department of the Mantralaya deals with the town planning and valuation of real properties.

So far the function of town planning is concerned it prepares regional plans, development plans, town planning schemes and site development plans. It renders advise and necessary assistance to municipal councils in the matters of preparation of town planning schemes and to Government on all matters regarding town and country planning. It performs duties of the arbitrator, and deputes member secretaries to Regional Planning Boards. Advice is also rendered on matters regarding preparation of town development, improvement, extension and slum clearance schemes. On the side of valuation the department assesses the value ofagricultural and non-agricultural lands of Government, fixes the value for purposes of non-agricultural assessment, scrutinises draft awards formulated by the Collector, undertakes valuation on behalf of the Central Government and other autonomous bodies, and gives expert evidence on behalf of Government in the High Court in reference cases, etc.

Organisation: The department came into existence as early as 1914. It was in 1936 that the department was asked to take over town planning work in Bombay city and suburban area and for this purpose a separate branch was opened. However this branch office was elevated in 1956. As the activities of the department increased two additional offices had to be opened in Bombay and at present there are two branch offices located in Bombay. These are (i) office of the Deputy Director of Town Planning, Bombay

Division and (ii) office of the Assistant Director of Town Planning, Greater Bombay. The office of the Deputy Director, Bombay Division, was however shifted to New Bombay.

Apart from regular work, the department is also required to send officers on deputation to other Government departments such as Revenue and Forest Department to scrutinise land acquisition awards at Government level to Bombay Collectorate for expert advice in town planning matters. Such officers also work with the organisations such as the Bombay Metropolitan Regional Development Authority, the City and Industrial Development Corporation, the Maharashtra Housing and Area Development Authority, etc. At present two offices of the Special Land Acquisition Officers (1) and (3), Bombay and Bombay Suburban District, and one office of the Special Land Acquisition Officer, Bombay Building Repairs and Reconstruction Board, Bombay, are carrying out the land acquisition work for departments of State and Central Governments and other autonomous bodies.

Development Plan: The Bombay district comprises of all land included in the limits of Greater Bombay Municipal Corporation. The Municipal Corporation is the only planning authority as defined in the Maharashtra Regional and Town Planning Act, 1966. The main planning work is done by the Corporation and the department has to play a role in the advisory capacity only. The development plan for Greater Bombay was sanctioned in 1966, however recently a revision of the sanctioned development plan has been undertaken by the Municipal Corporation.

Town Planning Schemes: A number of town planning schemes have been prepared by the Municipal Corporation for the city area. Schemes for suburban areas were prepared by the municipalities in suburbs now merged in the Municipal Corporation. Most of these schemes prepared by these local bodies were under provisions of the Bombay Town Planning Act, 1915. The Municipal Corporation has changed some of the sanctioned schemes due to fast changing structure of the city. The officers of the department are appointed as the Arbitrators to finalise the draft schemes prepared by the Municipal Corporation. Table No. 1 gives the details of town planning schemes undertaken and sanctioned for the municipal area of Bombay.

Development and Improvement Schemes: The Backbay Reclamation Scheme comprising blocks I and II including Marine Drive was prepared by the department in 1928-30. Subsequently the layout of a large area comprising blocks III and IV under this scheme was also prepared. Schemes for reclamation and development of the foreshore lands at Nepean Sea Road and also Sassoon Dock have been prepared. Similarly layouts at Bandra, Mahim and Ghatkopar etc. have been prepared by this department.

Valuation and Land Acquisition: The department advises the Government in respect of all matters relating to the valuation and acquisition of lands and buildings. It is required to scrutinise the draft awards framed under the Land Acquisition Act, 1894.

The officers of this department are required to give expert evidence in court and render necessary assistance to the Advocate General, in respect of land reference cases for the enhancement of compensation referred by all the land acquisition officers from Bombay in the High Court. This helps Government to save substantial a mount on acquisition of lands in Bombay. For example during 1976-77 the total amount of claims before court was Rs. 5,50,41,259.72 as against the compensation awarded by the Special Land Acquisition Officer of Rs. 1,47,62,311.78, the enhancement allowed by the court amounting to Rs. 41,88,571. 60. It is thus clear that due to expert evidence of the officers of this department a saving of Rs. 4,88,52,688.12 was obtained in the cost of land acquisition to the Government.

TABLE NO.1

DETAILS OF TOWN PLANNING SCHEMES UNDERTAKEN/SANCTIONED WITHIN THE LIMITS OF GREATER BOMBAY

(Information supplied by the Deputy Director of Town Planning, Bombay Division, Bombay)

	Name of Scheme	Stage	Date of sanction
1.	Bombay City-Mandvi I	N.A	1-12-1957
2.	Estate (Final)	Final	1-12-1957
3.	Estate (First variation)		
4.	Bombay city No. II	Final	1 -12-1959
	Bombay city No. III	N.A.	1 -3 -1961
5.	Bombay city No. IV		15-8 -1963
6.	Bombay city No. IV	Final	
7.	Bandra-II		15-2 -1921

		Name of Scheme	Stage	Date of sanction
	8.	Bandra-II (1st variation)	Final	1 -5 -1961
	9.	Bandra-II (2nd variation)	Draft	27-3 -1964
	10.	Bandra-III	Final	15-12-1940
	11.	Bandra-IV (varied)	Final	1 -2 -1959
	12.	Bandra-IV	Final	18-10-1937
	13.	Bandra-IV (varied)	. Draft	21-5 -1956
	14.	Bandra-IV	Final	2 -8 -1926
	15.	Bandra-V (varie <mark>d)</mark>		11-5 -1956
	16.	Bandra-V (varied)	. Final	
	17.	Bandra-VI	Final	29-3 -1941
	18.	Bandra-VI	. Draft	14-12-1937
	19.	Bandra-VI (varied)	Final	29-9 -1961
Mahar	20.	Bandra-VI (varied)	. Draft	12-8 -1959
Manari	21.	Santacruz No. 1 (varied)	. Final	11-2 -1967
	22.	Santacruz-I	. Final	16-5 -1919
	23.	Santacruz-II (variation)	. Final	12-7 -1945
	24.	Santacruz-III	. Final	1 -3 -1925
	25.	Santacruz-III (variation)	. Draft	11-2 -1958
	26.	Santacruz-III (varied)	. Final	29-7 -1961
	27.	Santacruz-IV	. Final	15-4 -1926
	28.	Santacruz No. IV	. Draft	5 -2 -1958
	29.	Santacruz-IV (varied)	Final	10-2 -1965
	30.	Santacruz-V	Final	6 -3 -1959

	N	lame of Scheme	Stage	Date of sanction	
	31. Santac	ruz-VI	. Draft	6 -5 -1954	
	32. Santac	ruz-VI	Final	21-8 -1958	
	33. Malad	No. 1	Final	1 -1 -1920	
	34. Malad-	I (variation)	Final	26-11-1969	
	35. Vile Pa	rle No. 1	. Final	12-7 -1920	
	36. Vile Pa	rle-l (variation)	Final		
	37. Vile Pa	rle No. II	. Final	11-9 -1924	
	38. Vile Pa	rle-II (vari <mark>ati</mark> on)	Draft	9 -3 -1961	
	39. Vile Pa	rle-II (varia <mark>tio</mark> n)	. Final	25-10-1973	
4	40. Vile Pa	rle No. III	Final	28-2 -1927	
	41. Vile Pa	rle III (variation)	. Draft	20-8 -1959	
	42. Vile Pa	rle III (variation) .	. Final	3 -10-1969	
	43. Vile Pa	rle No. IV and IV-A	. Final	30-10-1926	
anar	44. Vile Pa	rle IV and IV-A	. Draft	25-9-1958	пее
	45. Vile Pa	rle IV and IV-A	Final	11-4 -1962	
	46. Andhe	ri No. I	Final	15-11-1919	
Ī	47. Andhe	ri I	Draft	29-7 -1959	
	48. Andhe	ri I	Final	29-10-1963	
	49. Andhe	ri No. II	. Final	15-11-1919	
	50. Andhe	ri II (variation)	. Draft	12-9 -1962	
	51. Andhe	ri II	. Final	22-7 -1974	
	52. Andhe	ri No. VI	. Final	16-1 -1935	
	53. Andhe	ri VI	• Draft	5 -1 -1961	

	Name of Scheme	Stage	Date of sanction
54.	Andheri VI	. Final	10-11-1966
55.	Ghatkopar No. 1	. Final	27-1 -1925
56.	Ghatkopar I (varied)	. Final	3 -7 -1961
57.	Ghatkopar No. 1	. Draft	11-2 -1958
58.	Ghatkopar No. II (variation)	. Draft	15-5 -1938
59.	Ghatkopar II (variation)	. Draft	15-5 -1961
60.	Ghatkopar II	. Draft	9 -10-1970
61.	Ghatkopar No. III	. Final	15-9 -1958
62.	Ghatkopar III	Draft	10-6 -1954
63.	Ghatkopar II (variation)	Draft	
64.	Borivali No. 1 (variation)	. Draft	9 -3 -1962
65.	Borivali I	. Final	15-7 -1919

ALL INDIA INSTITUTE OF LOCAL SELF-GOVERNMENT

The Local Self-Government Institute, Bombay, the combined unit of the All India Institute of Local Self-Government was established in 1926-27. As a major step in the direction of launching its scheme for the training of municipal employees, the institute formulated a comprehensive course known as the Local Self-Government Diploma course. It aims at acquainting the students with the basic principles of local self-government together with the working knowledge of accounts, public health, sanitation and town planning. Besides this course, the inslitute holds a number of conferences of local bodies where discussions mainly centre round the municipal administration and views and ideas are inter-changed. In many such conferences efforts were made to persuade the Government to enquire into constitutional, financial and administrative functions of local bodies and their relations with the State Government.

The Institute has been functioning as a unique institute of education and has created facilities for training and research in problems concerning local bodies. Besides local self-government diploma course, and sanitary inspector's course, the institute has introduced many specialised training courses. The institute is recognised by the Bombay University to guide students for M. A. in local self-government. As many as 38,000 students in various courses have been trained so far. It had on its roll on an average 2,300 students during the last five years.

ADDENDA

CONSERVANCY

Prior to 1840, the work of cleaning the native town was done on a contract basis. As this system was found to be unsatisfactory, the contract system was discontinued. By Act XI of 1845, a Board of Conservancy composed of seven members was established in lieu of the Court of Petty Session. The sanitary work at that time was distributed between the Executive Engineer's Office, the Scavengering contractor and the Sanitary Department. The contractor who was practically uncontrolled did scavenging work in the cheapest manner. The arrangement was however cancelled in 1865. The Board of Conservancy took up the work depart-mentally by bringing a batch of *halalkhores* from the upcountry as the local *halalkhores* employed by the contractor refused to work. In 1865, cleaning work was organised for seven wards of the city. Night soil was deposited at Colaba, Khara Talao, Pakmodia Street, Sonapur, Kamathi-pura and Parel. Garbage was taken in bullock carts to the railway siding at Mahalaxmi. Garbage was disposed off in the low lying areas between Sion and Kurla. In 1865, 7,548 wagons with 45,300 tons

of garbage was transported. In 1868, the number of wagons and tons of garbage rose to 15,991 and 1,11,876, respectively. A committee appointed by the Corporation to study the transportation problem recommended two sites for railway siding for *kachara* loading, one at Carnac Bunder and the other at Grant Road. Subsequently the siding was located at Maha-laxmi. In 1897, Government acquired 823 acres and 4 gunthas of land at Chembur and handed it over to Municipal authorities for reclamation and development by garbage filling. In 1956, the conservancy services were directly put under the Health Officer. Gradually mechanised transport replaced bullock carts for transportation of garbage. A public health engineering section was created and the Conservancy Department was put under the City Engineer.

At present all public roads are swept daily and sweepings are deposited at temporary dumps, containers, etc. There are about 5,000 temporary collection points in Greater Bombay. For transportation of garbage the Municipal authorities operate 120 to 130 vehicles with the aid of hired lorries. The total garbage transported upto dumping grounds fluctuates from 3,000 to 3,300 tonnes. For the city wards there are two points where refuse is being taken for final disposal, one at Mahalaxmi railway siding and the other at Mahim-Dharavi creek land. The details of refuse dumping grounds in Greater Bombay are given in the following statement.

The disposal system so far employed since the last 100 years consists of filling the low lying areas with garbage. Large chunks of land have been reclaimed thereby, and these are developed into commercial and residential areas. The other method, *viz.*, incineration of garbage has been restricted only for hospital garbage. However this method is very costly.' Two plants, one of ten tonne capacity at Worli and the other of five tonne capacity at the T. B. Hospital at Sewree are set up. The city garbage has more organic matter of compostible nature, and it could be rapidly converted into a good manure. A 300 tonne capacity plant has been set up as a joint venture with the Maharashtra Agro Industries Development Corporation.

Refuse Dumping Grounds, 1981

Name	Ownership	Year since used	Total area (Hect.)	Area so far reclaimed(Hect.)	Planned use of developed land
(1) Deonar Borla	Municipal	1897	330	200	Housing and Industries.
	State Government	1957		8	Development by B. M. R. D.A.
(3) Mulund	Municipal	1968	32.8	3.5	
(4) ESIC Nagar (Andheri).	Do.	1979	2.5	1.0	Crematory
(5) Chincholi(Malad).	Do.	1970	5.6	4.0	Dog Kennel
(6) Gorai (Borivli)	Do.	1970	8.0	3.2	Industries.

DRAINAGE

Drainage in the past had created great difficulties to the municipal administration as the bulk of the island was originally below the mean sea level, thereby rendering gravitation into sea impossible.

The history of the drainage of Bombay commences with the old main drain, constructed about the end of the 18th century, which at first was merely a *nala* discharging at the Great Breach. It was gradually covered between 1824 and 1856 from the Esplanade to Pydhonie and Bellasis Road, and was furnished after the construction of the Hornby Vellard with a fresh outfall at Worli. As the urban area increased sluices were constructed in 1842 at Love Grove. In the meanwhile subsidiary connections with the main drain had also sprung into existence, so that by 1856 there were 8,201 yards of subsidiary drains, 1,268 yards of drains communicating directly with an outfall into harbour, and 2,634 yards of drains falling into Back Bay.

However, this system proved to be unsatisfactory as the bottom of the main drain was below the level of low water spring tides. A scheme for discharge of all sewerage at Wadi Bunder and Cornac Bunder on the east side as also for a separate drainage of the Fort area was sanctioned by the Government in 1863. To carry out the work a Drainage Department was established and the work was commenced in 1864. This work however, was suspended in the following year. A commission appointed by the Government in 1866 to study the whole subject recommended the discharge of all sewage into a reservoir opposite the old Light House at Colaba and thence to pump it out into the sea at ebb-tide. By the close of 1867, the outlet into the harbour had been provided, and the main sewer costing Rs. 1.4 lakhs with an outfall at Sonapur in Back Bay had been completed.

A scheme contemplating an outfall at Love Grove was commenced in 1878 for which a loan of Rs. 27 lakhs was raised by the Municipal Corporation. Under this scheme a main sewer from Carnac Bunder to Love Grove was constructed at the cost of Rs. 4.9 lakhs which was completed in 1881 and a new outfall sewer estimated to cost Rs. 2.41 lakhs was completed in 1880. A pumping station at Love Grove was erected in 1884 at the cost of Rs. 95,000. From 1882, many new works under this scheme were undertaken, Branch sewers were laid down, and notably the Queens road sewer was completed in 1884, Fort area was re-sewered in 1889; house connections and pipe sewers were completed in Girgaum in 1891 and in 1884 depots were erected for reception of night-soil which was discharged into new sewers and carried out to Worli. In 1890, Mr. Baldwin was asked to advise the municipal authorities upon the general scheme of drainage for the island. As a result of his report Colaba was sewered on the Shone system in 1893.

Since 1897 the districts of Mazagaon, Parel, Chinchpokli, and Agripada were sewered on the Shone system at a cost of Rs. 13.24 lakhs. An air-compresser station was constructed at Love Grove for all these districts at a cost of Rs. 8.78 lakhs. The Malabar Hill area was sewered at a cost of Rs. 6.50 lakhs. For the disposal of storm water, ajaew channel from Jacob Circle to Worli was completed.

The area further to north of Worli was developed subsequently. Hence another large sewage outfall with a treatment plant was provided at Dadar in 1935. The areas further to north were developed in 1940 and the sewerage scheme for these areas was implemented by opening yet another outfall plant at Dharavi. The effluent was discharged after treatment into the ajoining Mahim creek. These arrangements were finalised sometime by 1950. With this finalisation the city areas were sewered to the extent of about 90 per cent.

In 1950, the suburban areas (H, K, L, M and N Wards) were merged into the municipal limits of Bombay. On the eve of merger of these areas, sewerage facilities existed only in parts of Bandra, Khar and a few parts of Kurla. The Municipal Corporation took up the task of providing sewerage to these merged areas. By 1960 the areas of Khar, Santacruz and Chembur were sewered. New outfalls were provided at Khar, Versova and Ghatkopar.

In 1957, the areas now known as the extended suburbs were merged into the Bombay Municipal limits, and the new conglomeration came to be known as Greater Bombay. On the eve of the merger these suburbs were not provided with sewerage facilities. It was therefore incumbent to provide the same. Hence the municipal authorities constructed pumping stations at Kherwadi, Versova, Deonar, Ghatkopar and Malad. Some sewers in the adjoining areas leading to these pumping stations were also laid by about 1970.

Sewerage Projects: In 1962, a high level committee was appointed to study the water supply resources for Greater Bombay. As the increased water supply would cause a corresponding increase in the quantity of sewerage, the committee recommended to provide relief sewers and to construct additional pumping stations. However, due to lack of resources, very few works were undertaken. For the adequate finance, the World Bank was approached in 1969. The scheme aided by the World Bank is known as the Integrated Water Supply and Sewerage Project. A well-known firm of consultants from London, Messrs. Binnis and Partners was appointed to prepare feasibility report for water supply and sewerage requirements. The firm undertook these feasibility studies in their Development Plans I, II and III. Greater Bombay was originally divided into 14 drainage districts. As per the recommendations incorporated in the Development Plan II, these were now divided into five main drainage zones. These were: Malabar Zone comprising areas from Colaba to Love Grove; Worli Zone with areas north of Love Grove; Mahim Zone comprising areas of Bandra, Khar, Santacruz, Dharavi and, Kurla; Marve Zone having areas between Andheri and Dahisar, and Chembur Zone with areas between Ghatkopar and Mulund.

The execution of IDA-I project works started in 1973-74 with the work on engineering design for providing sewers in the developed residential localities of the suburbs and extended suburbs of Greater Bombay. Plans and estimates were prepared for laying underground sewers in the remaining unsewered areas of western and eastern suburbs. Simultaneously the developed residential localities of Malad, Kandivli, Goregaon, Borivli and Mulund were also tackled. Goregaon and Kandivli areas are now fairly sewered. In Borivli area a major programme of laying sewers is in the completion stage, while that of Dahisar is in progress.

WATER SUPPLY

In the past Bombay had many wells and tanks, constructed by philanthropic citizens for public good. The water therein was used for drinking and washing purposes. The location of a private well within the house was regarded as a luxury to be enjoyed only by the rich, and many houses in the Fort were supplied in this way with water which was percolated from the foul ditch surrounding the ramparts. Nevertheless it was rather the scarcity than impurity of water supply that underlay the efforts to improve it. Water

famines were by no means uncommon, one of the largest one occurring in 1824. No definite steps were taken until 1845 to improve water supply, when the deficiency of water forced the Government to appoint a committee to devise measures for enhancing water supply. During the terrible famine of 1854 the G. I. P. railway service and country boats were requisitioned to bring water from the main land. The crisis became so acute that the Government expressed its anxiety to prevent the recurrence of the calamity. Proposals were put forth for improving water supply which finally resulted in the adoption of Vehar water works

Vehar Scheme: The Vehar water works in Salsette were begun in the later part of 1856. The main dam and other two dams were completed in early 1858 and the delivery of water to the city commenced in 1860. The total cost of the works was about Rs. 65.50 lakhs of which the Government contributed Rs. 20 lakhs. All the dams were made of earth. The main dam with a width at the top of 8 m. has a puddle wall along the middle. After the introduction of Vehar water supply in 1860, Bombay had 24 hours supply only for a brief spell of eight years, by which time the demand for water increased considerably.

Tulsi Scheme: This scheme was originally proposed to be auxiliary to the Vehar scheme. However, in 1875, the Town Council proposed for an independent scheme. The works were completed in 1879, and it was commissioned in 1879. As the demand for water increased, it was thought necessary to increase the capacity of Tulsi lake by raising the dam. Accordingly, the work was taken in hand in 1884 and completed in 1887. The lake impounds about 2,000 million gallons of water and supplies to the city about 4 million gallons per day. The addition to water supply by 18 million litres of water per day from Tulsi lake brought the total supply to 63 MLD.

Powai Scheme: It was designed and carried out in 1890 as an emergency measure to mitigate the anticipated water famine. The Powai water was brought to city in 1890. However, the quality of water was so poor that several complaints were received from the public. The Tansa supply was introduced into city in 1892 and since that date the use of Powai lake as a source of water was abandoned. At present water from Powai lake is supplied for washing of buffaloes at Aarey Milk Colony.

Tansa Scheme: The Municipal Corporation undertook the work of the Tansa Dam in January 1886. In November of the same year the construction of aqueduct works from Tansa to Ghatkopar (14 km. in length) was begun. The works originally estimated to supply 95 million litres of water per day through a duct 88 km. in length, were completed at a cost of Rs. 1.50 crores. The Tansa scheme was executed in three stages, the original Tansa works between 1886 and 1892, the Tansa Duplication works between 1912-15 and the Tansa completion works between 1923-26. The supply from Tansa lake was originally about 82 MLD, but the works carried out in connection with duplication at the Tansa Main doubled this output in 1916. Under the Tansa Duplication works the Tansa Dam was expanded from its original capacity of 123.48 mts. to 126.37 mts. above the THD. The available daily water supply from the lake was raised from 95.34 MLD to 222. 46 MLD. The works were completed at a cost of Rs. 70,50,000 and were commissioned in December 1915.

The failure of the Monsoon of 1918 and the serious damage to Tansa Aqueduct in July 1919 made it imperative to provide for an additional water supply. Ultimately it was recommended to extend the Tansa scheme to its final limit at an estimated cost of Rs. 4.29 crores.

Accordingly, the project called the Tansa Completion Works was decided to be taken up to distribute the whole of the water which Tansa catchment could yield in normal years of rainfall. Accordingly, the works were started in 1923 and completed in 1926. In the fourth stage, which was taken up in 1948, 38 automatic falling shutters were installed to increase the spillway capacity from 23,000 to 33,000 cusecs.

Vaitarna-cum-Tansa Scheme: With the completion of the third phase of the Tansa Scheme in 1926, the available supply from Tulsi, Vehar and Tansa rose to 490.3 ML per day. From 1924 to 1944, Bombay had no real shortage of water supply. The increase in population during the World War II, however, called for more water. In 1950, the suburban area was merged in the city. To keep pace with the new demand the Vaitarna-cwra-Tansa Scheme was taken up in hand in 1948, and was completed in 1957. With 463 MLD of water from the Vaitarna Lake the overall supply of water rose to 999 million litres per day by 1964.

Ulhas Scheme: In 1962, the Government of Maharashtra appointed a committee to undertake a new scheme for augmentation of water supply to Greater Bombay, and it was decided to carry out the upper Vaitarna Scheme. The work on the same was commenced in 1965. Due to the delayed rains of 1966, Government allowed the Municipal Corporation to tap surplus water from the Ulhas river at Mohane near Kalyan as an emergency work. The scheme was undertaken immediately and was completed in one year. An additional water supply became available to the city since May 1967.

Upper Vaitarna Scheme: Even after completion of the Vaitarna-*cum*-Tansa Scheme in 1957 the water supply position was not happy. In fact demand for more water increased day by day. Towards this the Government of Maharashtra appointed a committee in 1962 to undertake new scheme for augmenting water supply. The committee decided to carry out the Upper Vaitarna Scheme. The work was commenced on two dams, one on the Vaitarna river and the other on the Alandi river in the upper reaches of the Vaitarna in 1965 and completed in 1973. A storage of 3,60,000 MLD was created which roughly meant an additional supply of 532 MLD of water to lower Vaitarna lake. From the Upper Vaitarna Lake the tail-race water after generation of electricity flows through the Vaitarna river and is collected into Modak Sagar (Vaitarna Lake). The reservoir is named after Mr. Modak in gratitude to the ingenuity and illustrious services of the engineer of this project.

With the completion of Upper Vaitarna. Project, the average supply brought to the city was 1,498 ML, per day in 1972-73, the details of which are as under:—

	MLD
Vehar	50.0
Tulsi	18.0
Tansa	340.5
Vaitarna	463.0
Ulhas	91.0
Upper Vaitarna	535.5
Total	1,498.0

Bhatsai Project: In 1962, the Municipal Corporation appointed a committee of experts to study the growing needs of water. The committee suggested various alternative sources, and in 1964 the Government of Maharashtra gave approval to harness the waters of the Bhatsai river for the purpose. Of the three stages, the Municipal Corporation is engaged in completion of the first stage, viz., augmenting the city's water supply by 455 MLD. The construction of three pumping stations at Pise, Panjrapur and Bhandup was taken up in hand from 1975, and the three switch yards and the above three pumping stations have been commissioned. From December 1979, the Corporation started pumping waters from the river at Pise. At present about 455 MLD of water is being drawn for the city's use.

In the following statement are given the details of the service reservoirs in the city and suburbs and their existing capacity.

SERVICE RESERVOIRS

Name	Existing capacity (MLD)	Full supply level (MTHD)
1.City-		
Malabar Hill-1	131.8	78.00
Bhandarwada	76.6	57.60
Bhandarwada elevated tank	5.7	
Golanji	7.3	60.96
Raoli HL	22.7	66.30
Worli	22.7	62.48
Powai HL-I	54.6	89.31
Total for City	321.4	
II. Colourba		
II. Suburbs-	10.0	67.67
Powai LL	10.9	67.67
Bhandup-l	22.7	89.92
Bhandup-II	18.2	89.92
Ghatkopar LL	10.9	64.31
Trombay LL	27.3	59.44
Trombay HL	54.6	84.73
Malad- I	50.0	89.92
Borivli-I	18.2	89.92
Veravli HL	4.5	108.2
Veravli LL-I	27.3	89.92
Veravli LL-II	40.9	89.92
Veravli LL-III	68.2	89.92
Pali-I	4.5	71.63
Total for Suburbs	358.2	
Total for Greater Bombay	679.6	

EDUCATION AND CULTURE



Maharashtra State Gazetteers

GENERAL GROWTH

THE EARLY HISTORY OF EDUCATION IN BOMBAY is a record of Christian missionary work. As early as the end of the 16th century the Christian missionaries established three parochial schools attached to the various churches. The British East India Company obtained a major foot-hold in the State when it received on lease the island of Bombay from King Charles II. It was essentially a commercial concern and therefore it did not undertake any educational activity whatsoever for more than a century of its existence. In pursuance of the Charter Act of 1698 it sanctioned some financial assistance to the charity school established by Rev. Richard Cobbe in Bombay city *m* 1718 for the education of Anglo-Indian and Christian children. The institution was mostly supported by donations, contributions and financial grants and was the only educational activity of the Company till 1815. In that year the European residents in city founded the Bombay Education Society with the object of furthering educational interest of the European and Anglo-Indians. This society took over the charity school opened by Rev. Cobbe and established other schools in Bombay. Many Hindu, Parsee and Muslim pupils started attending schools run by the society, and by 1820 there were as many as 250 pupils on roll. In 1823 the society restricted its activities to education of Europeans and Anglo-Indians as a separate society for spread of education among Indians was formed in that year.

The honour of having made the first attempt to educate the Indian people on modern lines goes to Mountstuart Elphinstone, Governor of Bombay. He encouraged the Bombay Education Society to extend its work, but as soon as he realised that there were very large limitations on what, Bombay Education Society could do for Indians, he helped to found an independent association under «the name of Bombay Native School and School Book Society (briefly known as the Bombay Native Education Society since 1827) for the express purpose of spreading modern education among Indian people.

The earliest missionary workers in the field of education were members of the American Marathi Mission who in 1815 opened a Hindu Boys' school and by 1831 maintained eight boys' schools and nine girls' schools. Afterwards many attempts were made by the missionaries to establish native schools.

Meanwhile the Bombay Native Education Society maintained a steady progress. It started in 1824 a central school which later on developed into Elphinstone High School, and then the Elphinstone College, two of the oldest educational institutions in the State. It also started special training class for primary teachers besides general English and primary schools in Bombay and elsewhere in order to meet the demand of people for a new type of education that was then being introduced.

In short, the society may be said to have taken the first bold and decisive step for the education of Indians on modern lines. The success of the society was due to the support and guidance of Mr. Elphinstone. The actual educational achievements of Mr. Elphinstone were so significant that he has been aptly described as the 'father of the State education enterprise' in Bombay. By 1840 the society conducted three English schools and 115 primary schools in the city and the province.

In 1840 the Government created a new body called the Board of Education consisting of 7 members, of whom three were nominated by the society, and transferred to it all educational institutions in the Province. Thus a single agency to manage all official educational institutions in the Bombay Province was created for the first time. It was controlling all the schools in Bombay island, which comprised in 1840 the Elphinstone Native Education Institution and 7 vernacular schools. During 1854-55 the Board conducted 194 vernacular schools including 6 situated in Bombay. The Board further elaborated the policy of Bombay Native Education Society and made a distinct contribution of its own. Firstly, the Board organised professional and vocational education. The Grant Medical College, established in 1845, was put under the control of the Board. Secondly, it laid a special emphasis on the establishment of schools for teaching of English. Thirdly, the Board tried to Indianise the teaching and supervising personnel.

Besides these English and vernacular schools, there were also indigenous schools maintained in Bombay. Between 1820 and 1830 there was a fairly wide spread network of indigenous schools in all the parts of the then Bombay Province. These schools were of two types, schools of learning which imparted the ancient traditional sacred knowledge, and the elementary schools which restricted themselves to the teaching of the three R's. These schools were mostly private ventures started by teachers in response to a local demand and were maintained with the fees and presents given by pupils. These indigenous schools had no building of their own and were held in private premises of rich patrons or in the dwelling of a teacher. They were open to all who could pay for their schooling but the strong popular prejudice against the education of women restricted their attendance to boys only. The course of study was very simple and included reading, writing, simple arithmetic, elementary knowledge of accounts and letter writing, etc.

In respect of educational reforms, the Government decided to undertake an extensive programme, after taking into consideration the limitations of the Board of Education, of educational expansion for the country as a whole. Accordingly it was decided that all such Boards or Councils of Education should be done away with and replaced by the regular department of education managed by competent officers. In pursuance of this policy the Director of Public Instruction was appointed in 1855 for the Province of Bombay. Since 1951 he is known as the Director of Education, Education Department.

Under the system of administration introduced in 1833 all financial control was centralised in the Government of India. The provincial Government could not incur any expenditure without the approval of the Government of India. It was under this inconvenient system that the department of education had to start its work of educational expansion in 1855. This system of centralisation was in force from 1855 to 1870. During this period a diverse expansion of education led to the separation of collegiate education from secondary education and to carry out thorough reforms of existing colleges.

In 1870 the system of centralisation was brought to an end and the State Government was made fully responsible for certain departments including education with the help of grants from the Government of India for educational development. There was no compulsion on municipalities to contribute towards the

expenditure incurred on maintenance of primary schools in their area. Upto 1884-85 the Bombay Municipality had very little to do with the administration of primary education within its jurisdiction. In 1888 a joint school committee consisting of representatives of the municipality and the Government was appointed to administer primary education in Bombay city and it was directed that 50 per cent of the expenditure incurred for the purpose should be met by the Bombay Municipality. Thus in 1890 all primary schools were handed over by the Government to the municipality. (For detailed history of education at all levels, see Gazetteer of Bombay City Chapter 2. and Island, Vol. III, 1910 and History—Modern Period in Greater Bombay Gazetteer, Vol. I,)

Since then there is a remarkable increase in the number of educational institutions of all types. This was mainly due to private initiative taken in starting secondary and higher educational institutions by prominent social workers and philanthropists. The rapid spread of primary education was due to increased receipts from school fees as a result of increase in enrolment and further expansion of private enterprise.

LITERACY

According to the census definition of literacy any person who has ability to read and write a simple letter in the language he understands is literate. This is a more stringent definition of literacy than that adopted by many countries which merely requires that a person be able to read and write. During 1881 a three-fold division into literates, learning and illiterates caused some confusion as the learning category could include both literates and illiterates. The learning category was however dropped in 1901. In 1911 a standard of proficiency for literates was laid down. This definition of literacy remained unchanged since 1911.

As per the Census of 1872 out of a total population of 644,405 in the town and island of Bombay, 105,086 souls were able to read and write or were under instructions including 14,517 females. The percentage of those able to read and write or under instructions, was as follows:—

	Males	Females
Not exceeding 12 years	19.08	6.97
Exceeding 12 but not exceeding 20 years.	28.53	7.94
Exceeding 20 years	22.28	4.95

There was a considerable progress in the field of education since the 1872 Census. Out of a total population of 821,764 in 1881, 26,740 persons were learning while 168,396 were literates. The literates per 1,000 in Bombay island and town as per the Census of 1881, 1891 and 1901 were as follows:—

	1881	1891	1901			
No. of literates in 1,000 males	249	278	249			
No. of literates in 1,000 females	63	87	95			

The Census of 1921 still showed an increase in literacy rates as compared to 1901 figures. The following statement shows the number of literates per mille since 1901 :=

1. Age 10 and over

	Males			Females				
	1931	1921	1911	1901	1931	1921	1911	1901
Bombay City	329	319	305	275	181	163	140	110
Bombay Suburban	331	260			149	22		

2. Age 15 and 20

	Males			Females				
	1931	1921	1911	1901	1931	1921	1911	1901
Bombay City	325	338	314	297	192	202	162	138
Bombay Suburban	365	311			202	192		

3. Age 20 and over

	Males			Females				
	1931	1921	1911	1901	1931	1921	1911	1901
Bombay City	339	320	305	275	180	154	130	100
Bombay Suburban	342	255			135	101		

As per the 1931 Census the number of literates according to age groups was as follows:—

	Bomb	ay City	Bombay Suburban		
	Males Females		Males	Females	
Aged 0-15	19,191	10,682	3,485	2,103	
Aged 15-20	22,050	9,087	3,590	1,716	
Aged 20 and above	1,76,529	43,384	21,661	5,439	

The percentage of total population returned as literate in Greater Bombay in 1951 was 49.33 as against 38.93 in 1941. The percentages for males and females were 55.93 and 38.25, respectively. The gap between male and female literacy in 1951 was striking so far as Bombay State was concerned wherein one male out of three and one female out of eight were returned as able to read and write. The most interesting feature of these figures was the very high percentage of female literacy in Greater Bombay area. The progress of literacy from 1941 is shown below:—

No. of literate males per 1000 males and females		March 941	1st March 1951		
illates affu females	Males	Females	Males	Females	
Aged 5-9	405	326	406	352	
Aged 5-14	509	411	55	479	
Aged 5 and upwards	479	329	593	431	
Aged 15 and upwards	N.A	N.A	601	415	

The Census of 1961 showed a considerable increase in literacy as out of a total population of 41,52,056, as many as 24,33,204 persons were returned as literates. Thus as compared to 38-25 per cent literates in 1951 it increased to 65.89 in 1961. The rate of literacy for the State of Maharashtra during 1961 was 35.08. During 1971, out of the total population of 59,70,575 in Bombay as many as 38,11,380 were literates and educated including 13,88,594 females. The percentage of literacy in 1971 was put at 63-84. The percentage of literate and educated persons to total population for males was 69.65 as against 55.72 for females. As per the Census of 1981, the population of Greater Bombay was 82,43,405, of which 56,20,316 persons were literates. The percentage of literacy to total population was 68.18. The percentages of literacy among males and females were 73.91 and 60.75, respectively.

PRE-PRIMARY EDUCATION

Pre-primary education has been left mainly to private institutions and enterprise assisted by the Government by the way of grant-in-aid. The stay of Montessori, an educationalist, in India during the war period gave an impetus to the early childhood education movement. Some of the teachers took advantage of training course organised by her and opened small classes on their own in various localities in big cities including Bombay. Montessori classes, known after the founder of the movement, or nursery classes managed by various societies are doing good work in the field of pre-primary education. These classes pay special attention to ward's health aspect and provide well planned mid-day refreshments and rest to the kids

Pre-primary schools are recognised by the Education department of the State Government, but recognition is not compulsory and hence there are a number of pre-primary schools which are run without the permission of the department.

There were during 1971-72, 112 schools which enrolled 11,742 children including 5,367 girls. There were five training colleges for pre-primary teachers, of which three had Gujarati as a medium of instruction and one each with Marathi and Urdu as medium of instruction.

PRIMARY EDUCATION

Although the island of Bombay came under rule of the East India Company as early as in 1668, its needs in primary education were exclusively provided by indigenous schools till 1824.(*A Review of Education in Bombay State,* 1855-1955, p. 96.) At that time the Bombay Native Education Society opened two primary schools on modern lines, one for Marathi and the other for Gujarati pupils. This society, and later on the Board of Education, continued to provide primary education for the city till 1855 when the number of schools was 6 with a total enrolment of 560. These schools were taken over by the Department which remained in exclusive control of primary education in the city upto the period 1886-87 when the strength of schools was put at 142 with 14,493 students.

Even though the beginning of municipal administration in the city of Bombay is very old and dates back to the year 1792, the municipal authorities in the city had nothing to do with the provision of primary education until 1872, when it was authorised to contribute to the expenditure on primary schools maintained within its jurisdiction by the department. Between 1872 and 1887 the municipal authorities had no control over the administration of primary education in the city and its sole duty in this respect was restricted to the sanctioning of small amount of grants.

The Municipal Act of 1888 made a revolutionary change in this position. It laid down the general principle that primary education in the city was a joint responsibility of the Government and the municipality, and created a joint school committee, consisting of 8 members of whom 4 were nominated by the municipality.

The supervision and control of the primary schools was vested in it and the funds required for educational activities were jointly provided. This joint management continued until 1907 when the Police Charges Act was passed (See Chapter 2— History— Modern Period in Vol. I of Greater Bombay Gazetteer.). Under its provisions the municipality was exempted from the payment of contribution towards the maintenance of

Police in the city and in return was made to accept the entire responsibility for financing primary education. Accordingly the Government grants for primary education in the city areas were discontinued in 1907-08.(*A Review of Education in Bombay State*, 1855-1955, p. 97.)

This major financial change also necessitated change in the administration of primary education in city. The Government ceased to appoint any member to the school committee, and the municipality appointed its own inspecting staff. The entire control over the aided schools was transferred to the municipality. Thus the municipality assumed full control over primary education. The system thus created in 1907 continues fundamentally unaltered to this date although Government grants for primary education have since been increased. The following statement shows the growth of primary education during the period 1887-88 to 1921-22:—

Year	Schools	Students	Expenditure
			Rs.
1887-88	136	14,354	1,42,047
1891-92	146	14,779	1,68,052
1901-02	194	18,980	2,68,166
1911-12	279	32,405	5,76,088
1921-22	402	49,596	21,85,580

The scheme of compulsory primary education was put forward as early as in 1906. Although this attempt did not succeed, efforts in that direction continued to be made by public leaders in the city. The scheme of expansion of primary education was introduced in 1918-19. In 1920 the City of Bombay Primary Education Act was passed and the Corporation was authorised to introduce free and compulsory primary education in its area subject to certain conditions. Accordingly compulsory education was introduced in F and G wards in 1925 and was extended to the entire city area in 1939-40. But as no effective measures were taken to enforce compulsory attendance the scheme remained more or less on paper. Owing to the increase of population and public awakening however the enrolment in primary schools increased considerably between 1924-25 and 1946-47. With the rise in cost of living the contribution of the Corporation also went up proportionately. This is borne out by the following statistics:—

Year	Schools	Students	Expenditure
			Rs.
1924-25	437	52,599	27,94,690
1931-32	464	76,951	35,30,898
1941-42	613	1,13,098	49,68,464
1946-47	640	1,51,063	91,00,984

In 1948 the Corporation appointed a committee to examine the problems of administration of primary education in the city and to make recommendations calculated to increase the efficiency of the existing system. The recommendations of the committee were accepted by the Government and Corporation and accordingly primary education was placed under the control of the Municipal Commissioner assisted by the Education Officer who was put in direct control and management of all the activities of primary education, municipal and aided. This effect was given under the Bombay Municipal Corporation (Amendment) Act of 1950. Under this Act, the Government assumed large powers to give directions to the Corporation regarding subjects, text books, etc. This major administrative change was accompanied by another equally far reaching reform, *viz.*, the merger of some suburban area with the city in order to form Greater Bombay. This led to a great increase in the scope of primary education and the number of schools and students showed a sudden rise as evident from the following statement:—

Year	Schools	Students	Expenditure
			Rs.
1946-47	640	1,51,063	91,00,984
1951-52	772	2,40,488	1,68,07,462
1954-55	840	2,72,001	1,69,84,825

Thus it will be seen that primary education made a tremendous progress during the period 1854-55 to 1954-55. In 1854-55 there were only 6 primary schools with total enrolment of 360 which were conducted at a cost of Rs. 3,912. In 1954-55 this number increased to 840 with 2,72,001 students and a total expenditure of Rs. 1,69,84,825.

Primary education recorded great strides since 1956-57 when the jurisdiction of Greater Bombay was extended to its present limits to include the extended suburbs. The following statement shows the progress of primary education since 1956-57 for a few years:—

Year	Municipal Schools	Private Schools	Total schools	Students
1956-57	605	391	996	3,37,727
1959-60	679	412	1,091	4,28,780
1962-63	819	484	1,303	5,17,081
1965-66	946	548	1,494	6,03,815
1968-69	1,019	558	1,577	6,64,706
1971-72	1,061	609	1,670	7,75,277
1973-74	1,091	622	1,713	7,31,004
1976-77	1,149	668	1,817	N.A.
1980-81	1,250	741	1,991	9,44,020

Municipal Schools: The Bombay Municipal Corporation has the largest net-work of primary schools in India. The Education Department of the Corporation at present conducts schools in Marathi, Gujarati, Urdu, Hindi, Kannada, Tamil, Telugu, Malayalam, Sindhi and English languages.

As regards the growth of municipal primary schools the number has shown a rising trend. In 1921-22 there were 298 schools imparting education to 35,062 students which increased to 319 schools and 61,196 students during 1931-32. During 1940-41 there were 380 schools with total enrolment of 1,13,820 pupils. The area-wise distribution of schools during 1951-52, 1961-62 and 1971-72 is shown below:—

Area	1951-52		196	1-62	1971-72	
Alea	Schools	Pupils	Schools	Pupils	Schools	Pupils
City	380	1,44,680	447	2,38,866	540	2,65,429
Suburbs	103	25,409	212	84,904	368	1,87,282
Extended Suburbs			82	25,684	153	76,091
Total	483	1,70,089	741	3,49,454	1,061	5,28,802

The Municipal Corporation employs a big teaching staff to man their primary schools spread over the city and suburbs. Out of a total of 400 teachers during 1951-52 there were 183 special teachers. This number increased to 9,127 including 324 special teachers during 1961-62 and 14,989 including 723 special

	195	1-52	1961-62		1971-72		1980-81	
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
Total Schools	483	1,70,089	741	4,39,454	1,061	5,28,802	1,250	6,64,900
Marathi Schools								
City	156	87,838	177	1,53,241	231	1,68,791	264	1,50,615
Suburbs	53	15,094	71	48,694	130	1,08,287	191	1,50,644
Extended Suburbs			38	13,359	58	40,878	166	82,383
Total	209	1,02,932	286	2,15,294	419	3,17,956	621	3,83,642

The number of primary schools and classes however showed an increase in 1980-81 as there were 1,250 full-fledged schools and 68 classes imparting education to 6,64,900 students. The medium-wise number of schools is shown in the following statement :—

Language		City			Suburbs			Extended Suburbs		
	Schools	Classes	Pupils	Schools	Classes	Pupils	Schools	Classes	Pupils	
Marathi	264	2	1,50,615	191	1	1,50,644	166	2	82,383	
Gujarati	77	5	15,882	53	2	18,967	46	3	21,761	
Urdu	104	5	39,234	76	4	45,445	22	1	10,100	
Hindi	54	2	22,509	69	2	34,909	37	2	22.654	
Tamil	11	3	4,686	13	2	3,870	12	2	3,234	
Telugu	18	1	7,264	9	5	2,164	6	6	1.871	
Kannada	14	6	3,462	20	3	5,908	8	3	3,707	
English	19	1	6,760	12		4,147	3		1,956	
Sindhi		1	56	2		398	1	2	203	
Malayalam				(%).	3	75		1	26	
Total	551	26	2,50,468	445	22	2,66,537	254	20	1,47,895	

The Municipal Corporation employs a big teaching staff to man their primary schools spread over the city and suburbs. Out of a total of 400 teachers during 1951-52 there were 183 special teachers. This number increased to 9,127 including 324 special teachers during 1961-62 and 14,989 including 723 special teachers in 1971-72. The details of trained and untrained teachers are given below:—

Area	1951-52			1961-62			1971-72		
/lahai	Trained	Un-trained	Total	Trained	Un-trained	Total	Trained	Un-trained	Total
City	3,236	566	3,802	5,709	410	6,119	7,673	100	7,773
Suburbs	539	176	715	1,884	156	2,040	5,012	53	5,065
Extended Suburbs				609	35	644	2,132	19	2,151
Total	3,775	742	4,517	8,202	601	8,803	14,817	172	14,989

During 1980-81, the number of teachers rose to 18,424. The medium-wise information of these teachers is shown in the following statement:—

Language	C	ity	Suk	ourbs	Extended	Suburbs
	Trained teachers	Untrained teachers	Trained teachers	Untrained teachers	Trained teachers	Untrained teachers
Marathi	4,453	9	3,854	6	2,224	8
Gujarati	22	2	602	13	682	3
Urdu	1,091	4	1,139	15	281	4
Hindi	629		912	5	518	3
Tamil	120	1	94	4	84	2
Telugu	184	19	59	1	57	4
Kannada	106	2	179	13	119	3
English	171		106	7	47	7
Sindhi	5		24	4	13	2
Malayalam			6		2	
Total	7,281	37	6,975	68	4,027	36

In order to keep the teachers abreast of new trends in education an in-service training department has been set up since 1961. Its special feature is the training aid centre where teachers are trained to prepare teaching aids necessary for instructional programme. During 1975-76 there were three such centres for the municipal teachers.

The Corporation conducts two training institutes for training of untrained teachers. These institutes are the Rahimtulla Currimbhoy Municipal Urdu Teachers Junior College of Education, Imamwada and the Municipal Urdu Teachers Junior College of Education located at Mahim. The total strength of trainees of the former during 1975-76 was 156 and that of the latter 78. These institutes prepare the students for the D.Ed, examination.

The corporation also provided library facilities to teachers. These libraries are situated at SantaCruz, Ghatkopar and Gilder Tank.

Research Unit: The Municipal Corporation was the first statutory body in India to set-up a research unit. The unit established in 1955 carried out surveys regarding premature dropping out of children and the incidence of stagnation. It studied ways and means for improving the quality and effectiveness of instructions in subjects and published materials for guidance of children. An educational guidance centre attached to this unit aims at making the pupils guidance-minded and to create an awareness among the people regarding the importance of careful selection of careers.

Scouts/Guides Activities: The municipal scouts/guides division is one of the largest single scouts/guides unit in Maharashtra State. During 1980-81, there were 2,974 cubs, 2,935 scouts, 2,096 bulbuls, 1,971 guides and 120 flock.

Vocational Schools: The Corporation provides vocational training through vocational schools in various crafts such as carpentry, tailoring, clock-repairing, signboard painting, book-binding and printing. Articles prepared by students are sold at an exhibition. During 1971-72 there were 22 vocational schools with 33 vocational classes. This number increased to 27 in 1975-76. Out of 41 vocational classes in these 27 schools, 18 were of carpentry, 19 tailoring, 7 book binding, 7 clock repairing and one each for painting and signboard painting.

Schools for Handicapped: A very important step in the field of primary education is the opening of special schools for the physically handicapped and mentally deficient or retarded children. Two schools for deaf and dumb children at the Nair and the Lokmanya Tilak hospitals are run by the Corporation.

Welfare Activities: Children in the municipal schools are examined medically and deficiencies, if any, are intimated to the parents. Parents are also interviewed, and necessity of clinical treatment to their wards is explained. Children requiring further treatment are referred to different school clinics conducted by municipal general hospitals. A separate medical inspection staff works under the Executive Health Officer of the Municipal Corporation for the medical check-up of school children. During 1980-81, 1,76,768 pupils from 1,175 primary schools were examined, of which 1,49,115 pupils were found deficient. Children from

municipal primary and secondary schools are treated in municipal dispensaries and at school clinics at K.E.M. Hospital, L.T.M.G. Hospital, Nair Hospital and Borivli Hospital.

The Municipal Corporation tries to take care of children attending municipal schools. Besides medical facilities, children studying in I to IV standards are covered under the school feeding programme with buns, peanuts and biscuits.

In order to raise the quality of education the Corporation has launched an ambitious programme. It has made arrangements for providing facilities for the all-round development of children. In addition to the provision of playground, after school play *centres-cum-bal bhavans* have been started in various parts of the city to enable children to enjoy sports and recreational activities. During 1980-81 the number of *bal bhavan* centres was 47. Children's magazines in Marathi, Gujarati, Hindi and Urdu are published since 1965 with a view to promoting literary and artistic activities among children. An audio visual section has been started to supplement the teaching programme. This section arranges film shows in municipal schools. The children are also given traffic control training. Facilities are provided for the children to learn music free of charge in music centres with the help of music teachers. The Corporation has also established art centres to develop talents in arts.

School Buildings: Owing to the shortage of owned school buildings the municipal schools are accommodated in rented premises. However, lack of spacious well lighted class rooms in sufficient numbers in the rented premises constitutes a major handicap in qualitative and quantitative improvement of education. The number of municipal owned premises rose from 100 in 1956-57 to 211 in 1969-70. During 1980-81, besides 297 municipal owned buildings, municipal schools were housed in 372 rented and 22 rent free buildings. In spite of constructing ten to twelve school buildings every year the accommodation provided by the Corporation proved to be comparatively insufficient. This has resulted in introducing shorter sessions system.

Private Schools: Besides the municipal schools, the educational needs of children in Greater Bombay are met by a number of private primary schools. Some of these schools are recognised for the purpose of grants by the Municipal Corporation. With the expansion of primary education these private schools are keeping pace with the municipal schools. The area-wise number of such aided and unaided schools is shown below:—

	1951	L-52	196	1-62	197	1-72
	Schools	Pupils	Schools	Pupils	Schools	Pupils
Aided Schools						
City	226	54,367	227	63,104	119	27,980
Suburbs	59	14,733	77	28,066	60	22,344
Extended Suburbs.			44	13,425	39	17,569
Total	285	69,100	348	1,04,595	218	67,893
Unaided Schools						
City	15	NA	80	NA	203	NA
Suburbs	8	NA	22	NA	131	NA
Extended Suburbs		NA	20	NA	27	NA
Total	23	3,179	122	23,908	391	1,27,337

During 1980-81 there were as many as 436 recognised schools and 305 aided schools imparting education to 1,60,903 and 1,18,217 students, respectively. The medium-wise number of such schools is shown in Table No. 1 at the end of the Chapter.

Year	Teachers in				
	Aided schools	Unaided schools			
1951-52	2,712	157			
1961-62	3,482	942			
1971-72	1,880	3,979			

In 1980-81, there were 3,242 teachers in aided schools and 4,846 teachers in unaided schools.

Expenditure: The details of income and expenditure in the years 1970-71 and 1980-81 are given below:

		Income						
Year	Municipal contribution	Government grants	Education cess	Other receipts	Total			
1970 - 71 1980 - 81				8,76,254 1,59,32,541	8,68,72,792 29,41,19,982			

The average expenditure per pupil during 1970-71 was Rs. 175.32, which increased to Rs. 399.98 in 1980-81.

Administration: With a view to assuring uniform pattern and achievement of quality in education, the Municipal Corporation maintains its own inspectorate for inspection of all schools both municipal and private. From the elected body of the corporators, the school committee has been formed. The Education Officer works out the plan of the Education Department in consultation with this committee. For administrative and executive purposes the Education Officer has as many superintendents as depending upon the number of schools of that particular medium. These superintendents in turn are assisted by Inspectors and supervisors.

SECONDARY EDUCATION

The role that the Government has to play in respect of secondary education has been entirely different as compared to that of primary education. Government always held the view that primary education was more important than secondary and that it had a prior claim upon the State funds allotted to education. Consequently, primary schools had been established under direct control of the Education Department or local bodies. Secondiary schools were thus left over to private enterprise.

Upto 1875-76 secondary schools were not in existence. The schools of this period were known as English schools on account of the fact that the study of English language was an important subject of their curriculum. After 1881-82 these English schools began to be known as secondary schools, though in fact instruction through English was being gradually abandoned since the 3rd decade of the 19th century. In this period the old connection between secondary education and teaching of English was done away with. Secondary education was then regarded as adolescent education. The secondary schools were then no longer bound by the narrow aim of teaching English. On the other hand, they were trying to provide diversified courses suited to the capacities and aptitude of adolescent boys and girls.

During 1815 the European inhabitants of Bombay city established the Bombay Education Society with the primary object of educating European and Anglo-Indian children. But from the very beginning the society admitted Indian children to its schools without making religious education compulsory. In 1818 the society started English schools in Bombay city. In 1820 it established a separate committee to look after the education of Indian children and the same committee came to be known as the Bombay Native Education Society from 1827. It was the principal agency responsible for the spread of education between 1820 and 1840.

With the creation of Education Department in 1855 the English schools began to be organised on sounder lines and increased in number. Between 1855 and 1871 several reforms were introduced which brought about marked qualitative and quantitative changes in the organisation of English schools. The Matriculation examination began to serve as (1) a leaving examination for English school, (2) as an entrance examination to the university, and (3) a dividing line between secondary and collegiate education.

The Indian Education Commission replaced the old terms of English education and English schools by the terms of secondary education and secondary schools. During 1909 the numbers of high schools and middle schools in Bombay were put at 39 with 12,762 students and 50 with 3,772 students, respectively. During the period 1921-47 the growth of secondary education was very rapid due to great awakening that had taken place among the people and to development of Indian private enterprise. In 1945-46 there were as many as 207 secondary institutions of which 153 were secondary schools, 49 middle schools and 5 Anglo-Indian and European schools with a total enrolment of 74,184. Besides, English classes attached to the primary schools numbered 6 with 952 students. Of 207 institutions, 176 were in the city and 31 in the suburbs. The institutions for boys numbered 148 while the rest were for girls.

The use of English medium was completely abandoned by 1946-47 except in Anglo-Indian schools. The congress Ministry which assumed office in 1937 introduced many changes in all fields including education. It started diversified courses and accordingly special courses in technical, commercial and agricultural education were organised in government high schools and assistance was extended to private agencies which came forward to conduct them.

After the attainment of independence, reconstruction of the educational system was undertaken. A radical change in secondary education was introduced which formed the weakest link in the general system of education under the British rule. It was decided to reduce the domination of English language from which secondary schools suffered so much in the past. English classes attached to primary schools were closed down. The Matriculation examination was conducted by the University of Bombay from 1859 to 1948. A separate board known as the Secondary School Certificate Examination Board was constituted and a new S. S. C. Examination was instituted at the end of secondary education course in lieu of both Matriculation and S. L. C Exams, in 1949, The secondary schools provided for such a large variety of courses that it reduced the domination of university courses very considerably and became a more powerful weapon for diverting the students into various walks of life.

As a result of the introduction of compulsory primary education, more and more pupils sought admissions to secondary schools which in turn resulted in the increase of both the institutions and enrolment. Thus from 207 secondary schools in 1945-46 the number increased to 266 with 1,06,808 students in 1950-51. The following statement shows the number of schools and students in the years 1960-61 and 1971-72:—

Year	Institutions	Students
1960-61	438	2,36,490
1971-72	637	4,59,789

Of the 438 schools in 1960-61, 79 were for girls. The number of girl students was 87,746. This number of girl students was the highest in the State, the percentage for Greater Bombay being 37. The average area served by a secondary school during the same period was 0.42 sq. mile with 9,466 average estimated population served by a secondary school. The average number of pupils per secondary school was put at 540, which was the highest in the State. The average number of pupils per teacher was the highest for Greater Bombay which was put at 26-1. The strength of institutions and students showed a considerable increase during the next 10 years, as in 1971-72 the total number of schools rose to 637. The schools with Marathi medium numbered 235 with 1,49,272 students, whereas English medium schools numbered 228 with 1,63,443 pupils. The total number of students included 1,93,853 girl students with as many as 7,234 studying in English schools. However the number of schools for girls was only 109 out of a total of 726. The management-wise classification of schools was—Central Government, 2 schools; State Government, 2; Municipal Corporation, 28; aided, 591; and unaided, 103. The number of multi-purpose schools was 51 including 6 for girls and the rest were ordinary secondary schools and 19 pre-secondary schools.

The following statement shows enrolment in secondary institutions during a few years from 1960-61 to 1974-75, and percentage rise over 1960-61:-

Mahara

nela	Enrolmer	nt (in lakhs)	0070
Year	Greater Western Bombay Maharashtra excluding Greater Bombay		Maharashtra State
1960 -61	2.36	3.22	8.58
1965 - 66	3.36 (45.9)	5.73 (78.3)	15.00 (74.9)
1970 - 71	4.35 (83.9)	7.71 (139.9)	19.36 (125.7)
1972 - 73	5.16 (118.6)	8.87 (175.5)	21.97 (156.1)
1973 - 74	5.75 (143.6)	9.93 (208.4)	24.32 (183.4)
1974 - 75	5.84 (147.5)	10.81 (235.7)	25.21 (193.8)

(The figures in brackets indicate percentage increase over the position in 1960-61.)

Enrolment per 1,000 population in secondary institutions since 1960-61 in the City, Western Maharashtra and the State is shown in the following statement:—

	Greater Bombay		Western Maharashtra excluding Bombay		Maharas	shtra State
Year	Estimated Population (in '000)	Enrolment (per '000 population)	Estimated Population (in '000)	Enrolment (per '000 population)	Estimated Population (in '000)	Enrolment (per '000 population)
1960-61	4,152	57	19,871	16	39,554	22
1965-66	4,718	71	22,573	25	44,931	33
1970-71	5,971	73	24,705	31	50,412	38
1972-73	6,301	82	26,084	34	53,222	41
1973-74	6,475	89	26,801	37	54,686	44
1974-75	6,653	88	27,539	39	56,190	45

During 1976-77, the strength of secondary schools showed a further rise, as the total number of these schools was put at 699 including 9 Anglo Indian schools. Of the total of 699 schools, 590 were for boys and girls, while the rest were for girls only. As regards the total number of students, it showed a tremendous rise as there were as many as 5,69,841 students studying in these secondary schools including 2,40,225 girls. The relevant figures of schools and students in the Bombay division were 1,947 and 10,88,991, respectively. During the year 1980-81, there were 602 secondary schools managed by private bodies with student enrolment of 5,96,150. The number of teachers was 15,495. The number of schools managed by the Bombay Municipal Corporation was 51. The number of students on roll and teachers was 76,102 and 2,466, respectively.

During 1960-61 there were as many as 8,090 teachers imparting education in secondary schools. The number of trained teachers was 8,018 including 3,130 female trained teachers. Thus, the percentage of trained teachers to total teachers worked out to 76.6. In the next ten year period due to the expansion of secondary education, the total number of teachers also showed an increase, as in 1970-71 the number was put at 15,966. Of this, 13,249 including 7,576 females were trained hands. The percentage of trained teachers was thus put at 83. A large number of teachers to the extent of 13,273 were employed in aided schools. During 1976-77 the number of total teachers and trained teachers was 20,876 and 19,089, respectively. The relevant figures for the Bombay division were 40,399 and 36,748, respectively. The percentage of trained teachers was 91.4 for Greater Bombay and 91.0 for the Bombay division.

HIGHER SECONDARY EDUCATION

From the academic year 1972, the new pattern of education, *viz.*, 10+2+3 was introduced in the State of Maharashtra, and the plus 2 stage of higher secondary education, designated as Junior College stage, was introduced throughout the State from the academic year 1975-76-The classes of the first and second year of Junior College (XI and XII Standards) were started in a few selected secondary schools and colleges. In the higher secondary stage of two years, it was expected that the distinct streams should be introduced, one stream preparing the students for admission to the University, *i.e.*, for academic or professional studies and the other for different vocational courses.

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Particulars	Y	ear
	1977- 78	1980- 81
Private Colleges :		
(1) Number of Junior Colleges attached to—		
Schools	105	112
Colleges	48	52
Independent		1
Total	153	165
(2) Intake Capacity—		
Schools	19,200	31,370
Colleges	56,620	70,300
Independent		800
(3) Enrolment—		
Arts	13,550	18,364
Science	24,070	28,778
Commerce	29,940	51,679
Total	67,560	98,821
(4) Teachers	2,326	2,961
Government Colleges:		
(1) Number of Junior C <mark>olleges attached to</mark> Colleges	3	2
(2)Intake Capacity		1,800
(3) Enrolment -		
Arts	344	588
Science	928	965
Commerce	414	270
Total	1,686	1,823
(4) Teachers	593	N.A

The State Government is required to maintain a huge staff with a view to have proper control over secondary schools, Looking to the enormous work in respect of inspection, guidance and finance, the office at Bombay has been raised to the level of Deputy Director. The Deputy Director, Bombay, is assisted in the matters of administration and supervision of secondary schools by three Educational Inspectors including one for girls' schools. These Educational Inspectors are assisted by Assistant Educational Inspectors and Deputy Educational Inspectors, etc. Besides educational control and administration, the office of the Deputy Director is required to disburse grants to schools, and to grant educational concessions, etc.

BOMBAY UNIVERSITY

(Also see Chapter 2—History—Modern Period in Vol. I of the Greater Bombay Gazetteer.)

The Bombay University, the second oldest university in India, was the first to be established in this State. Started in 1857 it continued to be the only university in the State until 1947. It was incorporated under the Act of 1857 passed by the Imperial Legislature. It nominated the first Vice-Chancellor and fellows who together constituted the body corporate of university. Before the establishment of the University of Sind in 1947 the jurisdiction of this university extended over the then entire Bombay Province. The jurisdiction became more and more circumscribed as regional universities came to be established in the then Bombay State.

The period of nearly 47 years between its establishment and its reconstitution under the Indian Universities Act, 1904, was one of slow and steady expansion. Throughout this period, the only function of the university was to hold examinations and confer degrees. The Act of 1860 empowered the university to institute any degree or diploma which it deemed fit while the Act of 1884 authorised it to confer honorary degrees. The first Matriculation examination was held in 1859. At that time the degree course was spread over three years after the matriculation examination. The number of students who appeared for the university examination was necessarily small. In 1859, 132 candidates appeared for the matriculation examination. In 1903-04 this number increased to 3,547. In 1862 only 6 candidates appeared for the first B.A. examination, but in 1903-04 the number rose to 486.

A purely affiliatory and examining body the university did not really require a large campus or extensive

administrative building. The Bombay University was a little fortunate in this respect because its early needs in these matters were liberally met by private charity. The Government of Bombay assigned a site in an important area of Fort and a munificient donation by Sir Cowasjee Jehangir enabled it to construct its imposing convocation hall in 1875. In 1864 Premchand Raichand offered a generous donation of Rs. 2 lakhs for the founding of a library and followed it up by another donation of an equal amount for creation of a clock tower known as the Rajabai tower.

In those days the administration of the university was a very simple affair. There was no system of university inspection or recognition of secondary schools which sent up candidates for the matriculaon examination and these functions were performed by the Education Department. Even in respect of colleges which were affiliated to the university, there was no system of periodical inspection. The entire business of the university was restricted to holding examinations and conferment of degrees. The senate was divided into four faculties but there was neither the academic council nor boards of studies. The entire day-to-day administration was looked after by the syndicate. The budget of the university in 1903-04 amounted to Rs. 2,42,011 only and the State did not give any grant-in-aid and the funds consisted of receipts of fees and endowments.

Since the university had no teaching functions of any type all teaching on its behalf was done by the affiliated colleges. In 1857 there were only three colleges in the Province, the Elphinstone College, the Grant Medical College both at Bombay and the Deccan College, at Pune. All these institutions were affiliated to the university in 1860. In the year 1903-04 the university had 16 affiliated colleges, eleven of general education and five of special education. These eleven colleges of arts and science included the Elphinstone, the Wilson and the St. Xavier's situated in Bombay. Out of five professional colleges, two colleges, viz., Law College and Medical College were established in Bombay. The total number of students enrolled in all the affiliated colleges in 1903-04 was 3,454, of whom only 79 were girl students.

The Indian Universities Act passed in 1904 at the instance of Lord Curzon, made a radical change in the constitution and powers of the university. A syndicate to look after the administration of the university was constituted and the authority was given to the university to undertake teaching, to maintain educational institutions for promoting research and to exercise a greater control over the teaching in its affiliated colleges by periodical inspection. The power of granting or withdrawing recognition to colleges was now vested in the Government instead of the senate, but the Government was to take decision on the recommendations of the senate. Government also started extending recurring and non-recurring grants to the university so that it was possible for it to carry out administrative reforms which were long over-due. Thus, the entire administration of the university was revolutionised during 1904-28.

Upto 1912 a little progress was made in respect of teaching functions. A beginning was made in that direction by undertaking teaching at postgraduate level with the university arranging lectures for M.A. students. The University School of Economics and Sociology was established and it began to function from 1919. Even though teaching and research work was organised the most important activity of the university was holding examinations. The number of students appearing for university examinations increased very considerably as a result of expansion of affiliated colleges. The finance of the university showed a great improvement during the period 1904-28. The matriculation examination brought in some revenue because the number of students appearing for it increased considerably. The university did not however hold the matriculation examination from 1919 to 1929.(*During this period the examination was conducted by the Joint Examination Board, established in 1919.*) The grants from the Government helped the university to develop teaching and research and to increase administrative efficiency. In addition it enabled to construct the buildings for its office and for the School of Economics and Sociology.

The increase in the affiliated colleges was an important development of the period 1904-28. Of the new colleges of general education established during this period was the School of Economics and Sociology conducted by the university. The Government established the Royal Institute of Science, now known as the Institute of Science, in 1924 with the primary object of furthering original research and post-graduate teaching in science. The number of professional colleges increased to ten in 1928. This included the Sydenham College of Commerce and Economics, S. T. College and G. S. Medical College.

From 1928 to 1947 the Bombay University was the only university in the State. As other universities began to function after 1948, the jurisdiction of the University of Bombay was reduced accordingly. Under the Bombay University Act of 1953 the jurisdiction of the university was restricted to the areas of Greater Bombay only.

On the teaching side the university made good progress. In 1934 the Department of Chemical Technology was founded. The Department of Statistics was established in 1947 and the Department of Politics was added to the School of Economies and Sociology in 1948. The Department of Military Studies was created in 1943 but was closed in 1948. During that period a scheme of post-graduate teaching was developed further which brought about a closer co-operation between the university and its colleges in post-graduate teaching. A number of teachers from affiliated institutions and recognised post-graduate institutions were accordingly recognised for giving lectures to the post-graduate students preparing for examinations by papers and obtaining the degrees by research. By the Act of 1953 the university was reconstituted and it became a teaching and federal university. As per the Act all the affiliated colleges became constituent colleges. The number of students who appeared for the matriculation examination held in April 1948 was 43,646. By the Act of 1953, all post-graduate instructions became a special responsibility of the university. In spite of this development of teaching activity, the work of holding examinations continued to dominate the university activities in this period also. The matriculation examination was held by university for the last time in 1948 when the S. S. C. Examination Board was established. On the constitution of the Board the university was allowed to conduct the entrance examination from 1949 to 1952 only for students from Goa, and admission to university was granted to the students who had passed this examination as well as to those who had passed the S. S.C. Examination.

Until 1947 the jurisdiction of the university was very extensive and covered Bombay Presidency including Sind. Duiing 1946-47 the total number of affiliated colleges were 79 with enrolment of 41,829 students as

against 29 colleges with an enrolment of 11,059 pupils in 1926-27. Of the 79 colleges in 1946-47, 55 colleges with 32,311 students were in the then Bombay State. With the sepaiation of Sind area and the establishment of other regional universities the strength of affiliated colleges was reduced. During 1954-55 there were only 34 colleges with 34,216 students in the city. Of these, 15 were arts and science colleges, including 11 new colleges opened during the period 1928-55. The remaining 19 colleges with 11,226 students were institutions of professional and special education.

During the same period 10 new such institutions were established and affiliated to the university. Thus as on 31st March 1955 the university had granted affiliation to 15 arts and science colleges, 5 medical colleges, 3 commerce colleges, 2 each of law and education and one each of architecture, engineering and veterinary. Besides, the city had four institutions of collegiate standard but not affiliated to university.

Among other events of importance which occurred during the period 1928-55, mention may be made of the great encouragement given by the university to research in social fields. In 1932 a scheme of medical examination of students was introduced but due to certain factors it was discontinued in 1946. The physical training was made compulsory since 1937.

Enrolment: The spread of higher education among the people has necessitated the increase in facilities for higher education. The total number of students receiving higher education has increased considerably as can be seen from the following statement:—

UNIVERSITY STUDENTS

Years	1940- 41	1949- 50	1960- 61	1965- 66	1970- 71	1975 - 76	1980- 81
Students	25,460	29,271	50,115	63,121	93,852	1,56,190	1,34,612

The faculty-wise classification of 1,32,934 students in 1982-83 was: Arts, 30,368; Science, 21,742; Commerce, 57,178; Law, 11,787; Technology, 4,004; Medicine, 5,676; Dentistry, 836; Ayurvedic Medicine, 905; and Fine Arts, 438.

Post-Graduate Teaching and Research: The Bombay University established Boards of Teaching for various faculties such as Arts and Science, Medicine, Technology, etc. The number of students registered for various post-graduate courses by papers and by research in the different faculties excluding the number of students registered in the university departments is shown below:—

Faculty	By papers			В	y researc	h
	1980- 81	1970- 71	1960- 61	1980- 81	1970- 71	1960- 61
Arts	600	627	777	92	63	49
Science	664	321	197	368	232	166
Commerce	958	267	238	23	13	4
Law	38	38	10	1	4	7+
Technology	79	86	42	4	5	4
Medicine	698	465	232	3	1	4
Dentistry	39	16	25			
Fine Arts	3					
Total	3,079	1,820	1,521	329	318	227

University Departments: During 1960-61, there were only seven teaching departments, *viz.*, Economics, Chemical Technology, Statistics, Sociology, Civics and Politics, Applied Psychology and Law with a total strength of 1,447 students. During the next ten years there was a considerable increase in the number of departments as in 1970-71 the number of departments rose to 21 with total strength of 2,921 students. Besides, there was a centre of post-graduate studies and research functioning in Goa. In 1980-81, again an increase was seen in the number of departments which stood at 29 including one at Goa with 4,644 students including 1,456 female students.

The following statement shows the department-wise details of staff and enrolment for the year 1982-83:—

Name of Department	Year of Establishment	Teaching and Research Staff	Enrolment
1. Sociology	1919	8	183
2. Economics	1921	19	432
3. Chemical Technology	1934	56	831

Name of Department	Year of Establishment	Teaching and Research Staff	Enrolment
4. Statistics	1948	6	114
5. Civics and Politics	1948	8	150
6. Applied Psychology	1959	6	135
7. Law	1959	2	606
8. English	1962	3	99
9. Sanskrit	1963	2	31
10. Mathematics	1963	12	227
11. J. B. Institute of Management Studies	1964	5	646
12. Library Science	1964	3	43
13. Linguistics	1964	3	20
14. Foreign Languages	1964	7	287
15. Chemistry	1966	11	133
16. History	1968	5	154
17. Marathi	1969	5	152
18. Geography	1969	8	47
19. Gujarati	1970	1	44
20. Hindi	1970	1	115
21. Physics	1971	10	169
22. Education	1974	2	64
23. Music	1978	1	28
24. Computer Science	1978	2	35
25. Kannada	1980	1	11

Name of Department	Year of Establishment	Teaching and Research Staff	Enrolment
26. Commerce	1980	1	25
27. Life Science	1981		1
28. Sindhi	1981	1	12
29. Urdu	1982	1	12

Colleges: During the year 1940-41, there were only 48 colleges affiliated to the Bombay University. Besides this, the university used to inspect through the committee of syndicate various schools. The total number of schools on the university register during the same period was 570. These schools were spread over the five regions of Gujarat, Konkan, Sind, Deccan and Karnatak.

The number of constituent colleges began to increase slowly. During 1960-61, there were 39 constituent colleges with 48,375 students in Bombay which lose to 62 in 1970-71. The strength of students was put at 86,750. As regards teaching staff during 1960-61, there were 2,235 teachers of whom 1,306 teachers weie working in arts and science colleges. As many new colleges were opened after 1960-61, the number of teachers also rose accordingly, which was put at 4,197 in 1970-71. The number of teachers in arts and science colleges was 2,106.

During 1980-81, the total number of colleges showed a further increase. There were as many as 131 colleges with a strength of 1,22,233 students under the jurisdiction of the Bombay University including 16 colleges in Goa, and 12, 5 and 11 colleges situated in the districts of Thane, Raigad and Ratnagiri, respectively. By the Bombay University Act of 1974, the colleges in Thane, Raigad and Ratnagiri districts were accorded all the privileges under the Bombay University Act with effect from May 1974. The management-wise number of 131 colleges was as follows: Bombay University 1, State Government 17, Bombay Municipal Corporation 4, and private agencies 109. Out of these 131 colleges, 88 were situated in Bombay. The information about some colleges and institutes is given subsequently. The college-wise strength of students, teachers and courses offered is shown in Table No. 2.

As regards the number of colleges situated in Greater Bombay the following statement shows the comparative position for the period 1966-67, 1976-77 and 1982-83:—

Maharashtra State Gazetteers

		Strength	
Types of colleges	1966 - 67	1976 - 77	1982 - 83
Arts, Science and Commerce	24	23	26
Arts and Commerce		2	4
Fine Arts		1	3
Science	1	2	2
Home Science		1	1
Social work		1	1
Commerce	8	16	18
Education	3	9	9
Physical Education		1	2
Education for Deaf		1	1
Engineering and Textiles	2	2	2
Architecture			ale
Pharmacy		1	2
Veterinary Science	1		
Law	4	5	8
Medicine	4	4	4
Dentistry	2	2	2
Nursing	1	1	1
Ayurveda		3	3
Total	51	76	90

Hostels: The Bombay University provides hostel facilities to the students through four hostels viz, J. S. Hall at Churchgate, University Hostel at Matunga, Dr Ambedkar Hall at Vidyanagari and International Students' Hostel at Churchgate. The last one provides accommodation to 116 students.

Recognised Institutions: Apart from the colleges and the university departments, a number of

institutions managed privately are recognised by the University of Bombay for post-graduate courses. The number of such institutions in 1960-61 was 14, which increased to 24 in 1970-71. This number further rose to 38 in 1975-76, including two institutions situated in Goa. Out of 59 institutions in 1982-83, there were 38 constituent recognised institutions and the 15 recognised qualified institutions. A list of these institutions is given below :-

Constituent Recognised Institutions

- (1) Bharatiya Vidya Bhavan's Mungalal Goenka Institute of Postgraduate Studies and Research, Chowpatty, Bombay-400 007. (2) Marathi Sanshodhan Mandal, Mumbai Marathi Grantha-sangrahalaya, Naigaum Cross Road, Dadar,
- Bombay-400 014.
- (3) Cancer Research Institute, Parel, Bombay 400 012.
- (4) Haffkine Institute for Training, Research and Testing, Parel, Bombay-400 012.
- (5) Tata Institute of Fundamental Research, Colaba, Bombay 400 005.
- (6) Anjuman-i-Islam Urdu Research Institute, 92, Dr. D. N. Road, Bombay-400 001.
- (7) Cotton Technological Research Laboratory (I.C.A.R.), Matunga, Bombay-400 019.
- (8) Bhabha Atomic Research Centre, Trombay Bombay-400 073.
- (9) Maharashtra Institute of Labour Studies, D. Chamarbaug wala Road, Parel, Bombay-400 012.
- (10) International Institute for Population Studies, Govandi Station Road, Deonar, Bombay-400 088.
- (11) Prince of Wales Museum of Western India, Bombay-400 001.
- (12) Textile Research Institute of the Bombay Textile Research Association, Ghatkopar, Bombay-400 077.
- (13) Naval Hospital INS ASVINI, Head Quarters, Western Naval Command, Mint Road, Bombay-400 001.
- (14) Institute of Naval Medicine of the INS ASVINI, Headquarters, Western Naval Command, Mint Roadj Bombay-400 001.
- (15) Jaslok Hospital and Research Centre, Dr. G. Deshmukh Road, Bombay-400 026.
- (16)Asiatic Society of Bombay, Town Hall, Bombay-400 001. (17)Pathology Department of the Bombay Hospital of the Medical Research Society, 12, Marine Lines, Bombay-400 020.
- (18) Sangeetha Vidyalaya of the Sri Shanmukhananda Fine Arts and Sangeetha Sabha, Bombay-400 022.
- (19)Sir Hurkisondas Nurrottumdas Hospital, Raja Rammohan Roy Road, Bombay-400 004.
- (20)Regional Meteorological Centre of the Indian Meteorological Department of Government of India, Colaba, Bombay-400 005.
- (21)Institute for Research in Reproduction (Indian Council of Medical Research), Jehangir Merwanji Street, Parel, Bombay-400 012.
- (22)Ananthacharya Indological Research Institute, G. D. Somani Memorial School Bldg., Cuffe Parade, Bombay-400 005.
- (23) All India Institute of Local Self-Government, Sthanikraj Bhavan, G. D. Barfiwala Marg, Andheri (West), Bombay-400 058."
- (24)Forensic Science Laboratory, Maharashtra State, Byculla, Bombay-400 008.
- (25) C. C. Shroff Research Institute, Goregaon (West), Bombay-400 062.
- (26)Drugs Control Laboratory, Maharashtra State, Griha Nirman Bhavan, Kala Nagar, Bandra, Bombay-400 051.
- (27)R and D Centre and Laboratories of Hico Products Limited, 771, Mogul Lane, Mahim, Bombay-400 016.
- (28) Regional Centre of the National Institute of Oceanography, Government of India, Sea Shell, Seven Bunglows, Versova, Bombay-400 061.
- (29) Bombay Natural History Society, Bombay-400 001.
- (30)Shri Vile-Parle Kelavani Mandal's Narsee Monjee Institute of Management Studies, Juhu Development Scheme, Vile-Parle (West), Bombay-400 056.
- (31)Bharatiya Vidya Bhavan's Shriyans Prasad Jain Institute of Management and Research, Munshi Nagar, Dadabhai Road, Andheri (West), Bombay 400 058.
- (32)Chetana's Ramprasad Kbandelwal Institute of Management and Research, Survey No. 341, Bandra (East), Bombay-400 051.
- (33)N. A. B. Louis Braille Memorial Research Centre, Cotton Depot, Cotton Green, Bombay-400 033.
- (34) Mani Bhavan Gandhi Sangrahalaya, 19, Laburnum Road, Bombay-400 007.
- (35)G. D. Parikh Centre for Educational Studies, ICSSR Hostel, Vidyanagari, Kalina, Bombay-400 098.
- (36) Central Testing Laboratory of the Textile Committee, Government of India, Ministry of Commerce, Crystal, Annie Besant Road, Worli, Bombay-400 018.
- (37)Smt. Motibai Thackersey Institute of Research in the field of Mental Retardation, Sewree Hill, Sewree Road, Bombay-400 033.
- (38)Spastics Society of India's Centre for Special Education, Opp. Afghan Church, Colaba, Bombay-400 005.

Institutions recognised as Qualified Institutions

- (1)Tata Memorial Hospital, Dr. Ernest Borges Marg, Parel, Bombay-400 012.
- (2) Raptakos, Brett and Co. (P) Ltd., Dr. Annie Besant Road, Bombay-400 018.
- (3) Silk and Art Silk Mills' Research Association, Sasmira, Bombay-400 018.
- (4) Indian Institute of Geomagnetism, Bombay-400 005.
- (5) Unichem Laboratories Ltd., Jogeshwari Estate, Jogeshwari (West), Bombay-400 060.
- (6) Fertilizer Corporation of India Ltd., Chembur, Bombay-400 074.
- (7) Central Institute of Fisheries Education, Kakori Camp, Jaiprakash Road, Versova, Bombay-400 058.
- (8) MAC Laboratories, Vidyavihar, Bombay-400 086.
- (9) Naval Chemical and Metallurgical Laboratory, Naval Dockyard, Bombay-400 001.
- (10) Bombay Research Centre of Central Marine Fisheries Research Institute, Army and Navy Bldg., Mahatma Gandhi Road, Bombay-400023.
- (11) Mahatma Gandhi Memorial Research Centre, M. G. Memorial Bldg., Netaji Subhash Road, Bombay-400
- (12) Development Laboratories of the Merck, Sharp and Dohme of India Ltd., Bhandup, Bombay-400 078.

- (13) All India Institute of Physical Medicine and Rehabilitation, Haji Ali Park, Bombay-400 034.
- (14) Wool Research Association, Sasmira, Dr. Annie Besant Road, Bombay-400 018.
- (15) Foundation for Medical Research, A. R. G. Thadani Marg, Sea Face Corner, Worli, Bombay-400 018.

Elphinstone College: In the annals of education in Western India, the Elphinstone College occupies a unique position. It is the oldest institution of its kind in this part of our country. The College owes its origin in 1827 to the Bombay Native Education Society.

The year 1827 was a glorious landmark in the history of the Elphinstone College. On the 28th August of that year a meeting of the Bombay Native Education Society was convened to discuss the question of erecting a befitting memorial to the Hon. Mountstuart Elphinstone, the retiring Governor of Bombay, in recognition of his many and great services to the country. The decision was taken to collect funds, from the interest of which one or more professorships were to be created. The professorships were designated as " Elphinstone Professorships".

The donations collected from the public amounted to Rs. 4,43,900. The young widow of Nana Phadnis gave Rs. 1,000.

In 1835, the Government gave its sanction to the Professorships. The first Professors were selected by the Honourable Mountstuart Elphinstone.

The first of April 1856, marks a turning point in the history of the College when it assumed an independent existance as Elphinstone College setting itself apart from the another institution. The college was formally affiliated to the University of Bombay in 1860. This institution was well-suited to the cosmopolitan atmosphere of Bombay City.

Up to 1889 it was the wandering College. From this situation the College came to be lodged finally in the Fort area in its present premises, in 1889. In 1855, Dadabhai Naoroji had the unique honours of being appointed the first Indian Professor of the College.

Galaxy of the Great: The Elphinstone College can claim to have sent out a large number of great men who distinguished themselves in the different spheres of life. Mention may be made of Dadabhai Naoroji, P. M. Mehta, Justice Telang, G. K. Gokhale, B. G. Tilak, M. G. Ranade and Wacha for the constructive statesmanship and guidance which they gave to the country. The Elphinstone College had the good fortune of having Lokmanya Tilak, the Father of Indian Unrest, as its student.

The Bombay Corporation was benefited by many Elphinstonians who have rendered meritorious service to it.

Endowment Scholarships and Prizes: The College gives many endowments and merit scholarships and prizes. The earliest scholarships and prizes are the West Scholarship, the Clare Scholarship, the Gaikwar Scholarship, the Bell Prize, the Sunderji Jivanji Prize and the Raja of Dhar Prize. To these a number of scholarships and prizes have been added from time to time. Freeships are given to poor and deserving students.

Courses: The College offers instruction in almost all the courses prescribed by the University up to M.A. and Ph.D. on the Arts side and upto B.Sc. on the Science side. The College has well equipped laboratories in Physics, Chemistry and Biology.

Teaching Staff: The total strength of the teaching staff is sixty. Most of the Principals of the College were scholars from Oxford or Cambridge formerly.

College Library: The college library, with its collection of about 65,702 books on various subjects can claim to be a real storehouse of knowledge. The library has been enriched with munificent donations by philanthrophists like Cowasji Jehangir and Mr. Banaji.

College Societies: The aim of education, giving full scope to the students for the development of their personality, has been fulfilled by the Elphinstone College through various societies, since the earliest times. In 1848, the Students' Literary and Scientific Society was started. In 1866, scenes.from Shakespeare were enacted and 'Othello' was staged, finally leading to establishment of a Dramatic Society.

The Shakespearean Society was founded in 1902, and next year the students Debating Society came into being. The Mc-Dougall Debating Society was formed in 1906, the Philosophical Society in 1907 and the French Literary Society in the same year.

The Social Service League was founded in 1917. It had then undertaken campaigns against illiteracy and insanitary conditions in the city's slums.

Games and Sports: It is not all study and no play at the Elphinstone College. Mr. Cowasji Jehangir had given a donation for the establishment of a cricket club. Government was pleased to grant a sum of Rs. 5,000 for the development of the ground. Between 1898 and 1905, the College could boast of a cricket team which had rendered a good account of itself during the tour to the distant provinces of India and Ceylon. The College then supplied nu ny players of repute to the Presidency Cricket.

Gymkhana: A gymkhana was attached to the College as early as 1868. Upto 1871, the gymkhana activities were limited to Cricket and gymnastics. During the last fifty years the gymkhana activities were extended to many items, *viz.*, Badminton, Table-tennis, Hockey, Football, Hollyball and Aquatic sports.

During 1870-71 the strength of students was 133 which rose to 365 in 1908-09. In 1982-83, there were 800 students on the roll and the teaching staff numbered 98.

Wilson College: In 1832 Dr. Wilson opened in Girgaum an English school connected with Scottish mission.

In 1835 the school was moved to the Fort area and its name was changed to the General Assembly's Institute. This institute had a school and higher education section which was recognised by the University as an affiliated college in 1861. By 1880 the largely increased number of students led the authorities to decide separating the school from college and housing the college in a new building. The present building of the college was opened on 14th March 1889 by Lord Reay. The old building in Khetwadi now houses the Wilson High School.

The number of students of this college rose from 18 in 1870-71 to 518 in 1908-09. In 1982-83 the strength of students was 1407. The college offers degree courses upto M.A., M.Sc. and Ph.D.

St. Xavier's College: The College owes its origin to the growth and development of St. Mary's Institute and St. Xavier's High School. It was founded in 1868 with the object of educating the Roman Catholic Youths of the Bombay Presidency. In 1869 it was affiliated to the Bombay University.

Until 1873 the college and the High School were housed in Cavel. In 1890 the existing building was completed at the cost of more than Rs.1.5 lakhs. The college hostel was opened in 1909.

The strength of students in 1870 was only 13 which subsequently rose to 181 in 1900. During 1982-83 the total strength of students stood at 1708. The college offers courses leading upto M.A., M.Sc. and Ph.D. degrees.

Sydenham College: The Government College of Commerce was started in 1913 with the help of magnificent donation from the public. For some time the classes were held in the Elphinstone College building. In 1916 the Government accepted a donation from the Lord Sydenham Memorial Committee and renamed the College as the Sydenham College of Commerce and Economics. After 1955 the College was shifted to the present building.

The College offers at present degree courses upto B.Com., M.Com. and Ph.D. During 1982-83 there were 1545 students and 47 teachers.

Government Law College: For a long time after its modest commencement in 1855, the Government Law College remained the only law college in the State. The beginning of this college marked the beginning of education in jurisprudence and law in the former Bombay Presidency. The college which was then known as the Government Law School owes its origin to the initiative of some of the enlightened citizens of Bombay. In 1860 it was affiliated to the Bombay University.

Prior to 1861, admissions were open to non-matriculate persons also. From 1909 two University examinations began to be held for law courses. In 1855 the strength of students was 46 which rose to 314 in 1901-02. During 1982-83 there were 1496 students on its roll, and the number of teachers was 32. The College provides facilities for post-graduate and research work in law.

Institute of Science: This Institute formerly known as the Royal Institute of Science was opened in 1924. It was in 1903 that Dr. Mackichan in his convocation address to the Bombay University stressed importance of scientific and research studies and pleaded for establishment of an institution devoted to science in Bombay. About this time the Governor of Bombay, Lord Sydenham, issued appeal for funds for the establishment of an institution. Accordingly, an amount of Rs. 25,00,000 was collected, of which Rs. 5,00,000 were contributed by the Government of Bombay. University affiliation was granted to the Institute in 1926. The Institute was renamed as the Institute of Science after Independence in 1947.

In 1956-57 there were 467 students on roll. During 1982-83 the strength of students was 382 and of teaching staff 55. The Institute offers courses upto M.Sc. and Ph.D. degrees. It is one of the few well-known research institutes in India.

Grant Medical College: The idea of having medical education for the benefit of Indians was first mooted by Sir Grant, the Governor of Bombay in 1835. It was accordingly resolved in a public meeting of enlightened persons of Bombay in 1838 to designate the proposed medical college as the Grant Medical College. The College was opened in 1845. The main building of the College was constructed at the cost of Rs. 89,600.

In 1860 the College was affiliated to the Bombay University. The earlier medical examinations were held by examiners appointed by the Government and students were awarded diploma (Graduate of Grant Medical College).

The total strength of students in 1982-83 was 2042, while the staff numbered 136. There are three hostels of which one is for the lady students. The Grant Medical College is attached to the J. J. Group of Hospitals which is one of the best equipped hospitals in India. It has all kinds of special facilities and sophisticated diagnostic equipment.

Victoria Jubilee Technical Institute: Founded in 1887, it is one of the oldest institutions of its kind in India. The establishment of this Institution in a large measure was due to the great foresight and endeavour of the citizens of Bombay and to the support of the Government of Bombay, the Municipal Corporation and the Bombay Millowners' Association.

The Institute started initially with two diploma courses. With the passage of time new departments were added. In 1913 the Government of Bombay recognised this Institute as the central technical institute in the Province. In 1923 it was shifted to Matunga and was affiliated to the Bombay University in 1946.

Tata Institute of Fundamental Research: This Institute was founded in 1945 by the Sir Dorabji Tata Trust and the Government of Bombay to carry out fundamental research in Physics, Mathematics and allied sciences.

It is a high level academic institution and the biggest centre for cosmic ray and nuclear research in India. The Institute has a School of Mathematics which is perhaps the largest and the most active in India. Since

its inception the Institute has made notable contribution to the theory of elementary particles. In 1956 the Government of India recognised this Institution as the national centre for advanced studies in Nuclear Science and Mathematics. The University of Bombay accorded recognition for the M.Sc. and Ph.D. degrees by research in Mathematics and Physics in this Institute.

The Government of India donated a piece of land coupled with the substantial capital grant for construction of a building at Colaba.

Tata Institute of Social Sciences: The utter lack of opportunities in India for scientific training in social work led the trustees of the Sir Dorabji Tata Trust to establish the Sir Sorabji Tata Graduate School for Social Work in 1936, which was renamed as the Tata Institute of Social Sciences in 1944.

It is a professional school for social work. It is recognised to guide students for the Ph.D. degree in Psychology and Social Studies by the Bombay University.

J. J. School of Art: The art education in Maharashtra during the British rule in India had its humble beginning with the munificence of a visionary like Sir Jamshetji Jeejeebhoy who in the political turmoil and instability of 1857, had constructively pursued the noble cause of establishment of Sir J. J. School of Art in Bombay. The establishment of Sir J. J. School of Art was destined to become an indivisible part of our cultural heritage and play a major role in the artistic renaissance of Independent India. This School of Art has grown and thrived to be recognised as one of the greatest art teaching centres in India.

The decision to establish such a school was taken by the British Government after careful deliberations and discussions through the committee appointed for this purpose. Finally on 18th February 1857 Sir Jamshetji was requested to furnish necessary funds for opening the school. This news was a subject of public discussions. However, a humble beginning of art education was made for the first time by conducting a class in elementary drawing and design at the Elphinstone Institute as there was no independent building for the Sir J. J. School of Art and Industry. Mr. James Payton who had the experience of work in the Gallery of Fine Art in London was put in charge of the art classes.

The growth and development of Sir J. J. School of Art can be traced as under: **1857:** was the year in which Sir J. J. School of Art was founded with a munificent donation of Rs. 1,00,000 offered by Sir Jamshetji Jeejeebhoy, the first Baronet. Under the management of a committee, headed by Sir William Yardley, Chief Justice of Bombay, the first drawing class was started at the Elphinstone Institution. Mr. Payton was temporarily in charge of tuition, until the Directors of East India Company engaged the services of Mr. Terry as a Drawing Master. Mr. Terry at once added classes for design and engraving. These classes were shifted to a house in Abdul Rehman Street, lent by the Donor before they were finally removed to the present site. In 1866, three ateliers for (j) Decorative Painting, (ii) Modelling and (iii) Ornamental Wrought Iron Work were established under Mr. Griffiths, Mr. Lockwood Kipling and Mr. Higgins, respectively.

The independent control by the heads of the ateliers resulted in lack of co-ordination. Government* who had by this time taken over the entire responsibility, appointed Mr. Griffiths as the Principal. The present main building was erected in 1878, at a cost of nearly Rs. 2,00,000 and Mi. Greenwood was appointed to assist him. The subject of Drawing was introduced in 1879, and facilities for training of Drawing Teachers, were started in 1893. A full-fledged department for training of Drawing Teachers however, was started in 1910, as the facilities offered in the past proved too inadequate to yield satisfactory results. Drawing examinations for pupils in High Schools and inspection of drawing classes by the Principal were instituted. In the meanwhile, assistance to the indigenous arts and crafts, as one of the functions of the school, was not lost sight of.

In 1891, the Lord Reay Art Workshops (now known as the Department of Arts and Crafts) were established in a separate building costing Rs. 47,000. In 1896, the Draughtsman's classes, the nucleus of the Department of Architecture, were established.

Mr. Griffiths retired after thirty years of valuable service. He would be remembered for his exquisite copies of wall paintings at Ajanta which he got done with able assistance of students. The students of the Modelling atelier, under the able guidance of Mr. Kipling also contributed at the same time to the ornamental details on the Victoria Terminus, University Building and other buildings in Bombay.

Mr. Greenwood, who all along helped Mr. Griffiths in the developments, succeeded him but retired due to ill-health in a short time. He was followed by Mr. Cecil Burns, under whom the foundation of the pattern of art education and examination based on the then current system in English Art School was laid. The number of students gradually increased from less than a hundred to more than five hundred during the years 1896 to 1920.

In 1910, Sir George Clarke Studios and Laboratories were built for the advanced study of crafts, pottery being the craft taken up for study. The Department was subsequently closed in 1926.

In 1914, the courses in architecture also were reorganised. Prof. Robert Cables negotiated with R.I.B.A. Board, who accepted passing of advanced Examination as equivalent to passing of Inter R.I.B.A. Mr. Cecil Burns was succeeded by Capt. W.E. G. Solomon, who worked untiringly in the cause of and for the status of art education.

The country-wise awakening in revaluation of the Indian traditions was reflected in the system of training in all Departments, a class of Indian Design, side by side with realistic aids to study from life models was started, together with facilities in post diploma training in Mural Painting.

In 1924, with Prof. Batley as the Professor of Architecture, full-day classes were established, and R.I.B.A. granted exemption from Inter R.I.B.A. on completion of 3 years' fulltime course.

In 1929, the school was converted into a separate Art Department, the Principal being then called the Director. The Thomas Committee's recommendation in 1931 to abolish the Sir J. J. School of Art was

rejected after the public opinion was effectively voiced in favour of its continuation.

In 1935, Mr. C. R. Gerrard who was called to assist as the Deputy Director helped to start the Department of Commercial Art (now known as Department of Applied Art). During the decade that followed, since Mr. Gerrard took over from Capt. Solomon in 1937, trends in art education moved with contemporary ideals, and creative rather than initiative tendencies came to be encouraged and emphasised.

In 1947 the dawn of independence marked rapid changes on the administrative side. Shri V. S. Adurkar was appointed the first Indian Director in 1947; subsequently the post of the Director was styled as that of the Dean. The post was held by Prof. R. N. Welingkar and Shri J. A.Tarapoiwala for a time, until the appointment of Shri J. D. Gondhalekar as Dean in 1953.

On the teaching side, the Department of Architecture has been affiliated to the University of Bombay. Extension of facilities in training in Architecture for students of other States has been sanctioned by Government of India and a new building is built for the same.

The Departments of Painting and Arts and Crafts have carried out full size Murals and Carved wooden friezes at Government Buildings. The Department of Applied Art, the largest training centre for the subject, has produced valuable publicity material for Government and Public organisations.

The School of Art was trifurcated in the year 1958 into three separate institutes *i.e.* the School of Fine Art, the Institute of Applied Art and the College of Architecture, In the following year Prof. P. A. Dhond took over the charge of the post of the Dean and continued in that post till Prof. S. B. Palsikar was appointed as Dean in 1968. He was followed by Professors V. V. Manjrekar, D. G, Sangavai, S. S. Kadam and S. D. Arawade. The syllabuses of various departments of the school were revised in 1970. Prior to this the Government of Maharashtra had established a new Directorate of Art in the year 1965 with Prof. V. N. Adarkai as its first Director to bring about co-ordination in Art Education. In the post centennial silver jubilee year *i.e.* 1982 degree courses have been introduced in the Sir J. J. School of Art.

SHREEMATI NATHIBAI DAMODAR THACKERSEY WOMEN'S UNIVERSITY

The Shreemati Nathibai Damodar Thackersey Women's University was founded by the late *Bharat Ratna* Dr. D. K. Karve, a veteran worker for the cause of education of women in Maharashtra, at Pune in 1916 known as the Indian Women's University. The university received its present name in 1920 when late Sir Vithaldas Thackersey, an enlightened industrialist from Bombay, gave a donation of Rs. 15 lakhs to the university subject to certain conditions, among which one was that it should be named after his mother, Shreemati Nathibai. The university accordingly came to be known as the SNDT Indian Women's University. In 1936, it was shifted to Bombay, and in 1951, the Government of Bombay gianted statutory recognition to the university. It is the only university for women in India which gives education through modern Indian languages and in whose management the women themselves play a prominent part.

The university made a comparatively slow progress during the period 1916-37, partly because the concept of female education did not find favour with the large sections of intelligentsia, partly because it did not obtain recognition from Government and other universities and partly because of financial stringency. But when the popular ministry assumed office, Government granted recognition to the university and graduates of this university were admitted to Government and semi-government services. This further improved the status of the university and raised it in public esteem. A further step was taken in 1947 when the Government appointed a committee to examine the problem of granting statutory recognition to the university. On the recommendations of that committee, the SNDT University Act was passed in 1949 and various authorities were constituted under this Act.

From the beginning the university is conducting and affiliating institutions for the education of women. In 1955 it conducted two colleges for women of which one was in Bombay. In addition to this, there were four affiliated colleges in Gujarat State. In 1952 it started a nursing college in Bombay. Formerly the university used to conduct its matriculation examination. But now the same has been discontinued and admission to university is given to any student who has passed the S. S. C. examination.

The aim of the university is to teach different courses of study to suit women fully equipped to play their role in the social life of the country. The university offers to girls and women a very wide and varied range of optional subjects of study. Thus, alongwith literature, science, economics, and other subjects like music, cooking, nursing, painting and home science also find a place in curricula. The university has at present eight faculties, *viz.*, Arts, Science, Home Science, Nursing, Library Science, Technology, Commerce and Education.

University Students— The total number of students enrolled in the colleges, both conducted and affiliated, and teaching staff is shown in the following statement:—

Year	Enrolment	Teachers
1950-51	854	60
1955-56	1,614	124
1960-61	2,915	151
1965-66	5,171	376
1970-71	13,887	510
1980-81	13,346	833

Faculty	No of students					
	Regular	Private	Total			
Arts	4,150	7,101	11,251			
Education	360	110	470			
Home Science	1,429		1,429			
Nursing	236		236			
Library Science	51		51			
Technology	388		388			
Science	198		198			
Commerce	1,836	199	2,035			
Total	8,648	7,410	16,058			

Of 16,058 students, 3,735 were studying in the conducted colleges and 4,913 in affiliated colleges. The number of teachers was 880.

Institutions: During the period 1960-61, the university had under its jurisdiction three conducted and nine affiliated colleges. Of these 12 institutions, Bombay had 5 colleges including 2 conducted colleges. In addition one school aided by the university was also functioning in Bombay. The next ten years saw a remarkable increase in the number of institutions both conducted and affiliated, as in 1970-71 there were 21 colleges including 6 affiliated colleges in Gujarat. Of 21 colleges, 8 were conducted colleges. The faculty-wise classification of these colleges was: Arts, 15 colleges; Education, 2; Home Science, 2; Nursing and Library Science, 1 each. The number of conducted and affiliated colleges situated in Bombay numbered 5. The university conducted thret schools of which one was functioning in Bombay. During 1980-81, the total number of colleges under the jurisdiction of this University rose to 23, of which 5 colleges were in Gujarat and 18 in the Maharashtra State. The number of colleges situated in Greater Bombay was 14, of which 6 were affiliated and 8 conducted colleges. Table No. 3 gives the details of these colleges for the year 1982-83.

University Hostel: The University provides hostel facilities at Bombay and Pune for the regular students. The hostel at Bombay was opened in 1962. The total strength of these hostels during 1982-83 was put at 318 including accommodation for 198 students in the hostel at Bombay.

Library: The Library service is provided through the Central Library established in 1955, the extension library, Juhu (1977), study centre, Santacruz (1972) and study centre, Ghatkopar (1975). During 1982-83, there were 1,58,299 books and 458 periodicals in these libraries.

Students' Welfare: The university students' council was established in 1970 with the object of coordinating activities of students of all colleges of SNDT University and giving guidance in managing their welfare activities and to train them in leadership, discipline, etc.

There is also a university canteen established in 1967. It also serves as a training ground in canteen management for the students of the college of home science.

SOCIAL EDUCATION

The concept of social education has grown out of the concept of adult education. In fact, social education is adult education with greater emphasis on social implication. The function of adult education in a democracy is to provide every adult citizen with an opportunity for education. The scope of adult education is very wide.

Adult education became a movement in the European countries by the end of 19th century. In India the idea of social or adult education came into being during the Biitish regime. The main object of the programme was to give the people the knowledge of three R's. Today this concept is used in a much more concrete and technical sense to cover organised activities and programmes concerned with education of adults. Proper functioning of democracy can only take place when the vast masses of people become literate and are enlightened to understand the political, economic and social activities in their proper perspective.

With the transfer of control and administration of education in Indian hands a greater interest became manifest in the field of adult education. The adult schools between 1921-37 were divided into secondary schools,, primary schools and special schools. The secondary schools for adults were really high schools conducted during night in order to enable the working class to continue their education at secondary stage. Such schools were located in Bombay and other big cities. The special schools were mainly meant for women in which they were taught three R's. first aid, sewing, etc. Efforts were made during 1921-37 to develop adult education proper, and encouragement was given to associations like the Adult Education Society, Bombay; Dnyanprasarak Mandal, Bombay; the Royal Asiatic Society, Bombay; to arrange lectures on various useful topics.

When the Congress ministry came into power, the Government decided to organise a planned drive to liquidate the illiteracy of masses. The work received a great impetus in Bombay city. The Government in 1938, appointed an adult education advisory board to secure public co-operation and collect funds for literacy work. A large scale literacy campaign was organised in 1939 with the object of rousing public conscience to the need of education for illiterates and spreading literacy. In 1939, the Bombay City Adult Education Committee came into existence. In Bombay city, the work carried out by this committee during

Year	No. of classes	No. of adults on roll	No. of adults made literate
1939 - 40	1,102	19,068	15,068
1940 - 41	1,198	22,337	15,538
1945 - 46	1,275	25,575	19,178

The problem received a fresh impetus again when the second popular ministry assumed office in 1947. The concept of adult education was radically changed. It was proposed that in a proper programme of adult education, the imparting of literacy must be combined with a good deal of general education which should include subjects like civics, elementary history, politics, instruction in simple crafts, etc. In short, adult education was to be intimately related to every day problems of life and culture. It was decided to give it a new name in order to distinguish it from the narrow outlook of earlier days and it was henceforward designated as social education. The work done by the Bombay City Education Committee (formerly known as the Bombay City Adult Education Committee) since 1950-51 is shewn below:—

Year	No. of classes	No. of adults on roll	No. of adults made literate
1950-51	2,368	59,867	30,540
1954-55	2,562	66,554	37,334
1960-61	1,221	28,246	14,313
1965-66	1,257	28,491	15,278
1970-71	667	14,640	9,291
1975-76	486	10,570	8,588

During 1976-77, the committee conducted 347 classes with 6,128 persons on roll of which 6,025 were made literate. During 1980-81, there were 1,005 centres managed by the Committee with a total enrolment of 28,530 adults including 11,260 women. The Committee incurred an expenditure of Rs. 69,250,000 during the same year, while the *per capita* expenditure was put at Rs. 10.50.

Bombay city is the industrial centre of the country having an ever growing population. Every year new arrivals go on adding to the already large population. Due to continuous inflow of illiterate workers the percentage of literacy in the city in spite of the committee's efforts does not show any remarkable increase. Hence this committee launched, in 1966, an intensive literacy campaign in the form of a crash programme. It envisaged voluntary aid from the students of secondary and upper primary schools on the basis of' each one teach one'. With the imparting of literacy skills to illiterate adults, the committee conducts literacy classes in five languages *viz.*, Marathi, Hindi, Urdu, Gujarati and Telugu. These literacy classes are run for 4 months and those of post-literacy classes for neo-literates lasting for eight months' duration.

Besides these classes, the committee also conducts literacy classes for illiterate workers in mills and factories with the help of employers. Continuing education programme was conducted in the form of craft training centres, workers class, community centre and polyvalent adult education centre. The last one is considered to be a pioneering effort in the field of continuing education which provided for need based training programme for basic level workers engaged in factories. To carry out its programme, the committee set up circulating and area libraries. In addition to this, other activities like study circles, community groups, community radio centres are also organised with the object of helping neo-literates to retain their newly gained literacy and keeping it at functional level.

During 1976-77, the committee incurred an expenditure for various types of programmes pertaining to adult literacy and adult social education to the tune of Rs. 5,05,716.81. The Government of Maharashtra paid a grant-in-aid of Rs. 2,50,000 and the Bombay Municipal Corporation Rs. 60,000.

The Central Government introduced the National Adult Education Programme on a massive scale from October 1978. The State Government also opened adult education centres in the State. Illiterate adults in the age-group of 15-35 are covered under this programme. During 1980-81, there were 30 centres in Bombay and 930 adults were enrolled. An expenditure of Rs. 41,90,000 was incurred during this period, while the *per capita* expenditure was stated at Rs. 45.05.

PUBLICITY

The main function of the Directorate of Informal ion and Public Relations is to keep the people informed of the work of the Government in various spheres of administration and developmental activities and also to keep the Government informed of public opinion and needs and grievances of people.

The headquarters of the Directorate is at Bombay and has formed different units to carry out its various functions. In the following is given a brief description of these units:—

News Unit: This unit is mainly responsible for the dissemination of news by issue of press notes and news items on matters of policy and important Government decisions, as also for giving publicity to various developmental activities. It thus feeds newspapers in the State and outside day in and day out with press releases, feature articles, speeches of ministers, etc., in all the prominent languages in the State. The information office attached to this unit does the work of scrutiny of newspapers, and reports to the Minister or the concerned department about it, by sending cuttings to them. On many occasions clarifications are issued in respect of certain press reports, by acquiring relevant information from the concerned departments. A full-fledged photographic section with a dark room is attached to this unit.

Equally important is the work regarding press accreditation which is also done by this unit. This involves work in the form of scrutiny of the application, verification of antecedents of the applicant etc. The accreditation cards are then issued to such eligible pressmen and press photographers on the recommendation of the State Accreditation Committee and sanction of the Government.

Publications Unit: The Directorate has a full-fledged publications unit, which gives publicity to the developmental activities of the Government by bringing out publicity literature in the form of books, pamphlets, folders, posters, etc. The Directorate has its own periodicals, *viz.*, *Lok Rajya*, a fortnightly published in English and Marathi and *Gramvikai*, a monthly in Marathi.

Film Unit: The film unit arranges to produce films, newsreels and documentaries depicting developmental activities undertaken by the Government and achievements made in respect thereof, both depart-mentally and through outside agencies. These movies are produced in 35 M.M. and 16 M.M. prints and are exhibited in the picture houses. 16 M.M. prints are exhibited in various localities of Bombay with the help of the mobile unit of the Directorate. The unit has a small air-conditioned pre-view theatre where films are shown to officials, and non-officials. The unit has a small workshop which facilitates to maintain the equipment and its accessories in good condition.

Public Relations: This unit has been entrusted with multifarious duties such as liaisoning work, organisation of information centres and radio rural forums, issue of advertisements, research and reference section and the central library. The library headed by the Chief Librarian is an institution by itself. The library caters to the needs of the Mantralaya departments for the purpose of reference. One of the major information centres is located at Dadar in Bombay.

Exhibitions and Cultural Programmes: The State of Maharashtra through this unit participates in various major exhibitions. The work involves various aspects like planning of exhibitions, booking of sites, preparation of layouts, etc. The unit is also entrusted with the work of giving publicity to five year plans through various cultural activities.

TABLES

TABLE No. 1 Number of Private Schools in Greater Bombay, 1980-81

Languages	City			Suburbs				Ex	tended	Suburb	S	
	Recog scho		Aided s	Aided schools		Recognised schools		Aided schools		nised ols	Aided s	chools
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
Marathi	21	10,227	24	11,432	15	4,665	46	18,725	11	2,070	21	6,357
Gujarati	7	8,532	28	7,395	20	4,785	19	8,902	18	4,763	21	13,301
English	120	43,258	37	18,905	130	58,945	36	11,435	56	19,974	8	2,551
Urdu	3	318	10	3,556	5	1,280	3	850				
Hindi			11	3,671	3	913	11	3,536	4	788	7	2,435
Tamil			4	895					1	421		
Malayalam			2	297					1	186		
Kannada	1	78	5	612							1	137
Sindhi							1	225				
Total	172	62,413	131	46,763	173	70,588	116	46,673	91	27,902	58	24,781

TABLE No. 2 COLLEGES IN BOMBAY 1982-83

Name and Year of Affiliation	Courses offered		of Stude	ents	No of teachers
		Male	Female	Total	
Arts and Science Colleges:					
1. Elphinstone College, Fort, Bombay-32 (1860).	B.A.,M.A.,B.Sc, Ph.D.	430	370	800	98
2. St. Xavier's College, Bombay-1 (1869).	BA.,M.A.,B.Sc, M.Sc., Ph.D.	656	1,052	1,708	N.A
3. Wilson College, Bombay-7 (1861).	Do	611	796	1,407	N.A
4. Ramnarain Ruia College, Matunga, Bombay-19 (1937).	B.A.,M.A.,B.Sc, M.Sc., Ph.D.	589	1,330	1,919	95
5. Sophia College for Women, Bombay-26 (1941).	B.A.,M.A.,B.Sc, M.Sc.	3	1,202	1,205	65
6. Rishi Dayaram National College and Wassiamul Assomul Science College, Bombay-50 (1949).	B.A.,M.A.,B.Sc, M.Sc.,Ph.D.		494	884	41
Arts, Science and Commerce Colleges					
1. Ismail Yusuf College, Jogeshwari, Bombay-60 (1930)	B.A.,M.A.,B.Sc, M.Sc.,B.Com	506	191	697	90
2. Guru Nanak Khalsa College of Arts, Science and Commerce, Matunga Bombay-19 (1937).	B.A.,M.A.,B.Sc, M.Sc.,B.Com., Ph.D.	1,002	770	1,772	N.A
3. People's Education Society's Siddharth College of Arts, Science and Commerce, Fort, Bombay-23 (1946).	Do.	1,049	306	1,355	67
4. Kishinchand Chellaram College, Churchgate, Bombay-20 (1954).	Do		672	1,452	74
5. Parle College, Vile-Parle (East), Bombay-57(1959).	Do		1,008	1,539	91
6. Jai Hind College, Basantsing Institute of Science and J. T. Lalvani College of Commerce, Church-gate, Bombay-20 (1948).	Do		900	1,547	69

Name and Year of Affiliation	Courses offered	No.	of Stud	ents	No of teachers	
		Male	Female	Total		
7.M. M. College of Arts, N. M Institute of Science , and Haji Rashid Jaffer Ph.D. College of Commerce, Andheri (West), Bombay-58 (1946).	B.A.,M.A.,B.Sc, M.Sc.,B.Com.	968	935	1,903	90	
8.D. G. Ruparel College of Arts, Science and Commerce, Matunga, Bombay-16 (1952).	Do	899	979	1,878	85	
9. D. E.Society's Kirti M. Doongursee College of Arts, Science and Commerce, Dadar, Bombay-28 (1954).	Do	1,161	414	1,575	79	
10. South Indian Education Society's College of Arts, Science and Commerce, Sion (West), Bombay-22 (1960).	Do	839	1,461	2,300	92	
11. Mithibai College of Arts, Chauhan Institute of Science and Amrutben Jivanlal College of Commerce and Economics, Vile- Parle (West), Bombay-56 (1961).	Do :		1,467	2,549	105	
12. Maharshi Dayanand College of Arts, Science and Commerce, Parel, Bombay-12 (1962).	Do		364	981	50	
13. Seth Laherchand Uttamchand Zhaveri College of Arts and Sir Mathuradas Vissonji College of Science and Commerce, Andheri (East), Bombay-69 (1963).	B.A.,M.A.,B.Sc, M.Sc.,B.Com.	592	979	1,571	64	
14. Ramniranjan Jhunjhunwala College, Ghatkopar, Bombay-86 (1963).	B.A.,M.A.,B.Sc, M.Sc.,B.Com., Ph.D.	1,328	656	1,984	N.A	
15. Sir Sitaram and Lady Shantabai Patkar College of Arts and Science and Chikitsak Samuha College of Commerce and Economics, Goregaon (West),Bombay-62 (1964).	B.A.,M.A.,B.Sc, M.Sc,B.Com.,Ph.D.		698	1,403	59	
16. Hazarimal Somani College of Arts and Science Jayaramdas Patel Commerce, College of Chowpatty,Bombay-7 (1965).	Do		776	1,806	81	
17. Maharashtra College of Arts, Science and Commerce, Byculla, Bombay-8 (1968).	B.A.,M.A.,B.Sc, B.Com.	773	386	1,159	N.A	

Name and Year of Affiliation	Courses offered	No. of Students			No of teachers	
		Male	Female	Total		
18.Vivekananda Education Society's College of Arts, Science and Commerce, Chembur, Bombay-71 (1978).	B.A.,B.Sc.,B.Com.	405	513	718	42	
19. Gokhale Education Society's Arts, Science and Commerce College, Borivali (West), Bombay-92 (1979).	Do	536	499	1,035	26	
20. N. G. Acharya and D. K. Marathe College of Arts, Science and Commerce, Chembur, Bombay-71 (1978).	Do	277	159	436	17	
Arts and Commerce Colleges:						
1.Burhani College of Commerce and Arts, Mazagaon, Bombay-10 (1970).	B.A.,M.A.,B.Com., Ph.D.	715	637	1,352	N.A	
2. K. J. Somaiya College of Arts and Commerce, Vidyavihar, Bombay-77 (1972)	B.A.,M.A.,B.Com., Ph.D.	1,281	1,606	2,887	73	
3. Bharatiya Seva Samaj Sanchalit College of Arts and Commerce, Malad (West), (1979).	B.com	2		2	N.A	
4.Sadhana Education Society's L. S. Raheja College of Arts and Commerce, Juhu, Bombay-54 (1980).	B.A., B.Com	306	160	466	9	
Colleges of Fine Arts:						
1. Nalanda Nritya Kala Mahavidyalaya,Bombay-49 (1973).	B.F.A.,M.F.A.(Dance),Ph.D.		46	46	12	
2.Sir J.J. School of Art,Bombay-1 (1981).	B.F.A. (Painting)	37	48	85	8	
3.Sir J.J. School of Applied Art, Bombay-1 (1981).	B.F.A., (Applied Arts)	102	69	171	15	
Science Colleges :						
1.Institute of Science, Fort, Bombay-32 (1926).	B.Sc.,M.Sc.,Ph.D.	230	152	382	55	
2.K. J. Somaiya College of Science, Vidyavihar, Bombay-77 (1960).	Do.	798	519	1,317	80	

Name and Year of Affiliation	Courses offered	No.	No of teachers		
		Male	Female	Total	
Home Science:					
1. College of Home Science, Bombay-20 (1969)	B.Sc.,M.Sc.(Home) Diploma		437	437	N.A
Social Work 1.College of Social Work, Bombay- 20 (1970)	B.Sw.,M.Sw	41	123	164	18
Commerce Colleges:					
1.Sydenham College of Commerce and Economics, Churchgate Reclamation, Bombay-20 (1914).	B.Com.,M.Com.,Ph.D.	983	652	1,545	47
2. R.A.Podar College of Commerce and Economic Matunga, Bombay- 19 (1941).	B.Com.,M.Com.,D.M.S.,Ph.D.	1,257	1,163	2,420	42
3.Siddharth College of Commerce and Economics,Fort, Bombay-23 (1953).	B.Com.M.Com., Ph.D.	893	293	1,156	19
4.H. R. College of Commerce and Economics, Churchgate, Bombay-20 (1960).	B.Com.	1,125	695	1,820	41
5. M. L. Dahanukar College of Commerce, VileParle (East), Bombay-57 (1960).	Do.	486	812	1,298	25
6.Smt.Mithibai Motiram Kundanani College of Commerce and Economics,Bandra, Bombay- 50 (1961).	B.Com.,M.Com., D.M.S.	863	745	1,608	32
7. Chinai College of Commerce and Economics, Andheri (East), Bombay-69 (1968).	B.Com.	983	835	1,818	39
8.Shri Narsee Monjee College of Commerce and Economics, Vile- Parle (West), Bombay-56 (1964).	B.Com.,M.Com., Ph.D.	1,218	1,192	2,410	44
9.Akbar Peerbhoy College of Commerce and Economics, Bombay-8 (1969).	B.com	942	124	1,066	20
10. Mulund College of Commerce, Mulund (West), Bombay-80 (1970).	B.Com.,M.Com.	833	1,032	1,865	32
11.Chetana's Hazarimal Somani College of Commerce and Economics, Bandra (East), Bombay-51 (1970).	B.Com.,D.M.S.	993	614	1,607	24
12. Prahladrai Dalmia Lions College of Commerce and Economics, Malad, Bombay-64 (1972).	B.Com.,M.Com., D.M.S.	1,218	759	1,977	33
13. Lala Lajpatrai College of Commerce and Economics, Bombay-34 (1972).	B.Com.,M.Com., Ph.D.	1,188	672	1,860	33
14. People's Education Society's Dr. Ambedkar College of Commerce and Economics, Wadala, Bombay-31 (1972).	B.Com.	1,782	452	2,234	N.A

Name and Year of Affiliation	Courses offered	No.	No of teachers		
		Male	Female	Total	
15. Bharat Education Society's College of Commerce and Economics, Bombay-4(1972).	Do.	520	96	616	14
16. K.P.B. Hinduja College of Commerce, Bombay-4 (1974).	Do.	920	533	1,453	22
17.South Indian's Welfare Society's College of Commerce Sewree Wadala Estates, Bombay- 31(1980)	Do.	430	237	667	14
18. Bhandup Educational Society's College of Commerce, Bhandup (East), Bombay-78 (1982)	F.Y.Com.	50	102	152	6
Traning Colleges:					
1. Secondary Training College, Bombay-1(1922)	B.Ed., M.Ed.,Ph.D.	32	70	102	12
2.St.Xavier's Institute of Education, Bombay-20 (1953)	Do.	29	89	118	11
3.Smt. Kapila Khandwala College of Education, Santacruz (West), Bombay-54(1962)	Do.	31	95	126	14
4.Bombay teachers' Training College, Colaba, Bombay-5 (1969)	Do.	32	107	139	12
5.Hansraj Jivandas College of Education, Khar, Bombay- 52(1969)	Do.	34	98	132	15
6. Chembur Comprehensive College of Eduation, Chembur, Bombay-71 (1970)	Do.	16	94	110	12
7.Gokhale Education Society's College of Education and Research, Parel, Bombay-12(1970)	B.Ed.,M.Ed.,Ph.D.	32	78	110	11
8.Gandhi Shikshan Bhavan's Smt. Surajba College of Education, Juhu, Bombay-49 (1970)	B.Ed.,M.Ed	10	65	75	9
9.St.Teresa's Institute of Education, Santacruz, Bombay- 54(1973)	Do.	J	93	93	10
Physical Education:					
Government College of Physical Education, Kandivli, Bombay-67 (1972)	B.Ed. (Phy)	83	17	100	N.A
2.B.P.C.A.'s College of Physical Education, Wadala, Bombay-31 (1978)	Do.	82	20	102	8
Education of Deaf:					
1. Indian Institute for the Teachers of the Deaf, Chawpatty, Bombay-7 (1974)	D.P in Ed.	lt	has stop	ped te	aching
Engineering Collegs:					
1.V.J.Technical Institute Matunga, Bombay-19 (1946)	B.E (Civil,Mech,Elec., Prod),B.Text,M.Text,M.E(Civil Mech, Elec, Auto, Prod.), D.I.E and Ph.D	1,134	67	1,201	212
2.Sardar Patel College of Engineering, Andheri (West), Bombay-58(1962)	B.E (Civil,Mech,Elec.,)	768	21	789	47
B.Pharm. Course:					
1.Bombay College of Pharmacy, Santacruz, Bombay-98(1970)	B.Pharm., M.Pharm., Ph.D.	64	68	132	16
2. K. M. Kundnani College of Pharmacy, Worli Seaface Bombay- 18 (1971).	B.Pharm., M.Pharm	175	43	218	15

Name and Year of Affiliation	Courses offered		of Stude	ents	No of teachers
		Male	Female	Total	
Law Colleges:					
1.Government Law College, Bombay-20 (1860)	LL.B.,LL.M.,Ph.D	1,843	453	1,496	32
2.New Law College, Matunga, Bombay-16 (1954)	Do.	1,283	356	1,639	25
3.Siddharth College of Law, Fort Bombay-20 (1956)	Do.	1,720	244	1,949	28
4.K.C.Law College, Churchgate, Bombay-20 (1955)	LL.B	1,629	252	1,881	42
5.K.P.B.Hinduja Law College, Bombay-4 (1976)	Do.	574	107	681	16
6.Jitendra Chauhan College of Law, Vile-Parle (West), Bombay-56 (1977)	Do.	679	200	879	19
7.G.J.Adwani Law College, Bandra, Bombay-50 (1977)	Do	262	118	380	12
8.Dr.Ambedkar College of Law, Wadala,Bombay-31 (1977)	Do.	455	49	504	12
Medical,Dental,and Nursing Colleges					
1.Grant Medical College, Byculla, Bombay-8 (1860)	M.B.B.S., M.D.,M.S.,DA.,D.V. and D., D.P.H., D.M.L.T.,D.M.R.D,D.F.M.,D.M.R.D, D.F.M.,D.M.,R.T,M.Pharm,M.Sc (Biochem),Ph.D)	1,299	743	2,042	136
2.S.G.S. Medical College Parel, Bombay-12 (1925)	M.B.B.S.,M.D., M.S.,D.A.,D.V. and D., D.P.H., D.M.L.T., D.M.R.D.,D.F.M., D.M.R.T.,M.Pharm. M.Sc.(Biochem), Ph.D.,B.Sc. and M.Sc.,(OT and PT), D.P.M	965	680	1,645	N.A
3. Topiwala National Medical College, Bombay-8 (1946).	M.B.B.S.,B.Sc.(Aud.) M.D.,M.S.,D.A., D.V. and D, D.P.H.,D.P.M., D.M.L.T.,D.M. R.D.,D.M.R.T., M.Sc. (Biochem) Ph.D.	555	388	943	194
4. Lokmanya Tilak Municipal Medical College, Sion, Bombay- 22 (1964).	M.B.B.S.,M.D.,M.S., M.Sc.(Biochem), D.M.L,T.,D.P.H., D.M.R.D.,D.M. R.T.,D.V. and D.,Ph.D.	421	263	684	238
5.Government Dental College and Hospital, Bombay 1 (1945).	B.D.S.,M.D.S.	263	198	461	69
6.Nair Hospital Dental College, . Bombay-8 (1954).	Do.	137	151	288	N.A
7. Institute of Nursing Education, Byculla, Bombay-8 (1960).	B.Sc.(Nursing)		54	54	169
Ayurvedic Colleges:					
1.Smt. K. G. Mittal Punarvasu Ayurved Mahavidyalaya, Bombay-2 (1972).	B.A.M.S.,M.D. (Ayur.)	220	90	319	25
2.R. A.Podar Medical College (Ayur.), Worli, Bombay-18 (1972).	B.A.M.S.		132	321	41
3. Ayurved Mahavidyalaya, Sion, Bombay-22 (1972).	Do.	196	69	265	23
Architecture:					
Sir J. J. College of Architecture, Fort, Bombay-1 (1896).	Do.	183	142	325	8

The colleges having library books of 20,000 and above are: Elphinstone College—65,702 books; Ruia College—78,574; Sophia College—33,714; R. D. National College—32,368; Ismail Yusuf College—39,929; K. C. College—42,607; Parle College—41,338; Siddharth College—72,276;M. M. College and N. M. Institute—30,647; Jaihind College—35,314; Ruparel College—47,486; Kirti College—41,352; S. I. E. Society's College—35,462; Mithibai College—32,847; Dayanand College—25,821; Zaveri College—24,090; Patkar College—28,390; Somani College—29,205; Somaiya College—28,148; Institute of Science—20,894; Sydenham College—45,934; Podar College—55,327; Siddharth College—26,099; Dahanukar College—26,904; Chetana College—20,140; Secondary Training College—29,496; V. J. Technical Institute—34,532;

Government Law College—27,158; Grant Medical College—37,534; Topiwala National Medical College—28,978 and Podar Medical College—20,000.

TABLE No. 3 Institutions of the S. N. D. T. University, 1982-83

Name of College	Year of Establishment	Courses offered	Numb	er of
			Students	Teachers
Conducted Colleges:				
(1) Department of Post-graduate Studies and Research.	1982	M.A., M. Phil., Ph.D.	259	25
(2) S.N.D.T Arts and Commerce College for Women,Bombay.	1931	B.A., B.Com., Dip. inTravel and Tourism.	1,857	91
(3) Leelabai Thackersey College of Nursing, Bombay.	1952	B.Sc, M.Sc. (Nursing)	235	29
(4) P.V.D.T. College of Education for Women, Bombay.	1959	B.Ed.	184	28
(5) Sir Vithaldas Thackersey College of Home Science,Bombay.	1959	B.Sc, M.Sc, Ph.D.(Home Science).	1,013	72
(6) Sir H. P. Thackersey Collegeof Science, Bombay.	1977	M.Sc, Diploma(Anal. Chemistry).	121	4
(7) Sir H. P. Thackersey School of Library Science, Bombay.	1961	B.Lib., M.Lib.	58	5
(8) P. V. Polytechnic, Juhu,Bombay.	1976	Diploma Courses in Pharmacy, Pathology, Dress Making, etc	461	57
(9) C.U.Shah College of Pharmacy, Bombay.	1980	.B. Pharm.	90	9
Affiliated Colleges:				
(10) B. M. Ruia Mahila Mahavidyalaya, Bombay.	1958	B.A., B.Com.	384	20
(11) Smt. Maniben M. P. Shah	1958	B.A., B.Com.	1,086	23

Name of College	Year of Establishment	Courses offered	Numb	er of
			Students	Teachers
Women's College of Arts and Commerce, Bombay.				
(12) Smt. P. N. Doshi Women's College, Bombay.	1960	B.A., B.Com.	933	30
(13) Shri M. D. Shah Mahila College of Arts and Commerce, Bombay.	1968	B.A., B.Com.	1,407	40
(14) Maniben N. Women's College, Vile Parle, Bombay.	1972	B.A., B.Com.	1,019	25
(15) Vile Parle Mahila Sangh's Lions Juhu N. J. Mahila Mahavidyalaya, Vile Parle(E).Bombay.	1969	B.A.	574	16



PUBLIC HEALTH AND MEDICAL SERVICES



Maharashtra State Gazetteers

LITTLE EVIDENCE EXISTS TO THROW LIGHT UPON THE SANITARY CONDITION OF BOMBAY during the period preceding its cession to the English Crown by the Portuguese. Heitor da Silveira named it the "Island of the Good Life," which he would scarcely have done, if the climate had proved very deleterious, while Fryer in 1673 spoke of the country people and Portuguese in old days living to a good old age, which he believed to be largely due to their temperate habits. But subsequent to the cession and up till the close of the first decade of the eighteenth century, the island acquired an evil reputation and the mortality, particularly among the English, rose to an alarming figure.

More fatal than all was a disease known as *mordi-sheen* to the Portuguese, which appears to have been choleraic in nature. Throughout the entire period between 1670 and 1710 there are continual references in official records to the great unhealthiness of the island, and on more than one occasion the Company's servants asked to be excused on this account from serving in Bombay. Moreover circumstances were not improved by the fact that the island was often destitute of a physician and that the consignments of medicines, which were spasmodically sent out by the Court of Directors, often proved to be bad.

Various reasons for the unhealthiness of the climate were put forward by the Company's representatives in Bombay. Writing in 1671 to the Court of Directors, they opined that it was due to the habit of manuring the cocoa-nut palms with putrid fish, while in 1673 Aungier remarked in his report that after the first intermission of the rains in May or June and after their total ceasing in October the air and water are unwholesome by reason of the crude pestiferous vapours exhaled by the violent heat of the sun into the air and vermin created in the wells and tanks which renders those months most sickly to the inhabitants and especially to Europeans. One of the chief reasons was doubtless the gradual silting up of the creeks which divided Bombay into a group of islets. At high tide the sea swept through the breaches, overflowed the major portion of the island, and laid a pestilential deposit highly productive of malaria; added to such natural causes was the dissolute life led by the majority of Europeans at this epoch.

Between 1690 and 1708 circumstances were aggravated by a violent epidemic of plague which helped to justify the dictum that in Bombay " two monsoons were the age of a man ".

The excessive mortality caused the greatest anxiety to the Court of Directors, who endeavoured to afford temporary relief to their factors by the despatch of medicines and Surgeons from home. They also advised the Bombay Council to issue orders prohibiting the "buckshawing" of the toddy trees in the Mahim and Worli woods, to allow the free perflation of the western breeze, to stop the breaches, to burn continual fires and to put chalk in the drinking water. Accordingly in 1708 fish manure was universally prohibited, dry manuring being permitted up to 1766, when it was discovered that the indulgence was turned to bad uses, and this practice also was discontinued; while by 1720 a dam had been constructed across the Great Breach at Mahalakshmi, and a considerable area of marshy ground had been drained. This gradual reclamation of land from the inroads of the sea coupled with better medical attendance and a more temperate style of living introduced a considerable change for the better, and by the middle of the 18th century, Bombay had not only lost entirely her former reputation for insalubriety but was even accounted a tolerably healthy station.

However, the sanitary condition of Bombay was far from perfect. In 1757, there was a serious epidemic among the labourers employed on the fortifications, which necessitated the appointment " of a country doctor, " whose medicine, it is satisfactory to note, met with great success; while little or no attention was paid by the inhabitants to the advice and orders of the special officer, styled ' Scavenger', who was appointed about this date to supervise the cleansing of streets. In fact, according to a consultation of the 18th November 1757, the town had become so dirty that the Bombay Government decided to appoint a member of the Board tq the office of Scavenger and to defray the cost of a sufficient number of labourers and scavenging carts by a tax upon the towns people. The mortality, at this date, was also high. At the close of the eighteenth century the mortality was about 500 per month.

At the beginning of the nineteenth century it appears from statistics of deaths collected by the Police that the average annual mortality varied between 4,000 and 8,000, this figure rising in 1804 to 26,000 in consequence of the great famine in the Konkan and the resultant immigration of a very large number of famishing and moribund people. The most common causes of death were fever and liver complaints.

In 1812 a definite attempt to secure the better conservancy of the town was made by the passing of Rule, Ordinance and Regulation I, which empowered the Justices of the Peace to check nuisances on roads and thoroughfares and make structural improvements in the streets of the town.

A further step forward was taken in 1845 when a Board of Conservancy was established to supervise sanitary and other measures for the improvement of the public health; but the activities of the board were somewhat curtailed by the fact that they were not vested with legal authority to check nuisances. In consequence Act XIV of 1856 was promulgated which gave the necessary legal status to the board, and bye-laws under it were framed. Two years later the board had fallen into considerable disrepute, in consequence largely of the venality of its inferior servants, and a new body corporate, composed of three Municipal Commissioners, was appointed to supervise the conservancy of the town. Finally on the 1st July 1865, the 'triumvirate' of Municipal Commissioners was superseded by a new Municipality, which was charged with the entire control of the urban administration, the executive power and responsibility being vested in a Municipal Commissioner appointed by Government for a limited term of years.

The municipal administration has put in good amount of efforts in improving the general sanitary conditions. The diseases like plague, cholera, which once took a heavy death toll, have been much reduced. Regular supply of water, construction of drainage, more careful scavenging of streets and roads, removal of offensive trades and introduction of compulsory vaccination have severally contributed towards counteracting the high mortality. With the increase in hospitals and dispensaries more staff is available to look after the principal diseases, especially epidemic diseases which once played a havoc in Bombay.

BIRTHS AND DEATHS

The registration of vital statistics which was performed by the police from 1850 to 1867 was since then entrusted to the health department of the Corporation. For this purpose, at present, Greater Bombay is divided into 80 districts each under a medical officer who acts as district registrar of births and deaths. These districts are further divided into sections.

Since 1920 the total births in Bombay city showed a steady increase whereas total number of deaths fell rapidly. This might be due to the increase in medical facilities and public consciousness to avail of the same. The following statement shows the births and deaths in the period from 1921 to 1951, registered in Bombay city:—

	1921	1931	1941	1951
Total Population	11,75,914	11,61,383	14,89,883	23,25,945
Area (Sq.miles)	23.54	24.19	26.18	26.18
Births-				
Males	9,979	14,084	20,638	33,721
Females	9,146	13,120	19,316	31,958
Total	19,125	27,204	37,954	65,676
Birth rate per 1000	16.3	23.4	26.8	28.2
Deaths—				
Males	N.A.	13,494	16,946	18,473
Females	N.A.	11,611	14,150	15,368
Total	53,609	25,105	31,096	33,841
Death rate per 1000	45.5	21.6	20.9	14.5

As a result of the merger of the Bombay Suburban District into Bombay city, the city limits were extended to Dahisar on Western Railway and Mulund on Central Railway in February 1957. This was naturally accompanied by an increase in births also. The following statement shows the position for 1961 and 1971:

	1961	1971
Total Population	41,52,056	59,68,546
Area	437.71 Sq.km	437.71 Sq.km
Births-		
Males	59,625	86,150
Females	56,712	78,143
Total	1,16,337	1,64,293
Birth rate per 1000	28.2	27.5
Deaths-		
Males	24,312	33,945
Females	18,805	23,300
Total	43,117	57,245
Death rate per 1000	10.4	9.6

Of 1,16,337 births registered in 1961, 74,706 births took place in city, 32,216 in suburbs and 9,415 in extended suburbs. In 1971 there was an increase in births which were put at 164,293 of which 78,941 were in city, 59,610 in suburbs and 25,742 in extended suburbs.

Statistics of month-wise births and deaths registered in Greater Bombay since 1961 for a few years are shown in Table No. 1, while ward-wise births and deaths are given in Table No. 2. Deaths according to ages are shown in Table No. 3. An interesting statistics of certification of causes of deaths is shown in Table No. 4.

INFANT MORTALITY

Infant mortality is divided into two groups: (1) neo-natal deaths, *i.e.* deaths under 4 weeks and (2) post-natal, *i.e.*, deaths under 12 months but at four or above weeks. Generally causes of infant mortality in case of neo-natal deaths are prematurity, congenital malformation and birth injuries; while diarrhoea and enteritis, small-pox are causes of post-natal mortality. Commendable work has been done to prevent high mortality of infants due to availability of services of medical personnel, specialist services, family planning and other allied social services. Due to spread of education there is also a considerable awareness among people to avail of the medical facilities.

Deaths among infants under one year in Bombay in 1921, 1931, 1941 and 1951 are shown below:—



	1921	1931	1941	1951
Infant Deaths	12,751	7,401	8,445	9,746
Rate per 1000	668	272	211	N.A

In 1961 there were 11,150 infant deaths which showed an 1971. The area-wise deaths are shown below:—

Year	City	Suburbs	Extended Suburbs	Total
1961	8,452	2,192	506	11,150
1971	6,627	4,529	1,817	12,973

In 1980 there were 13,633 infant deaths.

As regards neo-natal deaths the following statement shows the position since 1961 for a few years:—

Year	Births	Neo-natal Deaths	Death Rate
1961	1,16,337	5,087	43.7
1963	1,31,831	5,788	43.6
1965	1,42,781	6,740	47.2
1968	1,55,880	7,029	44.8
1971	1,64,293	7,445	45.9
1973	1,80,409	8,030	44.5
1975	1,80,018	7,452	41.4

During 1979 there were 8,440 deaths, the death rate being 41.4.

Table No. 5 shows infant deaths due to principal causes, while infant deaths by age group are shown in table No. 6. From table No. 5 it can be seen that diseases of respiratory system, congenital malformation, diseases of early infancy and diarrhoea and enteritis caused heavy mortality. Small-pox, malaria, fever which once were responsible for heavy mortality are now under control.

DISEASES

The details of some of the principal infectious and communicable diseases in Bombay are given below :-

Small-pox.—The disease is highly infectious. Deaths due to small-pox in the past were very high. One of the main reasons for occurrence of heavy incidence was a high floating population in city which remained unvaccinated. More and more areas were added to city jurisdiction which naturally resulted in delay in establishing proper and effective health services in newly added areas. However the Corporation took a serious note of it and organised systematic vaccination campaign and arranged treatment of small-pox cases. The national small-pox eradication programme was launched in 1962 with the object of covering a large number of people in age group of 1-14 years with special attention to labour class and migratory people. As a result of this the mortality incidence has gone down as can be seen from the following figures:

Area	Year	Attacks	Deaths	Rate
Bombay City	1921	N.A.	406	N.A.
	1931	N.A.	31	N.A.
	1935	N.A.	1,248	N.A.
	1941	2,325	1,293	0.8
	1945	603	235	0.1
	1951	1,803	314	0.1
	1955	166	44	0.0
Greater Bombay	1961	3,868	1,615	0.4
	1965	3,202	1,323	0.3
ashtra	1971	Nil	Nil	Nil
	1975	N.A.	N.A.	N.A.

The disease was epidemic during 1942, 1944, 1954, 1957 and 1958 while it was sporadic in rest of years since 1941.

Cholera: Recently Greater Bombay remained free from this disease. In Bombay city during 1921, 1931, 1935, 1941, 1945 and 1951 there were 70, 80, 13, 7, 30 and 1 deaths, respectively.

Preventive measures such as anti-cholera inoculations, disinfection of well water, destruction of over ripe and rotten fruits and unwholesome articles of food exposed to contamination are carried out regularly. During 1971, 9,20,668 persons were inoculated against cholera.

Malaria: It is classified as an infectious disease caused by the sporo-zoa parasite carried from man to man and transmitted by the bite of mosquito. The deaths have now practically been reduced due to implementation of the National Malaria Eradication Programme which was started in 1962-63. Potential breeding places such as wells, overhead tanks, mill tanks, storm water entrances and drains are checked regularly for detection and destruction of mosquitoes. Regular efforts of application of insecticides are adequately supported by aerial spraying of larvicides over creeks and grass lands. Under the programme, Greater Bombay has been divided into city, western suburbs and central suburbs. Under active surveillance enquiries of fever cases are made while under passive surveillance blood smears from fever cases attending hospitals and dispensaries are collected and examined in the Municipal Laboratory at Parel. The work done under this programme during 1975 was as under:—

Particulars	Fever cased detected	Persons treated	Blood Smears			
			Collected	Examined	Found positive	
Active	53,434	53,434	55,942	55,942	382	
Passive	2,81,098	2,81,098	2,81,098	2,81,098	2,296	
Mass	1,56,472	1,56,472	1,56,472	1,56,472	65	

As regards death toll in Bombay City and Greater Bombay area the following figures give the position since 1921:-

Area	Year	Deaths
Bombay City	1921	545
	1931	131
	1935	97
	1941	88
	1945	96
	1951	59
	1955	6
Greater Bombay	1961	1
	1965	Nil
itra Si	1971	Nil

Tuberculosis: It was once a dreaded disease because of the general belief that practically no cure was feasible, the patient having almost no option but to await death. Statistics of deaths due to tuberculosis in Bombay City are given below:—

Year	1921	1931	1941	1945	1951	1955
Deaths	1,566	1,929	1,692	1,981	2,525	1,934

Industrialisation and urbanisation are the main causes for the spread of this disease. Mortality since 1961 in Greater Bombay is on an increase as can be seen from the following figures:—

Year	Deaths from						
	Pulmonary	Other form	Total	Males	Females	Death Rate	
1961	2,184	762	2,946	1,905	1,041	N.A	
1965	3,371	838	4,209	2,750	1,459	0.9	
1971	5,673	66	6,339	4,344	1,995	1.0	
1975	7,555	860	8,415	6,005	2,410	1.2	

During 1979 there were 8,756 deaths including 2,374 females. Efforts such as establishment of hospitals and clinics, BCG vaccination, supply of anti-TB drugs are undertaken to check the heavy mortality due to this disease, Ilie All-India T.B. Association has also done significant work in this field.

Leprosy: It is the most dreadful disease and even today those who suffer from leprosy at once become outcastes. However deaths on this account are not heavy as there were 73 deaths occurred in 1931, 21 in 1935, 65 in 1941, 76 in 1951, and 61 in 1955 in Bombay City.

The Greater Bombay Leprosy Control Scheme aims at control of leprosy through survey, education and treatment.

MEDICAL FACILITIES

As early as 1668 the unhealthiness of the climate impressed upon the East India Company's servants in Bombay the prime need of a hospital. The Commissioners, writing to Surat in October of that year, stated that many of the soldiers were ill, and that medicines were urgently needed. But, notwithstanding the high mortality, no definite steps towards establishing a proper "hospital for sick English, "were taken until Gerald Aungier had assumed the reins of Government; and it was really due to his forcible representations that in 1675 the Court of Directors formally sanctioned the erection of a hospital. The Bombay authorities thereupon set about finding a suitable site, and informed the Directors that they estimated the cost of a building, capable of accommodating fifty or sixty patients.

In 1676 the Court of Directors despatched Dr. Wilson from England as first Physician, in the hope that he would prove " a great benefit and happiness to the Island ". It appears, however, that the proposed building was never erected, and that instead a new Court of Judicature was built in the bazaar, while the old Court situated on the Esplanade to the southeast of the present Cooperage was transformed into a hospital in 1677.

This hospital, the first ever known in Bombay, was in use until some little time prior to the year 1733, when a new building was erected near the Marine yard, nearly opposite the Great Western Hotel. The cost of completing it was defrayed by the imposition of a half per cent duty on trade. From 1740 onwards it was inspected weekly by a Board composed of the Land Paymaster, the Marine Paymaster and the Commandant of the Station, and seems to have been the chief resort for sick persons in both military and civil employ until the beginning of the nineteenth century, when the pressing need of more space in the Marine yard for the accommodation of workmen and materials forced Government to consider the desirability of choosing a new site.

In addition to this general hospital in the Fort, there were at the close of the eighteenth century a hospital for native troops on the Esplanade and a convalescent home on Old Woman's Island (Colaba).

The year 1824 witnessed the final relinquishment of the Marine yard hospital in favour of a new building erected in Hornby road for the use both of the garrison and the European civil population. The site had been occupied by a gun carriage factory, which was removed to Colaba about 1820. This hospital continued to be used until 1860, when the medical authorities condemned it, and Government determined to sell it with the land on which it stood, and devote the sale-proceeds to the erection of a new hospital on the Cooperage.

In consequence, interest in the matter languished until 1876, when the temporary huts in Fort George were relinquished in favour of a building known as the Officers' Quarters which had previously been used partly as the residence of the House Surgeon and partly as a convalescent, and contagious ward, and no definite step towards the construction of a proper hospital was taken until 1886, when, on the initiative of Lord Reay and Sir M. Melvill, plans were prepared and culminated in the laying of the foundation-stone of the present St. George's Hospital in 1889.

Apparently little was done towards providing State aid to the native population prior to the opening of the nineteenth century. Captain Hall, who visited Bombay shortly after the great famine of 1802-04, records that " several great sheds were erected as hospitals on the smooth greensward lying just beyond the foot of the glacis and reaching nearly across the Esplanade in front of the northern line of the fortifications. Numerous surgeons, some military and some belonging to the civil establishment, were called in from various out-stations and placed in charge of these and other infirmaries." (Fragments of Voyages (1832),64.) About 1809 a kind of Native General Hospital was in existence, which treated daily about 20 patients and was supported solely by Government. The inmates were chiefly paupers sent in by the police. In 1834, in pursuance of resolutions adopted at a public meeting, the Bombay Native Dispensary was opened in buildings granted rent-free by Government; and a few private dispensaries, notably one opened in Girgaum road in 1846, commenced to afford medical aid to the native population. The popularising of medical institutions and European remedies was largely the work of the Committee of the Native Dispensary, formed in 1836. By 1866 Bombay contained the Jamsetji Jijibhoy Hospital, including an Obstetric Hospital, and an Eye Dispensary, which was closed on the completion of the Sir Cowasji Jehangir Ophthalmic Hospital in that year, a Police Hospital, the Byculla Schools Hospital, and the Royal Indian Marine Dockyard Dispensary; while in 1874 the Jehangir Nasarwanji Wadia Dispensary at Mahim, opened several years before, was formally recognised by Government for a grant-in-aid, and the Gokuldas Tejpal Native General Hospital was opened for the benefit of native patients resident in areas distant from the J. J. Hospital. About this date the Native Dispensary opened a branch at Colaba, which was shortly afterwards abolished. This indirectly led to the opening of a branch in Khetwadi in 1877, which subsequently became the Nasarwanji Petit Charitable Dispensary. This was followed a decade later by a movement to afford medical relief to native women, who aversed treatment by male doctors, and in 1885 the Bombay Committee of the Medical Fund for the Women of India opened a temporary hospital for in-door patients at Khetwadi, the out-door patients being treated at the Jafar Suleman Dispensary for women and children, which was opened near the Crawford Market in the next year. In the following year (1886) the Pestanji Hormasji Cama Hospital was opened, whereupon the Khetwadi hospital was closed, and its inmates were removed to the former institution. The year 1890 witnessed the opening of the Bomanji Edalji Albless Obstetric Hospital. In 1890 the Acworth Leper Asylum at Matunga was opened, and in 1892 the Obstetric wards of the Jamsetji Jijibhoy Hospital were replaced by the Bai Motlibai Wadia Hospital and the Sir Dinsha Maneckji Petit Hospital, and an out-door department for both these hospitals was provided by the Dwarkadas Lallubhai Dispensary for women and children.

As compared to other urban areas of the State, better medical facilities are available in Greater Bombay through a network of medical institutions controlled by the Government, the Bombay Municipal Corporation and charitable trusts. These hospitals are well equipped and are well known in the country. A steady growth of public and public-aided hospitals and dispensaries in Bombay can be seen from the following statistics:

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	Year				
Particulars	1920	1930	1940	1950	1960
General hospitals and dispensaries.	21	30	38	51	74
Hospitals and dispensaries for females.	7	7	8	7	13

During 1960 these 74 general hospitals provided 4,528 beds, including 1,630 beds reserved for females. In addition, thirteen hospitals and dispensaries for females provided for 500 beds. The respective number of beds for the Bombay Division was 6,284 and 548, respectively. During 1975 there were as many as 191 hospitals and 284 dispensaries with a total bed strength of 19,526 and 27, respectively. The details are as under:—

Management	Hospitals		Disp	ensaries	
	No.	Beds	No.	Beds	
State Government	18	4,691	12	17	
Central Government	8	1,477	128		
Municipal Corporation	23	7,187	2	10	
Others	142	6,171	142		
Total	191	19,526	284	27	

Various hospitals provide teaching facilities for medical students for university degrees in surgery and preventive medicines. These are B. Y. L. Nair Hospital, Bombay Central; KEM Hospital, Parel; Sir J. J. Memorial Group of Hospitals, Byculia and Lokmanya Tilak Municipal Hospital, Sion. The courses leading to the degree or diploma in ayurvedic system of medicine are conducted in the M.A. Podar Hospital, Worli; Smt. Kamaladevi Gauridutta Mittal Punarvasu Ayurvedic Mahavidyalaya, Charni Road and Ayurvedic Hospital, Sion. Instructions in homoeopathy are given by the Government Homoeopathic Hospital, Irla.

In Bombay there are some specialised hospitals. Mention amongst them may be made of Tata Memorial Cancer Hospital for cancer patients, Acworth Leprosy Hospital for leprosy patients, Kasturba Hospital for infectious diseases and Group of T.B. Hospitals for tuberculosis patients. Other specialised institutions are Eye Hospital and ENT Hospital, both managed by the Municipal Corporation. Likewise there are special hospitals for females and children. These are B. J. Wadia Hospital, Parel; Children's Orthopaedic Hospital, Haji Ali; and Cama and Albless Hospital, Fort. Considering the area-wise distribution of these hospitals, it is noticed that there is a heavy concentration in Parel and Fort areas. However the needs of suburbs and extended suburbs are met by recently established hospitals managed by private bodies and some established by the Municipal Corporation.

Apart from hospitals managed by the Government, Municipal Corporation and Private Bodies there are some hospitals in Greater Bombay which are exclusively meant for the employees of the Railways, the Police, the Navy, the Bombay Port Trust and hospitals started under the Employees State Insurance Scheme.

State Government Hospitals

The State Government manages the St. George's Hospital, Fort; J. J. Group of Hospitals, Byculla; G. T. Hospital; Cama and Albless Hospital, Fort; M. A. Podar Hospital, Worli; Government Homoeopathic Hospital, Irla; and Police Hospitals at Nagpada and Naigaum. The details of some of these hospitals are given below:

St. George's Hospital: The foundation stone of this hospital was laid in February 1889 and the building was completed in 1892. Formerly it was known as the European General Hospital meant for treatment of sick Europeans. In the beginning it provided 130 beds. During the course of time the activities of the hospitals were expanded and at present it is one of the biggest hospitals in Greater Bombay having 467 beds. In the following statement is given the total number of patients treated and bed capacity:—

Year	Patients t	reated	Ве	ds
	Indoor	Outdoor	Males	Females
1920	3,585	1,432	141	101
1930	3,000	3,036	131	89
1940	3,658	9,824	102	83
1950	5,307	22,911	138	83
1960	4,999	25,022	308	121
1980	1,61,330	3,19,400	467	

During 1977 there were 34 doctors and 838 nurses working in the hospital.

Sir J. J. Hospital: The foundation stone of the Sir J. J. Group of Hospitals, Byculla, was laid in 1843 and the building was erected at the joint expenses of the East India Company and Sir Jamshetjee Jijibhoy Batliwala and the hospital was formally opened in 1845. In 1961 a new building was constructed. It consisted in the beginning of 18 wards with 237 beds. Today it is a premier Government hospital in the State, and renders medical aid in almost all types of specialised treatment. In 1977 there were 1,292 beds.

The following statement gives the statistics of patients treated with bed strength since 1920 for a few years:—

Year	Patients t	reated	Ве	ds
	Indoor	Outdoor	Males	Females
1920	7,833	34,440	228	68
1930	8,971	44,278	287	92
1940	9,877	50,503	249	116
1950	14,557	1,17,323	353	125
1960	5,366	44,278	332	146
1970	34,574	6,98,769	606	544
1980	5,18,272	9,70,931	1314	

The J. J. Group of Hospitals consists of two other hospitals, *viz.*, B. J. Hospital for Children and Sir C. J. Opthalmic Hospital. All these hospitals are situated in one compound. Attached to the hospital is a full-fledged medical college, the famous Grant Medical College, (For details see Chapters 2 and 15.) conducting courses leading to degree and post-graduate degree in medicine and surgery. The hospital and college received immense encouragement from enlightened Indians like Jagannath Shankarshet and Bhau Daji Lad, the latter being one of its first medical graduates.

G. T. Hospital: The Gokuldas Tejpal Hospital owes its existence to an outcry raised in 1868 for a second hospital for Indian nationals. The construction of the building was commenced in 1870 with the munificent donation from Gokuldas Tejpal and was finally completed in 1874. In the beginning it had 120 beds. The same increased to 521 in 1980.

In what follows are given the statistics regarding the patients treated since 1920 with number of beds :—

	Patients treated			Beds
Year	Indoor	Outdoor	Males	Females
1920	4,388	12,274	100	20
1930	5,182	20,725	180	20
1940	5,141	34,559	100	36
1950	7,789	53,898	156	76
1960	4,311	26,297	230	100
1980	1,75,200	2,42,300		521

There were 13 doctors and 167 nurses working in the hospital during 1977.

Cama and Albless Hospital: The Pestanji H. Cama Hospital for Women and Children with which are connected the B. E. Albless Obstetric Hospital and J. S. Dispensary originated in a movement commenced in 1882 to afford medical assistance to Indian women. In the following year Shri P. H. Cama offered a donation for creation of a hospital and Government granted a suitable land on Esplanade for hospital known as the Cama Hospital. The foundation stone of the hospital was laid in 1883 and the hospital was opened in 1886. In 1886 the dispensary was attached to the hospital and Albless Obstetric Hospital in 1890. These three wings now form one hospital financed and managed by Government.

In the following are given the statistics of patients treated since 1930 for a few years:—

	Patients	Beds	
Year	Indoor Outdoor		Females
1930	5,087	to (150
1940	6,059		155
1950	8,132	40,632	155
1960	3,703	14,597	163
1980	96,000	78,000	367

Besides, there are two Government hospitals, one homoeopathic situated at Irla and the other ayurvedic, *viz.*, M. A. Podar Ayurvedic Hospital situated at Worli. The hospitals for the police personnel are situated at Naigaum and Nagpada.

Employees' State Insurance Scheme: The Employees' State Insurance Scheme was passed by Parliament in 1948. It covers industrial workers of all non-seasonal factories using power and employing more than 20 workers. Workers drawing pay upto Rs. 1,000 per month are covered under this scheme. The medical facilities are provided by the State Government, and include outdoor patient treatment, specialist examination, hospitalisation, maternity benefits and ambulance service. Hospitalisation facilities are extended to the insured persons through five hospitals situated at Parel, Worli, Andheri, Kandivli and Mulund. The details of the four hospitals for 1980 are shown in the following statement:—

Name of Hospital	No. of beds		tients treated 1980	No. of doctors	No. of nurses
		Indoor	Outdoor		
1.ESIS Hospital,Worli.	550	12,000	15,500	64	161
2.ESIS Hospital,Andheri.	650	18,000	40,000	80	193
3.ESIS Hospital,Mulund.	650	20,060	1,63,700	98	156
4.ESIS Hospital,Kandivli.	300	1,800	2500	47	83

Municipal Hospitals: The Bombay Municipal Corporation is the biggest local authority in India providing six major hospitals for its populace. These are the K.E.M. Hospital, Parel; B.Y.L. Nair Hospital, Bombay Central; L.T.M. General Hospital, Sion; Kasturba Hospital, Jacob Circle; Group of T.B. Hospitals, Sewri; and Sheth A. J. B. Municipal E.N.T. Hospital, Fort. Of these hospitals, the first three provide facilities for medical education. The details of these institutions are given below:

K. E. M. Hospital: The King Edward Memorial Hospital, Parel, was started in 1926, the building being constructed at a cost of Rs. 43,86,000. The bed strength of the hospital during 1930 was 354 including 145 beds for females. This strength increased to 1,595 in 1980.

There are a number of departments, the major being pathology, bacteriology, pharmacology, surgery, medicine, preventive and social medicine, radiology, orthopaedic, neurology, cardiology, gynaecology and obstetrics. Besides, the hospital also runs a leprosy clinic conducted under the Greater Bombay Leprosy Control Scheme, a diabetic clinic, a family planning centre, a school clinic and a blood bank. The following statement shows the position regarding patients treated, beds, etc., during a few years from 1951:—

seht	Patier	Beds	
Year	Indoor Outdoor		
1951	19,148	1,56,888	510
1961	38,197 2,66,879		756
1971	60,079	3,78,015	1,450
1980	55,380	3,69,568	1,595

The Seth Gordhandas Sundardas Medical College is attached to the hospital. It admits 160 students every year.

B. Y. L. Nair Hospital: The management of this hospital was taken over by the Bombay Municipality in 1946.

The large central clinical laboratory, blood bank, full-fledged X-ray department, eye bank, school health clinic, medical check-up centre function in the hospital. The statistics of patients treated and number of beds are shown in the following statement:—

	Patier	Beds	
Year	Indoor Outdoor		
1951	10,036	62,973	250
1961	22,506 1,32,204		336
1971	32,964	32,964 2,49,329	
1980	45,070	10,22,050	830

The Topiwala National Medical College and Nair Hospital Dental College are attached to this hospital.

L.T.M. General Hospital: The Lokmanya Tilak Municipal General Hospital, Sion, formerly known as the Indian Military Hospital and popularly known as the Sion Hospital was taken over by the Corporation in 1946, and in the following year, the Dharavi Municipal Group of Hospitals was started there with 50 beds. In 1958 the hospital was renamed as the Lokmanya Tilak Municipal General Hospital.

It is now a full-fledged hospital with 783 beds including 306 for females in 1977.

Various kinds of facilities and specialised sections such as clinical laboratory, blood bank, child welfare centre, post-natal clinic, check-up centre, family planning centre, eye bank etc. have been provided at this hospital. Under the paying patient's scheme, which was started in 1951, 50 beds have been provided for poor patients. Ten beds are reserved for B.E.S.T. workers.

In regard to patients treated the following statement shows the statistical position for a few years since 1951:—

	Patier	Beds	
Year	Indoor Outdoor		
1951	9,426	51,431	300
1961	25,566 1,51,850		370
1971	44,646	2,53,010	50
1980	52,713	2,97,009	984

The Lokmanya Tilak Municipal Medical College attached to the hospital was started in 1964. During 1976-77 the strength of the college was 315.

The strength of medical personnel in the hospital comprised of 266 doctors and 522 nurses in 1977.

Kasturba Hospital: The Kasturba Hospital situated on the Sane Guruji Marg, formerly known as the City Fever Hospital which was opened in 1892, is maintained for admission and treatment of all cases suffering from infectious diseases. It also imparts instruction to undergraduates and post-graduates and to student nurses.

The paying bed scheme was introduced in 1965. In 1977 total number of beds available for patients was 680. The hospital has paediatric wards, pathology laboratory and X-ray department, clinical laboratory and welfare centre. In the following is given the statistics of admissions and the number of beds in the hospital:—

Year	Total admissions	Beds
1951	6,726	314
1961	25,073	314
1971	31,749	680

During 1977, total number of indoor patients treated was 18,092 as against 11,304 outdoor patients. The medical and nursing staff numbered 50 and 201, respectively.

E.N.T. Hospital: The Ear, Nose and Throat Hospital situated near the Hutatma Chowk was opened in 1962. It

is a specialised hospital rendering medical and surgical treatment to patients suffering from ear, nose and throat diseases. It provides facilities of radiological and sample pathological investigations, operation theatre, and endiology clinic. During 1980 the bed strength of this hospital was 100.

Group of T. B. Hospitals: The Group of T. B. Hospitals, Sewri, was established in 1948 by amalgamating the Maratha Hospital, the Turner Sanatorium and the R. P. T. B. Hospital. Facilities such as out patients department, X-ray, operation theatre and laboratory are available in the hospital. The bed strength during 1980 was put at 1,330. Clinical teaching in tuberculosis is imparted to undergraduate medical students of G. S. Medical College, L. T. M. Medical College and D. P. H. students of the Bombay University.

In the following is given the number of patients treated in the hospital since 1955 for a few years :—

	1955	1960	1965	1970	1980
In-patients	2,260	2,339	5,934	N.A	11,538
Beds	348	458	800	830	1,330

Besides the present bed strength of 1,330 provided in the hospital, 350 beds are hired from private hospitals for tuberculosis patients by the Corporation. The four T. B. clinics situated at Princess Street, Foras Road, Dadar and Khar serve as diagnostic centres for pulmonary tuberculosis patients and treatment centres. These centres also serve as outpatient departments for admission to the Group of T. B. Hospitals, Sewri or Sarvodaya Hospital, Ghatkopar.

Besides the above hospitals, the Municipal Corporation conducts the following other general hospitals:—

Ward No.	Name of hospital	Location	Bed strength (1977)
Н	K. B. Bhabha Hospital	Bandra	165
Н	Municipal General Hospital	Santa Cruz	104
K	Dr. R.N.Cooper <mark>Municip</mark> al General	Vile Parle	520
L	H.K.Bhabha Hospital	Kurla	178
М	D.M.Mehta hospital	Chembur	70
N	S. V. C. Gandhi and M. A. Vora	Ghatkopar	516
Р	Haji Bapu General Hospital	Malad	110
R	H.B.Municipal general Hospital	Borivali	300
Т	S.M.T. Agarwal Muncipal General	Mulund (W)	128
as	Muncipal General Hospital	Mulund (E)	100

The Corporation has also reserved beds in the hospitals managed by charitable trusts. The number of beds reserved are: 20 beds in S. B. C. J. General Hospital, Santa Cruz; 16 beds in Holy Spirit Hospital, Andheri (E); 600 beds in Sarvodaya Hospital, Ghatkopar (W); and 50 beds in S. K. Patil Arogyadham, Malad, thus making a total of 7,209 beds in 1977 in all municipal hospitals.

Trusts Hospitals: Medical needs of people of Greater Bombay are also met with by the big private hospitals. These hospitals are mostly run by the trusts. The details of some of these hospitals are given below:

Acworth Leprosy Hospital: The hospital situated at Wadala was established in 1890 to mitigate the nuisance caused by vagrant leprosy patients infesting the streets and public places in Bombay and to provide a shelter to these patients. The present hospital started functioning as Homeless Leper Asylum, Matunga by the initiative and untiring efforts of late Mr. H. A. Acworth, the then Municipal Commissioner of Bombay. In 1904 the name of the hospital was changed to Acworth Leper Asylum and in 1956 it was again changed to Acworth Leprosy Hospital. The expenditure is shared by the Government and the Corporation in the proportion of number of the non-Bombay domiciled and Bombay domiciled patients, respectively.

Total cases of leprosy treated in the hospital since 1970 are shown below:—

	1970	1973	1976
Indoor	872	820	720
Outdoor	13,746	16,224	19,340

The hospital provided, in 1976, 500 beds, 342 for males and 158 for females. The staff working in the hospital included 17 doctors during 1976.

Teaching facilities for the medical graduates in leprosy are provided by the hospital.

The hospital provides various types of occupations of supervisory, skilled and unskilled nature for the inpatients who are paid monthly wages.

Greater Bombay Leprosy Control Scheme: This scheme financed by the Municipal Corporation, the Government and the Gandhi Memorial Leprosy Foundation in equal share came into existence in 1955 with the aim and objective to control leprosy in Greater Bombay through survey, education and treatment. Upto 1959 it was under the control of the Municipal Corporation and now works under the control and management of Acworth Leprosy Hospital. During 1977 there were 9 clinics in Greater Bombay working under this scheme.

B. J. Wadia Hospital for Children: This hospital situated at Parel was opened in 1929 at the cost of Rs. 16,67,150 of which Municipal Corporation contributed Rs. 7,00,000. Today it is managed by a board of management.

In the beginning it had 126 beds which increased to 250 beds in 1976. There are medical, surgical, orthopaedic, plastic surgery, X-ray, pathology, social service, orthopaedic appliances, physiotherapy and occupational therapy departments in the hospital. A child welfare centre, a well baby clinic, a skin bank as well as a burns research unit are also run by the hospital. A child guidance centre controlled by the Tata Institute of Social Sciences was started in this hospital in 1948. In what follows are given the statistics of patients treated since 1930:—

	1930	1940	1950	1960	1970
Beds	126	135	135	174	250
Patients treated—					
Indoor	926	2,417	2,684	3,833	5,666
Outdoor	9,166	50,474	80,744	<mark>1</mark> ,20,261	65,655

During 1976, 6,535 in-patients and 65,663 out-patients were treated in the hospital.

The hospital had received recognition by the Royal College of Surgeons of London for F. R. C. S. in 1948, by the Royal College of Physicians of London for D. C. H. in 1947, and by the Bombay University for post-graduate courses in 1943. In 1964 it was included in the Bombay paediatric project sponsored by the UNICEF.

Bhatia General Hospital: This hospital situated at Tardeo, was started in 1932 by some industrialists. Originally it was meant for the Bhatia community only, but with the passage of time it was opened to all sections of population.

The hospital runs at present departments like surgical, medical, pathology, radiology, gynaec, ENT, paediatric and dermatological, besides an operation theatre. In the beginning it had only 25 beds which increased to 125 in 1973. During 1971 it treated 4,016 patients as against 4,218 patients, in 1976. The strength of doctors and nurses in 1976 was 11 and 45, respectively.

Bombay Hospital: Realising the difficulties of sick and suffering patients coming from upcountry in obtaining admission in private and public hospitals, Mr. R. D. Birla, the well-known industrialist, donated a large sum and amalgamated the P. A. Singhania Hindu Hospital Trust and the Marwadi Medical Relief Society to form a new trust, viz., the Bombay Hospital Trust which constructed in 1950 a new hospital with the help of donations.

The hospital, situated near Metro Cinema theatre, had in the beginning a bed capacity of 280 which increased to 625 in 1976. Of these 293 beds were paying beds. The number ofpatients treated during 1967, 1971 and 1976 are shown below :—

	1967	1971	1976
Beds	415	402	625
Patients treated-			
Indoor	10,399	9,105	16,402
Outdoor	94,872	93,947	1,30,364

The hospital has as many as 26 departments such as medicine, cardiology, surgery, ENT, obstetrics and gynaecology, out-patients, casualty, etc. Besides there are five operation theatres, a family planning centre, and an intensive cardiac care unit. The medical research centre with 200 beds was opened in 1972. The hospital also carries out laboratory investigations and provides for highly specialised medical and surgical treatmenti. It is one of the best equipped hospitals in Bombay enjoying national reputation.

The Bombay University has recognised nine units of this hospital for post-graduate studies.

During 1976 there were 97 honoraries working in the hospital, whereas resident medical doctors and nurses numbered 87 and 304, respectively.

Children's Orthopaedic Hospital: To provide orthopaedic and physiotherapy treatment for patients afflicted with poliomyelitis and other forms of crippling conditions, the Society for Rehabilitation of Crippled Children started a clinic in 1947. With the expansion in its activities a new building was constructed in 1950. It now provides treatment to children suffering from orthopaedic diseases and poliomyelitis upto 17 years of age.

Today the hospital is equipped with an operation theatre, physiotherapy, occupational therapy, medical social work, X-ray, psychology and psychiatry departments. A cerebral palsy unit was established in 1963 with assistance from the Department of Health, Education and Welfare of the U. S. A. The hospital provides training facilities to medical graduates. The work done by the hospital is shown below for a few years:—

	1965	1969	1973	1976
Cases seen—				
Indoor and outdoor	1,648	1,193	1,196	1,535
Patients admitted	333	348	373	409
Operations performed	516	596	559	680

The number of physio-therapists and occupational therapists working in the hospital in 1976 was nine and seven, respectively.

Holy Spirit Hospital: The Holy Spirit Hospital, Andheri, was started in 1966. It is a general hospital with bed strength of 100 serving a population spread over Andheri and Jogeshvari areas.

The hospital has regular wards such as medical, surgical, gynaecology, paediatric, opthalmic, orthopaedic, ENT, etc. In the following is given the number of patients treated in the hospital since 1971 for a few years:

7	1971	1973	1975
Indoor patients	1,661	2,298	2,488
Outdoor patients			
Free	6,824	8,223	94,591
paying	19,421	23,710	N.A

During 1976, 2,746 indoor and 97,363 outdoor patients were treated. The hospital staff includes 5 resident doctors and 39 nurses.

Harkisondas Narottumdas Hospital: Sir Harkisondas Narottumdas Hospital, popularly known as the Harkisondas Hospital at Girgaum, was established in 1925 with the help of donations from Sir Harkisondas Narottumdas. Started with 40 beds it is, at present, one of the biggest trust hospitals with 351 beds in 1976 at its disposal.

There are well equipped departments such as pathology, medicine, surgery, orthopaedic, neurology, opthalmology, dental, gynaecology, operation theatre, X-ray, family planning, intensive cardiac care unit, out-patients unit, blood bank, nutritions, artificial kidney unit, etc. It provides teaching facilities for housemen and registrars and also runs a college for nurses. Recently it has been recognised for post-graduate and Ph.D. courses by the University of Bombay.

Today the hospital employs nearly 750 hands including 15 medical officers and 40 residential staff. In the following is shown the work done by the hospital since 1971 for a few years :—

	1971	1973	1975
Patients treated—			
Indoor	8,692	8,973	9,114
Outdoor	6,282	8,918	13,424

Jaslok Hospital: The Jaslok Hospital, managed by the Jasoti Lokumal and Mulchand Charities Trust, was established at Cumballa Hill in 1973. It has various departments such as medicine, surgery, ENT, opthalmology, cardiology, dental, gynaecology, obstetrics, etc. The out-patient department has a referal system similar to a system followed by the Mayo Clinic in the U. S. A. It has provided the latest form of radiotherapy and chemotherapy for treatment of cancer. There is one multi-patient artificial kidney unit in addition to an intensive care unit, the largest unit in the country. It is one of the best equipped hospitals with a reputation all over India.

Upto 1974, 6,219 and 3,306 outdoor and indoor patients were treated in the hospital.

During 1976, 16,402 indoor and 1,30,364 outdoor patients were treated in the hospital. During the same period there were 625 beds, of which no charges were levied for 332 beds. The number of doctors and nurses working in the hospital was 188 and 304.

Nanavati Hospital: This hospital was opened in 1950 at Vile Parle with a bed capacity of 50. Various departments like pathology, X-ray, casualty, ayurvedic, occupational therapy, etc. have been provided in the hospital. A casualty section works round the clock in this hospital for the western suburbs people. Besides, there is a family planning section, an immunisation section and a diagnostic centre, the last being for the benefit of workers under the Employees State Insurance Scheme.

The hospital is recognised by the Bombay University for post-graduate teaching of general medicine, gynaecology and obstetrics, and by the College of Physicians and Surgeons for FCPS in medicine and general surgery, diploma in family planning, etc. It is also recognised by the Maharashtra Nursing Council for training of nurses.

In the following is given information regarding patients treated in the hospital for a few years :—

	1952-60	1965	1970
Indoor cases	34,319	7,363	10,354
Outdoor cases	4,11,286	74,429	91,770

Tata Memorial Hospital: The Tata Memorial Hospital, Parel, was established in 1941 by the trustees of the Sir Dorabji Tata Trust, Bombay, with the object of treating cancer and allied diseases. In 1957 the hospital was given as a national gift to the Government of India, and was placed under the control of the Ministry of Health, and subsequently it was transferred to the Department of Atomic Energy. The radiation medicine centre, a wing of the atomic energy was housed in the Tata Memorial Centre to facilitate treatment of cancer patients. The Indian Cancer Research Centre was established in 1952, and during 1967 this unit was amalgamated with the Tata Memorial Hospital. Now this hospital and the Cancer Research Centre form the two units of the Tata Memorial Centre, which has done pioneering work in the diagnosis and treatment of cancer. Its work in this field is unparalleled in India.

The activities of the hospital are classified as service (patient care), education (professional and public) and research.

(1) Patient Care: The patients treated, both indoor and outdoor, number of surgical operations performed, etc. are shown in the following statement for a few years since 1941:—

Year	No.of new patients seen	No.of cancer cases	No.of admissions	No.of surgical operations
1941- 45	12,219	6,686	5,183	4,227
1951- 55	29,249	14,138	8,341	7,880
1961- 65	51,571	27,092	10,754	17,522
1970- 71	14,229	N.A	3,062	10,388
1975- 76	15,145	N.A	5,030	8,942

During 1976-77 there were 5,344 admissions. From 100 beds in the beginning the bed strength increased to 210 in 1976. No fee is charged for 68 per cent of the total beds.

The routine activities of the hospital are undertaken in nine departments including department of social service and rehabilitation. There is also a blood bank.

- (2) *Education*: The hospital staff actively participates in seminars, meetings conducted in medical institutions both within the country and abroad. Members of the staff are recognised teachers of the Bombay University and conduct regular courses of lectures for post-graduate students. The strength of the staff of the hospital in the beginning was 120 which rose to 186 including 74 doctors in 1976.
- (3) Research: The hospital closely collaborates in research activities with the Cancer Research Institute. Clinical research studies in the methods of treatment to improve survival rate have been pursued; immunological studies in oral cancer have been initiated and retrospective case control studies of cancer of oesophagus and cancer of female breast have been undertaken to study the role of certain suspected factors. It has been recognised by the Bombay University as a teaching centre for postgraduate students for M.Sc. and Ph.D. degrees.

Shushrusha Citizen's Co-operative Hospital: The principle of cooperation was practised by some of the doctors and they established the Shushrusha Hospital at Dadar in 1964. It is managed by a board of directors, and its membership includes doctors and non-doctors.

The hospital is a modern institution and caters to the needs of people and provides facilities such as consultation, treatment, medical and surgical facilities, laboratory and X-ray and other special investigations. It also runs a drug store where medicines are sold at reasonable rates. It also runs a maternity home at Vikhroli.

The work done by the hospital and the maternity home, for a few years, is shown below :-

Particulars	Year			
abillia Viali	1971-72	1973-74		
Main Hospital:				
Consultations	5,171	6,159		
Admissions	2,233	2,354		
Operations	1,247	1,394		
Vikhroli Unit				
Registration	503	560		
Admissions	626	634		
Operations	170	170		
Deliveries	437	536		

Central Government Health Scheme: To provide medical relief to the employees belonging to the Central Government and their families staying in Bombay, the Government of India started a scheme in 1963 by opening six dispensaries in South Bombay. During 1974 this strength increased to 15 in addition to one specialists' out-patient department to cover 36,000 Central Government servants residing south of Andheri and Ghatkopar.

These dispensaries were located at Ballard Estate, Bandra, Byculla, Churchgate, Colaba, Ghatkopar, Juhu, Koliwada, Mahim, Malabar Hill, Opera House, Peddar Road, Santa Cruz, Wadala and Worli. Facilities for consultation and free supply of medicines are provided by these dispensaries. A specialists' centre provides consultation by specialists and is equipped with facilities such as X-ray, laboratory, minor operation theatre. Other cases requiring further treatment are referred to the State Government hospitals, the Bombay Hospital, the Nanavati Hospital and the Shushrusha Hospital. Beneficiaries are not required to spend money for the services received by them.

During 1974 there were 55 medical officers and 275 class III and IV staff employed in these dispensaries and specialists' centre. Expenditure incurred under the scheme per family per year came to about Rs. 140. During 1973-74 the total expenditure was to the tune of Rs. 45 lakhs. During the same period 8,29,174 patients were treated.

BARC Hospital: From 1965 to 1975 the Bhabha Atomic Research Centre Hospital was located in the premises of the J. J. Hospital, Byculla. In 1976 the BARC Hospital at Deonar was commissioned with five wards and a bed strength of 110. The hospital has 12 departments. The details of patients treated are given in the following":—

Year	Patients treated			
	Indoor	Outdoor		
1967	1,250	14,134		
1970	1,675	21,932		
1973	1,930	22,401		
1976	3,905	33,051		

This hospital caters to the needs of about 15,000 employees of the Department of Atomic Energy.

There are also hospitals run by some of the Government organisations like the Railways, the Navy and the Bombay Port Trust for the benefit of their employees. The Central Railway runs a hospital situated at Byculla which was started in 1926. During 1977 the bed strength was 315. The other railway hospital managed by the Western Railway is known as the Jagjivan Ram Hospital located at Bombay Central. A hospital was started in 1964 by the Indian Navy at Powai. Amongst semi-Government organisations providing medical facilities for their employees mention may be made of the Bombay Port Trust, which provides a hospital with 160 beds. This hospital was started in 1968 and is located at Wadala (E).

Haffkine Institute for Training, Research and Testing : The Institute is one of the oldest and leading medical research institutes in India and had its origin in 1896 when plague broke out in epidemic form in Bombay.

It has made important contributions in the field of medical research such as studies in the epidemiology of plague, standardisation of plague and cholera vaccine, development of lyophilised polyvalent antivenin against common poisonous snakes in India, etc. It has also made contribution towards the development of technology of production of biologicals.

This Institute, controlled by the Government of Maharashtra, has recently been converted into an autonomous body. Haffkine Institute for Training, Research and Testing is the successor organisation of the former institute. The present organisation was registered under the societies Registration Act, 1860, and started functioning as an independent body from September 1975.

The institute is entrusted with the work such as to study, investigate and improve the means of preventing and curing communicable diseases of man and animals, to conduct research on vital problems of medical field, to provide education in preventive and curative medicines to the medical personnel, to examine clinical specimens, to undertake testing of drugs, to advise various authorities in preventing the infectious diseases, etc.

Researches at this institute are carried out in bacteriology, immunology, chemotherapy, virology, biochemistry, chemical pathology, pharmacology, zoonosis and immuno-haematology. It is affiliated to the Universities of Bombay, Pune, Baroda, Nagpur, Marathwada and Konkan Krishi Vidyapith for the post-graduate teaching and research in medical sciences. During 1976, 134 seats were provided for post-graduate studies. For certificate courses in bioassay and drug analysis it admits 32 students every year. It is also recognised by the University Grants Commission. Scientists of other institutes and industries are provided short term training. In respect of testing, clinico-pathological, histo-pathological and biochemical tests are carried out at this institute. A mobile van for collecting blood from patients suspected to be suffering from typhoid fever within limits of Greater Bombay has been in operation. Samples received from private pharmaceutical companies are tested on payment.

This Institute is recognised as a reference and training centre by the World Health Organisation. A library of the institute is the oldest medical library in India having 18,000 volumes and 200 periodicals.

Dispensaries: For the benefit of the citizens of this metropolis the Municipal Corporation has set up a net work of free dispensaries. These dispensaries have proved very useful fo rtreatment of minor ailments. In recent years there has been over-crowding at the out-patient departments of the municipal general hospitals, making it difficult to medical staff to pay proper attention to each patient. The overcrowding at the out-patient departments is due to attendance of large number of patients requiring only dispensary treatment. With a view to relieving the general hospitals of heavy load of patients, the Corporation has upgraded some of its dispensaries by providing facilities of screening and routine laboratory investigations.

There is a steady increase in the number of free dispensaries in Bombay. During 1920, there were only 12 dispensaries which treated 77,963 new cases. This, however, increased considerably since then as can be seen from the following statement:—

Year	No of Dispensaries	New cases treated
1931	13	87,814
1941	16	1,98,350
1951	24	2,55,835
1961	27 + 1 mobile dispensary	6,03,278
1971	80 +15 mobile dispensaries	27,10,545

During 1977 there was as many as 124 dispensaries, their ward wise break-up was as follows:-

Ward	Α	В	С	D	Е	F/S	F/N	G/N	G/S
Dispensaries	5	5	5	5	12	7	6	11	7
Ward	Н		K	L	М	N	Р	R	Т
Dispensaries	11		9	6	8	7	12	6	2

Of 124 dispensaries, ayurvedic and unani dispensaries numbered two each and were situated in G-North ward and B ward, respectively.

FAMILY WELFARE

Maternity and child health, school health, family planning are the important activities carried out by the Corporation through its medical institutions. In the following is given a brief description of these services:

Maternity and Child Health: It is primarily intended to stop the wastage of human power and to build up future generation. As the maternity and child health service has unique position it occupies an important place in health care of the community. The Municipal Corporation renders maternity and child health services through its maternity homes and child welfare centres. Through these institutions domiciliary care is rendered to impart health education, and health propaganda is carried out amongst mothers. During natal period, mothers are explained importance of family planning. Milk is supplied free to needy and poor expectant and nursing mothers. Arrangement for B.C.G. vaccination, and immunisation is also made in the maternity homes.

The Corporation has started a number of maternity homes for the poor people who are unable to avail of the facilities offered by private hospitals. There were three maternity homes in 1921 in Bombay city which increased to 19 in 1971 in addition to the maternity wards provided in four municipal hospitals. The number of maternity and child welfare centres was 34. The total number of maternity beds increased from 134 in 1931 to 875 in 1971. In 1979 there were 22 maternity homes, 9 maternity wards and 39 maternity and child welfare centres. The scheduled strength of maternity beds was 1376. Paediatric centres were conducted at seven maternity homes during 1977 with a view to providing a service to community in which effective and comprehensive paediatric care can be given outside hospital by promoting good growth and development; providing immunisation facilities; reducing load of hospitals; and providing field and educational experience to doctors, nurses and allied workers.

In the following is shown the work done by all institutions both public and private, doing maternity work, for a few years since 1931:—

Year	No. of institutions	Beds	Confinements
1931	50	N.A.	18,237
1941	104	1,475	34,763
1951	N.A.	N.A.	N.A.
1961	195	2,775	80,995
1971	364	6,029	1,60,747
1979	445	19,358	1,97,926

The ward-wise number of all types of maternity homes during 1979 was as follows:—

Ward	Α	В	С	D	E	F/n	F/s	G/N
Maternity Homes					17 H/W			33 N
	13 p	29 R		12	31	9	22	18
	39	31	29					

School Health: Medical inspection of children studying in municipal schools is carried out by the health department of the Corporation. Parents and guardians of inmates are interviewed and are explained necessity of getting their wards investigated and treated. During 1971 there were six school clinics, and these were functioning at L.T.M.G. Hospital, Sion; K.E.M. Hospital, Parel; B.Y.L. Nair Hospital, Bombay Central; H.B.M.G. Hospital, Borivali; Nair Dental College, and Lions' Juhu Dental Clinic. Minor ailments are treated in the municipal dispensaries and those requiring further treatment are referred to the hospitals. Ailing children attending school clinics are provided milk.

The child welfare centre attached to the J. J. Group of Hospitals, established under the WHO Nursing Education Project, assists the municipal inspection branch in health programme. Assistance is also rendered by the mobile health unit in medical examination of children.

Family Planning: In Bombay efforts to provide family planning services were made as early as in 1925 when Prof. R. D. Karve opened the first birth control clinic in the city. In 1945 the Bombay Municipal Corporation passed a resolution to establish free family planning clinics, and the first two clinics were opened in 1947 at Dadar and Girgaum. In 1949 the Family Planning Association of India was established in Bombay and in 1952 it opened a family planning centre to provide family planning services to city population. In 1957 the Government of India established the Family Planning Training and Research Centre in Bombay. This Institute aimed at offering training to family planning workers. In 1952 a large number of clinics were opened because of impetus given to the family planning movement in city by holding International Planned Parenthood Conference in Bombay during that year.

During 1960 there were as many as 53 clinics in Bombay of which 38 were working in city area. Of 53 clinics doing family planning work, 29 were managed by the Bombay Municipal Corporation, 12 by voluntary organisations, 7 by the Central Government and 5 by the Family Planning Association of India. The total number increased to 62 in 1977, of which 52 were managed by the Municipal Corporation. During the period 1960-1977, 6,20,519 operations were performed by these 62 centres. The strength of staff employed was 367.

The Municipal Corporation has created a separate wing to look after the family planning programme in Greater Bombay. The family welfare unit situated at Parel was established in 1967, and has under its control 52 family planning centres spread over the area of Greater Bombay manned by a staff numbering 217. The work done by the wing in Greater Bombay since 1967 is shown below:—

Year	Sterilisation							
	Vasectomy	Tubectomy	Total					
1967-68	53,193	11,215	64,408					
1969-70	25,474	15,850	41,324					
1971-72	23,927	19,405	43,332					
1973-74	54,548	22,127	76,675					
1975-76	25,473	25,904	51,377					

During 1976-77, 78,707 operations were performed including 40,782 vasectomy operations.

The family planning programme launched by the Corporation is unique in the sense that it has jumped from the lowest rung of family planning ladder to the top by means of courageous and active implementation of novel and unorthodox ideas. Opening of numerous information-*cum-nirodh* distribution centres at railway stations and in crowded localities have facilitated tremendous increase in the distribution of *nirodh* (contraceptives) and spreading the message of small family norm in every nook and corner of the city.

The Family Planning Hospital established in 1971 was the first of its kind in the World. It is a specialised, centralised institution for total family planning care.

Ambulance Services: The Municipal Corporation of Greater Bombay provides ambulance services for removing cases of maternity and street accidents and infectious diseases to the hospitals, the last one on payment within Greater Bombay area. These services are provided by the Fire Brigade, Byculla and Ambulance Garage, Sane Guruji Marg. An ambulance is also attached to the K. B. Bhabha Hospital, Bandra; Dr. D. N. Cooper Hospital, Juhu; H. K. Bhabha Hospital, Kurla; Municipal General Hospital, Ghatkopar; S. H.

B. Municipal Hospital, Borivli; MAA Hospital, Chembur; and Municipal Maternity Homes, Mulund, Mahim, Bhandup and Malad.

PUBLIC HEALTH ORGANISATION

The medical and public health activities in Greater Bombay are entirely carried out by the Municipal Corporation of Greater Bombay. The subject of public health is dealt with by the Corporation and hence the Department of Public Health of the State Government has a little voice in this subject. The controlling authority of public health services is the Executive Health Officer who is responsible to the Municipal Commissioner. The Deputy Executive Health Officer and the Assistant Executive Health Officer with other staff help the Executive Health Officer in his day-to-day work. The public health committee, one of the special committees of the Corporation, gives guidelines to the public health department in order to carry out effectively the public health activities in Greater Bombay area.

The staff in the State Government hospitals works under the control of the Director of Health Services. Bombay.

BLOOD BANKS

A movement of voluntary blood donation in India was started in 1954 on an experimental basis at the St. Georges' Hospital, Bombay. A trust known as the St. Georges' Hospital Voluntary Blood Donation Service was registered in 1955. However it was wound up in 1968 and since then the blood donation service at the St. Georges' Hospital is managed by the Government. St. Georges' Hospital blood bank was declared a regional bank in 1965.

In Bombay there are as many as 22 blood banks working under the control of the Federation of Bombay Blood Banks. The list of these blood banks and transfusion centres is given below:—

Name of blood bank	M <mark>ana</mark> gement				
St. Georges' Hospital	Government				
Cama and Albless Hospital	п				
Gokuldas Tejpal Hospital	0				
Lokmanya Tilak Municipal General Hospital	Municipal Corporation				
B.Y.L. Nair Hospital	п				
Dr. R. N. Cooper Hospital	п				
Rajawadi Municipal Hospital					
Haffkine Institute	Government				
Indian Red Cross	Red Cross				
Jaslok Hospital	Charitable Trust				
Harkisondas Hospital	п				
Bombay Hospital	п				
Breach Candy Hospital	п				
Ma sina Hospital	п				
Nanavati Hospital	п				
Sarvodaya Hospital	п				
Saifee Hospital	п				
B. D. Petit Hospital	п				
St. Elizabeth Hospital	п				
Tata Memorial Hospital	п				
Wacha Hospital	п				
Tata Blood Bank (J. J. Hospital)	Government				

TABLES

TABLE No.1 BIRTHS AND DEATHS BY MONTHS

Year	Births/ Deaths										Total			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1961	Births	7,670	7,434	7,066	8,736	8,789	9,403	9,812	9,384	10,895	11,592	11,840	13,716	1,16,337
	Deaths	4,133	4,820	4,587	3,937	3,292	3,151	3,195	3,378	3,217	3,125	3,050	3,232	43,117
1963	Births	9,211	8,221	9,084	9,991	10,454	9,276	11,292	9,938	12,963	13,172	13,152	15,077	1,31,831
	Deaths	3,051	2,631	2,982	3,263	3,561	3,139	5,919	3,783	3,818	3,665	3,348	3,490	40,650
1965	Births	9,203	9,858	10,720	9,779	10,297	10,419	11,258	11,521	13,879	13,325	16,133	16,389	1,42,781
	Deaths	4,014	4,523	5,442	4,955	4,248	4,381	4,844	4,628	4,884	4,169	4,132	4,203	54,223
1968	Births	9,334	10,925	7,375	13,145	12,368	11,885	12,755	12,355	15,327	14,552	16,951	19,906	1,56,880
	Deaths	4,000	4,273	3,353	4,0 <mark>03</mark>	4,256	3,666	4,533	<mark>4</mark> ,294	4,828	4,654	4,119	4,460	50,439
1971	Births	10,210	10,206	8,842	10,666	11,790	12,194	14,866	12,949	14,841	14,690	19,027	24,012	1,64,293
	Deaths	4,427	4,849	4,702	4, <mark>438</mark>	4,647	4,385	5,001	4,928	5,094	4,955	4,845	5,472	57,245
1973	Births	12,362	11,237	11,749	12,536	13,256	14,559	13,035	13,159	15,737	17,005	21,080	24,424	1,80,409
VIC	Deaths	4,689	5,160	5,482	5,120	4,818	5,076	4,713	5,107	5,396	5,547	5,525	5,298	61,931
1975	Births	11,488	10,638	9,867	12,090	14,469	13,850	14,366	15,577	16,224	18,246	18,592	24,611	1,80,118
	Deaths	5,584	5,045	4,968	6,449	6,449	5,043	5,067	5,866	5,815	5,282	4,979	6,041	65,234
1979	Births	12,887	12,395	12,095	12,103	14,497	16,980	15,193	16,972	20,085	19,632	18,559	31,847	2,04,595
	Deaths	5,406	5,556	5,549	5,116	5,831	6,055	6,239	6,697	6,987	5,802	5,805	6,959	72,002

TABLE No. 2 Births and Deaths by Wards

Wards	1965		19	71	1979		
	Births	Deaths	Births	Deaths	Births	Deaths	
А	4,990	2,095	4,987	2,219	5,339	2,645	
B-1	1,600	736	1,490	574	1,132	564	
B-2	3,330	1,206	3,159	1,202	2,772	1,138	
C-3	3,747	1,574	3,217	1,298	2,704	1,072	
C-1	3,910	1,810	3,175	1,530	2,576	1,932	
D	8,522	3,826	8,345	3,638	8,899	4,426	
E-1	8,164	4,258	7,860	4,093	7,452	3,832	
E-3	6,281	3,155	6,319	2,594	4,504	2,023	
F-S	12,402	4,631	11,718	4,237	11,014	4,926	
F-N	5,873	2,756	6,810	2,737	9,583	4,323	
G-N	10,034	4,994	10,311	4,386	12,502	5,184	
G-S	10,794	4,262	11,550	3,854	12,768	4,131	
Н	13,614	4,551	14,340	4,763	17,619	5,654	
K	12,602	3,809	16,334	4,879	21,743	6,948	
L M	12,500	} 4496	8,721 9,268	2,611 2,708	11,636 15,077	3,616 4,368	
N	10,154	3,022	10,647	3,079	14,772	4,108	
Р	7,214	1,553	10,398	2,579	15,174	3,919	
R	4,054	670	6,638	1,937	12,586	3,589	
Т	2,996	821	8,706	2,327	14,753	3,468	
Total	1,42,781	54,223	1,64,293	57,245	2,04595	72,002	

TABLE NO.3 DEATHS ACCORDING TO AGE

Year	Sex	Age periods									
		Under one year	1— 4 years	5 — 14 years	15 — 24 years	25— 44 years	45 — 64 years	65 — 74 years	75 and above		
1965	Male	7,291	3,796	1,381	1,818	4,817	6,300	2,735	2,554	30,755	
	Female	6,448	4,229	1,313	1,314	2,763	2,607	1,767	3,027	23,468	
	Total	13,739	8,025	2,694	3,115	7,580	8,907	4,502	5,561	54,223	
1971	Male	6,929	3,033	1,219	1,804	5,981	8,289	3,568	3,122	33,945	
	Female	6,044	3,356	1,048	1,200	2,756	3,086	2,191	3,619	23,300	
	Total	12,973	6,389	2,267	3,004	8,73 7	11,375	5,759	6,741	57,245	
1975	Male	7,411	3,158	1,381	2,139	6,654	9,530	4,093	3,600	37,966	
	Female	6,736	3,688	1,105	1,572	3,077	3,655	2,391	4,213	26,487	
	Total	14,147	6,846	2,486	3,711	9,731	13,185	6,484	7,813	64,403	
1979	Male	8,158	2,752	1,262	2,441	8,044	11,743	4,817	4,366	43,583	
	Female	6,920	3,250	1,072	1,615	3,220	4,363	3,050	4,839	28,419	
	Total	15,078	5,992	2,334	4,056	11,364	16,106	3,867	9,205	72,002	

TABLE NO.4 CERTIFICATION OF CAUSES OF DEATHS, BOMBAY CITY

Particulars	Year								
	1931	1936	1941	1946	1951	1956	1961		
Total deaths	25,105	N.A	31,096	41,264	33,841	27,759	32,506		
Verified by District Registrar	N.A	N.A	N.A	25,004	17,318	11,273	12,420		
Certificates of causes of deaths received from -									
(1) Medical officers of hospitals	4,213	6,286	7,260	9,142	9,946	7,922	8,808		
(2) Private medical practitioners	3,484	3,636	4,106	4,264	4,135	5,115	6,886		
(3) Hakims and vaidyas	10	9	76	16	119	22	36		
(4) Commissioner of Police	128	200	152	342	432	392	339		
(5)Coroner of Bombay	621	940	1,175	2,496	1,891	3,035	4,017		
Total	8,456	11,071	12,769	16,260	16,523	16,486	20,086		
Percentage of total certificates received to total mortality	27.3	36.9	41.5	39.8	48.8	59.4	61.7		

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TABLE NO.5 INFANT MORTALITY BY PRINCIPAL CAUSES

Causes of death		Year									
	1961	1963	1965	1968	1971	1973	1975	1978			
Poliomyelitis	5	7	6	36	25	2	13	21			
Small-pox	259	21	229	8							
Measles	51	21	196	22	38	40	50	11			
Malaria fever											
Diarrhoea and Gastroenteritis	1,097	1,125	1,636	1,560	1,637	1,615	1,713	1,810			
Dysentery	40	39	40	55	61	70	44	53			
Congenital malformation and diseases of early infancy.	4,893	5,608	5,877	5,188	5,267	5,487	5,768	6,156			
Diseases of respiratory system	3,543	2,140	4,151	3,140	3,144	3,717	3,701	2,671			
Convulsions	83	35	27	48	43	22	1				
All causes	11,150	10,677	13,739	12,602	12,973	13,976	13,767	13,512			

TABLE No. 6 INFANT MORTALITY BY AGE PERIOD

Age Period		Year										
	1961	1963	1965	1968	1971	1973	1976	1979				
Under 1 week	3,366	3,702	4,424	4,621	5,113	5,292	5,305	5,450				
1 to 4 weeks	1,721	2,086	2,316	2,408	2,432	2,788	2,724	3,030				
4 weeks to 6 months	3,177	2,768	3,955	3,269	3,305	3,548	4,301	4,026				
6 months to 12 months		2,121	3,044	2,304	2,123	2,398	1,817	2,572				
Total	11,150	10,677	13,739	12,602	12,973	13,976	14,147	15,078				

TABLE No. 7 DEATHS DUE TO CAUSES

Area	Year	Measles	Influenza	Enteric fevers	Diarrhoea,enteritis and dysentery	Respiratory diseases	Diphtheria	Total deaths
Bombay City	1921	201	1,389	152	4,957	21,982	N.A.	53,609
	1931	45	130	186	1,295	9,096	25	25,105
	1935	264	72	232	1,235	10,642	28	29,289
	1941	199	44	554	1,374	10,186	70	31,096
	1945	160	32	616	N.A.	13,771	N.A.	40,215
	1951	96	6	262	1,156	8,784	90	33,841
	1955	60	3	211	1,423	5,418	171	28,108
Greater Bombay	1961	150	23	132	2,041	9,940	181	43,117
	1965	580	14	42	3,924	10,601	102	54,223
	1971	194		47	3,737	10,730	97	57,245
	1975	285		49	3,946	11,646		65,234
	1979	90		79	4,657	10,571		72,002

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OTHER SOCIAL SERVICES



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LABOUR DEPARTMENT

IN THE EARLY DAYS OF THE BRITISH RULE IN INDIA in the absence of organised labour the question of having any separate department for labour did not arise. During the later British rule, when with the development of industries, a labour force came into existence, the Deputy Secretary of the Labour Department worked as an *Ex officio* Commissioner of Labour. After Independence many labour laws were amended and new ones were enacted. It was also decided on the basis of the recommendations of the Administrative Enquiry Committee that the post of Commissioner of Labour should be a full-time independent post. Accordingly the office of the Commissioner of Labour with the three directorates was created with the Director as the head of each. These Directors were later designated as Deputy Commissioners of Labour. One of the directorates was put in-charge of various labour welfare centres, Government industrial training workshops and the Bombay Labour Institute. With the constitution of the Bombay Labour Welfare Board, the labour activities were transferred to that Board, while Government industrial training workshops, the Bombay Labour Institute and decentralisation scheme, looked after by the Director of Employment, were transferred to the Commissioner of Labour.

The offices dealing with labour matters are under the control of Industries and Labour Department. The Commissioner of Labour is the head of the organisation and is assisted in his work by the Additional Commissioner of Labour, Deputy Commissioners, Assistant Commissioners, Chief Inspector of Factories, Chief Inspector of Steam Boilers and Smoke Nuisances and Chief Government Labour Officer.

The Commissioner of Labour performs the statutory functions under the Industrial Disputes Act, the Trade Unions Act, the Minimum Wages Act, the Bombay Industrial Relations Act, etc. The working of these Acts is narrated below:

- (1) **Indian Trade Unions Act, 1926**: One of the Deputy Commissioners of Labour at Bombay works as Registrar of Trade Unions. His duties under this Act include registration of trade unions, registration of constitution of unions, etc. During 1976, the number of registered trade unions in Greater Bombay was 1.079.
- (2) Minimum Wages Act, 1948: The Minimum Wages Act is an important legislation passed by the Central Government in 1948. Its object is to prevent 'sweated labour' and exploitation of labour. The Government of Maharashtra have fixed minimum rates of wages under this Act in respect of employment in flour mills, oil mills, public motor transport, residential hotels and restaurants, etc. The enforcement of the provisions of this Act in Greater Bombay applicable to Scheduled employment is looked after by the Government Labour Officer.
- (3) **Bombay Shops and Establishments Act,1948**: This Act is to regulate working conditions of employees employed in shops and commercial establishments, hotels, restaurants, eating houses, etc. The provisions of the Payment of Wages Act are also applicable to the shops covered under this Act. This Act is made applicable to the area under the jurisdiction of Greater Bombay Municipal Corporation.
- (4) **Industrial Disputes Act, 1947**: The industrial disputes arising in establishments other than those amenable to the Bombay Industrial Relations Act, 1946, in Greater Bombay are dealt with by the Commissioner of Labour. The Assistant Commissioner notified as the conciliation officer under the Act handles the disputes. The State Government also refers disputes to the Industrial Tribunals/Labour Courts. Ten such Industrial Tribunals and four Labour Courts have been constituted in Greater Bombay. The Deputy Commissioner of Labour (Administration), Bombay is vested with powers to refer industrial disputes to a Labour Court/Industrial Tribunal where parties to such dispute apply in prescribed manner. The Deputy Commissioner and Assistant Commissioner are empowered to decide the applications made to them for recovery of money due to a workman under the settlement, agreement or an award under this Act.(The Act is applicable to engineering, chemicals and chemical products, pharmaceuticals, petroleum and other industries but not to textile industry.)
- (5) **Bombay Industrial Relations Act, 1946** (*This Act is applicable to textile industry only.*): This Act, which is a State legislation, provides for the registration of unions, settlements, agreements, etc. The Commissioner of Labour is the chief administrative authority under this Act. One of the Deputy Commissioners has been delegated powers regarding settlement of standing orders. The conciliators appointed for the purpose of the Act, try to settle the industrial disputes between employee and employer amicably. During 1976, 39 disputes were settled under this Act in Greater Bombay.

Labour Unions (A detailed history of Labour Movement in Bombay is given in Chapter 5— Industries.): The Assistant Commissioner, Bombay, is appointed as the Registrar under the Bombay Industrial Relations Act. His work is of a *quasi-judicial* nature and is entrusted with the recognition of undertakings and occupations, registration of unions, agreements, settlements, etc. In Greater Bombay area there were in, 1976 seven unions registered as representative unions under the said Act. These were Rashtriya Mill Mazdoor Sangh, Mill Mazdoor Sabha, Woollen Workers' Union (Red Flag), Co-operative Bank Employees' Union, BEST Workers' Union, Bombay Electric Workers' Union, and Tata Hydro Company Employees' Union.

During 1976, 148 agreements, 39 settlements, 25 awards and 9 Wage Board orders were registered under the Bombay Industrial Relations Act.

Undertakings: The number of undertakings registered under the Bombay Industrial Relations Act in Greater Bombay in 1976 was 622.

Wages and Earnings: The wages and earnings of the employees engaged in industries covered under the Bombay Industrial Relations Act are fixed by various awards of industrial courts, settlements and agreements. In cotton textile industry in Greater Bombay the basic wage rates and dearness allowance have been standardised by the Industrial Court.

Industrial Court : This court was constituted under the Bombay Industrial Disputes Act, 1938, to provide permanent official machinery for arbitration in order to decide industrial disputes. The court has jurisdiction to decide disputes arising in cotton, silk and woollen textiles, sugar, electricity industries and co-operative banking in the State of Maharashtra. It acts as a court of industrial arbitration in disputes referred to it by the union, employer or employees. Under its appellate jurisdiction it decides appeals referred from the decision of the Labour Courts, Wage Boards, Registrar and Commissioner of Labour. Reference on the point of law is also made to it. The Industrial Court also decides applications made by employees, or representative unions as regards the interpretation of award, agreement, settlement, etc.

The industrial court exercises superintendence over all the wage boards, labour courts in the State and over the courts of the Commissioner for Workmen's Compensation. It has its benches at Nagpur, Pune and Thane

Industrial disputes arising in the industries not covered by the Bombay Industrial Disputes Act, 1946 are referred to the Industrial Tribunal. The president and the members of the industrial court are also appointed as one man industrial tribunal. The tribunal decides the cases referred by the Government regarding wages, allowances, hours of work, bonus, provident fund, etc. It also decides questions of interpretation of the awards and settlements referred by the Government. There are 10 industrial tribunals functioning in the State of which 6 are in Bombay. In the following are shown number of cases pending, filed and disposed off since 1947 for a few years in the industrial courts/tribunals, in Bombay.

			No. of cas	ses	
Year	Pending at the beginning of the year	Filed during the year	Total	Decided during the year	Pending at the end of the year
1947	107	226	333	208	125
1952	411	1,802	2,213	1,786	427
1957	996	3,273	4,269	2,621	1,648
1962	596	1,146	1,742	1,093	649
1967	1,005	2,234	3,239	1,443	1,796
1972	1,322	1,263	2,585	1,383	1,202
1976	1,988	2,730	4,718	2,117	2,601

Labour Courts: Labour Courts constituted under the Bombay Industrial Relations Act, 1946 decide disputes regarding the orders passed under the standing orders governing relations between employer and employees. It has also power to decide the legality or otherwise of a strike, lock-out, closure, etc. The judges of the Labour Courts are also notified as presiding officers of the courts. These officers decide disputes regarding propriety or legality of an order passed by the employer under standing orders. They also decide complaints made by aggrieved employees during pendancy of a dispute, the question of interpretation of awards or settlements referred to them by the Government. Under the Maharashtra Recognition of Trade Unions and Prevention of Unfair Labour Practices Act, 1971, labour courts deal with cases and offences under the Act. The Judges of the court also deal with cases under various labour laws.

In 1975 there were sixteen Labour Courts in the State, out of which five were functioning in Bombay. In the following are shown cases filed and decided by Labour Courts, in Bombay, under various Acts during 1975:-

	No. of cases				
Act	Pending at the beginning of the year	Filed during the year	Decided during the year	Pending as on 31-12- 1975	
Bombay Industrial Relations Act, 1946	1,307	1,073	555	1,825	
Industrial Disputes Act, 1947	4,650	8,063	3,434	9,279	
Payment of Gratuity Act, 1972	382	1,123	368	1,137	
Recognition of Trade Unions and Prevention of Unfair Labour Practices Act. 1971		34	2	32	
Other Labour Acts	4	7	4	7	

Wage Boards: Wage Boards have been constituted under the Bombay Industrial Relations Act, 1946. There are three Wage Boards for cotton, silk and woollen textiles and sugar industries. Recently one more Wage Board has been constituted for co-operative banking. Disputes about items in Schedule II of the Act, disputes about reduction or increase in permanent posts, rationalisation of wages, workload, hours of work, etc., are referred to the Wage Boards for decision by the Government.

Commissioner for Workmen's Compensation: Under the Workmen's Compensation Act, 1924 the office and the court of Commissioner for Workmen's Compensation was established. Assistant Judges, Civil Judges, Judges of Small Causes Courts, Judges of Labour Courts are qualified to be appointed as the Commissioner. At present there are 3 Commissioners working for Greater Bombay area.

The Commissioner for Workmen's Compensation, Bombay, apart from having original jurisdiction over Greater Bombay area, has also exclusive jurisdiction over all cases of accidents occurring on railway lines of the Central and Western railways and in the Hydro-Electric Companies within the limits of the State. The Commissioner has all the powers of a civil court under the Code of Civil Procedure, 1908. Functions of the Commissioner are not limited to deciding cases but he is supposed to be the guiding force in the settlement of the claims under the Act by mediating disputes, by tendering advice/opinion as regards admissibility of compensation, etc. An appeal lies to the High Court only on substantial guestion of law.

The Commissioner for Workmen's Compensation, Bombay, is the authority under the Minimum Wages Act and the Payment of Wages Act for Greater Bombay area. He is appointed as a judge of the Employees Insurance Court constituted under the Employees State Insurance Act. Under the Bombay Labour Welfare Fund Act, 1953 the claim for payment of unpaid accumulations preferred by workmen are forwarded to the authority under the Payment of Wages Act. The Commissioner and the Additional Commissioner have been appointed as controlling authorities under the Payment of Gratuity Act, 1972 for the administration of the Act. They are also appointed as presiding officers of the Labour Courts constituted under the Maharashtra Recognition of Trade Unions and Prevention of Unfair Labour Practices Act, 1971 to decide complaints relating to unfair labour practices and to try offences punishable under the Act.

Index Numbers: The office of the Commissioner of Labour was publishing consumer price index numbers for Bombay with 1934 as the base year. The Bombay old series were based on family budget enquiry and had become outdated because of change in the consumption pattern of working class over a period of time. There were several complaints that the index numbers were not properly worked out because the prices of several articles were not collected and recorded. For examining those complaints and determining the extent of readjustment in the Bombay old series, the Government appointed the Expert Committee in 1963. The recommendations of the committee were accepted and the new index numbers were published in 1964.

As stated earlier the old series of index numbers for Bombay were based on family budget enquiries conducted long back. The necessity of new index numbers based on the latest family budget was also felt. The Government of India had conducted fresh family budget enquiry in Bombay in 1958-59 and the report was published in 1964. Thus the new series for Bombay on base 1960 = 100 was introduced in 1965. The new series was linked with the old one by linking factor 4.44. The dearness allowances in textile and most other industries in Bombay is generally paid at the rate linked to Bombay Consumer Price Index Numbers. The Government of India had conducted fresh family budget surveys at different centres including Bombay during 1971. The work of preparation of weighing diagrams for the fresh series of 1971 based on these surveys is in progress.

Labour Welfare : Welfare activities for the industrial labour outside the factory premises are conducted by the Maharashtra Labour Welfare Board, a statutory body constituted under section 4 of the Bombay Labour Welfare Fund Act, 1953. These activities are being conducted in the industrial towns and cities including Greater Bombay through labour welfare centres. During 1977, there were 174 such centres in the State, of which 37 were located in Greater Bombay.

Among other things, the labour welfare activities include community and social education including

reading rooms and libraries, community necessities like *shishu sanskar shalas* and *shishu mandirs*, games and sports, excursions, tours, entertainment, home industries and subsidiary occupations for women and unemployed persons, etc. These activities are classified as daily or institutionalised activities.

In the following are shown the location of labour welfare centres in Greater Bombay:-

Kamgar Kalyan Bhavan (1)	Dadar.		
Lalit Kala Bhavans (4)	Worli, Naigaum, N. M. Joshi Marg,Lalbaug.		
Vishishta Kendras (4)	Prabhadevi, Sewree, Kalachowki,Goregaon.		
Labour Welfare Centres (14)	Lalbaug, Ghodapdeo, Mazgaon, Love Lane, Kamathipura, Madan-pura, Jacob Circle, Acharya Donde Marg, Dharavi, Chembur, Transit Camp- Sion, Gandhi Nagar, Malwani and Vikroli.		
Sub-Centres (3)	Chinchpokli, Kurla, Malwani.		
Shramik Vasahat Kendras (11)	Santacruz, Dharavi, Jogeshwari,Malad, Wadala, Chembur, two at Parel and three at Andheri.		

The total attendance as on 31st March 1977 in these centres was 33,158,439.

A worker's stadium project constructed at a cost of about Rs. 40 lakhs on a centrally located plot of 19,760 sq. yards between Elphinstone Road and Dadar is an unique institution for workers. Various facilities such as football ground, open air theatre, library and information centre, ground for indoor games, auditorium, swimming pool, etc, have been provided at this stadium.

Bombay Labour Institute: The Bombay Labour Institute, established in 1947 imparts specialised training to men and women intending to join industries, trade union movement and labour management and administration. It is a post-graduate institute, recognised by the Bombay University, working for specialised training and research in the fields of labour welfare and industrial relations. The institution conducts a course leading to master's degree in labour welfare and industrial relations of the Bombay University and provides facilities to the students in their doctoral research.

Since 1959 this institute is recognised as a post-graduate institution imparting specialised instructions leading to a two years diploma in labour welfare of the Bombay University. With the growing complexities of modern industrial work and life, the whole perspective of labour welfare has considerably widened rendering it necessary to rationalise the training programme enabling the trainees to discharge their duties and responsibilities. With this view in mind the diploma in labour welfare was upgraded to master's degree in labour welfare of Bombay University in 1970. The University has instituted the master's degree in labour welfare and industrial relations in place of master's degree in labour welfare from the academic year 1974-75.

The institution also runs a full-time nine months leadership training programme in trade unionism and industrial relations with specific emphasis on participative management. Besides, it undertakes the specialised in-service training programmes for Government labour officers.

The diploma course in trade unionism and industrial relations provides intake capacity for 120 students every year. The duration of the course is nine months. From 1975-76 fresh graduates are also admitted to the course.

The institute publishes a journal, viz., Bombay Labour Journal, an annual devoted to scientific study of labour problems.

The Professor-Director, who is in-charge of the institute, looks after the teaching as well as administrative work.

During 1969, a labour cell was set up at the Bombay Labour Institute with a view to scrutinise labour items appearing in newspapers and to point out the suitable action in time; to compile statistical data having a bearing on labour matters; and to study the comparative labour problems and labour trends in the country and abroad.

The following statement shows the statistics regarding the number of students completing diploma

Particulars	Year			
	1961	1965	1971	1974
No. of students completing Diploma or Degree course.	14	83	32	44
No. of teaching staff including Professor Director.	5	8	8	9
No. of administrative staff	8	9	9	11

Factory Department: The first Factory Act was brought into force in July 1881. This Act was amended for the first time in 1891 and several times afterwards. In 1981 the centenary of the Factory Act was celebrated. Factories are governed at present by the Factories Act of 1948.

The Chief Inspector of Factories ensures that the provisions of the Factories Act, 1948 are observed by the factory owners. Besides, he has to administer the Payment of Wages Act, Maternity Benefit Act, Employment of Children Act, so far as section 9 of the said act is concerned. Although the department is not directly concerned with the administration of the Workmen's Compensation Act, it helps the injured workers and heirs of the deceased in getting compensation under the Workmen's Compensation Act.

Steam Boilers and Smoke Nuisance Department: It is responsible for the administration and enforcement of the Indian Boilers Act, 1923; the Indian Boilers Regulation, 1950; the Maharashtra Boilers Rules, 1962; the Maharashtra Economisers Rules, 1965; and the Bombay Smoke Nuisances Act, 1912. The department is primarily concerned with the registration and inspection of steam boilers and their certification in order to ensure that they are maintained as per the conditions prescribed by the above Acts. The Inspectors appointed under the Bombay Smoke Nuisances Act, 1912 deal with approval of plans for erection, renewal of furnaces and chimneys in the industrial establishments.

PROHIBITION AND EXCISE DEPARTMENT

Prior to the imposition of prohibition in the State there were no restrictions on drinking. In the absence of any industrial production of wine or liquor, the country liquor was a favourite drink of the people. As a matter of fact drinking is known from times immemorial and in history we find instances of puritanical Emperors like Aurangzeb, making drinking an offence. The free use of country liquor proved dangerous to health and affected social morale. There was growth in crime and the Government was hard put to deal with it. Taking these factors into consideration the Government decided to prohibit consumption of intoxicant liquor and accordingly prohibition was imposed in the then Bombay State in 1950. This step was aimed at the moral, ethical and economic uplift of the common man and achievement of peaceful living conditions in society.

The restrictions were thus put on consumption, sale, use, etc., of intoxicant liquor. It was thought that this would find an effective check on manufacture of country liquor. But this policy proved ineffective as the law could not check effectively the drinking habits of the people. The lack of social education was also one of the major factors responsible for this failure.

The Maharashtra Government, therefore, relaxed its prohibition policy in 1973. As per the new prohibition policy a licenced person above 21 years can consume, use, transport any quantity of liquor. A number of sugar factories and firms in the State were allowed to manufacture wine, liquor, beer which to some extent checked the production of country liquor by illicit methods. This policy also resulted in an increased revenue due to excise.

Organisation: The Commissioner of Prohibition and Excise posted at Bombay is the head of the department. The different activities of the department are controlled and co-ordinated by the Commissioner with the assistance of Director of Prohibition (Education), Deputy Commissioner, Chief Assessment Officer and Assessment Officer. Field staff such as Inspectors, Sub-Inspectors, Constables and Prohibition Propaganda Officers assist the Superintendent of Prohibition and Excise in carrying out the functions assigned to him. The number of Inspectors and Sub-Inspectors of Prohibition and Excise was 25 and 180, respectively in 1976; while that of constables was 258.

Functions: The main functions of the department are confined to licencing, inspection of licences and enforcement of various controls enacted under the prohibition laws particularly the Bombay Prohibition Act, 1949. The officers of the department have also to do the prohibition propaganda and supervise recreation centres in their charge and cooperate with the Police Department in their duties of prevention and detection of prohibition crimes. In respect of responsibilities of officers of this department, they are expected to take cognizance of all offences committed by or in the establishments licenced by it or expected to be inspected by it as also other offences that may come to the notice of the prohibition and excise officers during the course of their duties. These officers have powers under the Bombay Prohibition Act, 1949 to prosecute independently the offences in respect of cases detected by them instead of passing them on to the Police. The prohibition staff is responsible for supervision over bonded manufactories, warehouses, foreign liquor shops, *neera* centres, distilleries, sugar factories for supervision over molasses, management of the drug sale depots and inspection of various other excise licences. They are also required to associate themselves with the ameliorative and social aspect of prohibition and tighten the loopholes where such loopholes exist.

Foreign Liquor: Under the Bombay Foreign Liquor Rules, 1953 framed under the Bombay Prohibition Act, 1949 various licences such as trade and import licence, vendors licence, hotel licence and club licence are granted. The details regarding number of each kind of foreign liquor licences granted in Greater Bombay and in the State as on 1st September 1974 are given below:—

Particulars	Bombay	State of Maharashtra	Total
Trade and Imports	115	167	282
Vendors	726	1,103	1,829
Hotels	59	69	128
Clubs	15	5	20

In addition to the above, licences authorising storage in bond of foreign liquor are granted under the Maharashtra Foreign Liquor (Storage in Bond) Rules, ,1964. In Greater Bombay there were 27 such licencees as on 1st October 1974. There were 375 licencees in Greater Bombay who were permitted to sale mild liquor (Beer) in hotels and restaurants under the Special Permits and Licences Rules, 1952.

Various permits under the Bombay Foreign Liquor Rules, 1953, *viz.*, temporary resident's permits, health permits, emergency permits, special permits for priviledged personage and visitor's permits have been prescribed.

The Government recently rationalised its policy in so far as the grant of foreign liquor permits to persons above 21 years of age are concerned. The health permits which were in existence on 14th September 1972 have been made valid for an indefinite period and the persons holding these permits are entitled to any quantity of foreign liquor. These permits are now available on payment of Rs. 2. The Government also relaxed its policy by reducing the rate of excise duty and sales tax on Indian made foreign liquors.

Toddy: The Government of Maharashtra sanctioned the introduction of the *toddy* scheme in the State with effect from 1st December 1968. Under this scheme the free sale of *toddy* upto 5 per cent alcohol by volume to persons over 21 years of age is permitted. The licences for sale of *toddy* are disposed off by public auction.

Neera : The *neera* scheme is implemented by the Maharashtra State Khadi and Village Industries Board through Neera Tad Padarth Sahakari Mandali Ltd., Bombay. The total number of *neera* centres in Greater Bombay during 1970-71 was 67 which rose to 110 in 1976-77.

Medicinal and Toilet Preparations : The aims of the Medicinal and Toilet Preparations (Excise Duties) Act, 1955 are to provide for the levy and collection of excise duties on medicinal and toilet preparations containing alcohol, opium, Indian hemp, other narcotic drugs and narcotics at the rates prescribed in the Act.

The rules provide for the licencing of the manufacture of allopathic, ayurvedic, unani, homoeopathic and toilet preparations requiring alcohol.

Industrial alcohol: The Konkan Development Corporation Ltd., Bombay was granted a licence in form 'I' under the Maharashtra Distillation of Spirit and Manufacture of Potable Liquor Rules, 1966 for the manufacture and sale of industrial alcohol. The actual issue of industrial alcohol during 1971-72 and 1973-74 was as shown below:—

		4		
Captive use			Estimated requirements fo the year	
	1971- 1973- 72 74		1974-75	
	Lac Liters	Lac Liters	Lac Liters	
(1) Union Carbide Ltd., Bombay.	169.84	172.52	180.20 imports	
(2)Polychem Ltd., Bombay	17.90	19.28	20.00	

Messrs.Konkan Agro-Marine Industries Pvt. Ltd., Bombay was granted licence in form ' I' in 1972 for the manufacture of alcohol for use in the manufacture of Indian made foreign liquor under P.L.L. licence held by it.

Potable Liquor, Beer and Wine: After the enforcement of the Maharashtra Distillation of Spirit and Manufacture of Potable Liquor Rules, 1966 and the Maharashtra Manufacture of Beer and Wine Rules, 1966 the following parties were granted the licences for the manufacture of potable liquor (Indian made foreign liquor) and beer and wine:—

Name of Company	Year in which Licence was issued
(1) Konkan Agro-Marine Industries Pvt. Ltd.,Bombay.	August 1972
(2) Messrs. Sanghi Motors (Bombay) Pvt. Ltd., Bombay.	November 1969

Category	Year in which issued
(a) Potable Liquor	
(1) Shri S. D. Lalla, Bombay	January 1973
(2) Kay Distillery Industry Ltd., Bombay	February 1974
(3)Jayem Distilleries Ltd., Bombay	January 1974
(4)Shri S. K. Shirodkar, Hindustan Beverages Co., Bombay.	September 1974
(b) Manufacture of Beer	
(1) Hanson Breweries Ltd., Bombay	September 1974
(2)Western India Steel Traders, Bombay	January 1973
(3) Messrs. Indian Engineering and Commercial Corporation Pvt. Ltd., Bombay.	January 1973
(4) Shri S. D. Lalla, Bombay	July 1973
(5)Messrs. S. S. Miranda Pvt. Ltd., Bombay	October 1972
(6) Messrs. Alok Manda <mark>li</mark> a, B <mark>om</mark> bay	November 1973
(7)Shri J. M. Nadkarni of Jayam Breweries, Bombay.	November 1973
(8) Shri J. N. Rathi, Bom <mark>ba</mark> y	November 1973
(9) Shri K. G. Nariman, Bombay	November 1973
(10) Bombay Breweries Ltd., Bombay	November 1973
(c) Manufacture of Wines	azet
(1)Messrs. A. R. P. S, (India) Ltd., Bombay	January 1973
(2)Shri S. D. Lalla, Bombay	July 1973

Denatured Spirit: The ordinary denatured spirit is used in the manufacture of French polish, varnish and thinners. This spirit is manufactured by the distilleries by adding 0.5 per cent caoutchoucine and 0.5 per cent pyrine as denaturants to rectified spirit produced by them. There were 29 parties in Bombay who held licences for the wholesale distribution of this spirit. For retail sale of ordinary denatured spirit to the domestic consumers etc., in bottles there were 146 retail licences in Bombay during 1973.

Drugs Sale Depot: There are 24 sale depots throughout the State for the sale of opium, *ganja* and *bhang* in packets of various denominations to the permit/licence holders. The requirements of various sale depots are now being met from the opium and hemp drugs packing and supply depot at Boribundar Excise Station, Bombay. The packing depot is placed under the control of the Superintendent of Prohibition and Excise, Bombay.

Country Liquor: In order to combat effectively illicit liquor trade in the State, the Government announced in 1973 the introduction of liquor (country liquor) at cheaper rate. The country liquor is permitted to be manufactured under licences granted to the distilleries holding licences for distillation of spirit and persons holding licence for possession and use of rectified spirit issued under the Maharashtra Country Liquor Rules, 1973. The second category of persons are granted licences to manufacture country liquor provided they import spirit from outside the State and no manufactory is allowed to be located in Greater Bombay area.

The manufacture of country liquor is under licence and under excise supervision, and the cost of the supervisory staff is borne by the manufacturers. Warehouses for the storage and wholesale sale of duty paid country liquor are required to be opened and managed by the manufactories holding licences for manufacture of country liquor. Such manufactory holding licence to manufacture of country liquor is required to open its Warehouses at Bombay, Pune, Nagpur and in such other two districts as may be specified by the Commissioner of Prohibition and Excise.

The permits for possession, use, consumption and transport of country liquor are issued on payment of Rs. 2. These permits are valid for an indefinite period. 14 C.L.II licences, 171 C.L.III licences and 250 C.L./F.L./TOD-III licences were in force in Greater Bombay as on 30th June 1974.

Propaganda and Recreation Activities: For successful implementation of prohibition education, propaganda and recreation activities are conducted throughout the State. While carrying out these activities, advice of the various committees such as the Maharashtra State Prohibition Board, District Prohibition Committee is sought for. This propaganda is carried out through Prohibition Propaganda Officers and Honorary Prohibition Organisers, most of whom have been provided with vans to enable them to arrange film shows, meetings etc., and entertainment programmes such as *kalapathaks*, dramas, *bhajans* and *kirtans*. Recreation-cwm-amelioration facilities are provided through departmental *sanskar kendras*. An essential part of the rationalisation of prohibition policy by Government is education of the people about the evil effects of drinking by vigorous prohibition propaganda and ameliorative activities to wean the poor people, especially the younger generation, away from the drink habit. Government has sanctioned grants for intensifying educational and propaganda activities against the drink evil. There were 7 such *kendras* in 1960-61 in Greater Bombay run by the department. This strength has however reduced to 6 in 1980-81.

Offences: Various offences committed under prohibition and excise laws are shown in the Table No. 1.

Revenue : Total collection of excise revenue *in* Greater Bombay in 1970-71 was Rs. 57,255,124 which increased to Rs. 113,284,595 in 1975-76.

TABLE No.1
Offences under Prohibition and Excise Laws

Particulars Particulars Particulars Particulars	Year			
	1960- 61	1965 - 66	1970 - 71	
(1) Offences relating to liquor—				
(a) Illicit distillation and possession of implements etc. for the same.	6,468	19,866	5,761	
(b) Illicit importation, exportation and transportation.		182	121	
(c) Illicit possession	73,315	98,485	28,618	
(d) Unlicenced sale			158	
(2) Offences relating to hemp drugs	281	509	183	
(3) Offences relating to opium	62	30	15	

During 1980-81 the regular executive staff detected 1,548 prohibition offences.

SOCIAL WELFARE DEPARTMENT

The creation of a department of this nomenclature is the result of the new concept of a welfare State, where priorities are given to weaker sections of the community. At the secretariat level a new department of Social Welfare was created after the reorganisation of States in 1956, whereas at the directorate level the department came into existence in 1957. The backward class welfare work done by former Backward Class department was entrusted to this newly created department.

The Department of Social Welfare deals with the welfare of weaker sections of the society, *viz.* the backward classes like scheduled castes and tribes, etc., and socially handicapped persons like the destitutes and needy children, women in distress or in moral danger, beggars, physically handicapped persons like blind, deaf-mute as well as aged and infirm and leprosy affected persons.(*Information about many institutions for beggars and physically handicapped is given in Chapter 18.*)

Welfare of backward classes: The term backward classes consists of scheduled castes including neo-Buddhas, scheduled tribes, nomadic tribes, vimukta jatis and other backward classes. As per the 1971 Census the population of scheduled castes and scheduled tribes in Greater Bombay was 2,10,497 and 30,016, respectively.

The schemes for the welfare of backward classes fall into three main sections *viz.*, education, economic and housing and others. Under educational uplift are included grant of freeships and scholarships, examination fees, running of hostels, grants to hostels run by voluntary agencies, etc. These educational concessions form a very important part of the backward class welfare programme. During 1978-79 the number of backward class students was 39,332 of which 13,632 were girl students.

As regards post-S.S.C. scholarships, 3,866 backward class students including 356 girl students were awarded scholarships amounting to Rs. 31,64,000 during 1977-78, the *per capita* expenditure being Rs. 818. An expenditure of Rs. 21,24,000 was incurred on account of tuition fees and examination fees during 1977-78. The number of beneficiaries was 38,213 including 2,097 girls. During 1978-79 an amount of Rs. 16,10,000 was awarded as freeship to the students belonging to backward classes.

In order to encourage students from the backward classes, the Government have started Government hostels for boys and girls. In the following statement are shown the details of Government hostels located in Greater Bombay:—

Name of Hostel	Sanctioned strength (1978- 79)
Sant Meerabai Girls' Hostel, Worli	120
Sant Eknath Vasatigriha for Boys, Worli	170
Government Hostel for Boys, Goregaon (W)	120
Government Boys Hostel, Jogeshwari (opened in March 1979)	175

During 1977-78 three hostels accommodated 628 students including 290 girls and the expenditure incurred amounted to Rs. 12,31,825, the *per capita* expenditure being Rs. 613. Besides there were six hostels for backward classes run by voluntary agencies. Under the economic uplift, financial assistance is given to the backward class persons for improvement of agriculture, starting new business, etc. A separate employment cell was created for the backward class candidates in Bombay in 1978. This cell is entrusted with registering backward class candidates and sponsoring and seeking employment for them. As many as 15,628 candidates were on the live register during 1977-78, of whom 300 candidates were placed in employment.

The Government established the Mahatma Phule Backward Class Development Corporation in 1978-79 with its headquarters at Bombay to undertake the economic development of backward classes.

In Bombay are located the offices of the Divisional Social Welfare Officer and the Social Welfare Officer, Greater Bombay. The Social Welfare Officer, Greater Bombay, executes the schemes of the department and also co-ordinates work of other departments relating to backward class welfare in Greater Bombay district. The Placement Officer looks after the employment cell.

CHARITY COMMISSIONER

Though the office of the Charity Commissioner as such was not in existence in the past, there was a convention of taking over the estates of the deceased or minors in mediaeval times under State Administration though the reasons for the same were totally different. Even in the time of the Peshwas this system appears to be current. The British under their various rules and regulations continued it after they established themselves finally.

The religious and charitable trusts in the State prior to 1950 were governed under various enactments, Central as well Provincial based on religion. In 1950 a composite legislation called the Bombay Public Trusts Act of 1950 was passed which was made applicable to all public trusts without any distinction of religion.

The State Government is empowered to apply this Act to any public trust and on such application the provisions of the previous Acts cease to apply to such trust or class of trusts. The Act was made applicable in the old Bombay State from January 1952 to the various classes of public trusts such as temples; *maths; wakfs* \ public trusts other than temples, *maths* and *wakfs* created or existing solely for the benefit of any community or communities; societies formed either for religious or charitable purposes, or for both and registered under the Societies Registration Act, 1860; *dharmadas i.e.*, any amounts which according to custom or usage of any business or trade or agreement between the parties relating to any transaction are charged to any party to the transaction or collected under whatever name as being intended to be used for a charitable or religious purpose; and all other trusts, express or constructive, for either public or religious or charitable purpose or for both.

The Act has not been made applicable to the charitable endowments vested in the treasurer of charitable endowments under provisions of the Charitable Endowments Act, 1890.

The Charity Commissioner with headquarters at Bombay has been appointed to administer the Act. The Deputy Charity Commissioner with assistance of two Assistant Charity Commissioners looks after the Greater Bombay region.

Duties of Trustees: The Act imposed a duty on the trustees of a public trust to make an application for the registration of the trust within three months of the application of the Act or its creation giving particulars of approximate value of movable and immovable property owned by the trust, gross average annual income and expenditure. Every trustee has to keep regular accounts of the trust which are to be audited annually by a chartered accountant or a person authorised under the Act. The trustee of a public trust is bound to invest the surplus funds of the property in public securities or first mortgage of immovable property.

Application of funds by cypres: If the original object of a public trust fails wholly or partially, or in case of public trust, other than a trust for religious purpose, if it is not in the public interest practicable or proper to carry out the original intention of the author of a public trust, an application can be made to the City Civil Court, Bombay for application *cypres* of the property or income of the public trust or its portion.

If there is a breach of trust or a declaration is necessary that a particular property is the public trust property or a direction is required for the administration of any public property, two or more persons having interest in the trust or the Charity Commissioner can file a suit in the City Civil Court, Bombay to obtain reliefs mentioned in the Act.

Sole Trustee: The Charity Commissioner may with his consent be appointed as a trustee of a public trust by a court or by the author of a trust, provided his appointment is made as a sole trustee. The Court

is however not empowered to appoint the Charity Commissioner as a sole trustee of a religious public trust

Charitable Endowments: The Charity Commissioner is deemed to be a treasurer of charitable endowments for the State of Maharashtra appointed under the Charitable Endowments Act, 1890. In case of religious and charitable endowments which vest in the State Government they are to be vested in the committees of management to be appointed by the State Government.

Statistics: The total number of public trusts in Greater Bombay as on 31st December 1953 was only 5,003, which increased to 10,915 on 31st December 1968 and again to 16,473 on 31st December 1976.

The break-up of these trusts is shown below:—

Category A B C D E F
(Hindus) (Muslims) (Parsis) (Others) (Cosmopolitan) (Societies)
Number 3,122 1,247 1,161 246 6,473 4,224

During 1976 as many as 811 public trusts were registered in the Greater Bombay region. The highest number of 442 trusts belonged to F section.

HOUSING

Bombay, being one of the leading business centres, attracts population from every corner of the country. The inflow of population has been heavy since the Second World War. The network of transport and other infrastructure facilities considerably helped the growth of industries, business and trade. The heavy inflow of people created however many civic problems including housing accommodation. The shortage of accommodation in turn caused a rise in rents of premises and prices of open land. Private landlords added fuel to fire by introducing the *pagdi* system. To overcome the situation the Government stepped in the house building activity and established a board to take up the responsibility for constructing houses for low income group and middle income group persons.

The Bombay Housing Board was created in 1949 for the then Bombay State. After the bifurcation of the Bombay State, *it* was renamed as the Maharashtra Housing Board. Although this board was to look after the Western region of the State its activities confined mainly to the Greater Bombay area. During 1960-61 the number of tenements in Greater Bombay was 21,425. There was considerable increase in the next ten years and in 1970-71 the number of tenements stood at 56,593.

In 1965 the Government of Maharashtra appointed a committee to investigate into the cases of collapse of the old buildings in Bombay city. The recommendations of this committee led to the formation of the Bombay Building Repairs and Reconstruction Act, 1969 and accordingly a board was constituted to carry out structural repairs to old and dilapidated buildings.

Another statutory body dealing with housing problem was the Slum Improvement Board created under the Maharashtra Slum (Improvement, Clearance and Redevelopment) Act, 1973. This board was charged with the responsibility of providing basic amenities to the people living in slums.

These three above mentioned statutory bodies were brought in 1976 under the newly created body, *viz.*, the Maharashtra Housing and Area Development Authority with its headquarters at Bombay. The Bombay Housing and Area Development Board, a regional body for the Bombay region was also constituted. This board having its jurisdiction over Bombay, Thane, Raigad, Ratnagiri and Sindhudurg districts is functioning as the principal public agency in providing shelter in Greater Bombay.

The earliest housing schemes included houses for industrial workers, and rental schemes for the lower, middle and higher income groups. Now the public housing agencies are not constructing housing tenements on rental basis due to problems of rent recoveries, maintenance, etc. Most of the newly constructed tenements are under the ownership scheme with financial assistance of the HUDCO.

The Bombay Housing and Area Development Authority in the recent past has been constructing on an average 2,800 housing units per year. In the following statement are shown the number of housing units constructed and the expenditure incurred on them since 1973-74:—

HOUSING UNITS

Year	Economically weaker section	Lower income group	Middle income group	Higher income group	Total	Expenditure (Rs. in millions)
1973-74	680	485			1,165	29.73
1974-75	1,152	1,100	79		2,331	24.97
1975-76	7,480	1,340			8,820	32.11
1976- 77	1,620		40		1,660	63.70
1977-78	1,080	200	516		1,796	57.71
1978- 79	120	976	1,016		2,112	77.88
1979-80	920	840	100	220	2,080	65.12
Total	13,052	4,941	1,751	220	19,964	351.22

Of the 19,964 housing units, a major sha<mark>re (65.38 per cent) was for t</mark>he economically weaker section. The percentage shares for the lower, middle and higher income groups were 24.75, 8.77 and 1.10, respectively.

Along with public housing agency, the private sector is busy in constructing houses. The following statistics based on the building permissions granted by the Bombay Municipal Corporation in Greater Bombay show the performance of the private sector:—

	Year Housing units constructed					
7	II a 3 i	Private sector	Co-operative Societies	e Employers for employees		
1	.973-74	8,059	5,046	736	13,841	
1	.974-75	9,763	5,503	801	16,667	
1	.975-76	8,611	5,170	718	14,499	
1	.976-77	10,557	5,029	462	16,048	
1	.977-78	9,128	4,083	547	13,758	
1	.978-79	9,282	2,936	61	12,279	

The private and co-operative sectors together have been contributing around 12,000 housing units per year. The performance of all the agencies put together, namely private and co-operative sectors and the Bombay Housing and Area Development Authority accounts for the annual creation of conventional new housing stock of about 15,000 units, in recent years.

In older parts of the city there are a number of buildings constructed during the pre-war period. On account of low rent the landlords found it difficult to maintain these dilapidated buildings. By the end of 1960 the problem of such old buildings assumed alarming proportion, and in 1969 the Government opted to accept the responsibility of repairs or reconstruction of such buildings. About 20,000 buildings in the city were identified in 1971 as requiring urgent repairs. The task of carrying out repairs has been completed by the Bombay Housing and Area Development Board in respect of 5,582 buildings. Transit camp facilities are provided to the tenants of the buildings under repairs. One such transit camp at Sion-Koliwada provides 5,458 tenements.

Slum Improvement: The growth of slums in cities is one of the difficult problems brought in by industrialisation and urbanisation. Bombay city presents a classic picture where provision of housing does not keep pace with increased influx of population on account of job opportunities. For decades, thousands of families have migrated to Bombay in search of livelihood. It was estimated that on an average 350 migrants are added daily to the city's population. Under these circumstances it is impossible for the State or Local Authority to provide well built houses. When the migrants find well-built homes beyond their means, they start building shelters wherever open space is available in the city with whatever building material available. This led to the development of slums in Bombay.

Greater Bombay which attracts thousands of people in search of job has the highest density of slum dwellers in the country. According to the survey undertaken by the Municipal Corporation in 1956-57 there were 144 localities having a total area of 350 hectares in Bombay city designed as slums. The number of residential buildings in these areas was 7,591, besides 4,238 huts and 1,360 non-residential structures. In all 83,451 families were staying in these areas. The number of slum areas in suburbs and extended suburbs was 65 accommodating nearly 35,000 families. According to 1961 Census the slum population in Greater Bombay was put at 7,61,079. Thus, nearly one-sixth of the population was living in slums. City's slum population was estimated at 13 lakhs in 1971, which accounted for more than 20 per cent of total population. This figure does not include a large number of houseless persons living on road side, railway bridges and along the railway lines.

Initially in the first decade after Independence the Government adopted the policy of slum clearance by eradication of shanty colonies and rehousing of slum dwellers in permanent structures built on the same site by subsidising cost of construction. In 1958 a centrally sponsored programme was started for clearance and improvement of slum areas and rehousing of slum dwellers whose income did not exceed Rs. 350 per month. As per the programme nearly 21,000 units were constructed. However the construction activity could not keep pace with increased demand. The cost of construction was on the increase, and thus the houses built were beyond the paying capacity of slum dwellers. It was soon realised that eradication of slums was nearly impossible and hence the Government decided to undertake a scheme of providing minimum amenities to the slum dwellers. In 1971 the Slum Areas (Improvement, Clearance and Redevelopment) Act was passed. This Act enables the Government to undertake improvement of slums on all lands. The improvements under this Act include provisions of water supply, drainage, common toilets, etc. The slum dwellers are protected from eviction by landlords and are ensured reallocation upon development.

A census of hutments was undertaken by the Government of Maharashtra in January 1976. This census however was restricted to the hutment colonies on the lands which belonged to the Government, the Bombay Municipal Corporation and the Housing Board. With the help of 7,000 enumerators, 847 colonies consisting of 2,60,337 huts were covered in a single day. This was the first measure to gauge the magnitude of the problem and to regulate and control the existing slum colonies. The results of the Census were as follows:—

Land belonging to	Pockets	Huts
Government	440	89,571
Municipal Corporation	306	1,12,764
Housing Board	101	58,002
Total	847	2,60,337

The Government thereafter formulated a policy for protection, removal, rehabilitation and improvement of slum colonies. The entire cost of demolition, transport, etc. is borne by the Government and local authorities. In order to prevent proliferation of slums and to protect the existing colonies from being encroached upon by new slum dwellers and to bring about a co-ordination between the various public authorities, the State Government appointed a Controller of Slums. The staff working under him is entrusted with the work of management of colonies and patrolling of open areas and for recovery of compensation and service charges. The slum dwellers are required to pay a sum of Rs. 20 per month for an area of 150 square feet occupied by them for residential purpose.

As per the comprehensive plan for removal and resettlement nearly 6,000 slum families were shifted and settled before 1976. In addition to this, the Bombay Municipal Corporation had shifted the Janata Colony near Anushaktinagar, Trombay, consisting of 5,000 hutments to the other area.

Before formation of the Bombay Housing and Area Development Board, the Maharashtra Housing Board, the Slum Improvement Board alongwith the Municipal Corporation were actively concerned with the issue of slum clearance.

Housing Board : A slum clearance scheme sponsored by the Government of India was undertaken by the Board in 1960-61. This scheme covered slum dwellers whose income did not exceed Rs. 350 per month. As many as 14,510 tenements were constructed by the Housing Board upto March 1975. The areawise distribution of these tenements were: Andheri, 880 tenements; Bandra, 288; Goregaon, 3,700; Ghatkopar, 672; Malwani, 1,500; Mahim, 1,200; Sion-Koliwada, 128; Tardeo, 128 and Vikhroli, 5,814.

The Board had also undertaken the Western Express Highway Slum Clearance Redevelopment and Rehabilitation Project in Bombay. Under this project it was proposed to construct 1,700 tenements and 9,200 beds in night shelters and dormitories costing Rs. 16.70 crores to rehabilitate slum dwellers.

Municipal Corporation: The Municipal Corporation of Greater Bombay has opened a slum improvement cell to deal with slum improvement and to prepare civic environmental improvement schemes. Initially the emphasis was laid on slum clearance. As a step towards it, the Bombay Municipal Corporation Act was amended in 1954 introducing anew section which empowered the Corporation to clear slums legally. The civic authority in the public interest as well as on humanitarian grounds has undertaken an ambitious programme to help improve a lot of hutment colonies on Municipal lands and prepared a detailed inventory in some of the hutment colonies. The cell also prepared schemes for provision of amenities to various colonies, and the work was executed through a zonal construction department.

As per the Corporation's programme, 63 colonies located on municipal land were taken up for improvement upto March 1974. Various amenities provided at the cost of Rs.. 1.98 crores included 4,567 w.c. seats, 1,836 water taps, 18,600 square metres paved passage, 73,600 metres drains and 1,000 poles of street light.

Slum Improvement Board: The Maharashtra Slum Improvement Board, a principal executive organ of the State Government for implementing the programme to provide common basic amenities to the slum dwellers, was established in 1974. As per the provisions of the Maharashtra Slum Improvement Board Act, 1973 and the Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 the Board was authorised to deal with the slums that have sprung upon private lands. Accordingly the Board had completed preliminaries of the slum areas on private lands. The work done during 1975-76 was as follows:—.

Total population	1,407,644
Slum population benefited under improvement programme.	592,484
Estimated cost (Rs.)	57,423,266
Cost incurred (Rs.)	45,300,000
Amenities provided—	
W.Cs.	7,430
Water taps	2,559
Sewer and drains	211,126 sq. mtrs.
Roads and pathways	1,789,304 sq. mtrs.

The Government has so far spent Rs. 171.5 millions on slum improvement covering about 1.50 million population in Greater Bombay. In the following statement are shown annual expenditure on environmental improvement and the population covered under the programme:—

Year	Investment (Rs. in millions)	Population (in lakhs)
1974-75	10.72	2.94
1975-76	45.30	5.85
1976-77	38.36	4.79
1977-78	33.17	2.95
1978-79	21.19	N.A.
1979-80	10.36	2.25

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS



Maharashtra State Gazetteers

(The information of various voluntary social service institutions given in this Chapter does not cover all the voluntary social service institutions in Greater Bombay District. The accounts are based on information as furnished by the various institutions.)

INTRODUCTION

THE FOUNDATIONS OF BOMBAY'S GREATNESS WERE FIRMLY LAID DOWNby Gerald Aungier late in the seventeenth century. It was during the succeeding century that the edifice which is now seen as Bombay slowly started taking shape. By the end of the nineteenth century the foundations of the development of Bombay were strengthened, while the present century has witnessed the glorious growth of this metropolis into one of the best cities in the world. This was a fascinating transition from scattered hamlets into a huge modern metropolis. With the transition of growth the strong corporate life of the eighteenth century underwent far-reaching changes. During the early days of European settlement life in Bombay centred around official and military circles. A chasm opened between the Europeans and the educated Indians. Life for the English devolved around assemblies, and dinner parties within an exclusive 'white' society.

Among the rulers the elite like Mountstuart Elphinstone, Sir Bartle Frere and a galaxy of reformists contributed towards enrichment of the public life. They encouraged and virtually gave birth to a number of educational institutions, social service organisations, clubs and libraries which had a deep impact on the educated Indians. The establishment of the Elphinstone College, the Wilson College, the University of Bombay, the St. Xavier's College, the Grant Medical College, the Bombay Branch of the Royal Asiatic Society and many other institutions paved the way for the education and enlightenment of the Bombay people. The city also have had the advantage of renowned newspapers, the old among which were the Bombay Herald, Bombay Courier, Bombay Gazette, Times of India, Bombay Samachar, Rast Goftar, Jame-Jamshed, Kaiser-i-Hind, Indu Prakash, Darpan and many others.

Western education generated an elite class of public luminaries like Dadabhai Naoroji, Pherozeshah Mehta, Dinshaw Petit, Dinshaw Wacha, Jamshetji Tata, Dorabji Tata, Jagannath Shankarshet, Balshastri Jambhe-kar, K. T. Telang, Chandavarkar, Bhau Daji, V. N. Mandlik, Jamshetji Jejeebhoy and a galaxy of illustrious men who were the leaders of public opinion for a considerable period of time. They shaped the public life and guided public opinion by virtue of the force of their individual personality. Their greatest contribution however lies in the formation of a number of institutions and philanthropic organisations in the field of education, social reforms, public enlightenment, sports and medical relief.

The present chapter deals with the development of public life and the institutional framework of social service organisations in Bombay. The chapter gives a narrative of public life in the city during the last about 170 years as well as an account of the prominent voluntary social service organisations which have enriched the cultural, social and educational life of the people in this city. The social service organisations have been arranged as per their functions, such as educational institutions, social service organisations, medical relief societies, sports and recreation, welfare of physically handicapped including the blind unfortunates, child welfare, philanthropic institutions, libraries, foreign cultural associations, religious organisations, etc. The Chapter also gives an account of journalism and newspapers and the theatre in Bombay.

PUBLIC LIFE

(The write-up on Public Life is contributed by Shri T. V. Parvate, a well-known journalist and author. The views expressed in this write-up are those of the contributor.)

The rise of the present City of Bombay from an obscure fishing hamlet or a group of hamlets on the west coast of India as one of the greatest metropolitan centres of the world is a tremendous marvel in the modern history of India. This amazing development is spread over about 300 years, but the most significant period is covered by less than two hundred years. That is to say that this period began since the fall of the Maratha power in Pune and appointment of Mountstuart Elphinstone as the Governor of Bombay Presidency in 1819.

Perhaps the most distinguishing feature of this new era was the spread of western learning and education with all its concomitants and aftereffects. There was altogether a new orientation in the thinking modes of the people, and one of the glaring expressions of it was the new consciousness of public life. Apparently, public life would seem to be something different from private life. The same idea might be better put by saying that public life is quite different from personal life. Public life may otherwise be described as collective or community life. The complaints, grievances, demands, needs and even aspirations and ambitions of such life began to be formulated and expressed on behalf of the community, the people, and the masses by those who came under the influence of the new education under British rule.

The educated men, there was no question of any such women so soon, considered themselves as the natural leaders and spokesmen of the people, and claimed that they were their representatives in the moral and material sense, though of course not elected by them by the usual democratic method of voting. That stage would come in due course, they thought and argued, under the very influence and impact they had received. That influence of western education was bound to grow with its wider and wider dissemination and it was quite well known as much to the rulers as to the ruled. To Elphinstone goes the credit of having set in motion the process of westernising the thought world of the people in Western India. The teaching of English history and literature and western sciences constituted a liberalising influence, and it breathed of freedom in every branch of human activity. In any case, that was the idea of those who represented the better mind of England, *viz.*, Burke, Macaulay, Bradlaughy Wilberforce, Morley and Montague, with many more belonging to this line of progressive thinking.

Elphinstone was appointed Commissioner of the Deccan from December 1817 to October 1819, and from November 1819 to November 1827 he was the Governor of Bombay. He estimated that the people over whom he was called upon to rule were tired of misrule, oppression and unrest and a new deal in the form of a stable government dispensing law equally to all and establishing peace was what they wanted. He decided to provide both as an enlightened despot, and yet he was anxious not to make them feel that a foreign government had replaced their own. Elphinstone's policy on two important matters made him a popular ruler. He gave a push to an educational movement in which the teaching of western learning and the ancient learning of India were accommodated. He also initiated the policy of associating suitable Indians with the civil administration, including chiefly the judicial administration as it indicated trust in the people.

Until 1813, the Directors of the East India Company had never thought of providing any kind of education for the people in its territory. But in that year, the question of renewing the charter of the East India Company was raised in Parliament and Wilberforce succeeded in imposing the condition that the Company must set apart one lakh of rupees to provide for education on eastern and western lines. Elphinstone insisted on enforcing this condition in Bombay and Pune and what is known as English education was formally introduced in 1823. But before that Christian missionaries were already here and they had started schools chiefly for teaching the Christian Scriptures and the English language. In 1815, what was known as the Bombay Education Society was started. The schools of this society admitted the Anglo-Indian progeny of British soldiers to these schools, and so the Indian residents of Bombay did not like to send their children to these schools. For their convenience, the Christian missionaries started different and separate schools. Elphinstone tried to use these schools, to begin with, to implement his plans.

As Dadoba Pandurang has stated in his autobiography, Elphinstone established on August 21, 1822 the Native School Book and School Society with the co-operation of eminent Indians like Jagannath Shankarshet, Jamshetji Jejeebhoy, Framji Cowasji, Dhakji Dadaji, Mohamed Ibrahim Maqba and others. The secretaries of the society were Captain George Jervis and Sadashiv Kashinath *alias* Bapu Chhatre. This society published chiefly school texts in Marathi, Gujarati and Hindustani till 1835. On March 7, 1835 English was declared as the medium of education and administration of the whole of India. This society changed its name three times. In 1827, it called itself the Bombay Native Education Society, in 1837, the Elphi.nstone Native Education Society in memory of Elphinstone, and in 1840 the Board of Education. Elphinstone and his successors like Malcolm provided funds for the pursuit of its objectives in a generous measure.

During the career of this society a number of Englishmen and citizens of Bombay distinguished themselves by their literary contributions. The most conspicuous among them were Bapu Chhatre, Balshastri Jambhekar, Dadoba Pandurang and Hari Keshavji. The services of Captain Jervis were the most distinguished and they were recognised by his colleagues and disciples when they voted him a farewell address on February 22, 1839 for he was leaving for England after retirement.

This new influence created a new spirit among the people, Balshastri Jambhekar who lived for only 34 years was the most brilliant product of this new influence. A study of his career shows that had he lived for some more years, he would have left an impress on his times, as would have been comparable to that of Ranade. This foremost celebrity of the early years of British rule in Western India was a pioneer of many activities and movements which have entitled him to the everlasting gratitude of the generations that followed him. Unfortunately he is more or less a forgotten figure now. Jagannath Shankarshet and Dadoba Pandurang were Balshastri's contemporaries but outlived him for a number of years and were older than him by some years. As a pioneer public man and educationist Balshastri formed a remarkable link between Indian and European western thought and had the opportunity and privilege of laying in Bombay the foundations of almost all the activities that constituted public life in those days. Education, literature, science, antiquarian research, journalism, social reform and political progress claimed his attention simultaneously. During the very brief life of only 34 years (1812-1846) Balshastri accomplished a versatile effort of extraordinary dimensions. He knew well about a dozen European and Indian languages and his wide acquaintance with the progressive thought of India and England enabled him to take a prominent part in the activities of such learned bodies as the Bombay Geographical Society and the Bombay Branch of the Royal Asiatic Society. His English contributions to the Anglo-Marathi Darpan, a weekly periodical in Marathi, and the various books he wrote covered a wide range of subjects, from widow marriage to the evolution of Marathi script and deciphering of ancient inscriptions, from measures of reform in His Majesty's Privy Council to the necessity of Indians studying the European medicine, from the intricacies of the new Marathi grammar to the importance of geography and to the advantages of pure and applied mathematics and from the microscope and steam engine to astronomy and " inquiries regarding intellectual powers and the investigation of truth." All this was done within about 15 years of a life of active Government service. No wonder that Balshastri Jambhekar was acclaimed by his contemporaries as " far in advance of his countrymen ", " a conspicuous ornament of society " and " the most learned native who has yet appeared in Western India.

Balshastri's spirit of liberation in social and religious matters was clearly evinced in the case of the readmission of a Brahman lad called Shripat Shastri Paralikar to the Hindu fold after he had almost become a Christian. This is the first *shuddhi* or re-admission from a Christian fold to the Hindu and this episode caused great commotion in the days in the dovecots of the Christian missions and typifies the new public awakening among the Hindus of Bombay.

Balshastri was a pioneer in the field of journalism also. The press is a necessary and very important contributory force that makes public life possible, healthy and powerful. In 1832, Balshastri first initiated an effort in high-class journalism in Western India by conducting an Anglo-Marathi weekly called the Bombay Darpan, i.e., the Bombay Mirror. Eight years later, he started a monthly periodical in Marathi called the Digdarshan. These two periodicals enabled him to build up and influence public opinion and give it a progressive turn in matters social, political and educational. He thus shaped the public life of Bombay, and was in the forefront of the reform movement. This was a many-sided movement and

Balshastri dealt with a number of subjects in the *Bombay Darpan* during its eight years' career, both in English and Marathi. One of the important subjects that was tackled by Balshastri was " influence of a free and impartial public press " published in the *Darpan* of October 12, 1832. It constitutes an important pronouncement on how the public affairs of any country should be conducted and how the public press can contribute to this desideratum.

Bhau Daji, Dadabhai Naoroji and Dadoba Pandurang were the men who carried on Balshastri's work of awakening the people in the new era and building public life in Bombay with Nana Shankarshet's kind eye on and active support to them. They in their turn appreciated his vigilance and guidance. Bhau Daji was one of the first eight medical graduates to pass from the Grant Medical College. Soon he set up his medical practice and became known as a proficient physician and surgeon.

By its charter of 1833, the East India Company had secured a twenty years lease of life. The renewal of the charter, to mend or end its rule, was the burning question of the day throughout the year 1852. It supplied the necessary impetus to young Bombay to plunge into politics. After 1833, the East India Company had ceased to be a trading corporation and had become a ruling body. The machinery set up for the traders who had become soldiers of necessity and administrators by accident was cumbrous indeed, with the result that the education of the people was neglected and improvements for the internal development of the country ignored. The defects of such a system of Government could no longer pass unchallenged.

With the spread of western education, the Indian people began to feel that they had a right to demand that the country should no longer be governed in the spirit of a commercial concern. Even at that early date, the greatest grievance of the people was the exclusion of Indians from the service of the State. Such awakening among the people was expected by Englishmen themselves. And as Mountstuart Elphinstone opined " it is a vain endeavour to rule them (Indians) on principles only suited to a slavish and ignorant population ".

As early as in 1841, Bhaskar Pandurang, younger brother of Dadoba Pandurang contributed a series of articles to the *Bombay Gazette* in which he made the point that the British domination over India was in essence economic exploitation, though they might have established a rule of law and peace. In his writings over the pseudonym *Hindu* he made it clear that British rule made for ever increasing impoverishment of India. Men like Bhau Daji, Dadabhai Naoroji and Jagannath Shankarshet were conscious of this feature of British rule but they believed that the better mind of England would put everything right and what was necessary was a movement of self-assertion and protest. This feeling found expression in the founding of the first political organisation in Bombay called the Bombay Association on August 26, 1852. Sir Jamshetji Jejeebhoy was elected president of the association, Jagannath Shankarshet, its working chairman and Dr. Bhau Daji and Vinayak Jagannath, its secretaries. (For history and activities of the Bombay Association see Chapter 2—'History. Modern Period , Vol. I)

The Association immediately set to work by sending round the various districts a questionnaire to leading citizens in order that the information they might give might be useful for preparing the petition that the Association wanted to submit to the British Parliament for securing improvements in the administration. All these questions pertained to the daily requirements of the people and touched their well-being at several points. Bhau Daji who was entrusted with the task of collating and co-ordinating the information thus collected prepared a petition, asking for an enlightened system of government for the millions of British Indian subjects. The question that loomed large in the petition was that of admission of Indians into the civil services. As a means to that end, the establishment in each Presidency of a University for training public servants was recommended. It was also suggested that the Councils of Local Government should be opened for educated Indians. The Government grant of Rs. 12,500 only for the education of millions was altogether inadequate, and so the petition asked for substantial increase and urged that a larger share in the land revenue might he spent on public works in the districts from which it was levied.

This petition was adopted at a meeting held at the rooms of the Elphinstone Institution on October 28, 1852, Jagannath Shankarshet presiding. The petition was signed by about 3,000 people from Bombay, Thane and Pune. Another petition also drafted by Bhau Daji was sent to England in May 1853 in which a number of defects and short-comings in the East India Company's administration were exposed. These petitions created a stir in England. Several friends of India including Sir Edward Ryon, Sir Erskine Perry, Lord Monteagle, John Bright and Joseph Hume raised their powerful voices in favour of the petitioners, while Cobden, cynically enough, could see no advantage either to the Indians or to their foreign masters in the vast possession called India. His countrymen however, were in favour of retaining India.

A typical comment in one of the newspapers in England would reveal how it was received by the British press. The *Globe* (11th January 1853) said, "It proves that some portion of the Natives at least have fitted themselves for the gradual admission of English privileges. Twenty years ago such a petition would have been impossible. Let it teach us how much the next twenty years may do in the way of further progress; especially if that progress were encouraged rather than thwarted by the spirit of our rule. Unquestionably, it will be a safer and cheaper plan to administer the Government of India henceforth with the concurrence of the Natives rather than in spite of them."

On March 13, 1883, a meeting of the Friends of India was held in Charles Street, St. James Square, London and it constituted itself into an India Reform Society with Danby Seymour M.P. as president and John Dickinson as secretary. Its activities, however, coulcj not materially influence the decision of the House of Commons. A salutary change was, however, introduced in the Court of Directors. The number of members was reduced to eighteen of which six were to be nominated by His Majesty's Government from among those persons who should have resided in India for at least ten years. Similarly all the civil and medical appointments to the Company service in India were thrown open to public competition. Such competition was however to be conducted in England so that Indians were practically debarred from entering the service. This resulted in all-round protests but the result was not very gratifying to the Indian public. It established one point all the same, namely, that the concerted agitation and action had wrung from the

British Ministers more than was considered possible.

Bhau Daji resigned the secretaryship of the Bombay Association because of professional pressure and Nowroji Furdunji was elected in his place. But its voice was not as powerful as before owing to internal dissensions. An attempt was made to put fresh life in it in 1867 after the death of Jagannath Shankarshet (1865) in whose place Mangaldas Nathubhai was elected chairman and Nowroji Furdunji secretary, but it failed to command its former influence and respect.

All the same under the firm but cautious and discreet leadership of Jagannath Shankarshet, the Association kept on tackling matters of public interest with Bhau Daji and Nowroji Furdunji in the forefront for conscientious work. Among such matters could be mentioned request to publish the gazette in provincial languages which the Government accepted, representation to reduce stamp duty which the Government rejected, consideration of the request by the Government to join Khandesh and Berar which were cotton producing to Bombay by railway, request to appoint Indian judges, which was rejected, representation before the English Parliament about the attitude of the English people towards Indians, agitation for the revival of gold coinage, etc.

Bhau Daji was a man of versatile achievements, besides being an eminent medical man. He was a politician, educationist, social reformer and took interest in the industrial and commercial development of his country. He took particular interest in championing the cause of women's education, was ah antiquarian research worker and in the words of Justice James Gibbs " not only a good citizen of the world, but more than that helper and defender of the poor and the sick and the distressed. " Bhau Daji went to the Supreme Court to see that justice was done to one Vithoba Malhar, a tailor who was duped by one Mr. M. L. Meason.

The efforts made by Bhau Daji to vindicate Indian honour and dignity was duly applauded by the Indian and English press in Bombay, the *Gazette* and the *Times* upheld the decision of the Supreme Court, the *Telegraph* and the *Courier* went on attributing motives to the Bombay Association and alleging that it was a conspiracy on its part to slander

English officials; of course the Bombay Association had nothing to do with this case, though the *Telegraph* and the *Courier* went on saying loudly and vehemently that it was behind it. Reference to this event in Bhau Daji's life was made in the condolence meeting held to mourn the death of Bhau Daji by Chief Justice Westrop. He said "I ought not to pass over an instance of his public spirit. Believing one of his poorest and most humble fellow countryman to have been wronged by the local authorities he warmly espoused his cause and never deserted him until he obtained compensation for his wrongs in the Chief Tribunal of this island at the time."

One speech made by Bhau Daji delivered at a meeting in the Town Hall on October 10, 1859 is most remarkable because while speaking on a subject like the licence bill introduced by the Government of India to impose a levy on trade and professions, he has shown himself as a gifted politician who foresaw self-government for India with the blessings of England.

This meeting prepared a petition for submitting to the Legislative Council of India on October 17, 1859 which was published in the *Bombay Gazette* for October 20. But even before this another petition against this Licence Bill, signed by 5000 people was adopted on October 11, 1859 at a mass meeting of traders and citizens of Bombay, held at the house of Dhakji Dadaji. A full Marathi version of the same appeared in the *Dnyanaprakash* of Pune on October 24, 1859. This was the handiwork of Bhau Daji. He is the first signatory to the petition and next signatory is Bhavani Vishwanath Kanvinde. The original English version was forwarded to the British Parliament.

It was not all smooth sailing for the Bombay Association though with Jagannath Shankarshet as its helmsman it never adopted an extremist attitude. Its memorials, representations and petitions were always dignified and their language restrained and moderate, always leaning towards understatement than overstatement. Yet among a section of Englishmen, it was considered a rebellious body and some even from among the membership of the Bombay Association were found to play second fiddle to these Englishmen and express ultra-loyalty on their own. Manekji Cursetji was one such. In his view the Bombay Association was going too fast under the instigation of its secretary Bhau Daji. With the avowed intention of supporting everything that was done under the East India Company's rule, he published a pamphlet entitled "A few passing ideas for the benefit of India and Indians" and disseminated its copies in hundreds in India and England. This booklet contained some libellous statements about Bhau Daji and so he was compelled to file a suit for defamation against him. It was heard in the Supreme Court, but it did not find the defendent guilty. Bhau Daji's action is reminiscent of Lokamanya Tilak's action for libel against Sir Valentine Chirol.

The Association was now seven years old and had come out of the 1857 imbroglio with its reputation for loyalty and moderation untarnished and yet there was a die-hard prejudice against it. Jagannath Shankarshet with the co-operation of Dr. George Birdwood, Dadabhai Naoroji and Bhau Daji was endeavouring to establish a museum and a park in Bombay as a memorial to Queen Victoria and Prince Albert. A committee was formed with the object of implementing this project. There was one high military officer Col. Pope by name, who considered the Bombay Association as a political body that was opposed to the British rule. He refused to join the committee and criticised Nowroji Furdunji, whereupon Nowroji requested an explanation. In reply Col. Pope said a number of good things about Nowroji Furdunji individually but observed, "I have always thought that your connection with the Bombay Association, considering the attitude assumed towards Government on its being first established, was wholly inconsistent with your position as a public servant and an officer of the Supreme Court. I therefore did not wish to sit with you on the committee in question, viewing the duty as a public one."

Nowroji sent a strong rejoinder. Yet Col. Pope was adamant in his attitude.

Jagannath Shankarshet retained the presidentship of the Bombay Association for 12 years. During this time Danby Seymoor, M.P. and president of the Indian Reform Society in London visited Bombay with the object of verifying what the Bombay Association was stating from time to time in its petitions. On 13th February 1854, a deputation of the Bombay Association waited upon him and a meeting of the citizens of Bombay was convened at Nana Shankarshet's house to receive Danby Seymoor and hear him. He complimented the Bombay Association on its efforts to educate the British public on the Indian situation from time to time and asserted that people in England were increasingly eager to get correct and authentic information. His message to the people of Bombay and India was that they should exert to be self-reliant and have faith in their ability to get what they wanted.

After the rising of 1857 was quelled, some British statesmen visited this country. One of them was A. H. Layard, M.P. He was received in Bombay at Nana Shankarshet's house and ably briefed on the Indian situation by Bhau Daji, Nowroji Furdunji, Bomanji Hormusji, Framji, Nusserwanji and others, by going deep into the causes of Indian discontent and impressed upon him that the Bombay Association was salutary link between the Government and the people. Mr. Layard recognised the importance of an institution like the Bombay Association which reflected the mind of the people. The Association went on working according to its limited capacity on lines indicated by Seymoor and Layard but in Indian Government circles, there was subdued if not an atmosphere of suspicion about the loyalty of the Indian people to the British Crown. After the death of Nana Shankarshet, the Association became a moribund body, more or less, but an effort was made to put life into it again by Rao Saheb Vishwanath Narayan Mandlik and N. M. Parmanand who conducted the Native Opinion from 1864. It was a weekly journal in English. On its initiative, a meeting was held on December 14, 1867 at the house of Sheth Mangaldas Nathubhai and it was decided to start work vigorously again with a fresh committee of the Association. The new executive was composed of Sir Jamshetji Jejeebhoy as honorary president, Mangaldas Nathubhai as working president, Framji Nusserwanji, Vinayak Jagannath, Cowasji Readymony and Byramji Jeejeebhai as vicepresidents and Nowroji Furdunji as secretary. Among other members of the Committee were Bhau Daji, V. N. Mandlik, V. G. Shastri, Bal Mangesh Wagle and others. Rao Saheb Mandlik distinguished himself in the Bombay Municipality and the Bombay Legislative Council and also on the platform as spokesman and representative of Bombay Hindus. He was elected Mayor of Bombay in 1879 when in a congratulatory letter written to him by Ranade he said that he and his friends felt very proud of him for the honour done to him and looked upon him as the fitting successor of Jagannath Shankarshet and Bhau Daji.

For stability of trade and development of commerce quick means of transport and communication were required and ever since Mount-stuart Elphinstone took charge of the Governorship of Bombay, he was drawing the attention of the Company Government for taking immediate steps in that direction but nothing happened. Now Jagannath Shankarshet and Jamshetji Jejeebhoy made a move, aimed at quicker communication between India and England. On April 17, 1830 a meeting was held in which Captain Wilson of High Lindsay explained how very advantageous the running of cargo and passenger ships would be and a committee was appointed to take further steps. The committee recommended that ships between Bombay and Port Said and Alexandria and Malta would be of great benefit to all concerned. Jagannath Shankarshet, Jamshetji Jejeebhoy and other Parsee houses were already in business with middle east countries. They decided to purchase one steamship for Rs. 1,65,000 and a scheme was prepared. Subscriptions began to be collected. The Sheriff of Bombay convened a meeting at the Town Hall, Bombay, on May 14, 1833. However a regular service after an agreement with the P. and O. became current only in 1855.

The shipping trade played a great part in the coastal communications in India as well as communications with other countries. But Indian shipping worked under a number of restrictions from which English and other European ships were free. In order to have such discrimination removed, ship-owners in Bombay sent in 1841 a petition to the British Government in England. A copy of this petition was also forwarded to the then Governor of Bombay, Sir James Carnac. Similarly, in order to increase trade with Sind and Gujarat, Jagannath Shankarshet and Framji Cowasji and others started the Bombay Steam Navigation Company, and immediately a ship of the Company began to ply between Bombay and Karachi three times a month. Nana Shankarshet took keen interest in the working of this company and watched its progress.

Railway till 1853, was an unknown thing in Bombay and Western India. Discussion in this behalf was began in Bombay since 1843, when a company called Great Eastern Railway was started in Bombay. Nana and Jamshetji had taken the lead as usual. On July 13, 1844, a petition was sent to Government in this behalf. The promoters decided to found the Inland Railway Association in place of all previous efforts in this respect and a committee was appointed to assume all responsibility. At that time Jagannath Shankarshet pointed out that a project like the Railways all over the country could not remain for long a private company affair; it would soon assume a national character and it was absolutely necessary to enlist the support of the Government and induce it to take early steps to help materialise it.

When this was going on some capitalists in London perceived that railways in India would be a most profitable proposition and so Lord Vorncliff and others established in London a company called the Great Indian Peninsula Railway in June 1845. Mr. Chapman was sent to India to study the overall situation. Mr. Chapman was surprised to find that people in Bombay had made a good deal of progress in this behalf and he came to the conclusion that co-operation between the London and Bombay enterprises would be the best thing under the circumstances. The Company was given permission to construct a railway route between Bombay and Kalyan. The expenditure was to be covered by the issue of shares. Jagannath Shankarshet was a big shareholder and a director of the Great Indian Peninsula Railway. The first train between Victoria Terminus and Thane left V.T. at 3-30 in the afternoon on April 16, 1853. Among the distinguished travellers were the then Governor of Bombay and Jagannath Shankarshet.

There was nothing like a proper banking organisation in Bombay until 1837. In 1840 the Bank of Bombay was established. Sir Charles Malcolm was its first President and Dadabhai Pestonji Wadia of the firm of shipbuilders in Bombay was its native director. The Bank of Western India was established in 1842. It was the first bank to establish relations with European countries. Jagannath Shankarshet and Jejeebhoy

Dadabhai were among its Indian directors, the rest being Europeans. Its name was changed into Oriental Bank in 1845. Jagannath Shankarshet and his son Vinayakji were directors of the Commercial Bank of India which was started in 1845. It may be noted that exhibitions play a great part in promoting trade, industries, artisanship and artistic works. One such was held in London in 1851 and a variety of Indian industrial products were exhibited there. In Bombay a committee of 20 persons was constituted with five Indians who were Jagannath Shankarshet, Jamshetji Jejeebhai, Framji Cowasji, Bomanji Hormusji and Vinayak Gangadhar Shastri. In 1845 another such exhibition was held in Paris and its promotors sought the help of the Government of India to achieve its success. In the central committee among the Indian members were Jagannath Shankarshet, Cursetji Jamshetji, Bhau Daji, Bomanji Hormusji and Vinayak Gangadhar Shastri. On March 3, 1865, a body called International Exhibition Company was formed with the object of holding an international exhibition in Bombay. It was decided to form influential committees in England and America to enlist the co-operation of those countries. Everything was planned on a grand scale but the American crisis frustrated all high hopes to hold such an exhibition. Nana Shankarshet breathed his last on July 31, 1865.

To Nana Shankarshet, Bhau Daji and George Birdwood chiefly goes the credit for the Albert Museum and Victoria Gardens. It was originally a very ambitious project, holding art as " a great engine of education," " a college of inquiry ". However these dreams were not realised because though originally intended to illustrate the economic products and natural history of Western India and containing many good specimens under both heads, little had been done of late years to add to the collection.

Bhau Daji's interest lay in rearing up a garden for botanical and medical research. Numerous efforts were made in this direction and the Agri-Horticultural Society of Western India was founded. In 1835, the Government of Bombay gifted land to this society at Sewri to rear up a botanical garden. Albert Museum is also not the first museum in Bombay. In 1855 September, Lord Elphinstone, Governor of Bombay, had established a Central Museum whose object was "illustration of general economic processes and the development of the commercial and industrial resources of Western India ". It would appear that Bhau Daji had something to do with this museum because the *Lancet* for January 13, 1855 said about Dr. Bhau Daji, " to his exertions Bombay will owe the Economic Museum and Zoological Gardens and the various galleries of science and art now in process of organisation".

Sir George Birdwood, Jagannath Shankarshet, Bhau Daji and Dr. George Buist, Secretary and Curator of the Central Museum and Editor of the *Bombay Times* decided that the Albert Museum and Victoria Gardens should be on the same site. On December 15, 1858, a meeting of the citizens of Bombay was held, Nana Shankarshet presided and Bomanji Hormusji proposed " that a building be erected for the Central Museum and that Natural History and Pleasure Gardens be established in connection to be styled, with Her Majesty's gracious permission " the " Victoria Museum and Gardens as a mark of the loyal devotion of the inhabitants of Bombay towards Her Most Gracious Majesty". The second resolution of the meeting was moved by Mangaldas Nathubhai and seconded by Dadabhai Naoroji whereby the Esplanade or some other equally eligible locality was asked for the museum and the gardens. Lord Elphinstone agreed to make over the Esplanade on April 4, 1859. This decision was changed by the Governor who succeeded him and offered instead the Mount Estate at Mazagaon (*It now forms part of Byculla.*), *i.e.*, the site on which the museum and the gardens stand today.

The corner stone of the museum was laid by Sir Bartle Frere, Governor. The garden became known as the Agri-Horticultural Society's Garden. The Society worked enthusiastically for the fulfilment of its objects for the first four years but this enthusiasm soon ebbed out due to financial crisis. In 1874 Bhau Daji breathed his last.

What might be justly described as an effort which testifies to Nana Shankarshet's patriotism, broad mindedness and a spirit of service to his countrymen is to be met with in the founding of the Western India Canal Irrigation Company in 1854 with the purpose of starting irrigation work. He had talks with various officers of the Revenue Department and the response from the Government of Bombay was encouraging. However the Governor-General at Calcutta considered it undesirable to entrust the work of canals and irrigation to a private concern. A petition was sent to the Government in England but the response was totally negative. In this way a very laudable and public-spirited effort of great public utility was frustrated

A public enterprise of this gigantic proportions and fired with the ambition and earnestness to serve the peasantry and farmers of the country was nipped in the bud. Nana Shankarshet and Bhau Daji had met with two discomfitures in this way. One was in respect of the museum and garden and the other this irrigation project.

There was nothing like a well-conducted proper school when Nana Shankarshet was a child. He had naturally realised the need for his fellow-men for education and co-operated with Mountstuart Elphinstone and his successors like Malcolm and others in laying the foundations of education in Arts, Science, Law, Medicine and Engineering and lived long enough to see the University of Bombay established. In watching and nursing the growth of education he had such able collaborators as Bal Shastri Jambhekar, Dadoba Pandurang, Dadabhai Naoroji, Bhau Daji, Nana Moroji and others as well as a number of high minded and liberal Englishmen and a number of his public-spirited Parsee friends like Framji Cowasji, Jamshetji Jejeebhoy and others.

In the early stage a body called the Board of Education functioned. It established Marathi, Gujarati and English schools all over the City of Bombay and the Presidency wherever practicable. In those days, the East India Company Government was not very eager to spread education among the Natives of India though its individual servants often were. One such was the Governor, Mountstuart Elphinstone whose memory stands in the name of the Elphinstone Institution as it was originally called and which developed into the Elphinstone High School and the Elphinstone College. The Scottish Church Mission also did a great deal for education and established the Wilson High School and Wilson College, among others.

Though the City of Bombay was a pioneer in the matter of women's education also it was considered almost sacrilegious that a female should learn to read and write. The American missionaries with great effort succeeded in establishing schools for girls which numbered 25 in Bombay by about 1863. Balshastri Jambhekar in his *Darpan* had warmly supported women's education. Bhau Daji also was an ardent supporter and active worker in the field of women's education along with Nana and later K. T. Telang took similar keen interest. Dadabhai Naoroji helped a great deal in popularising education among Parsees with the support of Jamshetji Jejeebhoy.

The importance of the practitioners of law and medicine in the public life of a city could never be overemphasised. But in Bombay, there was no provision whatever for prosecuting medical studies till 1845 and legal studies till 1855 when a proper medical college named after Sir Robert Grant was started. The move as usual was initiated by Nana Shankarshet with the help and co-operation of Jamshetji Jejeebhoy, Dr. John Wilson and others. When the University of Bombay was constituted, the Grant Medical College became a fullfledged degree conferring college. Bhau Daji was a member of the faculties of Arts and Medicine from the beginning till his death. He was also the first Indian member of the syndicate.

Though the European medical practitioners did not oppose the establishment of a medical college the English barristers feared a competition in the field from the Indians and hence the establishment of an institution to provide for legal education did not receive Government sympathy till 1855 when E. J. Howard became the Director of Public Instruction. He favoured the proposal for providing for legal education. In 1852, Sir Erskine Perry was about to retire and leave for England. He was for ten years in Bombay and during this period he had identified himself with the citizens of Bombay. They naturally wanted to commemorate his services. At a meeting held under the presidentship of Nana Shankarshet it was decided to found the Perry Professorship of Jurisprudence. Still there was no response from Government which wanted to postpone consideration of the whole question till the University of Bombay was inaugurated. But Nana Shankarshet was anxious not to put the proposal off for such long. On March 6, 1854, he again requested Government not to delay the Erskine Memorial and Government decided at last on 17th March 1855 that the proposed class should be started. On July 3, 1855 the class began. As a member of the Bombay Legislative Council which for the first time had five nominated Indian members on it, and Nana was one of them, he fought for properly reinstating the new practitioners of law in spite of strong European opposition.

In 1852, when Bhau Daji was secretary of the Bombay Association, the demand for a University in Bombay was made in the petition presented to the British Parliament. The University came into being in 1857 according to the Act 22 of the Indian Legislative Council. In those days while Jagannath Shankarshet represented the spirit of progress, Dhakji Dadaji was a representative of orthodoxy and reaction as was seen in the Shripat Sheshadri Affair and was also opposed to extending the benefits of education to the backward Hindus and the depressed classes. But there were not many who followed his way of thinking whether among the Hindus or Parsees. The spirit of progress among Parsees was typified by Dadabhai Naoroji.

Nana Shankarshet's educational activity was varied. Government's policy of giving grant-in-aid to private educational effort was announced in 1856. Nana decided to take advantage of it and started in Girgaum area an English-Marathi school. It was ultimately merged in the Elphinstone Middle School.

Jamshetji Jejeebhoy took the lead in founding the J. J. School of Art. The *Gazette* and the *Times* warmly supported the proposal. Lord Elphinstone was then Governor of Bombay who recommended the proposal for approval of the Board of Directors and the necessary sanction was received. The school of Art was started in 1857.

The Royal Asiatic Society, Bombay Branch was a purely European-member society for many years since it was started in 1830. Nana Shankarshet became a member of this society on November 24, 1845. He was a great patron of writers, authors, painters, artists, indeed experts in every human activity.

A clear-headed and practical man that Nana Shankarshet was, he held firm and clear views on some problems like the medium of instruction, etc. Sir Erskine who was President of the Board of Education emphatically placed his view that English alone was the proper medium for studying of all modern knowledge, in the annual report for 1845, but Nana expressed his dissent in no uncertain terms, expressing the view that all education should be through the mother tongue. In a statement issued on March 16, 1846 Capt. Jervis ably contradicted Sir Erskine's view, Nana Shankarshet issued a comprehensive statement on May 1, 1847 on the question of medium of instruction in which he said he was not at all opposed to the study of the English language and the wealth of knowledge it contained, but it had to be brought in the Indian languages.

Ultimately, a compromise was reached whereby it was agreed that the education meant generally for the masses should be imparted through the vernacular languages and higher education should be imparted through the English language. One very important point that Nana stressed in this statement and which testified to his foresight and vision is that he suggested that Hindustani should be recognised as the common language of all India, and its literature should be developed.

In the early consolidation of the British power in India, the activities of the Christian missionaries formed an important factor of public life in Bombay because of their proselytising work. Two missionaries Rev. Hall and Rev. Knot arrived in Bombay in 1813 but as they were suspected of being secret informants, they were arrested for being shipped to England. They were released subsequently as the company's charter allowed missionary work and their activities to secure converts to Christianity began. In 1822, the Scottish missionaries began to arrive. In 1829 came the famous Rev. Dr. John Wilson. There came also others. These men were as much educationists as evangelists. They started a number of schools in Bombay and its precincts and during the frequent famines procured adherents to Christianity. Individual English officers secretly supported the proselytising activity of the missionaries but Government officially set its face against it. In 1838, there was great commotion among the Parsee, Hindu and Muslim

inhabitants of Bombay when two Parsee young men in their teens embraced Christianity. They were kept by Dr. Wilson in his custody. In spite of temptations offered they refused to be reconverts. The court verdict went in favour of Dr. Wilson. But the Parsees of Bombay were greatly agitated and in a meeting of Parsee Panchayat attended by Nana Shankarshet decided that Parsee parents and guardians should withdraw all their wards from the General Assembly Schools. It was also decided to send a petition to Parliament praying for a ban on Christian missionaries starting fresh schools and their coming to India for spreading the Gospel. The Parsee Panchayat enlisted the support of the Hindus and Musalmans. Sir James Carnac, the Governor of Bombay, gave a patient hearing to the deputation and pacified them with an assurance that no Christian religious propaganda would be allowed in educational institutions conducted by Government. Again in 1856 when four Parsee youths volunteered to convert to Christianity, the Parsees of Bombay were convulsed and attributed this development to the influence of the books they studied. The Parsee leaders once again sought Jagannath Shankarshet's help to have the books taught in schools properly edited with the omission of lessons on Christ, the Bible and cognate subjects. On April 15, 1857, a representation was made to the Government of Bombay which was signed by Nana Shankarshet, Bomanji Hormusji, Cursetji Jamshetji and more than a thousand other citizens.

The representation pointed out that the Government has agreed to remain neutral in regard to religious matters, that in the schools under Government's guidance no religious books would be taught, that Government would not interfere with the religious susceptibilities of the natives. It was further pointed out that several lessons in a number of text books taught clearly wounded the feelings of the Hindus, Muslims and Parsees and extolled the merits of Christianity. This was highly dangerous.

On July 6, 1857, the Government replied that the books were not prescribed by Government or the Department of Public Instruction, but by the Board of Education of which Nana Shankarshet and Bomanji Hormusji and others were members. The Director of Public Instruction had already noted the defects and shortcomings pointed out by the signatories to the representation and he was alive to the necessity of removing them as soon as possible. A new series of books was to be introduced. The lessons considered objectionable would not be taught under orders of the Director of Public Instruction. Even the new series of text books would be scrutinized from this point of view. The reply reiterated that no interference with religious matters of the natives of this country would take place. The Government attempt to pacify the public opinion was perhaps due to unrest all over the country in connection with rebellion of 1857. Nana Shankarshet was subjected to much hostile criticism from Government quarters and an attempt was made to implicate him with complicity with the rebels.

The British were in possession of Bombay for over 150 years. During this period only the European quarters developed and municipal and other civil functions were entrusted to Justices of Peace who were all Europeans till 1834. Jagannath Shankarshet found this situation very galling and intolerable. There was nothing like public life or public men. Jamshetji Jejeebhoy, Framji Cowasji and Nana Shankarshet were the pioneers in this field who tried to assert Indian self-respect.

Similarly the Grand Jury constituted for any trial did not have a single native of Bombay on it. Nana Shankarshet tried to secure membership of the Grand Jury for Indians and prepared a petition which was presented to Parliament by W. Wynn who also introduced a Bill in that behalf. The move succeeded and ultimately natives of Bombay secured this privilege.

In the years that followed a number of Justices of Peace were appointed from Bombay some of whom were Mohamed Ibrahim Maqba, Jagannath Shankarshet, Dhakji Dadaji, Mohamed Ali Roghay, Bomanji Hormusji, Cursetji, Ardeshir Dadi Cursetji, Rustomji Dadabhai, Pestonji Wadia, Framji Cowasji, Hormusji Bhikaji Chinoy, Jamshetji Jejeebhoy, Naoroji Jamshetji and Cursetji Cowasji.

The Justices of Peace were entrusted with a number of functions and a Bench of Justices supervised and controlled the civic administration. There was also the Municipal Conservancy Board.

In 1858, the Board was abolished and three Commissioners were appointed to look after various municipal functions. They had full powers to make the city pure and clean and free it from cholera. Drainage was a prime necessity in Bombay, and the J. P. Association took up the issue.

Water scarcity in the city was an equally important problem. The Conservancy Board before its abolition arranged for the construction of cast-iron pipes to bring water to the city from Vihar lake in 1863 and made lighting arrangements on Bombay's roads and streets by 1865.

That part of southern Bombay which is called Fort was once protected by fortifications and an embankment. It was pulled down as unnecessary and more space made available for buildings. One Dr. Leith in his report on civic health in 1853 recommended cutting down of palms as they obstructed the sea breeze. In the committee appointed to take decision in the matter N. D. Velkar and Nana Shankarshet opposed this move and the palms were saved. It may be noted that since 1862 Indians were nominated to Legislative Council. Nana Shankarshet was one of them. He contributed much to the Municipal Reforms Bill in 1864-65. The city and corporation owe much to the official and non-official statesmen who constituted the council.

The first measure for medical relief for the native population of Bombay in an organised manner was taken by Jamshetji Jejeebhoy by whose efforts the Bombay Native Dispensary came into being. Nana Shankarshet was a member of its managing committee. Out of this arose the famous J. J. Hospital for the construction of which Jamshetji offered a donation of Rs. 1,64,000 with the Government making a matching contribution.

The first maternity hospital was also opened near the J. J. Hospital for which land was donated by Jamshetji Jejeebhoy.

During the troubled times of 1857 the atmosphere in Bombay was full of suspicion against Indians and even Jagannath Shankarshet was not exempt from it.' Nana Shankarshet himself challenged Government

to take action against him in a court of law but it was proved that he was not, even in the most distant way, connected with the rebels.

In 1858, the famous Queen-Empress Victoria's proclamation assuring equality to all natives of India alongwith the other subjects in Great Britain and the Empire was made and what may be called the first instalment of political reforms was conferred on India whereby some Indians were nominated on the Central and Provincial Legislative Councils. Initially five Indians were nominated on the Bombay Council, *viz.*, the Nawab of Savnoor, Rustomji Jamshetji, Madhavrao Vinchurkar, Jagannath Shankarshet and Seth Premabhai Hemchand of whom only two knew English. The council obviously was so constituted that the native view point should be suppressed.

This became evident when an amendment relating to prisoners was sent to a select committee purporting to discriminate between Indians and Europeans. The amendment was passed so that an Englishman could not be handcuffed but Indians could be.

Jagannath Shankarshet was a member of the Bombay Legislative Council for about three years and during this period he handled a number of questions of social importance. He commanded the respect of all communities including the Muslims and the Parsees. An eloquent tribute to him after his death was a petition made to Sir Bartle Frere by Haji Habib Yusuf and a thousand other Muslim signatories for nomination of a Bombay Muslim on the Council in which it was said that so long as Nana Shankarshet was there they did not feel the need of a representative of their own, because he was confidently looked upon as their representative.

During the tenure of Jagannath Shankarshet's membership of the Bombay Legislative Council, the Act II of 1865 was passed, which did away with the system of administration by three Commissioners and vested the sole executive power in the hands of a single official responsible to the Board of the Justices of Peace. In giving shape to this Act, Nana Shankarshet had taken a prominent part as member of the select committee on the Bill and as member of the Council. A vast programme of improvements was undertaken by the Commissioner, Mr. Arthur Crawford, supported by his energetic assistant Dr. Howlett, the Health Officer. The years that followed witnessed enormous activity in every direction. From being " one cesspool and sewers discharging on the sand ", the city was made clean and healthy. Broad roads and foot-paths and adequate lighting arrangements were provided. The old ramparts that surrounded the Fort had already been pulled down and a large area on the western foreshore was reclaimed. Commissioner Crawford's ways, however, were autocratic and he brushed aside all constitutional checks. This soon led the municipal administration on the verge of bankruptcy and a vehement cry was raised for doing away with the obnoxious Commissioner. A Ratepayers' Association came into existence in November 1870 and it sent a monster petition to the Justices of Peace detailing the grievances of the public and asking for redress. A special meeting of the Justices of Peace was called on June 30, 1871 at the Town Hall to demand alteration in the constitution of the Municipality to secure effective control over the executive and greater efficiency and economy in administration. Pherozeshah Mehta emphasised the need for a responsible Branch of Justices elected by ratepayers themselves.

The Act of 1872, emerged as a fairly liberal measure with half the members elected. The Commissioner was to be nominated by the Government under the new constitution, the administration did make some progress but in the light of Lord Ripon's memorable resolution, the people's representatives quested for more, and made representation to Government from time to time requesting for a larger share in the administration of the city. The Government of Bombay was however totally opposed to any such concessions.

On the late Mr. K. T. Telang's proposal, a committee was formed " to consider and report what departments of administration the Municipality should ask Government to hand over to it for management and how the various outstanding claims of the Municipality against Government should be settled." The Committee comprised of Messrs. Naoroji Furdunji, R. N. Khote, T. Blaney, P. Peterson, R. M. Sayani, V. N. Mandlik, K. T, Telang, J. U. Yajnik, Badruddin Tyabji, P. M. Mehta, G. Geary and J. H. Grant. The principal of this committee's recommendations was that the number of the members of the Corporation should be increased from 64 to 72 to be elected and appointed, 36 by ratepayers' election, 24 by Justices of Peace election, 2 by the University, 2 by chamber of commerce and 8 by Government. After this and various other alternative schemes had been discussed and rejected, Government introduced the longlooked for Bill in the Legislative Council on July 16, 1887. It was the result of the joint labours of Mr. Naylor, the Legal Remembrancer and Mr. Charles Ollivant, the Municipal Commissioner. In the Council, the popular element in that body Lord Reay had the wisdom to appoint Sir Pherozeshah Mehta as an additional member. This was hailed by the *Bombay Gazette*, the *Indian Spectator* and the *Native Opinion*.

The bill as it was introduced was in many respects a retrograde measure entrusting the Commissioner with additional powers of giving the Government the right of interference in the municipal administration. Telang pronounced it as such. The bill underwent radical transformation in the select committee due to efforts of Pherozeshah Mehta so that the Corporation was charged with carrying out the provisions of the

Even then all aspects of the Bill were not necessarily commendable and the Corporation made a fresh representation, demanding full powers. In the second reading of the bill, the recommendations of the select committee were thrown out with the Bill giving the Commissioner wide powers in emergency. In consequence there was the Act of 1888 what Telang called " a strong executive responsible to the Corporation and an enlightened Corporation watchful over its executive".

Lord Reay, the Governor, wound up the proceedings with a lucid exposition of the fundamental principles underlying the Bill.

To Pherozeshah Mehta and K. T. Telang he paid appreciative compliments. About the Bill itself Lord Reay's

concluding remarks were, " the revised machinery created by this Bill will be found adapted to the enlarged functions which it has to perform. A systematic measure of amendment and consolidation was the need of the hour. In maintaining a high standard of primary education, of sanitation, in improving the system of communications and of lighting, in preserving open spaces, in the care of the sick, in giving increasing facilities to trade by the reduction of town duties, the Corporation will find a noble field for its initiative and energies."

The City of Bombay Municipal Act of 1888 was amended several times till today but its outline and framework has remained substantially the same during all these years, even with the expansion of the city limits during this period.

In the first decade of the current century, the Bombay Electric Supply and Tramways Company took on itself to supply electric power for domestic and industrial utilisation and run the tramways from Colaba to Sion and Matunga which served the people for decades and then replaced by the city-wide bus service now called the BEST supervised by the Bombay Municipal Corporation. Pherozeshah Mehta dominated the Corporation for a long time and laid down the policies of the city's development in almost every respect. He started the *Bombay Chronicle* and established the Central Bank of India. He was the universally acknowledged and undisputed doyen of Bombay's public life.

In this school of rendering public service were trained a number of his juniors including Chimanlal Setalvad, Gokuldas Parekh, Bhalchandra Krishna, Jehangir Petit, Homi Mody, Pheroze Sethna, M. A. Jinnah, Ibrahim Rahimatullah, Joseph Baptista, Nadirshah Sukhia, Narayan Chandavarkar, N. V. Gokhale, Daji Abaji Khare, D. G. Dalvi and so many others, most of whom learnt their early lessons in the Corporation and some distinguished themselves in the University of Bombay, and other similar public bodies.

After the end of the first world war and in the wake of the Montague Chelmsford Reforms, a larger field for public service was opened up for these disciples of Pherozeshah. When the Swaraj Party came into being other public workers like Jamnadas Mehta, S. K. Patil, M. R. Jayakar, K. F. Nariman, Bhulabhai Desai, M. B. Velkar, D. D. Sathye and others came to the forefront. Some of them became Mayors of the city of Bombay, some members of the Legislative Council and some like Kher and Morarji Desai rose to the Chief Ministership of the then Bombay Province. Purshottamdas Thakurdas, Jamnadas Mehta, M. R. Jayakar and M. A, Jinnah will be remembered as Bombay's representatives in the Central Legislative Assembly during the pre-Independence days for their distinguished and varied services to the country. So will be remembered N. M. Joshi, S. A. Dange, R. R. Bakhale, M. V. Donde, S. V. Parulekar as spokesmen of the working class and the lower middle class of Bombay for their outspoken championship of the under-dog.

Among the makers of modern Bombay, Rao Saheb Vishvanath Narayan Mandlik occupies a place of great distinction, next perhaps only to that of Jagannath Shankarshet. His experience as a public man was varied. He was a Government servant, a practising pleader, a member of the Bombay Municipal Corporation and its Mayor, a Member of the Bombay Legislative Council and the Central Legislative Council. He was the Editor of the *Indian Opinion*, an Anglo-Marathi weekly journal. He was also a social reformer having expressed himself in favour of widow remarriage and women's education.

His work as a legislator was appreciated both by the people and the Government. " Had he been born in England he would have become Prime Minister ", observed the *Reis and Ryot* in appreciation of his work in the Bombay and Calcutta Councils.

Mandlik enjoyed the confidence of the high and low alike for his devotion to duty and whenever he spoke he was listened to with respect and esteem. While the local self-Government legislation was on the anvil in the Bombay Legislative Council, Ranade wrote to him saying that he was certain that Mandlik would fight for the people's cause inch by inch. As late as 1910, Sir George Sydenham Clarke, Governor of Bombay, recalled the memory of Rao Saheb Vishwanath Narayan Mandlik who had immortalised himself by his intellectual eminence and high character.

He was nominated to the Indian Legislative Council in 1884 and a reception was held in Bombay to honour him.

Mandlik was closely associated with the Bombay Association as also the Bombay Branch of the East India Association. Pherozeshah Mehta, K. T. Telang, D. E. Wacha and Badruddin Tyabji were all trained in public work in these two bodies devoted to public work. They had all worked together while welcoming the doings of Lord Ripon, demanding simultaneous Civil Service Examinations and equal opportunities to Indians with Englishmen, and the Ilbert Bill agitation. However, the younger people wanted an organisation of their own for self-expression and the Bombay Presidency Association (For history and activities of the Presidency Association see Chapter 2, History, Modern Period, Vol. I.) came into existence in January 1885. It was inaugurated at a public meeting held on 31st January 1885 at the Framji Cowasji Institute, in response to an invitation by Tyabji, Telang and Pherozeshah.

The Association showed considerable activity in the early years of its existence. By resolutions, memorials and public meetings it focused the general feeling of the community on all matters of common interest. One of the earliest acts of the Association was to organise the carrying on of energetic propaganda work in England. The moment was propitious, for a general election was imminent, Gladstone having decided to appeal to the country against the Home of Commons which had rejected his Irish Home Rule proposals. In view of the growing interest which Parliament was beginning to evince in Indian affairs, and the growth of what might be called an Indian Party, it was felt that there was a good opportunity of educating the English electorate as to the wants of India and of persuading it to support candidates who had made her cause their own and the Council of the Presidency Association decided to take the matter up and appeal for co-operation to other parts of India. A number of leaflets and pamphlets were circulated in England which dealt with a number of subjects of importance to the well-being of India. Three delegates, N. G. Chandavarkar, Man Mohan Ghosh and Ramaswamy Mudaliyar were deputed to England to carry on platform propaganda.

The results of the efforts of the Bombay Presidency Association and other similar bodies to gain the ear of the British public were only partially successful. The activities of Indian patriots and public men at this time found their most practical expression in the establishment of an organisation which for many years afterwards laboured with phenomenal success to achieve complete political independence for India. It was the Indian National Congress which was founded at the close of 1885 in the City of Bombay. It was in Bombay that the foundations of local self-government had been laid and it was appropriate that Bombay should also be the birth place of the national movement for political autonomy. Among those who were present were Sir William Wedderburn, Justice Jasdine, Professor Wordsworth, R. G. Bhandarkar, and M. G. Ranade. The honour of presiding over this gathering was conferred on W. C. Bannerji, one of the most eminent leaders of Bengal. It was, however, a quite representative gathering of English educated India. All alike were greatly in earnest and fired with a noble purpose.

The first session of the Indian National Congress set the tone of the political agitation for many years afterwards as the nine resolutions passed at the session indicated. Most of these resolutions became hardy annuls. Several sessions of the Congress were held in this city, but that is a very big and different story which cannot be appropriately related here. (See Chapter 2, History—Modern Period, Greater Bombay Gazetteer, Vol. I.) Suffice it to say that the Indian National Congress, the Indian Social Conference, the Industrial Conference, the various chambers of commerce and industry, the trade union movement and the awakening in the working class, the lower middle class and the people in general have been the results and expressions of the public life of Bombay and the teachings and doings of its public men.

With the end of the nineteenth century, ended what may be called the earlier part of the incessantly growing public life in the city. To this Mahadeo Govind Ranade's contribution was silent and rather subdued, but it was very much there. Indeed, it was not limited only to the city of Bombay but the whole country. He passed away on January 16, 1901. Rich tributes were paid to him by Lokamanya Tilak when he said that he believed in the all sided and not lop-sided development of the nation. He was clearly of the opinion that we are backward in every way—religiously, socially, industrially, educationally, politically and unless we improve in all these respects we would not come in line with the civilised nations. He was fully conscious that every Indian who had the equipment of western education had this public responsibility and he set an ideal example by his own efforts for 30 years for all to follow. It was even strongly held during the governorship of Sir Richard Temple that the Pune Sarvajanik Sabha which he promoted and of which he was the soul was a seditious body. Quiet courage was his most extraordinary quality.

Under the influence of the teachings of Dadabhai, Ranade, Telang, Mandlik and Pherozeshah Mehta, public life was, generally speaking, an expression of faith in the justice and fairness of British love of freedom and law. The Congress and the Provincial Political Conferences that usually followed the lead of the Congress made demands for improvement in the administration of the various departments and equal opportunities for moral and material development of the people. Hope was always expressed that the liberty loving British would sooner or later grant all that was demanded and Indians would enjoy equal rights and privileges in the British Empire. As a measure of self-reliance the Swadeshi movement began. Bodies like the Indian Chamber of Commerce, the Millowners' Association became the allies of the Indian National Congress and the Industrial Conference. But a younger generation was rising that became impatient to lose faith in the mendicant policy of Dadabhai, Ranade and others. It was about this time that what came to be known as the Extremists in politics and public life gathered strength in the country and this city. Even among the so-called Moderate ranks there was much dissatisfaction. The best and most restrained but unmistakable expression to this is to be met with in the Presidential address of Gopal Krishna Gokhale at the Banaras Congress of 1905.

But how public opinion in Bombay stoutly expressed itself on a matter which may be considered as trivial today is noticeable in the agitation over what has passed into history as a battle of the clocks which arose due to Lord Curzon's decree of July 1, 1905 that India should observe one uniform time since known as the standard time. There was stout opposition to the move from the Corporation spearheaded by Pherozeshah Mehta. Public opinion was also against the adoption of standard time and was expressed in a mass meeting addressed by Bhalchandra Krishna Bhatavdekar, a veteran corporator.

In the Corporation it became a prestige issue and Pherozeshah Mehta carried the house with him. A few hostile persons resented this saying that they protest against the dominance of Pherozeshah in civic affairs. The *Times of India* observed that in due course Sir Pherozeshah would find that he had sadly over-calculated his strength.

A proposal was again moved in Corporation by Harrison, Accountant General, but the amendment to postpone the adoption of standard time moved by Pherozeshah was carried.

Two months after Pherozeshah had secured the rejection of standard time, that a movement was started which convulsed all Bombay and threatened seriously to impair that harmony between the different sections of its population which had always been the distinct feature of Bombay's public life. (Homi Mody, Sir Pherozeshah Mehta.) A feeling was fostered assiduously in certain quarters that Pherozeshah's opposition was a personal attempt to demonstrate to the city who was master and to impose upon the Corporation his personal will in the face of its opinion expressed twice. The movement was aimed at the overthrow of Pherozeshah whom Harrison described as a despot whose following, he said, must be crushed. He found easy allies in the Editor of the Times of India, Collector and Commissioner of Police, using their official position. They succeeded in persuading the Justices of Peace who were asked to vote for 16 nominees of their choice in return for some favour or the other.

As the elections drew near, public excitement rose to fever heat. Voting day, February 22 came at last. The public had been admitted to the Municipal Hall and the election took place amid scenes of wild excitement. The result of the voting showed that the 'caucus' of the three had triumphed and Pherozeshah had lost. However two friends offered to make room for Pherozeshah. He accepted one offer

and eventually came in. The election was challenged in the court of law where some dramatic incidents were witnessed, some damaging disclosures were made and many people had to look foolish in the course of the inquiry. The case resulted however in the election being upheld. A representation made to Government was turned down. All these incidents kept the public mind in great excitement. They culminated in a great demonstration at the Hindu temple of Madhav Baug in the afternoon of 7th April. A mass meeting of the citizens of Bombay was convened to give expression to the universal feeling of condemnation of the unconstitutional action of Government officials in interfering with the purity and freedom of the election and to adopt a memorial to the Viceroy praying for an inquiry into the affair. Gokhale addressed the meeting wherein he paid eloquent tributes to Pherozeshah and defended his unrivalled position as a tribute and gratitude on the part of those to whose service a great career has been consecrated. (Homi Mody, Sir Pherozeshah Mehta).

The reply from the Government of India reiterated the position taken by the Government of Bombay. The so called caucus could not effect any changes and the corporation still continued to be dominated by Pherozeshah. Thus the caucus entirely failed in depriving Pherozeshah of his exalted position in the Bombay Municipal Corporation.

When these events were taking place there was great upsurge on the political front with the rise of terrorist cult apart from extremism whose followers were Tilak, Bipin Chandra Pal and Lala Lajpatrai. Following the split in the congress at Surat in 1907 leaders of militant persuasion were prosecuted. Among them was Tilak whose imprisonment shocked the people of Bombay and resulted in a spontaneous strike. The then Police Commissioner, H. G. Gell had graphically described the happening in Bombay city as follows: " All sorts of rumours became current about this time and one of the arguments used to gain the sympathy of the masses, especially the mill-hands of Bombay was that Government was displeased with Tilak because he interested himself in temperance and Swadeshi Movements which caused loss of revenue to Government. Efforts were made to stir up a strike by Tilak's friends and sympathisers while the trial was on. There were about 85 mills and one lakh of operatives. Most of them were Marathas and Tilak was a Brahman but that did not stand in his way. He advised mill-hands especially jobbers and head jobbers to form local committees of mill-hands for the purpose of discouraging liquor drinking among them. It is clear from this that Tilak had considered the advisability of gaining the sympathies of mill-hands and teaching them to organise, and had he been vouchsafed a longer period of liberty, he would no doubt have had, in course of time, a large organised body of millhands at his disposal. Fortunately, he was arrested in time and though no doubt his followers will try and carry on his work, I do not think they have yet succeeded in doing much. Speakers at Chowpatty ostensibly spoke about Swadeshi but in effect spread Tilak's popularity and disaffection against Government."

Bombay's English educated intellectuals reacted to Tilak's trial and deportment when he was under trial. As Jayakar puts it: Tilak rejected legal defences as disingenuous short cuts to acquittal which he did not desire to adopt and asserted that his defence was going to be on lines, not guided by the desire of acquittal, but forming a worthy answer of the educated classes of India to the challenge of the prosecution. But Tilak disdained them, regarding the trial as offering an opportunity for a defence worthy of the high cause of which he regarded himself as the custodian for the moment.

From the time of Tilak's incarceration in Mandalay jail till the time of his release in 1914, there was a sort of lull in the political movement for freedom, although the Morley Minto Reforms were introduced and the elected element in the Provincial and all India Legislacive Councils was enlarged. Tilak's release from Mandalay jail and the First World War almost synchronised. Tilak made his declaration of loyalty and started very soon the Home Rule League. Mrs. Annie Besant joined hands with him by a separate League for Indian Home Rule, but there was close co-operation between these two leagues and their branches all over the country. The day to day agitation for demanding home rule was considered supplementary activity of the Indian National Congress. Tilak and Besant entered the Congress and until his death in 1920, Tilak almost became the dictator in the Congress with the willing and free consent of his countrymen. During the war years, Lord Willingdon was the Governor of Bombay and during his Governorship public life in Bombay was at its height. Bombay's popular leaders in those days were Baptista, Jinnah, Jayakar, Horniman, Jamnadas Dwarkadas, Sathye, Velkar and numerous others who exploited the platform in Bombay for popularising the demand for home rule. The Bombay Press in the Indian languages and English operated in harmony and unison with the platform.

After the end of the First World War, the Montague-Chelmsford political reforms were inaugurated but they fell short of fulfilling the aspirations of India. Tilak died in 1920 on August 1 and from that date Mahatma Gandhi assumed the leadership of the action. His principal weapon was the non-co-operation movement. Some items of the non-co-operation movement were the boycott of Legislative Councils, boycott of law courts and boycott of schools and colleges. Bombay became most prominent in this movement because the city became practically the headquarters of Mahatma Gandhi and his colleagues. Public life assumed altogether new dimensions and reached a new high in Bombay. The public bodies of businessmen and industrialists became the allies of the nationalist movement for self-assertion and autonomy. Their accredited representatives like Purushottamdas Thakordas, Pheroze Sethna, Lalji Naranji, Homi Mody, Jehangir Petit and others sat in the various legislative bodies. With the inauguration of the Swaraj Party, the edge of national sentiment became sharper. Youth leagues and students' organisations gave enthusiastic support to the national movement. The boycott of the Simon Commission was universal.

The salt and forest satyagraha movements as also the movements for refusal to pay land revenue when the crops had failed and assessment was increased were expressions of acute discontent in the country side, but their echoes ever reverberated in the city's public life. These had prepared the public mind to resort to still sterner action and during the Second World War, the Quit India movement arose like an angry storm when popular leaders like Gandhiji and Jawaharlal Nehru were placed under arrest. As a result of the war, the British power came to the conclusion that it had to transfer power to Indian hands and quit the country as political masters.

After this was effected, the country was divided into India, *i.e.* Bharat and Pakistan. Under *swaraj*, public life is asserting itself in all walks of life and all fields of human activity and ever proceeding towards self-fulfilment and the city's manhood (including its womanhood) is trying to reach its full stature.

To the making of the public life of Bombay, the contribution of the working class movement is truly considerable. Factory industry made its organising in Bombay where the first cotton textile mill was established in 1854. The first railway train ran from Bombay to Thane in 1853. These were the beginnings of modern industry which developed in succeeding decades. Factory industry and factory labour brought in its woke many an industrial problem.

Bombay became an industrial and commercial centre of India and was recognised as the financial capital of India before long. This position was due to its being an excellent port on the West Coast. With the passage of time and growth of the city labour became a major force in the public life of the city. The demand of labour for a larger share in the profits and better working conditions led to strikes by the working employees. Mr. N. M. Lokhande was the first labour leader who was employed in a textile mill as store keeper. Early in his life, he came in touch with Mahatma Jyotirao Phule and became an ardent worker of the satya shodhak samaj. Out of this was born his interest in the economic conditions and problems of factory workers. He championed the cause of the workers and made a name for himself. (For a detailed history of Labour Movement in Bombay see Chapter-5, Industries in Greater Bombay Gazetteer, Vol. II.)

Apart from factory workers, other workers also knew about the weapon of strike and resorted to it from time to time. The first was the butcher's strike in 1867 when the municipal authorities decided to remove the slaughter houses to Bandra. The strike however collapsed. In 1899, there was a strike of the signalling staff of the former G.I.P. Railway. The strike continued for 27 days but under threat from the management workers returned to work. The strikes mentioned so far are only samples, but there were many more which make clear that the workers were not unaware of strike as a method of ventilating grievances and securing their demands. By the end of the 19th century, modern industry had secured for itself an assured place in the life of the city and the country. The political awakening that was taking place was solidly behind it. However, an organization to look after the welfare of workers was lacking. This need was fulfilled with the establishment of the Bombay Mill-hands Association in 1890. Joseph Baptista, S. H. Jhabwala, F. J. Ginwala, S. K. Bole, Koregaonkar, Talcherkar and others were the earlier leaders of the working class movement. By 1920 N. M. Joshi came to provide healthy and continuous guidance. An important event of the early pre-war phase of the working class movement was the first strike of a general character with political motivation. It took place in Bombay in 1908 after the conviction of Lokmanya Tilak in the second sedition case against him and against the savage sentence of six years rigorous imprisonment upon him, and continued for six days. It was quite peaceful but owing to the police offensive it became violent. The military was brought on the scene and it caused the death of 15 persons and many more were injured.

It is somewhat interesting to note that Tilak who was in England in 1919 was elected by the workers' meetings in Bombay as the labour representative for being sent to Washington to attend the first International Labour Conference, though the Government nominated Mr. N. M. Joshi, as such and Tilak was asked to be his adviser. Tilak declined the offer. The All India Trade Union Congress was established in October 1920, and the first session of the Congress was held in October with Lala Lajpat Rai in the chair. In his presidential address he put forward socialism as the goal of self-governing India. Mr. Joshi was associated with the AITUC from the beginning.

During this period there were two strikes of textile workers, one in 1924 on the issue of bonus that was being paid to the workers since 1917. The other was the general strike of 1925 which began on September 15 and was on the issue of wage cut. This strike was manipulated by the mill-owners to obtain the abolition of excise duty on cotton. The Government bowed to this demand with the result that the wage cut was restored and strike withdrawn. The employers used the strike as a weapon to get their demand from the Government. And yet the workers and their leaders were accused from time to time of resorting to strikes for political ends.

Mr. Joshi's single-minded devotion to the organisation and the trade union movement and his competence and fair mindedness in handling affairs were exemplary. His constant assistant and collaborator was Mr. R. R. Bakhale, another member of the Servants of India Society. His advice and counsel were always sought and respected by the more militant working class leaders and Communists like Messrs. Dange, Joglekar, Mirajkar, Ranadive, Deshpande, Nimbkar and others. All of these added an important dimension to the public life of Bombay by their work and activities in politics and the working class movement.

Communists started working in trade unions much later than nationalists and o+hers. Systematic work on their part began in 1927. They were mostly middle class intellectuals scattered in a few cities like Bombay, Calcutta, Madras and Kanpur. But in a year or so they had a big following in most industrial centres. By 1928, they were the leaders of workers in Bombay. They were dedicated and tireless workers. They had behind them the prestige of the Russian Revolution and the backing of the international communist movement. In the trade union field, communists were following what Dange, general secretary of the AITUC and president of the Indian Communist Party, described as a two-pillar policy, *viz.*, to help in the development of the economy and to defend the interests of the working masses in that economy. Communist influence in the All India Trade Union Congress becomes noticeable from 1925 onwards. A number of communist agents from abroad came into the country from time to time.

Chiefly it was the British communists who trained younger intellectuals and workers in the ideology of communism and their influence on Bombay's undergraduates and intelligent workers was considerable. The total effect of this training and the teaching of N. M. Joshi, Baptista, R. R. Bakhale, Chamanlal and others was the erection of class consciousness among the workers as also white collared clerks hailing from the j ower middle class and the development of strong public spirit for the improvement of the lot of the common man.

A significant development of the period was the appointment of the Royal Commission on Labour under the chairmanship of J. H. Whitley. It was not an all-white Commission since N. M. Joshi and Diwan Chamanlal were appointed among others as members and yet it was boycotted by the communists and even by Jawaharlal Nehru. But the appointment of Joshi and Chamanlal did raise the status of the trade union movement. Both made valuable contribution to the labours of the Commission and impressed everybody with their earnestness as well as by their knowledge of the labour problems.

In this year there came about a split in the AITUC, the section led by Joshi having found it impossible to agree with the decisions of its session in 1929. It formed what became known as the Federation of Trade Unions, but after some years all working class organisations united again in 1938 under the banner of the AITUC.

General elections under the Government of India Act, 1935 took place early in 1937 and Congress ministries came into power in most provinces of India, except Bengal and the Punjab. The AH India Trade Union Congress extended its full support to the Indian National Congress. The result in Bombay was that the Kher Ministry took office. The workers expected a better deal in these circumstances. One noteworthy action of the Congress Ministry in Bombay was the appointment of a committee to inquire into the conditions of the textile workers under the chairmanship of Jairamdas Daulatram. The most far reaching of the actions of the Bombay Ministry was the legislation for the settlement of industrial disputes. Another important Act was the Shops and Establishments Act. World War II broke out in September 1939 and the Congress Ministries resigned in all provinces. During the war, an imposing industrial structure had developed. The first impact of the war on workers and the trade union movement was the rise in prices and the scarcity of essential commodities. The first to react strongly to this situation were the Bombay textile workers. They embarked on general strike demanding an adequate dearness allowance to compensate against the rise in prices. Another demand that became general over the country was the demand for bonus. These demands had to be conceded.

After the war came political Independence and a new constitution, and in 1952 the first election took place. The Ministry of Labour and Employment of the Government of India became the central administrative machinery for the formulation of labour policy. Five year plans for the development of the country were framed and implemented. A lively interest in the international trade union movement and a keen desire to maintain contacts with it have characterised the working class movement since its inception. The international communist movement took an equally keen interest in the Indian movement. The Indian movement was never isolationist in outlook. After Independence, more and more trade unionists are attending international conferences and playing an important role in their discussions.

After nearly sixty years of sufferings and sacrifices, trade unions have secured for themselves an assured place. Workers have realised the necessity of binding themselves together in unions and developing their national organisations. Employers have realised that it is not possible to stop the growth of unions and that, treated with consideration and confidence, they can be of value for maintaining industrial peace and for increasing production. The Government have realised that trade unions are not destructive or disruptive organisations but that they can play a useful and positive role. With this realisation, the attitude of the society as a whole has also changed. There is a general recognition of the important and constructive role that trade unions can play in a free society. And towards this achievement, those workers in public life from the days of Lokhande to this day have made a rich contribution. They have had a considerable share in the making of the public life of Bombay as in other urban centres of the country.

IOURNALISM

The history of journalism in Bombay commences with publication of the *Bombay Herald* in 1789 and of the *Bombay Courier* in 1790. The former disappeared after a brief, almost meteoric existence, while the latter continued to exist, as a separate publication, until 1847. Who its original proprietors were cannot be definitely stated, but its express object was the support of Government, and it was for many years known as the official organ. The office of the paper was in Forbes Street. In 1792, it enjoyed the exclusive patronage of the Bombay Government and continued to publish the orders of Government in full until 1830, when the *Bombay Government Gazette* made its first appearance, under the auspices and editorship of Colonel Jervis of the Bombay Engineers.

Among the chief contributors and supporters of the *Courier* was Mountstuart Elphinstone, who ventilated his view on native education in its pages.

In 1791, the *Bombay Gazette* appeared for the first time, and shared journalistic honours with the *Courier* until 1819, when Captain Stocqueller arrived in Bombay. He, after a brief period of military duty, bought a paper called the *Argus*, which had been recently started by one Mr. Beck, and republished it under the name of the *Bombay Chronicle*.

The Bombay Chronicle died a natural death, when its editor returned to England about 1822; but in 1827 Captain Stocqueller again sought these shores and commenced to issue the *Iris*, which for a time had phenomenal success in connection with the dispute between the leading sects of Parsis on the subject of the Zoroastrian calendar. Mr. Henry Roper, afterwards Chief Justice, became one of this paper's most valued contributors; and shortly afterwards the proprietors of the *Courier*, who watched the progress of the *Iris* with considerable misgivings, persuaded Captain Stocqueller to amalgamate his journal with theirs and become editor of the *Courier* on a salary of Rs. 1,000 a month.

Apparently by this date Bombay journalism had distinctly improved in character and tone. The chief English papers in 1838 were the *Bombay Gazette*, the *Bombay Courier* and the *Bombay Times*, the last named of which appeared for the first time in 1838, while native journalism was represented by the *Darpan* (mirror), a Marathi publication, edited by Balshastri, and confined to local and domestic matters; the *Chabuk* (lash), which followed a more outspoken policy and was printed in Gujarati; the *Samachar*, also a Gujarati paper, and the *Jam-e-Jamshed* (cup of life), edited by a Parsi and treating principally commercial matters. Two years later (1840) journalism received a considerable impetus by the

publication of at least six new monthly magazines, among them being the *Dig Darshan* and *Vidya Sagar* in Marathi, the *Bombay Magazine* and the *Bombay Sporting Magazine* in English while seven native newspapers, owned by Parsis, Hindus and Muhammadans, catered to the taste of the native public. In 1844 appeared the *Bombay Witness*, a religious weekly, which was given up in December 1846, in 1845 the *Bombay Mail* was instituted as a monthly summary of Bombay affairs for the English public at home; an *Indian Sporting Review*, published at the *Bombay Gazette* office and characterized as full of "elegance, wit, spirit and sprightliness", ousted the *Sporting Magazine* in the same year; while in 1846 a new daily paper was issued under the title of the *Bombay Telegraph* and *Eastern Intelligence*. The *Courier* was merged in the *Bombay Telegraph*, which became the *Telegraph and Courier*.

Meanwhile Indian journalism had not stood still; for by the middle of the nineteenth century Bombay possessed six Gujarati newspapers, notably the *Samachar*, first issued in 1822, the *Jam-e-Jamshed*, which started in 1831, the *Dnyan Prasarak*, a magazine started in 1847, the *Rast Goftar*, which was first published as a fortnightly in 1851 and the Native Opinion started from 1864.

The general spread of education was also noticeable in the demand for the publication of local scientific societies. The Transactions of the Bombay Literary Society, which were printed during the first quarter of the century, had to be discontinued on the score of expenses; but a longer life was vouchsafed to the Transactions of the Bombay Branch of the Royal Asiatic Society, of the Agri-Horticultural Society, of the Medical and Physical Society and of the Geographical Society.

The movement for the publication of new European journals steadily progressed. A weekly paper, the *Spectator*, appeared early in 1847, the *Bombay Times* joined the ranks of daily papers in 1850, a *Bombay Quarterly Magazine* was issued from the Byculla Press in the same year, and these were followed by the *Bombay Guardian*, an evening paper, in 1851, the *Bombay Herald*, a bi-weekly, in 1855, and the *Bombay Standard* started by Dr. Buist in 1858. Most of these disappeared or were absorbed in other papers as the years went by, as was also the case with more than one vernacular paper, issued between 1840 and 1870. Those which preserved the even tenor of their way were the *Bombay Gazette*, which had altered its title to the *Gentleman's Gazette* about 1842, and the *Bombay Times*, which absorbed the *Standard* (1859) and *Telegraph and Courier* (1861) and became the *Times of India* in 1861, and among Native Journals, the *Indu-Prakash*, an Anglo-Marathi journal dating from 1862, and the weekly *Gujarathi* which first appeared in 1879 were important. These were followed a little later by the *Kaiser-i-Hind*, published first in 1882, and in 1888 by the *Hindi Punch*. Vernacular journalism in general received no little impetus from the famous Maharaja Libel Case of 1862, which arose out of the startling charges laid against the high priests of the Vallabhacharya sect by Mr. Karsandas Mulji in the columns of the *Satya Prakash*, which was amalgamated subsequently with the *Rast Goftar*.

Since 1880 the number of journals, both English and vernacular, steadily increased, and the native press made great strides in printing. In 1909, there were altogether 131 newspapers and periodicals printed in Bombay and the number of books annually published by the local presses ranged from 700 to 1,000.

The twentieth century opened an era of increasing political consciousness involving the masses in national and international affairs. Consequently the newspapers have become an important means of mass communication, spreading views, holding discussions and expressing opinions effectively and quickly through their editorials and other columns.

The following table gives information about newspapers and periodicals published in Greater Bombay as in 1976.

TABLE No. 1
Newspapers and Periodicals published in Greater Bombay, as in 1976

Language	Daily	Bi- weekly	Weekly	Fortnightly	Monthly	Quarterly	Six- monthly	Annual
Marathi	9	1	26	21	97	22	1	18
Hindi	2		7 +1 (bi-lingual)	9 +1 (bi-lingual)	32 +6 (bi-lingual)	13		2 +8 (multi- lingual)
English	11		67	101	330	173 +9 (bi-lingual)	20	104
Gujrati	4 +1 (Anglo- Gujrati)	2	15 +3 (Anglo- Gujrati)	17 +1 (Anglo- Gujrati)	74 +1 (Anglo- Gujrati) +1 (multi- lingual)	16 +2 (Anglo- Gujrati) +1 (multi- lingual)		5 +1 (multi- lingual)
Urdu	7		11	9	17	6	1	2
Sindhi	2		5	2	9			8 +2 (multi- lingual)

The detailed information about the leading newspapers and news services in Bombay is given below.(The

account is based on information supplied by the respective newspaper offices.)

The Times of India: The Times of India was founded in 1838, with the title of the Bombay Times. This paper was at first a bi-weekly and owed its origin, in great measure, to Lord Metcalfe's action of 1838, which granted freedom to the press in India and encouraged capitalists to embark upon journalistic enterprises. The syndicate which founded it was composed of eleven European merchants in Bombay, Sir Jamshetji Jejeebhoy, two eminent barristers and a member of the medical profession. Dr. Brennan, secretary to the Chamber of Commerce, was the first Editor and was succeeded in 1839 by Dr. Henderson of the Elphinstone College. In May 1840, Dr. Buist was specially despatched from Scotland to edit the paper during whose tenure it expanded into a daily paper on 2nd September 1850. The title of the journal was changed to the Times of India in 1861 during Mr. Knight's editorship. The journal was edited by eminent editors who were mainly Europeans.

The paper always described and commented upon the chief events in the history, and socio-economic life of India. In the nature of things, it was a pro-British paper throughout the struggle for freedom in India. Very often it supported the British rule, and was rather indifferent to the aspirations of the Indians for freedom. After the dawn of Independence it adopted a progressive attitude, guiding and expressing public opinion. It has utilised the freedom of press guaranteed by the constitution of India to the advantage of the reading public.

The original office of the *Times of India* was located in Maneckji Petit building (now destroyed) near the end of the Colaba Causeway. After being shifted twice it was finally moved to the present Times of India building, opposite the Victoria Terminus.

The Times of India group of newspapers are under management of Bennett Colemen and Company. The company controls many newspapers and journals besides the *Times of India* which command a vast readership and wide circulation in Bombay and Maharashtra.

The Times of India News Service was set-up by Bennett Colemen and Company in 1953 for an efficient and effective use of the services of its correspondents spread over the country and abroad. Nearly 200 correspondents, of them 18 were staff editors, worked for the Times of India News Service. Besides staff correspondents, there were two other categories, stringers and liners, who were part-time correspondents.

The News Service had two staff correspondents abroad, one in Washington to cover news in North and South America, and the other in London to cover Europe. It had two part-time correspondents in South-East Asia at Hong Kong and at Kuala Lumpur and the other at Colombo. In addition, it also had a part-time correspondent in Australia to cover sports.

The News Service Organisation is headed by the Chief of Bureau. There are two chief sub-editors, one in Bombay and another in New Delhi.

For convenience, the country has been divided into two zones, Bombay and Delhi, according to the importance of news from the area to the Bombay and Delhi editions. Correspondents in the Bombay Zone send their news items to Bombay. Those in Delhi Zone send them to Delhi.

News items received in Bombay and Delhi are processed at re-write desks manned by trained sub-editors. News messages are put in proper shape and passed on to the edition desks in Bombay and Delhi.

Bombay is connected with Ahmedabad, New Delhi and Calcutta by teleprinter links. There are three teleprinter channels to Delhi, two to Ahmedabad and one to Calcutta. Bombay is also connected by teleprinter to Madras, Bangalore, Trivendrum, Hyderabad and Pune.

The Delhi News Service is connected by teleprinter to Bhopal, Jaipur, Chandigarh, Shrinagar, Lucknow and Patna

The correspondent in Washington communicates his news messages over the telex directly to Bombay. The London correspondent uses the Reuter's transmission line for sending his messages to Delhi.

In Maharashtra the news service has staff correspondents at Piine and Nagpur so that there is adequate coverage of regional news. Of about 40 part-time correspondents working in the Bombay Zone nearly 20 were in Maharashtra.

The Times of India News Service publishes 16 journals from Bombay, of which the *Times of India* (including *Times Weekly*) is published from Bombay since 1838, from Delhi since 1950 and from Ahmedabad since 1968. Daily circulation of the paper as in January-June 1976 was 1,81,612 in Bombay, 1,00,434 in Delhi and 29,419 in Ahmedabad.

There were 40 proof readers and 101 editorial staff in the Bombay office of the *Times of India*. The workmen included press workers numbering 1,660, office staff 860 and administrative and sub-staff 170. At present the Chief Editor is Shri Girilal Jain.

The *Economic Times* was started in 1961 from Bombay, in 1974 from Delhi and in 1976 from Calcutta. The daily circulation of the same as in January to June 1976 was 26,098, 18,875 and 8,736 from Bombay, Delhi and Calcutta, respectively. The strength of the staff in Bombay comprised 19 proof readers and 61 editorial staff. At present the Chief Editor is Dr. M. Ezekiel.

The Navbharat Times was started in 1950 from Bombay and Delhi. In 1976 daily circulation of this paper in Delhi was more than that in Bombay (2,32,502 in Delhi and 73,431 in Bombay). There were 21 proof readers and 35 editorial staff in Bombay. The present Chief Editor is Shri Rajendra Mathur.

The Maharashtra Times was started from Bombay in 1962 (Mr. D. B. Karnik was its founder-editor.). It is a daily and its circulation as in January-June 1976 was 1,22,459. It has a wide circulation in Western Maharashtra and parts of Vidarbha and Marath-wada. The name of the present Editor is Shri Govind S. Talwalkar.

Besides the above publications, the Times of India Group publishes 12 newspapers and magazines which command a large readership. The following statement gives the statistics about these newspapers and magazines which are published from Bombay and Delhi:—

Publication	Place	Daily or Weekly	Year of commencement	Daily Circulation January-June 1976
Evening News	Bombay	Daily	1923	23,143
Filmfare	Bombay	Fortnightly	1952	1,34,767
Illustrated Weekly	Bombay	Weekly	1880	2,75,093
Femina	Bombay	Fortnightly	1959	1,44,292
Dharmayug	Bombay	Weekly	1950	2,07,416
Sarika	Bombay	Fortnightly	1961	43,578
Madhuri	Bombay	Fortnightly	1964	1,19,630
Indrajal (Comics)	Bombay	Weekly	1964	56,390
Science Today	Bombay	Fortnightly	1966	77,658
Dinaman	Delhi	Weekly	1965	41,786
Parag	Delhi	Bi-weekly	1958	97,125
Youth Times	Delhi	Weekly	1972	26,782

The Free Press Journal: The Indian National Press Ltd., Bombay published the *Free Press Journal*, the *Bharat Jyoti*, the *Free Press Bulletin*, the *Navshakti* and the *Janashakti*.

The Free Press Journal, a daily English paper, is published from Bombay since 1930. Its average daily circulation was 62,342 in 1973. The Free Press Journal News Service is designed as a news and features agency primarily for the Free Press Journal itself. Its services are available also to all publications of the group. The major part of the daily news is supplied by special bureaus in Pune, Ahmedabad, Delhi and Calcutta. These bureaus are linked with the main Bombay office by direct teleprinters. Besides these bureaus, the Free Press Journal News Service maintains correspondents in many State capitals like Madras, Bangalore, etc. and in many towns in Maharashtra and Gujarat. All correspondents file their despatches to the Bombay office where they are received and processed by a special cell of the news department consisting of a Chief of Bureau and two or three assistants. The processed copy is made available to the news editors of all the five publications. At present, the Free Press Journal News Service does not have correspondents in foreign countries (1973).

At present Shri Virendra Kapoor is the Chief Editor of two English newspapers of the company, *viz.*, the *Free Press Journal* and the *Free Press Bulletin*. Shri P. R. Behere is the Editor of the *Navshakti*. The publication of *Bharat Jyoti*, a weekly and *Janshakti* has been discontinued.

The *Navshakti*, a daily paper in Marathi, is published from Bombay since 1932, and its circulation in 1973 was 43,418. The *Bharat Jyoti*, (It's publication was discontinued subsequently.) an English Sunday news magazine, was started in 1938. Its circulation in 1973 was 62,551. The *Free Press Bulletin*, an English eveninger is published since 1947. Among the evening papers in Bombay it commands a good readership. Its daily circulation in 1973 was 16,041. The *Janashakti*, a daily Gujarati paper is published

from Bombay since 1950. Its daily circulation was 29,224.

The company had 119 working journalists, 249 press workers, 44 miscellaneous staff members and 61 members of office staff in its employment as on 28th February 1973. These figures include the members of the staff employed in various News Bureaus.

Indian Express Newspapers (Bombay) Pvt. Ltd.: The Express News Service is a captive arrangement serving exclusively the Indian Express group of newspapers, including the regional language publications. The service has special arrangement with the *Washington Post* and the *Los Angeles Times* News Service for the coverage of foreign news, in addition to its own correspondents in Washington, London, Cairo, Dacca, Ceylon and Hong Kong.

Under the news service, all the individual reporting establishments of all the editions are integrated, their reports being transmitted over its own teleprinter and telex circuits. The service has also correspondents in all the State capitals and a few other important commercial centres linked to the publication centres by teleprinters.

In Maharashtra, the news service has correspondents at Nagpur and Aurangabad. The service has a branch office and full-fledged bureau at Pune.

The Express News Service supplements the common agencies. The services of all part-time correspondents have been terminated since the news potential in the districts was considered inadequate for such an arrangement. It was considered more useful to have roving correspondents visiting the rural areas frequently.

The Indian Express group of newspapers published the following journals from Bombay: the *Sunday Standard*, the *Indian Express*, the *Loksatta*, the *Screen* and the *Financial Express*, the information of which is given below:—

The Sunday Standard.—The Sunday Standard was started in 1936.It is published simultaneously from seven centres, and its daily circulation from each centre in 1973 was as follows: Bombay 1,26,807; Ahmedabad 19,938; Delhi 1,26,807; Madras 44,455; Madurai 77,501; Vijayawada 53,076 and Bangalore 56,030. The total circulation of the same was 4,84,042. It is published in English language. At present the Chief Editor is Miss Dina Vakil.

The Indian Express: The Indian Express is published from Bombay since 1940. At present the Chief Editor is Mr. Hiranmay Karlekar. It is published in English from seven centres, *viz.*, Bombay, Ahmedabad, Delhi, Madras, Madurai, Vijayawada and Bangalore. The total circulation of the paper in 1973-74 was 4,18,919, of which 96,898 was from Bombay.

The Loksatta: The Loksatta is a Marathi daily published from Bombay since 1946. It is a daily paper edited by Mr. Madhavrao Gadkari. The total circulation in Bombay was 1,30,605 in 1973.

The Sunday Loksatta: The Sunday Loksatta was started in 1948 and its circulation in 1973 was 2,13,608 in Bombay.

The Screen: The Screen, a weekly cine magazine was started in 1951. It is published simultaneously from Bombay, Madras and Delhi. The total circulation of the same in the year 1973 was 1,10,291, while in Bombay it was 62,255. At present the Editor in Chief is Mr. B. K. Karanjia.

The Financial Express: The Financial Express is published from Bombay since 1961. The total circulation of the same was 10,895 in 1973. It is devoted to commercial news and commands a good readership in the city. At present the Chief Editor is Mr. P. M. Mohamed.

Janmabhoomi Group of Newspapers, Fort: The Janmabhoomi Group of Newspapers publishes the following newspapers and journals: the *Janmabhoomi*, the *Pravasi*, the *Vyapar*, the *Sudha*, the *Kavita* and the *Janmabhoomi Panchang*.

Janmabhoomi: The late Amritlal Sheth formed the Saurashtra Trust and the Gujarati daily, the Janmabhoomi was first published on 9th June 1934. Since Independence the Janmabhoomi has kept up the proper spirit of publishing news impartially, to enlighten the people on the tasks ahead and create a proper atmosphere in the country for co-operative endeavour and patriotic sacrifice.

It has correspondents in Gujarat State, various parts of India, and offices at New Delhi and Ahmedabad. It publishes news gathered by the score of correspondents objectively. Every week it publishes articles on politics, economics and various other subjects. The paper publishes special features on municipal affairs and sports. Reviews of social and cultural activities find ample space in the *Janmabhoomi*.

At present the Editor is Shri Harindra Dave. Its daily circulation in Bombay was 33,598, and at other places 7,487 in 1976. It had 31 journalists and 320 technical and administrative personnel.

The Janmabhoomi Pravasi: The Pravasi is a weekly paper published from 22nd October 1939. It gives reviews of international and national affairs. It publishes short stories, serial novels, social problems, etc. There is a separate section for children and cartoons. Its daily circ ulation in Bombay was 51,589 and at other places 19,225 in 1976.

The Vyapar: In order to provide latest information in commerce and industry the Saurashtra Trust started a commercial weekly, the Vyapar in 1949. From 4th January 1961 it is published twice a week. It has a large circulation as a financial journal.

The circulation of the paper in Bombay was 11,240 and at other places 19,129 in 1976. The persons engaged as journalists were 13 in number in the same year. At present the Editor is Mr. S. J. Vasani.

The Sudha (It's publication was discontinued from October 1, 1982.): A new addition to the group was the Sudha, a Gujarati weekly which was started in 1967 for women. The Editor was Smt. Varsha Adalja. Its weekly circulation in 1976 was 6,500 in Bombay and 5,048 in other places, of which 1,114 were subscribers. Four women were working as journalists.

The Kavita: It is a fortnightly in Gujarati devoted to poetry and poetic criticism. It was started in October 1967. The name of Editor is Dr. Suresh Dalai.

The Janmabhoomi Panchang: The Janmabhoomi Group has an efficient panchang department since 1945. Every year they publish a panchang i.e. Indian Ephemery. It has taken-up research in the field of predictive astrology. The department is also serving the general public by providing astrological advice. The editor was Shri D. K. Sule. Its annual circulation in Bombay was 13,000 and at other places 17,000 in 1976. At Present the editor is Miss Jyoti Bhatt.

The Bombay Samachar, Bombay: The *Bombay Samachar*, the oldest vernacular newspaper in India, was founded by Mr. Furdunji Marzban, the pioneer of native journalism in Western India, in 1822. Appearing first as a weekly, it was converted in 1932, into a daily paper, but was forced by lack of resources to revert to be a bi-weekly issue in 1833. In 1855, however, it again appeared as a daily, and has remained so up to the present time. Since 1870, the paper was the property of the Minocher Homji family, who conducted it for the benefit of all sections of the public. Now it is managed by the Bombay Samachar Private Ltd.

At present the Bombay Samachar publishes the Bombay Samachar, daily and weekly (Sunday); Diwali Ank, Panchang and Vasant Ank annually. The daily circulation of the Bombay Samachar amounted to 1,30,985 and that of the weekly edition to 1,42,931. The strength of the office staff in 1975-76 was 48, working journalists 30 and press workmen 127. The news coverage for the paper is done by its own reporters and representatives in selected cities and towns in India. The editors of the daily and weekly are Mr. Jehan D. Daruwala and Mr. Shantikumar Bhatt, respectively.

Navakal: The *Navakal*, a Marathi daily is published from Bombay since 1923. This paper had the fortune of being edited by the well-known journalist and dramatist, *viz.*, Krishnaji Prabhakar Khadilkar who was succeeded by his illustrious son, Yeshwantrao Khadilkar, and then by his grandson Nilkanthrao Khadilkar. Shri N. Y. Khadilkar is the present Editor of the paper. It receives news from various news services and reporters in big cities in Maharashtra.

The Hindustan: The *Hindustan* which is now published as a daily from Bombay was originally started at Hyderabad (Sindh) as a weekly under the name of the *Hindu*. The *Hindu* was started in 1916 as a weekly in Devnagari script by Maharaj Lokram Sharma and Maharaj Vishnu Sharma under the inspiration of Acharya Kripalani and Dr. Choithram P. Gidwani. It was coverted into a daily in 1919 in Arabic script when it was asked to deposit a security of Rs. 2,000, under the Defence of India Act. The newspaper was shifted from Hyderabad (Sindh) to Karachi in 1934 and to Bombay in 1948.

The *Hindustan* has played a notable part in the freedom movement in India. In 1926, the paper was taken over by Sind Swarajya Ashram which was later converted into Desh Seva Mandal. In 1930, the paper continued to appear under different names from different presses, although the press was confiscated and editorial staff arrested. In 1942, the paper ceased publication after the arrest of most of the editorial staff. It was registered again in 1943. It continued publication from Sind till the middle of 1948, and after migration, reappeared in Bombay on 15th August 1948, first as a weekly and then as a daily from 20th March 1949. It is now being run by Bombay Printers Ltd., a public limited company.

It is the only Sindhi daily published in Maharashtra State, and goes to many parts of the Globe wherever Sindhis are spread. The average net sale in Bombay and other places was 13,000. In 1975 the Chief Editor was Shri Jairamdas Doulatram, the present Editor being Hassomal Makhijani. There were about 100 staff members and workers in the Bombay establishment.

It also publishes a Sindhi weekly, viz., Hindvasi, the average sale of which was 16,882 copies.

It has representatives in almost all important places in India, who dispatch local news. It subscribes to the U.N.I, for news service.

LIBRARIES

Libraries in Pre-British Period: Prior to the advent of British Rule, libraries were not entirely unknown in the State, although books were few and rare and newspapers or magazines were totally absent. However, some ancient religious institutions like *maths* or temples,families with old literary tradition, and learned men often collected manuscripts of books for their personal use or for the use of their students. Some of these collections were impressively large and important and it may even be possible to call them the 'libraries' of the period. But such libraries were altogether few and there was no organisation about them.

The modern public library is, therefore, mainly a creation of the British administration. It was as a result of British influence that the printing of books began in India and newspapers and magazines came to be published. With the introduction of these reforms, the foundation for the starting of public libraries was laid. The lead in the matter was almost always taken by influential British Officers, Collectors and Judges, who felt that public libraries should be organised for the spread of information. They were supported, in this endeavour by enlightened leaders of Indian opinion who helped in collecting funds and in popularising the new institutions by overcoming the natural prejudices and suspicions of the people against the actions of the alien Government. The movement, therefore, made a good beginning, in the earlier half of the nineteenth century, in the city of Bombay and the other headquarters of the districts. The Bombay Native Education Society which was in office from 1827 to 1840 recognised the importance of

establishing and maintaining public libraries as a means of educating the people and tried to assist them by grants in the form of cash and books. At this time, the society was the main agency for publishing books in Indian languages and hence the grant of books which it used to make was of great assistance to the libraries of this period. The same policy was continued by the Board of Education which was in office from 1840 to 1855, and when the education department was created, there were 22 libraries in the State as a whole of which 10 were in the city of Bombay. The following table reproduced from the Gazetteer of Bombay City and Island (1909) gives the information about the libraries during that period.

TABLE No. 2 CHIEF LIBRARIES OF BOMBAY IN 1909

Place	Date of opening	Number of books	Members					Yearly Income
				Maximum Minimum				
				Rs	as.	Rs	as	
Dhobi Talao	1845	24,500	1,600	2	0	0	6	9,000
Fort	1856	21,000	2,600	2	0	0	6	30,000
Fort	1891	8,000		Free				
Bhuleshwar	1874	6,000	400	1	0	0	6	2,300
Bhuleshwar	1900	6,000		Free				
Khadak	1865	6,000	300	0	8	0	4	1,700
Bhendi Bazaar	1885	5,000	300	1	0	0	4	800
Dadyshet's Atashbehram	1831	4,500						1,000
Nizampura	1870	4,000	60	1	0	0	6	800
N.A		1,500						
Prarthana Mandir, Girgaum	1897	2,000		Free				
Market	1869	1,300						
Girgaum	1863	1,000						
Khetwadi	1860	500			-			
Mahim								
Chikhalwadi	1900	300		Free				
Thakurdwar	1875	200	80	0	3	0	2	
	Dhobi Talao Fort Fort Bhuleshwar Bhuleshwar Khadak Bhendi Bazaar Dadyshet's Atashbehram Nizampura N.A Prarthana Mandir, Girgaum Market Girgaum Khetwadi Mahim Chikhalwadi	Prace opening Dhobi Talao 1845 Fort 1856 Fort 1891 Bhuleshwar 1900 Khadak 1865 Bhendi Bazaar 1885 Dadyshet's Atashbehram 1870 N.A Prarthana Mandir, Girgaum 1863 Khetwadi 1860 Mahim Chikhalwadi 1900	Prace	Place	Place	Place	Place	Prace

¹ The original name was Bhuleshwar Library, donation to the Library.It was changed in 1902 when the contributors of the Javerilal Umiashankar Fund gave the donation to the Library.

Note,—This list only includes the Libraries registered by the Educational Department. The Chief Libraries of Societies were the B.B.R.A. Society, containing about 90,000 books, the Sassoon Mechanics Institute,

² Contains about 500 old Sanskrit books.

containing 14,000 books, the Blavatsky Lodge containing 2,000 books and the Bombay Natural History Society's Library, containing 1,000 books. The other libraries are Circle Litteraire Bibliotheque, Dinshaw Petit, Cosmopolitan Circulating Library, Girgaum Circulating Library and the Jain Reading Room and Library.

LIBRARY DEVELOPMENT (1855-1901): The Education Department continued the earlier policy of assisting public libraries. The department purchased books and gave to public libraries registered with the department. But unfortunately there was no special grant for assistance to public libraries and the funds for the encouragement of literature in Indian languages was very limited. It did not, in fact exceed Rs. 15,000 at any time. Hence the financial assistance given to public libraries by the Department was not material and the libraries also were not very eager to obtain recognition and registration by the Department. It may, therefore, be said that after the initial start had been given to the movement by Government, the public libraries were left to grow on their own, subject only to a nominal departmental supervision exercised in return for an equally nominal help in the form of books and publications.

This absence of departmental assistance was fortunately compensated by popular enthusiasm, for public libraries went on continually increasing during this period. With the spread of education there was a continuous increase in the number of persons who had developed the reading habit. Books and newspapers became common and available at comparatively low prices owing to the introduction of the printing press. Consequently, more public libraries were established before the close of the nineteenth century. As stated before, they were mostly maintained by subscriptions paid by the members. But some of the libraries were fortunate enough to collect large funds or to secure handsome donations from rich patrons. This prompted them to have a fairly decent collection of books and even buildings of their own.

The first popular Ministry decided to develop a regular movement of public libraries in the State and appointed a Library Development Committee (1939-40) with Shri A. A. A. Fyzee as chairman. The committee was requested to explore the possibilities of a Central Library in Bombay and three regional libraries at Pune, Ahmedabad, Dharwar and of co-ordinating all these four libraries with a net-work of town and village libraries organised all over the State. After Independence there was a tremendous expansion of education and reading habit. This resulted into establishing more and more public and private libraries.

The list of recognised public libraries in Bombay city as in 1975 is given below:—

- a. Central Library: Asiatic Society of Bombay and the Central Library, Town Hall, Bombay-1.
- b. District Library: Mumbai Marathi Grantha Sangrahalay, Bombay-14.
- c. Other Libraries: (1) Mumbai Marathi Grantha Sangrahalay, Dadar, Bombay-28.
- 2) Dadar Sarvajanik Vachanalay, Dadar, Bombay-28.
- 3) National Library, Bandra, Bombay-50.
- (4) Shridhar Vasudeo Phatak Grantha Sangrahalay, Vile Parle, Bombay-57.
- (5) Rashtriya Mill Majdoor Sangh Granthalay, Parel, Bombay-12.
- (6) Khar Residents Association's Kamalabai V. Nimkar Pustakalay, Khar, Bombay-52.
- (7) Shri Samartha Pustakalay and Lokamanya Vachanalay, Malad, Bombay-64.
- (8) Marvadi Sammelan, Kalbadevi, Bombay-2.
- (9) Maharashtra Mitra Mandal Grantha Sangrahalay and Mofat Vachanalay, Lalbagh, Bombay-12.
- (10) Janata Kendra Vachanalay, Tardeo, Bombay-34.
- (11) Kumari Krishnabai Limaye Vachanalay and Vile Parle Mahila Sangh Granthalay, Vile Parle, Bombay-57.
- (12) Mumbai Marathi Granth Sangrahalay, Lamington Road, Bombay-4.
- (13) Santacruz Library, Santacruz, Bombay-54.
- (14) Government Quarters Residents Association's Vachanalay, Bandra, Bombay-51.
- (15) Kedarnath Vidya Prasarini Granthalay, Kurla, Bombay-70.
- (16) I. I. T. Sanskritic Mandal, Powai, Bombay-76.
- (17) Seth Jamnadas Adulkiya Lions Library, Malad, Bombay-64.
- (18) Kandivali Hitavardhak Mandal, Kandivali, Bombay-67.
- (19) Mumbai Marathi Grantha Sangrahalay, Ghatkopar, Bombay-77.
- (20) Lokmanya Tilak Library, Ghembur, Bombay-71.
- (21) Social Service League Library, Chinchpokali.
- (22) Mumbai Marathi Granth Sangrahalay, Goregaon, Bombay-51.
- (23) Pradnya Granthalay, Worli, Bombay-18.
- (24) Shri Ramdeoji Maharaj Library, Mazagaon, Bombay.
- (25) Saivadi Loksena Committee, Andheri East, Bombay.
- (26) Milind Mitra Mandal Vachanalay, Sion, Bombay-22.

The details of some of these libraries are given below:

Asiatic Society — Bombay Branch: The Asiatic Society, one of the most eminent organisations in Bombay has played an important role in the intellectual life in Bombay. The institution once enjoyed an international reputation for its highly equipped library, prestigeous journal and organisation of seminars and debates with a scholastic level. Formerly known as the Bombay Branch of the Royal Asiatic Society, the institution arose out of the Literary Society of Bombay, which was founded by James Mackintosh, in 1804. The objects of the society were the promotion of literary and scientific investigation connected with India, and the study of literature, antiquities, arts and sciences of the oriental world. In 1827, the Royal Asiatic Society of Great Britain and Ireland sent a proposal for the union of the two institutions; and in 1829, it formally resolved that the Literary Society of Bombay should thenceforth be considered an integral part of the Royal Asiatic Society, under the appellation of the Bombay Branch of the Royal Asiatic Society, though the latter was to be considered quite independent of the Royal Asiatic Society.

The Bombay Geographical Society, which was originally established in 1831 and subsequently became a branch of the Royal Geographical Society of London, was amalgamated with the Bombay Branch of the

Royal Asiatic Society in 1873. Another society merged in the B.B.R.A. Society was the Medical and Literary Society founded in 1789. Of the early societies, the chief were the Agri-Horticultural Society founded in 1830; the Medical and Physical Society founded in 1835; and the Literary and Scientific Society founded in 1848.

Upto 1831 the Society rented a building in the Fort for its library and reading-room; but the need for accommodation of its museum and the gradual growth of the library resulted in its removal in that year to the upper portion of the north wing of the Town Hall. The library dates from the foundation of the Society itself, and received its first tangible nucleus in the Medical and Literary Library, which had been established in 1789 by certain medical men of Bombay. Since that date many special additions have been made to the library, chief among them being a collection of books in foreign languages presented by the Honourable Mountstuart Elphinstone in 1820, some valuable Sanskrit and Prakrit manuscripts and Gujarati manuscripts presented by the Bombay Government in 1826, a collection of Parliamentary reports and other public records presented by the Court of Directors in 1837, a body of valuable works on natural history, geology, etc., by the Malcolmson Testimonial Fund in 1844, several works on natural history presented by Jagannath Shankarshet in 1863, and a collection of Oriental works by Mr. Cowasji Jehangir in the same year. These and other donations, coupled with the systematic purchase of books, have raised the total number of volumes in the library to nearly 88,000. The museum attached to the library was opened in 1816 for the collection and preservation of antiquities and of specimens of the natural history, arts and mythology of the East. It contains a fine collection of geological specimens, and many archaeological relics, inscriptions, copper-plates, carvings and the like, of great interest and value. A coincabinet also forms part of the museum, the nucleus of the collection consisting of donations from Government and a collection, which formerly belonged to William Frere, presented by Sir Cowasji Jehangir

For many years membership of the Society was confined to Europeans, the first Native of India to be admitted being Mr. Maneckji Cursetji elected in 1840. After him Mr. Jagannath Shankarshet, Sir Jamshetji Jejeebhoy, and others in increasing numbers were elected. Apart from the establishment of the library and museum, the operations of the Society have consisted of the reading and discussion of papers on Oriental subjects, and the publication of a journal, embodying those papers. The first journal was published in 1841. Apart from this the activities of the Society, both before and after its union with the Royal Asiatic Society, have been manifested on various ways, such as a scheme for a statistical account of Bombay (1805), for the translation of Sanskrit works (1806), the erection of an observatory in 1815, the collection of specimens of Indian products for the Royal Asiatic Society in 1836, the preparation of a list of subjects for investigation by the Chinese-Tartary Frontier Mission in 1847, the formation in 1848 of a commission to investigate and report upon the cave-temples of Western India, and the collection in 1865 of a sum of money in aid of Dr. Livingstone's explorations in Africa.

In 1950, the Society agreed to undertake the responsibility to expand its activities so as to undertake and discharge the functions of the Central Library. By the Trust Deed of 1950 executed between the then Government of Bombay and Bombay Branch of Royal Asiatic Society, the library of the Bombay Branch of the Royal Asiatic Society and the Central Library came into existence.

In 1955, the Government of India notified the central library as a National Depository Library under the Delivery of Books Act, 1954.

The library is equipped with a reference counter. Every day over 1,000 members of the public visit the Central Library for reading. The research section renders service to readers as well as research workers.

Books and other reference material received from the United Nations Educational and Social Council are processed and kept in the UNESCO centre and are made available for reference. The Society publishes a journal devoted to oriental studies. It also organises book exhibitions, lectures, seminars and symposiums.

The Kane Research Institute was started by the Society for the purpose of studies in Indology, Sanskrit, History and Ancient Indian Culture. The Society is recognised by the Bombay University as a Post Graduate Research Institute.

The existing stock of books, periodicals etc., of the Asiatic Society's library as on 31st March 1976 was 2,44,232 comprising 2,03,075 books, 3,157 manuscripts, 25,000 rare and valuable books, 5,000 periodicals and newspapers in bound volumes, and 8,000 periodicals which are not bound.

It had 1,495 members as on 31st March 1977. About 12,091 readers attended the library during 1976-77. The income and expenditure of the library for the year ended 31st March 1977 amounted to Rs. 5,77,232.

Mumbai Marathi Granth Sangrahalay: Upto 1898, Bombay did not claim to have any Marathi public library worth the name. Regardless of this utterly discouraging situation existing then, eleven selfless social workers, from the lower middle class with an abundance of missionary zeal, came forward to make a determined effort in that direction. After a series of mutual consultations, and with a mere trunk load of about four hundred personal old books, they laid the foundation of Mumbai Marathi Granth Sangrahalay in 1898. During the past about 80 years this institution has steadily grown, attaining the stature of a Goliath.

The successful functioning of the reference section is the most predominant feature of all the activities of the institution. The section houses over seventy five thousand books. During 1971-72, over ten thousand readers took advantage of this section and over thirty thousand books were issued to readers during the same period. The collection of over 1,000 rare books has added a distinguishing feature to this section.

At present the vast areas of Greater Bombay, from Dahisar to Church-gate on Western Railway, and from Mulund to Boribunder on Central Railway, are covered with a closely knit net-work of 35 branches, each managed by an elected committee. The overall membership is over 11,699 and the overall collection of

books is to the tune of about 2 lakhs.

With the avowed aims and objects of extending the much desired impetus to research in language and history, a language research centre (Marathi Sanshodhan Mandal) and a history research centre (Itihas Sanshodhan Mandal) were started in 1948 and 1958, respectively. The history research centre has published valuable books on historical research numbering over 20. Similarly, the language research centre also claims over 38 publications exclusively on linguistic research. Besides, this centre is currently busy in preparing the Encyclopedia of Marathi literature. Both the centres publish their own quarterlies devoted to research.

With a view to contribute to the enrichment of various literary forms, the publication division was started many years ago. Eminent writers are invited to write books on various subjects of academic interest. So far it has 30 precious publications to its credit.

Maharashtra Prabodhan Branch takes upon itself the responsibility of including the laity to take interest in sciences and technical subjects, through talks and exhibitions.

Sane Guruji Bal Vikas Mandir section exclusively for children, is always humming with activity. It runs twenty reading centres all over Bombay for children, and publishes a monthly, by name, *Balvikas*. The *kala mandal* was started with the main object of affording encouragement to the amateur activity in the field of dramatic arts. Many more projects undertaken by the library include an experimental theatre, a mobile library and an air-conditioned hall for rare books.

During 1974-75 the income and expenditure of the library was the same amounting to Rs. 10,08,047.

Bombay University Library: The Bombay University Library, one of the oldest Libraries in India, was established in 1879, and was formally opened to readers in February 1880. At present it has two units, one within the University premises in Fort and the other at the new University Campus at Kalina. The Library at Fort continues to be known as the University Library and the Library at Kalina is named as Jawaharlal Nehru Library. The Library at Kalina started its functioning from 12th July 1971, when the Statistics, Physics, Chemistry and Geography Departments were transferred to the Kalina Campus. The Library was temporarily housed in the Humanities building. The construction of a new library building at Kalina was started in 1973 and two wings were completed in June 1976 where the unit has now been permanently housed.

In the beginning though the growth of University Library was slow, to-day it is one of the largest and the most well-organised academic libraries in the country. The development in the past few decades was so rapid that an annexe to the Fort Library building was built in 1959 providing space for over 2,20,000 books. The collection of the two units now exceed 4,00,000 books and periodicals.

The library is particularly rich in subjects like Mathematics, Indian History and Social Sciences. Its reference section contains up-to-date information on most of the topics. The Library receives over 1,500 periodicals per annum of which about 1,165 are subscribed and the rest are received *gratis* and in exchange. The manuscript collection of the library is of great value for research in Indian religions, philosophy, literature and history. It has more than 1,190 manuscripts in Arabic, Persian and Urdu, and about 7,418 in Sanskrit and allied languages. Printed descriptive catalogues for most of the manuscripts are available. There are 6,740 research theses and over 1,000 maps and atlases in the library.

The library is also rich in archival materials. It has 57 micro-films and complete micro-film sets of the former edition of District Gazetteers for various States in India and the Census of India volumes for all census years.

In the early years after its establishment the library had an annual budget of Rs. 400. In 1930 the library received a non-recurring grant of Rs. 50,000 from the Government. During 1975-76 the budget of the library amounted to Rs. 12,81,574.

The valuable resources of the library are used not only by the faculty members and students of the University and its affiliated colleges, but also by the research scholars, firms, institutions, and the various government departments in the city. Every year more than 8,000 members make use of the book collection of the library.

Mantralaya Central Library: The Mantralaya Central Library started functioning as the Central Library, since 11th February 1955 as a result of the recommendation of the Administrative Enquiry Committee.

The stock of books in the library consists of Central and State Government publications, reports of various committees, commissions, Gazettes, debates of Parliament and State Legislature etc. The Library also purchases English books mainly on social sciences like politics, administration, economics, history, biography and other kindred subjects excepting science and technology. Since 1960, the library has started to purchase Marathi books and journals embracing almost all subjects. The library pays subscription to all important newspapers and journals and maintains the same after binding for future reference.

During 1976, the library had 42,358 books and 200 bound volumes of periodicals. During the same year 483 books and 200 bound volumes of periodicals were added to the existing stock and 223 periodical titles were received. The expenditure of the library was Rs. 30,000 in 1975-76.(In 1982-83, the Mantralaya Library had 45,400 books and 10,000 bound volumes of periodicals. During the same year the library had 350 members and it issued about 200 books daily. The annual expenditure of the library was Rs. 90,000.)

Dadar Sarvajanik Vachanalay, Dadar: The Dadar Sarvajanik Vachanalay was established in 1907 with the object of doing a useful work in the educational and cultural fields. It is recognised by the Government

as an ' A' Grade Library with free reading room. The institution was started only with 600 books and 100 members, now it has 30,000 Marathi, English and Hindi books. It is a peculiar institution of its kind in the area which provides English and Hindi books. At present the total number of membership of the library is about 2,000.

The hall of the library has been named as Kashinath Dhuru Hall after the name of the donor family. The income received from Dhuru Hall by way of rent is also used for the institution. Another spacious hall has been constructed on the 2nd floor with grant-in-aid from Maharashtra State Government for the reading room-cum-reference section.

During the year 1975-76 the institution received grant amounting to Rs. 6,000 from the Maharashtra Government, Rs. 30,000 from the Municipal Corporation and Rs. 1,000 from the Mahalaxmi Temple Trust.

The library arranges lectures of eminent personalities on different subjects, film shows and dramas. During the year 1976 the total number of books in the library was 29,565 of which 17,818 were in Marathi, 8,660 in English and 3,087 in Hindi.

During 1975-76 the income and the expenditure of the library amounted to Rs. 78,876 and Rs. 89,172, respectively.

National Library, Bandra: The National Library was established in 1917 with the object of providing reading facilities and creating liking for literature amongst them.

In 1949, the Library was registered under the Societies Registration Act, 1860 and then under the Bombay Public Trusts Act on 3rd June 1953.

During 1976 the membership of the Library was 1,739. The library is running four branches at Bandra East, Khar East, Khar West and Mahim West. The library possesses about 40,130 books, besides 165 Marathi, 44 Gujarati, 48 Hindi, 85 English journals and periodicals and 17 dailies. Besides lending of books and magazines, it arranges cultural programmes, seminars, lectures and film shows in its own premises.

During 1976 the library received a grant of Rs. 6,000 from the Government and Rs. 75,000 from the Bombay Municipal Corporation. During the same year income and expenditure of the library amounted to Rs. 1,95,494.

The total number of books possessed by the library, on 1st February 1976, stood at 31,735, of which 15,025 were in Marathi, 3,096 in Gujarati, 2,509 in Hindi and 6,751 in English. Besides, there were 4,354 books for children in various languages.

Kandivali Hitvardhak Mandal Library: The library of Kandivali Hitvardhak Mandal was established in 1934, with the object of providing reading facilities to the people. The library section is known as H. T. Vora Smarak Library.

The library had 700 members in 1977. It possesses about 4,604 books, and readers attending the library during 1976-77 numbered 48,000.

THEATRE IN BOMBAY

Theatre in Bombay displays a fascinating variety of attributes. Sometimes while one part is dormant, the other part is dynamic, while one part is just developing, another part is historically ancient. Theatre in Bombay offers more variety than any other city in the world, even more than Tokyo. Bombay's wealth is in its heterogeneity. One comes across as many as ten different styles of theatre in as many or even more languages. There is a confluence of streams. Besides the cosmopolitan character of the city, there is another factor that gives the theatre scene here its unique piquancy. Many places in this city are linked with theatre history. Opera House, for example, signifies more than a junction of roads overlooked by a brooding building in the innards of which we see the latest movies. In the old Royal Opera House, visiting English and other European companies gave excellent drama performances. It is reminiscent of the stage performances of the best classics in English, European and Indian dramas.

Bombay is also the most prolific home of the Indian film industry. The Bombayite goes to the cinema theatre, the drama theatre, listens to classical music and generally supports the performing arts in a greater measure than other Indians.

Bombay city's first theatre came into existence in 1776.(*Dr. Kumudini Mehta, English drama on the Bombay Stage, Ph.D. Thesis.*) The Bombay Amateur Theatre (*Ibid.*) situated on the Bombay Green, on a plot of land donated by the Government was constructed in 1776. The cost of construction was met by public subscription raised from among the European residents. In its formative years the theatre also served as the venue for important social and cultural events in the life of the English community. The theatre was renovated in 1818 and reopened in 1819. It enjoyed relative prosperity in the ensuing decade. It was patronised by Mountstuart Elphinstone, and the influential among Bombay's European residents.

The theatre was born of a nostalgic starving to re-create here the atmosphere of a London play-house, and the advertisements, the notices and the critiques of dramatic performances published in the English newspapers of the time, such as the *Bombay Courier*, the *Bombay Gazette*, and the *Iris*, bear testimony to this starving. The taste of the English play—goer found an immediate echo here, for the plays presented on the boards of the theatre were in the main the Georgian comedies and the more entertaining among the farces, popular in the first two decades of the nineteenth century in England.

In the early years of theatre's life, when society on the Island of Bombay was more compact and intimate,

amateur theatricals assumed almost a private character and perhaps some of the ladies of the settlement found no hesitation in coming forward to act. But as Bombay grew in size and importance this practice was discontinued.

By 1830, the theatre was already in a state of neglect and it had finally to be sold by auction in 1835.

The Grant Road theatre, opened on February 10, 1846, was situated in the heart of what was then called the Black Town. Towards the latter half of the century, Bombay was already transformed from a frontier outpost into a commercial and industrial centre. In the new urban setting, the area around the Grant Road theatre became Bombay's theatre land. The theatres that had sprung up in Grant Road were usually engaged by the Indian companies, and with the construction of the Gaity Theatre in 1879 English drama moved into more respectable surroundings in the Fort area.

The original dramatic efforts in Marathi and Gujarati began to reflect in this period. The moods engendered by social reform and nationalist sentiments and plays of intrinsic dramatic merit commenced to appear.

In the beginning only English dramas were performed in these theatres. Another well-known theatre during the early years of the 19th century was the Artillery theatre at Matunga. A great entertainment was held here at the beginning of November 1820, when all Bombay society, including the Governor, witnessed a performance of " Miss in her Teens and the Padlock ".

In 1909,(S.M.Edwardes' Gazetteer of Bombay City and Island) the chief European theatres in Bombay were the Novelty and the Empire. The Tivoli was in use in 1909, but was renovated and improved, and renamed as Gaity. The Empire was opened at the close of 1907. During the closing years of the 19th century, a few professional companies visited Bombay and the bulk of the theatrical performances were given by two good companies of local amateurs.

Indian drama commenced to appear in Bombay about the middle of the 19th century, the pioneer being one Mr. Rambhau, who borrowed plots for his plays from Sanskrit literature. In 1865, a Gujarati play was enacted, and between that date and 1875 a large number of Gujarati plays were enacted. The native companies utilised the theatre at Grant Road mentioned above. Subsequently four to five new theatres sprang up into existence in the neighbourhood of Grant Road, namely, the Elphinstone, the Original, the Victoria, the Ripon, and the Bombay theatres. Between 1875 and 1885, several new native dramatic companies were formed, the most popular among which were the Niti Darshak (Gujarati) and the Hindustani (Parsi). The closing years of that decade also witnessed the foundation of the Parsi Natak Mandali. This marked the substitution of the Western harmonium by the Indian soulful sarangi. In 1888, a permanent Gujarati company was formed, which purchased the Gaity.

The native theatres of Bombay presented Marathi, Gujarati and Urdu dramas. Marathi dramas were played only by touring companies, the chief among which were Kirloskar and the Shahu Nagarvasi companies. The Marathi stage opened a glorious chapter with the performance of the Shakuntal, written by Annasaheb Kirloskar, in 1880. The performance of Shakuntal gave new dimensions to Marathi stage and it marked the beginning of the glorious history of Marathi drama stage.

In 1909, there were six theatres for native performances at the junction of Falkland Road and Grant Road, in addition to the rebuilt Gaity theatre opposite Victoria Terminus station, and two theatres on Kalbadevi Road. Some of the theatres in Grant Road area were very indifferent structures acking in sanitation or accoustics. The most up-to-date theatres in the Grant Road neighbourhood were the Grand theatre, built by a Parsi actor in 1907 and the Appu's theatre, which was opened a little later.

The Parsi (Parsi Theatre- Udbhav Aur Vikas by Somnath Gupta) theatre is supposed to be the first vernacular organised theatre. The history of theatre in Bombay is traceable to 1776 when the Bombay theatre was established. This theatre was however dominated by English drama performances. Though there were a number of efforts to give performances in vernacular by local talents, the information about the organisers is not available. The Parsi Dramatic Core established in 1853 can be regarded as the commencement of the Parsi theatre. It was in 1853 that the Core performed the 'Rustom Jaboli and Sohrab '. The Parsis established a number of theatres in Bombay in the last century as well as in the present one. A few of them may be mentioned here. The Edward theatre on Kalbadevi Road is supposed to be established during the decade 1850-60, and it was formerly a venue of Gujarati dramas. The Elphinstone was established in 1853. The Original theatre also was established in the same year. The Esplanade theatre which is no more in existence was formerly situated near the Crawford Market. The Gaity was another Parsi theatre where mainly English dramas were played. It appears to be the predecessor of the present Capitol. The Tivoli was another theatre which was mainly used by English theatrical companies. It was located at a site presently occupied by the Times of India press and office. The Novelty, said to be constructed in 1887, was popular among the Europeans. The present Excelsior theatre was established on the site of the Novelty. The Grand theatre opened in 1907 in Grant Road area was burnt in a fire in subsequent years. The Victoria theatre was built in the Grant Road area in 1870. The details of the Golpitha Natyashala in Golpitha area, the National theatre and the Ripon are not known. The Empire theatre built in 1907 was started by the Bombay City Improvement Trust, and was designed to accommodate an audience of about one thousand. It was a drama theatre upto 1930 after which it was converted into a cinema house. It is one of the old cinema theatres, and was renovated in 1948. The Royal Opera House was constructed on its present premises in 1925 by a Parsi. It was a venue of English, Marathi and Gujarati dramas upto 1935, after which it was converted into a cinema house. In those days it was supposed to be a very good theatre, the cost of construction being about Rs. 7.5 lakhs.

The Eros opposite Churchgate station was constructed in 1937. It was supposed to be an excellent addition to the theatres in Bombay, as it was exquisitely designed as per the standards of those days. It was also a venue of dramas relished by the elite in Bombay, but was subsequently converted into a cinema house.

During the course of this century Marathi drama stage made immense progress in Bombay. There is a particular class of connoiseurs of Marathi drama. The Marathi stage which celebrated its century in 1980 enjoyed a very great patronage not only from Marathi speakers but also from Gujaratis, Parsis and Hindi speakers in Bombay. Now Marathi dramas are played in a majority of the auditoriums in Bombay mentioned in the table below.

During the course of the last about 70 years a good many theatres and auditoriums were thrown open to the Bombay public. The pace of their development gathered momentum after the Second World War and Indian Independence. The introduction of electricity from the second decade of this century in theatres was an important event. Due consideration came to be given to sanitation, comfort of the audience, audition and light effects on the stage.

The growth of urbanisation and complexities of city life provided and immense stimulus to the growth of theatres after Independence. At present there is a galaxy of auditoriums in Bombay wherein drama, dance recitals and musical concerts and ballets are performed. Some of the auditoriums are exclusively given for Western music concerts and ballets, while a majority of them are patronised by companies performing Marathi and Gujarati dramas. The list of the main auditoriums in Bombay is furnished in table No. 3.

TABLE No.3 THEATRES IN BOMBAY

(The Taj Magazine, 1st quarterly, 1982.)

Name of theatre	Location	Date of establishment	Type and language(s) of usual performances	Amenities	
1	2	3	4	5	
Homi Bhabha Auditorium	Navy Nagar, Colaba.		Mainly Western music concerts and ballets.	Seats 1,036, Air-conditioned, very comfortable.	
Tata Theatre	Nariman Point		Theatre from all over India and abroad,as well as all performing arts.	Seats 700, Now run by NCPA Excellent accoustics, Air conditioned, splendid decor Revolving Stage.	
NCPA Mini Theatre	Nariman Point	1966-67	Dance, Drama, film shows and music programmes, both Indian and Western.	Seats 114, Air-conditioned.	
Patkar Hall	New marine Lines	1-10-1963	Drama, film shows and music programmes, both Indian and Western.	Seats 750, Air-conditioned, comfortable.	
Birla Matushri Sabhagriha	New Marine Lines		Theatre in Gujarati, Marathi and occasionally Hindi, Indian music concerts.	Seats 1,159, Air-conditioned, Revolving Stage.	
Ranga Bhavan			Theatre in Marathi, Tamasha both INdian and Western music programmes.	Seats 2,850, Open-air	
Sahitya Sangh Mandir	Bhalerao Marg (Charni Road)	1964	Theatre in Marathi	Seats 800, Air-conditioned.	
Hinduja	Charni Road	11-10-1978	Marathi and Gujrati theatre and Indian music concerts Seats 600, Air-conditioned.		
Bharatiya Vidya Bhavan	Wilson College Road, Chowpatty.	7-11-1938	Theatre in Gujarati, music and dance programmes.	Seats 700, Air-conditioned.	

Tejpal Auditorium	Gowalia Tank		Theatre in Gujarati, English and sometimes Hindi.	Seats 650, Air-conditioned, comfortable.	
Sophia Bhabha Bhulabhai Auditorium Desai Road ''			Theatre in English and Western music concerts.	Seats 850, Air-conditioned.	
		Seats 923, Air-conditioned, comfortable			
Hanuman Theatre	Lalbaug		Tamasha	Seats 500	
Shivaji Mandir	Near Dadar Railway Station		Marathi theatre	Seats 1,022 Air-conditioned	
Dinanath Mangeshkar Hall	Near Vile Parle Rail- way Station.	24-4- 1978	Marathi theatre	Seats 950, Air-conditioned.	
Chhabildas Hall	Near Dadar Railway Station.		Theatre in Marathi and Hindi by amateur and experimental troupes.	Seats 200	
Shanmukhananda Hall		August 1963	Music,dance,theatre mainly by visiting troupes in Tamil,Kannada,Malayalam, Marathi.	Seats 3,012, Biggest, Air- conditioned.	
Balgandharva Rangamandir	Bandra		Hindi and Marathi theatre	Seats 900, Open-air	
Prithvi Theatre	Janki Kutir, Juhu		Theatre in Hindi and English, also dance programmes.	Seats 509, New thrust stage, Airconditioned, garden cafeteria, Excellent snacks, also dinners by candlelight.	
		24-3- 1973	Theatre in Gujrati and Marathi Indian music programme	Seats 1,200, Air-conditioned.	
N. Thakkar Hall	Vile Parle (East)		Theatre in Gujrati, INdian music programmes.	Seats 650, Air-conditioned.	
Amar Grover Auditorium	Haji Ali	1971	Gujrati and other performances	Air-conditioned.	
Bhulabhai Desai Auditorium	Marine Drive, BackBay Reclamation	1964	Cultural performances, international conferences and educational activities.	Air-conditioned	
Bharati Kala Manaram	Chunabhatti				
Balmohan	Shivaji Park				
Amar Hind	Dadar	1974			

The Tata National Theatre (For details refer to the account of Tata National Theatre in Chapter 19.) at Nariman Point deserves a special mention. It is designed specifically to fulfill the exquisite accoustic and visual requirements of Indian classical music, dance and drama. This magnificent auditorium possesses the most sophisticated accoustic properties so as to do away with the customary reliance on artificial amplification. While maintaining the essential beauty of modern architecture, the architects have achieved their accoustic purpose by means of sophisticated devices. All extraneous noise or sound from the auditorium is eliminated by special devices. The National Centre has some features, perhaps unique in the world which distinguish it from any other auditorium in the country.

Types of Theatre in Bombay: Broadly the theatre in Bombay can be classified as professional and amateur. However the theatre can be classified more scientifically into traditional theatre and modern theatre. The traditional theatre is closer to the *Natyashastra ofBharat*. It comprises three sub-classes, namely, folk, temple and urban theatres. The Folk theatre aims at entertainment cherished by the lower middle class and poorer people. It covers *Tamasha*, *Bhavai*, *Jatra*, *Chavittu Natakam*, *Theru Koothu*,

Nautanki, Bailata, Yakshagana, etc. The aim of the Temple theatre is to evoke awe and reverence, and is patronised by the religious people, mainly from the south. It comprises *Kathakali, Krishnattam, Kutiyattam* and *Mahadevi*. The Urban theatre aims at entertainment and instruction combined together, and enjoys the patronage of sophisticated urban elite and middle class.

The Modern theatre which is closer to the poetics of Aristotle but very often descending to a much lower level, aims at entertainment of the masses. It is more commercial in nature. (Taj Magazine, 1st quarterly, 1982.)

ANIMAL WELFARE ORGANISATIONS

All India Animal Welfare Association, Bombay 4: The Association was established in 1951 at Bombay. It was at the suggestion of the Animal Welfare Delegation, sponsored by the India Society for the Protection of Animals, London that the All India Welfare Committee was changed into the All India Animals Welfare Association. It was registered under the Bombay Public Trusts Act, 1950 on 14th May 1953 with a view to promote welfare of animals and birds in India and other countries.

In 1969 the association had 100 ordinary members, 25 life members and an associate member.

It received a grant of Rs. 3,450 from the Animal Welfare Board and Rs. 7,000 from the Bombay Municipal Corporation in 1968. The trustees of the Royal Western India Turf Club also gave a donation of Rs. 6,000 to the association in 1969. The association received donations of two vans, one each from the Animal Welfare Celebrations Committee and the India Society for the Protection of Animals, London in 1952 and 1967, respectively.

The association has a small staff consisting of a supervisor at the kennel, two staff members to prevent cruelties at the slaughter house and to maintain the water troughs, etc. It has also an ambulance.

The association rescues some good dogs caught by the Corporation by paying necessary charges and finding for them suitable homes. It has rescued and found homes for about 2,000 dogs so far. It looks after the welfare of dogs in the city. It can keep 50 animals in its kennel. It receives generous finances from the Bombay Humanitarian League.

The association is a member of the International Vegetarian Union. It has assets and properties valued at Rs. 31,318. Its income and expenditure amounted to Rs. 39,084 in 1969.

Bombay Humanitarian League, Bombay 3: The Bombay Humanitarian League is one of the oldest charitable humanitarian organisations established at Bombay in 1910.

It is now an all India humanitarian organisation working in various States. It is also internationally known as it gives co-operation to the international organisation for animal welfare, protection of animals, vegetarianism and prevention of cruelties in the name of science, religion, food etc. In times of famine and natural calamities it organises extensive relief operations especially for cattle and occasionally for human beings. Such relief measures were undertaken in the past in Maharashtra, Gujarat, Madhya Pradesh, Bihar and Rajasthan. In Bombay the League organised influenza relief work during epidemics and provided free medical aid to people. The league takes over unclaimed animals from cattle pounds and arranges for their protection in rescue homes run by it. It also takes over weeded out animals from Aarey Milk Colony. A gosamvardhan trust was founded by the League to start an experimental cow unit at the Aarey Milk Colony to prove the potential of cows in dairy trade, and accordingly donated 225 cows.

The income and expenditure of the league amounted to Rs. 2,03,428 and Rs. 2,11,813, respectively during 1975-76.

Bombay Panjrapole Trust, Girgaum: The Bombay Panjrapole Trust, one of the largest *panjrapoles* (A panjrapole is an asylum for disabled animals whether the disablement be due to old age, sickness or injury.) established in the country, was started in 1834. The management of the trust is vested in a board of trustees consisting of ten Hindu and five Parsee members.

The trust maintains 1,500 animals and five herds of *Gir* cows. It produces nearly 5,51,000 litres of cow milk per annum and distributes it in sealed bottles to the public. It also distributes, free of cost, cows, bull calves, bullocks and best pedigree bulls to needy farmers and State Government for their key village centres and development schemes. Among the four branches established by the trust, one is functioning at Chembur.

The income and expenditure of the trust amounted to Rs. 14,62,025 and Rs. 15,00,955, respectively during 1970.

Bombay Society for Prevention of Cruelty to Animals and Bai Sakarbai Dinshaw Petit Hospital for Animals, Parel: The society was founded in 1874 by Mr. Cleveland, General Bailard, the Rev. Dr. Wilson, Sir William Lee-Warner and other residents of Bombay for promotion of kindness and prevention of cruelty to animals through education, legislation and establishment of a veterinary hospital.

The society employees a corps of about 15 agents led by a field officer. They are constantly on the alert about the offences against animals and are armed with police powers under the Prevention of Cruelty to Animals Act, 1960.

Ten years following the birth of the Bombay Society for Prevention of Cruelty to Animals, the Bai Sakarbai Dinshaw Petit Hospital for Animals was founded by Sir Dinshaw Maneckjee Petit in 1884. The management and control of the hospital was vested in the hands of the committee of the Bombay Society for the Prevention of Cruelty to Animals.

The hospital is equipped to treat all kinds of animals and birds except wild carnivora. Camels, elephants, chimpanzeas, ostriches, deer of various species, rare lemur; and pet panthers are treated as out-patients.

Of the daily average number of 100 in-patients, the majority are dogs, numbering about 60, milch cattle, cats, monkeys, horses and pet-birds. More than 60 per cent of the animals under treatment are treated free of cost or at concessional rates.

The hospital is well equipped with separate wards for different kinds of animals, surgical operation theatres, an up-to-date patho-bacterio-logical laboratory and an X-ray department in the charge of a trained radiologist.

The veterinary surgeons who treat the animals are mainly members of the teaching staff of the Government Veterinary College which is situated adjacent to the hospital.

There is an adequately staffed out-patient department functioning on all week days. About 50 patients are treated every day.

ART, LITERATURE AND CULTURAL ORGANISATIONS

Amar Hind Mandal, Dadar: The Amar Hind Mandal was established in 1947 with the main objectives of creating popular interest in social and cultural development and sports. It also strives for the welfare and progress of the public in educational, cultural and social fields.

The activities of the Mandal include conducting of sports and gymnasium, staging of dramas, a hall for social functions, offering medical aid, lecture series, educational help and other cultural activities. The *Vasant Vyakhyanmala*, a series of lectures in the spring season, arranged by this Mandal has been enjoying patronage of the enlightened and studious. Maharashtrians since its starting in 1947. All eminent leaders in all walks of life in Maharashtra have graced the platform of the Mandal in this series.

Mandal has been conducting its activities mainly on its own resources while it gets a petty grant from Government.

Bharatiya Music and Arts Society, Sion: The Bharatiya Music and Arts Society was established on 23rd February 1953.

The object of the society is to establish classes, schools or colleges for the study of music, dance and allied arts.

The music college of the Society had a strength of 215 students in 1975. The music classes are conducted in the premises of South Indian Welfare Society's High School at Matunga, and National Kannada High School, Wadala. In the year 1974-75 the Society introduced a seven year integrated diploma course for music, both vocal and instrumental. After completion of the course the successful candidates are awarded diploma, viz., Sangeetha Vidya Praveena. The Society conducts annual music competitions every year.

The Society had 750 members including founders, patrons, life members and ordinary members.

Bombay Art Society, Jehangir Art Gallery, Fort: The Bombay Art Society was founded in December 1888 with the object of promotion and encouragement of Art by holding exhibitions of pictures and other works of art. This is the oldest art institution in India in the field of fine arts. The society is registered under the Societies Registration Act of 1860.

The activities of the society include publication of an art journal, convening and conducting meetings and arranging lectures in connection with art, establishment and maintenance of a gallery for the exhibition of pictures and other works of art.

The affairs of the society are managed by a managing committee. The Governor of the State is the chief patron of the society. In 1976-77. it had 5 life members, 55 ordinary members and 15 students. The society depends for its funds upon the subscriptions of members and grants received from Government. In 1976-77 it received Rs. 2,500 from Bombay Municipal Corporation, Rs. 1,000 from Government of Maharashtra and Rs. 2,000 from Lalit Kala Academy. About Rs. 4,500 had been distributed by way of prizes. In 1976-77 the income and expenditure amounted to Rs. 33,711.

The society collected exhibits of prominent artists for an exhibition of art and its sale was organised by the Thane District Relief Committee to augment the Chief Minister's Relief Fund for the cyclone affected areas of Maharashtra. Numerous artists from all cadres belonging to Maharashtra had donated their paintings to the relief committee which were exhibited for sale. The society publishes an art journal. In 1975-76, four journals were published and sent to members, art bodies, art schools, colleges, libraries and to a number of publishers in India and abroad.

British Council, Fort: The British Council, founded in 1934, is the principal cultural agency of the United Kingdom for developing cultural relations with the Commonwealth and other countries. It is an independent non-political organisation supported by public funds, with the defined aims of promotion of a wider knowledge of the United Kingdom and the English language abroad and the development of closer cultural relations with other countries. In furtherance of the objectives, it arranges for exchange of persons in educational, cultural and other fields to and from the U.K. It also sponsors dramatic and musical performances and exhibitions.

The council established a library at Bombay in 1950 and the other two libraries are situated at Pune and Bhopal. These three libraries together have approximately 26,000 members. The British Council library in Bombay has very valuable books on all subjects. Its membership is sought for by thousands of readers.

The council's income is derived entirely from public funds.

Besides, it arranges for cultural exchanges and educational visits, and strives for understanding and goodwill between India and the U.K.

Circle Litteraire, Fort: The Circle Litteraire Bibliotheque Dinshaw Petit was founded by a group of prominent Indian and European gentlemen on the 9th June 1886. The Circle Litteraire is governed by a constitute which consists of provisions of the usual kind for a cultural institution. Membership of the society is open to those interested in French language and literature.

The Circle Litteraire is a purely educational and cultural institution for the study of French and is registered as a society and as a public trust. The library consists of a fairly extensive collection of works on French literature.

Upto the beginning of the Second World War the Circle Litteraire was amongst the two or three leading cultural institutions of Bombay and its substantial membership came from every class of society. Its patrons were the successive Governors of Bombay, Sir Dinshaw Petit and the Maharaja of Kapurthala. Professors, teachers and students were also well represented. Its regular cultural and educational activities consisted of lectures, talks and discussions in French on subjects connected with French language, literature and thought, staging of French plays and various social activities. Among the famous Frenchmen felicited by the society were Pierre Loti, the celebrated novelist, and the great political figure, Georges Clemenceau. It was mainly due to the efforts of the Circle Litteraire that the University of Bombay introduced French as a subject for the Honours Degree at the B.A. and M.A. examinations.

The work of the Circle Litteraire is financed by income derived from membership fees, interest on deposits, occasional donations, etc. The society always received a very friendly encouragement from the representative of the Government of France in India from whom valuable donations of books and periodicals have been received.

Crafts Council of Western India, Malabar Hill, Bombay 6: The Crafts Council of Western India was set up in Bombay on 28th February 1966. Subsequently in 1972, its headquarters was shifted to New Delhi and later to Madras. In order to continue the work done by the Crafts Council of India in Bombay, a new organisation, the Crafts Council of Western India was set up and registered in Bombay in June 1972. This organisation is affiliated to the national body, the Crafts Council of India, as well as to the World Crafts Council at New York, U.S.A., whose Asian headquarters is in Sydney, Australia.

The council strives to assist craftsmen in every possible way. It also aims at encouragement of craftsmen in the adoption of improved methods of manufacturing.

It holds annual crafts exhibitions at the Jehangir Art Gallery and other venues. Craftsmen from 12 States in India have benefited through the sales in Bombay.

In August 1975, the Crafts Council of Western India, invited by the Handicrafts Marketing and Service Extension Centre, Kolhapur (All India Handicrafts Board) jointly sponsored a market meet of Maharashtra crafts. About 30 crafts units participated with exhibits including embroideries, wood work, silver jewellery, dolls, batik and textiles.

Film shows, lectures and demonstrations are conducted by the council for members. In addition to demonstrations in embroidery, textile printing, pottery, glass blowing, paper making and weaving, the council proposes to make craft kits for children and to print books on craft making and collaborate with organisations which hold vacation craft training programmes. The most important task is the preservation and exhibition of the crafts of Western India.

The council has a plan to build a crafts museum and a craftsman's workshop.

It is a self supporting voluntary organisation.

Indian Council for Cultural Relations, Marine Lines: The Indian Council for Cultural Relations with its headquarters at New Delhi is an autonomous organisation entirely financed by the Government of India to establish and strengthen cultural relations between India and other countries. It has got branches at Bombay, Calcutta and Madras.

Activities of the council include exchange of visits of scholars, artists and men of eminence to various organisations and centres of learning. It also arranges international conferences, seminars and lectures by renowned scholars. It has maintained Indian cultural centres, and established chairs of Indian studies abroad. The council also takes care of the welfare of overseas students in India and looks after the administration of the Jawaharlal Nehru Award for International Understanding. It presents books and specimens of Indian art to universities, libraries and museums in other countries. It has a library containing about 25,000 volumes. The council undertakes the work of interpretation of Indian art and culture, and translation of Indian works into foreign languages. It also publishes a quarterly, *viz., Indo-Asian Culture* and a bi-monthly, *viz., Cultural News from India*, both in English, as also a quarterly journal in Arabic

Mumbai Marathi Sahitya Sangh, Charni Road: The Mumbai Marathi Sahitya Sangh established on 21st July 1935, has been functioning in Bombay as an active centre for intellectuals, artists, educationists and litterateurs. The institution owes its origin to the pioneering efforts of Dr. A. N. Bhalerao. It was started as a central literary institution under the presidentship of the late Prof. A. B. Gajendragadkar.

The Sangh holds literary conferences within the limits of Greater Bombay with a view to bring together all those interested in literature. It organises seminars on literacy, cultural and educational subjects. The Sangh arranges lectures and invites prominent persons from various parts of the country.

Felicitations are also held in honour of celebrated writers, poets, editors, dramatists and actors and particularly those who visit Bombay under Government of India's cultural exchange programme. The Sangh guides and directs young men and women in the study of Marathi classics. It conducts certificate examinations in Marathi. About twenty-five devoted professors of Marathi participate in the programme of Marathi teaching by this institution. Classes for teaching Urdu and Russian languages through Marathi medium are also conducted by the Sahitya Sangh.

One of the good schemes of the Sangh is the seven memorial lecture series in commemoration of Waman Malhar Joshi, Hari Narayan Apte, Dr. A. N. Bhalerao, V. S. Khandekar, Anna Martand Joshi, Lalaji Pendse and Nath Madhav, who have adorned the literary horizons of Marathi literature and social life in Maharashtra. The Sahitya Sangh has taken keen interest since its inception in the development of Marathi theatre. It has also established a drama wing and Amrit Natya Bharati and a school for imparting education.

In 1964, the present building of the Sangh Mandir was constructed. The air conditioned theatre named after Dr. A. N. Bhalerao, consists of an auditorium with a seating accommodation of over 800, a spacious stage equipped with all modern amenities and contrivances for the performance of play and dance. Dr. Bhalerao Natya Griha is made available at concessional rates on Wednesdays for Marathi, Hindi and Sanskrit experimental drama performances.

The offices of Marathi Natya Parishad; the Granthali; the Drama Artists' Association and the Professional Marathi Drama Producers' Guild which have similar aims and objects are situated in the premises of the Sahitya Sangh.

A reference library with a collection of about 10,000 selected books has been established to commemorate the late Lt. Col. Principal, A. B. Gajendragadkar, who was the president of the Sahitya Sangh.

In 1982 the Sangh opened the N. R. Phatak Research Centre for fundamental research in Marathi stage and literature. The Municipal Corporation has given a grant of Rs. 50,000 for this centre.

The Sahitya Sangh was honoured by the Government of the German Democratic Republic by inviting the artists of the Sangh for drama recital on the occasion of silver jubilee celebration of the Republic in that country in September 1974. The theatrical troupe gave many drama performances in the G.D.R., Zurich and Berlin.

The Sangh has rendered good service in the field of Sanskrit drama.

In 1980-81 the strength of members of the Sangh was 1,353 including 1,191 life members. During the same year the income and expenditure amounted to Rs. 5,82,157.99.

National Centre for the Performing Arts, Nariman Point, Bombay-21:

The centre originally registered as the National Institute of the Performing Arts in 1966 was renamed in 1967 as the National Centre for the Performing Arts. The main objects of the centre are, to organise, sponsor, promote and establish scientific research in various fields of fine arts and to establish a national centre for the study and performance of arts.

The centre has built a small recording auditorium, a library and studios in the premises of the Bhulabhai Auditorium. Formerly it had an auditorium donated by late Mrinalini D. Desai, the daughter-in-law of the late Bhulabhai Desai at Breach Candy. Now it has a magnificent and artistically designed auditorium at Nariman Point. Eminent connoisseurs of art and philanthropists like J. R. D. Tata are associated with this organisation. The library is equipped with proper listening facilities, records, tapes, manuscripts and has a large collection of books. Besides, the centre has established a Performing Arts Circle with about a thousand members. The centre also undertakes several research projects.

The centre has come up with the endowments and has received generous support from the Government of India and the Government of Maharashtra. The Government of Maharashtra has made available a land of 8 acres and the Government of India has sanctioned a substantial loan. The annual budget of the centre amounts to Rs. 10 lakhs.

Shanmukhanand Fine Arts and Sangeeth Sabha: The Shanmukhanand Sabha was established by a band of lovers of classical music and dance on 14th April 1944. The Sabha with an initial membership of 500 was amalgamated with a similar organisation, *viz.*, Fine Arts, Bombay in 1950. The new institution came to be known as the "Shanmukhanand Fine Arts and Sangeeth Sabha".

The main object of the institution is propagation of classical music, dance, drama and other fine arts and also to provide medical relief to the needy persons. This organisation has earned a good reputation in sponsoring the performances of well-known celebrities of Indian classical music and dance. The needs of the connoisseurs of performing arts in the Sion-Matunga and Suburban areas have been satisfied by it by giving performances of top-most artists belonging to various schools of music and drama.

The Shanmukhanand auditorium is the biggest and one of the most magnificent ones in Bombay. It has a seating capacity of 1,552 on the ground floor, 896 in the first balcony and 564 in the second balcony, which make a total of 3,012 seats. It is the largest fully air-conditioned multipurpose auditorium with the best ami latest accoustics. It is a popular venue of concerts of music, dance, drama, and get togethers. Since it has a huge seating capacity it is quite an economical auditorium.

The Sabha, devoted as it is to propagation of classical music, has established a school, *viz.*, Sangeet Vidyalaya for imparting education in Karnatic vocal as well as instrumental music and also in Sitar recital in Hindustani music.

Every year the Sabha conducts music competition in which students from other institutions and private classes also take part.

The Sabha started a medical relief centre for the benefit of people of all castes. The medical centre is equipped with a pathological Laboratory, X-Ray clinic, E.C.G. Unit, Dental clinic, Eye clinic, etc. There are experts assisted by competent staff and equipment.

The facilities provided are available to the public at concessional rates. The philanthropic activities of the Sabha also include medical check up of students in the nearby schools at concessional rates.

The Sabha also arranges film shows on health and hygiene for the children of nearby schools for which admission is free. It also arranges lectures on health and hygiene for the benefit of the citizens. The Sabha also arranges lectures and demonstrations on music by eminent musicologists and instrumentalists. A quarterly journal, *viz.*, *Shanmukha* devoted to music is also published.

The Sabha had 5,700 members on 30th June 1980. It received a grant of one lakh rupees from Central Government, one lakh rupees from Maharashtra Government and Rs. 25,000 from Tamil Nadu Government in Tune 1980.

The assets of the institution were worth Rs. 3,91,946 in June 1980. Its income from the music school, amounted to Rs. 1,80,981 and from the medical centre Rs. 96,726 in the year ending with June 1980.

Shilpi Kendra, Colaba Causeway: The Shilpi Kendra was establishes in December 1963. It is an organisation run by honorary workers dedicated to preserving India's rich artistic heritage and works under the guidance of the All India Handicrafts Board. The objects of Shilpi Kendra are to popularise and foster the advancement of Indian handicrafts; to help the hereditary craftsmen to continue to practise their art; and to provide them good standard of living through the sale of their handicrafts.

Every year it honours those craftsmen and craftswomen in Maharashtra, who have excelled themselves at their individual crafts by giving Master Craftsman Awards. The exhibitions of crafts are also organised in collaboration with the All India Handicrafts Board.

It maintains direct contacts with craftsmen by eliminating middle men and ensures fair returns for their labour. It also helps the craftsmen to adopt new designs and forms, and encourages to form co-operative societies. Necessary financial help for buying raw materials and machinery is offered by the Kendra.

The Kendra helps the artisans by selling the articles at home and abroad.

The Shilpi Kendra had 77 members which included 30 founder members, 14 life members and 33 ordinary members. It received a loan of Rs. 50,000 in 1967 and grant-in-aid of Rs. 25,600 in 1968 from the All India Handicrafts Board, New Delhi.

Sur-Singar Samsad, Bombay-6: The young music enthusiasts founded an organisation under the name of Sur-Singar Samsad in 1947 to promote and popularise Indian classical music.

The Sur-Singar Samsad is a movement, rather than an institution, devoted to serve and promote the interests of both artists and public.

It holds the Swami Haridas Sangeet Sammelan once a year lasting for a week. It is one of the most popular music festivals in the country, wherein topmost Indian classical vocalists, instrumentalists and dancers participate.

The Kal-Ke-Kalakar Sangeet Sammelan is a unique venture for discovering talent. Another sammelan, *viz.*, the Ras Ganga was started from 1966 which comprises *lok sangeet* and dramas. Alankar is the music circle of the Samsad which arranges for classical music programmes for its members at least once in a month. The Samsad presents titles of the Sangeet-peeth to top musicians and dancers every year. It also publishes a monthly news-bulletin, the *Sur-Sandesh*.

The assets of the institution were valued at Rs. 83,296 and income and expenditure was the same which amounted to Rs. 72,576 in 1975.

Vile Parle Music Circle, Vile Parle: The Vile Parle Music Circle, an eminent organisation in the field of music programmes, was established in 1958 with the efforts of Shri Sadanand Danait, Umakant Deshpande, the late Nanda Patkar and others to provide a high standard of musical entertainment to the residents of Bombay. A band of enthusiastic lovers of music have launched this organisation which has won the patronage of hundreds of connoisseurs of music.

The organisation was inaugurated on 16th August 1958 under the presidentship of M. C. Chhagla, the then Chief Justice of Bombay. This function has become memorable because Surashri Kesarbai Kerkar, the exponent of the Jaipur School of music gave concert of classical vocal music.

The circle was registered under The Bombay Public Trusts Act, 1950 on 4th April 1960. The aims and objects of the institution are to promote music and other fine arts, to facilitate and spread education in music and other fine arts by establishing classes and academics for imparting scientific knowledge of Hindustani Classical music and other fine arts. It is to the credit of this organisation that it arranged musical concerts of celebrated artists, such as Smt. Kesarbai Kerkar, Smt. Gangubai Hangal, Smt. Hirabai Badodekar, Ustad Abdul Halim Jafer, Smt. Laxmi Shankar, Shri Bhimsen Joshi, Shri Vasantrao Deshpande, Shri Nikhil Bannerjee, Ustad Allah Rakha, Pandit Ravishankar, Smt. Manik Varma, Ustad Bismillah Khan, Kumar Gandharv, Ali Akbar Khan, Smt. Shobha Gurtu and almost all other contemporary artists. In addition to the regular bi-monthly programmes, the circle also arranges for some special programmes which attract music lovers from distant suburbs and parts of the city. The circle is recognised by the

Sangeet Natak Academy since January 1961 as an important organisation in the field. The Sangeet Academy of the circle started functioning from 1st July 1980. Through the Sangeet Academy systematic training in vocal classical music and natya sangeet is being imparted to the students under the guidance of Dr. Mrs. Jyotsna Mohile. About forty-six students were enrolled within a span of one year. It is affiliated to the Akhil Bharatiya Gandharva Mahavidyalaya for purposes of examinations since April 1981.

The circle has formed Natya Shakha for the purpose of encouraging dramatic talent. It also gives instruction in drama performances and connected matters. The Circle organises drama festival staging selected dramas.

Shri P. L. Deshpande, a talented Marathi litterateur and connoisseur of music, takes a interest in the activities of the circle. His guidance to the Natya Shakha is worthy of mention.

The Parle Music Circle had on its roll about 1,044 members in June 1981. The assets of the institution as on June 1981 were worth Rs. 4,72,395 while its income and expenditure amounted to Rs. 71,991.

The institution receives an humble grant of about Rs. 3,000 from the Government of Maharashtra.

CHARITABLE ORGANISATIONS

Babulnath Mandir Charities, Girgaum Chowpati: The Babulnath temple and the other properties were declared to be a religious public charity, and trustees were appointed for its administration on 8th October 1883. The objectives of the trust are: (1) to maintain the temple of Shri Babulnath Mahadeo and other temples attached thereto, (2) to maintain a Sanskrit pathshala to spread Sanskrit education and Vedant philosophy, (3) to protect cows and help the people in case of famine, flood and other natural calamities, and (4) to help educational and medical institutions.

The trust is managed by the trustees appointed under the scheme framed by the High Court. The trust has been helping other social, religious and educational institutions by giving donations within the limits fixed by the High Court. The Babulnath temple is one of the most revered and sacred Hindu temples in Bombay; it is said to have taken its name from the individual, who built the original shrine about 1780. A new and larger temple was commenced in 1836. The present temple with its high spire and pillared hall and terrace was completed about 1900. This temple is dedicated to Lord Shiva and is frequented by hundreds of devotees daily. It is situated at the foot of the Malabar Hill on Pedder Road side.

Rao Bahadur Anant Shivaji Desai Topiwala Charity, Girgaum: This charitable trust was established in 1926, with the objects to provide scholarships and financial aid to the poor and needy students from the Kudal Deshastha Gaud Brahmin community.

The institution provides scholarships worth about Rs. 5,500 every year to nearly 50 students and financial assistance to 20 poor and needy individuals amounting to Rs. 2,000. During 1967-68, the annual income and expenditure of the institution amounted to Rs. 45,000. The institution possesses property worth Rs. 7,00,000.

Saurashtra Trust, Fort: The Saurashtra Trust was founded in 1931 with the objects of conducting or aiding schools, colleges, and libraries, providing medical aid to the people and also relief to human beings or animals during times of famine or distress; and helping different societies and institutions having similar charitable objects.

Sheth Gokuldas Tejpal Charities, Fort: This is one of the oldest charitable organisations in Bombay which was established in February 1882. It is an educational, religious and charitable institution. It runs two free boarding schools in Bombay, *viz.*: (1) Sheth G. T. Free Boarding School, which gives admission to college students, and (2) Sheth G. T. Dormitory Hostel, which provides lodging accommodation to *bona fide* students on payment of Rs. 200 per month. Both the schools give concessions to poor and deserving students. The former Prime Minister of India, Shri Morarji Desai had stayed at the Gokuldas Tejpal free boarding house for four and a half years during his college days. A number of others who later became very eminent in various fields also received free boarding facility at this institution. They include Prof. C. N. Vakil, the well-known economist; Prof. Welankar, a Sanskrit scholar; Shri N. H. Bhagwati, a Supreme Court Ju.dge and Vice-Chancellor of the Banaras Hindu University; Shri C. M. Patel; Shri M. B. Amin and Shri Chandulal Trivedi, a Governor and member of the Planning Commission of India. The first session of the Indian National Congress in 1885 had been held in the Sanskrit Pathshala which was situated in the same compound as the G. T. boarding house. Besides, the institution conducts high schools including two girls' high schools and a Sanskrit Pathshala in Bombay and four high schools in Kutch.

The institution incurred an expenditure of Rs. 13,81,221 in 1968 on educational activities.

Sheth G. T. Hospital which was originally established by this trust in 1874 was subsequently handed over to the Government of Bombay Presidency for management on specific condition that the name of Sheth Gokuldas Tejpal be retained for ever. Now the Hospital is under management of the Government of Maharashtra.

The institution has constructed two temples of Shri Laxminarayan, one in Bombay and the other at Kothara in Kutch. It also manages two charitable funds *viz.*, Bhatia Destitute Relief Fund and the Bai Jamnabai and Bai Manekbai Dharma Fund.

The assets of the institution amounted to Rs. 90,27,667 and its income and expenditure amounted to Rs. 16,81,782 in 1967-68.

Shri Mahalaxmi Temple Charities, Mahalaxmi : The Mahalaxmi temple situated on a small hillock overlooking the Hornby Vellard Causeway on the western side of the island of Bombay was built by Ramaji

Shivaji in the eighteenth century. For the management of the temple, a scheme was framed by the High Court and the trustees took charge of the temple under the said scheme in 1935. The trustees were appointed in 1935. Board of Trustees have five prominent members of the Hindu community.

The source of income of the trust consists of donations from the public and sale proceeds from coconuts and clothes. The trust gives scholarships to the deserving students and also donations to various educational institutions and hospitals.

Sir Ratan Tata Trust, Fort: Sir Ratan Tata Trust was established in 1919 for philanthropical work aimed at amelioration of human suffering and for other work of public utility. The trust is managed by a board of trustees. Since its establishment the trust has disbursed Rs. 3,55,20,391 for various objects like education, medical relief and social welfare. It has helped towards the establishment of some leading educational, medical and social welfare institutions. It contributed Rs. 11,70,000 for the establishment of the National Metallurgical Laboratory at Jamshedpur. Jointly with other Tata Trusts, it has also contributed substantially towards the establishment of various institutions like the Tata Institute of Fundamental Research, Tata Memorial Hospital and Cancer Research Society, Tata Institute of Social Sciences, all situated in Bombay; the Indian Institute of Sciences, Bangalore; Tata Blood Bank and Transfusion Service; Tata Agricultural and Rural Training Centre for the Blind, etc. Two recent Tata projects undertaken by the trust are the National Centre for the Performing Arts, Bombay and the J. N. Tata Memorial Centre at Navsari.

The Trust does not receive donations or grants from other trusts or individuals. A very large number of social welfare agencies both from the State of Maharashtra and other States in India are helped by this trust in their welfare work. It also gives substantial donations to National Funds like Prime Minister's Relief Fund, etc. Over and above these donations, relief and rehabilitation work of victims of natural calamities are undertaken by the Tata Relief Team to which donations are given by the trust. Such relief work was undertaken for the victims of earthquake, floods and cyclones in various parts of the country.

CHILD WELFARE ORGANISATIONS

Balkan-Ji-Bari, Santa Cruz (Juhu Road): "Balkan-Ji-Bari" literally means children's own garden. It was established in 1923. The organisation aims at making children happy and to imbibe in them the spirit of sharing or giving rather than taking. Its motto is education and entertainment.

The activities of Balkan-Ji-Bari are based on the belief that recreation is a medium of education. By providing recreation in leisure time it tries to develop a sense of responsibility and other civic virtues in children. It conducts children's recreational centres, libraries, workshops and hobby clubs, nursery schools, child guidance clinics and ashramshalas in rural areas. It exerts to have a uniform legislation for children all over the country. It celebrates festivals, and publishes literature for children and on child welfare. It also conducts a pen-friends club and arranges for exchange of gifts, thus bringing children of different States and countries in close touch with one another. It makes efforts to retain in children the beauty and fragrance of life.

Balkan-Ji-Bari has also its youth section—Akhil Hind Yuvak Sangh (All India Youth Association) to satisfy the physical, mental, social and psychological requirements of youths. The Balkan-ji-Bari has branches throughout India and its activities are carried out by voluntary workers. The training camps are organised for these workers at different centres and a regular training institute for child welfare is located at Bombay. Besides, social workers' conferences and seminars on various topics connected with child welfare are arranged.

Balkan-ji-Bari has connections with almost all child welfare organisations of different countries in the world.

The assets of the institution were valued at Rs. 3,08,197 and its income and expenditure amounted to Rs. 25,444 in 1970-71.

Bombay Mothers and Children Welfare Society, Worli: The society was established in 1919 and was subsequently registered in November 1946 to promote maternity and child welfare by providing medical services, food, clothing, etc., to mothers and children in the State. The society is carrying out various activities both in Bombay and in rural areas. It runs two maternity homes, one at Worli and the other at Delisle Road in Bombay where pre-natal, natal and post-natal services are made available. Routine examination of blood, urine and stool is also done at both the centres. Besides, it conducts auxiliary nurse-*cum*-midwives diploma courses with the Central Government aid. The centres together have trained 2,371 *dais*, 1,000 midwives, 800 health visitors and 150 auxiliary nurses till the end of March 1971. They also, strive for family planning programme and run a well-baby clinic and a Bal Mandir at Delisle Road. The clinic was started in April 1970 where on an average 35 children are given medical treatment at each attendance. The Bal Mandir was started on October 1955. It runs a nursery school. The society also runs a centre at Cotton Green where ailing mothers and children are given medical treatment. The Indian Council of Medical Research conducts a family planning clinic and research centre in the premises of the Dadar centre of the society.

Among the mofussil areas, welfare work is carried out at the health units at Khed in Pune district, at Bhilawadi in Sangli district and at Miri in Ahmadnagar district. The Bhilawadi centre has got two subcentres, one at Ashta and the other at Walva. These units provide medical facilities similar to those at the centres at Bombay, except for training courses. Various facilities such as gynaecological clinic, paediatric clinic, pathological laboratory and mobile dispensary are attached to these units.

The total income and expenditure of the society amounted to Rs. 5,33,288 and Rs. 6,12,126, respectively in 1970-71.

Children's Aid Society, Mahim: The society started functioning in the old jail at Dongri on 1st May 1927 by establishing a remand home for about 100 children. Subsequently however, an urgent need for a certified school for younger children was keenly felt. It was with the efforts of Shri K. M. Munshi and Shri Morarji Desai that the Chembur Children Home came into being in 1939. The Government also handed over the management of the David Sassoon Industrial School at Mahim to the society in 1939.

In 1941 the society organised a special institution near the Chembur Children's Home for the mentally deficient children.

The society also entered into new areas of work. It started preventive service under the Juvenile Service Bureau in 1954. At present it runs about 12 preventive centres in the city wherein about 1,500 children are accommodated and brought up properly.

The Children's Aid Society has under it a network of institutions, the details of which are given below:

	Institution	Date of Establishment	Average No. of children	admitted	Average annual budget (Rs.)
1.	Remand Home, Umarkhadi.	1-5-1927	580	88,094	5,50,000
2.	New Remand Home, Mankhurd.	1-12-1960	200	1,341	1,15,000
3.	David Sassoon Industrial School, Matu <mark>nga</mark> .	1854	421	11,473 (since 1925)	4,50,000
4.	Chembur Children's Home, Mankhurd.	15-9-1939	350	4,737	3,95,000
	Home for the Mentally Deficient Children, Mankhurd.	30-9-1951	120	607	1,65,000
6.	Juvenile Service Bureau	2-2-1954		Non-institutional service	50,000

The various institutions take care of the juvenile offenders, socially and physically handicapped children, uncontrollable children and victimised children. In the city of Bombay about 3,000 children are taken charge of every year under the Bombay Children's Act and brought to the society's remand homes. The juvenile court plans out the rehabilitation programme for each of them with the assistance of the society's probation officers. The remand homes of the society received over 92,000 children since 1927. Some children are sent to their parents after warning or after taking bonds for their proper care by their parents. Some children who cannot be dealt with under the above corrective measures are sent to certified schools, where training is given in liberal education and crafts.

The society has a governing council of 24 members under the presidentship of the Home Minister of the State. The council has six members elected by the general body, six members nominated by the State Government, four representatives of the Bombay Municipal Corporation including the Mayor, and the Municipal Commissioner, the Police Commissioner, the Secretary, of Social Welfare Department of the State Government and other representatives of social work agencies. The chairman of the society is nominated by the State Government from amongst the members of the council. Each of the institutions has a superintendent to look after its management.

The society has a staff of about 300 workers most of whom have received specialised training in the work of juvenile correction at the Tata Institute of Social Sciences.

The society annually spends about seventeen lakhs of rupees on its activities. The income consists of grants from the State Government, Bombay Municipal Corporation, Public Charities and sale proceeds of articles made by the children.

The assets of the society were valued at Rs. 16,63,940 on 31st March 1971, while its income and expenditure during the same year amounted to Rs. 16,75,031 and Rs. 19,66,945, respectively.

Children's Film Society, Worli: The society was established in May 1955, under the Societies Registration Act of 1860, to produce, distribute and exhibit films specially suitable for children and young people. This was based on the recommendations of the Film Enquiry Committee which was set-up by the Government of India in 1949.

The Society is the only national agency (*The registered office of the society is situated at New Delhi and its administrative office is at Worli in Bombay.*) in the country engaged in utilising the medium of film in entertaining and educating children and young people in the country. It also maintains liaison with similar organisations in foreign countries.

The affairs of the Society are managed by an executive council consisting of seven members, appointed by the Government of India from amongst the representatives of the Ministry of Information and Broadcasting and the Ministry of Finance, and three non-official members. The Society has liaison with some State Governments, union territories and local bodies. The Society has its own production unit which has produced so far 75 films including feature films, short films, cartoon and puppet films, compilations and adaptations. About 12 films have won national and international awards at various film festivals. On an average more than five million people including adults see its films at commercial, non-commercial and free shows organised by the society or Central and State Government departments.

In 1969 the working of the Children's Film Society *vis-a-vis* the future of the children's film movement in India was examined by a high level committee of the Government of India. The study team recommended amendment to the rules of the society to make it more broad-based for involving all the official and non-official agencies in the country which are engaged in the children's welfare programme, art and culture or television. The recommendations of the study team have been accepted by the society and also by the Government of India in principle.

The finances of the society accrue from grant-in-aid from the Government of India, affiliate membership fees of the State Government, union territories and local bodies, exhibition receipts, sale of prints, film library membership fees, and export of films for screening abroad and TV and theatrical circuits. The Society received grant-in-aid from the Government of India amounting to Rs. 7,89,108 and revenue from its own sources amounting to Rs. 5,01,478 in 1970-71, while its expenditure in the same year amounted to Rs. 12,94,748.

Child Welfare Workers' Association, Santa Cruz: It is an association of the former students of the Balkan-ji-Bari Training Institute for Child Welfare which was founded in 1953 by Dada Shewak Bhojraj.

The objectives of the association are to assist in the advancement of education of children, to prevent cruelty to children, to maintain milk distribution centres for children, children's health centres, nursery schools, etc. The association renders service to various institutions contributing to child welfare. It arranges periodical lectures, discussions, outings, conferences, seminars and surveys on matters of interest to children, and for the furtherance of child welfare movement. The children's days, national days and other social festivities are also observed.

Maharashtra State Council for Child Welfare, Worli: The Maharashtra State Council for Child Welfare was established in 1952 mainly to take over the responsibilities of the Bombay State Committee for the United Nations Appeal for Children and to carry on work for the welfare of children in Maharashtra State. The main aim of the Council is to initiate, undertake and aid, directly or through its branches, schemes for the furtherance of child welfare in Maharashtra State.

The State Council encourages the formation of District Councils which are affiliated to the Council to work for its aims and objects.

The total number of members of the State Council in 1975-76 was 102, of which 43 were life members, 26 ordinary members, 18 institutional members and 15 District Councils. The Council has formed six committees for different activities.

The Maharashtra State Council for Child Welfare which is working in the field of child welfare all over Maharashtra conducts the following schemes in Bombay City:—

- (1) $Hospital\ Work$: This programme was started at J. J. Group of Hospitals in 1967 which was extended to St. George's and Nair Hospitals also from 1975-76. The programme provides recreational activities and opportunities to the ailing children in these hospitals.
- (2) Bhandup Complex: The Council runs a creche and balwadi for children from the poor class, particularly the workers on the water purification project at Bhandup. Around 120 children are benefited by this. The children are given nutritious diet at the centre. Efforts are made to inculcate habits of cleanliness and hygiene and also to prepare a base for further schooling.
- (3) Aurobindo Centre: This centre was started in 1976 in collaboration with the Society for Clean City of Bombay. The Centre maintains a balwadi at Bandra for the children coming from the surrounding slums. There are about 90 children attending the balwadi. The purpose of the programme is to inculcate health habits and also to prepare children for a school.

During 1975-76, the income and expenditure of the council amounted to Rs. 63,595 and 66,113, respectively.

Manav Seva Sangh (Bal Niketan), Sion: The Sangh was formerly known as Hindu Deen Daya Sangh which was started in a humble way in the J. J. Hospital compound in Bombay in 1924 to meet the needs of the poor and the destitute. Shri Jamnadas Mehta, the then Mayor of the city, inaugurated the newly constructed home in 1936. The Sangh was registered under the Societies Registration Act on 23rd April 1936. Sardar Vallabhbhai Patel presided over its second anniversary in 1938. Seth Govindram Seksaria donated Rs. 50,000 in 1940 for constructing a building for the Sangh. The Central Social Welfare Board and the Government of Maharashtra granted Rs. 50,000 and Rs. 30,000, respectively to the Sangh in 1956 and 1960. It has been functioning as a voluntary social welfare organisation giving protection to orphan children irrespective of their caste and creed, and enabling them to grow into useful and responsible citizens.

Children are brought to the Sangh from juvenile courts, police stations, municipal hospitals, welfare organisations, etc. Illegitimate children are handed over to the institution. Under exceptional circumstances it takes care of children on temporary shelter basis for short specified periods from parents and guardians who are in difficult circumstances. It functions primarily as a fondling home and provides congenial surroundings, educational and vocational training and medical care to children.

The institution is in a position to house about 200 children. Till 1970-71 it took care of about 2,652 children.

It has at its service a medical officer, a lady superintendent, a full time qualified nurse, an experienced matron and caretakers. In cases of major ailments the children are referred to local hospitals. The Indian Red Cross Society has also donated it useful medical equipment.

The institute runs a Montessori class for children within the age group of 3 to 6 years, while the grown-up children go to primary and secondary schools in the vicinity. Much attention is paid to the recreational activities of the children.

The institute gets the grown-up girls married to suitable persons. Children are also given to foster-parents for rearing up. It is a matter of gratification that parents from western countries like Sweden and France have taken children from the home.

The institute is recognised as a centre of studies for students of social work. In 1969-70, seven students were deputed by the Tata Institute of Social Sciences for studies in social research, child-welfare and medical and psychiatric social work.

The institute had 328 members in 1970-71. The total number of children under care, and income and expenditure of the institute for the past few years, was as follows:—

Year	No of children	Income	Expenditure	
		Rs	Rs	
1950	62	25,489	22,945	
1960	151	64,970	71,496	
1970-71	160	2,17,710	2,17,924	

Its steady progress in many directions of child protection and rehabilitation has received recognition and financial support from the Director of Social Welfare, Maharashtra State; Central Social Welfare Board, New Delhi; Municipal Corporation of Greater Bombay; Public Trusts, industrial concerns, commercial houses, philanthropists and well-wishers. The property and assets of the institution valued at Rs. 10.02.110 as on 31st March 1971.

Society for Protection of Children in Western India, Matunga: The Society was established in March 1916 with a view to provide a home and give shelter to orphan children, educate them and make them good and responsible citizens. The 'Home' of the society is known as the Byramjee Jeejeebhoy Home for the Children.

In 1969 there were 169 life members, 36 ordinary members and 93 associate members.

The assets of the society were valued at Rs. 32,477 in 1968-69. The donations received by it in the same year amounted to Rs.24,854. It also received a grant-in-aid of Rs. 43,982 and recreational grant of Rs.250 from the State Government towards the maintenance of juvenile court committed children. The total receipts from grants, donations, subscriptions, etc., amounted to Rs. 1,35,059, while the total expenditure came to Rs. 1,74,148 in 1968-69.

There were 154 children in the home including after care children. The cost of maintaining one child in the home was about Rs. 64.20 per month excluding the cost of foodgrains in 1968-69. The average age of children was 11 years. The number of Juvenile Court committed children during the year was 120.

Apart from education the home runs printing, tailoring, weaving and music classes. The home also makes arrangements for various training courses for nurses, teachers, *gramsevika*, etc. The court committed girls who wish to get employed outside are sent to the Jhabwala After Care Home for Girls at Borivali after the age of 18 years, while boys are sent to the After Care Hostel or other State Homes.

Welfare Society for Destitute Children, Bandra: This institution was established on 27th November 1957 at Mount Mary's Hill, Bandra with the object to educate destitute children irrespective of their caste and community. It provided basic education and useful knowledge to earn their livelihood by establishing a workshop for cottage industries, handicrafts and small scale industries. It has started homes for the destitute children, training centres for social workers and a free medical dispensary. The institution is working for inter-religious understanding and communal harmony for strengthening social solidarity and national unity.

During 1970 there were 136 children in the school, of whom 82 were provided with residential facilities.

The income and expenditure of the society amounted to Rs. 20,717 and Rs. 11,889, respectively in 1971.

CULTURAL RELATIONS WITH FOREIGN COUNTRIES

Indian Institute of Asian Studies, Andheri: The Asian Research Institute, established in 1956, was subsequently reorganised and named in 1963 as the Indian Institute of Asian Studies. The aims and objects of the Institute are to study the present structure and future prospects of the Asian economy with possibilities of stimulating its rate of growth and of intra-Asian economic co-operation. It also undertakes studies on the problems incidental to economic growth in Asian countries. It functions as a clearing house of information which is done through publications. The Indian Institute of Asian Studies has maintained a library with a small collection of books and journals.

Indo-American Society, Fort: The Indo-American Society, established in 1959, is a cultural and

educational organisation devoted for the promotion of understanding between India and the United States of America.

The society had 4,500 members of which nearly 30 per cent were students of different colleges in Bombay in 1976.

The society conducts various programmes such as management training programmes, cultural exchanges, organisation of lectures, group discussions and exhibitions which are of mutual benefit to Indians and Americans. The society runs a library having a collection of more than 3,000 books for members.

The assets of the society were valued at Rs. 97,651, while its income and expenditure amounted to Rs. 1,11,125 in 1974-75.

Indo-Arab Society, Fort: The society was established on 3rd November 1954, with the objective of building closer ties between India and the Arab countries in cultural, social and educational fields, and to foster trade and commerce between India and the Arab countries. The membership of society consists of patrons, life members, ordinary members, honorary members, associates and students.

The society meets its expenses through membership fees and donations. It is housed in well furnished premises and also has its own library, where research students come for studies.

The society strives to achieve its objects by holding several receptions, lectures and symposiums in honour of visiting Arab dignitaries as also prominent Indian personalities.

Indo-Japanese Association, Rampart Row, Fort: The Indo-Japanese Association was established in February 1954 as a cultural organisation to promote better understanding, co-operation and friendship between the people of India and Japan. It is one of the biggest organisations of its type in India, working for international relationship.

It has about 1,200 members including founders, members, life members, corporate supporting members, ordinary members and student members.

The Association organised during the last 23 years varied activities which include conduction of Japanese language classes, flower arrangement classes, handicraft classes, regular screening of Japanese documentary and feature films, presentation of well-known Japanese dance troupes, exhibitions of paintings, photography, handicrafts, etc. Academic programmes for the benefit of teachers for upgrading their knowledge about contemporary Japan include organising annual Ikebana contests, study tours to Japan, youth exchange programmes. It has an excellent library on Japanalogy, translation department, and it arranges for cultural delegations and tourist facilities. All its activities in the field of educational, cultural, and social work are towards the enrichment of life.

No financial assistance is received by it from the Japanese or the India Government. Funds are raised by organising cultural programmes to meet the expenses.

Indo-Malaysia Society, Fort: The Indo-Malaysia Society was established in 1957 to promote cultural and business relations between India and Malaysia. Over the years, the society has made an earnest endeavour to promote friendly relations between the people of India and Malaysia. It has in the pursuit of its objectives, endeavoured to promote with a view to promote trade and joint ventures in Malaysia, held film shows on Malaysia, maintained close liaison with Malaysian students and trainees in India. Whenever high dignitaries from Malaysia pass through Bombay, efforts are made by the Society to arrange reception in their honour.

Indo-Mauritius Society, Colaba : The Indo-Mauritius Society was formed in 1965, with the main object of bringing Mauritius and India closer by exchange of economic and cultural delegations. It arranges lectures, films and debates for promotion of Indo-Mauritius friendship.

It has about 1,500 invitees on its roll from all walks of life. Whenever any functions are held expenses incurred are contributed voluntarily by the committee of hosts.

Indo-Swiss Society, Fort: The Indo-Swiss Society, a non-pohtical and non-sectarian organisation, aims at promotion of greater goodwill and amity between the people of India and Switzerland. It also aims at encouraging true appreciation of the art, literature, culture and philosophy of India and Switzerland.

The Society was established in 1969 and was registered in 1971. In 1976, membership of the society consisted of 3 patrons, 36 life members, 6 institutional members and 80 ordinary members.

In the span of last eight years the society has made remarkable progress in its social, cultural and educational activities. In 1970 it had organised an exhibition, " spotlight on Switzerland ".

By organising exhibitions and issuing posters, it has provided an insight into art, culture, industries and other facets of life in Switzerland. Film shows are organised for the benefit of members. Active assistance is rendered for exhibitions organised in Switzerland showing art and culture of India. It also provides assistance to Indian students who desire to go to Switzerland for advance studies.

The source of income of the society is from subscriptions received from its members and donations from general public.

Iran League, Fort: The Iran League was founded in 1922 for establishing closer cultural and friendly contacts between Iran and the Parsis of India, to ameliorate their conditions and to strive for their uplift. It also encourages Parsis to visit their old land.

It issues a " Quarterly News Letter " and arranges lectures on Iranian activities.

Max Mueller Bhavan, Fort: The Max Mueller Bhavan is a branch of the Goethe-Institute, Munich, a private institution promoted by the German Government and working within the framework of the cultural agreement between India and the Federal Republic of Germany. The Max Mueller Bhavan, Bombay, was established in December 1968 Indo-German cultural relations, through a better understanding of both the countries, and co-operation in the fields of culture, arts, sciences and other spheres of learning.

Besides conducting German language courses, the cultural activities of the Max Mueller Bhavan include concerts, lectures, exhibitions and film shows. It has a library having 6,500 books.

EDUCATIONAL INSTITUTIONS

(information regarding various colleges in Greater Bombay is based on the "Centenary Souvenir" (18-7-1957) of University of Bombay.)

Anjuman-i-Islam, Fort: The Anjuman-i-Islam was founded in 1875 (For history and role of leaders like Badruddin Tyabji see Chapter-2, History-Modern Period.) and registered under the Indian Companies Act, 1913, with the objects of promoting educational, social, economic and general welfare of Muslims.

It conducts a girls school, a commerce college, a technical school, a hostel for the needy students and the Urdu Research Institution. A number of students belonging to the Muslim community have taken advantage of the educational facilities offered by this society.

It also looks after the welfare of its employees by forming a co-operative credit society to solve their financial difficulties.

The income and expenditure of the Anjuman was the same amounting to Rs. 2,73,519 in 1968-69.

Aryan Education Society, Girgaum: The Aryan Education Society was founded in 1897 by Late Babasaheb Jayakar Diwan Bahadur, and some other educationists and social workers to propagate education amongst Indians.

The founders of the society had the goal of cultivation of respect for the mother-land and our culture in an era when missionary schools were very active in the propagation of western education and religion in India.

At present the society conducts six institutions in Bombay including two high schools, one each for boys and girls, a training college for women, a primary school and a montessori class. Of these institutions, five are located in Bombay.

The Society had property and assets worth Rs. 13,11,749 while its income and expenditure amounted to Rs. 1,06,632 in 1973-74.

Ayurvidya Frasarak Mandal, Sion: The Mandal was established in June 1947, with the object of conducting research and modernisation of ayurvedic studies and providing instructions in the field of ayurved.

At present it runs two ayurvedic dharmarth hospitals, two dispensaries and an ayurvedic college.

At the end of March 1969 the fixed assets of the *mandal* amounted to Rs. 1,98,328.55, while its total income and expenditure stood at Rs. 2,00,437.50 and Rs. 2,96,782.45, respectively.

Bharatiya Vidya Bhavan, Chowpati: The Bharatiya Vidya Bhavan is an institution with a missionary zeal established with the objective of integration of Indian culture in the light of modern needs and resuscitation of its fundamental values. The origin of the Bhavan can be traced to the Sahitya Sansad, Bombay, which was founded by K. M. Munshi in March 1922 with the object of developing and spreading the culture of Gujarat. The Bhavan with broader objectives was founded on November 7, 1938. The founder members included men of eminence like Dr. Rajendra Prasad, Sir Chimanlal Setalvad, and Sir Harsiddhabhai Divatia who has since been one of its main bulworks. The Bhavan was registered on April 20, 1939 under the Societies Registration Act, XXI of 1860, and in 1952 under the Bombay Public Trusts Act. It started its endeavour, with studies in Sanskrit, Indian History and Culture, and Gujarati and Hindi.

The generous donation of Shri Mungalal Goenka enabled the establishment of the Mungalal Goenka Institute in 1939 for higher Sanskrit studies, which was later developed into the Mungalal Goenka Samshodhan Mandir (Post-Graduate and Research Institute).

The initial activities of the Bhavan were started in the premises of the Fellowship School on June 1, 1939 which were transferred to rented premises at Andheri. The department of Jain studies was opened soon after with the co-operation of the Gujarati Sahitya Parishad. On September 1, 1939, the Mumbadevi Sanskrit Pathashala was opened as part of the Bhavan, with the help of the Mumbadevi Trust. In 1940, Nagardas Raghunathdas Jyotish Shikshapith was founded, and the beginning of a library was made. In the same year, land measuring about eleven acres at Andheri was purchased from Government.

On September 14, 1940, Mr. Munshi laid the foundation stone of the building, which when completed in 1941, was opened by Dr. S. Radhakrishnan.

During 1943-47, there was considerable expansion of the Bhavan's activities. This period witnessed the opening of Jain Shastra Shikshapith in 1943-44; Bharatiya Itihasa Vibhag in 1944; the starting of the Gita Vidyalaya and the institution of the Bhavan's own examination in Sanskrit and Gita in 1945; the

inauguration by Sardar Vallabhbhai Patel of the Bhavan's Megji Mathuradas Arts College and Narrondass Manordass Institute of Science in 1946; the development of the Mumbadevi Sanskrit Pathashala into the Mumbadevi Sanskrit Mahavidyalaya in 1946-47; and the starting of the Munshi Saraswati Mandir including the library and the Museum in 1947.

The rented premises on Harvey Road together with the adjoining properties were purchased by the Bhavan in year 1946 with a view to constructing a Central Home for the Bhavan in the city. The new building was completed in 1949 at the cost of Rs. 18 lakhs. C. Rajagopalachari, the first Indian Governor General of India, inaugurated the new building on August 8, 1949. This Central Home of the Bhavan has proved to be the hub of cultural activity in Bombay.

In 1951, the Bhavan's Book University was organised. In the same year the Sanskrit Vishva Parishad (World Academy of Sanskrit) was also sponsored by the Bhavan. In 1954, the Bhavan's College of Arts was shifted from Andheri to Chowpati and the *Bhavan's Journal*, a fortnightly devoted to life, literature and culture was started. The Bharatiya Nartan Shikshapith giving instructions in Indian Classical dances was an important addition to the Bhavan's activities. The Bhavan's College of Journalism, Advertising and Printing was inaugurated in 1961. The Sardar Patel College of Engineering in Bhavan's Campus at Andheri was inaugurated by Jawaharlal Nehru, the then Prime Minister of India in 1962. Bhavan's Hazarimal Somani College of Arts and Science at Chowpatty was started in 1965.

In 1966, the Bhavan International department was inaugurated by Dr. S. Radhakrishnan. The Babulnath Kikabhai Kushal Brahma-Karmodaya Pathashala was opened as a part of the Bhavan's Mumbadevi Sanskrit Mahavidyalaya in 1966. In 1971, the campus at Andheri was renamed as Munshi Nagar in sacred memory of *Kulpati* Dr. K. M. Munshi, and in 1973 the building of the Bhavan in city was named as Munshi Sadan on the 87th birthday of Dr. K. M. Munshi. In the same year the College of communication and management was renamed as Bhavan's Pranlal Devkaran Nanjee College of Mass Communication. The Mumbadevi Sanskrit Mahavidyalaya of the Bhavan started functioning as Adarsh Sanskrit Pathashala under the Government of India scheme. The department of Ansient Insights and Modern Discoveries was constituted in 1977 for correlating ancient insights to modern discoveries. In 1978, the Department of Foundation and Cultural courses was started. The book extension counter and own your own library schemes were launched in 1980. In the same year Jayramdas Patel College of Commerce was started at Chowpati, Haji Rashid Jaffer College of Commerce was started at Andheri and N. M. Jalundhawala Laboratory of Electronics and Radio Communication was added to the Bhavan's Hazarimal Somani College of Arts and Science at Chowpati.

The establishment of the Rajaji International Institute of Public Affairs and Administration offering a practical course in the method of functioning of true democratic system which was initiated in 1980 was one of the most ambitious and prestigious projects of the Bhavan.

The British Prime Minister, Mrs. Margaret Thatcher, laid the foundation stone on 17th April 1981, for the latest venture of the Bhavan in the educational sphere, the Rs. 200 lakh, Bhavan's Shriyans Prasad Jain Institute of Management and Research at Bhavan's Andheri campus.

The Bhavan's associate body, the Sanskrit Vishva Parishad, World Academy of Sanskrit, has many branches all over India and even abroad.

The Bharatiya Stree Seva Sangh, the Bombay Astrological Society, the Sahitya Sansad and the Gujarati Sahitya Parishad are also affiliated to the Bhavan, and conduct their activities in its premises.

The Bhavan has centres and branches at 28 places in India and abroad in United Kingdom and United States of America (New York). The United Kingdom centre of the Bhavan was opened in 1972.

The Bhavan has now developed into a miniature university with its dozen and odd constituent institutions imparting education in subjects ranging from Sanskrit, music, dance, arts, science, engineering, technology, journalism, advertising, public relations, modern management, printing, radio, television and other media of mass communication, and foreign languages like French, Spanish, Russian, German and Japanese. The Bhavan's monumental publication of History and Culture of the Indian People in 11 volumes which was started in 1946 was completed in 1978. The book university series, journals in English, Sanskrit, Hindi and Gujarati and research work in Sanskrit and allied languages, its efforts in resuscitating Sanskritic studies, in popularizing amateur theatricals, reviving folk art etc. are an outstanding and everlasting contribution of the Bhavan to the cause of education, culture and oriental learning.

Bombay Adult Education Association, Fort: The Bombay Adult Education Association was inaugurated in 1934 with the objective to promote educational interests of adults and to co-ordinate university extension courses by undertaking extension courses for educated adults, literacy and post-literacy classes for mill-hands, factory workers and free reading rooms and libraries.

Many.persons including college students are receiving benefits of library started by the association. So also about 15,000 educated adults have taken advantage of the extension classes and nearly 9,000 illiterate mill-hands were made literate.

The membership of the Association is open to all adult members of the public. In 1975, there were 304 members.

The Association receives financial assistance from Government, local bodies and private charitable trusts. In 1975, it received a grant of Rs. 1,000 from the Government of Maharashtra and Rs. 2,000 from the Bombay Municipal Corporation. It also received Rs. 3,500 as donation from N. M. Wadia Charities and Rs. 1,000 from M. K. Tata Trust. The value of assets was Rs. 14,323. Its income and expenditure amounted to Rs. 13,999 in 1975.

Bombay City Social Education Committee, Worli : The Bombay City Social Education Committee, formerly known as the Bombay City Adult Education Committee, was officially constituted by the then Government of Bombay Province in 1939, under presidentship of the late B. G. Kher, the Chief Minister of Bombay State. Prior to the establishment of this committee, adult literacy work in the city was carried out under the joint auspices of the Government of Bombay State and the Literacy Committee consisting of local voluntary workers and representatives of social welfare organisations like the Social Service League. The present nomenclature of the committee came into being in 1946 when the programme of literacy and adult education was systematically organised by giving emphasis on its social aspect.

The committee educated over 5,76,103 illiterate men and women till the end of 1969. It undertook a crash programme in 1967, and educated 7,114 illiterate men and women through the voluntary efforts of students, teachers and social workers by the end of 1969-70.

The committee organises social education classes, *matru-vikas kendras*, educational and cultural activities and voluntary classes. General social education is given to the masses through extra-curricular programmes like talks, film shows, cultural programmes, educational exhibitions, cleanliness campaigns and area libraries.

The committee receives assistance under educational schemes of the UNESCO in India. Delegates of the UNESCO from different countries in the world and some foreign experts in the field of adult education regularly visit the committee and study its various programmes. The annual income and expenditure of the committee in 1969-70 amounted to Rs. 4,98,603. The committee receives State Government grant of 60 per cent of the approved expenditure with a ceiling of Rs. 2,50,000 and municipal grant of Rs. 60,000.

Bombay College (Kirti College): The Bombay College was established in June 1954 by the Deccan Education Society, Pune. The basic aims of the society since its foundation by the late Lokmanya Tilak, Gopal Ganesh Agarkar and other patriotic educationists had been to cover the country with a net-work of educational institutions. The college is situated on a beautiful site on the sea-face at Kashinath Dhuru Road off Cadel Road, Dadar. The construction of the college building was completed in June 1954. At present the college is kn6wn as 'Kirti College'.

Bombay Educational League, Thakurdwar: The league was founded in 1933 to render free educational service to the poor and backward class people by establishing day and night schools. It runs the Colaba Free Night School with English medium.

The institute has planned an education centre called the Nehru Kennedy Memorial-cum-International Education Centre.

The league receives financial assistance only from the public. The income for the year 1970-71 amounted to Rs. 5,228.

Chikitsak Samuh, Girgaum: The Chikitsak Samuh was established in 1906 with the object of spreading and imparting primary, secondary and higher education. The institution had a membership of 252 consisting of 11 patrons, 6 fellows and 235 life members.

The Samuh receives financial assistance from various private trusts, a part of which is utilised for paying scholarships to deserving students.

It runs at present the Sitaram and Lady Patkar College situated at Goregaon, and the Shirodkar High School. A primary school and montessori is also conducted by this institution.

D. G. Ruparel College, Mahim: The Modern Education Society, Pune was founded in 1932. It decided to extend its field of activity to Bombay by establishing there in the first instance a full grade arts and science college. Thus the Ruparel College was established in 1952 on the Tulsi Pipe Road in Dadar. In grateful appreciation of the keen interest shown by Seth Gordhandas Jadhavji Ruparel and Seth Naraindas Jadhavji Ruparel of Messrs. Doongarsee Gangjee and sons of Bombay, the society has named the college as "Doongarsee Gangjee Ruparel College". It was permanently affiliated to the Bombay University after three years since its inception.

General Education Institute, Dadar: The General Education Institute is an old educational organisation founded in 1892 at Dadar with the object of imparting education by starting schools for primary and secondary education, industrial, vocational training institutions and colleges for higher education at different places.

The membership of the institute consists of patrons, benefactors, fellows, honorary members and the representatives of the trustees of the charitable estate of the late M. R. Chhubildas Lulloobhoy.

The assets of the institute were valued at Rs. 25,66,671 in 1968-69. Its annual income and expenditure amounted to Rs. 1,57,701 and Rs. 1,10,068, respectively during the same year.

The G. E. Institute runs a number of schools in and nearby Bombay, the names of which are given below:

- (1) Chhubildas Lulloobhoy Boys' High School, Dadar.
- (2) Girls' High School, Dadar.
- (3) English School, Mahim.
- (4) High School, Kurla.
- (5) M. H. High School, Thane.
- (6) S. V. J. High School, Dombivali.
- (7) New High School, Kalyan.
- (8) High School, Kalyan.

- (9) P. R. High School, Bhiwandi.
- (10) Native Institution, Uran.
- (11) Chhubildas Lulloobhoy Primary School, Dadar.
- (12)Chhubildas Lulloobhoy Pre-Primary School, Dadar.

Gokhale Education Society, Girgaum: The Gokhale Education Society was founded in 1918 with the objects of starting, conducting and maintaining educational institutions and thereby build up ideal citizens.

Any person holding a Master's degree in first class or the Ph.D. degree of an Indian or a foreign University is eligible for life membership of the society. In 1967 it had 36 life members.

The Society conducts 30 institutions, of which 11 are located in Bombay. These 11 institutions are divided into two centres, which are shown below:—

(1) Bombay Centre: (i) Sheth Dharamsey Govindji Thackersey High School, (ii) Primary Section, (iii) Pre-Primary Section, (iv) Borivli High School, (v) Primary Section, Borivli, (vi) Pre-Primary Section, Borivli.

(2) Parel Centre: (i) R. M. Bhatt High School, (ii) Parel Night High School, (iii) G.E.S. Primary School, (iv) G.E.S. Pre-Primary School, (v) G.E.S. Commercial Institute.

Hindi Vidya Prachar Samiti, Ghatkopar: The Hindi Vidya Prachar Samiti was established in 1938 with the object to conduct educational institutions.

The Ramniranjan Jhunjhunwala Arts and Science College at Ghatkopar, the Ghatkopar Institute of Management and the Hindi High School, Ghatkopar, are the various educational institutions run by the society. The Ghatkopar Institute of Management conducts different diploma courses which are recognised by the Government of Maharashtra and the University of Bombay. In 1977 there were 40 members of the society consisting of patrons, life members, founder members and ordinary members.

The Samiti receives financial assistance in the shape of public donations, grants from Government and the University Grants Commission.

During 1975-76 the income and expenditure of the Samiti was Rs. 8,47,344 and Rs. 6,96,254, respectively.

Jai Hind College, Churchgate: The Jai Hind College was founded in June 1948 by the ex-Professors of the D. J. Sind College, Karachi, and other educationists, who migrated to Bombay on account of the partition of the country.

At first, the college was started only as an Arts College upto the B.A. standard and functioned in the lecture-rooms of the Elphinstone College, for which permission was given by the Government of Bombay. In 1949, the college developed science side upto the Inter-Science stage and was located in hired bungalow on Pedder Road. For the science section the college received a donation of Rs. 1,25,000 from the Basantsing Anil Dharmada Trust and it was named Jai Hind College and Basantsing Institute of Science. In June 1952 both the sections of the college were shifted to a new building on Road ' A' Backbay Reclamation on two plots released by the Government of Bombay.

Jamnalal Bajaj Institute of Management Studies, Churchgate: The Institute was established in 1955 with a view to conduct professional courses in business management and industrial management. It is one of the departments of the University of Bombay. Financial assistance amounting to Rs. 2,41,338 was given by the University Grants Commission and the State Government. The annual expenditure of the institute in 1969-70 amounted to Rs. 4,85,793.

At present the Institution conducts courses in Marketing Management, System Management, Operation Management, Computer Management and Administrative Management. It also conducts Master of Management Studies of 2 years and Master's Degree in Administrative Management, Financial Management and Marketing Management of 3 years.

Jamsetjee Nesserwanjee Petit Institute, Fort: The Jamsetjee Nesserwanjee Petit Institute was established in 1856, with the object of diffusion of useful knowledge by making available to the members works of literature, philosophy, science, as also eminent magazines and newspapers. It also arranges lectures on literary and scientific subjects.

The membership of the institute in 1971 was 6,438. Its annual income and expenditure in the last few years approximated to Rs. 2 lakhs.

Karachi Maharashtriya Shikshan Prasarak Mandal, Kurla: The Karachi Maharashtriya Shikshan Prasarak Mandal was established in 1929 at Karachi. The Mandal which was founded by Late V. G. Pradhan (an eminent educationist) and D. V. Anaokar, conducted Shri Shivaji High School at Karachi before partition of India.

After the partition of the country, the K.M.S.P. Mandal started its activities in Maharashtra with headquarters at Bombay. Of the funds kept reserved for construction of building a secondary school for the benefit of the displaced persons' children by the Government of India, the entire amount of Rs. 1 lakh was given to the K.M.S.P. Mandal. At the same time the Government of Maharashtra gave Rs. 70,000 towards the same. The Mandal also received a grant of Rs. 2 lakhs from the Bombay Municipal Corporation in 1971.

The Mandal at present conducts two high schools, one in Bombay at Kurla and another at Kudal in Sindhudurg district. The total strength of students in the Kurla High School was above 1,200 during 1977-78. The total income of the Mandal during the year 1976-77 amounted to Rs. 70,231 while the

expenditure during the same year came to Rs. 74,134.

Khalsa College, Matunga: TheKhalsa College, with its imposing building in an ideal situation is one of the most popular institutions affiliated to the Bombay University, with regard to both academic and extra-curricular activities. The college was founded in 1937 by the Gurudwara Committee of Shri Nankana Sahib and is now managed by the executive committee of Shiromani Gurudwara Prabandhak Committee, Amritsar, an elected statutory body of the Sikhs in the Punjab.

It is a matter of great pride that this College attracts students from all over India and provides a common platform for students of different communities, provinces, religions and even different countries to create a healthy feeling of common fellowship and brotherhood. The teachers in this College are also drawn from different parts of India and play-prominent role in strengthening inter-provincial bonds of love and affection among the students.

K. R. Cama Oriental Institute, Fort: This Institute was established in 1916 in the memory of late Kharshedji Rustomji Cama, the renowned oriental scholar, social reformer and educationist. Mr. D. G. Sukhadvala gave a donation of Rs. 1,00,000 towards establishment of the institution.

The institution is devoted to oriental studies. It encourages research work and gives scholarships to scholars devoted to oriental studies. It publishes a journal and other publications dealing with oriental studies. The institution invites scholars to deliver lectures on the concerning subjects and affords facilities to scholars both from Indian and Foreign Universities.

The institute has a library containing 14,675 books and 1,674 manuscripts on different subjects.

M. M. Arts College and N. M. Institute of Science: The Bharatiya Vidya Bhavan started the M. M. College of Arts and N. M. Institute of Science at Andheri in 1946 to cater to the educational needs of Greater Bombay, with the help of donation received through Sheth Charandas Meghji and Sheth Gordhandas P. Sonawala. The late Sardar Vallabhbhai Patel performed the opening ceremony on 13th July 1946. The new building of the college was opened on 25th July 1953. In response to the growing demand of the students and the general public the Arts section of the college shifted to Chowpati in 1954. The new building of Art section was inaugurated by Shri K. M. Munshi on 9th July 1955.

New Sarvajanik Education Society, Wadala: The society was registered on 29th September 1949. The objects of the society are to establish, control and manage educational institutions in Bombay.

The society had 539 members in 1968-69.

It runs the following schools, *viz.*, (1) Sarvajanik School, Matunga, (2) M. P. Bhuta Sarvajanik School, Sion, (3) Girgaum Sarvajanik School, (4) K. V. K. Ghatkopar Sarvajanik School and (5) Ghatkopar Sarvajanik (English medium) High School. All the schools are aided by the Government of Maharashtra.

The assets of the society in 1968-69 were valued at Rs. 8,72,233, while its income and expenditure during the same year amounted to Rs. 8,17,566.

Ramnarain Ruia College, Matunga: Realising the need for an Arts and Science College to satisfy the growing demand for higher education in the city of Bombay, the Shikshana Prasarak Mandali, Pune, established this college in 1937. The House of Ruias gave a generous donation of Rs. two lakhs in recognition of which the college is named after the late Seth Ramnarain Harnandrai Ruia. The college was permanently affiliated to the University of Bombay in 1940.

R.A.Podar College of Commerce and Economics, Matunga: The Shikshana Prasarak Mandali, Pune, established this College in 1941 in order to satisfy the growing demand for sound commercial education in the city of Bombay. The House of Podars depnated a building costing about Rs. 1,46,000 for the college.

Sadhana Education Society, Santa Cruz (West): The Sadhana Education Society was established in June 1962 with the object of running a teacher's training college in Bombay. The college has a practising school and it conducts research projects sponsored by the National Council of Educational Research and Training. It also prepares students for M.Ed, and Ph.D. degrees in education.

During 1969-70 the number of staff was 19. The total assets of the college during 1969-70 amounted to Rs. 4,50,000. The annual income and expenditure during the same year stood at Rs. 2,51,911 and Rs. 3,54,192, respectively. The college gets annual maintenance grants from the Government.

Sanskrit Vishva Parishad, Grant Road: The Bharatiya Vidya Bhavan's Sanskrit Vishva Parishad was established in 1951 with the main objective to propagate Sanskrit and indology by binding together in one organisation all individuals and institutions interested in the study of these subjects and working for its advancement in India and abroad.

As per the request of the Sanskrit Vishva Parishad, the Bharatiya Vidya Bhavan has started a graded primary course in Sanskrit through the Saral Sanskrit Examination. Every year about 60,000 students appear in this examination at various centres in India and abroad. Moreover, the staff members of the Saral Sanskrit Examination visit important cities in India and abroad to propagate the ideals of the Sanskrit Vishva Parishad.

During the year 1975-76, it received Rs. 5,000 by way of financial assistance from the Government of Uttar Pradesh. During the year 1976 the income and expenditure of the Sanskrit Vishva Parishad amounted to Rs. 6,949.

Shri Vile Parle Kelavani Mandal, Vile Parle: It is mainly an educational institution founded in the year 1934.

The Mandal conducts three colleges (Mithibai College of Arts, Chauhan Institute of Science and A. J. College of Commerce and Economics; N. M. College of Commerce and Economics; and J. C. College of Law), two junior colleges, a polytechnic (B. M. Polytechnic), a high school and primary school, *shishu vihar*, two hostels including one for polytechnic, a *sanskar sadan*, a *yoga mandir*, *sl* gymnasium and an auditorium (Shri Bhaidas Maganlal Sabhagriha).

The day-to-day affairs of the Mandal are looked after by a managing committee consisting of 44 members. During the year 1980-81 the Mandal had assets worth Rs. 2,04,00,535, while income and expenditure amounted to Rs. 13,69,242.

Bhaidas Maganlal Sabhagriha was constructed by the Vile Parle Kelavani Mandal with the generous help of Rs. 1,50,000 from Smt. Chandaben in 1973. It provides a great *stimuli* to the cultural life of the western suburbs of Bombay. Situated in the Juhu-Vile Parle Development Scheme near Vile Parle Station, the auditorium has a seating capacity of 1,179 seats. It is fully airconditioned. The Sabhagriha caters to the needs of entertainment of the people in the western suburbs of Bombay. A good many Marathi, Gujarati and Hindi dramas are staged in this auditorium. The income and expenditure of the Sabhagriha during the year 1980-81 was Rs. 5,56,495.

Siddharth College of Arts and Science, Fort: The Siddharth College of Arts and Science was founded in June 1946, by the People's Education Society, of which Dr. B. R. Ambedkar was the Chairman. It was a significant landmark in the development of higher education in Bombay city under Dr. Ambedkar's inspiring guidance and dynamic leadership. The principal object of the society was to promote higher education among the lower middle classes and working classes, especially, the Scheduled Castes.

Siddharth College of Commerce and Economics, Fort: Siddharth College of Commerce and Economics is one of the several institutions conducted by the People's Education Society, Bombay, whose founder chairman was Dr. B. R. Ambedkar. The college was established in June 1953.

Siddharth College of Law: The People's Education Society, of which Dr. B. R. Ambedkar was the chairman, founded the Siddharth College of Law in June 1956. The object of the College is to provide education in law to the lower middle classes and working classes in general and the Scheduled Castes in particular.

Sir Jamsetjee Jejeebhoy Parsi Benevolent Institution, Fort: This is one of the oldest and the most reputed institutions doing pioneering work in the field of education for the last 125 years. It was established on 9th January 1849 with a view to spread the benefits of education among the Parsis in Bombay and in the mofussil, to give monetary relief to poor and disabled Parsis, and to ameliorate their sufferings by giving them aid to meet marriage or funeral expenses.

The major part of its activities is confined to running schools. It runs two secondary and three primary schools in Bombay. It also runs, under a sister trust, two secondary schools, one each at Bulsar and Navasari and three primary schools, one each at Sural, Bulsar and Navasari. The schools were originally meant for Parsis only, but in the interest of education and to honour the secular ideals of the country the schools are now thrown open to students of all communities. For almost a century education was imparted entirely free. It was only when the cost of running the schools became enormous that the institution started charging nominal fees in some of its schools.

Membership of the institution is open to those Parsis who contribute a sum of Rs. 500 to its donation fund. Most of the schools get financial assistance from Government in the form of grant-in-aid.

The income and expenditure of the institution in 1970 amounted to Rs. 6,25,629 and Rs. 6,36,757, respectively.

Sophia College for Women, Cumballa Hill: Sophia College was founded in 1940 with the inauguration of the "Home and Social Culture" course. It was first affiliated to the University of Bombay for the Arts Course in 1941. The Governing Body of the college is the Governing Body of the Society for Higher Education of Women in India. Its day-to-day administration is in the hands of the Religious of the Sacred Heart, a world wide society for the education of girls. In June 1950, affiliation to the University was made permanent. As the number of Arts student increased from year to year the non-University "Home and Social Culture" Course had finally to be dropped in 1947.

St. Xaviers College, Mahapalika Marg: St. Xaviers College owes its origin to the growth and development of St. Mary's Institution and St. Xavier's High School. The college was founded in 1868 with the object of educating the Roman Catholic Youths of the Bombay Presidency and was affiliated to the Bombay University in 1869. It became a constituent college of the Bombay University in 1953. It is conducted by the Fathers of the Society of Jesus. The high school and the college proper was accommodated in a building in cavel until 1873. Then it was situated on the Carnac Road for nearly a generation. In 1890 it was shifted to the present premises on the Cruickshank Road (Mahapalika Marg).

MEDICAL RELIEF ORGANISATIONS

Bombay City Ambulance Corps, Marine Lines: The Corps was founded in 1930 with the object of training young men and women in first-aid, home nursing hygiene and sanitation as also to give medical relief to the sick and injured persons in Bombay and its suburbs.

The free first-aid and ambulance service station of the Corps was started in January 1939 with the objects of removing patients from one place to another, attending to street accidents and other emergencies, providing medical relief in times of riots, epidemics, etc.

The station is located in the Corps' headquarters and service station buildings at Marine Lines, where a

fully equipped first-aid theatre, control room, station offices, residential quarters for the paid staff and garages for the ambulance cars are provided.

It is registered as a charitable society which had 13 patrons, 210 life members, 3 honorary life members and 52 volunteers in 1970. The volunteers of the Corps are imparted the necessary training of five years duration in first-aid to the injured, home nursing, hygiene and sanitation. They hold a diploma in ambulance work by receiving arduous practical training in casualty work at Sir J. J. Hospital, and by attending training camps and mobilisation practices.

The strength of the Corps, as on December 31, 1970, was 52 volunteers including 2 warrant and 10 non-commissioned officers.

The volunteers of the Corps were turned out for public duty for the first time on January 26, 1931. The Corps performed strenuous duties during the 1932 riots and put in 80 hours of field duties, treated over 450 casualties and rescued about 200 persons. The peak of strenuous duties ever performed was reached in February 1946, when the entire Corps was mobilised for an aggregate period of 1,668 hours to meet the emergencies of the Subhash Day disturbances, the Royal Indian Navy mutiny and the prolonged communal riots.

The Corps receives grant-in-aid from the Bombay Municipal Corporation. It also received a donation of Rs. 52,438 from the late Sheth Haji Gulam Mahamed Ajam Charity Trust for construction of a building.

The Government of Maharashtra had granted Rs. 58,363 and Rs. 8,293 as house building grants in 1956 and 1958 respectively. The total income of the Corps was Rs. 41,390, while its expenditure amounted to Rs. 44,239 in 1970.

Bombay Medical Union, French Bridge, Near Chowpati: The Bombay Medical Union was established in 1883, with the objects of promoting friendly association and exchange of views between its members, and promoting the advancement of medical sciences.

During 1972-73 the total number of resident members was 274 and 6 non-resident members.

The main activities of the Union are holding monthly clinical meetings, exchange of medical knowledge and promotion of professional ethics in the medical profession. It awards several prizes, gold medals and scholarships to deserving students.

The pioneers of the Union included eminent medical practitioners and leaders of public opinion. They started with building a library with a small collection of books in 1886. In 1887, Sir Dinshaw Petit donated Rs. 7,000 to the Union for a Medical Library which was intended for the use of not only the members of the Union but also of the entire medical profession and even common men. The Library was called the Sir Dinshaw Manekji Petit Medical Union Library after a trust deed was entered into between the Union and Dinshaw Petit in 1888. During the subsequent period it received several donations.

The Union has consistently worked for a high standard of medical education. It was instrumental in the institution of a M.B.B.S. degree instead of L.M.S. in 1912 during which year the first batch of students received the M.B.B.S. degree. The Union has also been instrumental in evolving a code of conduct for medical profession as also important medical legislation.

Cheshire Homes India, Andheri: A branch of the Cheshire Homes India was established at Bombay in December 1955, for taking care of the incurable sick.

The Home is managed by a management committee and various sub-committees of medical experts all of whom provide their services voluntarily. About 50 incurable sick persons suffering from serious diseases such as cancer, paraplegia, arthritis, Parkinson's disease, etc., are provided hospital facility by the Home.

The society receives funds and donations from private sources. The income and expenditure of the Home was Rs. 78,659 and Rs. 80,425, respectively in 1970-71.

Diabetic Association of India, Fort: The Diabetic Association of India was established in 1955 for research in diabetes and for rendering advice and necessary facilities to diabetic patients. It is a pioneering organisation in this field and has been serving the cause of the diabetics in a grand measure.

The Association has been approved by the Indian Council of Medical Research. It has established several branches in important cities of India where public lectures for education of the diabetics are given in local languages every month. It supplies reliable drugs at cheaper rates and laboratory facilities at very moderate rates to the members. It also arranges for frequent check-ups of the diabetics.

The Association encourages research in diabetes by suitable grants to research workers in diabetes. The scientific section of the Association meets once a year along with other specialised bodies at different centres in India for the exchange of knowledge and promotion of research on the subject. In order to coordinate the scientific work of workers in all branches of medicine regarding diabetes, a national congress on diabetes is held every three years.

The Association has published several books for the guidance of the diabetics and medical practitioners such as a *Guide for the Diabetic*, a *Companion for the Diabetic* and *Tropical Diabetes*. It also publishes a quarterly journal, *Madhumeha*. Besides this, the Association through its Nutrition Committee has analysed over 100 recipes of different Indian food preparations giving their carbohydrate, fat, protein and caloric values of a measured portion.

The Association has a cadre of devoted persons like Dr. Ajgaonkar and Dr. N. G. Talwalkar who have done

eminent work on diabetes. The total membership including the branches in December 1968 was 2,319. For the last 27 years the Association is maintaining itself on public help only. It does not receive any financial assistance either from the State or Central Government. The Government of Maharashtra has donated it a plot of land of about 2 acres at Mahim where the association has started a home for the diabetic, a clinic and a research centre since 1st January 1982.

Family Planning Association of India, Fort: The Family Planning Association of India was established in 1949 for propagation of family planning for the advancement of basic human rights, family and community welfare, achievement of a balance between population, resources and productivity, and the attainment of a higher standard of life. The Association was registered in 1954.

The Association has provided audio-visual equipment including film projectors, slide projectors, film slides and film strips as also clinical equipment to the mobile units and branches. It publishes useful literature for the benefit of the public.

Its area of operation covers an approximate total population of 6.58.000.

Greater Bombay, among 47 districts in the country, has been selected for intensive family planning work, and since 1967, the programme has received a marked impetus particularly due to the stepping up of the Municipal Corporation's programme for vasectomy.

The Association maintains a clinic for vasectomy operations for the benefit of factory workers and low income group persons.

The infertility clinic of the Association draws a good number of couples for investigation and treatment for infertility and sub-fertility. Practical demonstrations of various techniques are arranged at the Wadia Maternity Hospital. The Association also arranges for training of medical practitioners in family welfare work and for surveys and demonstrations.

The Family Planning Association of India received a silver medal and certificate for its good performance in Bombay. It also won the first prize for voluntary work in family planning in Greater Bombay for the three-year period 1967-70.

Hind Kushta Nivaran Sangh, Fort: A branch of the Hind Kushta Nivaran Sangh, New Delhi was established in Bombay with a view to control the spread of leprosy, and offer assistance for the eradication of leprosy. It has been recognised by Government as a survey, education and treatment unit. The Sangh is also represented on the State Leprosy Advisory Board, which has been functioning from 1970.

One of the main activities of the Sangh under the work programme is to educate the community and to create awareness about the disease of leprosy. Health education campaigns are also organised in the slum areas of Bombay and other parts of the State through various media. It also extends supportive services for sponsoring non-infectious leprosy affected children and healthy children of leprosy parents. The Sangh publishes brochures giving information on leprosy and other related matters in order to identify and make use of the health and welfare agencies for prevention and control of leprosy.

The Sangh received Rs. 39,654 in 1975-76 on account of grants and donations. A sum of Rs. 25,000 per annum was sanctioned by the Government of Maharashtra from 1976-77 for a period of five years for undertaking health education programmes in the State.

In 1976 it spent an amount of Rs. 30,582 for medical relief. Its annual income and expenditure in 1975-76 amounted to Rs. 31,038 and Rs. 39,653, respectively.

Indian Red Cross Society (Maharashtra State Branch), Town Hall Compound, Bombay 1: The Indian Red Cross Society was established in 1920 with the object of rendering medical relief and the mitigation of suffering. The main objectives of the society are to aid the sick and wounded members of the Armed Forces. The Maharashtra State Red Cross, a branch of the society is managed by a committee comprising a chairman, vice-chairman, treasurer, secretary and other members including representatives of the District Red Cross Branches in Maharashtra State. There are approximately, 10,000 members in Maharashtra State.

The society runs dispensaries, maternity and child welfare centres, hospitals, T.B. sanatorium, and family planning centres. It also runs blood banks in Bombay city as well as in several districts in Maharashtra. This is one of the largest civilian blood banks in the country supplying over 13,000 bottles of whole blood per year, over 85 per cent of which is supplied free or at cheaper rates. T.B. sanatorium is one of the finest and biggest sanatoria in the country with a bed strength of 260. Over 95 per cent of the patients are treated free or at concessional rates. The Indian Red Cross Society maintains the Adams Wylie Hospital with 50 beds, where indoor and outdoor patients are given treatment free of charge. The ambulance section and health training classes are conducted by St. John Ambulance Services, on behalf of the Indian Red Cross Society. During the scarcity period of 1976-77 the Red Cross had over 600 distribution centres in the State in which over 97,000 persons were looked after.

It inculcates in the school children a sense of social service through the Junior Red Cross. Under the guidance of the Junior Red Cross the school children visit hospitals, orphanages, slum areas and bring a little cheer to those less privileged than themselves.

All the above activities, in Bombay city and Maharashtra cost the Red Cross nearly a million rupees every year. The income of the society itself was Rs. 1,83,000 whereas its expenditure amounted to Rs. 1,71,000 in the year 1976.

Donations are received from the public and funds are also collected through membership fees. It gives

assistance in the form of medicines to dispensaries run by other charitable organisations, helps individuals by providing them with artificial limbs thereby helping them in earning their living. In special cases wheel chairs and hearing aids are also provided.

Ishwardas Chunilal Yogic Health Centre, Kaivalyadham, Marine Drive:

The centre was established on 6th January 1932, by late Swami Kuvalayanandaji at Santa Cruz under the auspices of the Kaivalyadham. It is now housed in its own building on the Netaji Subhash Road, Marine Drive. The main establishment of the Kaivalyadham is located at Lonavala.

The object of the institute is to give training in yogic physical culture and therapy with a view to promote physical and mental health of people. There are two departments working in the institution, one of which gives cultural exercises and the other gives remedial exercises. The cultural department is recognised by the Education Department of the Maharashtra Government. The activities are carried out under the supervision of a qualified Medical Officer. For the better yogic treatment, the institute has appointed 3 Medical Officers and 12 Demonstrators.

It receives grant from the State Government. The assets of the institute in 1965-66 were valued at Rs. 1,10,000. During the same year its income and expenditure amounted to Rs. 69,000 and Rs. 66,000, respectively.

Jeevan Vikas Kendra, Andheri: The Jeevan Vikas Kendra was inaugurated on 1st November 1972 by the Prime Minister of India, Smt. Indira Gandhi. The activities of the institution include educating the people in public health, hygienic living and family planning. The organisation conducts a medical relief centre for the benefit of the poor strata of society. It provides for all pathological tests, diagnosis of various diseases, radiological facilities and many departments such as cardiology, paediatrics, gynaecology and obstetrics, orthopaedics, E.N.T., dentistry, opthalmology, physiotherapy, etc. All the medical facilities are practically free of cost. All the units work under the able guidance of specialists and qualified technicians.

The immunization department of the Kendra provides various vaccines and sera, and amenities for B.C.G., triple, polio, small pox, typhoid and cholera vaccinations.

The Kendra proposes to establish a hospital for the benefit of the poor, the building of which is under construction.

The Kendra is also conducting a Balvikas Kendra for the benefit of children from slum areas. The Kendra distributes milk and bread to about 1,000 children per day at five different places under its nutrition programme.

The income and expenditure of the Kendra amounted to Rs. 8,21,933 in the year 1979-80.

Popular Ambulance Association, Grant Road: The Popular Ambulance Service was started on 12th November 1947. Ambulance vans are made available to all irrespective of caste, creed and status and calls are attended not only for movement of patients in the city but also for up-country. The ambulance service is maintained out of donations given by the patients and their relatives. Every van is equipped with first-aid kit, oxygen cylinder, etc.

Society for Prevention of Heart Diseases and Rehabilitation, Kemp's Corner: The Society was started in 1968 with the objects to establish cardio-vascular preventive and rehabilitation institute, check-up centres, clinic and hospital, research laboratories and to conduct lectures, seminars, symposia etc., to grant scholarships and aid for deserving medical and paramedical personnel intending to specialise in this field, and to give specialised training to those engaged in the treatment of heart patients.

St. John Ambulance Association, Maharashtra State Centre, Fort: The Maharashtra State Centre of the Association was established on 23rd April 1915, with a view to give training in first-aid, home nursing, hygiene and sanitation, render first-aid in case of accidents or sudden illness and transport the sick and injured, organise ambulance corps and nursing corps. After the establishment of the St. John Ambulance Association, India at New Delhi in 1904, classes in first-aid and home nursing were conducted in Bombay and in the districts of the then Bombay Province by individual doctors for various social organisations, and Ambulance and Nursing Divisions were formed since 1905.

In 1914 the First World War broke out and the training in first-aid and home nursing got impetus and the classes in these subjects were started all over the province and a number of new centres were formed. In 1915 the Bombay provincial centre was established and the work of the organisation of classes was organised on proper lines by the secretariat at Pune. In 1931, the secretariat was shifted to Bombay, and the principal medical and health officer of the G.I.P. Railway was appointed as Honorary Secretary. He called the meeting of all persons concerned in Bombay and framed the rules and regulations and held election of the first executive committee.

Since 1932 elections have been held for the formation of the executive committee to govern the St. John Ambulance Association Centre. After the bifurcation of Bombay State this centre was renamed as the Maharashtra State Centre.

This centre, through the various local and district centres, has been conducting classes in first-aid, home nursing, hygiene and sanitation, and child welfare, and mackenzie school course. During the World War II, the centre conducted Air Raid Protection Classes.

In 1975, 10,841 persons were given training in different courses out of whom 9,971 appeared for the examinations. Of these, 9,840 were awarded certificates and other awards.

There were 27 active local and district centres under the Maharashtra Centre. Detached classes were

conducted at 30 places by the Red Cross where the association had no sub-centres of its own.

The organisation organises training programme for educational institutions, members of the police force, employees of the All India Radio and Television Centre, and for the N.C.C. organisation.

The property and assets of the Association in 1975 were valued at Rs. 5,60,506, while its income and expenditure amounted to Rs. 52,853.

Yoga Institute, Santa Cruz: The science of Yoga in India is more than five thousand years old. Its technology has come down by tradition from master to disciple. One such great Yogi of the past was Parama-hamsa Madhavadasji who lived at Malsar. His senior-most disciple, Shri Yogendraji founded the Yoga Institute on 25th December 1918 at Versova to promote and standardise the science of Yoga. The institute is recognised by the Government and foreign bodies as an educational, medical and research institute. It is a registered society and is specially exempted to receive donations. At present the institute is situated on the east side of Santa Cruz railway station in Prabhat colony. It has no branches.

The main activities at the institute are as follows:—

- (1) 21-day better living course.
- (2) Regular class for study and cure of minor complaints (for men and women).
- (3) Social workers and teachers course.
- (4) Publication of a monthly journal.
- (5) Clinic, hospital and laboratory.
- (6) Six-month Yoga education course.
- (7) Welfare and children wing.

The Institute maintains a fully equipped 12-bed psychosomatic hospital with qualified medical practitioners, a pathological and clinical laboratory, etc. Considerable original work is being done in connection with Yoga therapeutics in treatment of chronic functional diseases. Persons suffering from physical and mental complaints are examined every Sunday and are kept under observation in regular practical classes for one month. On the basis of results obtained at the end of the month further advice is made available. A normal fee of Rs. 25 is charged for the first month.

The Yoga Institute believes that the Yoga ideals, value judgements and way of life can be integrated into modern conditions. This can help in creating a better society for the future. To this end, the institute prepares persons through the short and long term Yoga education courses. The institute was recognised in 1958 by the Government as a special training institute of Yoga and since then it has trained over three hundred men and women including 72 women and 68 foreigners in Yoga education to instruct others.

Over forty books have been published by the Institute since 1920. Most of the popular works have passed the tenth edition mark. It publishes a monthly journal which is widely circulated.

At the Institute over 7,000 patients were treated, many of whom were refractory cases. Over 10,000 students of Yoga have been trained; about 300 men and women were prepared to instruct others. The trained experts of the Institute are now conducting Yoga education centres in three continents where over 2,500 men and women practise traditional Yoga everyday.

The average annual income and expenditure of the Institute for the last few years came to Rs. 1.5 lakhs.

MISCELLANEOUS ORGANISATIONS

Consumer Guidance Society of India, Fort : It was established in April 1966 by nine housewives and social workers to protect the consumer interest and to unite the consumers of the country. In January 1977, it had 1,938 members including 245 life members, 30 associate members and 35 institutional members. It had five branches located in Pune, Hyderabad, Dandeli, Coimbatore and Thane.

The Society protects and promotes the rights and interests of consumers, gives information and guidance through its monthly publication *Keemat*. It co-operates with commercial organisations which are interested in promoting fair trade practices. It tries to build up consumer awareness through annual exhibitions, demonstration and through the mass media. At the same time it follows up complaints against shopkeepers and dealers from members and non-members and has obtained redressal in over 66 per cent of the cases it had taken up. In 1974 it started a project of consumer education for low income group persons employing a trained social worker. It propagates consumer awareness and education through various media through a network of 48 community centres in Greater Bombay.

The Society is represented on many national advisory bodies for consumer protection, such as the central committee for food standards, the ISI certification marks advisory committee, and other ISI subcommittees, and the Maharashtra State Advisory Board for Food and Drugs. The Society has associate membership of the international organisation of consumers' unions.

The Society was successful in organising the first All India Conference on consumer protection in 1972 in Bombay to bring together consumer activities from all over the country.

Forum of Free Enterprise, Fort: The Forum of Free Enterprise was founded in 1956, with the objects of educating the public on economic affairs and particularly the role of private enterprise in economic development of our country, and its close inter-relation with the democratic way of life, and thereby to create an awareness among people in private enterprise of their social obligations. It is a voluntary educational organisation. Eminent economists and citizens of Bombay like A. D. Gorwala, A. D. Shroff were closely associated with the Forum.

It issues a journal on important current economic problems. Informative and educative articles bearing views of the Forum are sent to newspapers. So also essay competitions, elocutions and study sessions are held for students and the public. Public speaking courses, discussion sessions and leadership training courses are also arranged. The Forum helps organisations and associations in private enterprise in their public relations campaigns to defend and promote private enterprise.

At the end of July 1976, there were 987 general members, 2,650 associate members and 5,526 student associates of the Forum.

The income and expenditure of the Forum amounted to Rs. 3,36,234 in 1975-76.

Indian Institute of Architects, Fort: The origin of the Institute could be traced back 60 years ago when the Architectural Students' Association was formed in 1923. It was subsequently renamed as the Bombay Architectural Association. It derived the present name in 1928.

The Institute has members spread over not only in India but also in Africa, Afghanistan, America, Australia, Burma, Canada, Ceylon, Europe, Iran, etc.

The main objects of the Institute are to unite the architects in India and to co-ordinate activities of the building industry and of the profession of architecture.

The Institute has done a lot of work in spreading architectural education and maintaining fair professional ethics. It also helps Government and the civic administration in slum clearance projects and housing schemes.

The Institute is run with the help of subscription paid by its members. Its income and expenditure in 1970-71 amounted to Rs. 1,23,071 and Rs. 1,21,527, respectively.

Indian Railway Passengers' Conference Association: The Indian Railway Passengers' Conference Association was established at Bombay in 1945 and was registered as a public trust in 1950. The objects of the association are to educate the public as regards the rules and regulations governing railway travel; to rehabilitate disabled and destitute, orphans and beggars who infest railway premises, in order to prevent them from a life of crime and to convert them into law-abiding citizens; to render free legal advice and aid to railway passengers; to publish newspapers and other literature dealing with the carriage of passengers and transport of goods; and to hold conferences, seminars, etc.

The affairs of the Association are managed by a committee consisting of 19 members. There are 13 life members, about 100 individual members and 200 nominal members. No financial assistance was either sought or received by the association from any quarters.

During the last about 30 years the association took out from the clutches of anti-social elements more than 6,000 young run-away boys at railway stations in the Greater Bombay area. The association has been working for the elimination of crimes on the railways committed by criminals *en route* in running trains or at railway stations.

The association has established contacts with several passenger associations working in other parts of India and efforts are being made to establish the National Federation of Railway Users on an all India level to function as a liaison between the railway users and the Ministry of Railways and the Zonal Railways.

The Association publishes a fortnightly known as Rail News in English.

National Institute of Labour Management, Parel: The Institute was established on the 26th January 1950. It is a voluntary association of persons engaged in the field of industrial relations and personnel management. Its members discuss and formulate sound labour policies, which would be helpful for the industrial progress of the country and improvement of the conditions of labour and better employeremployee relations.

The Institute has branches at Pune, Kalyan-Ambernath, Baroda, Goa, Thane and New Delhi.

The Institute has over 900 members, who are working as personnel or welfare officers, industrial relations officers, etc., in different industries.

The Institute holds monthly discussion meetings and arranges documentary film-shows, and seminars on important topics for its members. It maintains a library and a reading room, publishes a quarterly journal and conducts a labour advisory service for members and small industrial establishments.

The activities of the Institute are financed from subscriptions from members and donations received from well-wishers. The assets and property of the Institute by the end of December 1970 valued at Rs. 1,03,700. The income and expenditure for the year ended on 31st December 1970 was the same and amounted to Rs. 31,016.

Press Guild of India, Majestic Hotel, opposite Regal Cinema: The establishment of the Press Guild of India is a significant event in the development of journalism in India. It is a broad-based and composite organisation of journalists, functioning on a national basis and assisting not only the members of the profession but also others vitally connected with the newspaper industry.

The aim of the Guild has been not only to promote understanding and goodwill through intellectual and cultural exchange but also to foster high standards of professional practice and conduct, and assist the growth of the press as an effective social force for the good of the nation. It was established in April 1955.

It has a membership of about three hundred journalists representing every newspaper and periodical.

The organisation has started a club, a reading room and a library for the benefit of journalists. The Guild conducts cultural activities like musical concerts, dance performances, lectures, recitations from plays, screening of topical films and seminars.

The assets of the organisation were valued at Rs. 9,124 and its income and expenditure amounted to Rs. 11,490 in 1975.

Society of the Justices of Peace and Honorary Presidency Magistrates, Bombay-9: The Society is a successor to the Society of Honorary Presidency Magistrates of Bombay, which became defunct in 1958. The main objects and purpose of the present Society are to afford opportunities to the members to meet with a view to exchanging ideas and promoting co-operation amongst themselves in the matter of their duties and offices as Justices of Peace and Honorary Presidency Magistrates.

In the beginning, the Society had 242 members including 42 Honorary Presidency Magistrates. The same increased to 644 on 31st March 1971.

The Society has formed several committees to look after its working and to render real public service in its wide and varied sense. The Society conducts a diagnostic centre to provide medical relief to poor persons.

The Chief Presidency Magistrate, the Commissioner of Police, the Municipal Commissioner, the Coroner and the Regional Transport Officer are nominated members of the managing committee.

During 1971, the income and expenditure of the Society was the same amounting to Rs. 12,559.

PHILOSOPHICAL ORGANISATIONS

Arya Samaj (Bombay), Girgaum (Kakadwadi): The Arya Samaj (For history of the Samaj see Chapter-2, History, Modern Period, in Vol. I.) was founded by late Swami Dayanand Saraswati in 1875, with the objectives to propagate the real Philosophy of the Vedas; to spread the Sanskrit language; and to help in the field of education. The ten principles of the Arya Samaj are followed by the Bombay branch of the Samaj.

With the inspiration of the *Rishi* Dayanand, the great revolutionary thinker, the Samaj has given new directions, new hopes in religious, educational, social and national fields. The main activities of the Samaj consist of *Ved Prachar*, free charitable dispensaries, free Sanskrit pathashala, ashrams for orphans and distribution of free books to needy persons.

With the spread of its activities and the propagation of Vedic religion among the people several branches were established in the suburbs of Bombay. The following are the activities of Arya Samaj:

The Ved Dharma Pracharini Sabha was founded in 1898-99 by some young people who were impressed by the principles of the Arya Samaj. Its objective was to propagate Vedic religion through lectures of eminent persons and the *Arya* magazine. After some time the Ved Dharma Prachar Sabha was amalgamated with the Arya Samaj.

The Samaj purchases reference books on principles of vedic religion and translates them in Gujarathi language for free reading.

The Gorakshopadeshak Mandal was founded by the Arya Samaj to impress upon the people the importance of *goraksha*.

The Samaj also conducts the Arya Stree Mandal situated at Mandvi and Kalbadevi for amelioration of women. The Stree Mandal has done valuable work in the field of social life.

It also conducts an orphanage for children and women since 1942, which is now situated in Bangadwadi.

The Mithibai Sanskrit Pathshala was established by Sheth Jeevandas Mulji to give education in Vaidnyanic principles and Sanskrit language.

The Arya Vyayam Shala which was established on 12th May 1926 to develop physical health, Auchhavlal Nagar Ayurvedic Aushadhalay and the D. A. V. free night high school which were conducted by the Samaj formerly are not in existence now.

Blavatsky Lodge of Theosophical Society, Grant Road (For history of the Society see Chapter-2, History, Modern Period, in Vol. I.): The Blavatsky Lodge of the Theosophical Society was founded in 1879 with the objects of encouraging the study of comparative religion, philosophy and science and forming a nucleus of universal brotherhood. It was registered under the Societies Registration Act, in July 1906.

The Society has its international headquarters at Adyar in Madras. It has branches all over the world. Its library contains about 6,000 books on religion, philosophy and science.

The society does not get any financial assistance from any Government or private body. The average annual income and expenditure of the society amounts to about Rs. 12,000 and Rs. 13,000, respectively.

Bombay Zionist Association, Hamam Street, Fort: The Bombay Zionist Association was established in 1919 for the promotion of spiritual, religious, social, intellectual, economic and physical welfare of local Jewry.

The Association conducts meetings, seminars and ideological campaigns for strengthening the unity of the Jews.

The income and expenditure of the association amounted to Rs. 21,364 during 1970.

Central Chinmaya Mission Trust, Powai: The Chinmaya Mission was established 25 years ago but the Chinmaya Mission Trust was established in 1964 with a view to provide educational and medical relief.

The trust is managed by a board of eleven trustees. It works through the various mission centres spread all over the country and through other institutions belonging to it. There is no membership of the trust. However, each local centre has a membership.

The mission conducts a diagnostic centre at Chembur, and a clinic at Ghatkopar. The trust has opened two nursery schools in Bombay where, in addition to the regular teaching, the students are taught music, dancing, etc.

The source of income of the trust mainly consists of public donations. In 1975-76, the income and the expenditure amounted to Rs. 9,48,828. All the income is generally spent during the year itself.

Prarthana Samaj, Girgaum (For history see Chapter-2, History, Modern Period, Vol. I.): The Prarthana Samaj was founded as a religious reformist movement on 13th of March 1867. It is one of the foremost organisations which have played a very important role in the making of modern India and regeneration of the true spiritual heritage of India. From its very beginning it has had a deep impact on the public life of Bombay. This organisation has given birth to many other institutions and individuals who helped in guiding public opinion in this city.

The objects of the society are as under:—

- (1)The worship of God in accordance with the cardinal principles of religion enunciated by its pioneers;
- (2) The spread of education and of useful knowledge by the establishment of schools, colleges, academies, etc.; and
- (3) The establishment of orphanages, rescue homes and other institutions of a like nature.

The authorities of the Prarthana Samaj are known to strive for the realisation of these objectives.

The Samaj runs the following educational institutions in Bombay:—

- (1) Ram Mohan English School, Girgaum (June 1917)
- (2) Ram Mohan English School, Dadar (N.A.)
- (3) Prarthana Samaj High School, Vile Parle (N.A.)
- (4) Prarthana Samaj Primary School, Vile Parle (1958)
- (5)Prarthana Samaj Pre-Primary School, Vile Parle (1954)
- (6) Sir Narayan Chandavarkar Primary School, Girgaum (N.A.)
- (7) Sir Narayan Chandavarkar Pre-Primary Shishu Vidyalaya School, Girgaum (1949).
- (8) Sir Narayan Chandavarkar Primary and Pre-Primary School, Byculla (N.A.).

The Samaj is handling the problems of unmarried mothers, pregnant widows, married women in difficulties, orphan children and old, infirm women by establishing orphanages and schools. The following institutions are managed by the Samaj for the benefit of destitute women and children:—

- (1) W.B.N. Balakashram at Pandharpur (1875);
- (2) D. N. Sirur Balakashram at Vile Parle (1932) and
- (3) The Balakashram at Wai (1903).

It also runs Dr. R. G. Bhandarkar Library, a Sangeet Sabha and Sunday School. A weekly divine service is also held by the Prarthana Samaj.

The Samaj is publishing a journal, the *Subodh Patrika*, since 1873. The *Subodh Patrika* is the official organ of the Samaj.

The total assets of the Samaj were valued at Rs. 13,63,591 in 1968-69. The income and expenditure of the Samaj in 1968-69 amounted to Rs. 9,98,586.

Ramkrishna Mission Ashram, Khar: For the last about 60 years, the Bombay centre of the Ramkrishna Mission has been conducting humanitarian activities in Bombay and different parts of the State. The centre was established in 1923. Since then the Mission has been pursuing various spiritual, cultural, educational, medical and philanthropic activities for the benefit of society.

Daily worship and prayers are held in the *ashram*, and the birthdays of different preachers and saints are observed. Devotees in large numbers visit the *ashram* to breathe in a spiritual atmosphere. Regular classes and lectures on religion and culture are conducted by the *ashram*.

Durga Puja festival and anniversaries of Shri Ramkrishna Paramhans and Swami Vivekanand are celebrated with great eclat in different parts of the city. Birthday anniversaries of the Holy Mother—Shri Sharada Devi, Bhagwan Shrikrishna, Lord Buddha, Shri Shankaracharya and Jesus Christ are also celebrated at the *ashram*.

The mission runs a student's home for college students to help them in their university education and to imbibe in them the salient features of Hindu culture.

The public free reading room and the Shivananda library of the Mission are equipped with more than 13,987 books on philosophy, literature, science, history, ethics, and 136 dailies and other periodicals.

The Mission runs a charitable hospital equipped with surgical, pathological, gynaecological, dental, E.N.T., ophthalmic and radiological instruments. Nearly two lakhs and a half patients were treated free of charge

from April 1965 to March 1967. Now major surgical operations are also undertaken in the hospital.

The centre undertakes relief work in and outside the State in times of national calamities like famine, flood and earthquake. So far it undertook 26 relief operations, some on very large scale, involving a total expenditure of lakhs of rupees. In the recent past the Mission conducted flood relief work in Kutch and Surat where its total expenditure was above Rs. 10 lakhs.

The assets of the Mission were valued at Rs. 12,75,433 and the income and expenditure amounted to Rs. 2.84.943 in 1966-67.

Religious Amity Centre, Mistry Court, Marine Lines: The Religious Amity Centre was established in 1963 to work for religious amity and goodwill among people. It maintains a list of invitees numbering over a thousand. The expenses incurred are paid by its president. It has had several distinguished speakers at prayer meetings including the late Dr. Zakir Hussain, ex-President of India.

St. Peter's Armenian Church (Trust), Fort: The St. Peter's Armenian Church was founded in 1942 with the objectives to spread religion, to render educational and medical facilities to students and members of the community.

The management of the property of Armenian Churches in Bombay city and other parts of the Bombay province is looked after by the trust. It had 18 members in 1969.

The assets of the trust were valued at Rs. 8,39,016 in 1969, and its annual income and expenditure amounted to Rs. 1,02,089 approximately in the same year.

ORGANISATIONS FOR PHYSICALLY HANDICAPPED

Ali Yavar Jung National Institute for the Deaf — A Project of SARRAM:

It was at the time of the Indo-Pakistan conflict that the Bangla Desh Aid Committee was established with the immediate objective of rendering succour to the refugees fleeing from erstwhile East Pakistan. The work done by the Bangla Desh Aid Committee in Maharashtra was greatly appreciated and lauded, keeping in view especially the fact that funds were raised from the common man by the relentless dedicated and determined efforts of a group of voluntary workers.

It was therefore felt that the group, assembled under the banner of Bangla Desh Aid Committee, should continue working together towards different humanitarian goals, such as, rehabilitation of refugees, rendering help to the needy or under-privileged segments of our society. Instead of disbanding this Committee it was decided to rename it as the Society for Assistance, Rehabilitation, Relief and Aid, Maharashtra (SARRAM). The Society as the successor to the erstwhile committee has had wider objectives. It is one of the leading voluntary institutions which has served to rouse civic consciousness and fellow-feelings of the public and raise substantial amounts for numerous noble causes including rehabilitating the weaker sections of the society and rendering assistance to warwidows and orphans, constructing percolation tanks in drought-hit districts, hostels for widows and orphans, etc.

The late Governor of Maharashtra, Shri Ali Yavar Jung who was the chief patron, associated himself with its progress and took keen interest in its activities.

The latest project with which SARRAM is now occupied relates to the establishment of an institute for the deaf. It was in 1973 that the initial steps were taken in this direction.

SARRAM is sponsoring the establishment in Bombay of an institute for the deaf and mute which has a five-fold objective, *viz.*, (a) training teachers through degree and diploma courses for the teaching of deaf and mute children in secondary and primary schools, (b) running a vocational and technical as well as a general primary and secondary school for the deaf and mute, (c) undertaking home and pre-school education, (d) promoting research in early detection, proper assessment and treatment and (e) assisting the rehabilitation of the deaf and mute.

SARRAM has built up a fund of Rs. 20 lakhs, collected through public donations and earmarked for the establishment of the Ali Yavar Jung Institute for the Deaf. The University of Bombay has instituted degree and diploma courses for teachers' training in technical and vocational education of the deaf.

The Government of India has approved the location of the proposed institute in Bombay. The Government of Maharashtra has released a piece of land in Bandra Reclamation for the setting up of the Institute. The foundation stone for this Institute was laid on the 25th December 1978 by the then Prime Minister of India.

The total assets of SARRAM are of the order of about Rs. 25 lakhs of which Rs. 24 lakhs are in term deposits (1981-82).

Blind Men's Association: The Blind Men's Association is the first organisation of its type established by the blind men in the then State of Bombay in 1947. It has its affiliated branches at Pune and Ahmedabad.

The Association looks after the welfare of the non-institutional blind people.

It renders home visits, offers necessary advice and guidance to the blind. It also provides financial assistance in the shape of loans, free of interest, to enable the blind to set-up small business of their own. Scholarships to blind children as also the children of blind parents are offered for pursuing higher education. A recreation centre for the blind children has been established at *balbhavan*. It grants monthly assistance and medical aid to blind people and organises recreational activities for them. Braille reading competitions are held every year for the blind.

Many of these activities of the Association are carried out with the help of volunteers. The Association has a membership of over 400 including 300 blind men. The day-to-day activities of the Association are looked after by the executive council consisting of blind men and women. The income and expenditure amounted to Rs. 24,205 and Rs. 22,965, respectively during 1975-76.

Central Society for Education of the Deaf, Agripada: The Central Society for Education of the Deaf was established in 1966 with the objects of guidance, education, training of the deaf; imparting instruction and guidance to parents of the deaf; and conducting research investigations and experiments in all matters concerning education of the deaf.

The Society conducts a central school for the deaf which also guides the parents of the deaf children so as to understand the problems that they encounter during bringing up and education of these children.

Another institution started by the society is the Central Institute of Teachers of the Deaf, to train teachers from all over India, to educate the deaf through the oral method, to carry out hearing tests and assess the deafness of the children and foster the correct methods of teaching speech to deaf children.

During 1976, the income and expenditure of the society was the same amounting to Rs. 1,18,930.

Fellowship for the Physically Handicapped, Haji Ali: The organisation was started in 1956 to solve the problems of the physically handicapped.

The general body consists of patrons, life members and ordinary members. Members include both able bodied and disabled.

The aims and objectives of the society are to ameliorate the conditions of the physically handicapped by fostering in them, fellowship for the encouragement and development of their interests and abilities. It provides opportunities and assistance to the physically handicapped and advise them to solve their social, economic, educational and general problems and for the spread of useful knowledge with the view to affording them training for occupations by which they can support themselves and be useful members of the community. It started an industrial workshop for the handicapped in 1957, the first of its kind in India. Various types of work such as printing, book binding, carpentry, weaving, plastic moulding, plastic welding, packing etc. is undertaken in the workshop.

The main source of income of the institution continues to be cash donations from the public, receipts from charity shows and entertainments organised by the funds committee. It receives grants-in-aid from the Directorate of Social Welfare, Government of Maharashtra.

Happy Home and School for the Blind, Worli : The Happy Home for the Blind, under the auspices of the Blind Relief Association made a beginning in 1925 with 5 blind beggar boys. In 1948 a school was started within the Home, and today it has 130 visually handicapped students on its register.

The primary object of the School is to provide education to visually handicapped children. The School is established for court-committed, juvenile and delinquent blind boys. The rehabilitation and education of these students envisages job-oriented education based on vocational guidance as well as training in music and handicrafts. Academic training is given up to VII Std. and intelligent students are encouraged to pursue their studies under the integrated system of education up to S.S.C. level. The School is a residential school providing all the students free boarding, lodging, clothing, medical aid, educational facilities and all other necessary amenities. Recently, a special unit catering to the needs of partially sighted students was initiated. In this, border liners and apparently slow learners are given special training to use their residual vision efficiently. Another unit was started for the educationally sub-normal children who are too young for vocational placement.

Financial assistance is received from the State Government and the Bombay Municipal Corporation towards maintenance of the children. It also receives grants from charitable trusts and philanthropists for the care of the blind. The annual income and expenditure of the school in 1975-76 was Rs. 1,58,183 and Rs. 2,56,986, respectively.

Industrial Home for the Blind Women, Andheri : The Industrial Home for Blind Women is conducted by the Blind Relief Association which was established on 27th January 1919. The idea to develop the workshop for blind women was originated because of 13 orphan girls in the Dadar school for the blind who had no interest in academic education, and being orphans, had no place to go. The management of the Blind Relief Association therefore set-up this home in the premises of the Dadar school for the blind on the 15th August 1959. The institution shifted to its newly constructed building in June 1976.

The Home trains the blind women between the age group of 16 to 40 years and provides them free lodging, boarding and medical aid. The home imparts them training in different vocations such as weaving, tailoring, broom making and caning of chairs. The main objective of the institution is to rehabilitate the blind inmates and to enable them to gain economic independence. The home placed 40 inmates in industrial employment and settled down marriages of 15 inmates.

The institution manufactures some of the household articles besides caning of chairs and stitching.

The institution gets financial assistance from Central Social Welfare Board for better amenities, Government of Maharashtra for maintenance and Bombay Municipal Corporation for better training facilities.

The income of the institution was Rs. 64,099, while the expenditure amounted to Rs. 84,877 in 1976.

Muncherjee Nowrojee Banajee Industrial Home for the Blind, Jogeshwari: The Home came into existence on the 16th July 1956 to cater to the needs of adult blind men. The new building constructed in

the premises of the Home provides training and residential facilities to the blind inmates. In 1956, strength of the Home was only 14 which increased to 150 in 1975. It had trained 763 blind persons upto 1974-75.

The blind are taught to accept the limitations imposed by their blindness. Besides, they are also given training to operate power driven machinery in light engineering and wood work units. In 1975, 530 persons were trained in cane work, carpentry, handloom weaving, tailoring, etc. The orchestra of the home; manned by 20 musicians, is one of the sources of income.

The inmates have organised an Andha Vikas Mandal to solve their difficulties. Different committees have been set-up for entertainment, food, library and cultural activities.

The home had assets worth Rs. 15,07,213, while the income and expenditure amounted to Rs. 3,89,592 during 1974-75.

Narsingrao Shivaji Dharmaji Industrial Home for the Blind, Worli: This institution was started on 1st April 1917 with the object of integration of the blind in all walks of life; to adjust and rehabilitate the adult blind and give them industrial training. The inmates, after their training in selected vocations, are employed either in other factories or in the workshop of the home. The home admits blind persons between the age group of 18-40. The strength of the students during 1966-67 was 115.

The Home provides training in weaving, chair caning, carpentry, tailoring and brush making.

Under contract with the Government of Maharashtra the institution gets orders from the Government as also from the Maharashtra State Road Transport Corporation, the B.E.S.T., the Bombay Port Trust and the Air India, besides, private companies for the supply of dusters, swabs, coarse cloth, etc. The annual turnover in handloom goods amounts to Rs. 60,530. The work of caning and repairs of chairs in all Government offices in Bombay is done by this institution. During 1966-67, 5,863 chairs were caned by inmates, fetching an amount of Rs. 36,152. The annual realisation of tailoring and brush making sections amounted to Rs. 6,720 and Rs. 1,805, respectively during the same year. The blind men mainly perform jobs such as assembling, inspection and packaging.

In addition to free boarding, lodging, medical care, clothing etc. the blind workers are paid about a quarter of the receipts on account of work done by them as incentive. On an average each worker gets Rs. 25 to Rs. 30 per month. The after care service is also rendered by the Home for the aged and infirm

The institution has an orchestra manned by 20 blind musicians. The orchestra party gave 132 performances during 1966-67 realising Rs. 1,81,362.

It had assets worth Rs. 3,33,670 in 1966-67 and its total receipts amounted to Rs. 2,57,691, whereas the expenditure came to Rs. 2,53,498 in the same year. It gets grants from Government as well as private trusts.

National Association for the Blind: This is a premier organisation devoted to the cause of the blind. Founded in January 1952, the National Association for the Blind has encouraged several institutions in the country in the matter of the welfare, rehabilitation and enrichment of the life of the blind. It is conducting and promoting basic and applied scientific research in the fields of education, rehabilitation and economic resettlement of the blind. It encourages good literature for the blind in various forms including braille, large type, sound recordings and equipment and appliances for the use of the blind. It trains instructors and volunteers to work in the field.

By March 1982, the National Association for the Blind had 182 institutions affiliated to it from all over India. Of these, 33 institutions were in Maharashtra. The institutions affiliated to the National Association for the Blind in Bombay are mentioned below:-

- (1) Blind Men's Association, Bombay 400 036.
- (2) Blind Relief Association, Kalbadevi Road.
- (3) Dadar School for the Blind, Dadar.
- (4) Haji Allarakhia Sonawala Andh and Anath Stree Ashram, Andheri.
- (5) Happy Home and School for the Blind, Worli.
- (6) Industrial Home for Blind Women, Andheri (West).
- (7) Krishanlal Jalan Charity Trust, Kalbadevi.
- (8) M. N. Banajee Industrial Home for the Blind, Jogeshwari (West).
- (9) M. U. R. L. National Centre for the Blind, Pant Nagar, Ghatkopar. (10) NAB Mata Lachmi Nursery for the Blind, Sion.
- (11) NAB Workshop for the Blind, Prabhadevi.
- (12) N.S.D. Industrial Home for the Blind, Worli.
- (13) Salvation Army Blind Men's Working Hostel, Byculla.
- (14) Victoria Memorial High School for the Blind, Tardeo Road.

The NAB and the entire blind fraternity in India owes immensely to the philanthropy and dedication of Mr. Vijay M. Merchant who is its president. This cricketer of international fame is the principal architect and source of inspiration for the NAB. He has been instrumental in mobilisation of funds for the organisation. Besides him, a cadre of dedicated persons are working for the cause. The institution has 700 Life members and 300 ordinary members. Its income and expenditure during 1981-82 amounted to Rs. 20,01,884 while its assets were worth Rs. 1,42,30,115.

NAB-Workshop for the Blind, Worli: The present organisation founded in 1963 is an outcome of the amalgamation of two trusts, viz., the Trust of the Workshop for the Blind at Worli and the Maharashtra State Council on Blindness. The main object of the institution is to impart intensive industrial and vocational training with a view to preparing the blind for absorption in employment and economic rehabilitation.

The institution gives training in light engineering, assembly of component parts, tailoring, carpentry, telephone operating, etc.

Up to 1977 December, 590 blind persons have been imparted training in various trades. The organisation secured jobs through its employment and placement committee for 290 trained blind persons.

The institute provides educational and hostel facilities to its inmates-Besides, it organises social programmes for the amusement of the blind-These programmes include musical concerts, orchestra, lectures, *bhajans*, picnics, etc.

The trainees are paid stipend at the rate of Rs. 70 per month. The day trainees are paid, in addition, a sum of Rs. 15 to cover conveyance charges for their journey from residence to the workshop.

The institution receives maintenance grant of Rs. 1,00,000 from the Government of Maharashtra and a general grant of Rs. 10,000 from the Municipal Corporation. It also receives donations from the general public.

The assets of the institution were valued at Rs. 14,68,916 in 1975-76, while the income and expenditure were the same amounting to Rs. 5,43,250.

National Association of the Instructors of the Blind, Worli : Originally established in 1960 as the Maharashtra State Association of the Blind

Teachers, it became a national organisation in 1963. The objects of the association are to take measures to awaken interest in and to encourage research for the improvement and development of educational methods employed in institutions for the blind, and to raise the status of the instructors of the blind by taking such steps as may be necessary for fostering a fellowship among them, securing their adequate representation on educational bodies and providing facilities for united action for matters affecting their professional welfare.

The activities of the Association are mostly of an academic nature. It arranges periodical conventions, and conducts refresher's courses; and holds workshops, symposia and seminars on various aspects of blindness. A special forum on blindness is held annually when experts in the field are invited to deliver lectures. It also publishes a professional magazine called, *The Educator of the Blind*. It receives grants from the Central Government and collects funds from donors and sympathisers.

National Society for Equal Opportunities for the Handicapped, Paltan Road, Bombay-1: The National Society for Equal Opportunities for the Handicapped was established in 1968 to help nearly 20 million handicapped people in India who are blind, deaf, orthopaedically handicapped, leprosy afflicted or mentally retarded. The society coordinates and conducts such activities as will help both the handicapped individual and the numerous welfare organisations working for them.

The society has undertaken 14 major projects such as promoting integrated education of the handicapped, preparation of teachers for them, employment in industries, home bound programme and national sports for them, evaluation and assessment of the programme for them and their training at industrial training institutions. It also provides the necessary help to the handicapped, observes the World Day of the Disabled, holds sports meets, arranges exhibitions, gives awards to the handicapped workers, publishes a quarterly journal, maintains a multi-category workshop and undertakes research on total communication for the deaf.

During 1976 its income and expenditure amounted to Rs. 3,25,457.

Royal Commonwealth Society for the Blind, Bombay-36: The South Asia Regional Office of the Society for the region of India, Ceylon, Pakistan and Bangla Desh, with its headquarters at Bombay, was established on 1st January 1970. The Society with its headquarters in England is governed by a Governing Council. The Queen of England is the patron-in-chief of this organisation, which works for the education and rehabilitation of the blind and for the prevention and cure of blindness in 34 Commonwealth countries. The Society has only institutional members.

The Society is a voluntary private organisation subsisting on public funds. The annual budget of the regional office is one million rupees, approximately. Most of the funds are raised by way of donations and by organising charity shows. The society conducted over 200 eye-camps mainly in the rural areas of India. In these camps up to the end of 1970 it examined 2,63,689 ophthalmic patients, treated 2,10,094 of them and operated 21,752 for the restoration of sight and 6,587 for the prevention of blindness.

The Society helps the National Association for the Blind in India in the running of its expanded employment and placement service for the blind and also assists the Tata Agricultural and Rural Training Centre for the blind at Phansa in the resettlement of blind farmers. It provides mobile ophthalmic vans to other Indian organisations to carry on prevention and cure of blindness in rural areas.

Society for Education of the Crippled, Agripada: This Society was founded in December 1958, by a group of prominent citizens of Bombay, who realised that the physically handicapped, especially those from the lower income group, had no opportunity for normal education and good living. The object of the society is to organise educational facilities covering all stages i.e. pre-primary, primary, secondary, university, vocational and technical education for the orthopaedically disabled and crippled, children and adults. Apart from formal education extra curricular and vocational activities are also organised by the society.

In June 1960, the society established the S.E.C. Day School for crippled children, and the school had a strength of 56 students. It is recognised by the Education Department of the Government of Maharashtra, and the Bombay Municipal Corporation.

The society does a great deal of work in furthering the cause of the handicapped whenever an opportunity arises. It makes arrangements for placement in suitable employment and providing wheel chairs for the needy persons.

Society for Rehabilitation of Crippled Children, Haji Ali: The Society was established in 1947, with a view to organise hospitals and clinics for the diagnosis and treatment of disabled and crippled children; to create and educate public opinion on the problems of such affected children; and to compile and publish statistics and maintain records relating to the causes and frequency of poliomyelitis in India.

During 1968 the Society received financial assistance to the tune of Rs. 1,20,000 from the Government of Maharashtra and Rs. 99,000 from the Bombay Municipal Corporation. A sum of Rs. 1,000 was also received from the Central Social Welfare Board during the same period. The annual income of the society amounted to Rs. 1,69,614, while the expenditure came to Rs. 5,07,809 during 1968-69.

The Society runs the Children's Orthopaedic Hospital and the cerebral palsy unit demonstration and research centre. The hospital, with a bed capacity of 50 beds, is well-equipped with an operation theatre, X-ray department, physiotherapy, occupational therapy, speech therapy units and a school. About 200 children attend daily for treatment in various departments. The unit is sponsored by the Department of Health, Education and Welfare of the U.S.A. Government.

RESEARCH SOCIETIES

Bombay Natural History Society, Fort: The society was established as a private organisation in 1883 by seven residents at Bombay. It is an eminent organisation actively engaged in collection of information and specimens of natural history throughout India, Burma and Ceylon, and dissemination of the knowledge of flora and fauna, through the medium of publications, lectures, films and expeditions. Eminent scholars in the field are associated with it. It has also been instrumental in focusing official and public attention on the need of conservation and development of the rich and varied wild life of the country.

The Society at present has about 1,000 members from all over India, Pakistan, Burma, Ceylon, Europe, America and other parts of the world.

The library owned by the society has a collection of about 6,000 books on fauna and flora. It receives grants from the Government of Maharashtra and the Central Government for maintenance of the research collections.

In 1970 the income and expenditure of the society amounted to Rs. 1,85,391 and Rs. 1,65,781, respectively.

Gujarat Research Society, Khar: The Society was founded in 1936 with the object of promoting, organising and co-ordinating research in all branches of knowledge. It has contributed to the advancement of knowledge, particularly in the field of education, psychology, sociology, economics, health and medicine.

The Gujarat Research Society has a branch in Ahmedabad. In 1968-69, society had 76 life members and 51 ordinary members. The assets of the society during 1968-69 were valued at Rs. 8,69,253 and the income and expenditure amounted to Rs. 1,45,507 in the same year.

The activities of the society are carried out through various units, the details of which are given below:

(1) Psychological Research Institute: Emotionally imbalanced and educationally backward children with normal intelligence are treated at the child guidance clinic with drug therapy, individual play therapy, group play therapy and individual psycho therapy.

Under the expert guidance of psychiatrists, parents of the handicapped children are given instruction through individual and group psychotherapeutic interviews as also through parent group meetings. In 1968-69, 125 children were admitted for treatment. The clinic acts as a training centre for the students of Diploma in Psychological Medicine as well as social work students. It is also approved by the Bhabha Atomic Research Centre as a hospital and nursing home for psychiatric patients.

Educational and vocational guidance and psychological testing bureau helps the youth in making proper choice for education. The youngsters are guided on the basis of psychological test. Meetings with teachers and parents are organised in different schools to bring awareness and discuss the problems of children. In 1968-69, 425 pupils took advantage of the services rendered by the Bureau.

(2) Health Research Institute: In field of public health the society has done a good work by starting a dispensary, a pathological laboratory, oral polio vaccine centre and a family planning centre. A centre for mentally handicapped children is also run by the society in collaboration with the Bombay Municipal Corporation. There were 40 children on roll in 1968.

The society has a library which contains reference books on various subjects, serves the needs of the reading public, and especially the students and research workers.

Indian Cancer Society, Parel: The Society was registered under the Societies Registration Act, 1860 on 20th January 1954 and also under the Public Trusts Act, 1950 on 16th July 1954.

Its membership is open to individuals as also to any corporate body or association of persons.

It is an eminent scientific research organisation which has done pioneering work in cancer research, detection and cure. It is by far the biggest institute in the field in the country and it is equipped with sophisticated equipment and eminent experts. The aims and objects of the society are given below:

Scientific investigation of the cause, prevention and control of cancer; public education on cancer and education of the medical profession in latest methods of detection, diagnosis and treatment of cancer; combating quackery; sponsoring of research both fundamental and clinical; establishment of free detection centres, establishing international cooperation in research, encouraging visiting professorship, awarding scholarships and fellowships in cytology, chemotherapy and promoting relief and rehabilitation of indigent cancer patients, donating apparatus to hospitals and research institutions; establishing population based cancer registries in different parts of India, organising all India cancer conferences, cancer exhibitions etc., and the publication of Indian Journal of Cancer.

It gets financial assistance from individuals, municipal corporations, companies and trusts in the form of donations, gifts and grants. In 1970, the Society received Rs. 2,93,200 by way of donations. The income and expenditure of the Society amounted to Rs. 3,16.800 and Rs. 4,11,600, respectively in the same year.

The Society has opened branches and free detection centres in several places in Bombay city. It has also established cytology and chemotherapy departments. National cancer conferences were organised in India in 1961, 1964, 1967 and 1971. The first international seminar on cancer was also held in India in 1971.

Marathi Vidnyan Parishad, Tardeo: This institution, established on 24th April 1966, is devoted to the propagation of scientific outlook and popularising science among the Marathi people. It also aims at development of Marathi language for literature on scientific subjects. In furtherance of its objectives it holds seminars, symposia and lectures of scientists on various subjects on science. The scientists on the panel of the Parishad organise lectures on various subjects in the day-to-day life of society with an angle to explain the phenomena in scientific terms. Its objectives are precisely as under:—

- (i) Propagation of science through Marathi;
- (ii) Enrichment of Marathi for scientific writing;
- (iii) To increase the importance of science in life;
- (iv) Promotion of scientific research.

The organisation publishes a journal, *Marathi Vidnyan Parishad Patrika* and other books on science. It arranges fpr exhibitions, film exhibitions, competitions, visits to scientific projects, etc. It advises interested institutions on various scientific subjects and encourages adoption of scientific methods. It awards prizes and scholarships to those contributing to science in Marathi language.

The members of the Marathi Vidnyan Parishad include scientists, doctors, technicians, industrialists, science teachers, as also experts in social sciences. Many of the celebrated scientists in the Tata Institute of Fundamental Research, the Bhabha Atomic Research Centre as also eminent professors and medical experts are associated with this organisation. Its membership stands at about 1,500.

The institution is recognised as a research institute by the Maharashtra Government, as well as by the Bombay Municipal Corporation from which it receives grants. Though initially housed in the Air-Conditioned Market building at Tardeo, the organisation has constructed a specious building, *viz.*, Vidnyan Bhavan at Chembur. It has many branches in Bombay and Maharashtra. It is now extending its activities out of Maharashtra, and particularly to Hyderabad and Baroda.

Nehru Centre, Worli: The Nehru Centre was established on 20th October 1972, with the objects to inculcate and promote new social values, secularism and national integration and propagation of a humane, self-reliant and scientific outlook on life, and to perpetuate the memory of Jawaharlal Nehru by undertaking educational, social, cultural, medical relief, scientific research and other charitable activities.

The Nehru Centre aims at developing a scientific outlook in society. It desires to excite and satisfy human curiosity for knowledge. It has a research-oriented programme to probe into new areas of learning and enlightenment. It has planned to have a network of creative units aimed at promotion of arts, sciences and humanities. It has decided to encourage research by instituting research awards and scholarships upto about Rs. 10 lakhs a year.

In accordance with this approach, the Nehru Centre complex offers facilities for children's activities, a hobby centre, a science centre, art galleries, library, auditorium facilities for seminars and symposia, and a publications division. It has established a planetorium in the heart of the city which affords a glimpse of the cosmos and a panorama of the planets around us.

The income and expenditure of the centre during the year ended 31st December 1976 amounted to Rs. 13,84,786.

Tata Institute of Fundamental Research, Colaba: The Tata Institute of Fundamental Research was founded in June 1945 by the trustees of the Sir Dorabji Tata Trust in co-operation with the then Government of Bombay. The Government of India has recognised the Institute as a national centre for advanced studies and fundamental research in nuclear science and mathematics. It has also been recognised by the University of Bombay as a constituent recognised institution for postgraduate research in physics and mathematics.

The Institute is managed by a council consisting of a chairman, a secretary, three representatives of the Government of India, one member of the Government of Maharashtra and two members appointed by the trustees of the Sir Dorabji Tata Trust.

The activities of the institute are carried out through a school of mathematics and a school of physics. The former is organised with a view to building up a body of competent scientists, actively participating in the mainstream of modern mathematical research. At present there is a group of nearly 40 mathematicians in the school engaged in active research in almost every major branch of pure mathematics. The school organises international symposia on different topics from time to time, under the co-sponsorship of the International Mathematical Union.

The school of physics covers both theoretical and experimental investigations. In addition to what might be termed as pure physics, the Institute conducts research in some aspects of biology, chemistry, geophysics, astro-physics, computer sciences and engineering.

This institute has also established various units and sections such as a workshop, glass shop, and precision instrument section, liquid helium and liquid nitrogen plants, electron microscope and X-ray units, a laboratory for chemistry involving radio-active materials. There are lecture and conference facilities. The library of the institute has a good collection of about 22,000 books and 13,000 volumes of periodicals.

As a result of research that has been carried out, the institute has achieved competence of a unique character in several fields. The following are the activities of the institute which constitute as 'National Facilities': (1) National Computation Centre, (2) Balloon facility, (3) Radio-astronomy Centre at Ootacamund, (4) Radio-carbon Laboratory for Archaeology and (5) Tritium Laboratory for Hydrological studies.

The Institute publishes a number of books, pamphlets, lecture notes and proceedings of conferences, symposia and summer schools.

In the year 1968, the institute had 1,350 staff members, of whom 352 were qualified scientists and engineers engaged in research and scientific development.

The present building of the institute on Homi Bhabha Road in Colaba area admeasures about 3,20,000 square feet. The property and assets of the institute were valued at Rs. 6,97,22,330 in 1970. The annual income and expenditure of the T.I.F.R. amounted to Rs. 1,71,84,122 and Rs. 1,62,65,228, respectively in 1969-70.

The main financial support of the institute comes from the Government of India through the Department of Atomic Energy. In 1969-70, the institute received Rs. 185.55 lakhs as capital revenue from the Government of India, Rs. 50 lakhs from the Government of Maharashtra and Rs. 1 lakh from the Sir Dorabji Tata Trust.

SOCIAL WELFARE ORGANISATIONS

Association for Moral and Social Hygiene (Maharashtra Branch), Fort: The association was established in 1955. It is affiliated to the International Abolitionist Federation, Geneva.

The main objects of the association are: (1) condemnation and prevention of all types of prostitution; (2) raising the standard of character and conduct in sex relations and to uphold the highest family tradition; (3) recognition of an equally high standard of morality for men and women; (4) eradication of prostitution and kindred evils; (5) eradication of venereal diseases and the condition which promote the same; and (6) education of public opinion for creating proper social hygienic conditions.

All persons over 18 years of age are eligible for membership of the association. The management of the association is vested in the managing committee and the executive committee. The association has its district branches at Ahmadnagar, Nagpur, Pune, Solapur and Nashik. It arranges lectures and seminars on various problems of life and educates people in healthy family life. It also runs *balwadis* and undertakes case-work services at the welfare centres.

The association receives grants from government, municipality, and the central social welfare board. The assets of the association were valued at Rs. 1,52,155, while its income and expenditure amounted to Rs. 19,209 in 1970-71.

Bharat, Sevak Samaj, Ballard Estate: The Bharat Sevak Samaj was started in Bombay in 1954, and registered under the Bombay Public Trusts Act with the object to find and develop avenues of voluntary service for the citizens of India.

After the formation of linguistic states, the name of the Samaj was changed to the Maharashtra Pradesh Bharat Sevak Samaj. It received however a great set-back due to stoppage of grants from all the sources.

The Samaj could maintain certain activities only because of the institutionalisation of the activities. The Samaj has started three dental clinics at Bandra, Abhyudaya Nagar and Ghatkopar, besides six dispensaries at various places in Bombay. It also conducts coaching classes for the high school students at Bandra. The community centre at Sardar Nagar (Sion-Koliwada) provides library facilities. A home for improvement of vagrant boys was started by the institute.

Bombay Keraleeya Samaj, Matunga: The Samaj, established in 1930, is the premier social and cultural institution of the Keralites in Bombay. It has got its own building, *viz.*, Kerala Bhavanam at Matunga. Its activities include propagation of the Kerala system of ayurvedic treatment, free reading rooms and library, educational activities, sports and promotion of arts and culture, etc.

The Samaj is the sole agent in Bombay for the supply of ayurvedic medicines from the reputed Kottakkal Arya Vaidya Shala, Kerala. It runs four dispensaries, one each at Matunga, Dadar, Chembur and Goregaon

where medical consultation is free of cost. As many as 32,671 patients were given free treatment in 1971.

Free reading room facilities are provided at Matunga, Dadar, Chembur and Goregaon by the Samaj. The library at Kerala Bhavanam has a collection of nearly 8,000 books in English and Malayalam. The Samaj publishes a monthly magazine, *Vishal Keralam*, in Malayalam.

It conducts a dance class in Kerala Bhavanam and K. G. classes at Matunga and Chembur. The Samaj has an educational fund of Rs. 5 lakhs at present.

The members of the Samaj in January 1972 included 26 patrons, 466 life members, 1,549 ordinary members and 187 associated members. It possesses property and assets valued at Rs. 7,63,301. Its income and expenditure in 1971 amounted to Rs. 9,25,818.

Bombay Legal Aid Society, Fort : The Society was established in 1925 and registered on 23rd April 1930. The objects of the Society are to render legal aid to poor litigants. It provides free legal aid as also the service of lawyers to the poor, in civil as well as criminal cases.

The Society has a panel of advocates attached to prominent labour welfare centres at Naigaon, Kalachowki, Arthur Road, Kamathipura and Worli to give free legal advice to poor persons.

The Society gets Rs. 1.200 by way of Government grant per annum.

Bombay Relief Association, Fort (Cook's Bldg.): The Association was formed in 1909 by some European inhabitants of Bombay by amalgamating existing charities, and was named as the Bombay European Relief Association. In 1963 the name was however changed to Bombay Relief Association. The Association runs a home for destitute and aged men, and gives medical and financial help to deserving people in distress.

Bombay Young Men's Christian Association: The Bombay Young Men's Christian Association was founded in 1875. It is an important voluntary organisation which has rendered useful service to society. It is not an athletic or recreational club, but an international organisation conducted for the welfare of the young and is devoted to the cause of students, industrial workers and young middle class persons.

The Young Men's Christian Association has a network of affiliated organisations spread over 88 countries in the world. In India alone there are 66 associations in urban areas and 69 in rural areas.

The Bombay branch of Young Men's Christian Association serves its members and the public through the following institutional framework and activities: a home for vagrant boys at Andheri; clubs for high school boys and girls in Young Men's Christian Association branches; three municipal playgrounds managed by industrial workers; gymnasium and wrestling akhada for industrial workers; swimming pool; Young Men's Christian Association Lions Juhu centre and international house to accommodate tourists, visitors and their families.

The Association receives financial assistance by way of donations and funds from the public.

Chhatrapati Shivaji Smarak Mandal, Dadar: The institution was established in 1943 by some enthusiastic social workers with the earnest desire of helping the backward and weaker sections of society. The main objectives of the institution are to organise and strengthen the backward and weaker sections of the society and to strive for their improvement in educational, social and economic fields.

The institution has constructed a worthy auditorium which is named as Shivaji Mandir. The auditorium is used mainly for performance of Marathi dramas which are enjoying good patronage. The auditorium is the venue of two to three drama performances every day. Besides the auditorium there are other wings including Rajarshi Shahu Sabhagriha, Rajabhau Mulik Sabhagriha and reading room where social and educational activities are conducted. The institution has undertaken construction of a hostel building at D. N. Nagar, Andheri, for the benefit of the poor and deserving college students.

The institution has established a branch called Jeejamata Mahila Mandir, which strives for the welfare of women by arranging lectures and exhibitions. The institution has another branch called Sainik Kalyan Kendra which conducts activities for the welfare of persons in the defence forces. It extends help for their settlement in Bombay and attends to their grievances. The institution takes keen interest in sports activities and maintains a library called Shri Shivaji Library. The institution celebrates functions like Dasara Sammelan and Shiv Jayanti when prominent personalities are invited to deliver lectures. The institution receives an annual grant-in-aid of about Rs. 5,000 to Rs. 25,000 from the Municipal Corporation of Greater Bombay. The Corporation also granted an *ad hoc* grant of Rs. 2 lakhs towards the construction of the hostel building. The institution also secures donations from the Maharashtra State Co-operative Bank and the State Government. As against the financial assistance received, the institution grants scholarships to the extent of Rs. 35,000 to Rs. 40,000 to college students. The income of the institution was Rs. 8,35,014 while the expenditure amounted to Rs. 8,19,669 in 1979-80.

Indian Council of Social Welfare, Fort: The Indian Council of Social Welfare was established in 1947 to provide a national forum for the discussion of social welfare and related issues and to foster the development of social welfare throughout the country.

As an apex body, the Indian Council of Social Welfare has helped in initiating and promoting welfare bodies like the Family and Child Welfare Association, Family Services Centre, etc. It has also undertaken projects like Missing Children's Bureau, Volunteer Bureau, Counselling Services; Emporium for Marketing Goods of Welfare organisations, etc. Recently, the council has been recognised by the High Court of Bombay for professional consultation on petitions by foreigners to adopt Indian children.

Conferences and seminars are held by it from time to time. In fact it has provided a forum for the

exchange of ideas, knowledge, techniques and experience, as well as a meaningful dialogue between social scientists, social workers, administrators, planners, educators and others engaged in social welfare.

A project to establish a welfare secretariat building at Chembur to house the headquarters of the council, an auditorium, a research centre and a library has been undertaken by the Council. A community services centre is planned for the slum dwellers in Bombay Central area on a piece of land donated by the Bombay Municipal Corporation.

During 1975-76, the income and expenditure of the council stood at Rs. 95,107 and Rs. 1,30,288, respectively.

International Council on Social Welfare, Fort: The International Council on Social Welfare was founded in 1928 in response to a long felt need for an international forum for exchange of information and promotion of human welfare. The objects of the council are to provide a world-wide forum for the discussion of social welfare and related issues, and to foster the development of social welfare throughout the world.

Regional conferences, seminars and other activities which offer an opportunity for constructive discussion and individual as well as co-operative work on questions concerning the broad field of social welfare are organised periodically. It also serves as an official consultant on social welfare matters to the important international organisations such as FAO, ILO, UNESCO, UNICEF, WHO, the Council of Europe and the organisation of American States.

The revenue of the council accrues from membership fees based on an annual quota and from registration fees for its various activities. The executive committee supervises the management of the council.

Konkan Cultural Association, opp. Regal, Bombay-39: The Konkan Cultural Association was established on the 20th of October 1964 for the cause of the social, educational and cultural well-being of the residents of Bombay hailing from the Konkan.

The total number of members of this cosmopolitan organisation was 471 in 1975-76.

The activities of the Association include an employment bureau, adult literacy class, health clinic, and a family welfare bureau. A sponsorship programme assuring opportunities to the young to develop their potentialities and qualities of leadership is undertaken.

The Association has formed five committees such as cultural programmes committee, food committee, games and sports committee, health and welfare committee, to manage different activities.

During 1975-76, 49 students and their families were assisted. The *Konkan Khabar*, its mouth-piece, gives publicity to different activities of the Association.

Its income and expenditure in the year ending 31st March 1976, amounted to Rs. 53,067.

Lokmanya Seva Sangh, Vile Parle: Lokmanya Seva Sangh was established on 11th March 1923, in memory of the late Lokmanya Bal Gangadhar Tilak. The object of the Sangh is to strive for the welfare and progress of the public in educational, cultural, social, economic and other fields. It is one of the oldest social service organisations in Bombay.

The Sangh has undertaken various activities such as providing medical facilities for children including immunization against diseases. It also maintains a child health centre under the guidance of specialists.

The Sangh conducts a montessori school which had 341 students in 1979-80. It also conducts a school for dumb and deaf children.

The Sangh has a library possessing about 26,000 books of which 16,806 are Marathi, 6,776 English, 394 Hindi, 59 Gujarathi, 105 Sanskrit and 1,860 other books. It had 1,540 members in 1979-80.

The catering service of the sangh is very popular in Parle and the adjoining suburban area. It renders catering service at social functions, parties, diwali festival and such other similar occasions. By such activities it provides work to the needy and poor women.

It runs tailoring, embroidery and handicraft classes which had a strength of 73 in 1979-80.

The Sangh has maintained a well equipped gymnasium for adults and children. It arranges lectures, discussions, elocution competitions and exhibitions.

In 1979-80 the Sangh had 2,198 members, and its income and expenditure amounted to Rs. 7,91,807.

Maratha Mandir, Bombay Central: The Maratha Mandir was established on 30th March 1945, with the objects of striving for the welfare and progress of the public in educational, cultural, social, economic, and other fields. It is one of the eminent social service organisations in Bombay and it has done useful work in the field of education.

During 1972, the total number of members was 3,000. The annual budget of the institution was Rs. 10 lakhs.

The institution is running several schools in the city and in rural areas. It also grants scholarships to students receiving higher education.

A number of ladies are given advice on family planning. It receives grant-in-aid for educational institutions

to the tune of Rs. 6,50,000 per year from the Government and a small annual grant of Rs. 3,000 from the Bombay Municipal Corporation. It also gets an income of about Rs. 1,00,000 by way of rent from their own properties.

Nagpada Neighbourhood House, Byculla : The Nagpada Neighbourhood House, established in 1927, is a unit of the American Marathi Mission. It is a registered body and is governed by the Mission.

This pioneer social organisation provides a centre where men, women and children from all strata can come together as neighbours for recreation, education, medical assistance and a variety of social services and thereby inspire moral integrity and constructive citizenship.

During the last few years the activities of the house have expanded. It has started classical music and dancing classes, sewing classes, a medical centre and a handicrafts sales centre. The last one was started in 1951 to assist village and cottage industries in marketing their handicrafts. It serves 33 handicrafts-cum-welfare centres throughout India. The house has provided hostel facilities for 33 working men and 16 women belonging to lower income group. The house provides library facilities to about 180 persons daily.

It receives grants from Government as well as from private trusts and individuals. The income and expenditure of the House amounted to Rs. 1,46,283 and Rs. 1,46,422, respectively in 1970.

Parsi Panchayat: The Panchayat had its origin way back in the last quarter of the seventeenth century, presumably in the 1670's during the Governorship of Gerald Aungier. In the beginning it was a quasi judicial-*cum*-social body dispensing justice and enacting *bundobusts*. Between 1775 and 1825 it was a powerful social organisation. Its main function lay in giving help to the indigent Parsis and in maintaining towers of silence and other institutions of public worship. But as time changed the Panchayat assumed the functions more of a utilitarian body than an archaic one. Today its main function is to maintain and manage funds and properties specially established for religious and charitable purposes; and to do such other acts and things as may be directly conducive to the well-being of the Parsis. In the second half of the last century the Panchayat began to settle down to be more charitable or a relief giving institution than merely a socio-religious body.

The first religious act of the Parsis in Bombay was to build a tower of silence in 1672 at Malabar Hill. From 1915 onwards the Panchayat began to build bunglis at the Doongarwadi where dead bodies could be brought for obsequial rites and disposal.

The Sanjan memorial column was built by the Panchayat and was opened on 15th February 1920. The forefathers of present day Parsis are believed to have landed at Sanjan.

The first charitable fund started by the Panchayat for the welfare of the community was for funeral expenses in the year 1826. Four months later another fund was started for giving maintenance relief to the poor and destitute. Various funds have been started including the first one in 1826, by the trustees of the Panchayat and today the trustees practically look after the Parsis of Bombay from the womb to the tomb. The number of beneficiaries from the philanthropic activities of the institution continued to grow from 1826. Since 1960 however the Panchayat is mainly concentrating on giving relief to old and infirm persons.

The Panchayat started its housing programme in 1912, when the first housing colony at Hughes Road sprang up. Uptill 1961 the organisation built 142 buildings in nine different colonies in Bombay accommodating about 1,330 families. Many more residential buildings for the benefit of the Parsis in Bombay were later constructed by the trust.

In 1936, clinic building was built in Gamadia colony where the trustees started a clinic known as the maternity and child welfare clinic which they ran for over 10 years. In the year 1948 the trustees obtained a large donation of Rs. 3,57,200 from the executors of the late Dr. Kaikhushroo M. Gimi and the Health Unit came into existence. The unit is meant for the benefit of poor and lower middle class Parsis.

In 1937, a hostel for college students was built in Gamadia colony from a donation of Rs. 60,000 received from the executors of the will of the late Seth Behramji Hormusji Sorabji. The hostel has 54 single rooms. The fees are kept specially low in order to accommodate poor students. The Trustees started an Employment Bureau in 1935.

The industrial institute for men was established so as to provide employment opportunities to deserving persons. In 1951, a printing press was added to the industrial institute. This is known as the Godrej Memorial Printing Press. It executes fine art work and also undertakes colour printing.

Sir J. J. Commercial Institute was started in July 1953 in Bombay, a part of which was converted into a college known as the Sir J. J. College of Commerce.

F. S. Parukh Dharmshala (Infirmary) is one of the oldest institutions under the control of the trustees. It is a place where the old, infirm, meal, blind and destitute persons are kept and cared for throughout their life. Food, clothing, shelter and medical treatment are offered to the inmates.

The trustees had started a vocational guidance bureau in 1947 which was converted into the department of psychological services in the year 1955 with the addition of a psychotherapist in the Bureau.

Passengers and Traffic Relief Association, Fort: The Passengers and Traffic Relief Association is one of the old social welfare organisations in Bombay established in 1915, with the object to educate, advise and help the travelling public and also those engaged in transport of goods. The Association helps the commuters travelling by railway, bus, taxi and air.

From the beginning, the Association has been fortunate in having a galaxy of good men to guide its

destinies. It acquired a truly national character with the election of Pandit Madan Mohan Malaviya and Prof. K. T. Shah as honorary members in the late twenties.

In 1944, the Government of Bombay invited the association to send its representative on the Traffic Advisory Committee, presided over by the Commissioner of Police, Bombay. Similarly the association got representation on the Zonal Railway Users' Consultative Committee of both the Central and Western Railways, and on the advisory committees of the BEST and the State Transport.

The Association always endeavoured to focus public attention on the problems affecting the comfort and safety of commuters. While seeking official intervention in the interest of commuters, it always depreciated mob violence and acts of hooliganism leading to the destruction of public property.

In January 1977 the membership of the Association was 350 which comprised patrons, life members, ordinary and moffusil members. The income and expenditure of the association in 1975-76 was Rs. 11,678. The value of its assets and liabilities was Rs. 47,125.

Servants of India Society, Charni Road: The Servants of India Society, founded by Late Gopal Krishna Gokhale on 12th June 1905, is the oldest institution of its kind in India. It strives for the training of national missionaries for the service of India and promotion of the welfare of the Indian people. The headquarters of the Society is located at Pune and has branches at Bombay, Madras, Nagpur and Allahabad.

The work of the Society can be broadly categorised under three heads, *viz.*, economic, educational and medical. The Society has been devoting special attention to the welfare of the tribals and backward class people. At present, it is conducting over 100 centres of work for such people in Karnataka State as well as in U.P. At these centres, *balwadis*, primary and secondary schools as also welfare services for women and children are carried on.

Its assets were valued at Rs. 52,68,636. Its annual income and expenditure amounted to Rs. 19,54,575 in 1975-76. It received donations amounting to Rs. 1,25,672 in the same year.

Shri Brihad Bharatiya Samaj, Backbay: Shri Brihad Bharatiya Samaj was established originally in Nairobi in 1950 and subsequently in Bombay in 1951. Under the guidance of the then Indian High Commissioner, Mr. Appa B. Pant, some prominent Indians in Nairobi and Mombasa decided to establish an organisation which could render assistance to Indians from overseas countries visiting their motherland. The Mombasa committee requested their friends in Bombay to form a similar committee in Bombay to carry out the objectives of the Samaj. The Samaj was registered as a public trust in 1957.

It provides accommodation for travellers proceeding to Africa or returning there from, and tries to promote social, cultural and educational interests of Indians at home and abroad.

In 1951, the Samaj started a transit camp in rented premises in the Congress House compound at Vithalbhai Patel Road. The Samaj constructed in 1963 a six storeyed building at Backbay Reclamation, Bombay.

The management of the Samaj is carried on by a board of trustees. In 1977, there were 11 trustees, 4 patrons and 21 life members. The income of the Samaj amounted to Rs. 12 lakhs, while its expenditure stood at Rs. 10 lakhs in 1976-77.

It gives assistance, free of charge, to foreign travellers in matters of customs, immigration, booking of passages by sea, rail and air, obtaining passport renewals, visas etc. It also gave other assistance to the Indian repatriates from Zanzibar and Uganda who were forced to leave the countries of their adoption.

To undertake research into the social and economic problems of Indians settled abroad, a research centre was established in 1963. The research centre was named after Sir Purshottamdas Thakurdas. The Muljibhai Madhavani public library started by the Samaj has a good collection of books. The Samaj conducts a book bank for college students in Bombay. The Samaj gives scholarships to students in colleges affiliated to Indian Universities and overseas. It has made arrangements with the Bombay University under which accommodation is provided in the International Students Hostel near Churchgate to 40 overseas students studying in Bombay colleges every year.

The Samaj constructed the Bhulabhai Desai Auditorium which is made available for cultural performances and educational activities.

It also gives assistance to medical institutions for provision of medical relief to poor and needy persons and also to educational institutions.

It received financial assistance for construction of its building at Backbay Reclamation from the Government of India, the Government of Maharashtra, the Government of Gujarat and from a number of business houses.

Social Service League, Girgaum: The Social Service League was established on 19th March 1911. The aims and objects of the league are to pursue social service with a view to ameliorate the physical, moral, and economic condition of the people; and to adopt measures for the training of social workers.

In 1968-69, the number of members of the League was 319, of which 288 were ordinary members.

The League gets grant-in-aid from the Government of Maharashtra and the Bombay Municipal Corporation. It also gets income from its buildings, an auditorium at Parel, and donations from textile mills, and the Bombay Millowners' Association. Its income and expenditure during 1968-69 was the same amounting to Rs. 7,41,498.

In the field of education the League has done a good work by starting different types of educational institutions. The Mafatlal Gagalbhai Textile Technical School conducted by the League is the only institution of its kind in the country imparting pre-employment and post-employment training in spinning and weaving. The school also trained personnel in textile processes deputed by the textile industry in Ceylon.

It also runs industrial schools for women in Greater Bombay, for training young women in needle-work, embroidery and tailoring. The League has started a high school and a night high school. The former was started in 1966 and had a strength of 800. A training class for social workers was started in 1925, with a view to stimulate interest in social work amongst the people.

It imparts an orientation course in social work of six months' duration. Besides, the League conducts libraries and reading rooms in predominantly working class areas. The League has established an allopathic dispensary and an Ayurvedic dispensary at Parel.

The League has maintained a gymnasium, a drama theatre and a co-operative drama club. The Sahakari Manoranjan Mandal stages dramas for the working class. The League publishes a journal, *viz.*, the *Social Service Quarterly* devoted to the discussion of social problems. Lectures are also organised from time to time to awaken public mind to social problems of the day. A co-operative credit society, started by the League, tries to promote saving habits amongst its members. It also advances loans to its members at a low rate of interest and on easy instalments.

Society for Clean Environment, Chembur: The Society for Clean Environment was formed in December 1969. It is a social, cultural and educational organisation striving for the preservation of a clean environment which is essential for health and welfare of the citizens and their properties.

It runs a laboratory and publishes a quarterly bulletin, the *Scavenger*, It tries to educate the public through lectures, film-shows, talks on radio and television.

During 1976, the total number of members of the society was 316. Its sources of income consist of donations, subscriptions and grants. Its annual income and expenditure amounted to Rs. 70,000 in 1975-

St. Xavier's College Social Service League, Fort: The League was founded in 1950 with the aim of inspiring students with a spirit of selfless and untiring work in the service of the less privileged citizens of the country.

During 1971, the total number of members was 200. The property and assets of the League were valued at Rs. 13,000. During 1971 the annual income and expenditure of the League was the same amounting to Rs. 30,000. The league receives a grant of Rs. 10,000 per bi-annual camp from Government through N.S.S. Grant and Rs. 3,000 as non-Government aid from trusts and donors and Rs. 7,000 from students membership fees.

It adopted Vethi village in Dahanu taluka in May 1968, the main object being implementation of the lift irrigation scheme and induction of the villagers to double cropping. The League is conducting a *balwadi* in the village Vethi for young children and stitching and handicraft classes for women. Free medical aid is provided to the villagers. Educational and documentary films are screened for the villagers.

The authorities of the League hold exhibitions, seminars and a blood donation drive for the Red Cross Organisation.

Young Men's Hindu Association, Girgaum: The Young Men's Hindu Association was established in 1910, with the objects of working for the social, moral, educational and cultural advancement and benefit of the general public. It was registered in 1946.

During 1975 the total number of members on the roll was 498.

Among the varied types of activities undertaken by the Association mention may be made of a reading room, women's tailoring and music classes, *balvikas mandir*, Hindi teaching classes, *vyayamshala* for children and scout and girl guide troupes.

The Association receives annual grant-in-aid from the Bombay Municipal Corporation and the Maharashtra Government for different purposes. The Association has also received donations from Mahalaxmi Temple Charities, Mumbadevi Temple Charities and S. Jindal Charity Trust, Delhi.

During 1975 the income and expenditure of the Association was the same amounting to Rs. 12,786.

Zoroastrian Association, Horniman Circle, Fort: The Zoroastrian Association was founded in 1903 with a view to improve and protect social and financial status of the Parsi community. It also works for the benefit of the community in various fields. The institution has contributed immensely for the upliftment of the Parsis who were always on the forefront in the making of Bombay.

The Association through its work classes imparts instructions in type-writing, short-hand and sewing to its members to earn their living. Scholarships are given every year to the deserving students. It also gives donations to other institutions engaged in welfare work.

The income of the Association is mainly derived from investments in Government securities and fixed deposits with banks.

SPORTS AND RECREATIONAL ORGANISATIONS

Board of Control for Cricket in India (Account is based on Golden Jubilee Volume (1929-79) of the Board of Control for Cricket in India.): The Board of Control for Cricket in India was constituted in December 1928 with Grant Govan as the first President and Anthony S. De Mello as the first Hon. Secretary with the object to advance and control cricket throughout India and to arrange test cricket matches as also other Foreign and inter-regional cricket matches in India.

The Board owes its origin to many factors, such as (1) popularity of the game played in India and a number of matches being played, (2) the growth of prestigious clubs and gymkhanas which acted as effective spring-boards, (3) various wealthy and devoted patrons who encouraged promotion of the game, and (4) the zeal, enthusiasm and dedication of the founding members.

The first recorded cricket match (*Mr. S.C. Caple writes in his book, England vs. India 1886-1959.*) was played in India in 1751 between the teams representing the British Army and the English settlers. But it was not till 1792, when the Calcutta Cricket Club was formed by the members of East India Company, that the game began to be played more regularly.

Within five years of the existence of the Calcutta Cricket Club in 1797, the first friendly fixture between a Military XI and an Island XI was played in Bombay, which seems to have given inspiration to the sporting people of Bombay to follow in the footsteps of their counterparts in Calcutta.

The Parsis were the first among Indians to enter international cricket. A team consisting of Parsi players alone, under the Captainship of Dr. D. H. Patel, was sent on the first tour of England in 1886.

A team which could be called an Indian team in the true sense, selected by a committee on the basis of merit, went on a tour of England for the first time in 1911, under the captainship of Maharaja Bhupinder Singh of Patiala, who along with other princes encouraged the game in India. This visit encouraged the formation of the Cricket Control Board.

The unofficial matches were certainly the precursors of the official Test matches. The Test matches between England and India, started in 1932. C. K. Nayadu was the captain of the first test match between India and -England. Prof. D. B. Deodhar was the first cricketer to record a century in the very first representative international match. Their other colleagues gave evidence of the Indian ability in cricket. In the meanwhile, the game continued to gain popularity, the main cause being the annual competitive festivity in cities like Bombay, Pune, where the famous Triangular, Quadrangular and Pentangular matches (Triangular matches were played between the Europeans, Parsis and Hindus; Quadrangulars between Europeans, Parsis, Hindus and Muslims and Pentangulars between Europeans, Parsis, Hindus, Muslims and 'Rest'. (Also see P. J. Hindu Gymkhana in this Chapter.)) were played. These events attracted the attention of cricket lovers all over the country. The meeting of representatives from various States and Provinces held at Delhi on 21st November 1927 paved the way for the formation of the Board of Cricket Control. The Board was formally framed in 1928. In May 1929, India was admitted as a member to the Imperial Cricket Conference with the unanimous consent of the members present.

Ever since its establishment some championship tournaments are started by the Board. Among those the *Ranji Trophy* is now accepted as the premier tournament for cricket in India.

It is played annually. This championship which was started in 1934-35, structurally underwent important changes twice, firstly in 1957-58, when the competition was converted into a league-*cum*-knock-out affair and secondly in 1970-71 when the first two teams from the Five Zones were allowed to compete in the knock-out stage of the championship.

To commemorate the memory of Ranjit Singhji, an illustrious cricketer and a patron of cricket, the Board of Control for Cricket named this tournament after him. The Late Maharaja Bhupinder Singh of Patiala donated a magnificent gold cup to be awarded to the winners of this championship.

The first match of the 'Ranji Trophy Championship' was played in November 1934 and the Bombay team emerged as the first National Champion.

The Zonal Cricket Tournament in India for the *Duleep Trophy* started in 1961-62. This tournament was named after Duleepsinghji, another cricket immortal and the nephew of 'Ranji'. The first match for the Duleep Trophy between the South Zone and North Zone was played at Madras.

The *Irani Trophy,* started in 1959 by the Board, was named after Mr. Z. R. Irani who had then served the Board in various capacities. The inaugural match played as a part of the Silver Jubilee celebration of the Ranji Trophy Tournament was staged at the Railway Stadium, New Delhi on 18th March 1960 between Bombay (the National Champions) and the Rest of India led by Lala Amarnath.

Inter-University Championship: In 1935, Mr. Baria donated this Trophy to the Board of Control for Cricket in India for a tournament to be played between the Indian Universities. This tournament was managed by the Board till 1940-41.

The Inter-University Tournament has brought to limelight a number of Cricket Stalwarts.

The Vizzy Trophy Tournament is a Zonal tournament for the Universities. It is conducted by a committee called Vizzy Trophy Committee appointed every year by the Cricket Control Board at its Annual General Meeting. It is normally conducted at one centre in the first week of February. Vizzy Trophy is played in four zones. There was a void between cricket at the school level and first class cricket. With an intention of linking up this gap the Board decided to institute this tournament.

All India Schools Championship was started in 1945-46 to tap talent at a younger age, and nurse it so that it could blossom. The Maharaja of Cooch-Bihar, a great patron of the game, offered the Board a trophy for

the tournament, and the Board, in gratitude, named the tournament as All India School Tournament for the Cooch-Bihar Trophy.

Initially, it was an open tournament, played on the knock-out basis and was contested by ten provincial associations. From 1952-53 it took the same pattern as the Ranji Trophy, and is now being played first within a Zone amongst its Associations and then on the inter-Zonal basis amongst the Zonal teams.

The Cricket Control Board introduced in 1973-74 a new tournament especially for those who had not completed 22 years of age, but were not fortunate enough to join colleges. The Bombay Cricket Association, from the funds it had collected to perpetuate the memory of Col. C. K.Nayadu, donated the trophy to the Board to be named as Junior Tournament of India for the C. K. Nayadu Trophy.

A limited overs Zonal tournament was started by the Cricket Control Board in 1973-74, mainly to provide an opportunity to cricketers to adapt themselves to the new type of 'instant' cricket which has become extremely popular in England.

The Maharashtra Cricket Association offered a Trophy to be named after the veteran cricketer, Prof. D. B. Deodhar, for the limited overs Zonal tournament. Its importance lies in the fact that most of the eminent cricketers in India were not accustomed to such matches.

Bombay Cricket Association: Bombay adores a special place in the history of Indian cricket. The city gave birth to a number of cricketers of national and international standing, who have distinguished themselves in test cricket. Bombay cricket fans are known for their enthusiasm and discernment. The Bombay Cricket Association has made valuable contribution in popularising this game and in fostering the spirit of sportsmanship amongst the young. It has also nurtured several eminent cricketers who won distinctions and decorations in national as well as test cricket events. The Association is considered to be a premier cricket association in India. It has its own stadium.

The formation of the Board of Control for Cricket in India spurred the Indian presidencies and States to form their own cricket associations. In order to get affiliation to the Indian Board the leading gymkhanas in Bombay decided to form a cricket association in 1930, and named it as the Bombay Presidency Cricket Association. It was meant for all the areas in the presidency which included Saurashtra, Gujarat and Western Maharashtra. In order to take part in the national cricket championship tournament several new associations sprang up in the Bombay Presidency with the result that the Bombay Presidency Cricket Association had to change its name in 1935 to the present name as Bombay Cricket Association.

The object of the Association is to promote, organise, manage and control the game of cricket in the area controlled by it. The Association has its jurisdiction over Greater Bombay and Thane districts.

Initially the office of the Association was situated in Bombay Gymkhana, later in 1934 it was shifted to Islam Gymkhana, and after 1942, it was again shifted to C.C.I.

As the years rolled by the responsibilities of the Association grew and the activities enlarged. The Association succeeded in getting a sizeable portion of the open space known as the Lloyds Recreation Ground from the Maharashtra Government on lease for a period of 50 years. The present Wankhede Stadium with magnificent pavilions and all the necessary amenities was built in 1974, and the first test match against the West Indies was played at the new stadium in the last week of January 1975. The construction of the stadium owes a lot to the labours and initiative of Mr. S. K. Wankhede, Mr. M. W. Desai and many others.

Amongst the other tournaments which Bombay continued to witness during the first 25 years of existence of the Association the erstwhile Quadrangulars and Pentangulars deserve a special mention. Quadrangulars were converted into Pentangulars in 1937. The year 1937 was an eventful year in the brilliant history of Bombay's cricket. The year was marked by important events such as, Lord Tennyson's team's visit, opening of the C. C. I. pavilion and the Brabourne Stadium, and inauguration of the pentangular tournament, with the 'Rest' team joining Europeans, Parsis, Hindus and Muslims. The Pentangulars continued to be staged till 1946, the year in which the Hindus won the Championship.

The other annual tournament, in which the Bombay Cricket Association's team directly participated was the National Championship of India for the Ranji Trophy, started by the Board of Control for cricket in India in the 1934. Bombay won the championship in the very inaugural year and many subsequent years. The Association's team won the championship 28 times till 1980.

Dr. H. D. Kanga League Cricket Tournament is a major tournament organised by the B. C. Association which is played in monsoon when the wickets are wet, slow, sticky and drying. This tournament was started in 1948.

Dr. H. D. Kanga Memorial Library was founded in 1950 with the initial capital of Rs. 65,000 provided by the Bombay Cricket Association. In 1980-81, the library had 230 Life members, 685 ordinary and 17 corporate members. It has 8,615 books on sports and other subjects.

In 1980-81 the Association had 348 members. At the end of 1980 as many as 17,554 players were on the register of the Association. The Board appoints umpires for all tournaments registered with the association. The Board conducts umpires' examination.

The World Cup Hockey Tournament was played in Bombay for the first time in India in 1981-82. The first hockey test between India and Pakistan was played at the Wankhede Stadium.

Bombay Gymkhana: The Bombay Gymkhana was instituted for European residents on the 19th June 1875, as the result of a meeting of members of various sporting clubs. Prior to that date any one desirous of boating, pigeon-shooting or playing out-door games was obliged to become a member of several separate clubs, and it was not till 1872 that the amalgamation of these clubs into a single central

gymkhana was agreed upon and a site for a pavilion obtained from Government.

As a result of the meeting of 1875, a pavilion was erected at an initial cost of Rs. 18,000 on the open ground adjoining the junction of Esplanade and Waudby roads, and the hockey and football club, the golf club, cricket club, gun club and boat club were all within a short period affiliated to the new gymkhana. The pavilion was subsequently enlarged at a cost of Rs. 7,000; but, having been found insufficient for the needs of the club, it was replaced by a new double-storeyed pavilion facing the cricket ground, which was completed in September 1907, and opened by the Governor of Bombay in the following December. The Gymkhana contains a racquet-court built in 1882. Under the auspices of the club, a Rugby Football Tournament, Athletic and Sport Meetings and Tennis and Racquet Tournaments are annually held, while the management of the Agha Khan Hockey Tournament and the annual Presidency Cricket Match are also vested in it.

After Independence the Bombay Gymkhana maintained its old glamour, and is patronised by the elite society and sport lovers in Bombay. The first test cricket match was played on the ground of this Gymkhana in December 1933.

Bombay Hockey Association: The former Bombay Provincial Hockey Association was established on 2nd October 1934. In 1964 it was renamed as Bombay Hockey Association. The office of the Association was at Cross Maidan near the Parsi well upto 1949, which was shifted to the Cooperage in 1950, and to its present premises near Churchgate railway station in 1951.

The Association has a ground on the plot of land obtained on a lease basis from the Maharashtra Government. The ground extends over an area about 20,000 sq. feet with a sitting capacity of 10 to 12 thousand audience.

The Association conducts Hockey matches on its own ground as well as on the Bombay University Stadium and other grounds in Bombay. It conducts the Bombay Hockey League, Charanjit Rai Tournament, Guru Tegh Bahadur Memorial Gold Cup Hockey Tournament, Bombay Gold Cup Hockey Tournament and the Bombay Hockey Championship.

The Association had 1,512 members as on 31st May 1980. The income and expenditure of the Association amounted to Rs. 87,082 on 31st May 1980.

Bombay Presidency Radio Club Ltd., Colaba: The club was established on 8th March 1928. It is situated on Arthur Bunder Road at Colaba. It is a recreational club equipped with a Badminton court, Billiard room, snooker, skittle game and a card room. The club has a swimming pool for the benefit of members. Reading room facilities are an added attraction for the members. The club has a permit room and a golden jubilee room which are available to the members for lunch and dinner parties. These rooms are also available for meetings, conferences and gatherings on payment.

The Radio Club enjoys the patronage of the elite class from Bombay and has about 4,000 members.

Catholic Gymkhana Ltd., Charni Road : The Gymkhana near Charni Road railway station, was established on 20th December 1913 for promotion of sports activities, cultural activities, such as dramas, debates, seminars etc. and social get-togethers. It has obtained a piece of land on lease from the Government of Maharashtra, on which a pavilion has been erected. The Gymkhana has almost all kinds of facilities for various outdoor and indoor games, such as, Cricket, Badminton, Tennis, Billiards, Chess etc. It participates in several local tournaments. It is affiliated to several sports associations in the State including the Bombay Contract Bridge Association, Bombay Cricket Association (as a member), Bombay Hockey Association, Greater Bombay Badminton Association, Greater Bombay Regional Amateur Athletic Association, Maharashtra State Billiards Association, Maharashtra State Lawn Tennis Association, Maharashtra State Table Tennis Association and Western India Football Association.

The Gymkhana had 1,753 members on its roll in 1982. Its income and expenditure amounted to Rs. 10,34,161 and Rs. 13,47,982, respectively in 1980-81.

Cricket Club of India Ltd.: The Cricket Club of India was founded in 1933. The Brabourne Stadium constructed by it which was a monument of those days came into existence in 1936. The Club occupies an area measuring some 90,000 sq. yards of land which was entirely reclaimed. The C.C.I, is in the very heart of the sophisticated area of Bombay, barely 100 yards from the Churchgate railway station. The Club is entirely cosmopolitan in composition and conception. At present it has about 6,000 members on its roll. It provides several facilities including Tennis, Badminton, Squash courts and a modern swimming pool. The Cricket ground of the Stadium measures 40,000 sq. yards and provides for covered accommodation all round for nearly 50,000 spectators.

It may be recalled that the first test cricket match in India was played in Bombay at the ground of the Bombay Gymkhana in December 1933. The match was played between India and England. The venue of subsequent test matches was shifted to the Brabourne Stadium since 1937.

The Brabourne Stadium became the scene for staging First Class Cricket and test matches in Bombay. The C.C.I, and the B.C.A. had common bonds and many of the office bearers of both the organisations were common. Hence North stand of the stadium was placed at the disposal of the B.C.A. till 1973-74.

After construction of the new Stadium, namely the Wankhede Stadium the venue of test cricket was again changed. The last test match was played at the Brabourne in February 1973.

Though test cricket is not played at the Brabourne now, the Duleep Trophy and Kanga League cricket matches, as also many prestigious football tournaments are staged here.

Golf Club: The Bombay Golf Club was founded on the 9th January 1842. The Club had a goodwill

connection with the Blackheath Golf Club of England. For about five years the Bombay Golf Club flourished, but disappeared about 1848. It was revived for a short span of some years, but in 1861, bereft of most of its members, died a natural death. It was on 16th November 1869 that two English enthusiasts in concert with others, reconstituted the club under the title of the Royal Bombay Golf Club. In 1875, the Club was amalgamated with the Bombay Gymkhana and flourished steadily ever since. Many prestigious trophies were annually competed for by the members of the club.

Islam Gymkhana: The Islam Gymkhana, situated on the Kennedy sea-face between the Parsee Gymkhana and the P. J. Hindu Gymkhana, was established by subscriptions from the Bombay Muhammedan community in 1891, with the object to encourage sports. The pavilion of the Gymkhana and the cricket and tennis grounds were completed in the following year.

The Gymkhana has obtained membership of the Bombay Cricket Association. After Independence membership of the Gymkhana was open to all communities. In 1981-82 it had about 900 members, and has facilities for various sports, such as, Cricket, Table Tennis, Billiard, Chess and other games like cards.

The Gymkhana takes part in several local tournaments such as Kanga League, Salarjung Tournament and Talim shield.

Maharashtra State Badminton Association, Marine Lines, Bombay 20 : The Maharashtra State Badminton Association was established in 1960 with a view to control or govern the game of badminton in the State.

The Badminton Council, established by the Bombay Presidency Olympic Association for badminton was dissolved in 1942 and a new organisation, *viz.*, the Bombay Provincial Badminton Association was formed. In 1952, the name of the Association was changed to the Bombay State Badminton Association and it was again renamed as the Maharashtra State Badminton Association in 1960.

The membership of the Association is open to district associations, zonal associations and individual members. In 1971, there were 6 patrons, 274 life members and 10 ordinary members.

The Association received a nominal grant of Rs. 1,615 in 1971 from the State Government through the sports council. A sum of Rs. 5,000 was donated by the Royal Western India Turf Club Ltd. Its income and expenditure coincided to Rs. 52,544 in 1970-71. The assets of the Association were valued at Rs. 53,707.

Maharashtra State Billiards Association (Islam Gymkhana), Netaji Subhash Road : The Association was established on 1st September 1947, with the object of promoting and developing the game of Billiards and snooker throughout the State of Maharashtra.

In 1972 the Association had 60 ordinary members, 30 life members and 17 patrons.

The Association, since its inception, has been staging the Western India Billiards and Snooker Championships as also conducting the Bombay Billiard League every year. This is open to all ordinary members in Bombay. This has proved a very popular tournament. The Association is utilising the Islam Gymkhana premises as its headquarters.

The Association has produced champions of national and international events. Mr. Wilson Jones was a world amateur champion twice in 1958 and 1964. He is also a holder of world record of 8 centuries in 2 hours of play. Michael Ferreira was also a runner up twice in 1962 and 1969 and broke the world record under the new rules.

The Association receives a grant of Rs. 2,000 per annum from the Maharashtra State Sports Fund.

Orient Club, Girgaum: The Orient Club was opened on |the 1st of May 1900. The main object of the club was avowedly to encourage more intimate and friendly social relations between the leaders of Indian society and European gentlemen.

The Club was initially housed in a hired bungalow on Chowpati, which was subsequently shifted to its own building on the Girgaum Chowpati.

The affairs of the Club are managed by a committee consisting of a president and 14 members elected annually. The Club provides facilities of indoor games like Billiards, Table Tennis, Cards, etc. and a permit room, well patronised by members and their guests. It is mainly a recreational club.

In the year 1981 the Club had 360 members, of which 89 were life members and 215 were permanent members.

The assets of the Club were worth Rs. 7,71,300, while the income and expenditure amounted to Rs. 4,28,130 in 1981.

P. J. Hindu Gymkhana, Marine Lines: The Parmananddas Jivandas Hindu Gymkhana, was opened on 5th May 1894 at the hands of Lord Harris, the Governor of Bombay. A few young enthusiasts in the then Elphinstone High School in 1878 started a club known as the Hindu Cricket Club for encouraging the game of cricket amongst the Hindu public of the city. They had their practice pitch on the Esplanade ground. In 1894, the Bombay Gymkhana, the premier European cricket institution agreed to play a match with the club for the first time and this became a regular annual feature since then. The P. J. Hindu Gymkhana arose out of the Hindu Cricket Club.

The Gymkhana was named as Parmananddas Jivandas Hindu Gymkhana in memory of the father of the chief donor who had contributed a sum of Rs. 10,000.

In 1892, the Bombay Government granted a plot of land on the Kennedy Sea-face (near Marine Lines Station) for cricket pitches, a pavilion, and other sports activities of the club. The expenses were met from donations by Gordhandas Parmananddas, Gordhandas G. Tejpal, Gordhandas Khatau and others.

The Gymkhana has contributed towards promotion of sports in the city of Bombay. It has produced illustrious exponents of Cricket, Tennis and Badminton.

The Gymkhana secured membership of the Bombay Cricket Association in 1933.

The Presidency match arranged between Hindus and Europeans in 1905 gave birth to the triangular cricket matches between the Europeans, Parsis and Hindus. The first match of this tournament was played in 1907. Afterwards the quadrangular match was introduced with the entry of the Mohammedans in 1912, and later in 1937-38 the pentangular with the entry of 'Rest' who were good cricketers but did not belong to any of the above four communities.

In 1937, the Gymkhana staged a festival match on their ground with celebrated cricketers like C. K. Nayadu and Prof. D. B. Deodhar. The Oxford Athletics visited India in 1902 and played against a representative Hindu Team on the Gymkhana ground wherein the players of the Gymkhana distinguished themselves.

The Ranji Trophy championship was introduced by Board of Cricket Control in memory of the great Indian batsman, the late Prince Ranjit Singhji. Many of members of the Gymkhana played in these series since its inception. The P. J. Hindu Gymkhana played an important role in preparing cricketers in Bombay.

Tennis, like cricket which has its own history was first introduced in the Hindu Gymkhana in June 1894.

The Gymkhana took part in the Western India Lawn Tennis Tournament in 1912 which was uptill then confined to the Europeans.

Since the commencement of Tata Shield the Hindu Gymkhana took part in the competitions from time to time and won the shield for the first time in the year 1921.

The Billiards Department of the Gymkhana came into existence in 1902. The Handicap Billiards Tournament was introduced in the year 1914 which is still continued.

A Flying Billiards Tournament was held for the first time on 15th August 1928 and the Open Billiards Tournament was started in 1931 which is being played annually. The game of Snooker and Slosh was introduced in 1943 and the first Handicap Slosh Tournament was held in 1944. The Gymkhana was affiliated to the Bombay State Billiards Association since 29th September 1947.

In 1936, the game of Badminton was introduced with the handsome donation for a Badminton Pavilion from Mr. Motiram Desai. The first Bombay Presidency Amateur open badminton championship was played in August 1938.

In 1942, Gymkhana got affiliation to the Bombay Provincial Badminton Association. Some of the members of this Gymkhana won regional titles, while some were chosen to represent India in the Thomas Cup World Badminton Competition.

Table tennis, then known as Ping Pong was introduced for the first time in the Gymkhana in 1907. A tournament in the singles event was held for the first time in the year 1925. A member of the Gymkhana won the national championship in 1948 and 1949, and was selected to represent India at the World Table Tennis Championship held at Budapest.

Herbert Smith Shield competition was conducted by the *Times of India* and Gymkhana has been taking part in this tournament since 1942. It also participated in the league tournament arranged by the Bombay Table Tennis Association from the year 1940.

The Hindu Gymkhana has 5,496 members. Its income was to the tune of Rs. 9,97,822 while expenditure amounted to Rs. 10,08,525 in 1981.

Parsee Gymkhana: The Parsee Gymkhana was founded on 25th February 1885, to meet the needs of the community for recreation and to encourage sports, athletics and gymnastics. The Gymkhana situated on the Kennedy Sea-face near Marine Lines is one of the old Gymkhanas of Bombay. It occupied its present premises in 1900.

Actual cricket career of the Gymkhana started in 1889 when the services of a military bowler from Colaba were requisitioned to give training to the prospective players. In the same year the annual fixture between the Bombay Gymkhana and the Parsees as a community, as well as between the Parsees and the Poona Gymkhana, were first arranged, and these proved to be the forerunners of the Parsee Presidency Tournaments, Triangular and the Quadrangular tournaments. From 1901 the Bombay match was extended to three days, and came to be known as the Parsee Presidency match.

The Parsee Gymkhana patronised lawn tennis considerably. The first tournament was initiated in 1892. S6me members of this club distinguished themselves in many important matches. In 1921 the Gymkhana won Sir Dorab Tata tennis shield.

Although cricket and lawn tennis always claimed the bulk of attention in the Parsee Gymkhana, other games were not altogether neglected. In1894 football held favour with a certain section, while in 1918, hockey was first introduced.

Apart from outdoor games, the Gymkhana provides for many indoor games. Billiards was first introduced

in 1902. Ping-pong commands its quota of votaries mainly from the colleges, while the extension of the Dinshaw Kanga pavilion put the Gymkhana into possession of one of the best badminton courts in Bombay. Some members have attained proficiency in this game, and in 1930, R. F. Vakharia and N. K. Dubash won the championship in the Seers Cup Tournament.

The affairs of the Gymkhana are controlled by a managing committee elected annually. Among the illustrious band of architects of this Gymkhana, a few names may be mentioned: M. J. M. Framji Patel, Mr. Jamshedji Tata, Sir Jamsetji Jeejeebhoy, Dinshaw Maneckjee Petit, N. N. Wadia, D. J. Tata, F. D. Petit, D. D. Kanga, Dr. M. E. Pavri and many others.

The Gymkhana has about 700 members at present and it is open for all communities.

Princess Victoria Mary Gymkhana and Gymnasium: The Princess Victoria Mary Gymkhana and Gymnasium was established in November 1908. Originally it was founded to commemorate the visit to India on the 9th November 1905 of Victoria Mary, the Princess of Wales. It was started with a nucleus fund of Rs. 6,000 being the surplus from the fund collected for a reception to the princess at the Town Hall on 11th November 1905. Lady Dhunbai Cowasji Jehangir and Miss Serene M. Cursetji pioneered the establishment of the gymnasium. Miss Khanumbai Noormohamed gave a donation of Rs. 40,000 towards the cost of the building and badminton court.

The Gymkhana provides the women of Bombay with all the amenities of healthy club life together with games such as tennis, badminton, table-tennis, billiards etc. Many memorable parties were held in the Gymkhana in the past, such as garden fetes for charities, farewell parties to the illustrious presidents like Lady Minto, Lady Willingdon, and reception to the King and Queen of Afghanistan.

The Gymkhana is now a well established institution which not only renders service to its members, but also encourages social service activities. The Dhun Desai Scholarship was established to help needy sports-loving girls. The disabled and the handicapped are given necessary assistance.

The Gymkhana is affiliated to the Maharashtra State Women's Council, Maharashtra State Badminton Association, Maharashtra State Table Tennis Association, Billiards Association and Cooperage Residents Association.

In 1981 the Gymkhana had 972 members and assets worth Rs. 9,19,176, while the income and expenditure amounted to Rs. 2,22,294.

Royal Bombay Yacht Club: As early as 1839 Yacht-racing and boat-racing were in vogue in Bombay. Originally the Yacht Club is reported to have been formed in 1846. The existence of the Yacht Club as a properly established institution dates from the year 1880 when a proposal to build a club-house was first made.

The original premises of the Club on the site of what was then called the Wellington reclamation were obtained on lease of 50 years.

The Yacht Club was formerly a favourite resort of the European society of Bombay. The most note-worthy addition to the club was a fine block of residential chambers on the South side of the Apollo Bunder Road, in 1898.

The original beautiful building of the Club was taken over by the Bhabha Atomic Research Centre after Independence and the activities of the Club were shifted in the magnificent stone building just facing the old one

Though originally a European club, at present majority of the members are Indians. Sailing sports is the main activity of the club. At present the Club has six yachts. Occasionally Club arranges social functions in honour of members or guests. It provides facilities for table tennis and Billiards, as also a library and restaurant.

Royal Western India Turf Club Ltd., Mahalaxmi: The Royal Western India Turf Club, founded in about 1800, controls racing held in Bombay, Pune and New Delhi. It owns two race courses, one being at Mahalaxmi, Bombay and the other at Pune.

From 1828 all horse racing in Bombay was held at Byculla, the winning post of the old race course being situated in front of the Byculla Club. In 1883 (1880 as per Bombay City Gazetteer, Vol. III, p. 238 (1909).) this venue of racing was shifted to Mahalaxmi. The 2.5 km. race course and its enclosures studded with lawns, gardens and paddocks have been transformed into a beautiful spot.

In 1935, King George V, then Emperor of India, was graciously pleased to grant permission to the Western India Turf Club to use the title ' Royal'. Since then it is called as the Royal Western India Turf Club Ltd.

The Apprentice Jockeys' School was started in June 1938 under the guidance of the stipendiary stewards of the club which has produced since then many top class jockeys.

In the year 1967 the club started inter-venue betting between Bombay and Pune, *i.e.* when the races are held in Bombay, betting is accepted at the Pune race course. In 1974, it was the first club to start intervenue betting with the Bangalore Turf Club and this is a regular feature since then. In addition to this, this club accepts inter-State betting on races run in Calcutta, Madras and Bangalore for the Indian Turf Invitation Cup.

The racing season at Bombay commences in December and lasts till the middle of April providing 26 to 30 days of racing. The Club holds special races in aid of charities every year.

The centre of the Bombay race course is divided into playing fields and allocated to different institutions who apply for the use of the same.

Besides being the venue of races, the race course provides excellent facilities for entertainment, clubactivity and walking. It is the biggest open ground in Bombay, and is well maintained.

The assets of the Club amounted to Rs. 4,40,02,203 and its income and expenditure amounted to Rs. 22,38,973 in the year ending with June 1976.

Western India Football Association, Cooperage: The Western India Football Association was established in 1889. The main objectives of the Association are to promote, control and develop the game of football in the State of Maharashtra, and sending the State teams for national and international events. The Association imparts training and coaching to players and referees. It has produced many Olympians and International football players who have represented the country in international tournaments. The State Association had won the National Championship in 1951 and 1964, which were held at Madras.

The Association has obtained the football ground on lease from the Government of Maharashtra. In 1982, it has 742 individual members, 90 institutional club members, while eleven District Football Associations are affiliated to it. They are granted permission to conduct football competitions. The Association provides help to the disabled players and strives for welfare of the members. It conducts fund raising programmes for flood relief, hospitals and other social services as demanded by circumstances.

Willingdon Sports Club, Mahalaxmi (Also see Chapter-2, History, Modern Period, in Vol. I of *Greater Bombay Gazetteer.*): The Willingdon Sports Club was founded by Lord Willingdon, the Governor of Bombay, in the year 1917 as a social club to enable business people, executives and dignitaries to meet and play various games. The total membership of the club was 2,900 on 4th May 1977.

Foreign dignitaries and VIPs and foreigners participating in various types of games and sports are allowed to make use of the club as guests of members.

The Club has magnificent lounges and splendid lawns, which are maintained upto international standards. All facilities for indoor games, lawn tennis and polo are provided for the benefit of members. The entire premises of the Club are beautified with luxuriant gardens and trees. The Club is patronised by the aristocratic society of Bombay.

WOMEN'S ORGANISATIONS

Bapnu Ghar: Bapnu Ghar is a unique institution founded in 1953 by Mr. Manu Subedar, the philanthropic chairman of the Lotus Trust. In 1956 the management of the Bapnu Ghar was entrusted to the Maharashtra State Women's Council by the Lotus Trust. The Bapnu Ghar Committee was formed by the Maharashtra State Women's Council to look after its day-to-day management and deal with the cases which come to Bapnu Ghar.

Bapnu Ghar offers free shelter to all women who are in social distress. It does not keep any one permanently. The aim of the institution is to arrange for reconciliation and to see that a woman returns to a happy home. The institution does not admit unmarried mothers or destitutes. On an average over hundred women have been admitted every year and nearly 40 per cent of them have been reconciled back into their families.

Admission to Bapnu Ghar is free and women receive some domestic training. The entire work of the institution is done by the inmates themselves. Also to give the women some sort of education literacy, sewing and embroidery classes are conducted regularly. All inmates are medically examined on admission and when the need arises they are referred to a hospital for treatment. The children's film committee of the Maharashtra State Women's Council organises film shows of educational value.

Children, whose mothers are obliged to stay in the institution for a length of time, and who cannot be kept with their mothers and whose fathers and relatives refuse to take their responsibility are being sent to the William Booth Salvation Army School at Ahmadnagar and to the Byramjee Jejeebhoy School at Matunga. The educational expenses of these children are paid by philanthropic individuals.

Apart from this, arrangements have been made for some children to receive free education at Nadiad Hindu Anath Ashram. Some inmates are sent for free education to Vikas Vidyalaya, Wadhwan and Kasturba Vikas Griha, Bhavnagar. The family counselling service of Bapnu Ghar provides assistance and advice to non-residential cases.

Beggars' Home for Females, Chembur: It was established in 1946 for the detention, training and rehabilitation of women beggars admitted under the Bombay Prevention of Begging Act, 1959.

Women admitted in this institution are first trained in various crafts such as tailoring, basket making, broom making, etc. and subsequently are rehabilitated either by providing employment or reconciliation with their relatives. Besides the general section for handicapped women, there is a section for leprosy treatment in the Home.

Bhagini Samaj, Khetwadi:—The Bhagini Samaj was founded on the 19th February 1916 in memory of the late Gopal Krishna Gokhale. It is one of the pioneer cosmopolitan women's institutions functioning in Bombay. It was founded with a view to work for social, educational, economic and physical welfare of men, women and children.

It conducts various activities like *Balmandirs*, cultural, educational, recreational and industrial classes and free library for women and children at Khetwadi, Mandvi, Bhuleshwar and Tardeo. Besides, it also runs two

other primary schools. Needy women are provided tailoring, embroidery and other handicraft work. Two hostels for working women have been provided by the Samaj at Lamington Road and Gokhale Road (Dadar).

The Samaj also conducts child care centres in different localities where pre-natal and post-natal care as well as free medical service is given to mothers and children. Lectures, film shows and exhibitions are arranged to propagate consciousness about health, balanced diet and family planning.

Apart from above activities conducted in Bombay, the Samaj runs the following educational institutions at Udwada, a hostel for adivasi girls, a *balmandir*, a primary school for boys and girls, a multi-purpose high school with home science, a primary teachers' training college for women, and an *ashram shala* for boys and girls.

Bhagini Seva Mandir Kumarika Stree Mandal, Vile Parle: The Bhagini Seva Mandir Kumarika Stree Mandal was established in 1929 for the upliftment of women and children and to help the handicapped.

As on 19th March 1977 the total membership of the Mandal was 1,200. The educational activities of the Mandal comprise montessori, primary and high school, junior college of education for women, a tailoring class, and a school for mentally retarded children. Besides, the Mandal conducts short term courses, *viz.*, *a* Yoga class and cooking and hair-style classes.

The work of training and education of retarded children was taken up in hand by the Mandal with a view to train them to look after themselves and to earn their living. With this idea in mind the mandal started a school with three children on its roll in the year 1954. In 1972 the school had 67 children in the age group of 5 to 18 years. They are given general education as also training in different crafts like, cane work, fret work, pottery, painting and embroidery.

During 1975-76, the income and expenditure of the Mandal stood at Rs. 4,41,314 and Rs. 4,54,400, respectively.

Dadar Bhagini Samaj, Dadar: The Samaj was established in 1932 to achieve cultural, social and economic progress of women and children. Women above eighteen years are eligible for membership. During January 1977, there were 80 members on roll.

The activities of the institution are carried out through various centres such as *udyog mandir*, *arogya kendra and kreeda kendra*. The catering establishment of the Samaj is known in Dadar locality, which provides snacks to school children, and people from nearby offices. It also takes catering contracts of marriage parties and similar occasions. By such other activities it provides work to the needy and poor women.

It receives municipal grants for the library and health centre.

Keraleeya Mahila Samaj, Shivaji Park: The Keraleeya Mahila Samaj was established in 1944 with the object of undertaking social, cultural and educational activities for the welfare of the community. In 1972, it had 250 members including 45 life-members. Daring 1971-72, the income and expenditure of the Samaj was Rs. 20,000 andRs. 15,000, respectively.

The Samaj possesses a small building on a plot given on lease by the Municipal Corporation. It conducts K. G. classes, dance classes, classes in cooking, painting, flower arrangement, etc. for its members.

The Samaj holds cultural functions, sales, social gatherings and a portion of the amount collected was donated to charitable work like *jawans* welfare fund and Society for the Rehabilitation of the Physically Handicapped.

Maharashtra State Women's Council, Town Hall: The Maharashtra State Women's Council was founded in 1919. The objects of the Council are to associate women of all nationalities in Maharashtra State for mutual help and the service of others, to further the interests and advancement of women and children in India; to train women in the responsibilities of citizenship; to organise work of a special nature in case of any emergency and to collect funds for the same.

The income of the Council was Rs. 2,84,670 and the expenditure incurred Rs. 2,92,406 during the year 1970-71. It received donation worth Rs. 80,227, grant from Government and private bodies Rs. 22,527 and income from internal sources Rs. 1,81,916 in the year 1970-71.

The Council is federated to the National Council of Women in India which in turn is affiliated to the International Council of Women In 1971, it had 1,880 members. The Council has many committees whose activities are as under:—

- (1)Rescue Home gives shelter to court committed girls in moral danger and court committed children.
- (2) Bapnu Ghar provides refuge for women in social distress.
- (3) Worli Welfare Centre—Kasturibai Khandelwal Nari Seva Sadan provides the means of augmenting their meagre faily income of women.
- (4)Parliamentary Committee acts as the watch-dog of legislation concerning women and children.
- (5)Haj Group helps helpless women who are in transit through Bombay on their way to and from the Haj. (6)Labour Committee conducts tailoring classes for women and nursery classes for children in Matunga Labour Camp.
- (7) Women's Home Industries Depot Committee markets articles made by needy women.
- (8) Social Education Committee teaches women in functional accomplishments in order to employ their leisure hours usefully. It also conducts literacy classes.
- (9) Children's Recreation Committee has 9 centres in the city, where trained workers conduct group recreational activities.
- (10)Children's Library Committee with its mobile library van, holiday library and book service provides

children with good reading.

(11)Child Welfare Committee runs a child guidance clinic for problems of delinquency and special classes for the mentally retarded. A day care centre called *Naunihal* is also run for children of pre-primary school age.

(12)Health Committee conducts health centres at rescue home and Matunga Labour Camp with special emphasis on propagation of family planning.

(13) Ad hoc Milk Distribution Committee distributes milk to undernourished children through its 12 centres.

(14)Beggar Problem Group has as its aim the elimination of the beggar nuisance in the city.

(15) Children's Film Group arranges film shows for children during school vacations at special low rates.

(16) Civic Group seeks redress of citizens' grievances which are of a public nature, tries to instil civic awareness and brings to the notice of municipal authorities various public needs.

(17) Foster Care.—This programme was undertaken from November 1969 on a request from the Central Social Welfare Board. It is a new concept in social work for our country, whereby children receive care in foster homes without being institutionalised when their parents for one reason or another are not in a position to provide for them.

(18) Junior Wing was started to train future leadership for the Council. As an initial approach the members of the group run a Balwadi in the compound of the Town Hall. They provide recreational opportunities for these children and also distribute free milk to them.

(19)Child Guidance Clinic (Rescue Home).—Recognising the need for more and more child guidance clinics, the Council opened another clinic at Rescue Home premises for the inmates and children of rescue home, remand home as well as of the locality. Under trained guidance the mental and physical development of the child receive a new impetus.

(20)Funds Committee strives to collect money essential to maintain and expand the activities of the Council outlined above.

Seva Sadan Society, Gamdevi: The Seva Sadan Society is a well organised, growing and progressive organisation aiming exclusively at the all round progress and well being of women. It was established on 11th July 1908. At present it runs various types of educational institutions such as a primary school, a high-school, a training college, English classes for adults; ashrams and a home for vagrant children and centres of cooking, hosiery and laundry. The details of some of these constituents are given below:—

The Hindu ashram and the Parsi ashram are primarily meant for their own students and workers.

The home for the homeless admits orphans, widows, deserted women and such other needy women and girls. The inmates of the home are given instruction in the schools and training college. They are also taught tailoring, embroidery, cooking etc. and thus are, made themselves self-supporting. The total number of inmates in the year 1971 was 40.

The training college *viz.*, Ramabai Nowrange Junior College of Education had four divisions, and had a strength of 180 in 1970-71. The strength of primary school and high school in the same year was 319 and 556, respectively.

The English classes are mainly conducted for adult women. A typewriting class was started for ladies in 1967.

In 1971, there were 107 members of the Society. It receives a Government grant for training college and a high school and a municipal grant for primary school.

Shraddhanand Mahilashram, King's Circle: Shraddhanand Mahilashram conducted by the Hindu Women's Rescue Home Society was founded in December 1927. It was mainly established to provide shelter and assistance to those women and children who are in distress and thereby to rehabilitate them.

The institution, though in the beginning started only as a rescue home, has now developed into a multipurpose institution to help and up-lift children and women in distress. It provides multifarious facilities by conducting primary school, tailoring and embroidery classes, a fondling home, orphanage, rescue home and home for old and infirm women. Besides, the institution also conducts a work-centre for women staying outside the *ashram* premises which helps them to supplement their income.

In 1967-68, 46 women were admitted in the *ashram*, which number rose to 60 in 1970-71. The institute provides these women with lodging, boarding and protection free of charge until they are properly rehabilitated by securing a job on completion of education or by marriage. The section of girl students and after-care section of the institution together had 18 girls in 1970-71.

The State Government pays capitation on maintenance charges at various rates from Rs. 15 to Rs. 37. 50 per month per head, for orphans, rescue and preventive cases, children on remand, court-committed children, old and infirm women, convicts, etc. Besides, the Bombay Municipal Corporation pays an annual grant. The annual income and expenditure of the home amounted to Rs. 5,09,368 and Rs. 5,08,117, respectively during 1970-71.

Shri Jain Mahila Samaj, Marine Drive: Shri Jain Mahila Samaj was established in October 1910, with the object of making all round progress of women and children through conducting schools, libraries, classes for adult women and by inculcating the spirit of co-operation among them.

The Samaj is conducting literary classes through Gujarati, Hindi and English languages for adult women in the Fort and Dadar areas. Sewing classes are also conducted and many trainees have secured Government diploma. No fees are charged for attending the classes. Besides, the Samaj is conducting a balmandir at Dadar and a library located in Fort area with 15,000 books to its credit.

A monthly magazine *Vikas*, published by the Samaj deals not only with news about the activities of the Samaj but also publishes articles on cultural subjects.

The yearly expenses of the Samaj exceed over Rs. 21,000 while the regular income is Rs. 11,000.

Vanita Vishram, Girgaum: The Vanita Vishram was founded at Bombay in 1915 with a view to ameliorating the social, economic and other problems of suffering women by educating them. It was registered under the Indian Companies Act in 1928. Smt. Zaverbai Bhagwandas Narottamdas then donated Rs. 50,000 towards the cost of construction of a building.

The Vanita Vishram Training College, an institute for training women teachers for primary and upper primary schools, was established in 1916. The entire responsibility of running the sixty year old Sir M. N. Kanya-shala was taken over by the Vanita Vishram. Besides, the Vanita Vishram runs an *ashram* and an English school. Sir Vithaldas Damodar Thackarsey donated Rs. 1,00,000 for the *Ashram* in 1918 in memory of his mother and it has been named as Smt. Nathibai Ashram. The English school was started in 1924 and was subsequently affiliated to the Shrimati Nathibai Damodar Thackarsey Women's University, Bombay in 1930. The school is housed in its own building.

The total assets of the Vishram in 1969-70 were valued at Rs. 23,75,930, while its income and expenditure amounted to Rs. 85,255.

Vile Parle Mahila Sangh, Vile Parle: The Mahila Sangh was founded in 1952. It aims at alround development of women and children. It runs a *Shishuvihar,* primary and secondary schools and a women's college; an employment centre; handicraft classes, a health centre for children, a family planning centre and a marriage bureau. It also maintains a library, and arranges for exhibitions, lectures, picnics and games for women.

In 1969-70 the total number of members of the Sangh was about 800. The assets of the Sangh were valued at Rs. 4,74,282, while its income and expenditure amounted to Rs. 74,924 in 1969-70. It received donations from the public amounting to Rs. 42,509 in 1969-70.

Young Women's Christian Association of Bombay, Fort: The Young Women's Christian Association, an organisation in the service of women, was established in Bombay in 1875. It is a branch of the Young Women's Christian Association of India with its headquarters at New Delhi, which in turn is a part of the World Young Women's Christian Association with headquarters at Quai Wilson, Geneva. The Association endeavours to promote the full development of women and girls irrespective of race, culture and creed.

The board of management, an elected body of the Association, carries out various programmes relating to housing, education, cultural exchanges etc. and welfare service.

To solve the problem of housing for working women, hostels are run by the Young Women's Christian Association in many parts of the country. The first hostel was started in Bombay in 1887 at Dhobi Talao. The Young Women's Christian Association stepped in the field of vocational education and employment by starting a commercial school and an employment bureau in 1905. The education programme covers a wide range of subjects from domestic art to public involvement in social service and understanding of political responsibilities and from individual development to community development. It conducts four *balwadis* at Colaba, Worli, Sewri and Modiwadi, and provides supplementary diet to undernourished children. It has also undertaken a free feeding programme for a certain number of children in the Express Highway area children's complex.

It runs a tailoring class for ladies and children's garments and a weaving class at Andheri for school drop outs. A nutrition education project was started in 1960 to teach the low income group women about low cost balanced diet. It also undertook a bakery craft training project for housewives as well as small bakers and low-income group women.

It renders help to the police, in rehabilitating or re-uniting with their families, girls who have been abducted or who have absconded. It conducts a welfare centre. To cater to the needs of foreign and national tourists the Young Women's Christian Association opened the international guest house in 1970.

The Young Women's Christian Association has membership of nearly 1,000. Financial assistance is sought from the public at Carnival. It receives financial assistance from the Wheat Associates (U.S.A.) for its bakers' training and nutrition project.

PLACES



Maharashtra State Gazetteers

AAREY PARK AND PICNIC SPOT



FORMERLY AAREY WAS A LITTLE VILLAGE UNHEARD OF and was located in Salsette about 5 km. east of Goregaon railway station on the Churchgate-Virar suburban section of the Western Railway. It was sparsely inhabited by Adivasis, till just three decades ago. Today it has become popular as the location of the Aarey Milk Colony from where lakhs of citizens of Bombay obtain their supply of milk. Before establishing the colony it was merely a jungle tract with hardly any scope for development till it was chosen to be the home of the thousands of milch cattle which were kept in wretched condition in the filthy stables spread all

over Bombay. Now it is not only the principal and the best source of milk supply to Bombay but also a pleasant picnic spot in Bombay. Initially an area of about 1619 hectares (4000 acres) of land valued at Rs. 40 lakhs was acquired by the Government, the entire jungle was cleared, dairy farms were erected and most of the cattle from the limit of the Bombay city was removed to farms.

At the entrance of the Aarey Colony there is a hill on which a special observation pavilion has been built. From the pavilion one gets a wide view of the entire colony and of the beautiful surrounding country. Besides the attractively built pavilion, where there are charts and maps showing the lay-out of the colony and explaining the scheme, very pretty lawns and gardens have also been laid out on the hill which add to the charm of the place.

The main attraction of the visitors is an inspection bungalow of the colony which is reputed to be the largest in Asia and one of the best of its kind in the world. Close to the Aarey colony has been developed a picnic spot. In order to assist holiday makers and encourage them in their outings, various shady spots have been especially prepared with arrangements for a stove, wooden seats round shade-spreading trees, and lawns. There are twelve such spots. Many of them also command excellent views. Facilities have also been provided for the canteen which serves snacks and meals and of course milk to the visitors. It is frequented by a number of visitors especially during the fair season. A number of BEST buses ply towards these spots.

ADI SHANKARA TEMPLE, MATUNGA

The temple dedicated to Adi Shankara Bhagavadpada who is considered by devout Hindus to be none other than Dakshinamurti or Shiva himself, has been constructed recently at considerable expenditure running into a few lakhs on the Telang Road at Matunga. It has been constructed by Shri Shankara Mattaiam at Matunga. Dakshinamurti is supposed to have come to this great land of ours to restore Hinduism, to reinstate and to re-establish the six faiths of Hinduism, namely, Ganapatyam (faith of Ganapati), Shaktam (faith of Shakti), Sauram (faith of Surya), Vaishnavam (faith of Vishnu), Shaivam (faith of Shiva) and Kaumaram (faith of Kartikeya). The temple is flanked on the right by Varasiddhi Yinayaka and on the left by Anjaneya. The temple has a majestic Rajagopuram. Looking up at the Rajagopuram could be seen five parts or steps representing the five elements of the universe or the Pancha Bhutas. The gopuram is also referred to as the Sthula Linga. There are images of Shiva, Vishnu, Brahma and Shankaratatvas in the gopuram. On both the sides of the gopuram are Shankanidhi and Padmanidhi. On the salai gopurams are the images of Ganapati, Vyasa and Agastya on the right and Muruga, Valli and Devasena on the left.

Ascending a few steps leading to *ardhamandapa* there are two elephants facing west and south-west. They are the Aryanam and Pushpadantam, two of the eight legendary elephants that guard the above directions. By their side are the images of *Vayu* and *Varuna*, the *Dishadhipatis* of the same.

On climbing the flight of 22 steps to reach the *Mahamandapa*, could be seen important episodes from the life of His Holiness painted on the walls. We also have a pictorial presentation of the extensive travels undertaken by Shri Shankara across the country and the establishment of the different Maths. The scene of *Gitopadesha* is depicted on the wall facing the main entrance.

At the entrance of the main hall or the *mahamandapa* is a beam supported by two pillars with thirty-six lotuses each with thirty-six petals. This is the decorated entrance to the mandapa or the 'Thorannavasal'. The lotuses represent the thirty-six tatvas of Hindu religion.

The temple has a spacious sabhamdndap admeasuring 15.54 m. x 21.95 m. (51' x 72 '). Looking around could be seen five pillars on either side. The figures on these pillars, viz., Dattatreya, Narayana, Padmodbhava, Vashistha, Shakti, Parashara, Vyasa, Shuka, Goudapadar and Govinda Bhagavadpdaar represent the *guru pitham* of the *Adiguru* himself. Panels on the wall depict the disciples of the Bhagavadpada. On the sides of the walls could be seen a row of swans, *Hansapakshis* facing towards *garbha-graha*. Looking up the ceiling the eyes are pleased to see the legendary lotus with 1,008 petals, the Bindukona in the centre which is said to be the abode of Adi Parashakti. On the four sides of the Sahasradala Padma Sharir Tatva, Trilokyamohana, Sarvarakshkara and Sarvarthasadhaka Chakras are portrayed.

The marble image of the Jagadguru is seated with a serene face preaching the greatness of Hinduism, the Sanatana Dharma, to the world. In front of it is the Shiva Linga. Thus the Mulatatvas of Shri Dakshinamurti and the incarnation in the form of Adi Shankara are there in front of the visitor. The traditional Dwarpalakas stand guard on either side of the entrance and the image of Swarnalakshmi is at the top.

On the outer *prakarams* of the garbhagriha are the six principal deities of the Hindu pantheon. Great care has been taken to follow Agama Shastras in building these temples and in the selection of stones from

which six deities have been carved.

First and foremost is the Omkara Swarupa Lord Ganesha. The temple is in the shape of *Gajapooshtam* or the back of the elephant. The temple of Shakti is in the form of *trikona* and faces the direction of Kubera. The temple of Surya is circular and that of Vishnu is square in shape. Dakshinamurti's temple is in the form of *panchakona* (pentagon) and that of Kartikeya is in the form of *shatkona* (hexagon).

After going round the *prakaram* on descending a few steps one gets a darshan of the Bhusparshastambha. Another unique feature is that the *abhishekatirtha* of all the deities go back to the garbhagriha, go round the Shiva Linga and Adi Shankara and comes out here through the Gomukha which represent that all the rivers merge ultimately in the ocean. Here is a big library and a hall to conduct Veda classes. A few more steps down lead to the ground floor where lies a hall for a primary Veda class. On the right could be seen a well (Vapi Kupam) for drawing water for Puja purposes. Coming out one crosses the *go-shala* and climbs seventy-two steps to reach the top to have a closer view of the *Vimana*.

The *Tridala Vimana* represents, Vishishtadvaitam, Dvaitam and Advaitam. There are three parts to the Sthupi. We have *Hansapakshis* on the top and the images of Shankara, Ganapati, Shakti, Surya, Vishnu, Dakshinamurti and Kartikeya in standing and sitting postures in the next two parts in the same order.

BABULNATH TEMPLE



The Babulnath temple, which is said to have taken its name from the individual who according to one account built the original shrine about 1780 and who according to other account was the cowherd boy, stands half way down the south-east portion of Malabar hill, a little to the south of the steps leading to the Parsi Tower of Silence. As per the other account (The Rise of Bombay by S.M.Edwardes, p. 40) the temple was known as Babhulnath, as near the temple was the plantation of Acacia arabica or Babhul, the reverence paid to which must have occasioned the building of a shrine of Babhulnath, ultimately Babulnath. It can now be approached by steps either from Babulnath road or Malabar Hill. The chief object of worship is a black stone *linga* of Mahadeva. According to one account it is supposed to have been discovered near Varli (Worli) while according to the other account it is considered to be a Swayambhu (self-born) linga and is said to have been discovered at the very place where it exists at present. According to an anecdote, Babul, the cowherd boy daily accompanied the cattle of one Pandurang Sonar who was the owner of the Malabar hill then. It so happened one day and thereafter that one of the best cows, 'Kapila' of Shri Pandurang Sonar stopped giving milk in the evening. Pandurang Sonar therefore asked ' Babul ' to investigate and find out the reason for it. ' Babul ' hence kept watch over the cow and found out that the said robust cow dripped away all milk at a particular

spot of the hill and this fact was reported to his master. So Pandurang came over the hill next day and saw himself what was happening. He therefore decided to get the ground dug and the *Shivalinga* was discovered. Hence Babul-nathji is considered to be a *Swayambhu linga*. An idol of 'Ganapati' and that of 'Mataji' were also found. Pandurang Sonar wanted to take away the 'Shiva-Linga 'to his residence but could not do it as it was firmly imbedded in the rock. He, therefore, prepared a small hut around the 'Shivalinga' and since then the worshippers started to flock for *darshana*.

From the outset the pleasant surroundings of the shrine and its proximity to the city rendered it popular. The construction of the new and larger temple was commenced in 1836 and completed about 1840 by subscriptions from the Gujarat Banias and Bhatias of the City. Subsequently a claim of the Parsi community to the land around the temple was successfully contested in the High Court, whereupon the above noted communities combined to rebuild the temple in its present form. The present temple with its high spire and pillared hall and terrace was completed about 1900. The warden of the shrine is a Gujarat Brahman, who keeps the *nandadip* burning, and presides at the daily services, which are attended by about twenty persons. On Mondays, the visitors, who are mostly Gujaratis and Maharashtrians, number more than two thousands while on Mondays in the month of *Shravan*, the concourse of devotees numbers more than five thousands. A special feature of the worship in *Shravan* is the *ghipuja* or worship in clarified butter. Over the *linga* is erected a lotus, a representation of the Ganges on a five-hooded serpent, decorated with patches of gold, silver and mica. Other chief occasion of worship is the *Pithori Amavasya* which falls on the last day of the month of Bhadrapada (August-September).

BHAU DAJI LAD MUSEUM

The Bhau Daji Lad Museum, formerly known as the Victoria and Albert Museum stands in the Veermata Jijabai Bhonsale Udyan, the former Victoria Gardens. The museum was founded in 1858 and was built to commemorate the assumption of the title of the Empress by Queen Victoria. The building was constructed on the subscription raised by the late Sir G. Birdwood on his being appointed as curator by Lord Elphinstone. The foundation stone of the building was laid in 1862 by Sir Bartle Frere and the construction of the building was completed in 1871. It has been built in Italian Renaissance style and has a highly ornamental interior with a fine ceiling

On founding the museum the collection of maps, prints, photographs, etc., illustrating the history of Bombay, was transferred here from Fort Barracks. Many of the important specimens formerly housed in this museum have recently been transferred to the Prince of Wales Museum. However the collection of old

prints, photographs, maps and drawings of Bombay and collection of indigenous economic products yet attract the attention of the visitors. The Museum has a reference library on Indian art, archaeology, etymology, geology, numismatics and such other subjects. A few specimens of Indian painting, metalware, silver-ware and some pre-historic finds are also displayed in the Museum.

The Museum has recently been named after late Dr. Bhau Daji Lad, a famous indologist, educationist, political leader and a great social reformer of the last century.



BOMBAY HIGH COURT

By the side of the University Library and the Clock Tower towards the north stands the gracious building that houses the High Court of Bombay. The building is in early English-Gothic style and was designed by Colonel J. A. Fuller. The construction of the building on the sea frontage was completed in 1879 at a cost of Rs. 16,44,528. The walls are of rubble and chunam faced with blue basalt roughly dressed and in shallow courses. It is an enormous building 562 feet in length and 187 in breadth. Its general height to the east is 90 feet, and the central feature is 178 1/2 feet in height. The west wing was added much later, The principal entrance is under a large arched porch in the west facade on either side of which is an octagon tower 120 feet high, with pinnacles of white Porbandar stone, and surmounted by statues of Justice and Mercy. The main staircase is on the eastern side and is approached by a noble groined corridor in Porbandar stone, which runs through the building. The offices of the High Court are on the first and third floors. The Appellate and Original

Courts are on the first and second floors. The Criminal Court is in the centre of the building, above the main corridor, and has a carved teak gallery for the public, running round three sides. The ceiling is of dark polished teak in panels, with a carved centre-piece. The floor is made up of Italian mosaic. A number of portraits of the past Chief Justices and Judges are hung in the different Courts.

The High Court of Bombay was established as a Supreme Court in the year 1824 with Sir E. West as the first Chief Justice. It became a High Court in 1862. (For history see Chapter 12 in this Gazetteer.)

Recently, an additional building in modern style was built nearby to house additional offices and courts.

The working and the architecture of the High Court does full justice to the First City in India that is Bombay.



BOMBAY RACE COURSE

The earliest reference of horse racing in Bombay is contained in the following extract from the *Bombay Courier* of the 25th November, 1797:—

" A plan having been set on foot for establishing races at this Presidency, which has hitherto met with very general encouragement, this is to give notice that in the course of next month a race will be run for a purse of 50 pounds. After the race there will be breakfast for the ladies and gentlemen at the race stand and a ball and supper in the evening."

By the 21st December 1797, sufficient funds had been subscribed by "the gentlemen of the settlement " to allow of two plates being run, and the 10th January was fixed as the first day of the two days' meeting. The ground upon which these races were run was, with the sanction of the Bombay Government, purchased by the stewards and managers. By 1800 the Bombay Turf Club had been established.

In 1839 the races had expanded into a five days meeting held at what was then the Byculla Club, and organised by "the friends of the turf". According to Mrs. Postans the races took place annually in January and were well patronised. The course was kept in good order.

About 1880 (1883 as per information sent by Turf Club.) the race-course was moved to the present site at Mahalakshmi, which is now held on lease. Successive Secretaries have wrought many changes in the appearance of the Bombay Race Course. The 2.4 kilometres course and its enclosures studded with lawns, gardens and paddocks have been transformed into a beautiful spot, where the public of Bombay can be seen gathering every race-day afternoon. The Mahalaxmi Race Course has established itself as one of the sights of Bombay and distinguished visitors to Bombay always find it on their itinerary. Of recent years racing has become very popular with all classes, the chief supporters being the rich gentry and middle class gentlemen, some of whom own valuable racing studs. During the cold weather five or six hundred horses may be seen training on the course. The Bombay Races take place from November to the first week of April every year. The Derby race which is held generally in January is supposed to be the most prestigeous one. The regular races from December to April are held on all holidays and Saturdays.

In 1935, King George V, then Emperor of India, was pleased to grant permission to the Western India Turf Club Ltd. to use the title "Royal ". Since that date this Club has been known as the Royal Western India Turf Club Ltd., and when on the 24th February 1961 Her Majesty Queen Elizabeth II visited Bombay the Mahalaxmi Race Course was honoured by her gracious presence.

The Apprentice Jockey's School was started in June 1938 under the guidance of the Stipendiary Stewards of the Club and has produced many top class jockeys since then.

Double and Treble Pool betting systems for both 'Win' and 'Place' on any horse in any race at tote odds was introduced in 1929. This experiment was so popular that in 1933 a separate Daily Double Pool and a Daily Treble Pool on selected races each day were introduced. Those collections are formed into pools entirely separate from the totalisators.

For some years now the Club has had the Jackpot Pool which is a pool run on five selected races and the maximum dividend paid on a ten rupee ticket was Rs. 48 lakhs.

In the year 1967 the Club started inter-venue bettings between Bombay and Pune, *i.e.* when the races are held in Bombay, betting is accepted at the Pune Race Course where the punters hear the running commentary of the race, while the results, dividends and odds on horses are also announced.

In the year 1974, this Club was the first to start inter-venue betting with the Bangalore Turf Club and this is a regular feature since then. The Bangalore Turf Club accepts bets on the races run at the Bombay Race Course and this Club accepts bets at the Bombay and Pune Race Courses on the races run at Bangalore. For this inter-state betting also when the races are run at Bombay the running commentary, results and dividends are communicated over the loudspeakers to Bangalore. [Also refer Chapter 18 in this volume.]



BORIVALI LION SAFARI PARK

Bombay rightly described as *urbs prime* of India deserves to have a good Zoological Park that could be of benefit to its people and help promote wildlife conservation in India with special reference to Western India. In the master plan for development of the Borivli National Park it had been proposed, among other items of development, to establish a modern safari style Zoological Park at Borivli, which proposal was under consideration of the Government of Maharashtra. Meanwhile, Government sanctioned the establishment of a Lion Safari Park, which was inaugurated on 1st May 1976. It is hoped that this Lion Park would be the first successful step towards the establishment of a Zoological complex in this National Park. An area of about 120 hectares

has been earmarked for the proposed Zoological complex and the general layout of the proposed Zoo has also been worked out.

This Lion Safari Park is the second of its kind in India, the first being in the Nehru Zoological Park, Hyderabad.

The Lion Safari Park is easily approached by road through the Western Express Highway and the main entrance of the National Park. Borivli railway station is only about 1.5 kilometres from the starting point of the safari mini-bus.

The Lion Safari Park in Borivli is a miniature Gir Forest. The 13 hectares site occupied by the park has a gentle slope from north to south. The green rolling hills of Kanheri seen prominently from the safari park remind the visitor of the Girnar hills of the Gir Forests. The Lion Park includes many species of trees characteristic of the Gir.

The 1200 m. long, 6 1/2m. high chain-like fence fitted to channel iron posts encloses the lion park area and is lion-escape-proof. On the northern boundary, the fence alignment goes up a hill, thus including in the Park one complete boulder-strewn face of the hill. This is a very attractive feature which lends beauty and grandeur to the safari park. The fence is painted green and merges with the surrounding greenery.

The visitors to the Safari Park are provided with mini-buses (each with 10 seats) from which they can view the animals roaming free in the Park. These minibuses are provided with safety measures to protect the visitors from lions. A rescue vehicle also with safety measures is always kept in readiness to counter unforeseen difficulties of the minibuses inside the Park. The 1.25 km long, asphalt internal road system within it is planned in such a manner that visitors could be taken reasonably close to the lions, wherever the lions be within the park. To prevent lions from escaping from the park when the gate is opened to allow entry into and exit from the Lion Park by the safari, a double door arrangement is provided at the gate. The lion house hidden from the visitor's view is a weather shelter to lions into which they are taken daily in the evening for feeding. A natural looking pond provides drinking water to the animals.

At present (1979) there are 9 specimens (4 lions and 5 lionesses) in the Park, of which 2 lions and 3 lionesses roam in the park for view by the visitors. Of these one specimen, a male 'Raj' has been purchased from a private party in Chalisgaon and six specimens—(Guru Dutt, Nargis,Meena, Raju, Rani and Meenakshi) have been received as donation from Veermata Jijabai Bhosale Udyan of the Municipal Corporation, Bombay. Recently a pair of lions (Navin and Ketki) from the Gir Forests, Gujarat have also been added to the Lion Park. These captive animals have been reconditioned to behave like wild animals and trained for conditions obtained in the Park. The Lion Park staff has also been trained to facilitate efficient management.

Establishment of this Lion Safari Park has been possible mainly because of the generosity of the Government of India in the Ministry of Tourism and Civil Aviation who have contributed Rs. 7.28 lakhs towards the cost of the 1200 m long fence to enclose the park area, construction of the lion house and landscaping of the Park. The amount of Rs. 2.05 lakhs provided by the Government of Maharashtra has been used for, among other items, developing the internal road system, providing water supply

arrangements and for acquisition of lions. Besides, one safari jeep—minibus has been received from Government of India and another from the Government of Maharashtra.



CHURCHES

Bombay being under the Portuguese domination for a number of years, there are several Roman Catholic churches in the City. Of these the church of N.S. de Esperanca was the oldest and was located at the Esplanade. It was demolished and was re-erected at Kalbadevi in 1760 at Government cost. This edifice was also subsequently demolished and what remains at the original site now is an old cross that has given its name to Cross Maidan.

N.S. de Gloria, at Byculla, was built by Antonio Pessoa, Lord of the Manor of Mazagaon between the years 1548 and 1571. It was renovated in 1810, and can accommodate 2,000 persons.

N.S.de Saude, or Our Lady of Health, at Cavel, was built in 1794. It has not been re-built, but is in a perfect state of preservation. There is a beautiful grotto with the statue of the Our Lady of Immaculate Conception, in front of the church.

San Miquel Church at Mahim, was built by the Portuguese probably in 1540. It is one of the oldest churches in Bombay. It has been renovated several times, and still attracts large crowds

of Catholics for Mass and other devotions on Sundays and other days of Obligation.

Holy Name Church, along Wodehouse Road, is now the Roman Catholic Pro-Cathedral. Though opened in January 1905, it is one of the best known churches in the city. Next to it is a Archbishop's House, and also the office of the Archdiocese of Bombay.

The Holy Cross Church at Kurla, built during the Portuguese rule and rebuilt in 1848, is one of the oldest churches in Bombay and it deserves a mention in view of its age. It measures 38.10 m. (125') long, 14.33 m (47') broad and 13.72 m (45') high. It is still in good order and fairly big congregation assembles here on every Sunday as also during Christmas.

Prior to 1675, the English in Bombay had no church. They worshipped in a room in the Bombay Castle, called Fort Chapel. On Christmas Day, 1718, St. Thomas Church, now the Cathedral, was opened, and was described as "Suitable in some measure to the dignity of our Royal Settlement". In 1838 it was notified by Government to be a Cathedral, the present tower was raised at a cost of R. 16,000 snd a clock was purchased by the congregation for 500 guineas. It has one of the finest organs in the East.

St. Andrew's Church, at Rampart Row, sometimes called the Scotch Kirk, was opened in 1819. The spire was added four years later. Its organ was bought by public subscription at a cost of Rs. 4,800.

Church of St. John the Evangelist, at Colaba, was built in 1857, in memory of officers, non-commissioned officers and private soldiers who fell in the campaigns of Smd and Afghanistan in 1838-43. The colours of the old 24th Regiment are preserved in the building. The 19th Regiment N.I. has decorated the wall behind the altar with mosaic tiles, and the marble pavement was laid in memory of the brethren of the Guild of the Holy Standard.

St. John's Church consists of the nave and aisles, 57 metres (187 feet) in length and 17.678 metres (58 feet) in breadth. The height is 18.288 metres (60 feet), and the chancel arch 15.240 metres (50 feet). In 1865, 42 stained glass windows were sent from England, all gifts from private individuals. They were placed in the triangular apexes of the 21 lancet windows on either side of the nave. The bells of the Church are unique in being the only peal in use in Western India, except a small one of four at Mount Abu.

The Wesleyan Methodist Church, at Colaba, is another important Protestant Church in Bombay. Its foundation stone was laid by Lord Reay.

St. Peter's Church, at Mazagaon, which has a boarding school and hostel attached to it, was opened in 1859. It contains a memorial window to those who were drowned in the P. & O. S.S.Camatic.(Bombay the Beautiful by J. V. Furtado, pp 136-37)

COUNCIL HALL (OLD)

The Old Council Hall has been built at the back of the Royal Alfred Sailors' Home with which it has been connected by a corridor. The Royal Alfred Sailors' Home is a fine building which is now too far from the docks to serve its original purpose. The sculpture in the gable representing Neptune with nymphs and sea-horse was executed by Mr. Bolten of Cheltenham. The building was taken over by the Government in 1928 and then the Council Chamber for the then Bombay Legislature was built. It is a stone structure on the corner of the Custom-House Road and Apollo Bunder Road opposite the Prince of Wales Museum.

The Council Hall(Bombay Today by R.J.Mehta, p. 31-32.) is surrounded on all sides by ante-rooms and lobbies on the ground floor. Galleries had been provided on the first floor for the Governor, the President and distinguished visitors, the public and the press. There was a special staircase to the different galleries reserved for the Governor and the President, and the gallery meant for distinguished visitors; a second staircase was provided for the general public and the press.

Bombay's Council Hall was designed by Mr. J. Mercer, F.R.I.B.A., the then Consulting Architect to the

Government. It was constructed by the Public Works Department under the guidance of the Presidency Executive Engineer. The walls are built of stone with a yellow basalt exterior facing. The roof is of reinforced concrete built on steel girders. A unique feature of the flooring of the main Chamber is that it is made of asbestos and that of the lobbies and corridors of white marble. All the panelling is of teakwood. The Council Hall was the first building in Bombay, and perhaps the first in India, to be equipped with an efficient air-conditioning plant. Any required temperature or humidity can be maintained constantly. The air-conditioning plant ventilates, cools and dehumidifies the whole building, including the corridors and the galleries.

FIRE TEMPLES

Fire is the chief object of Parsi veneration and the Fire Temple is the public place of worship. The Atesh Behram (the fire of Behram), ' the angel of success', which is composed of sixteen kinds of fire, is worshipped in four temples in Bombay, and the Atesh Dadghan or Proper-place Fire is kept in a Fire Temple known as the Agiari or Place of Fire, and is also called Dare-meher, *i.e.*, the Gate of Mercy. Bombay possesses 35 such places. The four main Atesh-Behrams in Bombay are as under:—

Name	Locality	Year of opening	Remarks	
Dady Shet's Atesh Behram	Girgaum		Founded by Dady Nasarwanji.	
Banaji's "	Charni Road	18/15	Founded by Framji Cursetji and Rustomji Cowasjiand Dadabhoy Rustomji	
Wadia's "	Princess Street		Fo <mark>und</mark> ed by,the sons of Ho <mark>rm</mark> usji Bomanji Wadia.	
Anjuman's "	Chanda <mark>n</mark> wadi	I X U /	Founded by subscription.	

The first two Atesh Behrams were consecrated according to Kadami rites and the last two according to Shahenshahi. The first Agiari founded was the Fort Agiari, built by Banaji Limji in 1709 and rebuilt by his family in 1845. The second was built in the same locality by Maneckji Nowroji Shet in 1733 and rebuilt in 1891. Each temple has a priest whose duty it is to read the religious books and to keep the fire burning. The piiests wear white dress, including the turban. Since 1862 classes have been opened and special training is given to those who wish to be priests and Dasturs.

ANJUMAN'S ATESH BEHRAM: In May 1896 the foundation stone of the Anjuman's Atesh Behram at Chandanwadi was laid by Dastur Dr. Jamsadjee Minocherjee Jamaspasna, M.A., Ph.D., High Priest of the Parsis, with great pomp and ceremony. The building which was constructed from subscriptions collected from the Parsi community was completed in 1897 and was opened for use after the performance of a Jasan or thanks giving ceremony. The building which cost about Rs. 2,30,000 has an imposing facade, the front walls, which are wrought in Porbandar stone bearing rich carving and medallions representing some of the well-known symbols of the Zoroastrian religion. The structure is built in the Persipolitan style, and the frontage particularly is an imitation of the palace of King Jamshed. The latest sanitary improvements have been introduced in all parts of the building which is well lighted and ventilated. The porch is a magnificent work of art, and so is the *sanctum sanctorum* where the sacred fire has been installed.

The shrine is about 7.5 metres (25 feet) long and an equal number of metres in width and in the centre of it is placed a marble pedestal, upon which stands the huge silver ewer containing the sacred fire. No one, except the officiating priests, is allowed to enter the room which is partitioned of by brass railings and there, besides the bells which ring in and ring out the five gehs or portions of the day, are to be found swords and other weapons used by the ancient Persians to prevent intruders from defiling the fire. Next to the sanctum sanctorum is the prayer hall which is 16.5 metres (55 feet) long and 16.5 metres (55 feet) wide, the height between the floor and the ceiling being nearly 6.3 metres (21 feet). The prayer hall is carpeted (1909) with Brussels carpets of rich workmanship, the ceilings being covered with silk and satin bordered with tassels of silk. The entrance hall is paved with Minton tiles and on the walls on three sides of it are marble tablets bearing the names of the different donors who have given large sums for the construction of certain portions of the building. On the first floor, which is approached by a grand staircase, is a magnificent hall 19.5 metres (65 feet) long and 16.8 metres (56 feet) wide, the roof, which is about 6.0 metres (20 feet) high, being supported on four fluted columns with coronas bearing horses' heads in Porbandar stone. The hall, which is used on festive occasions, contains portraits of the principal donors. The hall is named after Mr. Dadabhoy Nasarwanji Contractor who paid about Rs. 20,000 for its construction. There are two large ante-rooms on each side of the hall, one of which is intended to be used as a library, and contains some ancient Persian literature.

Maneckji Shet's Agiari: The fire in Maneckji Shet's Agiari was installed in the year 1733 by Maneckji Nowroji Shet. The old building showed signs of decay, which led to the erection of this handsome new building at a cost of about one lakh of rupees by Mr. Jalbhoy Ardesar, the eighth lineal descendant of the founder. It is built in the ancient Persian style of architecture, and its facade alone presents an appearance which is as unique as it is rare in the city.

The Adaran fire was installed in this temple on 5th November 1891. It is placed in a large silver censer, estimated to have cost about Rs. 7,000. The hall in which it is placed cannot be entered by any except the officiating priest or his immediate assistant. It is built entirely of marble facing and compares favourably with any building of its class in elegance and simplicity. The chief problem in the erection of a

fire-temple is how to get rid of the smoke. In the present instance a number of ventilating appliances have been provided.

During the time the building was under erection the Adaran fire was removed to Maneckji Shet's court in the Fort, a portion of the place having been set apart for the exclusive purpose and for the use of the priests in charge. All the arrangements for the removal and reinstatement were made under the directions of Mobed D.M. Adrianwala, the hereditary priest officiating in the temple. A portion of the building is devoted to the dedication of the Dadgan fire and to the performance of certain rituals enjoined by Parsi custom and usage.

However the N.M. Petit Fire Temple at New Marine Lines is considered to be the most elegant by some. It is constructed in white marble and is surmounted with huge red flame, the symbolic *afarghania* with at its entrance a 6.0 metres (20 feet) high winged bull. The construction of this fire temple was completed in 1940 at a total cost of rupees three lakhs and a half, of which an amount of Rs. 1,35,000 was donated by Mr. and Mrs. Jehangir K. Mehta.



GARDENS AND PARKS

The city of Bombay is a great industrial hubbub with both sky scrapers and hutment colonies existing side by side. Numerous industries existing in the city have given rise to the problem of pollution which has aggravated of late. One of the remedies to reduce pollution and to do away with industrial monotony in the city is to lay out parks and gardens in different localities and to grow trees. The first garden in the city was laid out about a century before. Within the present context, more emphasis being laid on

laying out gardens and parks, and growing more trees, the Municipal Corporation of Greater Bombay has decided to adopt a standard of half an acre per thousand of population for the city and four acres for one thousand of population for suburbs and extended suburbs for parks and gardens.

The *prima dona* of India has a number of gardens and parks, fountains and band stands, etc., maintained by the Municipal Corporation in addition to a few maintained by the Bombay Port Trust, the Government of Maharashtra and other private organisations. A number of industrial units, to name a few, Larsen and Toubro Ltd., Parke Davies Ltd., in the suburbs, have maintained beautiful gaidens. In what follows is given a brief description of the principal parks and gardens in the city.



VEERMATA JIJABAI BHONSALE UDYAN

Formerly known as the Victoria Gardens, Veermata Jijabai Bhonsale Udyan is the oldest public garden in Bombay which was laid on the Mount Estate, Mazagaon, now included in Byculla, in 1861 and stocked with plants from the garden of the Agro-Horticultural Society of Western India at Sewri which was maintained upto 1862 when its plants were transferred to the Victoria Gardens. The charge and direction of the Victoria Gardens vested in the Agro-Horticultural Society until 1873 when the Society ceased to exist. It was then handed over to the Municipal Corporation in the same year *i.e.*, in 1873. The area of the Victoria Gardens when it was laid out was 33 acies. In 1890 an additional area of 15 acres was included and the garden was extended especially for the zoo. The Udyan covers an area of 50 acres.

The garden was formally opened to the public by Lady Frere on November 19, 1862. It has a number of shady trees with some botanically important species such as *Amherstria nobilis, colvillia racemoss, Adansonia digitata, browhea coccinea, lagerstroemia rosea* and other varieties, *malalenca lencodendron,* varieties of cassias, etc. The Udyan contains about I,800trees belonging to about 150 species. The garden has a nursery, rich in collection. The botanical specimens are supplied to various colleges and schools in the city and suburbs free of cost. Plants are sold to the public on nominal charges. Besides, advice is also given to the public at large regarding growing and planting of trees.

The Zoo in the park occupies an area of about eight hectares and it contains more than 1,200 specimens of mammals, birds, reptiles, etc. The snake park constructed in the Zoo recently attracts a number of visitors. Housed in the snake park are more than two hundred snakes in natural environments. The animals kept in the Zoo include lions, tigers, bears, panthers, etc., besides different types of monkeys, deer, hippopotamus, elephants, etc. Apart from having good specimens of wild animals and birds from different climates and countries, recreational facilities such as joy rides, boating, open air theatre and a band stand where recorded music is played every evening have been provided within the precincts of the garden. The annual expenditure on the maintenance of the garden comes to about Rs. 4.5 lakhs against the annual collection of about Rs. 45,000.

On entering the paik thiough the main gate on the left is the Dr. Bhau Daji Lad Museum known previously as the Victoria and Albert Museum founded in 1858. The building was constructed at a cost of about Rs. 5 lakhs of which an amount to the extent of about Rs.1.1 lakhs was collected through public contribution and the remaining was Government contribution. The foundation of the building was laid in 1862 and it was opened to the public in 1872. The building of the museum is in Italian Renaissance style.

To the right of the south entrance of the Garden stands an almost life-size rock cut elephant which was brought here from the EJephanta island for exhibition. An equestrian statue of King Edward VII of England made of black marble and with fine workmanship, whiph was originally installed near the University of

Bombay and which was popularly known as Kala Ghoda, has also been shifted to the Bhau Daji Museum in the Gardens and has been placed just outside the museum.(For detailed history see Bombay City Gazetteer, Vol.III, 1910, pp.376-80)



KAMALA NEHRU PARK

Just near the Hanging Gardens is located the Kamala Nehru Park named after the wife of the first Prime Minister of India, the late Pandit Jawaharlal Nehru. The land on which the park has been laid out was purchased from the Government at a cost of Rs. 7 lakhs. The park covers an area of 10,000 square yards and has winding pathways, as terraces, green lawns and tropical vegetation on its slopes. The children throng in numbers to the Old Woman's shoe based on old Nursery Rhyme which has become their star attraction and a hot favourite. An artificial cascade and the fountain arranged with

lights with changing colours and a view with an effect of a diamond necklace attract people during evenings particularly after the sunset A visitor also gets a splendid panoramic view of the city as also the setting sun from this park. The park is maintained at an annual cost of about Rs. 32,000. Receptions to foreign dignitaries and other Indian nationals who have done some meritorious service to the Nation are arranged in this park usually, by the Municipal Corporation.



SIR PHEROZESHAH MEHTA GARDEN

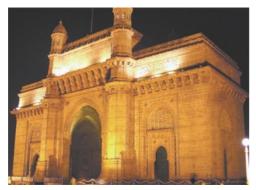
A garden was laid out on the terrace os a stone masonry water supply reservior at the Malabar Hill in 1886-87 and has been named after Sir Pherozeshah Mehta. the garden was relaid in 1936. It covers an area of 32,110 square yards and has been beautified with lushgreen laws, skirted by hedges and innumerable flower beds, with mnay hedges trimmed in the shape of different animals. To Facilitate teh visitors to relax in comfort have been provided four shady summer houses with benches. The model of the Vaitarna-Tansa scheme, completed by the Municipal Corporation for

schems completed by the Municipal Corporation for augmentation of teh water supply has been placed on the earth mound in the garden. the garden commands a beautiful biew of the Arabian Sea towards the west. The Municipal Corporation of Greater Bombay is reuired to spend about Rs.55,000 annually on the maintenace of teh Garden.

The Pherozeshah Mehta Garden (formerly known as the Hanging Gardens) and the Kamla Nehru Park are located close to each other and provide a pleasant evening resort to Bombayites.

JOSEPH BAPTISTA GARDEN

Joseph Baptisa Garden was laid out on top of Bhandarwada Hill reservoir in 1937. It is located in the dock area and covers an area of 3,75,000 sqaure feet. It commands a panoramice view of Bombay harbour with vast sea stretching beyond, the dock area and the northern portions of teh city. The Muncipal Corporation of Greater Bombay is required to spend about Rs.50,000 per year on the maintenance of this garden.



GATEWAY OF INDIA

The Gateway of India has been erected at a picturesque spot at the Apollo Bunder to commemorate the landing of King George V and Queen Mary when the royal couple visited the country on a State visit in December 1911. Shelter was provided to the waiting passenger formerly by an iron shed with a carved roof after the styleof a Mughal tent. This shed was removed and a temporary pavillion and hall were erected for the reception. It was suggested by the then Governoe of Bombay Lord Sydenham, that a permanent pavilion should be erected to commemorate the event to form a sea gaetway of India and provide a reception hall for all important occassions. The scheme however was carried out by Lord

Willingdon, The successor of Lord Sydenham.

The gateway consists of a Central Hall with the great archway forming the entrance with side halls providing seating accomodation to the visitors. The gateway designed by Mr.G.Wittet is Indian in character and its architecture is based on the work of sixteenth century in Gujrat. The Gateway is constructed in yellow basalt obtained near Bombay , but the pierced stone work in the arches of teh side halls is from the former princely State of Gwalior.

The Gateway is the centre of tourist attraction and picnics. It gives a fantastic view of the vast exoanse of the sea with the distant horizion lined by the mountain ranges of Saht\yadri, thepeak of the funnel hill or

the fort Karnala forming the most distinctive feature. INthe background of the Gateway could be seen the Bombay High Oil rig towers and a number of naval ships in thevast ocean beyond. On facing the Gateway to the left of the visitors is te life size statue of Swami Vivekanand on a raised pedestal with a garden surrounding it. IN fornt of the Gateway is the fine equestrain statue of Chhatrapati Shivaji Maharaj erected in 1960. The gateway is alos flanked by the famouse Taj and the Taj International.

GENREAL POST OFFICE

The General Post Office is located near the Victoria Terminus of the Central Railway. It was designed in the Bijapur style of architecture by J.Begg and was constructed under the supervision of Mr.G.Wittet. The building consits of apartial basement, ground and three super floors and was completed in 1911. All the rooms are welllighted and airy. It is a magnificent building with a fine architecture.



GIRGAUM BEACH

The Girgaum Chaupati or the Girgaum beach is loacted on the west of the Charni Road railway station on the suburban section of the Western Railway and extends from the Band Stand to Mafatlal Swimming Pool. Its splendour and view of the vast expanse of the sea attracts a number of evening walkers and children. Towards the band stand have been planted trees which have changed the entire face of the beach an dthe original scene of a sand beach is no more seen. Many young and old alike are found taking stroll on the beach tow ash their feet in the waves that lap the shore. The night times are especially enchanting with the slow rhythm of teh sea with a beautiful glimpse of the lighted marine drive, eating *bhelpuri*, *panipuri*, cocoanut and other eatables which are sold at the Chaupati at anumber of stalls erected for the purpose. The beach is also famouse venue for mamoth publicmeetings.

Opposite the Wilson College could be seen the status of the Late Shri Vithalbhai Patel in black stone installed on araised pedestal. Another statue of Lokmanya Tilak whose body was consigned to flames at Chaupati by the special permission of the British Government after he breathed his last in 1920 stands at the other end. A plaque gives the famouse saying of the Great leader

" स्वराज्य हा माझा जन्मसिद्ध हक्क आहे व तो मी मिळवणारच "

i.e meaning,"Independence is my birth right and I would get it". By the side of the statue couls be seen the Birla Kreeda Kendra and a swimming pool. To cross the Marine Drive towards the Opera House an escalator has recently been installed by the Municipal Corporation of Greater Bombay.

GOVERNMENT HOUSES

In 1757 the Bombay Government on the advice of Capt. De Funck decided that most, if not all the upper pait of the Fort House must be pulled down, and resolved to purchase Mr. John Spencer's house in Apollo street. This house was purchased in the same year by Government and tiansformed into Government House. It was known as 'New House' until 1767, and after that as the 'Company's House' or the 'President's House'. In this house Governor Jonathan Duncan died in 1811; and after that date the Governors gradually discarded it as a residence in favour of Parel, which became a hot-weather residence about 1750, and then of Malabar Point. In 1829 it ceased to be Government House and became the Secretariat, the Governor's residence having been removed to Parel. It continued to be occupied by the Secretariat till 1873, and was known for a long time after the removal of the Secretariat from it as the 'Old Secretariat'. It is of this Government House that Bishop Heber in 1825 wrote:—

"Though large and convenient, it is little used except for holding Councils, public darbars, and the despatch of business. It is a spacious dismal looking building, like many of the large houses in Bombay, looking like a Stadthouse in a Free German City." Valentia had described it a few years earlier (1802-06) as a handsome building with several good apartments, but inconvenient by reason of the largest apartment on both floors being a passage to other rooms.

GOVERNMENT HOUSE, PAREL

At the date of Fryer's visit to Bombay, a church and convent belonging to the Jesuits stood on the site of Government House at Parel. The principal establishment of the Society was at Bandra, where they had also a college, which was defended like a fortress with seven cannons, besides small arms. When Bombay was ceded to the English, the Bandra college claimed much land and various rights in the island. On the claims being disallowed, the Jesuits threatened a resort to arms and went so far as to assist the Sidi in his successful invasion of the island in 1689-90. As a punishment, when the war was over, all their property on the island, including the monastery and lands at Parel, was confiscated. In 1720 the building was alienated from its original use, and from that date Parel House was used as an occasional residence upto 1829, and thereafter until 1883 as the permanent residence of the Governors of Bombay.

Of Government House, Parel, Grose wrote in 1750: " At Parel the Governor has a very agreeable country house, which was originally a Romish chapel belonging to the Jesuits, but confiscated about 1719 for some foul practices against the English interest. It is now converted ioto a pleasant mansion house and

what with the additional buildings and improvements of the gardens, affords a spacious and commodious habitation. There is an avenue to it of a hedge and trees near a mile long; and though near the seaside, is sheltered from the air of it by a hill between. Here the Governor may spend most part of the heats, the air being cooler and fresher than in town; and nothing is wanting that may make a country retirement agreeable."

Mr. W. Hornby (1771-83) was the first Governor who took up his residence in the Parel House. His name was inscribed on a small tablet on the walls. Records show that dances and balls used to be held at this house on the birthday of H.M. King George III and of the Queen Consort, annually on the 4th of June and the 18th of January respectively. About 1803 Sir James Mackintosh, then Recorder of Bombay, writes: "We live about 5 miles of excellent road over a flat from our capital. We inhabit by the Governor's kindness his official country house, a noble building with some magnificent apartments and with two delightful rooms for my library, in which I am now, writing, overlooking a large garden of fine parkish ground. " " In 1804 the Governor (Jonathan Duncan) gave a grand ball at Parel, when that sheet of water, to which succeeding generations of wearied dancers have repaired to recruit the exhausted energies, became a fairy scene of gorgeous fireworks, which blazed away far into the night and early morning over the faces of fair women and brave men."

The original building was enlarged and embellished by Mountstuart Elphinstone (1819-27). Heber in his *Narrative of a Journey through India* (1838), describes the appearance of Parel House as " very handsome, having a fine stair-case and two noble rooms, one over the other of 75 or 80 feet long, very handsomely furnished." "The lower of these, "he continues, "which is the dining room, is said to have been an old and desecrated church belonging to a Jesuit College, which had fallen into the hands of a Parsi, from whom it was purchased by Government about sixty years ago. Behind the house is a moderate sized old fashioned garden in which is planted a slip of the willow, which grows on Bonaparte's grave. Adjoining is a small paddock or lather yard, full of different kinds of deer, who are fed like sheep by hand, and another little yard containing some wild animals. "The latter included "a royal tiger, stretched at his ease in a cage ", a tiger cat, a porcupine, an ostrich and an orang-outang. The house was repaired during the regime of Viscount Falkland (1850). Sir Seymour Fitzgerald and Sir Philip Wode-house also had the house repaired and refurnished in good style. It was during the latter Governor's regime that H.R.H. the Prince of Wales (Later King Edward VII) occupied a rooniin the building from the 8th to 15th November 1875. The chief reception held in this house was that in honour of H.R.H. the Duke of Edinburgh in 1870.

Sir Richard Temple refused to live at Parel, because the house was so much out of the way, and he transferred his head-quarteis to Malabar Point. Sir James Fergusson, who followed Sir Richard, occupied Govern ment House, Parel, in November 1880. In his time all the rooms at Parel were called by the names of towns. Thus one room was known as Madras, another as Agra, the third as Lahore, etc., the names being painted over the doors in half-inch letters. The rooms in the Aide- de-Camps' bungalow were named Aden, Zanzibar, Kandahar, Quetta, Sibi and Khelat. In 1883 Lady Fergusson died of cholera in the house. This house, which was the permanent residence of the Governor from 1829, was abandoned after the term of office of Sir James Fergusson (1880-1885). After this, the house was offered to the Municipal Commissioner for the Victoria Jubilee Technical Institute. In 1897 the advent of plague suggested its use as a convenient hospital and within its walls hundreds of plague patients were treated in 1897-98. In August 1899 the Plague Research Laboratory was removed thither, the opening ceremony of the laboratory being performed by Lord Sandhurst. The house continues up to now to be occupied by the laboratory, which has since been styled "The Bombay Bacteriological Laboratory," subsequently the "Haffkine Institute". The garden in the compound of the house was very spacious and well looked after. The house and ground were vested in the City of Bombay Improvement Trust under section 60(I) of Act IV of 1898, at a valuation of Rs. 9,91,407 and were dealt with by that body under the provisions of the Act.

GOVERNMENT HOUSE, MALABAR POINT

This very agreeable resort, known as Marine Villa in old records, is pleasantly situated on the summit of Malabar Point, a bold promontory which runs out into the ocean on the western side of the island. It commands a splendid view of the greater part of the island. On this part of the hill there stood about 1774 a lofty tower, in which Raghunathrao passed the period of his exile from Poona and whence he sallied forth occasionally to pass through the holy cleft (Shri Gundi) at Malabar Point. The ruins of this tower have been noticed by Maria Graham in her Journal of a Residence in India 1813. In Price's memorials (1839) it is stated that Malabar Point was the occasional retreat of the Governor, General Medows. Sir Evan Nepean, who was Governor of Bombay from 1812 to 1819, had a small room at Malabar Point, and his successor the Hon'ble Mountstuart Elphinstone (1819-1827) erected a bungalow, which Heber describes as " a very pretty cottage in a beautiful situation on a rocky and woody promontory and actually washed by the sea spray ".Lady Falkland, wife of Viscount Falkland (Governor, 1848 to 1853), was very fond of Malabar Point, and it is said that she spent one or two hot seasons here. Malabar Point, which was in use for many years more or less as a hot weather or occasional residence, became the permanent residence of the Governors of Bombay after the abandonment of Parel House at the end of Sir James Fergusson's term of office (1880-1885), and it being the only residence in Bombay available for the Governor, much money has been spent from time to time in making it suitable for the purpose. A dininghall, billiard room, porch and verandah were constructed in 1868; considerable alterations were made in 1877, and many improvements and additions have been made since that date. H.R.H. the Prince of Wales (later King George the Fifth) stayed here in 1905. In 1909 Government House consisted of a number of good bungalows, besides the residence of the Governor, which were used for various purposes including the accommodation of the officers on the staff of the Governor and of the office of the Private and other Secretaries. Quarters were also provided for servants, bandsmen and other staff. The entrance lodge was built by Sir Seymour Fitzgerald. After ascending Walkeshwar road one noticed half way up, a winding lower road leading to the Government House, which together with the upper road was lined with welltended trees, shrubs and creepers. The lower road was first constructed by Lord Elphinstone (1853-1860) and was widened in 1869, in which year were also constructed the lodges at the entrance of the road. The drive along this road afforded charming glimpses of Bombay. The house has a band stand, which is situated on the east side of the dining hall. It also boasts of an extensive garden. A flagstaff 100 ft. in

height stands at Government House, and a flag is kept floating on it all the time that the Governor is in residence. It may be noted that a small fort was built here in connection with the harbour defences and was guarded with heavy artillery. Government House was almost uninhabitable during the monsoons as Malabar Point was exposed to the full fury of the wind and waves; but during the rest of the year it was a far more agreeable residence than Parel. Electric lights and fans were installed throughout the house in 1908-09. It is now styled as Raj Bhavan.



INTERNATIONAL SOCIETY FOR KRISHNA **CONSCIOUSNESS (ISKCON)**

The International Society for Krishxia Consciousness (ISKCON) is established with a view to spreading the cult of Krishna bhakti and has an international coverage with Ashrams and shrines dedicated to Lord Krishna at New York, Los Angeles, Honolulu, London, Amsterdam, Stockholm, Teheran, etc. The ISKCON unfolds India's rich spiritual heritage in a thoroughly modern setting. Bhaktivedanta Swami Prabhupada was the founder of the ISKCON.

The ISKCON complex in Bombay is located at Juhu, two minutes walk from the Juhu Beach and about eight minutes walk from the Juhu Bus station. The complex comprises a Yoga Institute, an Auditorium, Vedic

Library, Ashram, a dining hall known as Govinda's, a refreshment alcove, a Bank and marble temple dedicated to Lord Krishna, popularly known as Hare Krishna Hare Ram Mandir. The entire complex covers an area of about two hectares. The main attraction is the temple.

The temple constructed in the Vrindavan style of architecture is replete with 24 domes of sculptured white marble. It has a finely carved red sandstone gate and a short marble stairway. On entering the temple gate the visitor's eyes are pleased to find a large courtyard bordered by marble pillars and floral engraved arches. In alcoves on either side of the courtyard there are fifteen colourful dioramas depicting scenes from ancient Ramayana and Bhagavadgita. Going from the right after entering there are three main altars with huge teakwood doors and brass castings. Beyond the door the Sanctum Sanctorum reveals the transcendental splendour of the deities. The idol in the central altar is that of Radha Krishna flanked by Rama Panchayatan in the altar on its right and that of Balram Krishna in the altar on its left while facing the deity. These idols are placed on hand-carved silver plated teakwood platforms.

Besides the temple, the ISKCON ashram has lodging and boarding facilities for visitors and their life members. The twin-towered seven storied edifice, finished with finely carved red and white sandstone has over fifty air conditioned rooms with balconies overlooking the coconut palms of Juhu Beach. Each room is equipped with a private bathroom, hot shower, two channel devotional music and telephone. It houses an international library with volumes on Vedic literature in more than thirty Indian and foreign languages.

The ISKCON has an auditorium that can accommodate 420 viewers. The centre for performing arts provides an array of entertainment facilities with advanced sound and lighting equipment, stage lifts for special effects, a recording studio and comfortable green rooms for the performing artists. One feature of this auditorium is the earphones for simultaneous translation in three languages. The rich devotional culture of the country is presented through various plays and devotional music in this auditorium. The ISKCON has a troupe to perform these plays.

The dining hall known as Govinda's offers pure vegetarian food.from fresh ingredients in both Continental and Indian styles. The interior is designed with Rajasthani decor with beautiful ceiling and wall paintings in natural colours which are based on the events in Indian history.



JEHANGIR ART GALLERY

IEHANGIR ART GALLERY has been the most important venue for art exhibitions in Bombay, perhaps in India as a whole, since the early 'fifties'. The institution is established with the objective of providing gallery facilities to artists from all parts of the country and abroad to exhibit their work on rent within their means and also for organising activities for the promotion of a national movement in contemporary visual

Sir Cowasji Jehangir, the Second Baronet, who was closely

associated with activities in the contemporary field, recognised the need of an art gallery in Bombay. To fulfil this need, he made an offer of Rs. 2,50,000 in 1946, on condition that the Government provided a suitable plot of land. Sir John Colville, the then Governor of Bombay and his successor Raja Sir Maharaj Singh took keen interest in the project. The latter in particular and Mr. B. G. Kher, the then Chief Minister, were associated with it in its various stages of growth till it took final shape.

Initially it was planned to construct the Gallery near Cooperage, but later it was suggested that a part of the Prince of Wales Museum compound be set aside for the purpose. The suggestion was placed before the Trustees of the Museum by the Government, at whose instance the plot of land on which the Gallery now stands was made available. The Gallery thus came into being with the munificence of Sir Cowasji Jehangir, on the one hand, and the Board of Trustees of the Prince of Wales Museum, on the other, as well as the active interest of the State Government, who agreed to make a regular yearly grant towards the upkeep of the building. These three parties signed a tripartite agreement on July 25, 1951 for the Gallery.

The construction of the Gallery building had already been taken in hand, the foundation stone having been laid on March 22, 1950. Sir Cowasji personally looked after every small detail of the project and paid every bill towards its cost which ultimately added up to Rs. 7,04,112. This amount was shown as a donation to the Trustees of the Museum, and hence the ownership of the building still vests with them.

Dedicated to the memory of Sir Cowasji's late son, Jehangir, after whom the gallery is named, Jehangir Art Gallery was formally inaugurated by Mr. B. G. Kher on January 21, 1952. The inaugural exhibition, the 61st Annual Exhibition of Bombay Art Society, was opened by Raja Maharaj Singh a few weeks later.

According to the terms of the tripartite agreement of 1951, the entire administration of the Gallery, including the upkeep of the building is the responsibility of a Committee of Management, consisting of ten members including one member or representative of the donor's family; two representatives of the Trustees of Prince of Wales Museum; two representatives of Bombay Art Society; one representative of the State Government; Executive Engineer, Bombay Presidency Division; Dean, Sir J.J. School of Art, Bombay and two nominees of the committee constituted as above.

The Gallery building consists of two exhibition halls. One has a floor area of 2,700 sq.ft. with a wall space of approximately 180 running feet. The other has 3,500 sq.ft. of floor area and a wall space of 218 running feet, with facilities for dividing the Gallery into two parts, if necessary, with the help of movable screens which also provide additional hanging space.

The walls have concealed fluorescent lighting at the height of nine feet from the floor, in addition to general lighting and arrangement for spot lights wherever desired. Hence the Galleries are suitable for the display of all types of visual arts and crafts.

Allotment of the Galleries is made by a Booking Committee, consisting of senior artists and art critics. The increasing popularity of the Galleries with exhibitors from all over India, is evident from the figures given below:—

	1978		1979		
Exhibitions	Bombay	Outstation	Bombay Outstation		
Individual Group—by artists Group—by institutions Group—by profitmaking bodies	26 3 17 2	7 8 3 1	19 6 20 5	23 14 1 1	
Total	48	19	50	39	

It will be seen that the total number of exhibitions held in the Galleries in 1978 was 67. In 1979 the number went up to 89.

The number of visitors to the Gallery is also on the increase. At present the average number of gallery-goers per day is estimated to be about 2,500.

The upkeep of the Gallery building and the administrative expenses are met out of the rent earned from the two Galleries and some additional space, given to a few parties some time ago on leave and licence. The Gallery has launched several projects recently, within the scope of its objectives, to augment its income. A brief description of these is given below.

The library gives original paintings and sculptures to its artist members on rental or on hire purchase basis. Individuals as well as institutions can join this library as members. This scheme is primarily meant for those who value original works of art but are unwilling to invest large sums to acquire them. These works are collected from artists, who receive the amounts of rent or sale proceeds after a deduction of a small commission by the Gallery.

Through the Sales Room of Prints and Publications the institution aims at providing gallery-goers with art publications and reproductions of outstanding merit, published by various renowned publishers. The entire stock in the Sales Room is taken on sale and return basis from publishers, who pay commission according to their terms.

Designed for laymen, the Art Appreciation courses aim at strengthening rapport between artists and the public. The Gallery has organised several courses on Art Appreciation, Art History and Art Criticism. All these proved to be quite popular. A small fee is charged to participants.

The Gallery sponsors exhibitions of the works of artists of proven merit. Known as Monsoon Shows—named after the season when the show is held—these exhibitions are now popular annual features in the art life of Bombay. The Gallery has also initiated a scheme of honouring senior artists of distinction through prestigious shows, as sources of enjoyment or inspiration for art lovers and artists. A beginning has been made with an exhibition entitled ' the Art of Hebbar since 1938'. The Gallery also earns a nominal commission on the sale of exhibits in all these exhibitions.

Dr. Homi Bhabha Art Reference Library was started some time ago for reference and research on topics of visual arts. It has a collection of valuable books on art and also subscribes to the foremost art journals from all over the world. Normally available to members only, the library also allows casual readers on

payment of nominal fees, on monthly basis. All the above projects are useful to the cause of art and artists, and have also proved to be economically viable.

The gallery has plans to start a technical service cell for providing display and other services to the gallery-users. A library of slides as an adjunct to the Art Reference Library with facilities for projection and duplication, is also on the board.

Over the years Jehangir Art Gallery has rendered exemplary service to Indian art and culture. It has a potential of further growth and it promises to keep pace with the global movement in visual arts.

JOGESHWARI CAVE

Jogeshwari (The Jogeshwari cave is described by Du Perron (1760), Zend Avesta, I. CCCL XXXVIII—CCCXC; Hunter (1784), Archaeologia, VII. 295-299; and Salt (1806) Trans-Bom. Lit. Soc. (Reprint) I. 44-47. Du Perron speaks of a 'female lingam' over the central altar. But his drawing is more like the present pair of footprints than the case of a ling. He carried off a small bull about a foot long which was still worshipped and covered with oil.) or Amboli Cave, in Bombay about four kilometres southeast of Goregaon station on the Western railway, is a very large, once richly ornamented, now decayed Brahmanic temple of the eighth century. It is cut in a low dome of crumbling volcanic breccia in the waving uplands that rise between the Jogeshwari railway station, now forming part of Jogeshwari, and the central Vehar hills. The rock lies within the limits of Amboli village from which the cave was formerly known as the Amboli Cave.

About the approach to these caves the old Gazetteer of Thana has given the following information:

" About three-quarters of a mile south from the Goregaon station along the Bombay high road, a good cart tract turns to the east. On the left, soon after leaving the high road, in the enclosure of Goregaon temple, are some Brahmanic stones, probably of the eleventh or twelfth century, which have been brought from a ruined temple, of which interesting traces remain in a thick thorn brake about 300 yards to the north. Beyond Goregaon temple the road leaves the rice fields and crosses about two miles of prettily wooded waving uplands. The low rounded rock in which the cave is cut is covered with grass and thorny bushes. It might be easily passed unnoticed but for a whitewashed lamp pillar and large pond to the west of the entrance."

However, the cave has now come in the heart of Jogeshwari just at a distance of about a kilometre from the Jogeshwari railway station in a thickly populated surrounding. A good black topped road now leads towards the caves to the east of the Jogeshwari railway station. Now the cave is known as the Jogeshwari cave.

From the two lamp pillars, of which one seems a later addition, a plain rock-cut passage, about eight feet broad and fifty feet long, leads to an open court much ruined, perhaps unfinished, and with some remains of carving. From this court twelve (of which six seem to be later additions) steps lead down to a portico 20'by 18' and about 20' high. Formerly there was a door very richly carved to pass through this portico. The walls of the portico, and the walls of its two end recesses, were once covered with figures/But the crumbling rock and the low damp site of the cave have rotted away almost all traces of carving. At the ends of the portico were two richly ornamented chambers (about 18' x 12' x 10' high) separated from the body of the porch by two pillars and two pilasters now in a totally dilapidated condition. These pillars have wasted away to the quaintest skeletons with rough corkscrew like ridges of harder stone, like the wreaths round the prentice pillar at Roslin Chapel. The large figure in the right chamber seems to have been Shiva in the form of a seated Buddha-like ascetic, and below there is a trace of a side figure now practically defaced, perhaps the giver of the sculpture. The figure in the left chamber seems to have been Shiva dancing the wild *tandava* of which nothing now remains. In the middle of the back wall of the portico is a highly ornamented door with the remains of large warders on either side, and in other parts, with traces of delicate carving of which only a few glimpses are visible.

The central door opens on an immense hall about ninety feet square and ten feet high, once dark and damp and the floor deep in mud and slime but now almost clean. About seventeen feet from the side walls a square cordon of twenty cushion-capitalled pillars, six on each side, divides the cave into four aisles and a central hall about fifty feet square in excellent condition. In the middle of the central hall is a rock-cut shrine about twenty-two feet square with an entrance door in the centre of each face. Within the shrine, on a low altar, is a stone about a foot square, apparently modern, on whose surface are cut a pair of feet. Formerly it was under a rough wooden canopy with four corner pillars about four feet high adorned with tinsel and coloured paper. At present placed on an altar is an idol of the Goddess Jogeshwari, where a number of devotees assemble on Tuesdays and Fridays and during the Navratra. The east outer face of the shrine was once covered with figures of Shiva's attendants or gans of which only traces remain. The north wall of the hall is blank with no outlet. The south wall of the hall is pierced with a central door, two pillared windows and two side doorways. The doors open on a veranda, sixteen feet broad and about 120 feet long, whose outer cave is supported on a row of ten pillars and two pilasters in the Elephanta style, of which now only one remains. On the capitals are struts, carved with a female figure and a dwarf standing under foliage, as in the great Badami caves which have suffered with the passage of time. The face of the back wall of the veranda, though much rotted, has remains of rich carving round the central door. Beyond the veranda is an open court surrounded by ruined and waterlogged cells. On a parapet at the east end of the veranda was a worn writing with the words ' ni ko ro' etc., in eighth century Sanskrit, of which nothing now remains. A little to the right, at the east end of the court-yard, a curious winding passage leads, on the right, to a shrine with a large carved image of Meshmargiri, which is now worshipped as Hanuman. The east door of the great hall opens on a large vestibule or porch. The inner wall of this porch, that is the outer face of the east wall of the main cave, is covered with figures. On each side of the door is a giant warder and many images of gans or attendants of Shiva. Above the door is a seated Shiva worshipped by ascetics. The group on the right is Shiva and Parvati; that on the left is Shiva's wedding all in perfect condition. The porch or vestibule is about thirty feet long. It has a central hall, about twenty-three feet broad and eighteen feet high, and side verandas sixteen feet broad, separated, from the central hall, by a row of four pillars and two pilasters. In the outer face of the east wall of the porch is Shiva dancing the *tandava*, and, above the door, is a cell said to be entered from the top of the rock, most of it in a dilapidated state. Across an open court, about forty-seven feet long is an outer porch, in form like the inner porch, a central hall (about 39 feet by 18) with the side rows of four pillars and two pilasters, and behind the pillars, aisles about twelve feet broad which have now fallen. The back wall of the north aisle is carved in groups of figures, goddesses and Ganapati. Outside of the porch, a rock-cut passage, about nine feet broad, rises by about thirty steps to the level of the top of the rock.

Next to the Kailas at Ellora this is the largest known cave in India. Its length from east to west is 240 feet, and including the two rock-cut passages it is 320 feet; and its breadth, including the long passage in the south, is 200 feet (*Cave Temples, 475*). According to Dr. Burgess it has the special architectural interest of showing almost no trace of the arrangements of a Buddhist monastery. Its large porticos and courts point to the development of the style that appears in the built temples of Ambarnath near Kalyan (1060), of Pattan Somnath in south Kathiawar (1198) and of the Abu temples in Rajasthan (1197-1247). If the Dumar cave at Ellora was cut in the first quarter of the eighth century, and the great Elephanta cave very soon after, this Jogeshwari cave probably dates from the latter half of the eighth century.(*Cave Temples, 476*. *Mr. Bhagvanlal agrees that the Elephanta and Jogeshwari caves are of about the same age. But from the character of the pillars and the sculpture, he would place Jogeshwari before, not after, Elephanta. He considers that the inscription in the south veranda in eighth century Sanskrit is later than the building of the cave.*)



JUHU BEACH

Juhu Beach is located at a distance of five kilometres to the west of Santacruz railway station on the Churchgate-Virar suburban section of the Western Railway. The Juhu road emanating from the Swami Vivekanand road near Santacruz railway station leads to Juhu beach. Juhu beach is regarded a Brighton of India and is the most popular bathing resort in Western India. It is one complete stretch of silvery beach extending about 5 km. north-south. It provides safe bathing

from November to May. The shore is studded with coconut palms which add to the beauty of the resort. There are a few starred hotels near Juhu beach. Besides, there are many excellent wayside hotels. The most refreshing drink is coconut water for which Juhu is famous. There are many stalls of *bhelpuriwalas*.

Sundays and holidays at Juhu provide enjoyment in good measure for a number of persons to pass their holidays in swimming, riding, playing beach games, etc. The Bombay flying club has a modern club house and airfield within a stone's throw of the beach. The Juhu beach is frequented by thousands of merry makers on the full moon day of *Ashvin*, *i.e.*, the Kojagiri Paurnima.

JUMA MOSQUE

Juma Mosque is one of the most spacious mosques in Greater Bombay. According to an old Urdu account of 1836, the original Juma mosque of Bombay was situated near the reservoir of the 'Dongri Fort' and that attractive construction was built by the Konkani Muhammedans.

All the land around the mosque was occupied by the Konkani Muhammedans but during the period of the administration of Mr. Bourchier [1750-60] the mosque and the houses were demolished. Subsequently, the new Juma mosque was erected on the Esplanade in front of the tomb of the Saint Pedro Shah. This mosque was also dismantled in 1770 by an order of the Governor, Mr. William Hornby which forbade the existence of any building within 548.640 m (600 yards) of the walls of the fort.

For devotional purposes the Sattar mosque in Mandvi was therefore utilised until the present Juma Mosque which lies about half way up Sheikh Memon Street, was built. Although its erection was commenced in 1775, it was not ready for use until 1802 owing to the disputes about the ownership of the land, which was eventually handed over to the Konkani Muhammedan community during the Governorship of Sir William Medows (1788-90).

The date of its completion (A.D. 1802 A. H. 1217) is derivable, from the chronogram <code>Jahaz-i-Akhirat</code> ' the ship of the world to come ' which contains an allusion to the fact that it was constructed over a tank. In the eighteenth century this tank was situated in the midst of gardens and open land, and belonged to a Konkani Muhammedan merchant, trading in Goa and Calicut, who, about 1778, agreed to the erection of a mosque on the spot, provided that the tank was preserved intact. A one-storeyed building was therefore erected over the tank and formed the original nucleus of the present Juma Mosque. The persons chiefly concerned in the completion of the mosque were Nathu Patel, headman of the Musal-man butchers of Bombay and his brother Ibrahim Patel, who in 1789 obtained the permission of the Kazi to complete the mosque, and who together with their nephew, acted as managers of the mosque until 1834 when in accordance with a decree of the High Court, all the affairs of the Juma Mosque were handed over to the Konkani Musalman <code>Jamat</code>. In 1837 the building was repaired and enlarged by the addition of an upper storey at the expense of Mr. Muhammad Ali Rogay, and shops were added to serve as the demesne of the mosque.

In 1897, a scheme had been framed by the High Court, and under it the Mosque and its properties are managed by a Board of eleven Directors triennially elected by the Konkani *Jamat*. The executive functions of the management are carried on by a *Nazir* appointed by the said Board of Directors. The staff of the Juma Mosque consists of an Imam and an assistant Imam, a Bangi, Assistant Bangi and various other subordinates. The Imam leads the faithful to prayers and Bangi calls the devotees to prayers.

The Juma Mosque is a quadrangular structure of bricks and stones, encircled by a ring of terrace-roofed and double storeyed building, the ground-floors of which are let out as shops. The chief or the eastern gate of the mosque leads directly across an open courtyard to the ancient tank, which is now furnished with masonry steps and embankments built in 1893 and contains about 3 m (ten feet) of stagnant water filled with gold and silver fish. From the depth of the tank rise sixteen black stone arches, constructed in 1874 which support the whole fabric of the mosque, the upper storey being upheld by five rows of wooden pillars each of which contains a receptacle for sacred books. The arches in the tank were built in 1874 at a cost of Rs. 75,000 while other noteworthy additions to the premises are the large windows in the north, east and south sides constructed in 1898 and the school building erected at a cost of Rs. 20,000 in 1902. Subsequently extensive repairs and alterations were made at an estimated cost of Rs. 65,000.

The annual income of Juma Mosque is about Rs. 60,000 derived from the surrounding chawls and the landed properties. Attached to the Mosque is a school called Madrasa Muhammadiah with a Boarding House, wherein religious and secular education is imparted to Muhammedan youths gratuitously. The income of the said Madrasa is about Rs. 10,000 a year. According to old *Gazetteer of the Bombay City and Island* the annual income of the Juma Mosque amounted to about Rs. 75,000 and the expenditure to Rs. 24,000.



KANHERI CAVES

(In 1860, Dr. Bhau Daji Lad numbered the caves. He was followed in 1860-61 by Mr. E. W. West. The following account of caves is based on the work of Mr. H. Cousens which has been furnished in the Thana District Gazetteer of 1882. The present numbers given by the Archaeological Survey of India do not tally with the original ones.)

The Kanheri Caves, in north latitude 19° 13' and east longitude 72° 59' lie in a wild picturesque valley in the heart of the former island of Salsette, about eight kilometres (five miles) west of Thane and 32

km. (twenty miles) north of Bombay, a few kilometres away from the National Park at Borivli.

The caves, which are more than 100 in number, are reached from the Bhandup station of the Central railway or the Borivli station of the Western Railway by a good black topped road emanating from the Western Express Highway and passing through the National Park at Borivli. From Bhandup, 24 km. (fifteen miles) north-east of Bombay, the Kanheri road runs north-west for about a mile, formerly across rice fields and grass uplands, till, at the foot of the Salsette hills, it joins the old Bombay-Thane road. It then climbs a pass in the hills, and winds about a mile across the rugged upland of Vihar, the gathering ground of the Vihar lake, which, starting on the left, stretches about 8 km. (five miles) to the south-west, its surface broken by wooded islets. Beyond the Vihar gathering ground, the path passes, for about a mile, through a thick belt of forest, over the slightly raised watershed that separates the Tulsi and the Vihar valleys. Near Tulsi the road swerves to the left, keeping to the south-west of Tulsi lake, a beautiful sheet of water surrounded by wild forest-clad hills. For the two remaining miles, from Tulsi to Kanheri, the road though formerly not fit for carts is now black-topped and motorable. The first mile lies along the Vihar-Borivli road, with rises and falls, down the wooded Tulsi or Tasu valley, surrounded by high forest-clad hills, through glades of withered grass, thick copsewood, and bright green clumps of bamboos. The last mile is along a footpath that strikes from the Borivli road north to Kanheri.

From Borivli station, on the Western Railway twenty-two miles north of Bombay, the way to Kanheri lies, for about half a mile south, along the Bombay road. Then, crossing the railway and passing south-east through about a mile, formerly through rice-lands, inters a great belt of brabpalms with patches of brushwood and grass land. After about a mile, the valley of the Tasu narrows, and the brab grove and grass give place to forest. Carts pass through this forest for about a mile and a half, when, not far from where the Bhandup track leaves the Borivli road, a footpath strikes north about a mile to Kanheri.

In the bed of the Tasu or Tulsi, near where the Kanheri footpath leaves the Borivli road, is a small rock-cut cave whose mouth is under water except in the hot weather. The first signs of caves are to the north-east, in the high cliff of Kaman, the main range that runs north-west from Tulsi. Further north the paths from Borivli and Bhandup join, and pass among thick trees losing sight of the Kaman range. Then suddenly on the right, from thickly wooded slopes, rises a rugged cliff, the end of the Kanheri spur, that runs about north-east and south-west, nearly at right angles to the Kaman range and several hundred feet below it. A bare black scarp that runs along the west face of the Kanheri spur is greatly worn by the storms of the south-west monsoon. There remains a black brow, as if roughly cut in a series of arches, overhanging a hollow gallery (West's 38-41) of light brown rock, the burying ground of the old Kanheri monks. Above the overhanging crest, the rounded slope of the hill-top swells, without bushes or grass to a flat plateau of black rock crowned by patches of brushwood, prickly pear, and stunted trees. The rest of the Kanheri spur, like its south-west face, is one long dome-topped block of black trap, a paradise for cave cutters.

Passing under the west cliff, up a deeply wooded ravine, a flight of steps leads, across a broad brushwood-^covered terrace, to the slightly overhanging scarp in whose west face is cut the Great or Cathedral Cave (No. 3). The Great Cave stands near the mouth of a narrow ravine, which runs nearly east and west in a deeply worn channel. On both sides of this narrow ravine the face of the rock is carved into caves. Along the low north bank there is room for only one row of caves. But the lofty dome of the south bank is carved into three irregular tiers, joined by long roughly cut flights of shallow steps. Behind the lines of caves, on the north bank, approached by roughly cut flights of steps, are two knobs of rock, with the remains of relic shrines or burial mounds, and on the top of the south bank above the lines of caves, the sloping sides and along flat table of rock are carved into steps and cisterns, and were once crowned by burial-mounds and relic shrines or temples.

The view from the hill top is bounded to the north by the scarp of Kaman, which, rising from a thickly wooded slope, though hollowed and broken by the weather, bears traces of more than one cave front. To the south a high wooded bank hides the distant view. But east and west Kanheri hill commands the whole breadth of Salsette from Bombay harbour to the mouth of the Vasai creek. To the east, across forest-clad slopes, lies Tulsi lake, with its small bare islets and its circle of high-wooded hills. Beyond Tulsi is a belt of thick forest, then a gleam of Vihar lake, and, beyond Vihar, hatches of rice fields and salt wastes stretch dim and grey to Bombay harbour. To the west lies the beautiful Tulsi valley, a large deep-shaped hollow. Its gentle slopes are richly covered with forests, brightened by tufts of light green bamboo, with lines of black-rock and glades of withered grass. Beyond the hills, the deep-green belts of brab-palms and mango groves are broken by yellow-patches of rice and grass land. Then, through a flat of bare brown salt waste, wind the narrow sail-brightened waters of the Gorai creek, and beyond the creek, stretches the long level line of Gorai island. Along the north-west winds the Vasai creek, and over the ruins and palm groves of Vasai, the sea fades into the sky.

The site of the caves, lonely, picturesque, and not far from the once famous and rich trade centres of Sopara, Kalyan and Chemula or Chaul, combines the three leading characteristics of the sites of the chief groups of Western India rock temples. But Kanheri is the only rock-cut monastery in Western India that has the feeling of having been, and of being ready again to be, a pleasant and popular dwelling place. The rows of cells, water cisterns, dining halls, lecture halls and temples joined by worn flights of rock-cut steps, and the crowded burial gallery show what a huge brotherhood must once have lived at Kanheri. In many of better caves the front courtyard with its smooth rockfloor, broad benches and gracefully rising side walls, the shaded water cistern, the neat flight of steps leading to the cave door, the deep flat cave, the cool veranda, the well-lit hall with its windows of stone lattice, the slim graceful sculptures, and the broad easy benches hewn at many of the best view points, have a pleasing air of comfort, refinement, and love of nature; while the long stretches of clean black rock, the steps and the courtyards free from earth, weeds, or brushwood, look as if lately swept and made ready for a fresh settlement of religious recluses. It is, says Mr. Nairne, a town carved in the solid rock, which, if the monks and the worshippers returned, would in a day or two, be as complete as when first inhabited. "All things in their place remain as all were ordered ages since." (Nairne's Konkan, 15.)

The centre of trade and population, on which the Kanheri monastry originally chiefly depended, was, probably, about three miles to the west at the mouth of the Tulsi valley, somewhere near the site of the deserted village of Magathan, which appears in one of the cave inscriptions as Mangalthan. Pilgrims, no doubt, came from the east, by Vihar and Tulsi, but the main approach was from the west, perhaps by way of Padan hill, up the Tasu valley, which was probably cleared and tilled and provided with an easy road.

Kanhagiri, the old name of the hill, perhaps the Prakrit corruption of the Sanskrit Krishnagiri or Krishna's hill, rose to fame and holiness from the rise of Buddhism. The Buddhist legends place the conversion of the Konkan to Buddhism as early as the lifetime of Gautama (B.C. 563-483). The story is that Purna, the chief of the Sopara merchants, was so affected by hearing Buddhist hymns sung by merchants from Shravasti, that he determined to become a follower of Gautama. Leaving Sopara he set out for Shravasti where Gautama was living, and on presenting himself as a disciple, was received with honour. He soon rose to a high place among Gautama's followers, and anxious to show his zeal for the faith, asked leave of his master to preach the law in the country of Shrunaparanta, apparently the Konkan. Gautama reminded him how fierce and cruel the people were. But Purna persisted, and, promising to overcome violence by patience, was allowed to make the attempt. His quiet fearlessness, disarmed the wild men of Aparanta. Many became converts, and monasteries were built and flourished. Shortly after, Puma's brother and some merchants from Shravasti, on the point of shipwreck off the Malabar coast, called on Purna to help them, and, he, appearing in their midst calmed the storm. On reaching Sopara they built a Buddhist temple with their cargo of sandalwood. About B.C. 246, when Ashok determined to spread Buddhism throughout India, Dharmarakshita was sent to Aparanta or the Konkan and made many converts.

None of the Kanheri caves shows certain signs of being as old as the time of Ashoka. But the simple style of Caves 5, 8, 9, 58 and 59 ranks them amongst the earliest class of caves which vary in date from 100 B.C. to A.D. 50. This early date is supported by an inscription (No 26) in Nasik Cave III, which shows that, in the time of Gautamiputra II (A.D. 177-196), Kanheri though so small a hill, was famous enough to be ranked with the Sahya, Vindhya and Malaya mountains. An inscription in Kanheri Cave No. 5 shows that, as early as the reign of Vasishthiputra (A.D.140), cisterns were made for older caves. Of about fifty inscriptions that have been deciphered, ten, from the form of the letters, seem to date from before the Christian era. The rule of the Satavahana kings (225 B.C.-A.D.233) especially the reign of Gautamiputra II (A.D. 177-196), seems to have been a time of prosperity at Kanheri. To about this time belong twenty of the fifty inscriptions, recording grants by kings, ministers and traders, of caves, cisterns, lands and money. Among the caves that belong to this period are the entire third tier, including the great Cathedral Cave No. 3. It was probably in the fourth century that the sculptured stone tope in cave No. 38 was built; and it was followed in the fifth century by a tope near cave No. 3. Additions both of fresh caves and of new ornaments in old caves seem to have continued through the fifth and sixth centuries, ten of the fifty inscriptions dating from that period. These additions belong to the late or Mahayana school and are much more ornate than the older caves. To this period belong the Darbar Cave (No. 10) and others at the end of the first row, the two large statues of Gautama at the ends of the veranda of the Cathedral Cave (No. 3), and several chapels. In the beginning of the fifth century (420) Fah Hian described from hearsay a monastery in the Deccan, in a hilly barren land, whose people were heretics, knowing neither the Buddhist nor the Brahman religion. Windows were pierced in many parts of the hill, and ac the four corners, flights of steps led up the hillside. The monastery was well supplied with water. A spring at the top flowed before the rooms encircling each tier, and on reaching the lowest chamber passed through the gate. Hiuen Tsang (640) though he passed through the Deccan, seems not to have heard of Kanheri. This was the time of the spread of the Rathods of Malkhed, near Hyderabad, staunch followers of Shiva and connected with the Ellora and perhaps with the Elephanta caves, who during the eighth and ninth centuries, seem to have wrested the north Deccan and Konkan from the Chalukyas. Before the end of the eighth century, gifts were again made to Kanheri. Two of the Kanheri inscriptions dated 853 and 877, belong to the ninth century. These gifts are of little importance, none of them being more than grants of money. So far as the inscriptions have been read, no further additions were made. Up to the middle of the thirteenth century, Thane was under the rule of the Shilaharas, who though Shaivas seem not to have interfered with the practice of Buddhism. From the Shilaharas it passed to the Devagiri Yadavas (1250-1318), who were staunch Shaivas. But neither the Yadavas nor their Musalman successors were firmly established in the Konkan. Only a few outposts were held, and it is not certain whether Salsette was under Gujarat or under the Deccan. In either case Kanheri seems to have been undisturbed, and, as late as the middle of the fifteenth century (1440), Buddhist monks were building relic shrines. Nearly a century later (1534), when the Portuguese conquered Salsette, the Kanheri caves were still the home of a large colony of monks. The Portuguese speak of the ascetics as Yogis and they may have been Brahmanic ascetics. But several details recorded by the first Portuguese writers (1538-1603) make it probable that they were Buddhist monks, and that the great Buddhist monastery of Kanheri remained in life until its leaders were forcibly made Christians by the Portuguese.

The twelve hundred years of Buddhist ascendancy (450 B.C.—A.D. 750) may be roughly divided into four periods, each period marked by the development of a new theory or gospel, of the way to enlightenment and rest. The gospel of the first period was conduct, of the second metaphysics, of the third mysticism, and of the fourth magic. Conduct dates from Gautama (500 B.C.), metaphysics from about 200 B.C., mystery from about A.D. 100 and magic from about A.D. 500. Though the older systems were to some extent eclipsed by the younger, they seem to have continued side by side till the fall of Buddhism.

Gautama's maxims have been so changed and so overlaid by later teachers, that it is hard to say how much of Buddhism comes from the founder of the faith.

Of the fifty-four inscriptions which have been more or less completely deciphered, except the three Pahlavi inscriptions in cave 66, two in caves 10 and 78 in Sanskrit, and one in cave 70 in peculiar Prakrit, the language of all is Prakrit ordinarily used in cave writings. The letters, except in an ornamental looking inscription in cave 84, are the ordinary cave characters. As regards their age, they appear from the form of the letters to belong to the time of Vashishthiputra (A.D. 133-162), twenty to the Gautamiputra II, period (A.D. 177-196), ten to the fifth and sixth centuries, one to the eighth, three to the ninth or tenth, one to the eleventh, and several coins to the fifteenth. Three of them in caves 10 and 78 bear dates and names of kings, and three in caves, 3, 36 and 81 give the names of kings but no dates. The dates of the rest have been calculated from the form of the letters.

Though almost all are mutilated, in most cases enough is left to show the name of the giver, the place where he lived, and the character of the gift. Of the fifty-four, twenty-eight give the names of donors, which especially in their endings differ from the names now in use; twenty-one of them give their professions mostly merchants, a few gold-smiths, some recluses, and one a minister. Except seven women, four of whom were nuns, all the donors were men.

The places mentioned in the neighbourhood of the caves are the cities of Kalyan, Sopara, and Thane (Sthanak), and the villages of Mangalsthan or Magaihan, Sakapadra probably Saki near Tulsi, and Saphad(?). Of more distant places there are Nasik, Pratishthan or Paithan, Dhanakat or Dharnikot, Gaud or Bengal, and Dattamitra in Sind. The gifts were caves, cisterns, pathways, images, and endowments in cash or in land. Only four of the inscriptions give the names of kings. One in cave 36 gives the name of Madhariputra and one in cave 3 gives the name of Yajnashri Satakarni or Gautamiputra II; two Andhrabhritya rulers of about the first and second centuries after Christ. Of the two, Madhariputra is believed to be the older and Yajnashri Satakarni to be one of his sucessors. Madhariputra's coins have been found near Kolhapur and Prof. Bhandarkar believes him to be the son and successor of Pulumavi Vashishthiputra, who is believed to have flourished about A.D. 130 and to be the Shri Pulumai whom Ptolemy (A.D. 150) places at Paithan near Ahmednagar. Yajnashri Satakarni or Gautamiputra II appears in the Nasik inscriptions, and his coins have been found at Kolhapur, at Dharnikot near the mouth of the Krishna, the old capital of the Andhrabhrityas, and on 9th April 1882 in a stupa or burial mound in Sopara near Vasai.

The two other inscriptions, in which mention is made of the names of kings, are caves 10 and 78. These are among the latest at Kanheri, both belonging to the ninth century, to the Shilahara kings of the Konkan who were tributaries of the Rashtrakutas of Malkhed. They are interesting as giving the names of two kings in each of these dynasties, as well as two dales twenty-four years apart in the contemporary rule of one sovereign in each family. Kapardi II, the Shilahara king, the son of Pulashakti, whose capital was probably Chemula (Chaul) was reigning during the whole interval between 853 and 878, and apparently Amoghavarsh I, was the son of Govind III one of whose titles was Jagattung; but he must have ruled from 810 to 830, and Amoghavarsh II was the son of Indra II. Indra either bore the title of Jagadrudra or Jagattung, or was succeeded by a son of that name. But the dates seem to point to Indra II himself, who may have borne the title of Amoghavarsh, and he succeeded Jagattung about 850.

The caves were discovered by the Portuguese in 1534 and since then they have continued to be objects of much interest and wonder. Many foreign travellers visited the caves at different periods of time. They have left behind some interesting descriptions and their impressions about these rock cut monuments. The following were the more important of the foreign travellers who were attracted to the caves:—

- (i) Dom Joao de Castro in 1539.
- (ii) Garcia d' Orta in 1540.
- (iii) De Couto in 1603.
- (iv) Sir Thomas Herbert in 1625.
- (v) Fryer in 1675.
- (vi) Gemeli Careri in 1695.
- (vii) Anguetil du Perron in 1760.

Several other foreigners also visited the caves but their descriptions are of little consequence. Dom Castro gives the following account of caves. The account given by other travellers is reproduced from the

At the foot of the hill on one side are the bases of seven pillars so deep and broad that the columns must have been of great height. A little further is the first edifice high and admirable, full of pillars and wonderful works. The first storey where one enters goes into the rock with great rooms and halls, but to this I did not go as the ascent was difficult and steep. Close to it is a great gallery forty yards by eighteen without columns. At the end are two chapels worked in relief with a great round ball the object of adoration, and in the middle an inscription almost worn out through time. Beyond the porch of this gallery is a magnificent temple. Outside is a large yard with two high columns admirably worked in relief. The column to the right hand, has on the top a wheel like a Catherine's wheel, placed above four lions beautifully carved. The column on the left hand has some men supporting in their hands a great ball like the world and looking as if they were much borne down by the weight. On this side of the second column are many chapels and rooms. Passing from this yard and before getting to the door of the temple are two other pillars each about fourteen feet high, with an inscription on each in clear and beautiful characters. A little beyond is a corridor, where, on one side, is a ferocious, and great giant of thirty-six spans high and the limbs well proportioned. In the rest of the corridor are, in relief, many figures and faces of men, Beyond the corridor is the temple very high and beautifully vaulted, 120 feet long by fifty broad and fiftyfour high. At the end of the temple is a great altar, with, on its top, the world or a masomy ball nineteen yards round. On each side is a row of thirty-seven columns, and between them and the walls is a cloister which goes round the body of the temple. Over the main entrance is a platform supported on two great colonnades, just like the place for cloisters in Portuguese churches. Outside of the temple a way of steps runs from the foot of the rock to the top, so steep that it seems to go to heaven, and all along the way from below upwards are many edifices, houses, porches, cisterns, chapels, and yards all cut out of stone. I shall speak of those only which I have seen. There are eighty-three houses, among which is one 120 feet long by sixty wide and others where you could keep 100 men; the rest are generally high and roomy. Besides houses there are fifteen chapels, all worked in relief, and thirty-two cisterns hollowed in the rock with plenty of good water, and fifty-six porches some in relief and in fifteen of them legible inscriptions. Most of the houses and rooms have entrances with seats of stone all round. The length of the staircase that runs from the foot of the rock to the top is 930 paces, and besides it, there are many other staircases with many buildings. It is a city cut in the rock that can hold 7,000 men. To the north is another higher hill at whose feet runs a small stream. Across the stream is another rock with many dwellings. But I had no time to visit them.

About the year 1540, Garcia d'Orta mentions two underground temples in Salsette, one of which was in a hill larger than the fortress of Diu and might be compared to a Portuguese village of four hundred houses. There were 300 houses with images carved in stone. Each house had a cistern, with conduits bringing rain water.

According to De Couto (1603), the Pagoda of Canari was cut out of the lower part of a great hill of light grey rock. There was a beautiful hall at its entrance and at either end of the yard which is outside the door of the hall, were two human figures engraved on the same stone so beautiful, elegant, and well executed, that even in silver they could not be better wrought. Near the front door were some cisterns hewn out of the rock which received the rain water, which was so cold in the summer, that no hand could bear it. From the foot to the top of the hill, like a winding staircase, were more than three thousand small rooms in the form of small cells, cut out of the rock, each of them with a water cistern at the door. What was more to be wondered at was an aqueduct constructed so ingeniously that it passed through all the three thousand apartments, received all the water from the hill, and supplied it to the cisterns that were at the doors of the rooms. When the Reverend Antonio de Porto (1534) lived in the Church of St. Michael (Cave No. 3), he was told by the Christians whom he had converted, that there was a labyrinth in the hill whose end had never been traced, and it was moreover stated that it extended as far as Cambay. The priest desirous of exploring this labyrinth took one of his companions, and gathered twenty persons with arms and matchlocks to defend themselves against wild beasts; and some servants to carry water, rice, biscuits, and vegetables for the journey, and oil for torches. They also took three persons laden with ropes to lay along their way. They entered the caves through an opening about four fathoms broad, where they placed a large stone to which they fastened one end of the rope. They travelled through the caves for seven days without any interruption, along places some of them wide and others narrow, which were hollowd in the rock, and on each side they saw small chambers like those in the sides of the hill each of which had at its entrance a cistern, but no one could say whether these contained water, or how they could receive any water, for in all these passages they could not discover any hole, crevice, or anything which could throw light on the subject. The upper part of the building was cut out of the rock, and the walls on each side of these roads were cut in the same way. The priest, seeing that they had spent seven days without finding any opening, and that their provisions and water were almost finished, thought it necessary to return, taking for his clue the rope, without knowing in these winding whether he was going up or down or what course they were taking as they had no compass for their guidance.

Couto also mentions that the Portuguese found the caves inhabited by ascetics or *yogis*. One of the ascetics, who was 150 years old, was made a Christian and named Paulo Raposo; and Coleta another *yogi* who had a more saintly reputation than Raposo, was named Francisco da Santa Maria. With regard to the origin of the caves, De Couto was told by one of the earliest converts that they were made by a king whose son became a great religious teacher. Astrologers told the king that his son would become a great ascetic. To prevent this and wean his mind to pleasure, the king kept his son in a splendid palace full of life and beauty. As he grew up the son wearied of his confinement and was allowed to drive in the city near his palace. During his first drive he saw a blind man, during his second drive an aged beggar, and during his third drive a corpse. Hearing that death was the end of all men he loathed his life of thoughtless pleasure, and flying from the palace, became an ascetic. De Couto's details of the life of this prince so fully and correctly agree with the legendary life of Gautama, that they strongly support the view that the *yogis* whom the Portuguese found at Kanheri were Buddhist monks. Couto also heard from some wealthy Cambay Vanis, that the king who made the Kanheri caves lived 1300 years before the coming of the Portuguese, that his name was Bimilamenta, that he was a wise good king, a native of Magor, Cedepur, and Patan, who had civilised the country reclaiming the people from wild wandering to a life of

settled order.

In 1625 Sir Thomas Herbert mentions two temples of profane worship at Salsette. He gives little detail, only noticing that one of them had three galleries.

Fryer gives the following account of a trip to the caves, in 1675. The way, he writes, to the anciently famed, but now ruined city of Canorein, is so delightsome, I thought I had been in England. It is fine arable pasture and coppice, After passing five miles to the foot of the hill on which the city stands, and half a mile through thick wood peopled by apes, tigers wild buffaloes, and jackals, and some flocks of parakeets, we alighted where appeared the mouth of a tank or aqueduct, cut out of a rock whose steaming breath was very hot, but the water cold. From hence it is thought the whole city was supplied with water; for as we ascend we find places, where convenient, filled with limpid water, not overmatched in India. If it be so, that it should have its current upwards through the hard rocks artificially cut, the world cannot parallel so wonderful a water course. From hence the passage is uneasy and inaccessible for more than two abreast, till we come to the city, all cut out of a rock, where is presented Vulcan's forge supported by two mighty colosses, bellied in the middle with two globes. Next comes a temple with a beautiful frontispiece. Within the porch on each side stand two monstrous giants, where two lesser and one great gate give a noble entrance; it can receive no light but at the doors and windows of the porch, whereby it looks more solemnly. The roof is arched seeming to be borne by huge pillars of the same rock, some round some square, thirty-four in number. The cornice work is of elephants, horses, and lions; at the upper end it rounds like a bow; near where stands a great offertory somewhat oval, the body of it without pillars, they only making a narrow piatzo about, leaving the nave open. It may be a hundred feet long and sixty or more in height. Beyond this by the same mole-like industry, was worked out a court of judicature (West's No. 10), or place of audience, fifty feet square, all bestuck with imagery well engraven according to old sculpture. On the side over against the door, sat one superintendent, to whom the Brahman who went with us, paid great reverence, not speaking of him without a token of worship; whom he called jogi or the holy man. Under this, the way being made into handsome marble steps, are the king's stables not different from the fashion of our noblemen's stables. Only at the head of every stall seems to be a dormitory or place for devotion, with images, which gave occasion to doubt if ever for that end, or rather made for a heathen seminary of devotees; and these their cells or chapels, and the open place their common hall or school; more aloft stood the king's palace, large, stately and magnificent, surrounded with lesser of the nobility. To see all would requiie a month's time. But that might see as much as could be in our allotted time, we got upon the highest part of the mountain where we feasted our eyes with innumerable entrances of these cony burrows, but could not see one quarter part. Whose labourt his should be, or for what purpose, is out of memory; but this place by the gentiles is much adored. It is probably a heathen fane or idolatrous pagoda, from the superstitious opinion they still hold of its sacredness; wherefore the Portugals, who are now masteis of it, strive to eiaze the remainder of this Herculean work that it may sink into the oblivion of its founder.

About twenty years later (1695), the Italian traveller, Gemelli Careri, gives the following details. The first piece of workmanship that appears, consists of two large columns two spans high, the third part of them from the bottom upwards is square, the middle part octangular, and the top round. Their diameter is six spans; they are fifteen spans distant from one another, and each of them eight from the rock which is cut after the same manner. These columns support a stone architrave forty-four spans long; four in thickness and eight in breadth, cut like the rest out of the same rock. These three porticoes lead into a sort of hall or passage room four spans long cat in the same rock. At the end of it are three doors, one fifteen spans high and eight in breadth, which is the middlemost, and two others four spans square on the sides, which are the way into a lower place. Over these doors is a cornice four spans broad, of the same stone; over which thirty spans above the ground, there are other such doors or windows cut in the rock. At the same height there are little grots or dens six spans high of which the middle most is the biggest. Thirty-four spans above the ground, in the same place, is such another grot. It is no easy matter to conceive what the use of all this was. Ten paces towards the right, is a sort of grot, open on two sides twenty-four spans in length and fifteen in breadth, over which was a round cupola fifteen spans high and ten wide, with a square cornice like that about the grot. Here there is an idol cut in the rock in half relief, which seems to hold something, in its hand, but what it is does not appear. The cap it has on is like the cap of the Doge of Venice. By it stand two statues in a submissive posture, as if they were servants. They have conical or sugar-loaf caps. Over their heads are two little statues, holding their hands on a staff and two children by their sides with their hands put together as if in prayer; on their backs is something like a piece of wood. Close by is another round cupola all of one stone, and shaped like the other; the top of it is broken. Both this and the other are supposed to have been sepulchres of the ancient gentiles; but there is no ground to make this out, no opening appearing to put in the bodies or ashes; on the contrary, it is clear they are not hollow within, only cut without in the shape of the cupolas. About this second there are four great figures carved in half relief, holding in the left hand, something like a garment, and the same sort of caps on their heads with small figures at their feet, and two above. Opposite to them, there are three little ones sitting, and six other large ones, and three of a mid ding size standing all cut in the rock after the same manner. That in the middle, which seems to be the idol, in its left holds a tree with fruit on it. On the other side are sixteen figures, all sitting with both hands on their breast, and the same caps; one of them seems to be superior to the rest, because there are two figures standing by its side and two children above. At a small distance northward is a little grot eight spans square, and in it, as it were a bed of the same stone, four spans broad and eight long. On the other frontispiece is a statue sitting on its legs, after the manner of the east, with the hands together on the breast; and another standing with the branch of a fruit tree, and above a winged infant. Beyond the grot, and on the same front, which runs sixty spans within the rock, there are two statues sitting after the same manner, their hands placed the same way, with conical caps on their heads and two like servants standing by them. On the same side is the famous pagoda of Canarin. The entrance to it is through an opening forty spans long, in a wall of the same stone, fifty spans long, and eight spans thick, on which there are three statues. On the right hand, before you go into the pagoda, is a round grot, more than fifty spans in circumference, in which, round the wall, there are many statues sitting, and some standing and one on the left is bigger than the rest. In the middle rises a round cupola cut out of the rock, like a pillar of the same stone, with several characters carved about it, which no man can explain. Going into the first porch of the pagoda, which is fifty spans square, there are on the sides two columns sixty spans high, with their capitals and six spans diameter. On the column, on the right as one comes in, there are two lions, with a shield by them; on the other upon the left two statues. Beyond these columns at the entrance of a grot, on the left, there are two great statues standing, and looking at one another. Still further in are two vast big statues on the left, and on the right of the door, all standing, with several little statues by them, only within the space of that porch; for going into the adjoining grot, which is twenty-four spans square, there is nothing worth observing. On the right hand, where the lions are, there are no statues, but two large vessels upon convenient pedestals. Hence there are three equal doors thirty spans high and eight broad, but that in the middle even with the floor, those on the sides five spans above is, into another plain place. Here there are four columns twelve spans high, standing on the rock itself, between the five windows that give light to the pagoda. On the right side of the door there are some unknown letters worn with age, as is all the rest of the work. In this place, on the sides, besides several small figures, there are two vast statues of giants standing, above twenty-five spans high; showing that right hands open, and holding a garment in the left, on their heads the same caps, and in their ears pendants after the Indian fashion.

At the entrance of the great gate of the pagoda, which is fifteen spans high and ten in breadth, there are on the right four statues standing, one of which is a woman holding a flower in her hand; and twelve others, some sitting and some standing, with their hands on their breasts, and something in them. On the left are four other statues, two of women, with large rings about their ankles of the same stone, and sixteen little statues on their sides, some sitting, some standing, and some with their hands on their breasts as was said before. Over the said door there are other two great ones and as many opposite to them, with three little ones standing.

On the left hand within, is another inscription in the same character; over the arch of this door is a window forty spans wide, which is the width of the pagoda, with a stone like an architrave in the middle, supported on the inside by two octangular pillars. The pagoda is arched, forty spans in breadth, and one hundred in length, and rounded at the end; besides the four columns at the entrance, there are thirty more within, which divide it into three aisles; seventeen of them have capitals and figures of elephants on them; the rest are octangular and plain; the space between the columns and the rock, that is the breadth of the side aisles is six spans. At the end of the pagoda there is a sort of round cupola, thirty spans high and sixteen paces about cut in the same rock but not hollow within. All that has been hitherto described is cut in the rock, without any addition to the statues or anything that may be parted. But on the floor of the pagoda there are several hewed stones which perhaps served for steps to some structure.

Coming out of the pagoda and ascending fifteen steps, all cut in the rock, are two cisterns of rain water, good to drink; and as many steps above that a grot sixteen spans square, and a great one further on with much water standing in it. Mounting twenty paces higher, is another grot twenty spans square, which led to another of the same dimensions, and that into one of twelve. In the first was a rising window with steps to it cut in the rock, with two columns near a small cistern.

At a small distance from these grots is another pagoda, with a handsome plain place before it, and little walls about to sit down, and a cistern in the middle. Five doors cut in the rock lead into the first arch; and between them are four octangular pillars; all but the middle door are two spans above the ground. On the sides of this arch, whose length is the breadth of the pagoda, that is eight spans, there are on the left several statues sitting like those above mentioned, and others on the right standing. All about the frontispiece, there are many sitting and standing, no way different from the rest already described. Then there are three doors to the pagoda, that in the middle twelve spans high and six in breadth, the two on the sides ten spans high and four broad. The pagoda is sixty spans square, no way proportionable, being but twelve spans high. On both the sides, and over the entrance there are above four hundred carved figures great and small, some sitting, some standing, like those before spoken, of two on the right bigger than the rest, are standing, as is that in the middle of the frontispiece, which is of the biggest idol, and another on the left in the same posture; but all worn with age, which destroys everything. On both sides there are two grots fourteen spans square with a low wall within two spans above the ground.

Going up ten steps further northward is a grot and within that another less. On the right is another like it, with another little one within it, in which is a low wall like those before mentioned. The great one is about twenty spans in length and ten in breadth; the other ten square, and all of them have small cisterns, on the right side, is another of the same bigness, with two small pillars before it, two little grots and three cisterns, one on the right and two on the left; and another adjoining to it, with another within it and a cistern of the same size as the other. It is likely these were the dwellings of the priests of the pagoda, who there led a penitential life, as it were in a pagan Thebaid.

Descending from that great height by fifteen steps cut in the rock, there is a little pagoda, with a porch before it thirty feet square through three doors, between which there are two square pilasters. On the left hand there are four statues, two sitting and two less in the middle standing. On the right hand a little open grot and another pagoda, with a cistern before it, the way into which is first through a door ten spans in height and six in breadth into a room twenty spans square, which has on the right another very dark room twelve spans square, which makes the pagoda somewhat dark. In the midst whereof is a round cupola of one solid piece, fifteen spans high, which is the height of the pagoda, descending fifty upright steps there is a plain space cut in the rock, which is not very hard, and eight octangular columns twelve spans high, which leave nine intervals to ascend five steps that led into an arch. In this place on the left side, which is ten spans, is a great idol sitting bareheaded; two other great statues standing, and some small ones; on the right side two other statues, sitting and two standing, besides many little ones about them. Then the way into the pagoda is through three doors, twelve spans in height and six in breadth, with two windows, over them. The pagoda is a hundred spans in length, fifty in breadth, and ten in height. About it runs an arch eight spans broad, with ten square columns. Here are four rooms or grots twelve feet square, besides seven in the front and left side of the pagoda, where the cistern is, all which seem to be rooms for the priests of the temple. In the niche of it, which is ten feet square is a great idol sitting, with two statues standing, another sitting on the left, by which also there are two statues standing, and several small figures in half relief about it. Ascending ten spans over against it is a little grot supported by two small columns, ten spans high. There is a door ten spans high, and four in breadth out of it, into a room or grot, sixteen spans square, and thence into another of twelve, where there is a large idol sitting, holding his hands on his breast.

Then descending twenty steps there is a plain space, whence four steps on the left lead up into an arch where there are four pilasters twelve spans high, the distances between which are the way into three little rooms cut in the rock. Twenty steps lower there are another grots cut in the rock, with small cisterns, but for what use cannot be imagined, unless we suppose all these cavities were dwellings of the idolators.

In 1720 Hamilton calls Canra the only city on Salsette island and hewn out of the side of a rock. It was nearly a mile in length and had antique figures and columns curiously carved in the rock and several good springs of water. He wrote, it was inhabited only by wild beasts and birds of prey.

Mr. Boon, who was Governor of Bombay between 1716 and 1720, had drawings made of the temple columns and of the colossal statues. He gives a good description of the great temple cave and notices several channels cut from all parts of the hill to supply the cisterns, many of which were continually full of very good water. " This stupendous work ", he writes " must have been the labour of forty thousand men for forty years." Time and the zeal of the Portuguese imagining those places to be the habitations of spirits and demons, they used constantly to discharge their great guns at them, which has left so many of them in a very maimed and broken condition.

Anguetil du Perron, who travelled through Salsette in the beginning of December 1760, has left a detailed account of the Kanheri caves. He came by the road from Vehar, and leaving his palanquin and several of his people at cave 8 of the lowest tier, perhaps West's 93, he crossed the ravine to the caves on the smaller hill. Beginning in the west he walked eastward up the valley till he reached the line of the old dam. On his way he passed nine caves which seem to correspond to West's 79 to 87. The cave most to the west, West's 79 or 80, was at great cavern about thirty-six feet long by twenty-four broad with many low openings. The next (81) had in front a porch with two pillars. At the end was a room with a shrine in which was a seated man. The cave was called the shop and the figure the Banian. The third (82) was a porch four feet deep with two windows four feet broad and inside a room fourteen feet broad by eight deep and six high. At the back of the room in a shrine were three seated men. The man on the left was between two standing servants with whips, probably fly-flaps, in their hands. Under the two other men were seated figures like servants and under the middle one, two little figures holding the pillar that supported the throne on which the figure was seated. To the right and left of the three first figures were other figures holding a string in their raised left hands, on the left at the cave mouth was an opening in the rock below. The fourth cave (83) was a ruined room 20' X 10'. The fifth (84) was a veranda 20' x 20' x 8' and inside a room 20' X 20' with a stone bench along the east and north walls. To the left a room eight feet square with a stone bench on the west side. Above a little cistern which had once held water was a writing in fair order on a stone 3½ feet square. The sixth (85) was a ruined cave sixteen feet square. The seventh (86) was a cave 60'x24'. At the end were six rooms, each eight feet square except the third, which was twelve feet broad and twelve long and had an inner chamber eight feet squaie. Outside of the cave to the left was a cistern. The eighth (87) had a veranda twenty feet broad and six deep with two broken eight-cornered pillars, and within the veranda a room twenty feet broad and sixteen deep furnished with a stone bench. At the end was a niche with the figure of a seated man. Outside above the cistern mouth was an eight line inscription on a stone two feet high and two and a half broad, of which only eight inches remained. The three first lines and the fifth were nearly complete; the rest were almost worn out. The ninth (88) cave was about the same size as the eighth. Inside of a veranda was a room and on its right a second room. At the back of this last was a third room eight feet square. There was a little cistern outside of the entrance.

After finishing this row of caves in the smaller hill, Du Perron crossed the ravine at the old dam and turned to the right walking down the ravine apparently to cave 11, then turning sharp to the left he took a row of ten caves which he calls the first tier going from south-west to north-east. This row he divides into two groups a western group low down, corresponding to caves 11 to 15, and an eastern group higher up, probably including West's 16 to 21. Of these groups he gives the following details. The first cave (West's 11) had a porch 24' x 8' with a little cistern on the right, on the left a niche with two seated women and a child standing between them, inside of the porch a room twenty feet square and six high; at the back a shrine with a strangely shaped lingam (this is a relic shrine or dagoba) in the middle, and to the right of the shrine a second room eight feet square. The second cave (perhaps West's 12) had a porch twenty feet broad, six deep and eight high, with two eight cornered pillars. At the back was a room twenty feet square and on its right a second room twelve feet square. Facing a little cistern was a writing on a stone five feet broad, above another cistern of the same breadth as the stone. The writing had $5\frac{1}{2}$ lines, then a line and a half division, and then five lines more. The third cave (West's 13) was twenty four feet broad and twenty deep. At the entrance were two rooms, the outer twelve feet square and the inner four feet square. Three other rooms were in ruins. Outside on the little cistern was an almost worn-out wiiting of five or six lines cut on a stone, three feet broad and one and a half high. The fourth cave (West's 14) had a porch 32' x 12' and on the left a dry cistern. The porch led into a hall 24'x20' with at each corner a room eight feet square. At the back was a recess with two pillars, the wall opposite the entrance being covered with figures. At the two ends of this recess on either side were standing men. Within this room was an empty chamber eight feet square.

Climbing a little up the hill side the second or eastern groups of the first tier had six caves, corresponding to West's 15 to 21. Of these the first (15) was sixteen feet large and eight deep forming two openings; the second (16) was six feet square and six feet high with a lingam or relic shrine in the middle; the third was 24' x20' with a stone bench along the east and west sides and three small rooms on the left the fourth was a room 10 feet square; the fifth (19) was a damaged cave 16'x4' with a stone bench; and the sixth, probably 21, was a porch supported by four pillars forming two arches. On the left, at the back of the porch was a cistern full of water, on the right a seated man with two small men standing beside him, holding in their left hands a tree whose fruit was like an apple.In front at the end of the porch was a

seated man and opposite him another man standing, holding a bush with a flower (a lotus), like a sunflower, growing as high as his ear. Within the porch was a room 24'x20', and on either side another room eight feet square. At the end was a shrine and in front of the shrine a seated man with standing attendants. On the side walls were nine seated figures one ot which had two attendants.

Du Perron next climbed the hill to the east end of what he calls the second tier of caves. Beginning from the east he travelled west passing sixteen caves, an eastern or lower group of nine and a western or higher group of seven. This second tier of caves seems to correspond to the irregular row in West's map that runs in a broken line from 69 on the east to 8 in the west, and includes 69, 70, 71, 72, 42, 43, 99, 73, 74, 75, 76, 77, 10, 9 and 8. According to Du Perron the opening, most to the east (West's 69), is a porch 16' x 6' with two pillars, and inside of the porch a room sixteen feet square. The next cave (West's 70) was a porch without pillars and inside of it a room twenty feet square. To the left of that room were two small rooms of eight feet and to the right a lecess. This cave had many figures of men both standing and seated, among others a bas-relief of a seated man and two attendants. Under this man, were two men holding the pillar that supported his seat. At the entrance was a large inscription on a stone five feet broad and three high. At the top about a quarter of the stone was broken. The inscription contained eleven lines of which seven were in large and four in small characters. No. 3 (West's 71) were plain cut reservoirs, a small cistern, and a ruined room, the whole sixteen feet square. Cave 4 (West's 72), a porch 16' x 12' with two pillars one of them broken, with two rooms at the ends, one on the right the other on the left. Inside was a great hall sixteen feet square, into which a room opened on the left. At the back was a shrine with a seated figure, and on the wall to the right two seated figures, one over the other. Cave 5 (West's 42) was a porch twenty-four feet long with three broken pillars with fluted shafts. On the capital were four tigers with a child seated behind them. At the two ends of the hall were seated men each with two attendants or servants, one of whom held a whip and the other a fair sized branch. Within were two large rooms sixteen feet square with a small room at the left of each. In the middle of the second room was a niche, and, outside of the niche, a well-carved statue, of a man or women with a cap pointed in the form of a mitre, seated cross legged like a tailor, and the breast adorned with jewels. Cave 6 (West's 43) was in the same style as cave 5; only four feet smaller. At the back was a niche with a small figure. Cave 7 (West's 44?) was twenty feet long with side rooms each with two pillars. Within was a room sixteen feet square in which were three recesses with two pillars eight feet large. In this cave there were altogether eleven rooms. Two ruined caves 8 and 9 (Perhaps West's 99 and 73) were twenty feet square with two rooms each and a cistern. These completed the eastern group of the second tier. The western gioup of the second tier, a little further up the hill than the eastern, included six caves apparently corresponding to West's 75, 76, 77, 10, 9 and 8. Cave 10 (West's 75) was a damaged cave about the same size as cave 9. Cave 11 (West's 76) was like cave 10 with two rooms and two entrance pillars, and an inscription showing the remains of six lines on a stone two feet high by three broad. Cave 12 (West's 77) was lour feet larger than cave 11, with two pillars and a well preserved inscription of nine lines, on a stone 3½ feet broad and two high. Cave 13 (perhaps part of West's 77) was about the size of 12, and lay above 8 (perhaps West's 93), with a room more to the right and an inscription of four lines much worn, on a stone one foot high and five broad facing the water cistern beyond the room to the right. Cave 14 (West's 10), the school or Darbar cave, had a porch 26' x 6' with pillars. In the porch, on the right of the entrance, was a standing figure holding an apple and a branch as high as his ear, and on his side two standing women. In the porch were fifty-seven seated figures seven of them large. Beyond the porch was a room about twenty-nine feet square round which ran a stone bench. The wall was covered with figures to the floor. The people called the cave the school because of the number of figures, but Du Perron thought it more like a Prince's court. On either side of each Prince were two ministers, one with a raised whip, the other holding in his left hand a bush, like that in the porch. There were 100 figures on each of the three walls. Du Perron thought they were twenty Indian Princes with their retinues. The cave also contained four rooms two on either side without figures. The next two caves 15 and 16 (West's 9 and 8?) were small openings one with two, the other with three rooms.

Next comes Du Perron's third tier of six caves taken from the west-eastward. They seem to correspond, but this is doubtful, to West's 29, 30, 31, 32, 33, 34 and 35. These were small openings of little interest except that caves 2 and 3 had inscriptions, the one in 2 much worn, the one in 3 with seven lines on a broken stone. Du Perron next passed from the end of his third tier to fourth tier with sixteen caves. These he divided into an eastern group of seven and a western group of nine. The eastern group seems roughly to correspond to West's 47 to 68, and the western group to West's 48 to 55. But the arrangement is confused and the identification doubtful. Du Perron begins about the middle, perhaps near West's 56, and mentions seven going east. Cave 1, perhaps West's 56, had three rooms with six pillars. It had a writing of eleven lines on a broken stone 2 1/2 feet broad and three high above the outside cistern; Cave 2 (West's 57?) was a ruined cave twelve feet square with two pillars; Cave 3 (West's 58?) was a little lower down eight feet square; Cave 4 (West's 59) was like 3 with two inscriptions one of three lines on a stone 2 1/2 feet broad above a water cistern, the other with longer lines over the entrance; Cave 5 (West's 60) was a little higher and well preserved; Cave 6 (West's 62?) was an opening of the same size with two small rooms and an inscription of two lines in the front wall; Cave 7 (West's 63?) was a porch 16' x 4' with two pillars, a large room inside, another room on the left, and at the back a pillared shrine in ruins.

Du Perron then retraced his steps along these seven caves till he passed his first cave (West's 56). Between this and the west end of the tier he mentions eight caves; Cave 8 (Perhaps West's 50) was about the size of Cave 7 and was reached by three steps. Below, at the entrance on the right, were two rooms. At the back was a great square room and to the left of it a little room; Cave 9 (West's 51) was like 8 and had damaged figures in the porch; Cave 10 ^West's 52) was twelve feet square and in ruins; Cave 11 (West's 53) had a porch 14' x 6' with two pillars; and an inner room with the same figures as the school cave (14 of the second tier; West's 10). To the right were two other rooms with doors opening into the outei room. In the middle of the back room were two attendants but no figure. There were two inscriptions, apparently modern, each of twelve upright lines lightly graven in Mongolian characters. Cave 12 (West's 54) had a porch with two pillars, on the right broken figures, on the left no figures, within a hall twelve feet square. In the shrine was a seated figure with two attendants. In the wall, between the hall and the shrine, was an opening about ten inches in diameter, through which women accused of bad conduct were made to pass and stuck half way if they were guilty. Cave 13 (West's 55) was a similar cave

without figures. It had a small cistern and a much worn inscription of nine lines above the cistern on a stone 2 1/2 feet high and three broad. Cave 14 was twelve feet square and had one pillar.

On the top of the hill were two rock-cut cisterns, 8' X 6' X 3'. Below was an open space with seats where the priests came for fresh air. These Du Perron numbers 17 and 18. From the top of the hill Du Perron climbed down to the lowest tier joining it at West's 1. He follows this tier along eight caves, which like West, he numbers 1, 2, 3, 4, 5, 6, 7 and 8. The first seven correspond to West's one to seven. Du Perron's 8 is perhaps West's 93. Cave 1, known as the Prison, was forty feet high and twenty-four, broad, with an upper story of windows without any rooms and with no stair leading to them. Below were two wells and at the back three dark rooms. At the entrance were two pillars ten feet high. Cave 2, measuring 48' \times 28' \times 40', had two rooms at the back with a stone bench running round. At the entrance were two strangely shaped lingams (relic shrines). Cave 3 was a great cave reached by three steps. The central hall, which was vaulted, was 76' X 28' x 32'. The Jesuits had made a church of it and it was still called the Church. There were fourteen pillars in the length, separated from the wall by an aisle. At the end was a headless lingam (a relic shrine). On the first two pillars were tigers, and on the others four elephants. On each side were six pillars in this style. The portico was about fourteen feet deep. At each end was the figure of a man sixteen feet high, and above each figure was a belt adorned with flowers and winged figures and with fluted pillars. In front were eight chief figures four of men and four of women, on either side. The entrance to this cave was open with two pillars twenty-four feet high. On the right pillar was a grindstone. On the left was a room whose walls were covered with figures of sitting men and women. This first part of the cave had a passage into the portico by windows. There were two inscriptions on the pillars, the first of twenty-three, the second of eleven lines; the inscription stone was four feet and three feet broad. Cave 4 was a small room, in a hollow within was the lingam (relic shrine) and on the left, attendants. Gave 5, higher up, was an opening four feet square with two figures, holding fire. In front was a great cistern with two openings. On a broken stone, above the two mouths of the cistern, was an inscription of two long lines. Cave 6, lower down, measured 20' x 10' and had two rooms; above a cistern on the left was inscription of seven lines. Cave 7 was an opening with five windows and three rooms measuring altogether 20' x 14'. Above the four mouths of the cistern were traces of an inscription of two lines. Cave 8 (perhaps West's 93), a great cave called the stable, measured 60' x 24'. At the back were six rooms, the fourth of which was a shrine with a seated figure and attendants and other figures on the sides. In the central hall on the left were the doors of four rooms, and on the right, a recess with four pillars. The centre of the cave had five pillars on each face. The entrance was a gallery upheld by eight pillars joined by walls. On the left of the gallery was a little room where were three sealed men surrounded by attendants. Above the cistern was a great inscription of dghteen lines, aid in front a second inscription of six lines in modern Sanskrit.

This ends Du Perron's account of the caves. About three weeks after Du Perron (28th December 1760), a party of Englishmen from Bombay visited Kanheri. They specially noticed one cave, apparently No. 3, which was 8 3/4 feet long by 21 wide and 50 high, ornamented, with thirty-two pillars each twenty-seven feet high and 8| feet round the base. At the upper end of the cave was a large pillar fifty feet round at the base. It was still worshipped by the people. The cave was entered by a portico 36' x 15' with at each end a figure twenty feet high. Round the portico were small idols. After passing several caves cut into small square rooms, they entered a veranda 75' x 12' supported by nine pillars. Then was a hall 63' x 25½" x 9'. Within this were ten small rooms for living in, neatly cut and measuring 11' x 6'. In the veranda were several English names, among others W. Aislabie, E. Baker (1708), John Hanmer (1697), and J. Courtney. They noticed the great number of cisterns of excellent water. The writer repeated the story that the caves were the work of Gentoo King who wished to secure his son against the attempts to gain him over to another religion. The Marathas, he states, made a yearly pilgrimage and held them in great honour.

In 1781, Dr. Hunger published a short account of the Kanheri, Elephanta and Jogeshwari caves. In his account of Kanheri, he notices only the great temple and the two statues of Buddha. Dr. Hove, the Polish traveller, who visited the caves in 1787, notices only the Great cave No. 3. The relic shrine was still worshipped. 'At the head of the caves' he writes, 'Stands a round pillar resembling the crown or a hat, to which the Hindus to this day pay their adoration.' He noticed two cisterns close to the entrance which were fed by a spring of water that issued 'Very spontaneously 'out of a chasm from the upper adjacent rock of the cave. In 1804, Lord Valentia wrote: 'The Kanheri caves are formed out of a high knoll in the middle of the range of hills which divides Salsette into two equal parts. The great cavern, like the Karli cave, is oblong and has a carved roof, but is inferior to it in size, in elegance of design, and in beauty of execution. It has the same singular building at the upper end and the vestibule is equally adorned with figures. Its peculiar ornaments are two gigantic statues of Buddha nearly twenty feet high, each filling one side of the vestibule. They are exactly alike and are in perfect preservation, in consequence of their having been christened and painted red by the Portuguese, who left them as an appendage to a Christian church, for such this temple of Buddha became under their transforming hands. The image of the presiding deity, in all the usual attitudes, embellishes several other parts of the vestibule; and one in particular is ornamented with conical cap worn by the Chinese Fo. The entrance, on which there are several inscriptions in the unknown character, faces the west. In a large cave close to the chief temple are many figures, especially one of Vishnu fanning Buddha with a fly-whisk. The innumerable caves which have been formed in every part of the hill are square and flat-roofed. They cannot but be intended for the habitations of the attendant Brahmans.

In 1825 Bishop Heber considered the caves in every way remarkable from their number, their beautiful situation, their elaborate carving, and their marked connection with Buddha and his religion. The caves, he writes, are scattered over two sides of a high rocky hill, at many different elevations, and of various sizes and forms. Most of them appear to have been places of habitation for monks or hermits. One very beautiful apartment of a square form, its walls covered with sculpture and surrounded internally by a broad stone bench, is called the Darbar, but I should rather guess had been a school. Many have deep and well-carved cisterns attached to them, which, even in this dry season, were well supplied with water. The largest and most remarkable of all is a Buddhist temple, of great beauty and majesty. It is entered through a fine and lofty portico, having on its front, but a little to the left hand, a high detached octagonal pillar, surmounted by three lions seated back to back. On the east side of the portico is a colossal statue

of Buddha, with his hands raised in the attitude of benediction, and the screen which separates the vestibule from the temple is covered, immediately above the dodo, with a row of male and female figures, nearly naked, but not indecent, and carved with considerable spirit, which apparently represent dancers. In the centre is a large door and above it three windows coitf ained in a semicircular arch. Within, the apartment is fifty feet long by twenty, an oblong square terminated by a semicircle, and surrounded on every side but that of the entrance with a colonnade of octagonal pillars. Of these the twelve on each side nearest the entrance are ornamented with carved bases and capitals, in the style usual in Indian temples. The rest are unfinished. In the centre of the semicircle, and with a free walk all round it, is a mass of rock left solid, but carved externally like a dome. On the top of the dome is a sort of spreading ornamented like the capital of a column. The ceiling of this cave is arched semicircularly and ornamented in a very singular manner with slender ribs of teakwood of the same curve with the roof and disposed as if they were supporting it. The caves were next described by Mr. Vaupell in 1837, and six years later Mr. Fergusson gave a short account of them in his paper on the Cave Temples and Monasteries of Western India.

In 1850 Dr. Stevenson translated some of the Kanheri inscriptions and brought to light some historical names and facts. In 1860 Dr. Bhau Daji numbered the caves. He was followed in 1860-61 by Mr. E. W. West, who published a plan of the caves and copies of the inscriptions with short notes on their position and condition. Mr. West also in the same year gave an account of some of the topes in galleries 38 to 41 and of some stone pots and seals found in digging cave 13.

The following account of the caves, originally contributed by Mr. H. Cousens, Head Assistant to the Archaeological Surveyor, and the substance of the inscriptions by Pandit Bhagwanlal Indrajit from facsimiles taken in 1881 have both been slightly revised. Most of the caves are cut in two knolls of bare rock separated by a narrow stream bed. Of the 102 caves all are eatily entered, except five small openings. Of the rest about twenty-seven are good, fifty-six are small, and fifteen are partly or entirely ruined. Except temples or chaityas, and the peculiarly planned cave 10, which was probably a place of assembly, nearly all the caves bear marks of having been used as dwellings, and many of them have stone sleeping benches ruinning round the walls: The doorways were fitted with frames and doors, which were fastened by horizontal bars held in holes in the stone jambs. The windows were either latticed or provided with wooden frames and shutters. The whole monastery tery was well supplied with water. On the hill top are several rock-ponds, and almost every cave has its cistern filled from channels cut above the caves or the cave. To the east of the caves a massive wall, now ruined, ran across the stream that separates the two cave-cut knolls and formed a small lake whose bed is now silted and full of reeds.

For a hurried visit of one day, perhaps the best order for seeing the hill is, after visiting 1,2 and 3, to pass to the left across the ravine, and, keeping up the sloping face of the knoll, see the sites of relic shrines or burial mounds and the remains of an old temple behind. Then come back to the ravine and pass along its north bank examining the line of caves. Next struggle up the stream bed, pass through the breach in the dam and crossing to the south bank of the stream come down along the lowest tier of caves from 21 to 10. At 10 turn back and up to 77 and pass as far as possible in front of the second tier of caves to the quarry on the hill top. See the view, the cisterns, quarries, remains of the retaining wall, and the ruins of relic mound. Then pass down seeing as many as possible of the third tier of caves 68 to 90. Pass from 90 to 36 and 37 and then along a flight of steps to the burial gallery 38 to 40 returning by the same way.

CAVES NO. 1-2: Climbing the footpath from the valley, the group of three temples 1, 2 and 3 attracts attention. They face west and have in front of them a large level space which had once some remains of the stupa or relic mound of which an account is given later on. Passing a little to the south of 3, the most striking of the group, a cave 1 should first be examined. It is the beginning of a large temple or chaitya, the only finished portions being two large pillars supporting the front screen, whose general clumsiness seems to show that this is one of the latest caves on the hill; 2 is a long low excavation, irregular in plan, being originally more than one excavation the partition walls of which have broken down. At the south end are three rock-cut relic shrines or dagobas. Of these nothing remains of the middle dagoba except its base. On the wall behind the first relic shrine, is the curious sculptured panel which occurs again in caves 21 and 66, at the Aurangabad caves, at Ellora, and at Ajanta. This is known as the Buddhist litany, a prayer to the good lord Padmapani to deliver his worshipper from the different forms of battle, murder, and sudden death. In the centre a lifesize image of the Bodhisattva Padmapani or Avalokiteshvar, stands at attention holding in his left hand a lotus stalk and flowers on his right and left are four shelves each supporting a couple of little figures which are much defaced. In front of each of these little groups, and between it and Padmapani, is a human figure with wings. In the upper group to the left, that is, on Padmapani's right, a kneeling figure appears to be praying for deliverance from a lion which is in the act of springing upon him. In the next group below, a kneeling woman with a child in her arms tries to avoid an old hag, disease or death. In the third compartment a kneeling man prays a winged figure to save him from one who holds a drawn sword over his head. In the lowest compartment the figure prays to be saved from a cobra which is crawling towards it from an ant-hill. At the top on the other side the kneeling figure is about to be attacked by an enraged elephant; in the west compartment a man in the background has his hand raised in the act of striking the kneeling figure. In the next, perhaps the petition against false doctrines, heresies, and schisms an orthodox Naga is attacked by a flying Garud, the type of Vaishnavism. In the last, two figures pray from deliverance from shipwreck. The winged figure to whom each suppliant turns for help is probably a saint, an intercessor between him and the deified Padmapani. On either side of Padmapani's head are cherubins with garlands and at his feet kneels a devotee. Other figures of Padmapan and Buddha which adorn the wall on either side of this panel seem to have been added by different worshippers. There are three inscriptions in this cave. In one corner of the recess behind the large relic shrine, partly on the left and partly beneath a standing figure of Buddha saluted by nine men near his feet, is an inscription of six short and one long lines. The length of the lines is six inches and twelve inches. The inscription gives nine names, probably of the nine persons represented owing to Buddha. The names are Nannovaidya, Bhano (Sk. Bhanu), Bhaskar, Chelladev, Bopai (Sk. Bopyaki), Bhattabesu, Survai (Sk. Suvrati) and Pohi (?). The characters seem to be of the fifth century. In the back wall, above a long bench set against the wall, is a deeply cut distinct inscription of two lines two feet two inches long. It is inscribed in letters of the time of Vashisthi-putra (A.D. 133-162) and records the gift of a refectory or satta (Sk. satra), by Nakanak (inhabitant) of Nasik. A few feet to the north of the second inscription, and nearer to the cistern in front of the cave, is a third deeply cut and distinct inscription of two lines two feet nine inches long. It is inscribed in letters of the time of Vashishthiputra (A.D. 133-162) and records the gift of water(?) by Samidatta (Sk. Svamidatta) a goldsmith of Kalyan.

CAVES NO. 3: Close to No. 2 comes No. 3, the cathedral or chaitya Cave 3, the most important of the Kanheri caves. The style and plan are much the same as in the great Karli cave, but, owing to its softness, the rock is much destroyed. The measurements are 86 feet long, 39 feet 10 inches wide including the aisles, and 37 feet 7 inches high. In front is a spacious court, entered through a gateway in a low parapet wall, whose outside has been prettily decorated with the rail pattern and festoons along the top. In basrelief, on either side of the doorway, stands a rather stunted gatekeeper, and attached to the walls of rock on each side of the court are great eight-sided columns on square basement with broken shafts. The capital of the northern columns once supported three fat figures holding something behind them like a great bowl, and on the capital of the southern column bore four seated lions only outlines of which are seen today. A great rock screen separates this court from the veranda. This screen has three large square openings below, separated by thick massive pillars, the central opening being the entrance to the veranda. Above it is divided by four pillars into five open spaces which admit light to the arched front window. These pillars support the outer edge of the roof of the veranda. In each end of the veranda, cut in the end walls, a gigantic figure of Buddha twenty-five feet high stands on a raised plinth. Low on the left leg of the figure in the north end of the veranda, are cut, in old English characters, A. Butfer, K.BJ.,B., J.S., 78, initials, which as is shown by a writing in another cave, stand for Ann Butfer, K.Bates, John Butfer, K.Bates, John Butfer, and John Shaw, who visited the caves in 1678. Between the two sides and the central doorways, the front of the cave is adorned with life-size statues in bas-relief of men and women after the style of the Karli figures. The men wear the same curious head-dress, and the women the same heavy earrings, bracelets, and anklets. Above these arc rows of sea ed Buddhas, and above the Buddhas again is the great arched window, through which light passes into the nave of this great Buddhist cathedral. The roof is high and vaulted, and at the far end is a semicircular apse, in the centre of which stands the object of adoration a relic shrine. Separated from this central space by two rows of pillars are two aisles. These are continued round behind the relic shrine where they meet forming an unbroken row of pillars, It is from the plain entablature above these pillars that the vaulted roof springs, the ceilings of the aisles being flat and very little higher than the capitals of the pillars. Of these pillars only eleven on the north side and six on the south side have been finished, the others are plain octagonal columns from top to bottom. The finished pillars have water-pot bases and capitals. The base rests on a paramidal pile of four or five flat tiles or plates and the capitals support a similar pile of plates in inverted order. Over each of these pillars is a group of figures. In two cases the figures worship a relic shrine which is placed between them, on another a tree is worshipped, and on the rest are men riding elephants and horses. Some of the pillars once bore traces of plaster with painted figures of Buddha. The relic shrine is plain and has lost its umbrella which was supported by a pillar of which the base may still be traced. Round the drum or cylindrical base are square holes at equal intervals apparently for lights. The roof of the nave has had arched wooden ribs similar to those at Karli, their positions being marked by dark bands on the rock. Under the great arched window and over the central doorway is a wide gallery supposed to have been used by musicians. There are now no means of getting to it except by a ladder. There are nine inscriptions in and about this cave. In the right gate-post is a deeply cut and distinct rather defaced inscription of 22 1/2 lines. The right side is imperfect as that part of the gate-post was built of squared stones which have been removed. The original length of the lines was three feet eight inches, which by the removal of the stones has been reduced to two feet in the upper part and three feet one inch in the middle. This is a valuable inscription, but much of importance has been lost in the upper lines. As it now stands, all that can be gathered from it, is that the cave was made in the time of king Yajnashri Satakarni Gautami-putra (A.D.117-196), by two merchant brothers Gajsen and Gajvir from Datamiti (?) (Sk. Dattamitri) in Upper India, and that the temple was dedicated to the Bhadravani school of Buddhism. The inscription mentions the names of several Buddhist monks, Kalvarjit, the reverend Thera (Sk.Sthavira), Achal, the reverend (Bhadanta) Gahala, Vijaymitra, Bo. Dharmapal and Aparenuka, the son of a Buddhist devotee and merchant. The inscription closes with the words Finished by Badhika, the manager, and the pupil of the old Buddha monk Seul. The cave was carved by the great mason Vidhika with Shailvatak, Kudichak and Mahakatak. Cut into the left gate-post is another inscription of elevan lines, originally three feet four inches long. It is deeply cut, and the rock being smoother and of a lighter colour it is more distinct than the last. The left side is imperfect in the upper lines owing to the outer angle of the gate-post having been broken off. The inscription, which is in characters of the second century, records gifts. The name of the giver is lost. It mentions gifts made in several places, in the Ambalika monastery in Kalyan, something given in the old district (Sk.ahar) of Sopara (Sk.Shurpa-raka), a monastery, vihar, in Paithan (Sk Pratishthana), a Chaitya temple and thirteen cells in the cave of Pratigupta, the grant of an endowment to support the Rajatadag reservoir on the way to Paithan Asana and Chulkappikuti(?) a cistern and some other things. The third inscription is under a standing figure of Buddha, on the inside of the outer wall of the veranda, between the left gate-post and the left colossal figure of Buddha. It is of three lines each two feet eleven inches long. The letters belong to about the fifth century. It refers to the carving of the image of Buddha below which it is set and states that the image was made by the Shakya friar Buddhaghosha, residing in Mahagandhkuti a disciple of Dharmavatsa and teacher of the three great Buddhist books, tripitaka. There is a fourth inscription of one line, three feet one inch long, under a sitting Buddha sculptured on the back wall of the veranda, above the dancing figure on the right side of the doorway. It is cut in letters of about the fifth century, and is tolerably distinct but high up. It records, ' The meritorious gift of the Shakya mendicant Dharmagupta'. The fifth inscription, of one line ten inches long, is cut into the square shaft of a small bas-relief relic shrine on the right wall outside the veranda. It is deeply cut in characters of about the fifth century, and, as it stands is complete. It gives the well known Buddhist formula. The sixth inscription, of nine lines each ten inches long, is cut into a pilaster on the right side of a standing Buddha which is sculptured on the western wall inside the small chamber to the left of the entrance. It is faintly cut in letters of about the fifth or sixth century and records that the image was the gift of Acharya Buddharakshita. A seventh inscription, of three lines, was found on the face of a squared stone, 19 1/2 inches long by 10 1/2 broad, that lay on the outside terrace under the trees in front of this cave. The letters are' of the fifth or sixth century, and the inscription is about the building of a house or In the open space in front of Cave 3 there were once two or three large relic mounds, of which the largest was built of stone and brick and was from twelve to sixteen feet high. Dr. Bird gives the following account of the opening of this relic mound in 1839: " After digging to the level of the ground and clearing the materials, the workmen came to a circular stone, hollow in the centre, and covered at the top by a piece of gypsum. This contained two small copper urns, in one of which were some ashes mixed with a ruby, a pearl, small pieces of gold, and a small gold box containing a piece of cloth; in the other were a silver box and some ashes." Two copper plates accompanied the urns containing legible inscriptions in the cave character, of which the following is believed to be the translation: Salutation to the Omniscient (Buddha). In the year 245 of the increasing rule of the Traikutakas, in the great monastery of Krishnagiri, Buddharuchi, an inhabitant of Kanak? (Kobhoka or Katoka) a village in the Sindhu country, the son of the glorious Buddhashri and Pushyavarman, intent on religious duties, of the religion of Shakyamuni (who was) strong in the possession of the ten powers, revered, possessed of perfect knowledge, an Aryagana of his (that is Shakyamuni's) Shravals, erected this relic shrine, chaitya, of dressed stone and brick to last while the moon, sun and ocean endure, to the gieat Shravak of the Paramamuni (Buddha), the noble Sharadvatiputra. Therefore let the Devas, Yakshas, Siddhas, Vidyadharas, Ganas and Manibhadra, Purnabhadra, Panchika, Arya Vajrapani, Vankanaka(?) and others be propitious. Moreover, as long as the milky ocean, the waters of the whirlpools of which are whirled round by the sea monsters which are driven about by its thousand waves, is an ocean of milk, as long as the clear river flow into the ocean; so long may this enduring and auspicious, fame attach itself to the excellent son of him named Pushya (Varman). Only the faintest traces of this relic mound remain.

CAVE NO. 4-5: Cave 4 is a small circular chamber to the left of Cave 3 containing a relic shrine. This cave is adorned by a series of monk figures in three panels. It has an inscription of three lines and two letters, cut into one side of the square tee of the relic shrine. It is cut in letters of about the fifth or sixth century, and states that the relic shrine was made to hold the relics of the reverend old Buddhist monk Dharmapal by Shivali-tanika, wife of the goldsmith Dhamanaka. Turning north, up a broad flight of steps, is Cave 5, a plain two-mouthed water cistern with a long inscription cut over it. The original length of line was probably nine feet ten inches of which one foot ten inches on the left have entirely peeled off. Though deeply cut the inscription is much defaced, which is specially to be regretted as it is one of the oldest and most important in the series. It is inscribed in rather corrupt Sanskrit, the letters being of the age of Vashishthiputra (A.D. 133-162). It records the gift of a water-pot by the minister Shatoraka. Though nothing distinct can be made out of the rest of the inscription, it appears from the fragments that this Shatoraka was the minister of the queen of Vashishthiputra. The queen is mentioned as belonging to the Karadamaka dynasty and it further appears that she was connected with the Kshatrapas, the word Mahakshatrapasya being distinct. She was perhaps a grand-daughter on the maternal side of a Mahakshatrap.

CAVE NO. 6-9: Entering the ravine of watercourses, between the two knolls, and continuing on from Cave 5, come caves 6 and 7, both much ruined and of little consequence. Above the two mouths of the cistern, at the left end of Cave 7, two deep distinct inscriptions, one of three and the other of four lines, are cut into the rock side by side and about six inches apart. The length of line in the first is two feet four inches and in the second two feet nine inches. Both inscriptions refer to the cisterns. One records that one cistern is the gift of Samika, a merchant of Sopara; the other that the other cistern is the gift of a goldsmith Sulasdatta of Chemula (Chaul), the son of Rohini Mitra. The letters are of the time of Vashishthiputra (A.D. 133-162) or perhaps a little earlier. After passing two great rocks in the stream bed and up some notches in the rock, is number 8, a water cistern, and beyond it Cave 9, a large plain room with four thick square columns in front. It is unfinished and forms the lower storey of Cave 10 above.

CAVE NO. 10: Following the ravine, a long flight of steps leads to Cave 10 generally called the Darbar Cave, the next largest cave to 3. Its arrangement differs greatly from that of most other caves. The frontage is a long veranda 72' 6" by 8' 4" supported outwardly upon eight octagonal columns. A little chapel at the eastern end has some figures of Buddha and attendants. Three doorways and two windows communicate with the inner hall which is a long rectangular room, the same length as the veranda. Round the two sides acd back of this inner hall runs an aisle separated from the room by pillars. In a shrine that stands out from the middle of the back wall across the full depth of the aisle, is a large seated figure of Buddha, and in the back walls of the aisles are two small cells. The most curious feature in the cave are two long low seats or benches running down the whole length of the centre. They seem to show that, like the Marathwada at Ellora, the cave was used as a place of assembly or as a school. In this cave are two inscriptions, one much older than the other. On the left wall, outside the veranda and above a recess over the cistern, is a minute inscription of sixteen lines, six feet four inches long, with part of another line and two half lines. Where not defaced it is tolerably distinct, and seems to be written in letters of about the fifth century. The language is pure Sanskrit and the whole inscription is in verse. It records the excavation of the cave by a merchant whose name is gone. In the fourth line he is described as famous among the millionaires of the great city of Chemula, as one whose widespread fame had bathed in the three seas. In the fourteenth line is mentioned the grant, to the Kanheri friars, of a village called Shakapadra at the foot of the hill. In the last part of the inscription some account is given of a preceptor, acharya, named Kumar. The other inscription is on the architrave over the veranda colonnade. It consists of three upper lines eleven, feet long, three lower lines eleven feet seven inches long, and two additional lines five feet six inches long, to the left of the three lower lines and on the same level. It is faintly cut but distinct, and the letters apparently belong to about the ninth century. The inscription records an endowment, akshaya nivi of 100 drammas by a great Buddha devotee from Gaud (Bengal) or

On the opposite side of the ravine, Cave 70 has a long inscription of about the same date as that over the pillars in Cave 9 and very like from same hand.

CAVES NO. 11: The next cave on the original side is Cave 11, which is further up the ravine. It consists of a veranda supported outwardly on two small pillars, an inner room about fourteen feet square, and a chapel with a large relic shrine in the centre. Opposite to Cave 11, on the other side of the ravine, is Cave 79. Next to Cave 11 on the original side is Cave 12, a plain small room with a veranda and a water cistern on one side. On the left wall, outside the veranda and over a large recess, is an inscription of about ten lines, five feet six inches in length. The letters, which are of the time of Vashishthiputra (A.D. 133-162), are deeply cut, and, where they have not peeled off, are distinct. They record the gifts of a cave, a cistern, a sea.t and a sleeping bench by an inhabitant of Kalyan, (name gone), a merchant, son of Shivmitra. There is a further gift of clothes and, Karshapanas and one Pratika a month to the friars who lived in the cave in the rainy season. Over against this is cave 80. Cave 33 is a group of three or four broken caves with some ruined relic mounds. In this cave some interesting discoveries were made by Mr. West in 1853. In the centre of the floor, which was covered with earth, were found the foundations of four small relic shrines of unburnt bricks. In one of these foundations, which seemed to have been undisturbed since the destruction of the shrine, fragments of clay seals were found representing a sitting Buddha surrounded by ornaments. Further search showed many similar impressions in dried clay, also several impressions of round seals of various sizes bearing inscriptions. Some larger fragments of dried clay which had been moulded into peculiar forms, were discovered to have been the receptacles in which the inscription seals had been embedded. The larger fragments of dried clay were found to be portions of six varieties of seal receptacles. The impressions of inscription seals were laid face to face in pairs, and one pair was embedded in each receptacle. They were small round pieces of dried clay with a flat face bearing an inscription in relief, evidently the impression of a clay with a flat seal, and a rounded back, which bore the impression of the skin markings of a human palm, showing that the clay was laid upon one hand while the seal was impressed with the other.

An examination of the most distinct of the seal impressions showed some words of the Buddhist formula, and this led to the deciphering of the whole inscription. On many of the other seals, the inscriptions, though differently divided into lines, were precisely alike, and represented in letters of about the tenth century, the well known Buddhist formula. One seal had an inscription in sixteen lines, the last three of which were found to be the Buddhist formulas. All the impressions representing a sitting Buddha seemed to have been made with the same seal as the same defects occurred in all. The figure was represented cross-legged under a canopy, surrounded by ornaments and with three lines of inscription beneath it. Portions of seventy distinct impressions of this seal were found in Cave 13 of which two were broken, fifty-five were pieces containing the whole sitting figure, the rest were in smaller fragments. The flat faces of the impressions were painted red, while the round backs bore distinct impres-ssions of the skin markings of human hand, showing that the seal was impressed in the same manner as the inscription seals.

There were a variety of fragments of moulded clay found with-the seal impressions. It was doubtful what they represented, but several of them, fitted upon others, formed mushroom shaped ornaments which would fit on to the broken tops of the receptacles. One was a fragment of a larger umbrella-shaped canopy; another appeared to be one-half of a mould for casting coins, bearing the impiession of a coin which might possibly be a very rude representation of a man on horseback. A brass or copper earring was found embedded in a small ball of ashes.

Two stone pots were found buried in the earth between two topes. They were of laterite or some similar stone, and had covers fitting a sunken ledge on the top of the pots. Each of them held about a table-spoonful of ashes, one pot had three copper coins and the other two copper coins. Of the coins, the first three appeared to have been little worn and were covered on both sides with well cut Arabic letters which differed in each coin, though all three bore the date H. 844 coinciding with A.D. 1440-41. The latter two were much worn and the inscriptions weie difficult to read and contained no date. On the other side of the watercourse are caves 81 and 82.

CAVES NO. 14-15: Still following the ravine and crossing an upward flight of steps is cave 14, a well finished cave but infested with bats and bad smells. The shrine at the back of the hall has a little antechamber with two slender pillars in front. The roof has remains of plaster. Opposite Cave 14 is Cave 83. Over the cistern corner of Cave 14 a rough path leads to Cave 15, an unfinished cave that seems to have contained a built relic mound. On a tablet, cut on a detached rock between Caves 14 and 15, is an inscription of four lines one foot four inches long. It is deeply cut and complete but not very distinct. The letters, which are of the time of Vasishthiputra (A. D. 133-162), record the dedication of a pathway by one Kumar Nand (or son of Nanda?) of Kalyan. Opposite to this on the other side of the ravine, is Cave 84.

CAVES NO.. 16-21: Cave 16 is a small cell cut in the rock with a relic shrine. Cave 17 is open in front with a group of cells walled off in one end, and a low bench running round two of its sides. Across the ravine are Caves 85 and 88. Cave 18 is a water cistern and Cave 19 a small cell. On the left wall of the porch of Cave 19 is a faintly cut and rather indistinct inscription of 2 1/2 lines three feet long. It is cut in letters of the time of Vashishthiputra (A.D. 133-162) and records, the gift of cave by a recluse (name gone, perhaps Asad), brother of the reverend Vir, who also gave and endowment from which to supply a garment to the monk living in the cave. Cave 20 is a broken cavern with some low benches. Cave 21 is rather a good

cave with a cistern on the right and a projecting porch supported outwardly by two pillars with cushion capitals. Beyond the porch is the veranda, the hall twenty-six feet ten inches long by twenty-two feet four inches wide, and the shrine with a seated figure of a teaching Buddha. There are Padmapanis on each side and Buddhas in the side niches with angels about. The most curious feature in this cave is a figure of Padmapani on the right of a seated Buddha, in a niche to the west of the porch with eleven heads. Besides his proper head he has ten smaller heads arranged in three rows above, four in the central row and three on each side of it. There is also a litany group, like that in Cave 2, but much damaged. On some plaster to the right of the shrine door are the painted outlines, of several Buddhas.

Dam: At this point the ravine widens into a large basin and has, across its mouth, the remains of the massive stone dam of which mention has already been made. On a detached rock, between Caves 21 and 22, is an inscription about the making of the dam. It is deeply cut and distinct, but most of the first line and part of the second have peeled off. The letters are of the time of Vashishthiputra (A.D. 133-162) and record the gift of a reservoir by a merchant named Punaka.

CAVES NO. 22-28: Continuing in the same direction is 22, a small cave, neatly cut, with a veranda and a cell furnished with a sleeping bench. Cave 23 is a long straggling excavation much like 13 with some benches along the back wall; Cave 24 is a small cell; 25 is the beginning of a cave and 26 another small cave, 27, which comes next was meant to be large, but never went much beyond a beginning. In front are two half-cut pillars with cushion capitals. Some little distance lower is 28 which is of no importance. From this, as 29 is back towards 3, it is best to return by the other side of the ravine taking the caves from 87 to 78.

CAVES NO. 87-78: Cave 87 is a little room and veranda with a water cistern; 86 is similar in plan but rather larger; 88 is the beginning of a cave up above between 85 and 86; 85 is a small room much ruined; 84, which has a figure of Buddha in a niche in the back wall and one of the more modern inscriptions; 83 is a long straggling cave with a row of six cells in the back wall and the remains of one or more built relic mounds. 82 is a small broken cave; 81 is a neat little cave with a long inscription and a doorway and little lattice window on either side. The veranda is open and pillarless. 80 originally included three rooms, which are now broken into one another and much destroyed; 79, a plain little room with a veranda and two pillars, is apparently unfinished. In the back wall is a long rectangular niche with a number of small seated Buddhas. In the inner dark chamber of cave 78, on the front of a pedestal or altar before a sitting figure, is an inscription of four letters. The surface of the stone is much honeycombed and the first two letters are illegible. The letters are of the time of Gautamiputra II (A.D. 177-196), or a little later, and the language may be Sanskrit. On the architrave over the veranda colonnade, is another inscription in Sanskrit of two sets of five lines, each line seven feet long. Each line is over the space between two pillars and the short line below is on the capital of a column. The first part, which is inscribed in letters of the ninth century, records the gifts, by the reverend Nainbhikshu, of an endowment of 100 drammas to the friars living in the large monastery of Kanheri during the reign of Kapardi (II), king of the Konkan, the humble servant of Amoghvarsh, Shak 799 (A.D. 877). Near the above but separated by a line to avoid confusion is another inscription which seems to mean: During the reign of Pulashakti, governor of Mangalpuri in the Konkan, the humble servant of (the Rashtrakuta) Amoghvarsh beloved of the world, the great devotee Vishnuranak, the son of Purnan-hari, living on the lotus-like feet (of the king) requests the honourable brotherhood (of monks) living in Kanheri to ' Read three leaves of the revered (books) Panchvinshati and Saptasahasrika '. Vishnuranak gave 120 drammas to keep up this sacred reading. On the left wall, outside the veranda of Cave 81 over a recess, is an inscription of twelve lines, each line three feet nine inches long. It is cut rather deep md is fairly distinct, the last four lines being clearer and probably later than the rest. It records the gift of a cave and cistern by the devotee Aparenuka, son of Ananda, inhabitant of Kalyan, on the fifth day of the first fortnight of Grishma (April) in the sixteenth year of Gautamiputra Yajnashri Satakarni (A.D. 177-196). Also of 200 karshapana and a field in the village of Mangalthan (Sk.Mangalasthan), as an endowment to provide sixteen clothes and one pratika a month during the rainy season. On the right wall, outside the veranda of Cave 82, is an inscription of probably more than five lines, originally three feet three inches long. It is cut rather deep but the rock is honeycombed and weatherworn, so that in places the letters are very indistinct. About three letters are wanting at the end of the first line and a corresponding number below. The letters are of the time of Gautamiputra II (A.D. 177-196), and record a gift by a nun (name gone), the disciple of some reverend friar. On the right wall, outside the veranda of Cave 84 and above a recess over a cistern, is an inscription of eight lines, three feet three inches long. It is faintly cut on a tablet surrounded by an ornamental border, the surface of the tablet being much corroded. The letters are of about the fifth century. It probably records the gift of a cave.

CAVES NO.. 29-36: About fifteen yards to the north of and on a much higher level than number 3, the cathedral cave, is 29, an ordinary sized cave with a hall twenty feet nine inches by eighteen feet five inches. A low bench runs round two sides of the hall, and the walls aie adorned with numerous Buddhas. seated on lotus thrones supported by Naga figures. There is a plain open-window on the left of the hall door and a latticed window on the right. This cave is provided with the usual water cistern on one side. On the inner wall of the veranda, o\er and between two grated windows is an inscription of one line seven feet six inches long, and of seven lines three feet one inch long. The inscription, which is deeply cut on a rough surface and tolerably distinct, records, in letters of the time of Gautami-putra II (A.D. 177-196), the gift of a cistern and a cave by a merchant Isipal (Sk.Rishipal), son of Golanaka, inhabitant of Kalyan, and (the gift) of a field in the village of Saphad as an endowment from which to supply a garment to a monk during the rains and in the hot season to make an awning mandap. 30 and 31 are small caves of little interest. 32 differs in plan from any cave except 45. A long veranda is supported along the front on four pJain thick octagonal pillars. Instead of having the doorway of the hall in the centre of the back wall of the veranda it is pushed towards one end, the other end being occupied by a group of cells. Two oblong windows much larger than usual light the hall, one on either side of the doorway; and further along the wall, another similar window opens into the cells. Round two sides of the interior of this hall runs, a low bench. A water cistern is attached to this cave. Passing up the steps between 30 and 31, keeping to the left, is 33, a much damaged cave with a water cistern and long benches against the rocks outside. 34 is a small cave with two pillars supporting the front of the veranda; and two little lattice windows one on

either side of the doorway, admitting light into the little room. Cave 35, next in size to 10, has the floor considerably raised above the outer court and has a well cut flight of steps leading to the veranda. The front of the veranda is supported on four thick plain octagonal pillars. Between each of the pillars, except the middle pair, is a low bench with a back that forms a low parapet wall from pillar to pillar. The outside of this wall continues straight down to the floor of the court. The upper part is adorned with the Buddhist rail pattern and an upper horizontal edging of festoons, which, in timber fashion, are shown as if resting on the cross beams pf the veranda floor, the square ends of which are allowed to project a little beyond the face. These again rest on a long horizontal beam which runs the whole length of the front of the cave, the beam itself resting upon vertical props which at intervals rise from the ground. The veranda walls are covered with representations of Buddha in different attitudes. A central and two smaller side doorways enter on a large hall, forty-five feet six inches by forty feet six inches, with a bench running round three sides and cells off the two side walls. These inner walls are also covered with sculptured figures of Buddha and Padmapani. A good water cistern is attached to the cave. From 35 the path leads up the rock, over the cistern near 33, southwards, across an upward flight of steps, about fifteen yards to 36 a much damaged cave. Outside the veranda on the right and left walls of cave 36 are two inscriptions. The right inscription of seven lines, three feet eight inches long, is faintly cut on a somewhat honeycombed surface. The lines seem to have originally been ten inches longer and in this part have become illegible. The left inscription, probably of eight lines three feet six inches long, is faintly cut on a honeycombed surface and is indistinct. Both inscriptions relate to the same subject and have the same date. The names of the donors are different. The inscription runs:' In the eighth yeai of king Madhari-putra the lord Shirisena, in the sixth fortnight of Grishma (April-May) on the tenth day, a merchant householder, the son of Venhunandi, merchant, living in Kalyan, made this cave of Satta (?) with the respectable , with his father Venhunandi, with his mother Bodhisama, with his brother...... hathi, with an assembly of all co-religionists.' On the left wall, outside the veranda and near a recess over a cistern, is a third inscription of ten lines three feet long. It is faintly cut, on a rough surface exposed to the weather, in letters of about the time of Gautami-putra II (A.D. 177-196). It records the gift of a cave, a cistern, and a bathing cistern by Lavanika, wife of Ayal (Sk. Achal), a merchant, son of Nandana and inhabitant of Kalyan, and of an endowment of 300 Karshapanas. The inscription also mentions something done in the Ambalika (monastery?) in Kalyan.

CAVES NO. 37-41: Further in the same direction, passing a dry cistern, is 37, a small cave with two front pillars broken away. It has a latticed window on either side of the doorway to the inner room and a cistern outside. On the rock, near the entrance to the open gallery (38) is a deep cut and distinct inscription of one line fifteen inches long. At a little distance below it, to the left, is this symbol |-|\ 10 /2 inches square and apparently of the same age.

The four long open galleries, under the south-western brow of the hill, 38, 39, 40 and 41, though rarely visited have several objects of interest. From the Tulsi side, 38 is the first to come in sight, as the path passes under it about a mile from the Cathedral Cave (No. 3). Like the three other galleries, 38 seems to be an enlarged natural hollow in the face of the cliff, where a band of soft rock lies between two harder layers. The harder belts are blackened by rain, while the soft band has worn into dust and been blown away, leaving a long hollow under the brow of the hill, where the rock, being sheltered from the rain, keeps its natural sandy colour. The only safe entrance to 38 is from above, where a path, cut in the rock and furnished with steps, crosses the lower plateau of rolling ridges, and may be reached either down the steep slope of 55, or by keeping below the terrace wall in front of 36. Following this path southwards, it turns suddenly to the right over the brow of the precipice, alongside which it descends by broken steps cut in a semi-detached rock, which end in another rock-path leading north to 39 and south to 38. The path to 38 goes down some steps and up others to the level of the floor of the gallery and is soon sheltered by the rock above. The floor of the gallery is covered with brick-dust, the foundations of fifteen to twenty small brick topes or relic mounds, buried in their ruins. Beyond the brick ruins are the remains of a large stone tope, and behind the stone tope, are three small chambers, with much sculpture greatly decayed owing to the perishable quality of the rock. The first chamber has a group on both sides and at the back, each consisting of a large sitting figure with attendants, two of the attendants in each group being life-size. Between the first and second chambers is a small sitting figure with attendants on the left wall; a standing figure with attendants on the right. The third chamber has a standing figure with attendants, on both side-walls, a sitting figure with attendants on the back, and outside the remains of some sculptures. All these chambers have remains of plaster and traces of paint. Beyond the large stone tope, the floor of the gallery suddenly rises about fourteen feet to a short level space, on which are the foundations of eleven small brick topes, buried in their ruins. Another rise of three feet leads to a level containing the foundations of thirty-three brick topes, also buried in their ruins. These topes have been built on platform paved with brick, and in some places the rock above has been cut to make room for them. Brick ruins, the remains of other topes, extend beyond the fourth chamber, which is semicircular, with a small ruined relic shrine in the centre and a small recess at the back. From this point, brick disappears for about eighty feet, the floor beginning to rise past another semicircular chamber, above the level of the gallery, with a small rock relic shrine in the centre and an umbrella shaped canopy cut in the ceiling. It then passes a relic shrine in bas-relief and the beginning of a cell, where broken bricks again appear and go on for about two hundred feet, no doubt covering the foundations of brick topes. The floor of the gallery then rises rapidly to the end, where a bench is cut in the rock, commanding a fine view of Vasai. Near the end of the gallery are three recesses, with benches from six to ten feet above the level of the floor; and below the first recess are three sockets cut in the rock for fixing wood work. A rock-path formerly passed the end of the gallery, leading to steps up the hill. But the first part of this path has slipped down the cliff and communication is cut off.

Of the numerous topes in this gallery, the ruins of the large stone tope have been fully explored, and many of the brick topes have been cleared. In 1853 the large stone tope presented the appearance of a heap of dust and stones decaying into bluish earth, which had probably not been disturbed for ages. It was noticed that one or two of the stones were covered with small sculptured figures, and the whole heap was carefully turned over and cleared in search of sculptures. The result was the discovery of the lower part of a large tope, built of stone, differing from the neighbouring rocks, and of some architectural merit. This stone tope has been a sixteen sided polygon for a greater height than the present ruins, and above

that it must have been circular. The many-sided base of the tope, which measured about twenty-two feet in diameter, was, for twenty-seven or twenty-eight feet from the ground, ornamented with level belts or friezes of sculpture, separated by narrower bands of tracery, and perhaps, divided into panels by upright pillars and pilasters. Too little of the tope is left to show for certain the number of tiers or friezes of sculpture which encircled the base. There seem to have been nine tiers or belts, several of which were sculptured into figures or tracery. Portions of the two lowest belts remain in their original position the other fragments that have been recovered were found scattered among the ruins. The lowest belt seems to have been plain and less than an inch broad. The second belt was about two inches broad and had figured panels. One of these (Mr. West's 1), measuring eighteen inches square, has a central and two side figures. The central figure is a broken spirit or Yaksha-like form, which with both hands steadies on its head a relic shrine, apparently a copy of the tope. Its many-sided base seems carved into six level belts and supports a semicircular-cupola, from the centre of which rises a tee of five plates, each plate larger than the one below it. On either side of the central tope bearer are two larger human figures, and behind are damaged figures which seem to bring offering in dishes. Mr. West's fragment two, which he thinks may belong to a higher belt is about six inches broad, it has two rows of heading, and is divided into three small panels. On the right (visitor's left) is a central kirtimukh or face of fame with a body and an elephant's head on both sides. The next panel is a man holding a rosary, beyond him are two elephant's heads neck to neck, and the end is a panel of tracery. The next four fragments (Mr. West's 3, 4, 5 and 6) perhaps belonged to a fourth belt about six inches broad. They are groups of lions, tigers, cattle and deer, peaceful and undisturbed, showing how under Shakyamuni's influence the lion and the lamb lay down together. Mr. West's fragment seven, which he thinks may have belonged to the fifth belt, is about nine inches broad. Above is a scroll of tracery about three inches broad, divided by upright lozenge panels. Below is a plain rounded moulding, about six inches broad. The sixth frieze was about eighteen inches broad. What remains of it in its place is plain. But Mr. West thinks that the groups of figures in his fragments 8, 9, 10, 11, 12, 13 and 14, may have belonged to this belt. In fragment eight (3' 6" x 13"x7") in the extreme right (visitor's left) a man, probably an ascetic without ornaments and with his hair standing out from his head in a great circle of curious tufts, sits under a tree on a stone bench, perhaps draped with cloth; his right leg is drawn up across the bench and his right hand holds near his chest a short broad bladed dagger. His left leg rests on the ground and his left hand is set on his left thigh. On the ascetic's left a man, who, has dismounted from his horse, kneels on stones before the ascetic, and with joined hands, seems to ask his help. This figure has a curious head with hair falling below the ears or it may be a cap, and wears a waistcloth tied in behind, and a belt or waistband. His horse, sturdy long-tailed cob, has a bridle without a head-piece, a saddle except for its high pommel much like an English saddle, a girth and two belts, one passing round the chest, the other under the tail. To the left of the horse the ascetic apparently again appears though the head-dress is a little different. He is seated and rests his right hand, in which lies something, perhaps bread, on his right knee, and he holds up his open left hand as if forbidding. A male figure, apparently the same as the kneeling figure in the last, stands with shock hair and a dagger in his right hand, and something, perhaps bread, in his left hand. Behind and above, a women seizes the hands, and a man the feet, of a male figure who struggles to get free. It is difficult to make out the meaning of this group. Perhaps two travellers have been waylaid by thieves, one is carried off, the other escapes. The traveller who escapes goes to a holy man who takes from him his sword and gives him food to offer the thieves and induce them to give up his friend. To the left (visitor's right) of this group the stone is bare and worn. It was once written with letters of the fourth or fifth century. One letter ko is still plain. On the same slab, separated by a plain pilaster, is a group of three figures under tree. In the background a standing man, his hair tied in a double top-knot and with a plain necklace and bracelet, blows a conch. Below on the left (visitor's right) a woman, with big round earrings, a necklace, and a topknot, kneels holding her hands in front. On her right is a kneeling male figure with a double top-knot and bracelet with something broken, perhaps a musical instrument, in his raised left hand. The object of worship, which these figures are reverencing, has gone. Fragment ten measures 2' x 1' 3". In the right (visitor's left) is a standing woman with a sword in her left hand, and, behind her, another woman. These figures are separated by a pillar square below and rounded above, in the fourth or fifth century style. To the left (visitor's right) of the pillar, under a tree is standing woman, with bracelet, waistcloth, and anklets. Her right hand is on her breast and her left is raised to pluck the leaves of a tree. Behind her is a man's face, and two male figures stand in the background. On her left is a seated figure apparently an ascetic; with his hair in the domecoil or fata style, no ornaments, and waistcloth passed round his knee. His right hand is up to his chest and held something which is broken. His left hand is stretched forward and seems to clutch a sword which is held in the right hand of a male figure who seems to be running towards him. This figure, whose head-dress, like a three-plaited tiara, seems to show that he is a king, wears a necklace and armlet, and a waistcloth which falls in a tail behind. A woman, perhaps the same as the woman to the right of the ascetic with a big earring and back-knot and an anklet, kneels in front and clasps the king's right knee as if in fear. The king seems to brandish his sword as if about to kill the woman, and with his left hand tries to free the sword from the ascetic's grasp. On the king's left a woman, standing under a cocoa-palm, clutches his waistcloth and seems to try to hold him back. On her left is a running figure with a royal tiara, brandishing a sword in his right hand and his left hand set on his left hip. The story of this group seems to be that a king's wife, the standing woman, on the ascetic's right, has left her home to live in the forests with the ascetic. Her husband comes in search of her, and, finding her, threatens to kill her, while the ascetic clutches his sword and the wife throws herself at his feet asking for pity. In the right of fragment eleven, which measures 2' 2" x 9", is a seated teaching Buddha under a tree, and, on his right, a seated disciple in the attitude of thought. A man, with a second man on his shoulders, comes from the right and behind them is a band of women dancing and singing. Behind the dancers are lotuses, and, in the extreme right is a dwarf carrying a dish on his outstretched hands. In fragment twelve (2' x 8") in the right panel are elephants and trees, and in the left (visitor's right) panel a man on a barebacked horse with two attendants in front with shields. Fragment thirteen (which measures 1' 6" x 6") is a line of six small broken male figures, some seated, others standing. In fragment fourteen (9" x 7") an elephant with two riders enters from the right. Before it goes a man on foot with a shock head of hair and a coarse waistcloth. He carries a dagger in his right hand and a long shield in his left hand. Four more fragments (15-18) are believed by Mr. West to belong to a higher belt. They are panels (about 2' 2" x 9") divided by pillars, in the Elephanta Cave style, showing groups of Buddha, alternately teaching and in thought, with, in each case, two attendant fly whisk bearers. Two more fragments (19 and 20) measure 1'

 $6" \times 6"$ and $2' \times 5"$. Nineteen is part of a belt of festooned drapery and twenty has an overhanging belt of rosebuds above and a plain withdrawn band below. The character of the figures, the shape of the letters, and the style of the pillars, seem to show that these sculptures belong to the fourth and fifth centuries.

Some time after the building of the tope, the sculptures were covered with a thin coat of white plaster, on which the features of the figures were painted in red lines, which do not always correspond with the original features. After the lower sculptures had become broken, a circular brick moulding was built round the basement, so as to hide the two lower friezes; it was covered with a thin coating of white plaster. Besides the sculptures three flat stones were found, bearing portions of an inscription on their circular faces. These stones probably formed a part of the upper circular portion of the tope, below the level where it began to round into a cupola. Many plain stones were also found of the proper shape for foiming portions of the cupola. A stone moulding was also found among the dust round the tope. It is a part of the polygonal portion, and bears an inscription in Pahlavi letters, cut in vertical lines, and without diacritical points. The letters are finely but superficially cut, like those in the inscription on the three stones abovementioned, and the inscription extends over only four lines. It reads, ' The year 390 (A.D. 1021) of Yazdakard Shatraiyar. Mah Frobag '. On another stone of the relic shrine is an inscription of which only two or three detached letters can be read. It appears to have consisted of seven vertical lines on a flat space between two groups of sculptures; but the surface of the stone is so decayed that the letters are just sufficient to show that the words have been Pahlavi. The tope was probably solid, the inner portion being of stone cut from the neighbouring rocks. It had already been broken open and the square in the rock had been emptied of its relics.

Brick Stupas: The foundations of all the brick topes that have been cleared are of three sizes, six feet, five feet three inches, and four feet six inches in diameter. They are solid, of large flat segmental bricks shaped in moulds on the outside, and of square flat bricks within. All the brick work has been covered with a thin coat of white plaster, which does not appear to have been painted. As eight of these topes were carefully searched without any relics being found, it is probable that the place of deposit was in the cupola, which, in every instance, was destroyed. In two of the cleared topes a small plain stone was found occupying the place of a portion of two courses of the brickwork just above the mouldings, and this probably existed in all. A similarly shaped stone was found among the broken bricks between the topes which had an inscription on its circular face. Many square stones cut in steps, and with a square hole through them, were found among the broken bricks and evidently formed ornamental tops for the topes. The great number of these brick topes, there must have been at least 100 of them, makes it probable that they held the ashes of the priesthood and that this gallery was the burying ground of the monastery.

Inscriptions: On the circular edges of three flat segmental stones, which were dug out of the ruins of the large built and sculptured stone tope were three inscriptions one of two lines, and a third of one line. The sizes of the circular surfaces of the stones were respectively 18 ½ X 5½ and 21½ inches by six. The inscriptions were cut in five lines upon a smooth surface. The beginning of all the lines was distinct, but the stone was corroded at the right end of the second and third inscriptions. They are probably parts of one inscription and the beginning of the lines were originally in the same vertical line. The first portion begins with the date 921 (A.D. 999) Ashvin shuddha. There was another inscription on one of the friezes of this tope alongside the sculptured representation, perhaps of a road robbery, where some faint traces of more ancient letters were barely visible. On the face of a stone, 8½ inches by 4½ inches and 9 inches deep, found among the ruins of a brick burial mound in the open gallery 38, is a three line inscription. The first two lines were distinct, except the third letter in the second line, but the lower line was much decayed. The letters belong to the fifth or sixth century. In the first line occurs the name of an old friar Aiashivanga (Sk. Aryashivanga). On the back wall of open gallery 39, is an inscription of one line six feet nine inches long, written in letters of the time of Gautamiputra II (A.D. 177-196). It is deep cut, but on a honeycombed surface, and records the gift of a cave.

CAVES NO. 42-43: A little above 13 and 14, close to the steps that run between them is cave 42, much inferior to it in execution, but in plan, closely resembling Nasik cave 3. The pillars, though now broken, have had the same pot capitals surmounted by the flat tiles and groups of pictures. These groups remain attached to the ceiling and one of the pot capital lies on the ground. The pilasters at either end have a central lotus rosette, with a half rosette above, and the neck between is cut into three large flutes. These are very poor, and, like the pillars, show inferior and careless workmanship. Instead of the usual large hall, two rooms of equal size open from the veranda, each by its own doorway. A low bench runs round two sides of each room. Close by, separated only by a broken partition wall, is 43, a plain cave, with two octagonal pillars in front of the veranda and a small square hall with a figure of Buddha cut in a niche in the back wall. The pillars have been recently plastered with cement. On each side of the central doorway is a little lattice window and a cistern. On the right of the entrance over the mouth of the cistern is an inscription of eight lines whose middle portion is almost totally defaced. The letters are of the time of Gautamiputra II (A.D. 177-196) and record the gift of a cave and cistern by an old nun, the disciple of the reverend Ghos. There is also the record of an endowment of 200 Karshapanas from which to give sixteen clothes and one *pratika* a month.

Cave Nos. 44-56: Cave 44 is broken and unfinished. It differs from the rest by having a small chapel in each of the three inner walls of the hall, the fronts of each chapel being supported upon two pillars. There is a cell at either end of the veranda and a cistern outside. Cave 45 is identical in plan with 32. The long veranda is supported outwardly by four square pillars with octagonal necks that pass from the ceiling about one-third down their shafts. At either end of the veranda is a Buddha with attendants, and in a niche in the back wall is a seated Buddha. 46, 47, 48 and 49 are small caves, the last much destroyed. Outside the veranda on the left wall of cave 48 is an inscription of five lines, originally three feet four inches long. The letters, which are of the time of Gautamiputra II (A.D. 177-196) are clear but not deep cut. The lines aie complete at the right hand end, but on the left the rock has peeled off. The upper lines are more indistinct than the rest. It seems to record the gift of a cave and an endowment of some Karshapanas from which to supply a monk with a garment during the rainy months. On the left wall outside the cave 49 is an inscription, probably of nine lines, which may have been four feet long. It is very imperfect, indistinct, and faintly cut. The few legible letters show that, like the last, the inscription is of the age of

Beyond 49, passing over the rock to the south is 50, a neat cave with a cistern, double veranda, a ruined front wall and a bench running round three sides of the interior. Further, in the same direction, comes 51, a tolerably large cave with nicely finished front. The outside of the parapet is of much the same style as 35. Cave 52 is plain but very neat. On the right wall, outside the veranda of cave 52 and above a recess over a cistern is an inscription probably of $9\frac{7}{2}$ lines, three feet four inches long. It is deeply cut, in letters of the time of Gautamiputra II (A.D. 177-196) but on a honeycombed surface. The upper three lines and part of the next two have peeled off, and it is difficult to make out anything of what remains. Cave 53 is like 52. On the right wall, outside, of the veranda and above a recess over a cistern, is an inscription of eleven lines, three feet four inches long. It is deep cut, but on a honeycombed surface, and the centre has peeled off. The letters, which are of the time of Gautamiputra II (A.D. 177-196), record the gift of a cave. Across a small torrent from 53, are caves 54 and 55, small and unimportant. From 55 the path runs back to the north-east, where, above 45, is 56, about the cleanest cave on the hill. It is of fair size and makes an excellent dwelling. As in many of the other caves four octagonal pillars support the front of the veranda; a low bench runs round two sides of the interior, two lattice windows aid in lighting the hall, and there is a cell in one corner with a small window opening into the veianda. In front, a fine open terrace with stone couches, commands a beautiful view of the sea, Vasai creek and Vasai. There are two inscriptions in this cave. Outside the veranda, on the left wall and above a recess over a cistern is one of eleven lines, three feet four inches long. It is cut to modelate depth, but owing to the honeycombed state of the rock, is not very distinct and part of the centre has peeled off. The letters are of the time of Gautamiputra II (A.D.177-196) and record the gift of a cave and an endowment by Kalyan worshippei (name gone). On the pilaster, at the right end of the veranda, is the other inscription of 6½ lines, one foot seven inches long. It is faintly cut and indistinct, and is very modern (ninth or tenth century). A groove has been cut through its centre at a still later date to fix some wooden framing. The inscription refers to something done in the old cave, probably the setting up of some Brahmanic or Jaini mage.

Cave Nos. 57-66: 57 is much decayed. 58 is a small but neatly cut cave in good preservation. On the inner wall of the veranda of 58, and to the left of a grated window, is an inscription of two lines, three feet long most of which has peeled off. The letters are of the time of Vashishthiputra (A.D. 133-162). It reads, "The meritorious gift of a cave named Sea View (Sk. Sagara Pralokana) " by the reverend elder Mitrabhuti. This cave is rightly named Sea View as it commands a fine stretch of the Vasai creek and of the sea beyond. 59 is like 58. On the back wall of the recess over the cistern mouth was an inscription of three lines originally two feet nine inches long. It was deeply cut but most of it has disintegrated owing to the porous nature of the rock. " The letters are of the time of Vashishthiputra (A.D. 133-162) and record the gift of a cave and cistern by a nun named Damila." On the inner wall of the veranda of the same cave, and above a small grated window, is an inscription of one line, frve feet thiee inches long. It is clear, though not deeply cut, and all the letters are perfect; three small letters under the line can also be easily read. The letters are of the time of Vashishthiputia (A.D. 133-162), and the inscription records the gift of a cave and a cistern by a nun Damila of Kalyan. 60 is plain and larger than the last two; it has a low bench running along one of the inner walls, 61 is like 60 but smaller; 62 is unfinished. A small chapel in the back wall has two pillars supporting its front and are now reinforced with plaster. It is probably the antechamber of a shrine that was ever begun. Caves 63 to 68 run parallel to these, on a higher level. Almost all of these caves were used as dwellings by Jogis and other ascetics. 94, is a large well cut cave in style of 35, 93, 64, a fairly large cave, has had its front pillars plasterd with cement.

The veranda walls are coveied with sculpture, and two large oblong windows light the hall which is a large plain room with a low bench round two sides. On the back wall of a recess over cistern mouth, to the right of the entrance of cave 64, is an insciiption probably of six lines faintly cut and indistinct. The two lowest lines have disappeared, and nearly half of the third and fourth lines are illegible. The letters are of the time of Gautamiputra II (A.D. 177-196). It records the gift of a cistern by the recluse Jamadevikam, daughter of the very rich Sbivtana (Sk. Shivtanu) and the mother of Mahasakdeva. (65) 92 is small and much ruined. (66) 91 is rather an interesting cave from the amount and nature of the sculpture. It has the best representation of the Buddhist' litany' that occurs at Kanheri. The arrangement of the little groups is much the same as in cave 2. Padmapani has two female attendants one on either side. The fourth compartment form the top on the right side represents a man on his knees praying for deliverance from a fire, in the middle of which is a human head. The figures are generally cut with greater spirit and more variety of pose than in cave 2; they are also in much greater relief. The rest of the well is covered with relic shrines and figures of Buddha on his lotus throne upheld by Nagas. In the back wall is cut a throne for a seated Buddha, but the seat is empty and a wretched attempt at a linga supplies its place.

On two of the outer pilasters and on the wall just above cistern are three Pahlavi inscriptions, the work of Par si visitors of the eleventh centuly. The inscription on the wall above the cistern is illegible.

Cave Nos. 67-76: In the rock under 66 is a cave whose front is nearly filled up. 86(67), a small cave with much sculpture like that in 66, has a shrine in the back wall of the hall with a life-size seated Buddha with numerous little figures on shrine walls. (68) 88 the last of this group is a small plain cave neatly finished. On the left wall, outside the veranda is an inscription of seven lines, deeply cut and distinct but the upper lines partly defaced. The letters are of the time of Gautamiputra II (A.D. 177-196) and record the gift of a cistern and a cave (?). The name and residence of the giver have been lost. He seems to have been a recluse named (Bu) dhak. A little way down the hill to the north-west is 87 (69), a plain muGh damaged cave. There is an inscription in this cave mentioning the eighth year of some king but too faint and worn to be read. (70) 80 is a larger cave but much destroyed. On the left wall outside the veranda are two inscriptions one above the other of seven and four lines respectively, originally six feet three inches long. The upper inscription is deep cut and distinct except at the top and left end. There is a blank space in the fifth line. The lower inscription is faintly cut and in places indistinct, the last two lines being very faint. The words used closely resemble Sanskrit and the language, though Prakrit differs much from the Prakrit of the other inscriptions. (71) 85 is smaller and in equally bad order; 84 (72) is a large well finished cave probably of late date with a shrine and seated Buddha; (83) 73 and (82) 74 are much decayed; 75 (81) is a plain cave in rather better order than either of the last two. On the right wall outside the veranda of cave 81 (75) is an inscription of eight or nine lines originally three feet long. It is deep cut, and tolerably distinct, though on a rough surface; the upper two or three lines and much of the other lines have peeled off. The letters are of the time of Gautamiputra II (A.D. 177-196) and appear to record the gift of a cave and cistern perhaps by the daughter of Samaka. 76 is much ruined, but on the right wall outside its veranda is a deep cut and clear inscription. The rock is rough and the upper two or three lines and much of the other have entirely peeled off. The letters are of the time of Gautamiputra II (A.D. 177-196) and record the gift of a cave and cistern by a reclufcs the daughter of Ramanaka, beloved of his family and inhabitant of Dhenukakata and the disciple of the old reverend monk Bodhika. She also gave an endowment from which to distiibute sixteen clothes. 77 is much like 76. It is only about twenty yards to the east of 35.

On the right wall outside of its veranda and over the entrance to a side chamber is an inscription of five lines originally six feet long. It is rather faintly cut on a rough surface. Nearly the whole of the first line, and about eighteen inches of the left and of the second line have peeled off, with a corresponding portion of the following lines. The letters are of the time of Gautamiputia II (A.D. 177-196) and record the gift of a cave by....... the mother of Khandnagasataka......

Cave Nos. 89-102: On the left of the entrance of cave 77, on the back of the recess over the cistern, is an inscription of ten lines, three feet six inches long. It is faintly cut on a honey-combed surface, very indistinct and almost completely illegible. The letters are of the time of Gautamiputra II (A.D. 177-196) and appear to record the gift of a cave. The ten next, 78 to 88, have been mentioned on the way down the ravine from 28. The remaining caves are 89, south of 66, on the edge of the stream-bed, which is not worth a visit. 90 and 91, between 36, 50, are both much ruined; 92 is a little to the south-east of 3, the cathedral cave; 93 and 94 are close to the stream across from 8 and 7; and 95, 96, 97 and 98 are ruined caverns and cells further up the ravine bank. 99 is a small cave near 44. 100 is high in the rocks over against 24 and 26, and 101 and 102 are broken cells in a great black hillock on the east of the hill above 100. On the back of a bench, the remains of cave 94 on the north side of the ravine opposite cave 7 is an imperfect inscription of two lines. The bench is ten feet six inches long, but only three feet six inches of the end of the last line of the inscription are legible. The inscription is deep cut, but the surface of the rock is much honeycombed and weather-worn. The letters are of the time of Gautamiputra II (A.D. 177-196) and in the second line, there appears the name of village, perhaps Gorpad. On the back of a low bench, along the flight of steps just above cave 95, is a deep cut distinct and perfect inscription of 2 ½ lines, three feet nine inches long. It is of the time of Vashishthiputra (A.D. 133-162) and seems to refer to the dedication of a pathway by a Chemula (Chaul) goldsmith Dhamaka, the son of Rohanimitra (and brother of the giver of the cistern in cave 7). The pathway consists of a long flight of steps beginning on the side of the stream-bed opposite the cistern recess of cave 5, and climbing the northern hill as far as the ruins of the great relic mound. Above a recess, over a bench in the left veranda of cave 96, is an inscription of two unequal lines, three feet eleven inches and four feet eight inches long. Though faint and somewhat rude the letters are distinct and perfect. It seems to record the gift of a field as an endowment by the merchant Mudapal (Sk. Mundpal), son of the devotee Vhe (nu?)-mitra. The letters are of the age of Gautamiputra II (A.D. 177-196). Outside cave 99, on the left wall, above a recess over a cistern mouth, is an inscription of six or more lines originally three feet long. It is deep cut but indistinct, the rock being much decayed. About one foot eight inches of the left end of the inscription and all the lower lines have disappeared. It records the gift of cave in the eighth year of some reign probably that of Gautamiputra II (A.D. 177-196). There is an inscription of one line on the front of a small low platform cut in the surface of the rock near the top of the main hill. The platform is six feet long, but there are no letters on the first eighteen inches. The letters are very new and seem to have been scrawled by some nineteenth century ascetic.

Besides the caves, interesting remains crown the flat tops both of the main spur and of the smaller knoll to the north of the narrow ravine. Above the tiers of caves the upper slope of the main hill is in places cut into cisterns and crossed by long roughly traced flights of steps. Along the flat top are cut a line of quarries, and cisterns, and in several places, scattered lines of large dressed stones lie as if brought together for some large building. Along the eastern crest of the hill run the foundations of a wall, and, near it, are one or two mounds covered with blocks of dressed stone apparently the remains of relic shrines or of burial mounds. Further along towards the south, is a quarry with blocks of dressed stone, some ready to be taken away, others half cut as if the work of building had been suddenly stopped.

To the north of the small stream-bed, behind the line of caves, a flight of eighty-eight shallow roughly-traced steps leads from the south up a gentle slope of rock. Along each side of this flight of steps three clusters of prickly-pear bushes mark the sites of what seem to have been small temples or relic shrines. Most of these sites are too ruined to show the form of the building, that stood on them. But enough of the third site on the right hand is left to show that it stood on a stone plinth about seventeen feet by twenty-two, and apparently rose in steps into a central building of brick and stone. Close to this ruin is a little rock-cut cistern. The building to which the flight of steps led is completely ruined and thickly covered with brushwood. It seems to have been a round building of dressed stone, with a diameter of about forty feet surrounded at a distance of about twenty-four feet, by a rail or stone-wall apparently square. In a hollow, about fifty yards to the west of this mound, lie some large broken pillars, and behind them is a hole which seems to have been worked as a quarry.

Worship: To the common people the caves have no connection with Buddhism. The people have fully adopted the Brahman story that the caves are the work of the Pandavas. Several of the figures are worshipped, notably the two huge Buddhas on either side of the entrance to the Cathedral Cave (No. 3). Their feet are reddened with pink powder and spotted with yellow. But the figures are respected not for the sake of Buddha, but because they are believed to represent Bhima the giant Pandava. Besides Hindu visitors, Parsis and Christians come to see the caves during the dry season.

Fair: There are two yearly fairs, one on the eleventh of the blight half of Kartik (November-December), the Divali of the gods, and the other on the Mahashivaratri or Great night of Shiva, the Thirteenth of the dark half of Magh (January-February). On both occasions, a number of persons of all castes attend the

fair, bathe in the ponds near the hill, examine the caves, and worship the *linga* in cave 66. Sweetmeats and other articles are sold in the Darbar Cave (No. 10), which is also called the Market or Bazar Cave.

KONDIVTI OR MAHAKALI CAVES

The Kondivti or Mahakali (Mahakal, or the great destroyer, is one of the forms of Shiva. This Brahmanic name may have arisen from the Brahmans telling the people that the relic shrine in the chief cave (IX of the south-west line) was a great ling.) Caves form two rows, one of fifteen caves on the south-east face and one of four caves on the north-west face, of a low flat topped range of trap breccia, about 6.4 km. (four miles) north-east from the Andheri station on the Churchgate-Virar suburban section of the Western railway. The caves are Buddhist, probably between the second and sixth centuries. They are small, many of them little more than cells, and much ruined from the flawed and crumbling nature of the rock. From Andheri, a good road leads east to Kurla. It was passing formerly through rice lands and mango orchards, with wooded rocky knoJls. However, keeping pace with the changing time, all these things have disappeared and have given the surrounding area an urban look.

The easiest way to see the Kondivti caves is to go by Mahakali road, which forks towards the south-east from the Andheri-Kurla load. Formerly the pleasantest route was to leave the Andheri-Kurla high road at Mulgaon, and by a good cross country tract, to wind about three kilometres through waving uplands, prettily wooded with mangoes and barb palms, round to the north face of the hill, see the north line of caves and the burial mounds, see the south line, pass south through the lands of Vihirgaon about two and a half kilometres (a mile and a half) to Marol and from Marol, go back to Andheri by the high road. This round covered a total distance of more than fourteen kilometres (nine miles).

On the east bank of the Mulgaon pond are the ruins of an underground Buddhist water cistern (A.D. 100-500), and some old bricks probably Buddhist. From the north among the waving uplands the Kondivti caves are hard to find, as the hill rises only a few metres above the general level from where the road goes and as the caves are in a hollow. About fifty paces north of the caves, in a small mound of smooth black trap, is an underground water-cistern with two openings, about 1.011 m² (three feet four inches square) and 1.219 m. (four feet) apart. About fifty paces south of this cistern is the north row of caves. They face the north-west and command a wide view. In this row are four small caves probably from the fourth to the fifth century. Beginning from the east, Cave I, a dwelling cave, has a veranda 4.1402 m. X 1.625 m. (13' 7" longx 5'4" broad) with two square pillars and two pilasters, now all crumbled, a cistern in the left corner, and a stone bench in a recess on the right (Left and right here mean visitor's left and right.). The veranda opens into a plain hall 2.692 mx 4.826m (8' 10"X 15' 10"), with a bench on the right wall, and cells 2.0574 mx 1.9812 m. (About 6' 9" X 6' 6" high) on the left and back walls. Cave II has two doors and two windows in the front wall. It is about 1.394 m.2 (fifteen feet square) and 1.829 m. (six feet) high, without carving or pillars, and except that it has no stone bench round it, looks like a dining hall. A door in the east wall opens on Cave III. Cave III is much like a Kanheri cave. It enters from a courtyard 4.826m. x 4.572m. (15'10" x 15') with a stone bench and cistern on the right. From the court four easy steps lead to a veranda, with a low front wall, carved in the Buddhist rail pattern, now defaced, divided in the centre by a doorway, and with two eight-sided pillars. The veranda 5.182 m. x 2.743 m. (17' x 9') has a stone bench at each end. The hall, which is entered by a plain door, measures nearly 4.267 m. (fourteen feet) square by about 2.438 m. (eight feet high). In the side walls are cells, and in the back wall is a door, with side pilasters surrounded by a belt of tracery, cut in a rough check pattern. The door opens on a shrine 2.515m. x 2.184 m. (8'3" x 7'2"), which has an altar in the back wall with a hole and sockets to support an image. On a narrow front of rock, between Caves III and IV there was a relic shrine or daghoba carved there of which even the remains are not visible. Cave IV, a dwelling cave, has a long veranda 9.449 m. X 1.829 m. (31' x 6'), with ten round capitalled pillars, and a cistern at the right end. The hall is plain about 4.572 m. (fifteen feet) square. It has two side recesses, and in the back wall, a niche, about 0.1524 m. (six inches) deep and 0.6096 m. (two feet) square, perhaps for a relic shrine. The low walls, against the right side of the cave, are modern, the remains of a liquor still. These four caves are all much of the same age, probably the fourth and fifth centuries, later than the Chapel Cave (IX ot the south row) which was probably the origin of the monastery. About 45.720 m. (fifty yards) in front of the north row are underground cisterns, with four openings, each about 0.5588 m. (one foot ten inches) square. About thirty yards further to the west, are three or foui broken tomb stones, apparently originally square below and rounded above and from 0.6036 m. to 1.2192 m (two to four feet) high. To the south about 9.144 m. (thirty feet) above these broken tomb-stones, is the bare flat hill-top, about 45.720 m (fifty yards) broad most of it a rounded sheet of trap. About 3.048 m (ten feet) above the north caves, the rock has been hollowed, two or three feet, into a shallow bathing pond, which is now practically dry and silted up. About 9.144 m (ten yards) further south, lies a broken pillar about 1.219 metre long and 0.9906 metre square (four feet long and three feet square) at the base, rising into a round broken topped shaft. This is probably the tomb-stone that stood on the top of the mound about 45.720 m (fifty yards) to the south. This burial mound, or stupa has been a round dome of brick and dressed stone about 8.229 m (twenty-seven feet) across the base. The centre has been opened and rifled, and bricks and dressed stones are strewn about or carried away. At a distance of about one and a half metre to the southeast is a smaller burial mound about 2.7432 m. (nine feet) across the base. To the north-east is a rock-cut passage. Close by, the surface of the rock is roughly dressed into two stone seats, one a few metres above the other. The upper seat was probably for the teacher and the lower seat for his disciples. The seats have a fine view both to the north and to the south. Close at hand are the bare top and upper slopes of the Andheri and Oshivara hills. To the south, beyond the hill slopes are the Snake or Sarpala lake, the smaller Barbai pond, and the large Church pond or Devalacha Talav with the ruins of a great Portuguese church. About half a kilometre to the south-west is the former village of Kondivti. On the south-east rise the withered slopes of Chandivli and to the north-east, the Vihar hills and a long stretch of the Vihar lake. Even though the overall landscape with the distant hills and palm groves has changed considerably with the rapid urbanisation and the growth of industrial establishments around, the general impression is however retained.

At some distance towards the south of the teacher's seat is an underground water cistern, and a little on

one side, are holes in the rock for planting the pillars of a canopy. To the west of the big burial mound, eight or nine steep rock- cut steps, some of them broken, lead down the south face of the hill to the south row of caves. In a level space, in front of the steps, is a heap of dressed stones apparently the ruins of a Buddhist temple, which has been about, 3.6576 m. (twelve feet) square. The middle has been opened probably in search of treasure. About 18.288 metres (twenty yards) behind the temple, in a low scarp, hidden with fallen rock and brushwood, is the south line of fifteen caves, all of them small and making little show, and most of them in bad repair. The caves are numbered from west to east. In the west end, the mouth of Cave I, was filled with earth to within 0.61 m. (two feet) of its roof which is now cleared. The veranda has had two plain square pillars and two pilasters. Cave II has a front veranda wall, about 1.2192 m. (four feet) high, whose face is carved in the Buddhist rail pattern. From the wall rise four plain square pillars 2.336m. (seven feet) high, the middle pair about 0.9144 m. (three feet) apart. Below the veranda floor 2.286 m. \times 6.858 m. (about 7 1/2' X 22.') is a water cistern with four openings 1.0668 m. \times 0.9144 m. (3'6"x3') formerly covered with slabs. On the right the wall has fallen, and on the left is an opening into Cave I, which is a small plain room 2.972 m. x 2.616 m. and 2.134 metres high (9' 9" x 8"7" and 7" high) and had a good deal of earth on the floor now cleared and a recess in the north wall. In the middle of the back wall of the veranda of Cave II is a door with five sided pilasters, and, outside, of the pilasters, a belt of checked carving, cut some niches into the wall. Inside is a plain pillarless chapel 7.214 mx4.826 m.(23' 8"x 14' 10"), with an altar for an image in the back wall. The side walls of the hall are full of socket holes for wooden pegs, which seem to have held a rich wooden wainscot.(These holes about three inches square and three inches deep seem to be favourite sleeping berths for snakes. Visitors would do well to avoid going too near the wall Mr. H. Cousens.) On the left wall are two hollows, apparently the beginning of a cell which was stopped by a flaw in the rock. The cave is probably of the fifth or sixth century. Cave III, is a monk's dwelling. Like Cave I it was nearly filled with earth but recently completely cleared. Cave IV is a chapel. On the right wall of the entrance court, outside of the veranda, is a roughly carved sevenhooded cobra, about 1.372 m (four feet and a half) long and 0.5354 m. (one foot nine inches) across the hood. Close beyond the cobra is a water cistern. The cobra is perhaps connected with the Sarpala or Snake pond at the foot of the hill. The outer wall of the veranda had four eight-sided pillars without capitals. The veranda about 10.973x2.896 m (about 36' x 9½') opens on the left into Cave III. The back wall of the veranda has two windows and two side doorways opening on a hall or chapel 10.668 m long and 7.620 m broad (thirty five feet long and twenty-five broad). At the sides are aisles 5.791 mx2.134 m.x.1524 m (19'x 7'x 6") with two pillars in front and three plain cells 2.134 m. x 2.134 m.x 2.134m. (about 7'x 7'x 7') behind. In the back wall of the hall was a shrine with a centre and two side doors the central door opening on an unfinished chapel now fallen 3.657 m. x 1.829 m. (12' x 6'). This is older than Cave II, and perhaps belongs to the third or fourth century. Cave V a small dwelling with a veranda and an inner cell. Cave Vlhas a veranda about 1.219 m. (four feet) broad, with, at the left end, a small cell with two stone benches and inside, a second cell with one bench. At the back of the veranda wall is a rough chamber and there is another chamber at the right end of the wall now completely out of repair. Cave VII has a veranda four feet broad opening on a hall 3.657 m. x 3 .657 m. (12'x 12') with side cells and a shrine in the back wall. The walls are much broken. Cave VIII is entered from VII; it is small and broken. Cave IX is a chapel, the most interesting, and probably the oldest, in the group. A ruind veraneda about 1.219 m (four feet) broad leads into a hall 7.620 m. (twenty-five feet) long, 5.334 m (seventeen and a half feet) broad, and 2.743 m. (nine feet) high. In the right wall were some carved figures now broken and defaced. The back wall is cut into a round towei-like shrine, with a central door 1.143 m. X 2.337 m. (3' 9"x7' 8" high) and two side stone latticed windows 0.991 m. x 0.736, m. (3'3"x2'5"). This shrine fills the whole of the back wall, from which it bulges about 1.524 m. (five feet), forming a semicircle about 6.096 m.(twenty feet) from end to end; and about 2.337 m. (7' 8") from the ground, with a round eave about 0.305 m. (a foot) deep. Inside, this round hut-like shrine measures about 3.962 m (thirteen feet) across and rises in a dome about 4.419 m.(fourteen nd a half feet) high. In the centre stands a whitewashed rock daghoba inrelic shrine, about 7.010 m(twenty three feet) round the base, ending n a cone about 2.438 m (eight feet) high. About 1.219 m. (four feet) from the floor is a belt, about 0.1524 m (six inches) broad, carved in the Buddhist rail pattern and on the top are four holes for an umbrella. Round the relic shrine is a passage about 0.9144 m.(three feet) broad. About the middle of its top, a flow in the rock has split the relic shrine into two, the cleft passing right to the floor. On the outside wall of the rounded hut-like shrine, above the east or right lattice window, was a Pali inscription of two lines, each line 0.8382 m (two feet nine inches) long now not very clearly visible and indistinct. The letters are of about the third century, very closely like those of the Rudra Dama inscription at Girnar in south Kathiawad. It runs, 'Gift of a Vihar, with his brother, by Pittimba a Brahman of ihe Gotamas gotra, an inhabitant of Pachi Kama. (The Pali runs : Pachikamaye vathavasa Bahmhanasa Gotamasa-gotasa Pitulasa deyadhama viharo sabhatukasa; (SK.) Pachikammayah vastavyasya Brahmanasya Gautamasagotrasya Pitulasya deyadharmo viharah sabhratrikasya. Pachikama is perhaps Pachmarhi, the well known Hill Station in Madhya Pradesh. Pandit Bhagawanlal) This rounded hut or shrine is very like the one of Asoka's (B.C. 250) round huts at Barabar hill near Gay a. It is not found in any other cave in Western India, and, as far as is known occurs in only two other caves, the Lomas Rishi and the Sudama caves at Barabar in Bihar, about 25.749 kilometres (sixteen miles) north of Gaya. The sculptures on the east wall are later than the rest of the cave; they probably belong to the sixth century. Of the wall sculptures the one next the rounded tower is a seated Buddha, teaching two attendants, one on either side. His lotus seat is upheld by a five hooded Naga figure, with, on each side a naga woman with one hood, and beyond her a man now much defaced. Arhats or saints float in the air over Buddha's head. Above is a row of six teaching Buddhas in small panels. To the right is a headless standing figure perhaps Avalokiteshvar, as he seems to have held a lotus flower over his left shoulder, and as there is a seated Buddha above. (Avalokiteshvar (the manifest or ' the pitiful lord'), one of the Bodbisattvas or would be Buddhas, often mentioned by the Chinese pilgrims Fah Hian (415) and Hiuen Tsang (642) as the protector of the world and the lover and saviour of men, is invoked in all cases of danger and distress. He is the same as Padmapani (the lotus bearer) of Nepalese mythology, and is also known by the names of Kamali, Padmahasta, Padmakara, Kamalapani, Kamalahasta, Kamalakara, Aryavalokiteshvar, Aryavalokeshvar and Lokanath. To the Chinese he is known as Kwan-tseu-tsai, Kwan-shai-yin and 'The Great pitiful Kwariyin.' His worship had an early origin in India. He is shown in Indian sculptures holding a lotus stalk in one hand, with an opening bud, and generally with a rosary or jewel in the other hand. His abundant hair falls in ringlets on his shoulders. On his forehead is a small figure of his spiritual father and master, Amitabha Buddha,t he lord of Sukhavati or the Western Happy Land, who is the fourth Dhyani or divine Buddha, corresponding to Gautama among the human or Manushi Buddhas. Burgess1 Arch. Sur. Rep. III. 75-76. For Avalokiteshvar's litany,See Bombay Gaz. XII, 531, J.R.A.S. (New Series), II, 411-413.) The small worshipping figure below, on the left, is perhaps the person who presented the sculpture. (Cave IX is locally known as Anasicha Kamara or the granary, because of the round granary—like hut in the back. From the figure on the wall it is called the school, the Bodhisattva being thought to be master and the seated Buddhas the boys.) Cave X a little to the east is a monk's dwelling. It is plain and ruined. The only carving is a rough vandyke belt at the top of the east wall. Cave XI is a small broken veranda with two plain pillars and an inner and outer chamber for monks. To the east is a passage cut in the rock. Cave XII is ruined and confused. The outer wall of the veranda has at the top, a belt of carving in the Buddhist rail pattern. The veranda is about 7.620 metres (twenty-five feet) long and seems to have had an image at the left end. The body of the cave is open to the east. It was originally cut off by a wall which is no longer there in piece. In the back were three cells, but the partitions are gone. To the left is a chamber. Cave XIII was once separated from XII by a wall which has fallen. In front is a courtyard, from which five steps lead to a veranda. On the right is a cistern. There is an outer and an inner veranda. The outer veranda 5.969 mx 3.962 m. (19' 7"x 13') has a bench in a recess at the right end. The outer wall of the inner veranda 6.401 m. x29.97 m. (21' x 9' 10") had two pillars and two pilasters with rounded cushionlike capitals which have now crumbled. Ruined steps lead about 0.9144 m. (three feet) up into the inner veranda. The outer wall of the hall had a central and two side doors. The hall 8.839 m. x 8.737 m. (29'x 28' 8") has three cells opening from each other. The back wall has a central shrine and two side cells. In the centre of the hall is a square space about 4.724 m. (15' 6") with four large eight-sided corner pillars with rounded capitals. The shrine door, at the centre of the back wall, has side pilasters and a deep-cut belt of check carving. The shrine measures 3.353 m (eleven feet) long by 3.353 m (elevenfeet) broad and 3.048 m. (ten feet) high. At the back is an altar which once had an image fastened to the wall by sockets. The side cells are about 2.134 m. (seven feet) square. Cave XIV is a small cell. Cave XV is blocked by a large fallen rock. It had a veranda with two pillars, of which now only one remains, and an inner and outer chamber. The door of the outer chamber has side pillars and a belt of check carving. An underground cistern beyond cave XV, and another to the left of the path down the hill complete the remains of the Kondivti monastery. The caves are very frequently visited by sight seers and the area has of recent become an excellent picnic spot.



MADH ISLAND AND BEACH

Madh, a beautiful island on the west coast of Salsette with thick coconut and palm groves and other swamp bushes, is located to the west of Versova across the Malad creek. It can be reached by a number of BEST buses plying from Malad railway station on the Churchgate-Virar suburban section of the Western Railway. It is located about 13.4 km. south-west of Malad. The Malad-Marve-Madh route passes through green fields with some old monuments located on either side of the road. Madh island and beach is a picnic spot which is frequented by a number of visitors from Bombay and the adjoining areas.

There is a Ganapati temple, to which a village was formerly granted in *inam*. The temple was built during the time of the Peshwas. Subsequently the temple was not carefully looked after for want of funds. Recently it was renovated from public contributions. Close to the temple is a reservior with stone steps. About half a kilometer south of the temph is a fort known as the Madh fort and is located on the bank of the Malad creek. It is now in a dilapidated condition. The Madh beach is close to Madh village. Many visitors come here for swimming and other beach games.

During the Second World War, Madh Island was under the Military control and no public traffic was allowed there. During that time the transport in the island was improved. Where the main road closes, there are several former Military barracks, some being used for residence and some converted by the Bombay Municipal Corporation into primary school.



MAHALAKSHMI TEMPLE

The temple of Mahalakshmi at Breach Candy is situated in an area named after the Goddess Mahalakshmi on a hillock at the extreme west of Bombay Island. The temple lies at a distance of about a kilometre from the Mahalakshmi railway station on the suburban route of the Western Railway. It can be reached by a number of BEST buses. The temple has a long tradition as has been mentioned in the *Rise of Bombay* by S.M. Edwardes, published in 1902. The traveller of early days, gazing westward from the kambal grove, would have marked the hill sloping downwards to the sea, and at its foot three shrines to Mahalakshmi, Mahakali and Mahasaraswati.

A legend connected with the Mahalakshmi temple relates that during the era of Muhammedan domination the goddess was so persecuted that she leapt from the shore into the Worli creek and remained in hiding there until after the Portuguese had ceded the island to the English. "The sovereignty of Bombay passed about the middle of the fourteenth century into the hands of the Emperor of Delhi, who sought by fanatical persecution to overthrow the power of Prabhadevi, Mahalakshmi and Valukeshwar."(The Rise of Bombay by S. M. Edwardes, 1902) When the first attempts were made to shut out the sea from the central portion of the island by building a dam between Mahalakshmi and Worli, the work was continually interrupted by the force of the incoming tide, and much money was wasted in apparently fruitless endeavours to check the force of the waves. At this juncture the goddess appeared in a vision to one Ramji Shivaji, a contractor, and promised that, if he tendered his

services to Government for the construction of a causeway, she would remove all obstacles, provided that he first removed the images of herself and her two sister goddesses from their watery resting place and established them in a proper shrine on land. Ramji acted according to these divine instructions and eventually, after the Hornby Vellard had been successfully built, obtained from the Bombay Government a grant of the site upon which the temples still stand. It is said that the temple in which were installed these images was built on the hill some time during the period 1805-1830. The present images of the Goddesses are the same as those salvaged from the sea.

The temple is a simple structure containing images of the goddesses Mahalakshmi, Mahakali and Mahasaraswati, who are themselves representations of the goddess Durga. The image of Mahalakshmi was represented as riding partly on the back of the demon Mahishasur and partly on a tiger. Not far from the temple was a small tank built by one Tulsidas Gopaldas in 1824 and on western side of the tank were the shrines dedicated to Shankar and Ranchhodji. Other temples in the enclosure are dedicated to Mayureshwar, Rameshwar, Dhakleshwar, Hari Narayan and Vinayakaditya. The temple of Dhakleshwar constructed at a cost of Rs. 80,000 and named after the builder Dhakji Dadaji is marked by excellent workmanship and is visible forty kilometres out at sea. The proximity of the shrine of Mama Hajiyani (Haji Ali) had given rise to a saying that under the British rule Mama and Mahalakshmi have joined hands, or in other words that the old animosity between the Musalman saints and Hindu gods has disappeared.In all probability the Mahalakshmi temple was originally patronised by the aboriginal Kolis and Agris only, and as time went on gradually attracted the attention of other classes of Hindus and other communities too.

The main entrance or the *mahadwar* of the temple facing the east was constructed in 1938. A flight of stone steps leads to the *mahadwar* of the temple. On the road leading to steps are the temples of Hanuman, Ram, Santoshi Devi, Rani Sati Mandir, and Sadhu Bela Ashram. At the top of the *mahadwar* is a drum-chamber or *nagarkhana* where drums *i.e.*, *chaughada* are beaten twice a day. Inside the *mahadwar* to the left, there is a *deepmala* (a lamp pillar), which is approximately four and a half metres (15 feet) high. At the right also there is another *deepmala* which is approximately 4 metres (14 feet) high. The hereditary Bhopis of the temple reside in the houses constructed on the left of the main gate. The open space in front of their houses is occupied by shops selling materials of worship, *viz.*, coconuts, incense sticks, flower garlands, etc.

The shrine of the deities which measures 6.096 m X 4.572 m (20' x 15') approximately faces the east. The floor of the shrine is paved with marble stone. The pinnacle of the spire of the temple is about 15.240 m. (50 feet) high from the ground. In the centre of the shrine, leaving a distance of about 0-762 m. (2 1/2) from the back wall thereof, for holy circumambulation, a stone platform (simhasana) measuring about 1.219 m. x 1.219 m. (4' X 4') and about 0.762 m. (2 1/2) in height from the ground level, is constructed. The platform is towered by a dome built in cement concrete resting on four pillars about 1.524 m. (5 feet) in height. In the space between the two rear pillars of the platform there is a stone wall about 1.524 m. (5 feet) in height which is lined with silver plates from inside. At the two sides of the platform there is a wooden railing about 0.914 m. (3 feet) in height, lined with silver plates. Canopies (Chhatra), cradles, etc., made of silver hung from the top of the platform over the heads of the deities, images of three deities, made of stone, are installed on the platform.

In front of the shrine, stands a sabhamandap (The Sabhamandap is being reconstructed at present (1985-86).) (auditorium) built on 18 pillars connected by arches constructed out of Porbandar stones, where programmes of bhajans, kirtans and pravachans, etc., are arranged. It measures about 7.620 m x 4.572 m (25'x 15') and its floor is paved with marble stones. The sabhamandap is open on all sides and at the centre of the sabhamandap facing the deities, an image of a wooden lion is installed on a stone pillar, both covered with silver plates. The pillar is erected on a stone platform measuring 0.762 m. X 0.762 m. (21/2 x 21/2) and 1.219 m. (4 feet) in height. At the entrance of the sabhamandap, a pit for lighting sacred fire (yajnya kunda) 0.762 m. x.07.62 m. (21/2 x 21/2') and 0.609 m. (2 feet) in depth, is provided which is used for performing havan (sacred fire) during the period of the fair and on such other occasions. Images of different saints are inscribed at the top of the sabhamandap on three sides, viz., the north, the south and the east. A hall 10.668 m. x 7.620 m. (35' x 25') constructed behind the shrine is used as a dharmashala.

The image of Mahalakshmi is in the centre of the platform and those of Mahakali and Mahasaraswati are to her right and left, respectively. In front of these images three small stools made of silver are placed. A gold plated mask of Goddess Annapurna is installed on the middle stool. Silver foot-prints of a Goddess are placed on another stool and the third stool is used for keeping worship utensils. An image of Goddess Annapurna is in a standing position and small images of other deities, all of silver, are kept in a niche in the back wall of the shrine and stone images of Ganapati and Vitthal-Rakhumai are kept in the niches in the right and left walls of the shrine, respectively.

Masks, plated with gold, are put on the images of the three deities. Nose rings (nath), ear-rings (Karnaphule), bangles, bracelets (patalya), necklace and waist belts (kamarpatta), all made of gold, are the ornaments of the deities for daily wear. The deities are also draped in saris, cholis and rich clothes and ornaments are put on the deities during the period of the fair and on special occasions such as Gudhi Padva (Chaitra Sud.I), Diwali (Ashvina Vad. 14), Tripuri Paurnima (Kartika Sud. 15), etc.

The temple is opened at 5-00 a.m. every morning when the images are bathed with water and scent, etc., and clothes, ornaments, flowers and flower garlands are put on them. *Kumkum* is also applied to their foreheads. A learned *Acharya* is appointed by the trustees on a part-time basis for reciting *Sapta Shati Path* daily in the morning. *Arati* is performed at about 7-00 a.m. and *Mahanaivedya* of rice, cakes of wheat flour, sweets and vegetables is offered to the deities at about 12-00 noon. *Dhuparati* (evening *arati*) is performed at sunset, *i.e.*, at about 7-00 p.m. The *Sayam Arati* is performed at about 10-30 p.m. after which the temple is closed. During the period of the fair, on festival days and on other special occasions, the temple is kept open upto midnight.

Devotees in large numbers flock to the temple for *darshan* of the Goddesses on Tuesdays, Fridays and Sundays as these days are considered to be more auspicious for their worship.

It is customary to make vows to the deities for getting a child, perity in business, for regamning eyesight, etc. On fulfilment of their desire the devotees offer cradles, small canopies (chhatra), artificiallimbss (viz., eyes), etc., made of silver &nd some offer cloth (khan), coconuts, bangles, combs, mirrors, etc. Some also distribute sweets or sugar as prasad.

In course of time, it was decided by prominent persons to hold an annual fair in the month of *Ashvina* from *Ashvina Sud. 1* to *Ashvina Sud. 10*, which are auspicious days for the worship of the deities.

The *mahayatra* starts on *Ashvina Sud. 1* and ends on *Ashvina Sud. 10*. As the temple is situated on a hill and as there is no sufficient space around to accommodate shops and stalls in the compound of the temple, the fair is held at the outer premises.

Though the duration of the fair is ten days, no special programmes except *bhajans, kirtans* and *pravachans* are arranged in the temple from *Ashvina Sud. 2 to Ashvina Sud. 9*.

Ashvina Sud. 1 being the first day of the fair, a ghata (a metal pot) is installed in the temple early in the morning and special worship is offered to the deities. An abhisheka is also performed. Devotees belonging to different castes and creeds visit the temple, worship the Goddesses with kumkum, flowers, etc., make their offerings to the Goddesses, and some distribute sweets, sugar or gur as prasad.

On Ashvina Sud. 9, the important day of the fair, the ghata is removed and a sacred fire (homa) is lighted in the yajnyakunda and a great number of devotees gather for the purnahuti and offer coconuts, incense sticks, dhup, etc., to the homa. On the evening of Ashvina Sud. 10 (Dasara), most of the pilgrims offer leaves of apta tree to the deities as a token offering of 'gold'.

The second or *Chaitra* fair starts on *Gudhi Padva* (*Chaitra Sud. 1*) and lasts till *Chaitra Sud. 9*. Programmes of *bhajan, kirtan* and *pravachan* are arranged during this period. On *Chaitra Sud. 19 Gudhi Padva* (or new year day) a *ghata* is installed in the temple and a flag is hoisted on a pole just adjacent to the entrance to the *sabhamandap*. On *Chaitra Sud. 9*, the *ghata* is removed and the sacred fire (*homa*) is lighted. On an average, 1,000 pilgrims attend this fair every day, from Bombay and suburbs.

An adequate number of policemen are deployed for maintaining law and order at both the fairs. Volunteers of local associations also provide minor amenities to pilgrims at the temple as well as at the fair.

The temple trust is registered under the Bombay Public Trusts Act, 1950-The Board of Trustees includes prominent citizens. This trust looks after the management of the temple.



MAHATMA JYOTIBA PHULE MARKET

The Arthur Crawford Market, now known as Mahatma Jyotiba Phule Market was founded by Mr. Arthur Crawford, C. S., Municipal Commissioner from 1865 to 1871, and was presented to the city in 1865. Recently the market has been renamed after Mahatma Jyotiba Phule, a celebrated social reformer of Maharashtra in the nineteenth century. The market consists of a Central Hall surrounded by a clock tower with a height of 39 014 metres (128 feet). The hall contains drinking water fountain donated by Sri Cowasjee Jehangir. The office as well as the residence of the superintendent and clock tower are situated on the northwest, the godowns, the purveying shops and fowl rooms on the south and the mutton and beef markets on

the east. Completed at a cost of Rs. 19,49,700, it was once lighted by incandescent gas. The right-wing meant for fruits and flowers measures 45.120 m.(150 feet) X 30.480 m. (100 feet) and the left one meant for vegetables measures 106.680 m. (350 feet) x 30.480 m. (100 feet). The whole is covered with a double iron roof. Over the entrance gate are bas reliefs executed by J. Lockwood Kipling who designed the fountain also. The ground is paved with flagstones from Caithness.

The mutton and beef markets are situated on the other side of the central garden. At the western end is a covered weighing shed, where consignments are first tested before being distributed to the stalls for retail sale. The enclosure was originally laid out as a garden with a handsome fountain in the centre.

The fish trade has recently been shifted from this market to the newly constructed Chhatrapati Shivaji Maharaj Market opposite the Phule Market on the Palton Road. In the midst of a very busy locality and surrounded by buildings of modern design, the Arthur Crawford Market renamed as Phule Market and the newly constructed Chhatrapati Shivaji Maharaj Market form a nucleus of the busiest centres of commercial activity of the Metropolitan city of Bombay. The Phule Market is the principal fruit market of Bombay.

MAHIM DARGAH OR HAJRAT MAKHDUM FAKIH ALI SAHEB DARGAH

The most noteworthy abode of peace at Mahim is the dargah of the Muhammedan saint Hajrat Makhdum Fakih Ali Paru. Mahim on the suburban section of the Western Railway is the nearest railway station and

number of BEST buses on various routes touch the place. A huge *urus* is celebrated at the dargah in honour of the saint from the 13th to 22nd of the month of Madar. The *urus* is attended by over three lakhs of people, mostly from Bombay and belonging to different religions, during the ten days.

The saint Hajrat Makhdum Fakih Ali Saheb was of Arab origin, an ancestor of his having fled to India about A.D. 860 (A.H. 252) from the clutches of Hajjaj ibn Yusuf, the tyrannical governor of Basra and surrounding districts. Some five hundred years later there was born on the island of Mahim a very remarkable man, Shaikh Ali Paru or as he was subsequently styled Makhdum Fakih Ali " the worshipful jurisconsult Ali whose shrine still attracts thousands of Musalmans annually from all parts of India. The saint died in A.H. 835 or A.D. 1431 al the age of 59, as we learn from the Kasful-Makhum or Revelation of the concealed by Mahommed Yusuf Khatkhate, and a mosque and shrine were straightway built to his memory which were repaired and enlarged in A.H. 1085 (A.D. 1674) and improved by the addition of verandahs in A.H. 1162 (A.D. 1748)(The Gazetteer of Bombay City and Island, Vol. III, 1909, p 301.). After spending several years of his youth in travel and study he is said to have been appointed law officer to the Muhammedans of Mahim. He acquired a well-meritted reputation for piety and learning, his chief work being a commentary on the Qoran held in high esteem by the Sunni Muslims of India. It is believed that the saint is capable of fulfilling one's desires and those who come to the dargah generally make vows before it in order to get a child, success in business, etc., and on fulfilment of their desires offer sweetmeats, etc. to the dargah. Also ascribed to the saint are many miracles in his life time including one when he is supposed to have brought back to life a dead she-goat which he loved so much.

The dargah stands on the western side of the Cadel road and the main entrance faces the east. The dargah is constructed in stone and mortar coated with cement plastering. To the east of it is a two storeyed *nagarkhana* or a drum chamber with four arches on the ground floor, the roof of which is surmounted by a green flag. To the north of the tomb is the mosque.

MAHIM FORT

The Mahim fort is located at the mouth of the Mahim Creek at the southern end of the Mahim causeway. In a letter written by Aungier and, his Council to the Court of Directors on 15th December 1673 it is stated "small lines or parapets and guard-houses have been raised at Mahim and Sion". It was strengthened and the small fortifications were built by Sir Thomas Grantham in 1684 during the eleven months that he held possession of Bombay. It is also mentioned that the small forts at Mazagaon, Sion, Mahim and Worli were also supplied with cannon.

In 1772 the Portuguese fired on Mahim fort. The English retorted with shells which "damnified their college at Bandora. In August of the same year the Portuguese attempted an invasion between Sewri and Sion (*Ibid., Vol. II, p. 92, Note 2.*) ".

What remains of the fort now are the rampart walls towards the Mahim creek. However, it is one of the very few old and historical objects in Bombay.

MANDAPESHWAR

Mandapeshwar, called Montpezier or Monpacer or Mount Poinsur by the Portuguese lies about 13 km. south of Vasai and 2 km. north in a straight line from the Borivali railway station. The place can be reached by a BEST bus route No. 292 from the Borivali railway station. It is known for its Brahmanic caves turned churches by the Portuguese. The Portuguese seem to have occupied Mandapeshwar some time in 1538, expelled the Hindu Yogis and defaced the paintings (In a recess on the left, as one enters, Lord Valentia in 1804 and Mr. Salt in 1805 noticed the painting of a saint still fresh on the wall. Trans. Bom. Lit. Soc. I.P. 48.) on the caves walls. For the vast area around, Mandapeshwar is easily known by a high whitewashed watch tower that crowns a garden around. Due to the development that has taken place of late there is no wooded knoll which could be seen previously, 91.440 metres (100 yards) to the north of the watch tower. On what was apparently a great isolated block of trap rock, are the remains of a Portuguese Cathedral and College. The buildings, especially the Cathedral with very high walls and high pitched roof, are of great size and cover a very large area. The eastern half of the Cathedral has been repaired and roofed and is used as a church. The east face of the great mass of rock on which the building stands, has been cut into several large Brahmanic caves. Beginning from the north end of the east side, a door opens into a long cave, about sixty six feet by forty and about twelve feet high. On the right hand, before entering, is a life-size defaced figure cut in the rock. The Cave has been fitted of a Portuguese Church, with a plain altar and seated wooden image as Virgin Mary at the south end, and a pulpit about the middle of the west wall.

The temple turned church consists of a central hall, two irregular aisles, and a vestibule or portico at the north end. The east aisle, originally a veranda, has a front wall built by the Portuguese with a central arched door and two square side windows. Inside of the east aisle or veranda, which is about nine feet broad, is a row of four pillars, and two pilasters about twelve feet high. The pillars are plain and look rather slim as if a surface of figured ornaments had been hidden by mud and mortar and small figures of Parvati and Shiva with attendants may still be seen. The Portuguese must have indiscreetly been responsible for chiselling away the ornamental works on the pillars. Much unharmed tracery covers the shafts of the pilasters, and they end in fluted cushion-like capitals like the elephanta pillars. The central hall measures about twenty three feet broad and fifty long, a Chancel fifteen feet deep, being cut off at the south end by a wooden railing. The altar is plain and square with a wooden seated figure of the Virgin Mary, about life-size and a cross above.

The west aisle is very irregular and is little more than a passage from two to four feet broad. The west wall originally opened into three chambers. The southern chamber is entered by two steps and a threshold through a plain opening about six feet broad and eight high. The chamber inside is about nine feet square and seven high, with a rock bench along the south walls about three feet broad. The

Portuguese filled the back wall with rough masonry. Formerly there was a square pillar with rounded capital, and the original caves went in about nine feet further. In the back wall there seem to be the remains of a figure.

The back wall, opposite the central door has been filled with masonry by the Portuguese. A five and a half feet square opening with plain wooden door posts gives entrance to a chamber about fifteen feet square and eight feet high, with some remains of carving on the back wall. On the floor are some well-carved Portuguese beams. Further north, a door in the back wall leads into a chamber fourteen feet by nine. The back wall, which has been filled by the Portuguese, was originally two plain square pillars and two square pilasters. A hole in the Portuguese masonry gives entrance to a chamber fifteen into six and nine feet high, and from this, to the north runs an inner chamber roughly fifteen feet into eight and five high. Both the chambers are plain. The vestibule or the portico, to the north of the hall, measures about eighteen feet into twelve and is about ten feet high. Round three sides runs a plain rock seat. In the east side of the north walls is an empty recess, about eight feet by five, with holes in the wall as if for closing it off. Before the Church was repaired this cave temple was used as a Christian place of worship for many years. It is now unused.

Passing south, outside of the church cave, behind the altar, cut off by a rough wall is a cave twenty feet into fourteen. The front is about half built. Passing through an opening left by the Portuguese as a window, is a cave twenty feet into fourteen.

In the back wall is a defaced statue of Shiva dancing the tandava or the frantic dance. (Except that it is somewhat larger, this representation of the tandava dance is much like that on the right hand side of the main entrance at Elephanta.) Above on the visitor's right, is Vishnu on his bird carrier or garud with attendants, and below are three worshippers, two women and a man. Above on the visitor's left are angels and a three headed Brahma, and below a Ganapati. Above is Indra on his elephant, and below are seers and a male figure, perhaps the man who bore the expense for cutting the group. Outside, to the left is an old cistern with a cross above, apparently cut out of an image of Shiva. The floating angel-like figures have been left untouched. Further along, an opening with two pillars and two pilasters with rounded capitals, gives access to a chamber eighteen feet by six. A door in this chamber gives entrance to a long plain hall 46' X 17' and 9' high, much filled with earth. In front are two great pillars about four feet square. There are two niches in the south wall, and to the east, is a six feet deep veranda with its north nearly filled with earth. Earth has recently been cleared when the excavations were carried out by the Archaeological department. From the rock, in whose east front these caves are cut, rises a great mass of Portuguese buildings. These buildings consist of three parts. In the south is the great Cathedral which runs east and west, to the north of the Cathedral is a large central hall surrounded by aisles, and behind the hall is a great pile of buildings, dwellings for priests and students and on the west a large enclosed quadrangle.(Vaupell (1839), Trans. Bom. Geog. Soc. VII, p. 146. About 1835 Mr. J. Forbes of Bombay, with the help of a pipal tree root, climbed to the top of the wall. He sat for a while and then slipping or losing his hold fell sixty or seventy feet into the court of the temple. He was carried to Bombay senseless and died that evening. Ditto.) To the west is a fine cross. The nave of the Cathedral, which is without aisles, is about seventy-five feet long by thirty-six wide. The side walls are about sixty feet high. The inner part of the nave has been covered with an open very high pitched tiled roof supported on massive teak timbers. Across the nave, about fifteen feet from the west door, two pillars with plain round shafts, about four feet high, support on plain square capitals, an arch of about thirty-four feet span which rises in the centre to about twenty-five feet. About thirty feet up the side walls are big square clerestory windows, and in the centre of the north wall, is a pulpit. At the east end of the nave is a transept about eighteen feet broad and fifty-four long, and beyond the transept is the chancel about thirty feet square and with a domed roof about fifty feet high. The whole is plain and simple, but clean and in good order.

To the north of the Cathedral is another large building which seems to have been a college hall. Inside of a row of cloisters, about nine feet broad and ninety feet long is a central hall, forty-five feet square, with four arches on each side. North of this hall and cloisters is another much ruined pile of buildings, and on the west, a great closed quadrangle.

At the foot of the west wall are two stones with Portuguese writing, one a dedication stone apparently dated 1623,(The writing states that the college was built in 1623 (1643?) as an appendage to the church by the order of the Infant Dom John III of Portugal (King Dom Joao IV?)Da Cunha's Bassein, p. 195, Trans. Bom. Geog., Soc. VII, p. 147.) the other a tomb stone.

About a hundred yards south of the Cathedral and the college ruins, on a covered knoll about 150 feet high, stands a high domed whitewashed tower, ending in what looks a belfry. The tower, whose height is about forty-six feet, stands on a plinth about fifty feet in diameter. Except to the east where there is a square out work with stairs leading to the upper story, the tower is round with a veranda about nine feet deep, and to the north, west and south, are seven vaulted guard-chambers about six feet in diameter and ten feet high. At a height of about fourteen feet the wall is surrounded by battlements about two feet high. Inside of the battlements runs a parapet paved with rough cement about eight feet broad, and from the centre rises a dome about fifteen feet in diameter and with stone side-walls about fifteen feet high. From the stone wall rises a brick dome about six feet from the lip to the crest, and on the outside over the dome, is a small building shaped like a belfry.

This tower, which was very notable for vast area round, was generally known as the high priest's dwelling, Sir Padri's Bungalow, but it was probably a watch tower. The upper platform commands a wide view. To the east rise the slopes of Kanheri and Tulsi hills. To the north-west are the ruins of Vasai, the Vasai creek to the north and beyond the creek the flat back of Tungar and the finely rounded peak of Kamandurg.

About the middle of the sixteenth century (1556) the Franciscans changed the cave temple into a Catholic chapel. They built a wall in front of the cave and screened off or covered with plaster most of the Shaiv sculpture; in some places they did not damage it .(De Couto states (Da Asia, VII. 245) that when in 1538 the Franciscans received charge of the Kanheri and Mandapeshvar caves, and expelled the Yogis, they did

their best to destroy the sculptures. But as has been noticed under Kanheri, this seems hardly correct.) In connection with the large monastery founded at that time by the great Franciscan missionary, P. Antonio de Porto, a church and college were built on the site of the cave, the cave forming a crypt. The church was dedicated to Nostra Senhora da Conceicaoandthe college was meant for the education of 100 orphans. Round the hill there was a colony of 200 converts. In the height of its prosperity Dr. Garcia d' Orta (1530-1572) described it as Maljaz, a very big house made inside the rock. Within were many wonderful temples which struck all who saw them with awe.(Coll. dos. Ind. (Ed. 1872), p. 42.) About 40 years later (1603) Couto wrote, " In the island of Salsette was another pagoda called Manazaper, which is also cut out of solid rocks in which lived a Yogi, very famous among them called Ratemnar, who had with him fifty Yogis, whom the inhabitants of these villages maintained. The priest Fre Antonio de Porto being told of this, went to him. But the Yogis of that island had so great a fear of him that no sooner did they see him, than they left the temple and went away. " Only divine power says De Couto, " could have made these fifty men leave their temples, and their lands, and fly before two poor sackclothed friars. The priests entered the cave and turned it into a temple dedicated to N.S. de Piedade. The Franciscans afterwards established a college for the island of Salsette for the education of the children of all those converted to Christianity. King D. Joao granted this college all the revenue and property that had belonged to the pagoda." (Jour. B.B.R.A.S.I. 38. De Couto notices that on his death the chief monk of Kanheri left to Mandapeshvar all the lands with which he had been presented, when he became a

In 1695 Gamelli Careri described it as a Monopesser, an underground church once a rock-temple, on which had been built a Franciscan college and monastery. It was 100 spans long and thirty broad. The front was built, but the side walls were of rock; close by was another rock-cut pagoda. Five religious men lived there, receiving from the king of Portugal 130,000 pounds (5000 paras) of rice a year, which except what they are for themselves they distributed to the poor. (Gamelli Careri in Churchill, IV, p. 198.) In 1760, after the Maratha conquest, Du Perron found the Mandapeshwar churches and buildings abandoned. A church to the left of the caves had a Portuguese writing dated 1590. The Marathas had destroyed the place and carried the timber to Thana. (Zend A vesta, I. ccc xc.) In 1804 (November) Lord Valentia found the ruins of a very handsome church and monastery.(Lord Valentia says, probably Jesuits; Du Perron is right. Da Cunha's Bassein, p. 193.) The Church was originally lined with richly carved wood panelling. In the centre was the head of saint tolerably executed and surrounded with wreaths of flowers. The sculpture was in excellent taste. The whole was in ruins. Under the church was a small rock-cut temple square and flat roofed with a few deities and other figures in bas relief. The priests had covered the sculptures with plastey and turned the cave into a chapel. But the original owners were uncovered and worshipped again. (Voyages, II. p. 195. Malte Brunn (1822, Univ. Geog. III. p. 161) says, "The Portuguese utterly effaced many figures of an ugliness incorrigibly heathen. Others, not having coolness enough to allow them to stand as imple monuments of art and antiquated opinions, they converted into Christian emblems, painted them red, and with pious zeal cherished them as valuable proselytes." Du Perron (Zend Avesta I. ccc cxxii) states that when the Marathas took Mandapeshvar and Elephanta, they did much harm to the sculptures by firing cannon in the caves to loosen the mortar with which the Portuguese had hid the figures. This can hardly have been done at Elephanta; it may be true of Mandapeshvar.) In 1850 Dr. Wilson found the cave-temple used by the Roman Catholic inhabitants of the neighbourhood as a church instead of their built church which had fallen into decay. (Jour. B. B. R. A. S. III. p. 41.)

On the eighth of December, the festival of the Mandapeshwar Virgin, Sahibin Kosehsang (N.S. da Conceicao, Our Lady of Immaculate Conception) a fair is held. Among Christian festivals it comes next in popularity to the fair of Mount Mary in Bandra. Childless people of all creeds and religious beliefs, Hindus, Musalmans and Christians, come in large numbers to make vows. A large bell said to have cost Rs. 250 was donated to the church by a man whose prayer for a son was heard.

The fair and the feast of "Our Lady of the Immaculate Conception" is celebrated in honour of the Mother of Prophet, Mary who was conceived without the stain of Adam's sin. The fair is held at the Church of Mount Poinsur on the Sunday following the 8th of December every year and lasts for a day.

The morning and evening Masses are offered on week days, Sundays, and feast days. Masses are offered from 5-00 a.m. to 11-30 a.m. after an hour's interval in each Mass. The last Morning Mass is held at 11-30 a.m. whereas the Evening Mass is held at 5-00 p.m. The Mass at 10-00 a.m. is the Solemn High Mass while Sermon and Benediction Masses are also offered on Octave day which falls on the 8th day from the day of the feast.

On an average 25 to 30 thousand devotees mostly from Bombay and its suburbs attend the feast. The devotees belong to other religions also though Christians are in large number.

The devotees attend the Morning Mass, offer coins, wax candles etc., pray for blessings of " Our Lady of the Immaculate Conception ". It is also customary to make vows to the deity to get a child, an eye sight etc., and in fulfilment of their vows devotees offer artificial limbs made of wax, candles, etc., to the deity.

MANKESHWAR TEMPLE, REAY ROAD

The temple dedicated to Mankeshwar is located on the Reay Road, Dock-Yard Road on the Harbour Branch line of the Central Railway being the nearest railway station at a distance of three kilometres from Bombay V.T. A number of BEST buses of different routes ply through the area at frequent intervals. For the convenience of the commuters the BEST makes special arrangement during the fairs held in honour of the deity.

The temple is said to be about 600 years old and its renovation carried out some 100 years back. It is a stone structure measuring 18.288m. X 12.192 m. (60' X 40'). A passage about 2.438 m. (8') in width and both 99.060 m. (325) in length is paved with stones and connects the temple entrance to Reay Road. The shrine is to the left of the *sabhamandap*, *i.e.* auditorium. The floors of both the *sabhamandap* and the

shrine are paved with marble stones. The door of the shrine is plated with silver sheets both from within and without. The new gilt *kalash* at the top of the dome of the shrine is said to have been built by the present owner in the year 1942.

The *pindi* (spout) of Lord Shiva installed in the temple, it is said, was lying buried in the ground under a tree. One of the forefathers of the present owner of the temple had a dream in which, Lord Shiva said to him, "I am in the earth under a tree, take me out from here and build a temple." Accordingly the *pindi* was unearthed and installed at the place where it was found and the temple was built.

The *ling* of Lord Shiva in the shrine is said to be *swayambhu* (self-born). It is installed in south-northerly direction. It is covered with a silver image of a hooded-cobra. The image of *Nandi* made of stone is installed at the entrance to the shrine in the *sabhamandap*. There are also stone images of Ganapatf, Kalbhairav, Shitala Devi and Hanuman in the temple. In a small room in the south-west corner of *sabhamandap*, silver images of Lord Shiva, Parvati and Ganapati areins tailed.

The temple opens at 6-00 a.m. in the morning when the deity is bathed with scented water. Sandal-wood paste is applied and flowers, etc., are offered to it. The *arati* is performed at about 6-30 a.m. This is called *pakhal puja*. Another *puja* in the same manner is performed before 12-00 noon and the third *puja* called *bhasma puja* is performed in the evening at about 7-30 p.m., when *bhasma* is applied to the deity. The temple is closed between 12-00 noon to 3-30 p.m., when the devotees are not allowed to enter the temple for *darshan*. It is finally closed at 9-00 p.m. During the fair period the temple is kept open throughout the day.

On Ashvina Vad. 14, Ashvina Vad. 30, Kartika Sud. 1 and Chaitra Sud. 1, the deity is draped with a pagadi (turban) of jari cloth, she la, pitamber and adorned with mukhavata of silver plated with gold. On Ashvina Sud. 15 rich clothes and precious ornaments are put on the deity. On other days no ornaments or clothes are put on the deity.

Cooked food (naivedya in the form of cooked rice, cakes of wheat flour and vegetables) is offered daily. Special naivedya of panchapakvanna' (five different varieties of sweet dishes) is offered to the deity on Chaitra Sud. 1 (Gudhi Padva), Ashvina Sud. 15 (Kojagiri Pournima), Ashvina Vad. 14, Ashvina Vad. 30 and Kartika Sud. 1.

It is customary to make vows to the deity for getting a child, prosperity in business, success in examination, etc. and it is believed that the deity is capable of fulfilling the desires of its devotees. On fulfilment of their desires, the devotees offer puja (worship) to the deity with coconut and distribute sweets, sugar or gur, as prasad. A few also offer clothes and ornaments.

Fairs in honour of God Mankeshwar (Lord Shiva) are held in the months of *Shravan, Ashvina* and *Magha*, of which the fair held in the month of *Shravan* is considered to be the most important. On an average 3,00,000 pilgrims attend the fair held in the month of *Shravan*. Ladies are, however, not allowed to enter the shrine.

The main fair is held from *Shravan Vad.* 5 to *Shravan Vad.* 9 (both days inclusive). The other fairs are held on *Ashvina Sud.* 15 (Kojagiri Pournima) and Magha Vad. 14 (Mahashivratri).

Three days of the fair, from Shravan Vad. 7 to Shravan Vad. 9, are considered to be very important days. On Shravan Vad. 5 and 6, there are no special programmes in the temple except bhajan, kirtan and pravachan arranged in the sabhamandap of the temple. At midnight on Shravan Vad. 7, images of Lord Shiva, Parvati and Ganapati of about two and a half feet in height prepared out of sandal-wood paste are installed on the wooden platform specially erected over the Shiva-pindi, After installation of these images no one is allowed to enter the shrine. The image of Panchamukhi Mahadeo is kept at the door of the shrine to enable the devotees to worship. The sandalwood paste images installed in the shrine are kept for three days, i.e., upto the morning of Shravan Vad. 9. In the morning of Shravan Vad. 9, these images are taken out of the shrine and are kept in the sabhamandap on big wooden stools (chaurangd), to enable the pilgrims to have darshan. At about 1-00 p.m. a special puja is performed by the owner of the temple and the images are then taken in a chariot bedecked with flowers and leaves. It starts from the temple followed by large congregation of devotees, musicians, lezim players, bhajan groups, etc., through the main streets of Bombay and it terminates at Bhaucha Dhakka, i.e., Ferry Wharf. At this place the images are transhipped to a big country boat after worship. The boat is taken about three kilometres (two miles) into the sea accompanied by about 300-400 people, and the images are immersed ceremoniously in the sea. The whole ceremony is conducted with great pomp and show.

The second fair is held on *Ashvina Sud. 15 (Kojagiri Pournima)*. On this day a *mahapuja* of the deity is performed between 9-00 a.m. and 12-00 noon and the deity is decorated with costly dress and precious ornaments. A *naivedya* of *panchapakvanna* is offered to the deity. No one is allowed to enter the shrine during the performance of the *puja*. At night at about 8-30 p.m. *a palkhi* (palanquin) procession of the image of *Panchamukhi* Mahadeo made of silver is taken out from the temple through the main streets of Mazagaon locality and it returns to the temple at about 11-30 p.m. The image of *Panchamukhi* Mahadeo is again worshipped and *prasad* is distributed. On an average 1,000 devotees attend this procession.

The third fair is held on *Magha Vad. 14*. On this day the devotees visit the temple and offer flowers and leaves of *Bel-tree* to the deity. On an average 4,000 to 5,000 pilgrims attend this fair. On this day *Laghu Rudras (rudra avartan)* are performed at night. At 6-30 a.m. next morning the *puja* of the deity is performed by the priest of the temple and *naivedya* consisting of cooked rice and curds is offered to the deity.

MANORI

Manori, a sub-island of Salsette lies 14 km. south-west of Borivali railway station of the Western Railway. The Borivali-Gorai-Manori route also traverses the greeneries of Gorai. It can also be reached by the Malad-Marve road. Between Marve and Manori there is a regular ferry service operated by the Manori Machhimar Vividh Karyakari Society Limited. Generally the boats have a carrying capacity of 25 persons each.

After crossing the creek, there is a road of about 1.6km. that leads to Manori. The route passes through the thick palm grove. The Manori village is land-marked by the ancient Portuguese Church, whose yellow outlines can be seen from across the creek. It was built by the Portuguese wayback in 1559. It also served as a rampart. On its galleries the Portuguese placed their big guns trained towards the sea in case of a naval attack. The church was repaired in 1815. It was finally remodelled in 1912. From inside it is very artistic, as all catholic churches are. There is a huge reclining image of Christ Crucified which is taken out in procession through the village once a year, on Good Friday. Several ancient Portuguese officials lie burried here.

Manori has two beaches in fact. One is directly in front of the village while the other one which is the better of the two is about a kilometre north of the village. Most of the villagers of Manori are Christian Kolis. On the former beach the fisherfolks are seen busy in their trade. Their fishing boats, always a fascinating sight whether sailing or anchored have their mast decorated with the colourful saris of the fisherwomen on auspicious days like Easter, Christmas and so on. They serve as lively buntings and wave lustily in the wind of the waters. The other beach is as beautiful as lonely.

MARKANDESHWAR TEMPLE, WORLI

The temple dedicated to Shri Markandeshwar is located on the Annie Besant Road opposite the municipal pumping station. The deity was originally known as Gathia Mahadev. It is a self born or a *swayambhu linga* (natural or spontaneous linga) over which a temple was built about three quarters of a century ago. The temple has been renovated a few years ago. A flight of 75 steps leads to the temple and a further flight of six steps above the shrine is a huge dome with a pinnacle. While ascending the flight of steps, towards the right is a shrine dedicated to Mahalakshmi in a standing position. The idol which is about 85 years old could be seen on a pedestal made of marble.

On entering the inner shrine on a marble pedestal is a Shiva-linga at the centre and a silver plated Sheshanaga. The image of Yama, the god of death, less than two feet in height is made in black stone. Behind the Shivalinga on the same pedestal could be seen an idol of Markandeshwar, two and a half feet in height. Towards the left could be seen an idol of Siddhi Vinayak which has a height of afe et and a half. Behind the pedestal on which is placed the Shiva-linga is another marble pedestal on which is an idol of Parvati. To the right of Parvati in a recess is an image of Ganapati and in the recess on the left an image of Maruti.

Opposite to the temple of Markandeshwar is seen a big banyan tree said to be centuries old. On the seat round about the tree are two images of Nandi, Lord Shiva's bullock, one made of marble and the other made of black stone.

An annual fair is held at the temple in honour of Shri Markandeshwar on the great night of Shiva *i.e.*, *Mahashivratri*, *Magha Vadya 14*. A number of devotees flock at the temple on every Monday in the month of *Shravan*.

MASONIC HALL

(The account is taken from former edition of Bombay City Gazetteer, Vol. III.)

For many years the Masons of Bombay had no building, worthy of the craft, in which to meet. Until the year 1859 the three craft lodges in Bombay were St. George, No. 549 under England, established in 1848, Lodge Perseverance, No. 351, established under the English constitution but transferred to Scotland in 1847, and Lodge Rising Star, No. 342 established under the Scottish constitution for Parsi brethren in 1844. Lodge St. George used to meet in the houses of various brethren on Malabar hill; Lodges Perseverance and Rising Star met in rooms at Colaba. In 1859 application was made to the United Grand Lodge of England for a warrant and, on its being obtained, Lodge Concord was established in 1866. A muhammadan brother placed a bungalow on the eastern margin of the Babula tank at the disposal of the brethren and allowed the lodge to occupy it rent-free for about two years. As the Masonic brotherhood increased in numbers, the need of proper accommodation was more acutely felt; and a general meeting, at which all the lodges except Lodge Concord were represented, was held to discuss the question. As a result a house at the back of the J.J. Hospital was secured and funds were raised by the issue of debentures for furnishing it. In 1877 (At this date the Hon.Mr.Gibbs was D.G.M of English Freemasonary and Captain (afterwards Sir Henry) Morland was G.M of all Scottish Freemasonry in India.) an attempt was made to locate the various masonic bodies under one roof, and Nawab's bungalow in Nesbit road, Mazagaon, was taken up for this purpose in joint partnership on equal terms; but the site was not wholly satisfactory, and it remained for Mr.N. N. Wadia, C.I.E., some years later to secure by purchase from Government the site, upon which the present Masonic Hall stands, giving the Masonic Committee which dealt with the matter the option of taking over the land from him at cost price within the following twelve months. The cost of the building was defrayed by subscriptions and the foundation-stone was laid by Lord Sandhurst on the 5th June 1897.

The Masonic Hall is situated to the east of the building formerly used as the Government Mews and opposite the Sterling Cinema Theatre.It is built in the Italian style, having brickwalls faced on the west

and north with Kurla stone and window-dressings of Porbandar stone. The main hall on the first floor is 60 feet long by 30 feet broad, the banqueting hall below being of the same dimensions. Rooms are provided in the building for the holding of chapters.



taxi cab takes directly atop the hill.

MOUNT MARY-OUR LADY OF THE MOUNT

The shrine of Our Lady of the Mount popularly known as Mount Mary or Mat Mauli, the corrupted form of Mata Mauli or Mother Mauli, is one of the most famous Christian shrines in India revered even by Hindus, Muslims and other communities also. Situated on a beautiful hill top opposite the Mahim causeway and overlooking the sea, the Church with its twin spires soaring into the sky presents a picturesque landmark to all who cross the dividing water between Bombay and its suburbs.

Bandra on the suburban section of the Western railway is the nearest railway station to the Church. A regular BEST bus service also plies from Bandra station to the foot of the hill. A

The shrine, at that time a modest little hermitage, was founded by the Jesuits round about the years 1568-1570. In 1640 the hermitage was enlarged into a chapel. However another reference states, " In the year 1678 a chapel was built by the Portuguese and named Capella de N. Senhora do Monte, which was made filial to the ancient church of St. Anne." (B. L. D'silva in the Indian Antiquary XIX, pp. 443-44.) However one thing is certain that by 1679 it had become a famous place of pilgrimage frequented by Christrians and non-Christians alike.

At the time when Antonio Luiz Gonsalves da Camera Coutinho was the Viceroy (1698-1701) Bandra was invaded by a pirate army of the Muscat Arabs. According to a story they attempted to ransack the shrine hoping to find treasure, and on being disappointed they intended to set fire to the church when a huge army of angry bees attacked them so cruelly that they were forced to abandon their evil intentions and leave in such a hurry that they even left the arms they carried behind them. (Behold All Generations by Prof. F. H. Gracias, p. 40.) However this account does not appeal to reason in view of the fact that when Marathas overran Salsette i.e., the present Suburbs of Bombay, the chapel was destroyed by the Portuguese authorities at the instance of the English in order to prevent this strategic position from falling into the hands of the victorious Marathas. On this occasion the popularly venerated image of the Blessed Virgin was ferried across the creek for safe custody to St. Michael's at Mahim whence it was brought back to be reinstalled in the nearby built chapel in 1761.

The present church which is a fine example of Gothic architecture with its noble facade and its soaring spires was built in 1904. In the spacious auditorium are the murals depicting the life of Our Lady of the Mount executed in Indian style. The status of the shrine of Mount Mary was raised to a Minor Basilica by Pope Pius XII, at the time of the centenary celebrations of the proclamation of the dogma of the Immaculate Conception.

In front of the shrine of the Blessed Virgin stands the oratory of Our Lady of Fatima built to commemorate the National Marian Congress held in Bombay in December 1954. It is also a fine specimen of architecture with a round staircase on both sides with arches below and over a central arch a structure with four minarets and a central spire.

A huge fair is held in honour of Mary, Mother of Jesus Christ and is celebrated during the Octave (Sunday to Sunday) following the feast on 8th September. During the period thousands of devotees from all walks of life with no discrimination of caste and creed throng the road leading to the chapel of Our Lady of the Mount that goes to show the secular nature and cosmopolitan character of Bombay city.

Many ardent Christians from all parts of India come on pilgrimage to Bandra to pay their homage to Mata Mauli regarded by many Christians as the holiest in India and is believed to possess miraculous powers. Numerous Hindus, Muslims and others pray to the deity for getting a child or a child's recovery from a dangerous disease and after the vow has been fulfilled they proceed to the chapel to offer their heartful thanks, their gratitude in many cases taking the shape of a wax model of a child or a limb or a cradle according to their respective vows to Our Lady.

From the top of the hill down the hundreds of steps leading to the road that goes to the station, the crowds surge backwards and forwards, jostling, pushing, edging their way from the shops that sell religious articles and the stalls put up by the different parishes to the toy shops, which today rarely sell as good toys as they sold some twenty years ago, from the toy shops to the sweetmeat shops, from the sweetmeat shops to the restaurants that sell eatables and some soft drinks and from there to the hastily built photographer's studios that can give you your photograph in three different poses for a rupee or so within half an hour.(Behold AH Generations by Prof. F. H. Graeias, p. 60.)

MUMBADEVI TEMPLE

The original temple of Mumbadevi or Mumbai from whose name the name of the metropolis, Mumbai or Bombay, has been derived is supposed to have been constructed and attended by the Koli fishermen of Bombay. "The influence of the old goddess, though subjected on occasion to disastrous eclipse, has survived the changes of centuries, and has finally given one common and immortal name to the scattered islets of Hindu period." (The Rise of Bombay by S. M. Edwardes, 1902, p. 43.) The temple has along tradition and the shrine of the ancient goddess Mumbadevi was in existence during the reign of Bhimdev who died in Shaka year 1225 (A.D. 1303). (Ibid. p. 27.) It was then situated near the old Phansi Talao, i.e.,



Gibbet tank near Bazar Gate on a spot now included within the limits of the Victoria Terminus or Boribunder of the Central Railway. The destruction of the temple of Mumbadevi, guardian goddess of the island, was undertaken during the reign of Mubarak Shah I of Gujarat. The Goddess Mombai or Mumbai was unquestionably an aboriginal personification of the earth-Mother who is still worshipped under various appellations especially by the Dravidian population of Western and Southern India. The Goddess is said to have been originally consecrated about 500 years ago and must have been built by Koli community of Bombay who were the aborigins of the place. After the temple was built they might have given the goddess their name 'Muja ' as such names as Munj Shimga, Modna, Manja, etc., are found amongst them. It appears that the Brahmins who became predominant later on turned the name Muja to Mumbadevi. An interesting anecdote regarding the origin of the deity is given in *Mumba Devi Mahatmya* or *Puran*, the *Rise of Bombay*, by S. M. Edwardes.

About 1737, when the then Bombay Government set to enlarging the fortifications of the old town and the land on which the temple stood then was acquired by the East India Company, the original temple was

demolished and the site on which the present temple stands was then granted to one Pandu Seth and other Hindu devotees of the deity. A new temple was erected by Pandu Sonar who was at that date a merchant of considerable influence in Bombay. It is said that Pandu Seth Savji collected funds from the Hindu devotees for the purpose.

The modern shrine of Mumbadevi contains an image of the goddess without mouth and is dressed in a robe and bodice with a silver crown, a nose-stud and golden necklaces, and seated under a domed makhar of wood, covered with silver plates. On the left is a stone figure of Annapurna, who is worshipped with Mumbadevi and on special days is seated on a stone peacock. In front of the shrine is a brass tiger, the vahan or carrier of the goddess, which was presented by a pearl merchant in 1890, and is washed and worshipped daily along with the goddess. Tuesday is the chief day of worship in ordinary season, when the devotees of the goddess break cocoanuts in front of the shrine, pour the contents over the tiger, and then hand the halves to the Pujari, who gives one-half to the worshipper, together with a flower or sweetmeat that has touched the goddess as prasad. One proof of the local importance of Mumbadevi is that among Marathi-speaking castes, the bride and bridegroom are taken on or after the marriage-day to the shrine, and present the goddess with a coconut, a bodice or a jewel, according to their means, in the hope that she will render their future free from ilMuck. The two great annual festivals occur during the nine days of the month of Ashvina which precede the Dasara festival and the five days of the month of Margashirsha. On the former occasion mixed millet and rice are sown on the first day in front of the shrine; on the seventh day a square sacrificial pit is dug and consecrated by a Brahman, in which on the following day a fire (homa) is kindled and fed with grain, ghi and coconuts, while on the tenth day or Dasara the seedlings, which have been carefully nurtured since they were first sown, are plucked up, washed and presented to the goddess, and are also distributed among the worshippers, who adorn their hair with them or put them in front of their turbans. On the occasion of the shorter festival in Margashirsha no seed is sown; but a sacrificial fire is prepared, into the ashes of which the devotees dip the third finger of the right-hand and then mark the forehead between the eyebrows. Other shrines within the Mumbadevi temple enclosure are dedicated to Ganesh, Maruti, Mahadev, Indrayani, Murlidhar, Jagannath, Narsoba and Balaji. A big tank was built in front of the Mumbadevi temple by a Kapol Bania named Nagardas Navlakhya. The tank however has been filled in and is no more: in existence.

The temple originally was a private property of Pandu Seth Savji. Due to the litigation between the heirs of Pandu Seth the matter was referred to the Governor of Bombay regarding the management of the temple. New trustees were appointed by the decree dated the 4th October 1898 and a scheme was framed for the management of the Mumbadevi temple by the Bombay High Court. Of the shrines in the temple compound only two shrines namely those of Mumbadevi and Hanuman come under the Shree Mumbadevi Mandir Charities Fund while the remaining shrines are private properties. During 1973-74 the total income of the trust amounted to Rs. 7,17,328.13. It rose to Rs. 7,85,325.72 in 1974-75. The money collected is utilised towards social service by the trust. The trust conducts a Pathology department in the Samaldas Kothari Hospital at C. P. Tank and the Intensive Paediatric Care Unit at Sir Harkisandas Hospital. An ayurvedic dispensary is conducted within the temple premises while a Pathological Laboratory is opened at Dr. Subodh Mehta's Medical Relief Centre at Khar. The trust also gives monetary assistance to various hospitals and educational institutions and provides assistance for running the Sanskrit Pathshala at the Bharatiya Vidya Bhavan, Bombay.

MUNICIPAL CORPORATION BUILDING

In 1866, the Municipality was housed in an unpretentious building at the end of Girgaum road, whence it was removed in 1870 to a building on the Esplanade. On the 19th December 1884 Lord Ripon, the Viceroy of India, laid the foundation stone of the present Municipal buildings opposite the Victoria Terminus of the Central Railway, which were completed in 1893. In the main entrance hall is a tablet containing the subjoined inscription:—

"These buildings were designed and their execution superintended by F. W. Stevens, C.I.E., F.R.I., B.A., A.M.I.C.E., RaoSaheb Sitaram Khanderao, M.S.E., being the Resident Engineer in charge. The work was commenced on the 25th July 1889, Grattan Geary being the President of the Corporation and E.C.K. Ollivant, I.C.S., being the Municipal Commissioner, and was completed on the 31st July 1893, Thomas Blaney being the President of the Corporation and H. A. Acworth, I.C.S., being the Municipal Commissioner. "

The domed and minaretted building belongs to the early Gothic style of architecture, while the many



domes which rise above the gabled roofs impart an oriental flavour to the design. The imposing facade with its magnificent tower is flanked by two wings which abut on Hornby (Dadabhai Naoroji) and Cruickshank (Mahapalika) roads. The tower rises to a height of 235 feet from the ground and is surmounted by a masonry dome. Over the facade is placed a colossal allegorical figure 13 feet in height representing *Urbs* Prima in Indis. The grand staircase is also crowned by an imposing dome, while on the Cruickshank road side are the offices of the Health Department, the Municipal Laboratory and a staircase for the use of the Commissioner and the members of the Corporation. On the first floor are the offices of the Mayor, the Commissioner, Municipal Secretary and the Corporation Hall. The hall is 65 feet long by 32 feel broad and is 38 feet in height. Its northern end is ornamented with a large bay window, filled with stained glass bearing the arms of the Corporation and flanked by canopied recesses of stone. The southern end opens into a lounge for the use of Councillors,

which leads through glass doors on to a broad terrace above the southern entrance of the building. The hall contains two galleries for the public. The cost of the whole building amounted to about Rs. 13 lakhs in 1893.

Another building, an annexe to the original building, in modern style has subsequently been constructed towards the north of the earlier building facing the Cruickshank road and has been connected with the old building.

Immediately in front of the original building stands a statue of late Sir Pherozeshah Mehta who took prominent part in the civic life of Bombay.



NATIONAL PARK-KRISHNAGIRI UPAVAN

The then Government of Bombay chose Kanheri with about five and a half acres of land studded with hills and green fields and nullahs as the site of the first National Park of the country and named it as Krishnagiri Upavan. Located near the Borivli railway station on the suburban section of the Western Railway on the east, the place could be reached by a number of BEST buses on holidays. About fifteen minutes walk from the Borivli railway station leads to the park.

A number of picnic cottages have been built in the park for the convenience of the visitors. A pavilion after the modernised Buddhist fashion has been built atop a hill and is known as Smriti Mandir. It has become a landmark visible from the vast area around. It commands an excellent view of the park itself as also of the surrounding country-side stretching upto the Kanheri caves. Recently a Lion Safari park has been added to the National Park. (See "Borivli Lion Safari Park" in this Chapter.)



NEHRU CENTRE

Nehru Centre is a national memorial devoted to the perpetuation of the ideals that the Late Pandit Jawaharlal Nehru, the first Prime Minister of India, cherished throughout his life time; and is dedicated to the fulfilment of his aspirations for the people of India whom he loved most. The centre is being developed on a five and a half hectare plot in the heart of the city at Worli. The centre envisages several projects such as the Planetarium, the Discovery of India Hall, the Museum, the Library, the Dance and Drama Academy, the Art Galleries and Art Studio, the Research Centre, the Publications Division, academic activities and children's facility centre.

One of the great attractions of the Nehru centre is the Planetarium. The imposing Nehru Planetarium building has already become a landmark in Bombay. It has three floors with a total area of 5,000 square metres and is fully centrally air conditioned.

There is provision in the basement for lecture halls and a library of books on astronomy, astrophysics and space sciences. A hobby workshop will cater to children and enthusiastic amateurs who wish to build their own telescopes and models and innovate their own patterns of study.

PLANETARIUM: The Planetarium has been made possible by a generous donation of over Rs. 1 crore from the house of Birlas.

"In the sky theatre of the Nehru Planetarium you lean back in your seat in air-conditioned comfort and watch starry heavens glide above you. You see the Sun moving in the midst of stars, comets zooming past, meteors flashing by, Jupiter's four moons going around their planet and many more celestial phenomena. These celestial spectacles are produced by a composite optical projector mounted at the centre of the circular sky theatre. On the hemispherical roof (dome) are projected images of some 9,000 stars, the Milky Way, Planets, Sun, Moon, etc. At the touch of a switch the sky appears to turn slowly to display the changing stellar panorama."

"The Zeiss projector at Nehru Planetarium can recreate the sky as seen from anywhere on the earth and at any time past, present or future. In a matter of minutes the night sky of Bombay can be changed to that of the North or South Pole where the stars neither rise nor set. Several fundamental principles of astronomy which are difficult to understand can be easily explained in the Planetarium. A number of celestical phenomena which take place over several years can be seen in a few minutes. The Planetarium is a powerful medium for introducing the young and old persons to the basic principles of astronomy."

"While we are waiting for the Planetarium programme, we can see on the ground floor the rotating planetary motion model (Orrery), the panorama of the Moon, a large collection of astronomical photographs and we can know our weight on Sun, Moon, Mars and Jupiter. On the first floor level we can see a working model of the solar and lunar eclipses, a solar telescope to show us the image of the Sun and the Fraunhofer spectrum (during the daytime when the sky is clear) and an exhibition of our space efforts. The Planetarium programmes last for about 40 minutes with commentary in Hindi, Marathi, Gujarati and English."

FACILITIES FOR CHILDREN: Nehru loved children. The major part of the Centre's activities will be devoted to the welfare and happiness of children, a mini-Disneyland to explore the wonders of the world; a work centre and laboratory to develop their creative talent; galleries to display their creative work; educational exhibits; an amusement park. Also 2 dormitories to accommodate 100 boys and 100 girls, at a time who may come from all parts of the country to stay and tour the centre.

Discovery of India Hall: The Discovery of India Hall is pageant of the immemorial past of India that echoes the tragedies and triumphs from the dawn of our history. Momentous moments frozen into sculptures, paintings, models recreate the glory and the grandeur of our inheritance.

Museum: Glimpses of the changing panorama of science and technology are delineated through actual working models and visual aids.

Library: Scholars from all over the world can draw on valuable material on Nehru and his ideals, world history and physical sciences in this library.

Dance and Drama Academy: This comprises a workshop for experimental theatre and innovations in our classical and folk dance forms housed in a 300 seat auditorium. In another auditorium, seating 1,200 persons, will be held cultural and educational programmes.

Art Galleries and Art Studio: Promising and professional painters, sculptors, and creative artists will be able to hold exhibitions in two art galleries. There is a studio with tools and facilities for artists to practise or execute their work as also an auditorium to seat 150 persons for discussions and discourses on various art forms and a permanent exhibition of artist Husain's tribute to Nehru.

Research Centre: Academicians, scholars and scientists will be provided facilities to conduct research in selected fields having a bearing on national priorities.

Publications Division: Collection and dissemination of literature on subjects relevant to Nehru's ideals; Nehru's writings; books and periodicals by and on Nehru will be printed and published in several languages to meet the needs of different age groups and a wide range of intellectual interests. Nehru Centre is also publishing a new Science Magazine known as *Science Age* from August 1983.

Mini Planetarium: In 1984 a Mini Planetarium was acquired from the USA. This is a portable Planetarium with an umbrella-like collapsible projection dome, which can accommodate about 30 spectators. The mini planetarium was inaugurated on November 30, 1984. Over 80 shows have already been conducted in various schools, colleges and other institutions. About 3,000 spectators have witnessed these shows.

After the completion of the entire project, the Nehru Centre would be a fitting and a gorgeous monument to the spirit of the man, whom all his countrymen loved most and who also thought of the betterment of his people.

OLD FORT

The remains of the Bombay Castle or the Old Fort could be seen behind the Town Hall. It is now used as an Arsenal. What remains of the Old Fort now are the walls facing the harbour and a portion of the wall to the north. Signals are made to ships from the Flagstaff located here. A clock tower, where a time signal-ball connected by an electric wire with the Observatory at Colaba falls at 1-00 p.m., is also located in the tower. It is from this fort that the area in Southern Bombay has come to be known as Fort Area.

PADAN HILL

Very few people, even the people living in the locality, are aware of the formerly beautiful spot known as the Padan Hill which was hallowed by religious and historical associations. On the outskirts of the village of Akurli in the suburb of Kandivali above 457.20 metres (500 yards) east of the temple of Karsanglidevi rises a great dome of black trap known as the Padan.

From the west it rises with a gentle bush covered slope to a bare flat top, and ends, eastward in a sheer cliff about 60.96 metres (200 feet) high. The hill lies eight or nine and a half kilometres (five or six miles) west of Kanheri, and the black cleft in which the Kanheri caves are cut, and above, the patch of

brushwood, that marks the site of one of the old burial mounds, can be clearly seen. The country between, rises in long slopes, the upper slopes formerly covered with teak and other timber, the lower thick with a forest of barb palms. The name Padan in modern Marathi means a resting place for cattle, which in the rainy months, are said to leave the wet lowlands and come to rest on the smooth dry hill top.

Two local stories explain the sanctity of the hill. According to one account, a supernatural cow, which lived on the hill top and hated the sight of man, was once pursued and disappeared into the rock, through a small hole, under a gnarled old tamarind tree, at the north-west side of the hill top. The hole looks artificial as if the mouth of a ruined shrine or cell. It is said that Kathkaris sometimes used to enter in search of porcupine quills and are said to have been able to crawl for some distance. According to the other story, the hill is called Homacha Dongar from a holy woman who lived on the top and offered herself as a fire sacrifice. That it was a holy place and a dwelling of sages appears from some of the inscriptions which mention the names of sages and speak of pleasure grounds, aramas. There was a pond to the west of the hill, which is said to have been lined with dressed stones and might have been connected with the hill by a flight of steps. Of the steps no trace remains. (The hill and the remains could not be traced at the time of study (1979-80).)

Going up from the north, there were, on the top, near the north end and along the west crest, remains of dressed stones and of foundations of retaining walls. In different parts of the bare smooth top were carved tracings of feet: Two pairs of cow's feet (50-800 mm—3") two pairs of calf's feet (50-330mm— 2")close by, four toelessfeet (one pair 254-000' mm \times 127-000 mm-10" \times 5" the other 203-200 mm \times 101-600 mm—8' x4') said to be the feet of a man and a woman, two large sized feet with marked toes 330-200 mm x 127-000 mm (1' 1 " x 5") and some distance off the prints of a child's feet. There were also the Buddhist wheel 228-600 mm (9") in diameter, a Buddhist trident 152-400 mm (1' 6") across, two conch shells (one 508-000 mm x 228-600 mm—1 '8" x 9", the other 203-200 mm x 127-000 mm—8" X 5"), a round looking glass with a handle 457-200mm x 228-600 mm (1'6" x 9"), twojugs(one203-200mmx 101-660 mm—8" X 4", the other 254-000 mm x 203-200 mm—10" x 8") and a water pot (50-800 mm x 228-600 mm—1' 2" x 9"). Near several of these carvings short writings have been cut. There were twelve writings all undated, but from the form of the letters estimated to vary between the first and sixth centuries A.D. Near the two large human footprints was a group of seven short writings. One of these, in letters of about the first century, runs: 'The sage Musala' a second of about the same age, 'The footstep (seat) of Nandi; a third and fourth, in letters of about the second or third century, reads ' Musaladatta the same name as the first; a fifth of about the same age, was the 'step of Rama' and a sixth, also of the second or third century, Ja (Ji?) rasandhadatta, probably the name of a sage. (These inscriptions are contributed by Pandit Bhagvanlal Indraji. The first inscription reads,: 4 Sadhamusala' probably for Sidhamusala' (SK) ' Siddhamusala '; the second Nandi 'paam', (SK) 'Nandipadam'; and the fifth ' Rama ikamo'; (SK) ' Ramavikramah'. The rest are as in the text.) The seventh inscription was the formula of the northern Buddhists, " the object of those (the Adi-Buddhas) who for the sake of religion came into the world (before him, that is before Gautama), the Tathagata (that is he who came as they came, namely Gautama), has explained; what they forbad the great Shramana (that is Gautama) tells as follows ". The letters were of about the sixth century and were written in the southern style of that century. (The letters Yedharmmahetu prabhava hetusteshan Tathagato hyavadatteshancha yo nirodha evamvadi Mahashravana'. This is a little incorrect in its spelling, dharmma should be dharmma, hetusteshan should be hetunteshan, and Mahashravana should be Mahashramana. This formula is written at the end of many Buddhist books and is repeated as a spell or mantra by the Nepalese Buddhists when they offer fried rice to Buddha after worship. It is often found below images of Buddha later than the fifth century.) Besides this group, there were four scattered inscriptions in letters whose forms seemed to be of about the first century. One of these was "The western pleasure-grounds of the Vasaka mountain"; the second, opposite to the first, was " And the eastern pleasure-grounds of Kosikaya (Sk. Kausikeya)"; the third was " Bamhachari (Sk. Brahmachari) Vi (Ma?) kara did. the farmers "; and the fourth was " the mountain, the residence of monks all around ".(The formula is differently interpreted. Some take it as an independent verse; others as in the text, take it to be the first of two verses, the other verse giving what is forbidden)

The top of the rock was about 106.68 metres long by 39.624 mm (350 feet long by 130) broad. At the south edge of the crest were the remains of a retaining wall and broken pieces of dressed stone, which seemed to mark the site of small Buddhist shrines or temples. There are said to be no caves in the east face of the hill, but this was not examined.

The top of the hill commands a magnificent view of the vales, the National Park and the Kanheri Caves on one side and the distant Versova Creek and Salsette Island on the other.

PIR SAYED AHMAD ALI SHAH KADRI DARGAH, DONGRI

The *dargah* of Pir Sayed Ahmad Ali Shah Kadri is located at Dongri. Sandhurst Road on the suburban section of the Central Railway is the nearest station to the *dargah*. The place can also be reached by a number of BEST buses. An *urus* is held annually in honour of the great saint Pir Sayed Ahmad Ali Shah Kadri on 6th, 7th and 8th of *Rajjab*.

The present dargah, it is said, was constructed about 125 years back and stands on a stone platform, 1.828 m. (6') high and measures about 7.62 m x 7-62 m. (25' x 25') with a circular shape at the back, i.e., the eastern side of the platform. The main entrance to the dargah faces the west, and the door on the eastern side is meant for exit. The dargah has 2 rooms, of which one is the shrine. The tombs of the Saint Pir Sayed Ahmad Ali Shah Kadri and of the mujawar of the Saint Pir Sayed Husain Ali Shah Kadri, are in the shrine. Both the tombs are made of bricks and lime and measure 1 '905 m. (6' 3") each. They are always covered with a cloth called Galaf.

The dargah is opened at 4-00 a.m. The tombs are worshipped in the morning by offering flowers and burning incense sticks, etc. The evening worship of the tombs is carried out by the *mujawar* of the dargah. The galafs are changed on every Thursday morning and sweets are offered and distributed by the

mujawar and devotees. The tombs are given a bath on every Thursday morning with rose water and other scented waters. The big drum is beaten in the evening daily before the *namai*.

It is believed that the saint and the *mujawar*, in whose honour the *urus* is held, are capable of fulfilling one's desires and therefore, many devotees offer vows in order to get a child, success in business, relief from bodily or mental afflictions, etc. On fulfilment of their desires, they offer the things promised. The offerings usually consist of galafs, sweetmeats, etc.

The *urus* is held for three days, *i.e.* 6th, 7th and 8th of the Muslim month of *Rajjab*. On the 6th of *Rajjab*, the procession of sandalwood paste, called sandal, is carried out at about 2-00 p.m. This procession attended by a large number of persons moves through Dongri, Pydhoni, Nagpada areas and returns to the *dargah* in the evening. The sandalwood paste is then applied to the tombs and the two galafs that are brought in the procession are spread over the tomb. This ceremony is called *Sandal Chadhana*. On the second day of the *urus*, the programmes of *kawalis* and *gazals* are held.

On the last day there is yet another procession of the *sandal* (*i.e.*, sandalwood paste and galaf) from the *dargah* at about 1-00 p.m. which moves through the important parts of the area round the *dargah* and returns to the *dargah* at about 8-00 p.m. The sandalwood paste is then applied to the tombs and the galafs and flower nets are spread over them. Prayers are offered and *Fatihah*, *Milad* and *Kurankhani* (reading of the holy *Koran*) also take place.

POWAI LAKE

The Powai Hills and Lake are located in Noith Bombay (former Salsette), on the Saki-Vihar road, just about half a kilometre from Saki Naka. It is about 6 km east of Andheri railway station of Western Railway. There are three ways of reaching Powai, first *via* King's Circle, Sion and Kurla, second *via* Santacruz and Andheri and third *via* Vikhroli-Powai. About 2/3 of the Lake's boundary is surrounded by the Powai road. The Powai Park is located on the west bank of the lake, while the Indian Institute of Technology stands on the north bank of the lake.

Powai got its name from Framji Kavasji Powai estate, which, besides Powai, included the villages of Tirandaj, Koprikhurd, Saki, Paspoli and Tungave. The estate except Tungave, was originally given in perpetual farm to Dr. Scott in 1799, on payment of a yearly quit-rent of Rs. 3,200. After Dr. Scott's death in 1816, the quit-rent was not paid and the property was at tached by the Government in 1826. In 1829 it was again leased in perpetual farm to the late Framji Kavasji a Parsi merchant in Bombay. About the time he bought the estate, Mr. Framji Kavasji was the vice-president of the Agricultural and Horticultural Society of Western India. He took great interest in agriculture, and introduced many exotics and made many experiments on his estate.

At present Powai Lake presents a sight wonderfully refreshing to the people in the city. It has also hills and woods and fair fields of green and tall palm trees scattered around. Indeed, if man has provided no amenities, nature has donated ample gifts to this scene. The Powai Park is a cheerful sight and besides the lake, a number of boats and fishing rafts are seen. They are maintained by an angling association to which the use of the lake for purposes of boating and fishing have been rented out by the Municipality.

Powai was originally harnessed for augmenting Bombay's water supply when the cry for more water began to be heard louder in the city. It was the third lake to be pressed into this vital public service. The scheme was taken in hand in 1889, but before that year, both the Vihar and Tulsi water works had started functioning. The Powai scheme was, however, ill—fated. Though it was completed within a year at an initial cost of more than Rs. 61/2 lakhs and started providing two million gallons of water per day, it had to be abandoned due to the hue and cry against the quality of the water. Five lakhs of rupees more were spent on the scheme in 1919 in a vain attempt to restore the supply at least for the use of the suburbs, but this, too, was given up with the development of the Tansa works. So from the civic point of view, Powai lake had been completely scored off, but it remained, ever more so now than before because it is untramelled by hydraulic appendages, one of the wonder spots of Nature around Bombay. The area of the lake covers some 151.4 hectares (365 acres). A full view of the lake is obtained a little further down from where two roads start off. The road on the left plunges steeply into the bosom of the lake itself as it were. It is more meant for walking and enjoying the cool presence of the waters on both sides of road. There are woods too within a few yards of the park, affording a shade for the picnickers here, and giving the view of the lake to visitor's delight.

One of the most pleasing features of Powai surroundings is the unending concert which the music of the birds provide. At one time the vicinity of Vihar and Powai used to house man-eating tigers. Many had been killed here in the past and one of them had killed 16 persons before he was shot. There is still scope for some game in the woods and on the hills.



PRINCE OF WALES MUSEUM

The Prince of Wales Museum is considered to be one of the finest in India. It occupies an island site at the southern end of the Mahatma Gandhi Road. This fine building commemorating the visit of King George V, the then Prince of Wales ir 1905 is Indo-Saracenic in style of architecture and has a huge moorish dome. The style is typically Western Indian of the 15th and 16th centuries and the materials used are blue and yellow basalt. The construction of the building was completed in 1914. Though the construction of the building was completed in 1914, it was used as a Military Hospital during the First World War and was handed over to

the trustees only in 1920. The opening ceremony was performed on 10th January 1922 by Lady Lloyd. (The wife of George Lloyd, Governor of Bombay.) The building consists of three units arranged round three sides of a quadrangle. A new wing has been added of late and in it is housed the natural history section. Though the question of providing Bombay with a museum had been discussed in earlier years, the history of the Prince of Wales Museum of Western India, may be said to begin with the appointment by Government in 1904 of a Committee to investigate the subject. In 1905, at a public meeting held in connection with the visit in that year of His Royal Highness the Prince of Wales (later King George V), it was decided that a permanent memorial of the visit should take the form of a public museum.

When the museum was projected Government gave the present site free of charge and the project was financed from the Royal Visit (1905) Memorial Funds, the Government grant of Rs. 3 lakhs and the Municipal grant of Rs. 2 1/2 lakhs. Sir Currimbhoy Ibrahim (first Baronet) donated Rs. 3 lakhs and the late Sir Cowasji Jehangir, gave half a lakh. The Museum was established under Bombay Act No. III of 1909. It is now maintained from annual grants made by Government and the Bombay Municipal Corporation and from interest accruing on the funds at the disposal of the Board of Trustees of the Museum.

Its contents comprise Art, Archaeology and Natural History. A section devoted to Forestry has been added, and a small local Geological collection of Rocks, Minerals and Fossils is also exhibited.

Art Section consists principally of the Sir Ratan Tata bequest of pictures, a splendid collection of Oriental arms, a varied and unique exhibit of jade, beautiful examples of China, Indian brass, silver, Indian and Persian draperies and objects d'art. Other pictures were presented by the late Sir Dorab Tata. Among Sir Ratan Tata's pictures are many most interesting examples of the Dutch, British, French and Italian Schools, and works by such masters as Cuyp, Lawrence, Romney, Gainsborough, Troyon, Poussin and Titian. Sir Dorab Tata's gift includes representative works of the late Italian Schools and a few good modern French and British pictures. There is also a collection of Indian paintings (Moghul and Rajput) and an extremely interesting collection of relics of the Satara Rajas, both purchased from Mr. P. V. Mavji in 1914.

Archaeological section, contains three main divisions, the Brahmanical section; Jain, Prehistoric and Foreign antiquities; and Buddhist section. In the first category are some large bas-reliefs discovered at Dharwar and attributed to the fifth or *sixth* century A.D.; a bust of Shiva from the Elephanta Caves, numerous other interesting sculptures of Shiva, some images and bas-reliefs of Brahma, a magnificent image of Vishnu (from Elephanta), and a miscellaneous collection of articles used in Brahmanical worship. The prehistoric antiquities are mostly from Madras, and comprise palaeolithic and neolithic implements; also pottery, including examples of necropolitan pottery utilised for coffins. A number of interesting bas-reliefs come from Mesopotamia and some good Jain sculptures are on permanent loan from the Bombay Branch of the Royal Asiatic Society. In the Buddhist section are portions of the Stupa of Amaravati in Andhra, some terra-cotta figures of Buddhas and Bodhi-sattvas, fragments and images of Buddhas (Gandhara School) and very interesting bas-reliefs (of the same school) representing subjects from Buddhistic legend.

Natural History Section: The exhibits (in the new wing) are specimens from the collections of the Bombay Natural History Society (started in 1883 and still existing). These include examples of all the Indian ruminants and carnivora; other sections deal with reptiles, birds, fishes and insects. The Birds section contains, besides many beautiful specimens, a collection of drawings by Gronvold.

Forest Section: This includes specimens of timbers grown in the Bombay Presidency. (A Handbook to India, Pakistan, Burma, Ceylon, Edited by L. F. Rushbrook Williams, C.B.E.)



PUBLIC FOUNTAINS

An interesting description of the public fountains as they existed then is given in the old *Gazetteer of Bombay City and Island*, published in 1910. Even if many of the fountains are no longer there, it still makes an interesting reading and hence is reproduced below:

"Bombay contains several ornamental memorial fountains. The Wellington Fountain, which stands opposite the Sailors' Home at the junction of the Esplanade and Apollo Bandar roads, was erected in its present form about the year 1865 by public subscription in memory of the Duke of Wellington, who was once resident in the island. (Survey Cottage, which is no longer in existence, was the residence of Sir Arthur Wellesley (afterwards Duke of Wellington) in March and April, 1801. The house stood about half-way up the now-non-existent brow of Malabar hill, on the right and as one ascended the Siri road, and was described by one writter in 1856 as " situated between the road and the sea at the curve of the bay towards Malabar Hill, close

to where the road from Byculla turns into the Breach Road from the Fort. "At the time this was written, a woodyard had grown up around the house, which was almost concealed from view by wood-stacks. In 1865 the brow of the hill was cut away to provide filling for the Chaupati reclamation and the sea-face road which now runs direct to Malabar hill, and the house disappeared with the ground upon which it stood. At the time that Sir Arthur Wellesley occupied it the house was a neat single-storeyed bungalow, comprising a fairly spacious hall, with wings and long verandahs at the sides and back. In front was a porch to which led two carriage drives from different points of a large compound. The hall commanded a view of Back Bay, a portion of Girgaum, the Esplanade and the Fort. When General Wellesley again arrived in Bombay in 1804, he appears to have occupied tents on the Esplanade.) The Floral Fountain, which stands in the centre of the Esplanade opposite Church Gate street, was erected some little time

later in honour of Sir Bartle Frere, to whose progressive policy Bombay owes many of her great public buildings. It was originally intended to erect this fountain in the Victoria Gardens at Byculla. During 1908, the grass plot and the palm trees, which originally surrounded the fountain, were removed in order to provide more room for pedestrains and horse-traffic between the tram lines and the kerb of the fountain. Another landmark is the Ratansi Mulji Memorial Fountain at the junction of the Mint and Frere roads, which was erected in 1894 by a well-known Bhattia freight broker in memory of his deceased son; while the Kesavji Naik Fountain, situated at the junction of Dongri-Koli street and Chinchbandar road, was erected by the gentleman whose name it bears in 1876. The Henry Memorial Fountain in Mazagacn was erected by the officials of the Peninsular and Oriental S. N. Company, in memory of former Superintendent of the Company, Captain Henry, and was handed over to the civic authorities in June 1878. Other notable fountains are one in Crawford Market designed by J. L. Kipling; the Bomanji Hormasji Wadia Fountain at the end of Bazaar Gate street, erected by public subscription in 1880; the Fitzgerald Fountain and lamp, facing the end of Cruickshank road, which was erected in honour of Sir S. Fitzgerald in 1867; fountains in Bhatia Bagh (1865), at Mumbadevi (1898), Cowasji Patel Tank road (1903) and at the junction of Grant and Duncan roads, the latter having been erected in 1901 by the Municipal Corporation to mark the site of an old tank. Finally there is the fountain in Jacob Circle, erected to the memory of General G. Legrand Jacob (1805-1881) by his niece and adopted daughter. '

Flora Fountain has witnessed a number of demonstrations. Many persons have lost their lives in the police firing near the Fountain during the Samyukta Maharashtra struggle. (1956-57). In memory of these martyrs a memorial has been erected with statues of a peasant and a worker with a torch in their hands representing the unity of the working class with peasantry. It has therefore been christened Hutatma Chowk.

Recently many new fountains have been erected at different places in the City and Suburbs and they attract a large number of people.

RODAT TAHERA

Rodat Tahera is a marble mausoleum immortalizing into eternity the life, the teachings and the ideals of Dr. Syedna Taher Saifuddin Saheb, the 51st Fatemi Dai-el-Mutlaq of the Dawoodi Bohra community. The credit for the foundation of the system for the progress, well being and development of the community and its institutions goes to his stewardship. He was held in high esteem both in India and abroad for his dedicated service to the cause of literacy and education. He was an eminent scholar of Fatemi humanities and philosophy. He also distinguished himself in the field of letters and had profound knowledge of Arabic language and arts. His mausoleum is located on Mohammed Ali Road which was constructed through generous contributions from his followers all over the world in response to the fervent call of Dr. Syedna Mohomed Burhanuddin Saheb, the son of the late Dr. Syedna Taher Saifuddin Saheb and next in line of succession, to erect a Mausoleum as a mark of reverential love to the departed soul.

The Mausoleum has been built in marble quarried from exactly where the marble for the Taj Mahal was obtained, *viz.*, theChosira and Ulodi quarries at Makrana in Rajasthan.

The Roza rises to a height of 32.918 metres (108 feet) in all the splendour of chaste marble, with a 15.849 metres (52 feet) high dome as its crowning feature. A 3.657 metres (12 feet) high gold finial stands sentinel over the dome. The 28.041 metres (92 feet) high Mausoleum rests on 92 piles, the number 92 being significant in that it represents the numerical calculation of the holy name, Mohammed. Four smaller domes, one at each corner of the central dome, each with a gold finial to match its prototype, perfect the setting against the azure of the sky. The dome and the cornice are inspirations from Jame-Juyushi, a Masjid in Cairo built by Badrul Jamali during the reign of Fatemi Imam, Mustansir Billa, H. 386-411 corresponding to A.D. 996-1020. The four outer walls are embellished, just below the cornice, with the names of Fatemi Imams and Doat Mutlaqeen inscribed in Kufi script, the same script as employed centuries earlier by Amirul Momineen Ali to commit to posterity his treasures of learning and erudition.

The four entrances to the Mausoleum have been specially designed to match the entrance gate of Al Agmar, a Masjid built in Cairo in the time of Fatemi Imam, Al-Amir, H. 495-524 corresponding to A.D. 1101 to 1130. The entrances are adorned with four silver doors of Fatemi design and lead into the inner sanctuary of the Mausoleum. Right in the centre lies the tomb of the late Syedna, at which his followers perform Ziarat in an endless stream. The inner height of the Mausoleum rises to 24.384 metres (80 feet) above the plinth, the age of Maulanal Muqaddas at life's end. The inner dimensions of 15.544 metres X 15.544 metres (51 feet x 51 feet) are equally symbolic, as they signify his position as the 51st Representative and Vice Regent of the Fatemi Imam. What gives the monument a unique place of honour is the inscription of the entire Holy Koran in gold-filled letters, on 772 marble slabs each 0.914 x 0.609 metres (3 feet x 2 feet) in size, constituting the inner wall upto a height of 9.753 metres (32 feet). One hundred and thirteen ' Bismillas' (in the name of Allah the Beneficent, the Merciful) constantly on the lips of every Muslim, are inlaid in precious stones to adorn the Holy Koran inscriptions. A glittering crystal chandelier, suspended from the centre of the dome, sheds its brilliance upon the tomb and seems to cast a divine light upon the hallowed precincts, while the four circular corner fittings and twenty-four wall brackets all lend their light to the radiance within the Mausoleum. The rosette at the apex of the dome proclaims " Innallahaa Yumsekus Samaa Vaate Val Ardaan Tazoola Vala-in Zaalataa in Amsakahuma Min Ahad in Min Baadehi ", meaning "Allah holds the sky and the earth together which no one else can" along its periphery, and the holy names of Mohammed and Ali in the centre, while the inscription on each pendentive reads " Laa Yamassohoo Illal Motahharoon " meaning " None but the pure shall hold the Holy Koran ".To the North of the Mausoleum is a Masjid, also in marble, designed along the Fatemi style of architecture, with its elevation emulating Al-Ahwar Masjid, built in Cairo during the time of Imam Al-Hakim, H. 386-411 corresponding to A.D. 996-1020, while its Qibla is a replica from Al-Jame-Al-Juyushi, also built in Cairo during the time of Imam Mustansir. The three feet high marble letters inscribing the Kalma of the Muslim faith; "La Illaha Illallah Mohammed Ur-Rasoolullah" Aliyun Valiullah " decorate the

western wall of the Masjid. A 13.411 metres X 3.657 metres (44 feet x 12 feet) area of the Masjid is covered and air conditioned, while the rest of the Masjid is open to the infinite heights of space. The style of ceiling of the Masjid, which has been worked in delicate gold relief, can be traced back in time to a wooden panel of the eleventh century, while the cornice of the wall and the two tall minarets gracing the two corners of the Masjid go back to the Fatemi period. A high wall with two decorative gates surrounds the complex of the Mausoleum and the Masjid constructed over a marble platform.

The construction of the Mausoleum was started on the 10th December 1968. The structural shell consists of a segmental R.C.C. dome 12.192 metres (40 feet) in diameter, springing from an R.C.C. cylindrical drum. The drum rests on an octagonal R.C.C. base block. The whole assembly bears on a load bearing masonry octagon, which in its turn, is supported by a system of reinforced concrete beams at the turret level. The full load of the roofing dome and central octagonal mass is transferred to pile foundations through eight main columns. There are eight secondary R.C.C. columns, two in each corner, supporting the four corner turrets. The external walls consist of 1.371 metres (4 feet 6 inches) brick masonry. The complete structure weighs 5080M.T. (5000 tonnes), and is supported by ninety-two piles tied at the tops by a raft cap.

SANYASASHRAM, VILE PARLE

The Sanyasashram complex is located to the west of the Vile Parle railway station on the Churchgate-Virar section of the Western Railway and contains a group of temples dedicated to various deities, a Sanskrit *Pathashala*, a *goshala*, lodging and boarding facilities for its inmates, an ayurvedic dispensary and a printing press known as Brahmavidya Press. It was founded at Vile Parle in 1942 by the late Swami Maheshwara-nandaji Maharaj Mahamandaleshwar over a specious area of about 7,525 square metres (9,000 yards).

At the entrance of the group of temples is an audience hall (sabha-mandap) supported by rows of pillars on both the sides. By the sides of the pillars from the left to the right in a row are the shrines dedicated to Shri Virat Bhagwan, Gajendra Moksha that depict puranic story of Bhagwan Vishnu rescuing the Gajendra from the jaws of a crocodile; Shri Nath Bhagwan, Ram, Lakshman and Sita; Shri Parvati Parameshwar; Shri Lakshmi Narayan; Shri Shankar Parvati in whose front are the Shiva Linga and small idols of Nandi and a tortoise; Shri Jagadguru Shankara-charya; Shri Swami Maheshwaranandji Maharaj, the founder of the Ashram; Amba Bhavani, Hanuman; Tirupati Balaji; Vitthal-Rakhumai; Khodiar Maa; Ganapati and Nrisimha (under construction) and a shrine containing the replica of the twelve Jyotirlingas.

In the court-yard are the shrines dedicated to Nateshwar; Gayatrimata; Santoshi Mata; Kshema Kalyani Mata, etc. In the shrine dedicated to Aamreshwar Mahadev are the idols of Parvati, Surya Narayan and Ganapati.

The shrine dedicated to Ekamreshvar was constructed in 1945 while the shrines dedicated to Shankar, Lakshmi-Narayan and Shri Jagadguru Shankaracharya were constructed in 1952.

The deities are worshipped daily by the Sanyasis. The main festival celebrated at the Ashram is that of Gokulashtami when about 50,000 people assemble. Ram Navami, Guru Paurnima, Mahashivratri and Diwali are also celebrated in the temple. The trust owns three buildings which have been rented out. The total expenditure of the Ashram exceeds Rs. 90,000 per year.



SECRETARIAT-OLD AND NEW (MANTRALAYA)

Early History: So far as can be gathered the Secretaries to Government occupied certain rooms in Bombay Castle during the seventeenth century and up to the year 1758, when the demolition of the Fort House forced them to vacate their old quarters and find temporary accommodation in certain warehouses adjoining the Marine Yard. In 1760, as there was no immediate chance of securing permanent quarters, the Collector and the Fortification Paymaster were allowed to hire houses for their offices; but for some reason this permission was either not obtained or not acted upon in the case of the

Secretary's and Accountant's offices. For in the joint letter to Government of the 22nd May 1754, they both animadverted upon the excessive inconvenience they were experiencing owing to the lack of proper office accommodation. Consequently, before the end of May 1764, in the absence of the Admiral, they were both permitted to remove their offices temporarily to Mr. Whitehill's house, which formed part of large block of buildings to the north of the Cathedral, the site of whieh was in 1909 occupied by the premises of Messrs. Kemp and Co. and the adjoining building. At the close of October 1764, Mr. Whitehill's house was purchased outright by Government for the use of the Secretary's office at a cost of Rs. 45,000 and the neighbouring house, belonging to Mr. John Munter, was bought for Rs. 60,000 for the use of the other public offices, excluding the Marine. In 1798 the Accountant's and other offices were ousted from Mr. Hunter's house to make room for the Sadr Adalat; but the Secretary's office continued undisturbed until 1829, when it was removed to the Old Secretariat buildings--a large house on the west side of Apollo street, which was then chiefly occupied by the offices of the Government Solicitor. Here the Government offices were housed until 1874 and the list o such offices in 1873 included not only the Secretariat offices proper, but those oi the Sanitary Commissioner, the Collector of Salt Revenue, the Collector of Bombay and the Superintendent of Stamps and Stationery. (General Administration Report, 1873-74.)

In 1874 the Secretariat was transferred to the newly built Secretariat (*It is called Old Secretariat, although the still older Secretariat Building still exists in the Fort*) building at the southern end of the great line of public offices facing Back Bay. The building, planned by Colonel Wilkins, R.E., in 1865, was commenced in April 1867 and completed in March 1874. It is in the Venetian-Gothic style; is 443 feet in length, and has

two wings, each 81 feet in breadth. The Council Hall, Library and Committee Rooms occupied a portion of the first floor. The cost of the building was Rs. 12,60,844. Owing to pressure of space the Stamp Office was removed from the Secretariat to the Town Hall in 1907. A portion of the top-floor was reserved as a residence for the Senior Under-Secretary to Government. Electric lights and fa'ns were installed throughout the building around 1908-09. The staircase is lighted by the great window 90 feet in height, over which rises the tower to 170 feet. The building is now occupied by City Civil Courts. Annexes have been constructed to the building subsequently.

The new Secretariat inaugurated in 1955 was known as Sachivalaya upto 1975. It is now known as Mantralaya. It is a magnificent new structure in modern style well adapted to the climate, and stands on the Madame Cama Road. It is a six storeyed structure with cabins for the ministers and their staff and sufficient space for other departments and employees. Facilities for canteens etc. have been provided for the staff. The main building costed Rs. 63,80,219, while the Annexe was opened in 1960 at a cost of Rs. 1,23,79,234.

In front of the Mantralaya stands the New Administrative building with 20 floors that houses other offices of the Government. The building provides all modern amenities.

SHEIKH MISRY DARGAH, WADALA

The dargah of Sheikh Misry is located at Antop Hill in Wadala. It is said that the saint was an inhabitant of Egypt and had been to India on a mission to spread Islam. It was while performing his mission that he died on sixteenth *Rajjab*, some more than seven hundred years before. The saint, it is believed, is capable of fulfilling one's desires such as getting a child, prosperity in business, etc. As such a number of devotees flock to the *dargah* during the *urus* held at the *dargah* in honour of the saint. They promise many things to the saint and on fulfilment of their desires, they offer galaf, sweets, non-vegetarian cooked food, etc., to the saint.

The *dargah* is supposed to have been constructed more than two centuries before and a reference to it is found in Mr. Murphy's map of Bombay in 1843. The *dargah* measures 30.480 m² (100' X 100'). However the main shrine measures 18.288 m² (60'" X 600) and is constructed of marble stone.

The *urus* of Sheikh Misry is held every year at Antop Hill in Wadala (east). The *urus* lasts for four days *i.e.*, from a day prior to the full-moon day in November and upto 2 days after the full-moon day. The most important day of the *urus*, however, is the full-moon day.

The *urus* is held to commemorate the death anniversary of the great Muslim Saint Sheikh Misry, who died on 16th of *Rajjab* more than seven centuries before. About 50,000 people assemble at the *urus*. The nearest railway station to reach the place of the *urus* is Wadala on the Harbour Branch of the Suburban section of the Central Railway. The place can also be reached by B.E.S.T. buses.

The dargah is opened after the morning prayers are held at the nearby mosque and the tomb of the saint which is inside the dargah and just below the central dome, worshipped by burning incense sticks and lubhan. The prayers {Fatihah} are offered. The holy passages from the Koran are read. The same procedure is followed for the evening worship also. The drums are beaten twice a day, in the morning and evening after the prayers are over.

On the second day of the fair, *i.e.*, full-moon day the *sandal* is taken out in procession and after it reaches the *dargah*, the sandalwood paste is applied to the tomb and the new galaf brought in procession is spread over the tomb and the old galaf is removed. Flowers are offered and incense sticks are burnt. On 16th of *Rajjab* the tomb is washed with rose water and prayers are offered.

The functions on the remaining days of the *urus* are those of prayers, reading the holy passages from *Koran*, etc. The persons attending the *urus* are mostly from Greater Bombay and belong to various religions, though Muslims are in majority.

SHRI LAKSHMI NARAYAN TEMPLE, GOWALIA TANK

The temple dedicated to God Narayan and Goddess Lakshmi is located at Gowalia tank and it lies at a distance of 0. 8 kilometres to the west of Grant Road Railway station on the Churchgate-Virar suburban section of the Western Railway. The temple can be reached by a number of BEST buses.

The temple is reported to have been built in the year 1885. The present structure is in cement concrete and is quite specious. The main entrance, *mahadwar* faces the north. After crossing the main entrance one reaches the *Sabhamandap* audience hall at the left, measuring about 21.336 m. x 12.192 m. (70' X 40'). It is used for performing *bhajans*, *kirtans*, religious discourses, religious ceremonies, etc. To the west of the temple is a *yajnya kunda* with a shed over it. A small temple dedicated to God Maruti stands behind the main temple. The shrine of the main temple measures approximately 3.048m. x 3.048m. (10' x 10') and is paved with marble slabs. In the front there is a platform admeasuring 4.876 m. x 3.657 m. (16' X 12') paved with marble slabs. A fencing made of wooden and iron bars is provided in front of the entrance of the shrine from which the devotees are allowed to have *darshan*. The pinnacle of the spire of the temple is about 18.288m (60') high from the ground and is plated with gold.

The images of Lakshmi and Narayan made of marble stone are installed in the temple on a *simhasan* also of marble stone which is 0.762m. (2 1/2) high from the ground. The image of Goddess Lakshmi stands to the left of God Narayan. The images of God Narayan and Goddess Lakshmi have heights of 1.219 m. and 1.067 m. (4' and 3 1/2) respectively. The image of God Narayan holds *shankh* (conch), *chakra* (disc), *gada* (mace) and *padma* (lotus) in his four hands. Small images of a lion, peacock, horse, etc., made of silver are some times kept on the *sinhasan*.

The deities are draped in rich clothes which are changed according to various seasons and festivals.

The daily worship of the deities is performed according to *Pushti Marga Sampradaya* as laid down by Vallabhacharya, the founder of the *Sampradaya*.

The fair in honour of God Narayan and Goddess Lakshmi to commemorate the inception day (*Sthapanadivas*) of the deities at Gowalia Tank is held from *AshvinaSud. 12* to *Ashvina Vad. 6*. On an average 1,00,000 to 1,20,000 pilgrims from Bombay and its suburbs attend the fair during these ten days. The peak period of attendance in the fair is from 17-30 to 23-30 hours.

Though the fair lasts for ten days, the first day of the fair, *i.e.*, *Ashvina Sud. 12* is the most important day and *patotsava* is celebrated on this day. On other days no special programmes are arranged except *bhajans*, *kirtans*, *pravachans*, etc.

On the first day of the fail, a special worship (panchamrita abhisheka) is performed, lasting for half an hour. After the performance of abhisheka, a sacrificial offering is made. After completion of the special worship, Raj Bhog is offered to the deities. The patotsava ceremony is performed under the supervision of one of the trustees. On this day, the temple is kept open from morning to 11 p.m. except during the bhog period.

The fair is held on the Gowalia Tank Maidan which is just near the temple. Pilgrims from all castes and creeds visit the temple to worship the deities and attend the fair every day.

In addition to the fair, the festivals such as *Makar Sankrant*, *Ram Navami*, *Rang Panchami*, *Vasant Panchami*, *Gokul Ashtami*, etc., are also celebrated in the temple. On *Kartika Sud.* 1, an *annakot* is offered to the deities *andprasad is* distributed amongst those present. The expenses incurred on daily worship, *naivedya*, *nandadeep* and on all other items are met from the Trust funds.

An adequate police force is deputed to the temple as well as to the site of the fair to maintain law and order.

The affairs of the temple are managed by "Seth Gokuldas Tejpal Charities Trust", which has been registered under the Bombay Public Trusts Registration Act, 1950. The managing committee of the Trust consists of eleven members including the president and the vice-president. A temple committee consisting of three members is appointed by the Trust to look after the daily management of the temple.

SHRI SUBRAMANIA SAMAJ TEMPLE COMPLEX

By the end of 1976 Shri Subramania Samaj Temple Complex with an exquisite architectural design, have become a reality in Chedda Nagar, Chembur. In 1969 a decision was taken to avail of an area of 2300 sq. yaids in Chedda Nagar at a cost of Rs. 1,30,000 by Shri Subramania Samaj and has undertaken a stupendous task of constructing a temple complex and a community development centre. It is claimed to be the first of its kind in Bombay. The Complex consists of separate temples for Lord Vinayaka, Subramania (Karthikeya), Dharma Sastha (Hariharaputra), Guruvayoorappan (Krishna) and Goddess Durga. The other facilities in the project of this complex include a Veda Pathashala, a Yoga School, a religious library, community and lecture hall, an Ayurvedic Medical Centre, two community and congregation halls. It is also proposed to have the Utsava Mandapa and Navagraha Peetha.

The main temple structure rises to a height of ovei 50 ft. from the front giound level with the main Raja Gopuram soaring to a further height of 27 ft. above. Theie are 108 steps to reach the *sanctum sanctorum* of the temple, conforming to the traditional pattern of Muruga Temples in the South. The building also has a basement of 9 ft. depth. The main entrance of the temple is flanked by two magnificent giant size intricately carved pillars of 50 ft. height.

The unique construction was conceived as a result of two considerations, firstly, a structure of vast proportion had to be built to be able to accommodate community welfare activities as well as religious functions, secondly the main deity of the temple, Lord Muruga (also referred to as Lord Karthikeya) is traditionally supposed to be placed at a height, as of hillock. The twin needs have been beautifully fulfilled by a building-cwm-temple concept. In particular, the *sanctum sanctorum* rests on a great R.C.C. pillar rising from ground level and reaching the height of the terrace. The hollow of the pillar is filled with earth so that the deities would rest on the earth as prescribed by religious sanctions.

The central *sanctum* in the Temple Complex is for Lord Subramania also called Karthikeya, Skanda, Muruga flanked by his Divine Consorts, Valli and Devayani. The other *sanctums*, with separate *Prathishtas* and *Pooja*, are for Lord Ganapathi (Vinayaka), Dharma Sastha, Guruvayporappan and Goddess Durga, apart from Navagraha Prathishtas.

The work on the temple complex has been executed by traditional *shilpis* well versed in 'Shilpa Shastra' from the South, and over 55 artisans had been working on this project for seven years.

The *Vimana* and *Gopuram* are finished in the finest style of Chola, Pallava and Pandya. It gives a feeling as though the temples have been physically lifted from the South and established at its present site. To make the entire building blend with the stone architecture of the temple, the cladding is of red stone work, supplemented by delicate *jali* work friezes, stone balusters, figures of gods and goddesses, Gandharvas and Apsaras.

This is the first time in the history of a temple building that R.C.C. structure has been combined with stone work in magnificent unity, the rare combination of ancient and modern architecture. The total cost of the project is about Rs. 75 lakhs.

The five temples in this complex occupy a unique place in Bombay city as regards the architecture as well as conception. These have been sanctified with the strictest possible adherence to the dictates and canons of Agamashastras and *tantric* rites. These temples have the special characteristic of having been built in blue granite stone from specially selected quarries in Wallajabad near Mahabalipuram, which was authentically shaped and transported by railway and trucks to Bombay. They have been assembled at the appropriate places in temples fifty feet above the ground level and to provide also for the necessary *Bhoosparsham* (touching the holy mother earth).

The idols, the carvings and the sculptured *gopurams* are executed by one of India's most outstanding authorities on temple sculpture Kumaresha Sthapathi, a winner of Presidential award.

The major work of the temple is completed however the finishing work is in the process of completion under the direct supervision of Sthapathi at Mahabalipuram. The major civil concrete work is also over. The complex when fully completed will stand as a permanent monument of our ancient art and culture and become a pilgrim centre.

Maha Kumbhabhishekam: The Maha Kumbhabhishekam celebrations of the temple complex were conducted on the 24th January 1980 in the benign presence of His Holiness Shri Kanchi Kamakoti Peethadhipathi Jagadguru Shankaracharya Shri Jayendra Saraswati Swamiji. The visit of Kanchi Acharya to this city, for the first time in the history of the Peetham, principally to guide and participate in the Maha Kumbhabhishekam was a memorable event in the spiritual history of Bombay. Lakhs of people from all classes joyfully participated in this memorable festival lasting for a week. The temple complex was declared open to the public after this ceremony.

SHRI VYANKATESH MANDIR, GIRGAUM

The magnificent Vyankatesh Mandir, also known as Divyadesh Mandir as per the Ramanuja Shrivaishnava Sampradaya, is dedicated to Lord Vyankatesh. It is believed to be one of the best temples in Bombay. There are 108 *divyadesh* temples in the South, and the mode of worship and meditation as practised therein is followed in the Vyankatesh temple. A great sanctity is assigned to this temple.

The foundation stone of the temple was laid in 1922 and was consecrated with all the customary religious rituals on June 4, 1927. The idol of Lord Vyankatesh was installed in the *divyadesh* on June 10, 1927.

The temple stands on Fanaswadi road in Girgaum, and has a magnificent gate constructed in 1936. The gate was built out of donation by one Raja Pannalalji Gowardhanlalji Hyderabadwale in memory of his father.

At the very entrance of the temple there is a magnificent Gopur built in the South Indian style of Architecture. It exhibits the typical munificence of the Gopurs in the south. The construction of the Gopur was commenced in 1963 with liberal donations from the Somani family of industrialists and other donors. The Gopur is decorated and beautified by a series of carved images and idols. There are few rivals to this piece of art in the environment of Bombay, and is one of the best objects of interest in the city. In front of the Gopur there is a *Swarna Garuda starnbha*, which is another speciality of the object.

Beyond the *Stambha* there is a spacious audience hall where the Nagaswaram, a south Indian instrument of music, is played at the time of worship. The audience hall is supported by 16 magnificent pillars in the style of the South.

Adjacent to the audience hall (Sabhamandap) is the main temple of Vyankatesh. The outer of the temple is decorated with images, among which the images of the ten incarnations of Lord Vishnu (Dashavtar) are the most prominent. Inside the temple there are massive pillars of marble. In the temple proper are the images of Varadaraj, Laxmiji, Nrisimha Bhagawan, Chakraraj Sudarshan, which are followed by Rukmini, Satyabhama, Rajgopal Bhagawan, Janakiji, Laxman, Shri Ramchandra, and Hanuman. In front is the large gate to the inner shrine of Vyankatesh.On either side of the gate are Jaya and Vijaya as dwarpalas. Lord Vyankatesh is accompanied by Shridevi Bhudevi and Shri Yathoktakari Bhagwan. Garuda is also nearby.

Near the temple there is a mirror house (Sheeshaghar), built in 1956 at a cost of Rs. 20,000. It is worth a visit. The Rangnath temple is nearby which is occoupied by the temples devoted to Mahalaxmi, Padmavati, Godamba, etc. These lead us to the spacious circumambulation around the temple. There are a number of chambers known as vahanghar, vastraghar, bhandarghar, Vaikuntha utsava mandap, chandan griha, dugdha griha and Shukrawar mandap. The entire text of the Bhagwadgeeta is inscribed in marble stone in the course of the circumambulation.

Beyond this there is the temple of Ramanujaswami wherein are installed the *paduka* of the Jagadguru Ramanujaswami. The *Yajnashala* is just adjacent wherein *homa* are performed on certain occasions.

The temple premises are equipped with a *dharmashala* and residential accommodation for pilgrims, ministrents, *pujaris*, distinguished devotees from outstations and others. There is what is called the Bhayankar Math where the Acharya used to reside. The library is well equipped with books on religion, particularly on the Vaishnava tradition of religion.

SIDDHI VINAYAK MANDIR, PRABHADEVI

The temple dedicated to Shri Siddhi Vinayak is located near the Sane Guruji Udyan and the Ravindra Natya Mandir at Prabhadevi. It has come to fame of late and the serpentile queues of the devotees could be seen on Sankashti or Angariki chaturthi, i.e., Sankashti Chaturthi falling on Tuesday and even during other days. The reference to the temple is noticed in the book entitled Mumbaitil Devalaye in Marathi by one K. Raghunathji which states that the construction of the said temple was completed on 19th



November 1801 and was constructed by one Laxman Vithu Patil. At that time the temple was located amidst dense growth of trees

The temple though small is revered by thousands of devotees. The temple faces the east and the inner chamber admeasures 15' x 15' with a sabhamandap, i.e., an audience hall admeasuring 12' x 30'. The temple has a spacious courtyard. In the courtyard facing the sabhamandap towards the right is a shrine dedicated to Maruti. In front of the temple are three lamp posts (deepmals). The temple has a spire over the dome.

The idol of the deity with trunk turning towards the right is two feet and a half in height and is made of black stone. However, it has recently been painted which has added glamour to it. The deity is seated under the silver plated canopy (makhar) with statues of lions on both sides. Close to an idol of Ganapati is an idol of Maruti in standing posture. On the wall above the makhar could be seen hanging the silver

replica of Ganapati. The temple remains open from 5 a.m. to 1 p.m. and from 2 p.m. to 9-30 p.m.

The site gets an appearance of a fair on every Tuesday and Thursday and also on *Sankashti Chaturthi, i.e., Vadya* 4 of every month. The congregation is larger on *Angariki Chaturthi*. Other festivals such as *Ganesh Chaturthi* in *Bhadrapada* and *Ganesh Jayanti* in *Magha* are celebrated at the temple with great pomp. Many devotees flock to the temple to make their offerings to the deity on fulfilment of their vows, such as getting a child, prosperity in business, etc. The management of the temple vests in the Government Trust. Accommodation for the *pujari* of the deity is provided in the courtyard, where the office of the trust is also located.

ST. ANDREW'S CHURCH, BANDRA

St. Andrew's Church stands on the sea-shore at Bandra on the site of a church of the same name, which was built in 1575 (According to the old Gazetteer of Thana District this church was built in 1575 while the Jesuit Report of 1669, refers to St. Andrew's church being built later than that of St. Anne. This report also mentions that the parish of St. Andrew was formed in 1616 since the parish of St. Anne had grown unwieldy and, therefore, an independent parish had to be formed at St. Andrew's to serve the needs of the neighbouring villages.) by the Rev. F. Manuel Gomes, the apostle of Salsette, the superior of the college of the Holy name at Vasai (Bassein). By 1588 Gomes had made 4,000 converts and by 1591 the number had risen to 6,000. Upto 1620 St. Andrew's was the only church at Bandra. Then the Jesuit college of the invocation of St. Anne was built close to the landing place. At first this was small with only two friars, but by 1675 it had been enlarged till it was not inferior to or much unlike an English University. The college was destroyed by the Marathas in 1737.

Formerly the Church's door was at the west end and opened on the sea-shore. The entrance to the present church which was rebuilt in 1864, is at the east which presents the usually, quaintly ornamented face. The bare walls are surmounted by a steep tiled roof with bell towers at each side, and a figure of St. Andrew stands over the central door. The roof was replaced in 1618 which was damaged by a hurricane. During 1764 a new roof was built and again renovated during 1823 and 1831. The cross to the left of the door on which the emblems of the passion are carved in coloured relief, was brought in 1864 from the ruins of St. Anne's college. A compound was built in 1862. However it was rebuilt in 1934. The interior portion of this church was paved with marble in 1890. During the same year a wooden porch was erected.

Till the turn of this century the church edifice dominated the entire landscape. Silhouetted 58 feet in height against the twilight sky people saw in it their aspirations to God. The massive four footwalls in the 42 feet width of the church gave a sense of security that the Catholic church is a bulwark against the evils of the world. In May 1965 the extension of the church structure was commenced with the demolition of the wooden porch attached to the facade of the church. The original architectural features are retained in the extension. The facade is retained and the extension frontage is a replica of the original. In the centre niche of the present facade once stood a granite statue of St. Andrew; this was placed at the apex of the facade, when the porch was built. For half a century it withstood the vagaries of the weather till the cyclone of 1940 dislodged it and broke it to pieces.

The bell in the window of the tower facing east bearing inscription " Santo Andre De Bandora 1793 " is used to announce deaths, arrival of funerals at the church and on all souls day. The one in the window facing north has inscribed on it: " Santo De Andre 1869, Recast 1900 ". It is used for the Angelus, summoning the faithful to services and on festive occasions. The largest bell in the centre of the Belfry cast by Gogossen Von Humprt, Brilon, was presented in 1934 by Sir Dominic Joseph Ferreira K.C.S.S. in memory of his wife, Josephine. It is used daily at 8-30 p.m. to remind the faithful to pray for the departed souls, for the Angelus and on festive occasions.

There is a majestic altar, which is of wood built on a brick base paved with marble. Three niches bear the statues of St. Andrew, the Sacred Heart and Our Lady. Above these, there are smaller niches with statues of St. John the Baptist and St. Sebastian and a little higher stands the statue of the Bom Jesus.

One letter of Jesuit describes the side altars thus: "The church has two side altars; on one side of them is a very devout crucifix; on other is Our Lady called of the Navigantes (Navigators) and the origin of this name is mysterious for the Kholis going a fishing in the sea of Bandora, got much better catch than that of St. Peter in the sea of Tiberius. There St. Peter caught fish, here the Kholis caught, not fish, but the image of the true Mother of Pearl Jesus." On the other altar, the scene of Mount Calvary is depicted with

statues of Our Lady and St. John at the foot of the Cross, upon which Christ hangs. In the crypt of this altar lies an ancient and treasured status of the dead Christ, which issued during the Lenten services. Both these altars are the original ones. They are made of wood dexterously carved and painted. A beautiful statue of St. Francis of Assisi is placed in the Sodality Hall. In the base of the existing southern tower stands an altar dedicated to St. Anthony, which was erected in 1914.

Two ancient wood panels with exquisite carvings hang above the side-doors in the middle of the Church.

A cross of unknown origin bearing the inscription ' 1720' stands in the cemetery at the southern extremity of the compound.

An interesting cross stands near the southern wall between the oratory and the Grotto mounted on a pedestal twelve feet in height. Towering above all others in Bandra in size and antiquity it was brought from the ruins of St. Anne's college. The peculiarity of this cross is that it is sculptured from one block of stone seventeen feet in height. There are thirty-nine symbols each of the old and New Testament carved on the western and eastern sides of this cross. It was erected in 1870 and base appearing like a dome was constructed during 1917-19.

ST. THOMAS CATHEDRAL

Prior to 1675 the English in Bombay possessed no church of any kind and for more than forty years after that date the only place of divine worship was a room situated in the castle and called the Fort Chapel. In 1672 and again in 1674 Gerald Aungier took the initiative and wrote to the Court of Directors desiring " by Gods assistance to erect a small church for public worship in the centre of the town" and in 1674 a regular scheme for building a garrison-church was projected. After approval and encouragement from the Council at Surat the plan of the building was submitted by the President at Surat for the Court's approval in 1676 it being designed to seat a thousand people and " to be of a form proportionable to our usual churches in England but plain and free from superfluous ornament". The expenses were to be defrayed by voluntary contributions largely borne by the Company's servants. After the receipt of formal sanction from the court of Directors the present site at the corner of the Elphinstone Circle, the then Bombay Green, was chosen, the building was commenced; and at the date of Sir John Child's governorship (1681-1690) the walls had been raised to fifteen feet. Then for some reason the work suddenly languished and the bare walls remained till a generation later a gathering place for animals an object of derision to the Indian and a reproach to the English in Bombay. But the scandal was removed on the arrival in Bombay on the 21st September 1714 of the Reverend Richard Cobbe, Chaplain to the East India Company who exhorted the English community " to wipe away the reproach of being godless in the sight of the heathens".

The appeal fell not upon deaf ears. Money and benefactions were readily offered; the foundation stone of a new edifice was laid by the Deputy-Governor, Mr. Stephen Strutt, on the 18th November, 1715, and on Christmas Day, 1718 the Church was formally opened by order of the Governor, Charles Boone. When first completed, it was described as " suitable in some measure to the dignity of our Royal Settlement, and big enough for a Cathedral," and as an illustration of the manners of that age, it may be mentioned that in order to keep that fabric in repair a duty of one-half per cent was levied on all goods imported into Bombay.

In 1814 Bombay became an Archdeaconry of the See of Calcutta, the first Archdeacon being the Rev. G. Barnes, and on the 7th June 1816 the Church, which had previously been occasionally called St. James' was consecrated by Dr. Middleton, the first Anglican Bishop in India, in the name of St. Thomas the Apostle. A generation later (1835), Bombay was raised to the dignity of a Bishopric, and on the arrival of the first Bishop, Dr. Carr, who was installed on the 21st February 1838, St. Thomas Church was notified by Government to be the Cathedral Church of the See. To commemorate this event, the old belfry, which Cobbe had raised " in order for a sea-mark, as high as funds could tower it ", was replaced by the present tower at a cost of Rs. 16,000; and a clock was purchased by public subscription at a cost of 500 guineas. In 1863 Archdeacon W. K. Fletcher formulated a scheme for rebuilding the Cathedral, and a committee was formed to carry out the work. The stone of the renovated cathedral was laid by the Governor, Mr. (afterwards Sir) Bartle Frere. Three-years later Bombay passed through the ordeal of bankruptcy which followed upon the share mania, and the work of renovation was perforce brought to a close. The only portions of the scheme completed were the chancel, which was fitted up in its present condition during the episcopacy of Bishop Douglas, the fountain at the west entrance for the erection of which Sir Cowasji Jehangir Readymoney subscribed Rs. 7,000, and the organ-chamber in which stands the magnificent instrument built expressely for the Cathedral by Messrs. Bishop and Starr of England at a cost of Rs. 15,000. On the 14th March 1906, public meeting was held and committee was appointed to carry out further improvements, estimated at Rs. 52,400, and consisting chiefly in the restoration of the organ, the installation of electric light and fans, and the erection of new choir-stall and a Bishop's throne and pulpit.

The most interesting portions of the building are the tesselated pavement in the chancel, which was laid down in memory of Archdeacon Fletcher; the three upper clerestory windows erected to the memory of Michael Scott, a merchant, and five lancet windows erected by the Royal Engineers to the officers of that corps. The finest memorials are those erected to the Honourable Jonathan Duncan, Governor of Bombay (1795-1811); to Captain Hardinge, R.N., a younger brother of Lord Hardinge, who fell in the victorious naval engagement off the coast of Ceylon between the British ship San Florenzo and French frigate La Pied Montaise; to Stephen Babington, reviser of the judicial code, whose statue now stands in the Town Hall; and to Bishop Carr, whose effigy in marble, in full episcopal robes, reposes in the southern transept. Other monuments of historical interest are those to Brigadier-General Carnac, who defeated the Shahzada in 1761; to John Watson, Superintendent of Marine, who was killed at the siege of Thane in 1774; to Admiral Maitland, to whom, when in command of H.M.S. Bellerophon, Napoleon surrendered; to Colonel Burton Barr, who won the battle of Khadaki; and to Major Eldred Pottinger, the heroic defender of Herat. An attractive specimen of Bacon's sculpture is the medallion in memory of Mrs. Kirkpatrick on the wall.

In the muniment chest are preserved two silver chalices of considerable age. The first, which Mr. Douglas has styled "the oldest tangible memorial of our existence as an English settlement, "was presented by Gerald Aungier to the Christian community of Bombay in 1675. It bears the following inscription: "Hunc calicem charistae eucharistae sacrum esse voluit Honorabilis Geraldus Aungierus, insulac Bombaiac Gubernater, ac pro rebus Honorabilis Anglorum Societatis Indies Orientalil us merca-torum agentium praeses." Of the other chalice no record whatever remains, nor can one hazard a conjecture as to how it came into the possession of the Cathedral. The following words are inscribed upon it: "The gift of the Greenland merchants of the City of York, 1632." The fountain in front of the cathedral was erected by Sir Cowasjee Jehangir.

SURYA NARAYANA TEMPLE, BHULESHWAR

Although the sun is one of the principal Vedic deities, very few temples are dedicated to the worship of the Sun God in India. One of the chief reasons assigned for this is that the consecration rites of a Surya Narayan temple are very elaborate and for their proper performance learned Brahmins of the Saura or Naga division also known as Sevak Brahmins are required. As such Brahmins are not available and as any flaw or defect in the due performance of the rites is believed to bring misfortune, few people venture to build temples dedicated to this deity, preferring to worship the great luminary in the morning and at noon at home. However, this worship is also on the wane and very few people worship the sun god. Through the magnificence of a merchant of Bombay, Harjiwan Vasanji Maniyar, the city has obtained a beautiful temple dedicated to the worship of the Sun God. This temple of Shri Surya Narayana is situated in Surajwadi, Panjrapol lane, Bhuleshwar. The foundation stone of the shrine was laid by Harjiwan in 1895. Unfortunately a few months later Harjiwan Vasanji died. The work of building the temple was, however, continued by his wife Radhabai and it was completed in 1899. Great care was taken to obtain Brahmins well versed in the Hindu scriptures to perform the consecration ceremony and these difficult rites were performed jointly by the Audich Brahmins of Gujarat and the Yajurvedi Brahmins of Bombay. Prominent among those who assisted at the Pratishthan ceremony were Narottam Shastri Shukla, Nilkanth Shastri Padhye and Baba Pathak, author of the Sanskrit work on rituals called Sanskar Bhaskar. The temple was renovated in 1958.

The temple is built of white stone, and at the main entrance there are carved figures of the celestial gate-keepers (dwarapals) called Jay and Vijay. There is a spacious hall for the reading of purans and galleries for the use of sadhus and visitors. In the quadrangle on stone pillars are sculptured the Sapta Rishis or the seven sages, viz., 1. Marichi, 2. Angiras, 3. Atri, 4. Pulastya, 5. Pulaha, 6. Kratu, and 7. Vashishtha. At the entrance of the inner sanctuary, which is paved with marble, stand the figures of Maruti and Ganesh, and of the apsaras or celestial damsels. In the inner sanctuary seated in a one wheeled chariot is the Sun God wearing a crown; on his right and left stand his two wives, Prabha or Sandhya and Chhaya. The chariot is drawn by a horse with seven faces and the drivei is the Sun God's alme charioteer Aruna. The temple was built at a cost of about Rs. 10,000. At the back of the temple were an oart and dharmashala which were used for the performance of religious ceremonies. The dharmashala has been dismantled and an open space is now used for religious ceremonies such as marriage, thread girding, etc.

An annual fair is held at the temple in honour of the deity on *Ratha Saptami*, *i.e.*, Magha Vadya 7 when about ten to fifteen thousand devotees assemble. Other celebrations that take place in the temple are *Gokul Ashtami* and *Kartik Shuddha 1* which mark the beginning of the *Vikram Samvat*.

The temple owns some land at Chinchani near Thane and gets some annual income from the same. It gets annually an income of about Rs. 35 to 40 thousand by way of temple collections from devotees. The management of the temple is vested in trustees from which scholarships are given to deserving students.

TARAPOREVALA AQUARIUM



The Taraporevala Aquarium and the Marine Biological Station is located at the Kennedy Seaface, i.e., Chaupati near the Charni Road Railway Station on the Western Railway. The building housing the same has been constructed at a total cost of Rs. 8,90,904. The Aquarium has been named as the Taraporevala Aquarium as a handsome donation of Rs. two lakhs was given towards the construction of the building by the late Shri and Shrimati Vicaji D. B. Taraporevala. The aquarium was opened in 1952.

"The building occupies an area of 5,326 square yards, is two-storeyed and lies about 200 feet from the sea-wall. It is rectangular in form, with a long axis running from west to east. To the right of the entrance is a chemical laboratory and a air conditioning room. All material, either for display in the tanks or for study, is kept in this room for observation before introduction into the main aquaria. Opposite the room is a small

hall where fish are artistically displayed in tanks that look like pictures framed in masonite partitions. The bulk of the fish displayed are exotic and have been specially imported from the Phillipines, Java, Sumatra, Siam, Malaya and other places. They have all been acclimatized to Indian waters.

Marine specimens are displayed in 18 tanks ranged along the walls, while nine tanks in the centre contain fresh water life. The capacity of the tanks ranges from 1,000 gallons to 1,500 gallons. In addition research workers are provided with special tanks where animals may be studied under controlled conditions. Illumination of the tanks is effected by concealed daylight electric bulbs, so that lighting conditions are as near as possible to those prevailing in the natural environment of the fishes.

Behind the main aquarium hall are the pumps and compressors which operate respectively the circulatory and related systems of the aquaria. Below them are the reservoirs for sea and fresh water. The former has a capacity of 42,000 gallons, and the latter 17,000 gallons. A purification plant for both sea and fresh water is located on the north side of the building. Both sea-water and fresh water have separate

underground concrete settling tanks and filtering units, with filtering media of pebbles and sand of varying grades, arranged in layers. The total amount of water in circulation is 1,25,000 gallons of sea water and 70,000 gallons of fresh water. Attached to the aquarium is a barge to secure undiluted and unpolluted sea water and a research vessel for collection of biological material and observations at sea."(Bombay the Beautiful, by J. V. Furtado, pp. 141-42.)

TATA NATIONAL THEATRE

(The details of the Tata National Theatre are based upon the article " A National Theatre for India" by Jamshed Bhabha in a souvenir published at the inauguration of the Theatre in October 1980.)

The construction of a theatre designed specifically to fulfil the exacting acoustic and visual requirements of India's classical and folk music, dance and drama was integral to the concept, aims and ideals of the National Centre for the Performing Arts. This public foundation was originally promoted by the Sir Dorabji Tata Trust as a pioneering institution to play a major role in preserving for posterity and developing those great national arts which have survived for centuries through oral traditions a,nd master-pupil links, the gurukula system, the gurushishya parampara. The disappearance of the old sources of patronage from the princely, feudal classes, and the accelerating pace of the country's industrialisation, since India won her Independence, have on the one hand, made the survival of masters and teachers more difficult and, on the other hand, provided new and attractive job opportunities in business and industry which have tended to draw the brighter children of performing artistes away from traditional family vocations. Though sponsored by Tatas, the name Tata was not attached to this institution because of the magnitude of the funds required for it. The amount of financial support extended to the National Centre from other sources than the Tatas was also quite considerable.

Indian music and Indian dance forms of all schools, Hindustani and Carnatic, northern, southern, eastern and western, have been performed; for centuries in courtyards, temples, palaces and relatively small halls and places. It is because Indian instruments and voices are generally soft and delicate in character and suitable for small audiences that the use of electronic amplification has been accepted as a necessity for performances in modern theatres and auditoriums almost everywhere in the country. Even a great sitar maestro like Pandit Ravi Shankar generally refuses to perform in a theatre anywhere without a microphone in front of him. One consequence of this dependence on electronic amplification is that, excepting for occasional performances organised in private homes or at music classes, it is not possible for present day audiences to enjoy the sound of Indian music in its purity.

To overcome this handicap, it was decided from the outset that the National Centie would build an auditorium of such acoustic properties as to do away with the customary reliance on artificial amplification, and to enlist for this purpose the help of the best available experts in theatre design and acoustics. It was fortunately possible to convince the Ford Foundation of the U.S.A., whose policy has been not to give grants for buildings, that a contribution to the National Centre for the expertise of this kind not available in India, would benefit the country as a whole. The generous grant of \$200,000 from the Ford Foundation enabled the National Centre to secure the consultancy services of Mr. Philip Johnson, Architect of the State Theatre of the Lincoln Centre for the Performing Arts in New York, and Prof. Cyril N. Harris, Professor of Architecture and Electrical Engineering of Columbia University, who was the Acoustic Consultant for the Kennedy Centre for the Performing Arts at Washington. These eminent men worked freely on this project on the basis of bate costs and without charging their usual professional fees because of their admiration of the great cultural heritage of India and their respect for the aims and ideals of the National Centre. They explained that, in general, the acoustic properties of the theatres and opera houses of the eithteenth and nineteenth centuries were superior to those of modern times because the older auditoriums had a lot of surface decoration on their walls and balconies with chandeliers and other embellishmeiits, which, though intended for visual beauty served the important acoustic purpose of breaking up the sound and distributing it evenly over the whole auditorium whereas the undecorated flat or curved surfaces of modern architecture resulted in present-day auditoriums having pockets of good sound and pockets of inadequate or bad sound.

While maintaining the essential beauty of modern architecture, the architects achieved their acoustic purpose by means of specially designed elongated three sided forms, which from their starting point at the centre of the stage extend in concentric circles over the entire ceiling and also along the walls of the auditorium. These forms of high density compressed plaster had to be prefabricated on the ground of increasing sizes determined by the auditorium's shape which is almost semicircular and like a fan. The importance of excluding all extraneous noise or sound from the auditorium was always emphasised. For this basic reason several design and construction features unknown to any auditorium in India or in fact, in Asia or Australia, wherever air-conditioning is required for cooling were insisted upon. Firstly, the air conditioning ducts for the Tata National Theatre had to be made many times larger in size than would normally have been installed for a 120 tonne cooling plant system, because Prof. Harris did not want to hear a whisper from the system even when he sat alone in an empty auditorium with no sound from the stage: in other words, he did not want the cool air to be ' blown ' into the auditorium but just to drop down noiselessly.

Secondly, the architects insisted on the following structural precautions :—

- a. The plant room block located in the basement has been structurally isolated from the Theatre Building to prevent structure-borne vibration of equipment being transmitted to the auditorium block
- b. All conduits and other piped services crossing such isolation joints have been provided with specially detailed flexible connections.
- c. All toilet fittings have been ' cushioned' from the building structure through special lubber based mountings.
- d. Similarly, all waterpipes and drains supported from walls or slabs have been provided with flexible connections to prevent direct sound transmission.

e. In the same way, all rainwater pipes in the auditorium area have been isolated from the structure.

Thirdly, an extraordinary feature, perhaps unique in the world, of India's National Theatre, is that the two terminal points of the building at each end of the 100 yards long Main Foyer are built on independent pile foundations right down to Bombay's rock-base, totally separated from the pile foundations which carry the heart of the auditorium. A visitor entering the Main Foyer from eithei end will observe a two inch wide cut in the floor extending upwards on both walls and cutting right across the ceiling, looking like a slice made by a knife in a cake. This cut is filled with a soft mastic compound of a kind that will exclude water without transmitting vibrations or sound. Thus, if a military tank or a road roller were to move along Marine Drive, or if the Municipal Corporation were to use road drills during the maintenance of the road or the foot-path, no vibration or sound would ever be transmitted to the inside of the auditorium. Not even the auditoriums of the multi-million dollar Lincoln Centre for the Performing Arts in New York have this unique feature which India's National Theatre possesses.

In regard to the design of the auditorium, Philip Johnson, who won an International Award for Architecture, made several visits to India and saw and listened to classical performances in small venues like private houses before intimate audiences of less than a hundred people. He was struck by the way the members of the audience sat on three sides of the performers and participated visually by their head and hand movements in the performance. He also appreciated the key importance of the subtle movements of the eyes and the facial muscles in classical Indian dancing and realized the consequent need for members of the audience, even sitting at the back of a theatre, not to be too far from the stage. These considerations weighed against the traditional rectangular shape (as, for instance, that of the Philharmonic Hall of the Lincoln Centre) or the equally traditional horse-shoe shape (such as that of the Metropolitan Opera House or of Johnson's own Theatre in New York) and to design India's National Theatre in an almost semi-circular fan-like shape. The auditorium is divided into five equal blocks, A to E, each of 208 seats, making a total of 1040 seats, with six entry doors and six aisles, which make it possible for members of the audience to find their seats without difficulty. A significant feature of the auditorium is that being fan shaped, the audience is as it were, wrapped around the stage so that the last row of this theatre is much closer to the stage than the last row of auditoriums of a similar size.

One consequence of this shape is the impracticability of having a traditional proscenium curtain. It was, therefore, decided to have a rotatable stage to provide for change of sets in a drama performance. The stage is light weight and is in the form of an aluminium platform with a wooden parquet top. It has a six inch thick concrete slab with a wooden covering topped by parquet to avoid any drumming effect in dance performance such as would have occurred with a thin aluminium platform which would react like the skin on a drum. Not only the stage platform is rotating, but also on acoustic considerations, the two rear walls and hooded ceiling over the stage are also rotating with the stage platform. For this reason, the two-halves of the rotatable stage are constructed like mirror-images of each other, and the whole weighs about 175 tonnes. Moreover, to exclude any leakage of sound from the back-stage, a metal turn-table has been provided which bears the stage platform and its walls are constructed to a tolerance of only plus or minus two millimetres. Since no factory in Bombay could build a turn-table of this size to this extreme accuracy, it had to be constructed in the maintenance workshop of the Tata Iron and Steel Company and hauled by road in two giant trailers and four trucks over the thousand miles from Jamshedpur to Bombay.

In regard to the aesthetics of the architecture and the design of the Main Foyer it was felt desirable to provide one access to the Theatre from Marine Drive and another access from the private road in its compound leading to the car parking area. Accordingly instead of the traditional rectangular Foyer, a Foyer over 100 yards long running diagonally across one corner of the National Centre's 8 acre plot was accepted. The result of this design is to give a magnificent sense of spaciousness to the Foyer without making it too large for a 1000-member audience. The simple Kota stone flooring in the entrance at the end of the Foyer carries the vision to the spacious staircase with its rich magenta carpets speckled almost invisibly with blue and leading the eyes to the Upper Foyer with the auditorium's six entrance doors. The ceiling level over the Upper Foyer is not unduly high for a theatre foyer being only 19 feet high and would be considered quite normal. However the ceiling of the entire Foyer is maintained at one level with the result that at the level of the lower Foyer, the ceiling has a height of 31 feet. Apart from the negligible economy that could have been effected by lowering ceiling at each end of the Foyer, the result would not have been aesthetically satisfactory whereas the Foyer as it is, has a grand sense of spaciousness.

In the pre-inauguration trial performances members of the audience sitting in the rear-most rows were able to hear with enjoyment the music of delicate instruments like *sitar*, the *sarod* and the *sarangi* to listen with clarity to dialogues in dramas and to see with pleasure and appreciation the subtle movements of the face, eyes and hands in classical Indian dance recitals. Thus, the auditorium has fulfilled the requirements of a national theatre.

TOWN HALL

No Town Hall existed in Bombay during the early years of British rule. In 1675 the hired house, in which the judicial courts were located, served as a Town Hall, and in 1677 the chief room in Aungier's Court of Judicature (Mapla Por) was styled the Town Hall. Similarly in 1720 Rama Kamati's house contained a room used for this purpose, which by 1771 had fallen into very great disrepair. It continued however to be utilized until 1786 when accommodation was provided in Hornby House (subsequently the Great Western Hotel) and the main room of this building served for the next few years as a Town Hall. The idea of erecting a separate building was first mooted by a Government servant named Henshaw in 1793; was again brought forward by Sir James Mackintosh, the then Recorder of Bombay in a letter to the Bombay Government of the 10th October 1811; and was finally adopted in 1812 by Government, who on the representation of Messrs. Forbes and Co. and Messrs. Bruce Fawcett and Co. sanctioned the holding of a lottery for raising the necessary funds. The lottery proved so successful, the amount realized being 1.10 lakhs that in October 1812 Government sanctioned the raising of a second lottery, on condition that the total sum to be raised for the erection of the building should not exceed 2 lakhs. This lottery however met

with poor success, and no further step was taken until 1820 when a third lottery was instituted. The amount so raised sufficed to commence but not to complete the building; and after considerable delay and correspondence Government were asked to undertake the completion of the work. The building, as it now stands, was designed by Colonel Cowter, R. E. and was finally completed in 1833 at a cost of a little more than 6 lakhs.

The building consists of a basement formerly occupied by the Government stamp, stationery and incometax offices, and an upper storey which is about 260 feet long by 100 feet wide. The large hall 100 ft. square contains a fine organ given by Sir Albert Sassoon to commemorate the visit of H.R.H. the Duke of Edinburgh in 1872. The hall which is frequently used for public meetings, concerts and balls also contains a statue of Mountstuart Elphinstone (Governor of Bombay, 1819-1827) executed by Chantery. A statue of Sir Charles Forbes is placed in the south vestibule; and in the north vestibule are statues of Mr. Stephen Babington, Sir John Malcolm, Mr. William Erskine, Mr. Carnac, Mr. William Frere, Mr. Nonis, Lord Elphinstone, Sir Jamshetji Jeejeebhoy, Sir Bartle Frere and the Hon. Mr. Jagannath Shankarseth. The library founded in 1804 by Sir James Mackintosh and museum of the Bombay Branch of the Royal Asiatic Society occupy the north end of the central hall, the Darbar room, so called on account of its being used for State purposes prior to the completion of the Secretariat, being situated at the south-east corner of the hall. The Darbar room was once used as the personal office of the Collector of Bombay. Rooms were also allowed for the personal offices of the Income Tax Collector and his deputy, and the Presidency Surgeon, first district. On the west side of the hall is a handsome portico approached by a massive flight of stone steps from the Elphinstone Circle. The pillars in front and the external character of the edifice are Doric; the interior is corinthian. The former Levee Rooms of the Governor and the C. in C. and the Council Room are no longer used. In the library of the present Asiatic Society of Bombay (formerly Bombay Branch of the Royal Asiatic Society) containing more than 1,00,000 volumes are busts of Sir James Rivett-Carnac by Sir F. Chantery and Sir J. Mackintosh. The Geographical Room contains portraits of Sir Alexander Burnes, and Sir John Malcolm and Captain Daniel Ross' the two first Presidents of the Bombay Geographical Society.

UNIVERSITY BUILDINGS

The University Buildings, which lie between the Old Secretariat and High Court, were designed by Sir Gilbert Scott in the French decorted style and completed in 1874 at a cost of about Rs. 9 1/2 lakhs. They are of a florid and decorative French-Gothic type, and consist of two detached buildings, namely the Senate-house or the Sir Cowasji Jehangir Hall and the University Library and Clock Tower. The Sir Cowasji Jehangir Hall, the earlier structure of the two, measures 45.720 metres (150 feet) long by 19.812 m. (65 feet) wide and has a high pitched globle roof about 27.432 m. (90 feet) in height, with four square turrets at the angles. The chief apartment is 31.699 m.(104feet) long by 13.411m(44 feet) broad and 19.202 m. (63 feet) high, furnished at one end with a semi-circuit apse containing raised seats and surrounded by a gallery supported by ornamental iron brackets and approached by staircases in the angle-turrets. The globule is embellished with a circular window, 6.096 m.(20 feet) in diameter, having its outer ring of twelve lights filled with stained glass representations of the twelves signs of the Zodiac. Over the windows in the western wall are stained glass representations of Sir Cowasji Jehangir's escutcheon and of the arms of England, Scotland, Ireland, Wales and Bombay. The eastern windows bear the arms of former Chancellors of the University, viz., Lord Elphinstone, Sir George Clarke, Sir Bartle Frere, Sir Seymour Fitzgerald and Sir Philip Wodehouse.

The Library building comprises two floors, the upper of which is devoted to one large room 44.500 m. (146 feet) long by 9.144 m. (30 feet) in breadth with a panelled teak-wood ceiling, and is in the style of 14th century Gothic and is adorned with carving. Abovethe porch of the building rises the Rajabai Clock Tower to a height of 85.344 m. (280 feet) with five richly decorated storeys afrd is the most conspicuous building in Bombay. The Tower was built at the expenses of Mr. Premchand Raichand in memory of his mother Rajabai and is divided into an octagonal lantern spire with figures in niches at the angles. The top of the cupola is ornamented with 16 statues and about 9. 144 m. (thirty feet) from the ground are eight other statues representing various Indian castes. The fifth storey contains the clock-dials. The carillon machinery used to play sixteen tunes which change automatically four times a day (*The mechanism is* not operative now.). The bells number sixteen and are tuned to the key of C, the largest of them weighing 3.04 m. tons (3 tonnes) and the whole peel about 12.192 m. tons (12 tonnes). The Library and Clock Tower were formally opened in February 1880, the clock and bells being received and fixed in the tower two years later. The peal of bells and the clock together cost Rs. 30,000. There is an opening in the centre of each floor so that one can look up 35.052 m. (115 feet) to the ceiling of the Dial Room. From the top of the Tower one gets a fine view of Bombay to the east harbour fringed with islands, Mody Bay and the Fort, and on the west the Malabar Hill and the Backbay and on the south Colaba Point. The Library contains a bust of Sir George Birdwood which was unveiled by Lord Harris in 1894, and busts of the Revd. Dr. John Wilson, James Gibbs, Sir Bartle Frere and Henry Fawcett. Around the buildings is a garden graced by the statues of Sir Cowasji Jehangir and Thomas Ormiston. Now the tower is closed to the public so that a visitor to Bombay misses the magnificent aerial view of the prime dona of India.

The University of Bombay have recently constructed a huge complex at Vidyanagari at Kalina with a number of buildings for library, different departments of the University, the University guest house and the residential blocks.

VICTORIA TERMINUS OF THE CENTRAL RAILWAY

The Victoria Terminus or the Bori Bunder is the terminus of the Central Railway formerly known as the Great Indian Peninsula Railway. The through train section of the station was opened on 27th March 1929 and the former adjoining the station is now reserved for suburban traffic.

The Victoria Terminus has taken place of 'a miserable wooden structure 'which prior to 1878 served as the terminal station. The area in front of this building was occupied by a Dhobi's *ghat* where the town's



washing was performed until the new *ghat* at Mahalakshmi was provided while a portion of the site of the present booking office and the open space leading to Frere road were occupied by the famous Phansi talao or Gibbet pond. The pond derived its name from the fact that murderers used to be hanged there and the gallows stood there in full view of the public until roughly a century ago when the tank was filled in and the melancholy structure was removed. Close by in olden times stood also the public pillory, where offenders were subjected to the raillery of the populace and had to submit to being pelted with rotten eggs, old shoes, mud and brickbats. The abolition of this mode of punishment was one of the first acts of Queen Victoria after her assumption of the Crown.

The terminal station of the Central Railway is one of the handsomest and most prominent buildings in Bombay and is generally supposed to be from the architectural point of view, one of the finest stations in the world. It was designed by the late Mr. F. W. Stevens, who subsequently joined the company's staff to superintend its erection. Work was commenced in May, 1878 and completed in May 1888, at a cost for the offices alone of Rs. 16,35,562. The station proper was erected under the supervision of Mr. T. W. Pearson, District Engineer, and was opened for traffic on the 1st January 1882. Its cost, excluding the permanent way amounted to Rs. 10,40,2.48. On Jubilee Day, 1887, the buildings were named in honour of H. M. the Queen Empress Victoria as ' VictoriaTerminus' the announcement being made by means of huge letters of light incorporated in the illuminations which adorned the building that night. The building is in the Italian-Gothic style with a frontage on Hornby road (now Mahatma Gandhi Road) of more than 450 metres (1,500 feet). The administrative offices form three sides of a rectangle enclosing an ornamental garden, the entrance gates to which are guarded by a massive lion and tiger carved in stone. They comprise a ground and two upper floors, the most prominent feature in the elevation being the high dome rising over the centre portion, adorned with a large figure representing ' Progress '. A statue of the late Queen Empress occupies a niche below the clock in the centre of the building. Marble columns support the lofty roof and entrance facade of the booking-office, the walls of which are decorated in the blue and gold.

This building has a series of well-proportioned and delicately ornamented arches, giving it the look of a grand cathedral. This eifect is further heightened by a central dome set off by a number of smaller domes and conical towers reminiscent of West Minster Abbey. The lancet windows in the dome and towers are of ornate stained glass, and like the rest of the building, are made out of solid cut-stone masonry, superimposed by delicate artistic work. Italian granite has been freely used for interior decoration. The apex of the dome is crowned by a colossal figure of a Lady in stone symbolising progress. This figure is 5.029 metres (16' 6") in height.

The building is the administrative headquarters of the Central Railway. Two multi-storeyed buildings were constructed later at Bombay VT to accommodate all the offices of the Railway on account of expansion in the activities of Central Railway.

The Divisional Headquarters of Bombay Division is also located near the old administrative building. Bombay VT is one of the biggest passenger terminals in India. There are a total of 13 platforms at Bombay VT, out of which 5 platforms are exclusively utilised for dealing with long distance passenger carrying trains. At present 30 Down and 30 Up Mail/ Express/Passenger Trains are being handled on these platforms. Eight platforms are exclusively available for dealing with suburban trains which arrive and leave VT on the Harbour Branch, Main Line and Through Line. At present 908 suburban trains (454 Down and 454 Up) are being handled at Bombay VT. Both the suburban and main line stations at Bombay VT have waiting halls, station masters' offices, booking offices, book-stalls, canteens etc. The main line station building contains a post and telegraph office, reservation and enquiry offices, retiring rooms, restaurants, cloak room etc. Facilities for local telephones are provided near the booking windows on the surburban section.

The divisional control office is also situated at the divisional headquarters office at Bombay VT. The passenger, goods and surburban trains operation of the entire Bombay Division is controlled from this Office.



imposing skyscrapers at Nariman Point.

VIDHAN BHAVAN

A Sailors' Home constructed in 1876 was enlarged by the then Bombay Government in 1928 and was converted to house the Bombay Legislative Council and its offices till 1981. Since Independence, the Old Council Hall could just any how accommodate the two houses of the Legislature. The building had also become very old. With a view to meeting the ever increasing requirements and providing more amenities to the legislature it was decided to construct a new Council Hall Building, on the three vacant plots available in front of Mantralaya. The work commenced on May 27, 1974 and the new Council Hall building was inaugurated by the revered Prime Minister of India Smt., Indira Gandhi on April 19, 1981. The new Council Hall building is located in the midst of

The new Council Hall called Vidhan Bhavan, has been provided with special acoustical treatment to

control noise in all the halls. Entrance to all the halls, waiting foyer, ministers rooms have superb interior decoration. The National Emblem 5.5 metres in height and weighing about four tonnes made of bronze has been erected atop the dome of the Central circular portion. The building has a parking space for 162 cars; 66 in the basement, 56 in the compound of the building and 40 outside the compound. The well laid-out lawns, roads, are all the complementary features, that help beautify the entire complex and 16.764 metres high flag mast located in an oval shape water pond complete the entire setting in a most dignified manner. A statue of Mahatma Phule, an arch social revolutionary, has been erected in the premises. Besides, all around the plot 2.45 metres high mild steel fencing with decorative treatment is provided, which not only beautifies the premises but also provides the necessary security.

The monument reflects all the glories of the architect ural, social and cultural heritage of Maharashtra, through the medium of concrete, glass, wood, steel, etc.

This Vidhan Bhavan Building Complex is a prestigious project and its uniqueness lies in its elegant architectural features, special structural design and the provision of modern amenities such as airconditioning, interior decoration, fire-fighting and fire-alarm system, reinforced sound and simultaneous translation system in six languages and automatic vote recording system, requiring the use of modern sophisticated electronic equipment.

The building provides much larger space for the legislators and the staff of Legislature Secretariat than the old Council Hall did. The Assembly Hall has a seating arrangement for 304 MLAs against the present strength of 289, and the Council Chamber can accommodate 130 members against the strength of 78. The Central Hall has a capacity to seat 400 members.

The premises are also being beautified with murals and large-size photographs depicting various features of Maharashtra's life and culture.

The entire concept of design comprises two units, one unit consisting of three Halls for Assembly, Council and Central Hall for the Joint Session of both the Houses and the other unit comprising the Legislature Secretariat. The three Halls have been coupled in one single mass one over the other, having a folded dome roof on top against the backdrop of the twenty-one storeyed.' Tower Block'. One more architectural mass, giving a podium-like effect balances the main two masses.

Three auditoriums have been provided in the Central Circular Portion with spectator galleries. Assembly Hall is on the ground floor. It is circular in shape with a diameter of 30 metres. There is a 3 metre wide circular corridor all round it, from which members can enter the Assembly Hall through six entrances.

The Speaker's and the Deputy Speaker's chambers are also located on this floor. The spectator gallery can accommodate 398 people. In addition, the Governor, the Chairman of the Council and the honourable invitees, diplomats, and journalists have reserved balconies.

Council Chamber is on the first floor. It is also circular in shape with a diameter of 21 metres. It can accommodate 130 members, with 240 seats in the gallery. The Chairman's and the Deputy Chairman's chambers are located adjacent to the hall. In addition, reserved balconies for the Governor, the Speaker, invitees, journalists and dignitaries have been provided for.

Central Hall is on the fifth floor and has a diameter of 30 metres with arrangement of 400 seats. The balcony can house 420 seats. A combined meeting of both Houses or international symposia or conferences can be staged here. Special equipment for simultaneous translation facility in six languages is installed here. In the other two halls, a speech can be heard in three different languages by simultaneous translation equipment.

Ministers' Offices: The ground and first floors house 40 chambers for the Chief Minister, other Ministers and Ministers of State. A hall for the Cabinet meeting and another for the Business Advisory Committee have been provided. In addition, a separate chamber and office have been kept for the Leader of the Opposition.

Committee Rooms and Offices: In all nine General Committee Rooms and two Business Advisory Committee Rooms have been provided. In four of the Committee Rooms, 20 members each, in two of the Committee Rooms, 25 members each and in the remaining three Committee Rooms, 35 members each can be seated. The seating capacity for each of the Business Advisory Committee Rooms is for 12 members. The entire area from 11th to 17th floor of the 'Tower Block' has been reserved for the offices of the Legislature Secretariat.

Salient Amenities: Two canteens, a library and a reading room for the MLAs, lounges for ladies and gents, MLAs and MLCs, post office, State Bank Office, railway and air booking facilities have been provided in the 'Tower Block'. Bombay Telephones, fire brigade and police force have been allotted space. Waiting room for the visitors, telephone booths etc., are on the ground and first floors.

The Assembly Hall, the Council Chamber, the Central Hall, the Ministers' rooms and other important rooms have been centrally airconditioned.

Sound System and Simultaneous Translation System: A speaker and microphone is provided for two members each in the Assembly Hall and the Council Chamber. The proceedings of the Houses can be heard simultaneously in three different languages. The Central Hall is fitted with simultaneous translation system in six languages.

Automatic Vote Recording System: This is the most modern equipment and by using this system, the votes can be immediately tabulated. Such facility is provided only in the Lok Sabha and the Rajya Sabha.

Fire- $Fighting\ and\ Fire$ - $Alarm\ System$: Considering the rules laid down for high rise buildings, multi-stage multi-outlet high pressure pumps, wet risers, sprinklers, concealed boards and such other sensitive and

efficient equipments are installed.

Hydropneumatic Water Supply System: This modern system with small balancing tanks at the top supplies water at the constant rate throughout and eliminates the bulky overhead tanks.

Miscellaneous: All the 145 clocks in the building are tuned to and controlled by a single master clock. All these show one and the correct time only.

VIHAR LAKE AND GARDENS

Vihar a sister lake of Powai, an artificial lake in Greater Bombay, 4.8 km (three miles) west of the Bhandup railway station on the Bombay V.T.-Thane section of the Central Railway and 9.60 km (6 miles) east of Goregaon railway station on the Churchgate-Virar section of the Western Railway, was the main source of water-supply to the town and island of Bombay before laying the Tansa Pipelines. The lake is a large and beautiful sheet of water dotted with green woody islands with a background of picturesque hills. It covers the sites of the villages of Vihar, Sai and Gundgaon, which formed the Vihar estate granted on lease to Morarji Rastamji, on the 22nd of September 1829. At the time of making the lake the right and title of the leases were purchased for Rs. 1,50,000, and the rights of the tenants in possession of the lands and premises were bought for Rs.56,585. There is a good made road from Goregaon railway station. It is well connected by a number of BEST buses.

In the middle of the sixteenth century, Vihar had a great Portuguese church and a college of 150 boys. There was also, on a site still marked by ruins, a great orphanage of 300 boys, built from the stones of a temple to the Hindu trinity and named the orphanage of the Blessed Trinity. (Da Cunha's Bassein. p. 188.)

Vihar lake covers an area of 566.5 hectares (1400 acres), and has a gathering ground of about 1011.7 hectares (2500 acres). When full the level of the lake is 73.85 metres (262.0 feet) above the Town Hall datum, that is 55.47 metres (182.36 feet) above mean sea level. The water of the lake can be drawn off, till the surface falls 18 metres (fifty-nine feet) below this level. This fall of fifty-nine feet represents about 1,51,800 lakh litres (10,650 million gallons). At the close of the dry season the surface of the lake is on an average about 3.45 metres (11 1/2 feet) below the top of the waste weir.

Vihar lake was the first lake to supply water to Bombay. It was one Captain Crawford who in 1845 first visualised using the Vihar stream for storing water and subsequently pumping it into the city.

Government finally gave its approval to the scheme in 1854 and the work was taken in hand in 1856. It is interesting to note that the dam at Vihar was then the highest earthen dam in the world. After the works were completed, the lake, thus formed, had a total capacity of 9120 million gallons.

It was in March 1860 that Vihar first started functioning. It supplied seven million gallons per day or 10 gallons per head of the population which was then only seven lakhs. Complaints about the quality of water from Vihar Lake were soon heard and they lasted till quite recently inspite of repeated endeavours made to keep the lake and the waters clean. Efforts to improve the supply continued till 1943 when the lake was thoroughly cleaned at a cost of Rs. 50,000. The Vihar water works actually came under the control of the Municipal Corporation in 1863.

On the other side of the lake, reached by walking over the bridge is a one-storeyed inspection bungalow, available now to the public by prior reservation with the Hydraulic Engineer in whose charge are all the lakes in Greater Bombay area. There is a considerable jungle country to explore around there. Besides, there is a beautiful garden and a picnic centre maintained by the Bombay Municipal Corporation where many visitors throng daily. During holidays and summer days the picnic centre gets a appearance of a fair.

At the beginning of the nineteenth century a land-grant stone (5' X 18" X 5') was found near Vihar, covered with an inscription of fifty to sixty lines. It belonged to the thirteenth century and mentioned the names of the giver, the receiver, and the grant made. At the top were a sun and moon, and below was the usual sculpture course. The stone was taken by Mr. Moor to England (.(Moor's Hindu Pantheon, 383.) (The obverse is a Y crowned, with four points on either side. The reverse is a cross of Saint George, with a point in each corner. The coin weighs 168 grains, Portuguese. It is figured and described in the third volume of Teixerhde Aragao's Moandes Cunhadas. The coin is very rare)). In 1881 another land-grant stone was found near Vihar which was kept in the collector's garden at Thane. It was a sandstone slab (4' X1" X 5") with a rounded top, on either side of which were the sun and the moon. There were four lines of some what defaced writing. It recorded a gift in the year A.D. 1081 (S. 1003), during the reign of the Shilahara chief Mahamandaleshwar Anantdev.

In making a path round the upper part of the reservoir in January 1855, upwards of a thousand copper coins were found in an earthen pot. They were much corroded. Three of them were Muhammedan of not very early days and most of the rest bore a cross on one side, with a point between each of the arms. On the obverse was a small figure like a Maltese cross with a point on each side of it, over which was a line bent down at each and the remainder of the field was occupied by a symbol between two sets of four points. A sixth had a rude outline of a cross on one side, the other side being plain. There were other smooth pieces of copper of similar size, Two of these coins which are shown in Dr. Burges's Archaeological Survey Report No. 10, p. 66, have been identified by Dr. Gerson-Da Cunha as Portuguese coins Struck by the viceroy Dom Joao de Castro in 1538..(Moor's Hindu Pantheon, 383.) (The obverse is a Y crowned, with four points on either side. The reverse is a cross of Saint George, with a point in each corner. The coin weighs 168 grains, Portuguese. It is figured and described in the third volume of Teixerhde Aragao's Moandes Cunhadas. The coin is very rare)

VITTHAL MANDIR, WADALA

The temple dedicated to God Vithoba is located on the Katrak Road near the Wadala market. Wadala Road on the Harbour branch of the suburban section of the Central Railway is the nearest railway station to the temple. The temple can also be reached by a number of BEST buses. The temple lies at a distance of 0.8 kilometres from the Wadala Road railway station. The temple is famous for a very big fair held in honour of God Vithoba from Ashadh Shuddha 10 to Ashadh Shuddha 12, the important day of the fair being Ashadh Shuddha 11 when over a lakh of devotees visit the fair.

It is said that a *guru* of the Varkari sect and a great devotee of God Vithoba was living about 160 years ago at the place where the present temple is situated. He used to pay visits regularly to Pandharpur in the month of *Ashadh* on foot. In one of his visits to Pandharpur he expressed his inability to visit Pandharpur with his fellowmen in the following year due to his old age. One of his followers said to the *Guru*, "You are a devotee of God Vithoba; so you may pray Him to come to Bombay." The *Guru* said, "Let us hope so, after all it depends upon the mercy of God Vithoba. "The same year the *Guru* and his followers took the palanquin procession to Pandharpur as usual. While bathing in the river Chandrabhaga, they were surprised to find that one of the followers of the *Guru* had found an image of God Vithoba. The *Guru* and his followers were happy and brought the said image to Bombay and installed it in the *Guru*'s hut on *Chaitra Shud 13*. The followers of the Varkari sect then discontinued the practice of carrying a palanguin to Pandharpur from the next year and started worshipping the God at Wadala.

The present temple it is said, stands at the place where there was a hut of the *Guru*. The old temple was built about 150 years ago but a renovation of it commenced some 20 years back for which donations were received from many devotees. The temple is situated in a compound with an area of about 2,675.62 square metres (3,200 square yards) with a wall on the three sides excepting on the south. The main entrance faces the east. Outside the compound wall, at the entrance about 4.572 m. (15') to the right, is a small temple of Shani and Kal Bhairav. The auditorium (sabhagraha) of the temple was constructed in cement concrete in the year 1953. The shrine measures 3.048 m. x 2.438 m. (10' x 8') and faces the east. The pinnacle at the top (kalas) is about 15.240 m (50') high and is plated with gold.

Just adjacent to the shrine to the south and the north are the temples dedicated to Ganapati and Mahadeo, both facing the east. The temple dedicated to Ganapati admeasures 3.6576 m. X 3.6576 m. (12' X 12'), and contains an image of Ganapati with its trunk turned to the left installed on a raised platform, paved with marble stones, measuring 3.048 m. x 1.0668 m. (10,x3 1/2') and 0.6096 m. (2') high from the ground level. The shrine of God Mahadeo also measures 3.6576 m. x 3.6576 m. (12'x 12') and a Shiva Linga is installed in it. Just in front of the temple of Mahadeo at some distance is installed a sacred bull (Nandi) of black stone on a marble platform which measures 1.8288 m. x 3.6576 m. (6'x12'). An image of Shitala Devi is also installed just near the sacred bull on the east. The image of Ganapati having its trunk to the right called Siddhi Vinayak is installed in a recess in the wall to the left of the entrance of the temple dedicated to Mahadeo. At a distance of about 1.219 m. just in front of the auditorium hall of the main temple, an image of Garuda with folded hands is installed on a platform of marble stone which is about 1.2192 m. (4') high from the ground. To the north of this image a deep-mala is erected on a stone platform measuring 1.5240 mux 1.5240 m (5'x5') and 0.4572 m. (1 1/2) high from the ground. There is a temple of God Maruti at the back of the image of Garuda at a distance of about 2.4384 m. (8'). This temple measures 3.6576 m. X 3.6576 m. (12 x 12') and faces the west. The inscription written on the plinth stone shows that the renovation of this temple was completed in the year 1919.

Images of God Vithoba and Goddess Rakhumai in their traditional posture with hands on their waist are installed in the shrine of the main temple on a raised platform of marble stones. The image of Rakhumai is to the left of Vithoba, at a distance of about 0.4572 m.(1 1/2)- The height of the image of Vithoba is 1.0668 m. (3 1/2) and that of Rakhumai is 0.9144 m. (3 1/2). The images are made of black stone. Small images of Vithoba and Rakhumai made of silver, are kept behind the main images in a *devhara*.

A silk turban *pagadi*, a *dhoti*, an upper garment and a shoulder cloth *(uparne)* of cotton, are put on the image of God Vithoba while the image of Rakhumai is draped in a saree and a blouse of cotton. During the fair and on special occasions, rich clothes of silk, etc., are put on the deities.

A nose-ring, a necklace (mangal sutra) of black beads and silver bangles are the ornaments for daily wear of Goddess Rakhumai.

During the period of the fair and on special occasions precious ornaments such as lockets and chain, both of gold, and ear-rings (kundale) and crown, both of silver, are put on the image of God Vithoba and bangles, necklace, a chain, a nose-ring, all of gold and ear-rings (kundale), a waist belt and a painjan all of silver are put on the image of Goddess Rakhumai.

The shrine of the deity is opened at 4-30 a.m. every day, *kakad arati* is performed at 5-00 a.m. which is followed by an *abhisheka*. Thereafter the deities are bathed with cold water. Scented oil is then applied to the deities and clothes and ornaments are put on them. After application of sandal-wood paste and *kumkum* on the forehead and other parts of the body, garlands of flowers are put on them. The images of Ganapati and other deities and Shiva Linga are also worshipped in similar manner amidst the chanting *of mantras*. The *arati* is performed in the main temple from 6-30 a.m. to 7-00 a.m. and the same is afterwards waved before other images. *Tirtha* (holy water) and *prasad* are distributed amongst devotees present at the time of the *arati*.

It is customary to offer a *naivedya* of cooked food to the deities daily except on the days of fasts, on which days *naivedya* offered contains fruits, groundnut seeds, etc., which are afterwards distributed by the priests. The temple is closed for *darshan* from 12-00 noon to 3-30 p.m. when it is again opened and garlands of flowers and leaves of sacred *Tulasi* plant are offered to the deities. The evening *arati* is performed at 7-00 p.m. and *prasad* is distributed amongst the devotees present. The temple is closed for

the night at 1-00 p.m. after performing night arati.

There is a general practice of making vows to the deity for getting a child, prosperity in business, success in examinations and relief from bodily or mental ailments. On fulfilment of the vows, clothes, ornaments, etc., are oifered. Some also distribute gur, sugar, etc., according to their means.

The annual fair starts on Ashadh Shud. 10 and lasts for three days i.e., upto Ashadh Shud. 12. On As had Shud. 10, a. special worship called Maha Abhisheka is performed by a prominent person at about 3-00 p.m. followed by an arati. The pilgrims attend the fair from this day and worship the deities with kumkum, flowers and leaves of sacred Tulasi plant and leave after taking darshan.

On Ashadh Shud. 11 which is the most important day of the fair, pilgrims from all walks of life attend the fair in large number. They worship the deities by offerinng flowers and coins before them and praying for mercy. The pilgrims come in groups called *Dindis* reciting *bhajans* and visit the temple throughout the day.

The programmes of *bhajans, kirtans* and *pravachans* are also arranged. To enable the pilgrims to have *darshan* of Vithoba and Rakhumai the temple is kept open throughout the day and upto 3-00 a.m. on the following day.

There is no special programme on *Ashadh Shud*. 12. Those persons who could not take *darshan* during the earlier two days, visit the temple to pay homage to the deities.

Besides the annual fair, there is a programme of the palanquin procession of a portrait of God Vithoba and Goddess Rakhumai at about 10-00 a.m. on *Chaitra Shud. 12*, the day of inception of the deities, taken round the nearby locality and attended by 2,000 to 3,000 persons.

Maha Abhisheka is also performed in the temple on certain festival days, viz., Ashvina Shud. 10 (Dasara), Ramanavami and Gokul Ashtami which are celebrated in the traditional way.



HAJI ALI

Little is known about Haji Ali, the Muslim saint. However, popular belief has it that a rich resident of Bombay, made a Haj to Mecca. On his return to Bombay from the pilgrimage he was called ' Haji Ali'. Haji Ali was searching spiritual attainment, he renounced the world, gave away his wealth and lived on these rocks in the bay.

Soon, his sister, Ma Hajiani, joined him having also renounced the world. They were now revered as holy people, and had a large number of devotees. When they died these devotees built two mausoleums—Haji Ali for the brother, on the rock where he meditated, and Ma Hajiani for his sister at a little distance away on Worli bay.

The Haji Ali Dargah is a Jewel-like mausoleum built on the rocks off the Mahalaxmi temple. It commands a beautiful view of the Malabar and Cumballa Hills as well as the Vellard. Thousands of devotees pay their respects to the holy Haji Ali on occasions of the Bakri-i-Id, Ramzan Id, the Prophet's birth anniversary and Muharrum. The saint is revered by Hindus as well.

There is no evidence about when exactly Haji Ali and his sister lived, but it is believed to have been sometime around the end of the eighteenth century. Muslims and non-Muslims flock to the mausoleum believing that Pir Haji Ali has the power of granting favours and they go to invoke his blessings. The only time to visit the mausoleum is during low tide since one has to walk about 500 metres into the sea along a narrow causeway when it is above water.

SWAMINARAYAN TEMPLE, BHULESHWAR

The Swaminarayan temple at Bhuleshwar has an elaborately carved frontage which is really a visual treat in an otherwise shaby surrounding. It was constructed in 1868 at a cost of about Rs.1 lakh. It is also known as *Shikharband*, i.e. a spired temple since all the three shrines in the temple have spires with exquisite carvings.

After climbing a flight of twenty five steps one enters the audience hall (Sabhamandap). There are three shrines. In the shrine on the east there are idols of Shri Swami Narayan, Shri Krishna and Radhika; the shrine at the centre has the idols of Ghanashyam Maharaj, Narayan and Laxmi; while the shrine on the west houses the resting place for deities. Over the Sabhamandap is a dome upon which are painted the scenes from the Krishnalila (Sports of Lord Krishna). The dome is supported by fifty four pillars. There are also the shrines dedicated to Lord Ganapati and Maruti. There is a big audience hall on the first floor where religious discourses are held regularly.

The festivities celebrated at the temple are Ram Navmi (birth anniversary of Lord Ram), Janmashtami (birth anniversary of Lord Krishna), Vaman Jayanti, Nrisinha Jayanti, Mahashivratri, Ganesh Chaturthi, etc. A large number of people assemble on these days.

There are some other smaller temples of the sect at Ghatkopar, Mulund and Malad in the suburbs and at Thane and Kalyan near Bombay. The headquarters of the sect is located at Wadtal in Gujarat from where all the temples in Bombay are managed.



CHAITYA BHOOMI, DADAR

Chaitya Bhoomi, a place of pilgrimage to the Buddhists, is located on the Dadar Chowpati. It is square in shape with a small dome divided into ground and mezzanine floors. In the square shaped structure is a circular wall about 1.5 metres in height. In the circular area are placed the bust of Dr. B. R. *alias* Babasaheb Ambedkar and a statue of Gautam Buddha. The circular wall has two entrances and is furnished with marble flooring. On the mezzanine floor

there is a *Stupa*, besides the resting place for Bauddha Bhikus. The Chaitya Bhoomi was inaugurated by the learned Smt. Meerabai Yashvantrao Ambedkar, the daughter-in-law of Dr. B. R. Ambedkar, on December 5, 1971.

Although this memorial has no claim to any architectural beauty as such it is revered by one and all. It is a memorial to Dr. B. R Ambedkar, the architect of Indian Constitution and the leader of the downtrodden classes. Lakhs of persons visit the Chaitya Bhoomi to pay their respects to Dr. Ambedkar on his death anniversary on the 6th of December, as well as on the Buddha Paurnima day.

APPENDIX



Maharashtra State Gazetteers

CONVERSION FACTORS

LENGTH

- 1 inch = 2.54 centimetres
- 1 foot = 30.48 centimetres
- 1 yard = 91.44 centimetres
- 1 mile = 1.61 kilometres
- 1 nautical mile (U.K.) = 1853.18 metres
- 1 nautical mile (international) = 1,852 metres

AREA

- 1 square foot = 0.093 square metre
- 1 square yard = 0.836 square metre
- 1 acre = 0.405 hectare

VOLUME

1 cubic foot = 0.023 cubic metre

CAPACITY

- 1 gallon (Imperial) = 4.555 litres
- 1 seer (80 tolas) = 0.937 litre
- 1 Madras measure = 1.77 liters

WEIGHT

- 1 tola = 11.66 grams
- 1 chhatak = 58.32 grams
- 1 seer = 933.10 grams
- 1 maund = 37.32 kilograms
- 1 palam -= 34.99 grams
- 1 seer (24 tolas) = 279.93 grams
- 1 viss = 1.40 kilograms
- 1 candy = 223.94 kilograms
- 1 ounce = 28.35 grams
- 1 pound = 453.59 grams
- 1 hundred weight = 50.80 kilograms
- 1 ton = 1016.05 kilograms

TEMPARATURE

 T^0 Fahrenheit = 9/5 (T^0 centigrade)+32

METRIC WEIGHTS AND MEASURES

LENGTH

- 10 millimetres = 1 centimetre
- 100 centimetres = 1 metre
- 1000 metres = 1 kilometre
- 1852 metres = 1 nautical mile (International)

AREA

- 100 square millimetres = 1 square centimetre
- 10,000 square centimetres = 1 square metre or centiare
- 100 square metres = 1 are
- 100 ares = 1 hectare
- 100 hectares or 1,000,000 square metres = 1 square kilometre

VOLUME

1,000,000 cubic centimetres = 1 cubic metre

CAPACITY

- 1000 millilitres = 1 litre
- 1000 litres = 1 kilolitre

WEIGHTS

- 1000 milligrams = 1 gram
- 1000 grams = 1 kilogram
- 100 kilogram = 1 quintal
- 1000 kilograms = 1 tonne 200 milligrams = 1 carat

ABBREVIATIONS FOR METRIC UNITS

(1) DECIMAL MULTIPLES AND SUB-MULTIPLES

Prefix	Value in terms of Unit	Abbreviation
Kilo	1000	k
Centi	1.01 (10- ²)	С
Milli	0.001 (10-3)	m
Micro	0.000001(10- ⁶)	u

(2) WEIGHTS

9		
Denomination	Value	Abbreviation
Tonne	1000 kg	t
Quintal	100 kg	q
Kilogram	1 kg	kg
Gram	1 gm	g
Milligram	1 mg	mg
Carat	200 mg	С

(3) CAPACITY

Denomination	Value	Abbreviation
kilolitre	1000	kl
litre	1	[
millilitre	1 ml 57-	ml

(4) VOLUME

Denomination	Value	Abbreviation
cubic centimetre	-cm ³	cm ³
cubic millimetre	mm ³	mm ³

(5) LENGTH

Denomination	Value	Abbreviation
kilometre	1000m	km
metre	1 m	m
centimetre	1 cm	cm
millimetre	1 mm	mm
micron	1/1000mm or 10. ² mm	um

(6) AREA

Denomination	Value	Abbreviation
square kilometres	1,000,000m ²	km ²
square metre	1 m ²	m ²
square centimetre	1 cm ²	cm ²
square millimetre	mm ²	mm ²

(7) LAND MEASURE

Denomination	Value	Abbreviation
are	100 m ²	a
hectare	100 a	ha
centiare	m ²	ca

MUMBAI CITY AND MUMBAI SUBURBAN DISTRICT

For administrative convenience, the metropolis has been divided into two revenue districts - Mumbai City and Mumbai Suburban District However; it is under a single municipal corporation. The genesis of Mumbai's metamorphosis into a megapolis can be traced to its all-weather safe port. Mumbai has remained a trend-setter in industry, innovation, literature, culture, art and fashion. The Metropolis attracts tourists from all over the world, each coming for different reasons, Mumbai is called India in Miniature as people from all corners of India and those speaking almost all languages are found in Metropolis, blending secularism and social integration for peaceful coexistence. The Gateway of India, the Chhatrapati Shivaji Museum, the Taraporewaia Aquarium, the Film City, Essel World, Jehangir Art Gallery, Marine Drive, Girgaum-Dadar-Juhu Chowpatties are some of the places of tourist attraction. Mumbai's vada-pave embodies its proletarian culture while the famed panipuri and of course, the legendary 'Bombay Duck' are sought by most visitors. The number of 5-Star Hotels in Mumbai cater to the foreigner and the wealthy. The Reserve Bank of India headquarters in south Mumbai controls the economy of the Nation. The birthplace of Indian film industry and known as Bollywood, Mumbai is proud of this glorious heritage. Mumbai is what it is because of its work culture, dynamism and its unceasing search for new.

1. District

2. Area

157 sq. kms.

3. Means of Transport

Railway Stations - Chhatrapati Shivaji Terminus (Central Railway HQ), Churchgate (Western Railway HQ), Mumbai Central, Dadar; Main Bus Depot - Mumbai Central, Parel. Mumbai port.

4. Population

Total-3,26,837 Male-8,75,141 Female-14,51,696

5. Literacy

Per cent-86.82 Total-26,04,173 Male-15,31,600 Female-10,72,573

6.Industries (Registered)

2500

7. Tourist Places

Hanging Garden, Veermata Jeejabai Bhosle Udyan, Chowpatty, Marine Drive, Banganga, Taraporewaia Aquarium, Hutatma Chowk, Gateway of India, Chhatrapati Shivaji Museum, Jehangir Art Gallery, Nehru Planetarium.

8. Languages / Dialects

Marathi, Hindi, English, Gujarati and Sindhi

9.Folk-Arts

Koli Dance

10. Weather

a) Temperature-Max.-31.2 Beg. C.Min.--23.7 Deg. C.b) Rainfall-2146.60 mm (Average)

11. Health Infrastructure (Consolidated figures for Mumbai City and Suburban)

Govt Hospitals-4 Mun. Hospitals-4 Pvt. Major Hospitals-4

12.Educational Institutions

(In Mumbai City and Suburban) Universities-2 Colleges-278

Prim. Schools - 2110 Sec. Schools - 1224

MUMBAI SUBURBAN DISTRICT

1. District

Mumbai Suburban

2. Area

446 sq. kms,

3. Talukas

3 (Andheri, Borivli, Kurla)

4. Means of Transport

Main Airport-Chhatrapati Shivaji Internationa! Airport (Sahar), Chhtrapati Shivaji Domestic Airport (Santacruz); Railway Stations-Kurla, Bandra; Main Bus Bepot-Kuria, Borivli

5.Population:

(as per 2001 census) Total-85,87,561 Male-47,02,761 Female-38,84,800

6.Literacy

Per cent-87.14 Total-66,24,554 Male-38,81,074 Female-27,43,480

6.Tourist Places

Juhu Beach, Sanjay Gandhi National Park, Marve Beach, Manori Beach, Kenheri Caves, Essel World, Goregaon Film City

7.WeatherTemperature- Max.-31.7 Deg. C.
Min.-22.1 Deg. C.
Rainfall-2422.1 mm (Average)

SOURCE- CENSUS OF INDIA 2001

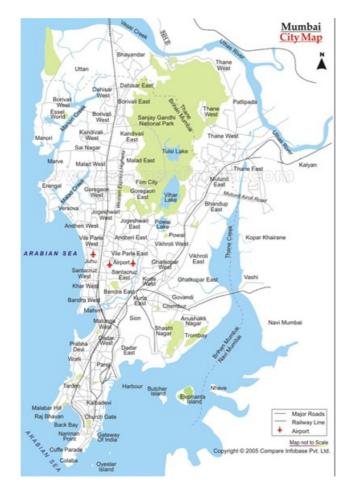


Maharashtra State Gazetteers

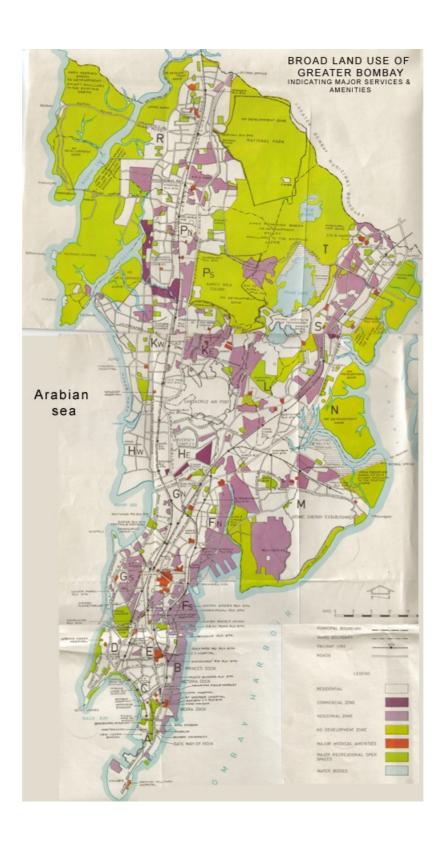
MAPS

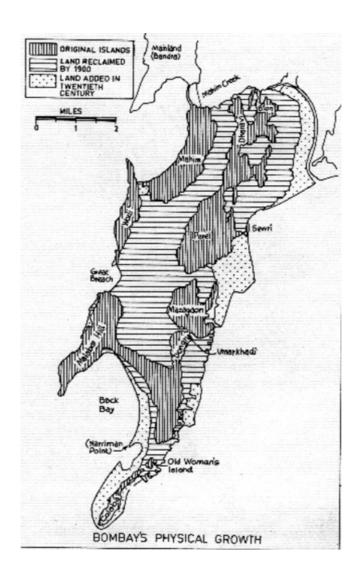


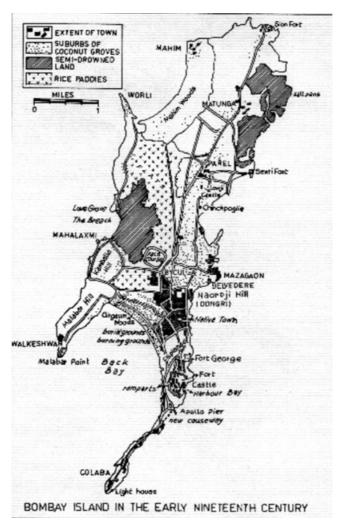
Maharashtra State Gazetteers

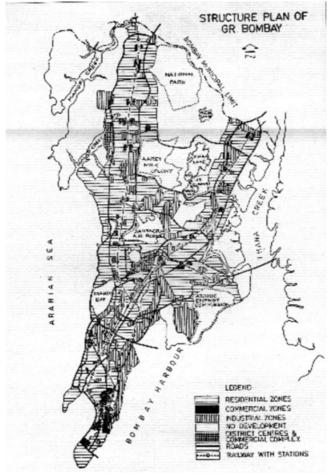


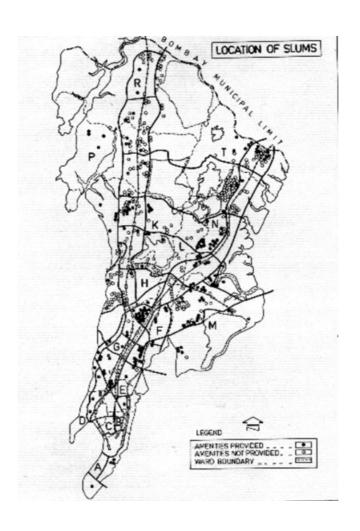
Mumbai City Map

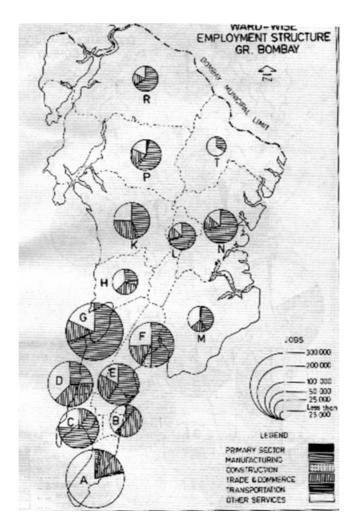


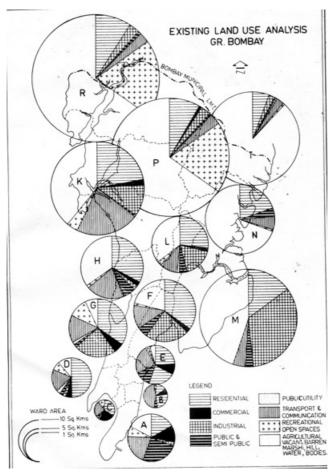


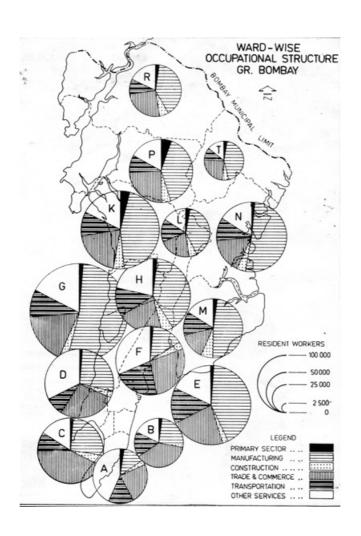












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Chief Metropolitan Magistrate.

Collector of Bombay.

Commandant General, Home Guards.

Commissioner of Income Tax.

Commissioner of Labour.

Commissioner of Police.

Commissioner of Prohibition and Excise.

Commissioner of Sales Tax.

Commissioner for Workmen's Compensation.

Coroner of Bombay.

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INSCRIPTIONS

A NOTE ON INSCRIPTIONS IN BOMBAY

Kanheri, with more than a 100 caves, appears to have been a large monastic rock-cut dwelling establishment with a chaitya as well as monastic teaching institution of the great Buddhist philosophy. The monastic dwellings at Kanheri are amongst the great creations of Indian architecture and sculpture. The chaitya at Kanheri, to some extent, imitates that of Karla, and dates from the late second century A.D. on the basis of inscriptional evidence. The sculpture of Kanheri absorbed not only the Kushan influence in its mithuna couples but, later on, in the fifth century, we also find present the influence of Gupta sculpture, apparently from Sarnath. Certain influences from Kanheri are quite evident at Elephanta not only in the size of the sculptures emulating the two great standing Buddhas of Kanheri, but also in the iconography of Lord Shiva at Elephanta. Kanheri is certainly earlier than Elephanta as far as its fifth century sculptures are concerned.

Kanheri has left for historians a large heritage of inscriptions, besides its extremely rich religious and sculptural heritage. Many copper plates and inscriptions found at Kanheri have enabled valuable research in the ancient history of this part of India. Kanheri caves were visited by several foreign travellers. A group of Par sees from Iran visited the caves thrice— twice in 1009 and once in 1021. Their Pahelvi inscriptions appear on a facade of the same cave giving the date and names of the visitors in the party on each occasion. Evidently the Kanheri Monastery must have been a famous monastery even in the eleventh century. The Kanheri plates of A.D. 494 show that the power, domination and rule of the Traikutkas in this part lasted till at least A.D. 533. Several such inscriptions and plates have been discovered at Kanheri.

A very commendable effort has been made in this respect by Dr. S. B. Deo who has compiled a reference index of the inscriptions and copper plates in his Marathi book *Maharashtra Va Gove Shilalekh-Tamrapatanchi Varnanatmak Sandarbha Suchi* (Bombay, 1984). Dr. Deo has given the relevant details of all the inscriptions and copper plates which are discovered in Bombay as well as those preserved in the Prince of Wales Museum, the Asiatic Society of Bombay, the St. Xavier's College, etc. Dr. Deo has enumerated 69 inscriptions and 18 copper plates, either discovered or preserved in Bombay. An important copper plate of the Shilaharas dated A.D. 1026 found at Bhandup has now been kept in the British Museum. This plate in Sanskrit gives the geneology of the Shilaharas and throws a light on the religious nature of the conperned ruler.

Of the 18 copper plates, 15 are now kept in the Prince of Wales Museum, while one each in the British Museum, the Asiatic Society and the St. Xavier's College. Of the 69 inscriptions enumerated by Dr. Deo, 53 are at Kanheri, one at Mehal near Kanheri, and one each at Kondivti, Jogeshwari, Parel and Powai, while the rest of them, probably from other places in Western India, are now kept in the Prince of Wales Museum, the Asiatic Society, the University of Bombay Library and the St. Xavier's College.

Fifteen of the copper plates are in Sanskrit, while language of the three cannot be deciphered. Of the inscriptions, 49 are in Prakrit, 16 in Sanskrit, two in Kannada and one each in Marathi and a mixed language. Many of them are in the Brahmi script, while those in Devanagari are more numerous. Two of the copperplates belong to the Gurjar rulers, eight to the Maitrakas, one to the Rashtrakutas, three to the Shilaharas and four to other rulers which are not identified. Of the inscriptions, one belongs to the Mauryas, five to the Satavahanas, one to the Kushanas, two to the Chalukyas, one to the Kadambas, two to the Rashtrakutas, eight to the Shilaharas, one to the Yadavas, while the dynasty of the rest of 49 inscriptions has not been ascertained.

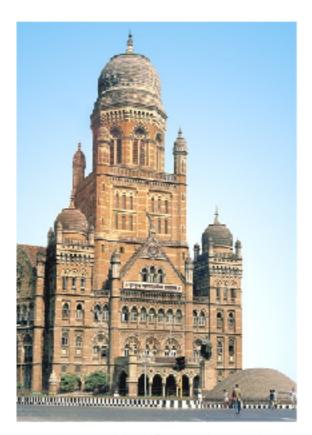
One of the Kanheri inscriptions mentions the matrimonial relationship between the Satavahan King Vasishtiputra Satakarni with the daughter of Mahakshatrap Rudra. As stated earlier, the Bhandup copper plate gives a geneology of the Shilaharas. One of the Kanheri inscriptions speaks of the spread of Buddhism widely in this part of India, while another mentions the excavation of the important *chaitya* at Kanheri. Most of the inscriptions and copper plates are in the nature of religious grants, and grants of land, land revenue, villages and water cisterns for the illustrious religious work.

These inscriptions and copper plates have opened new avenues for prized historical research.

PHOTOS



Maharashtra State Gazetteers



Bombay Municipal Corporation Building



Dhobi Talao



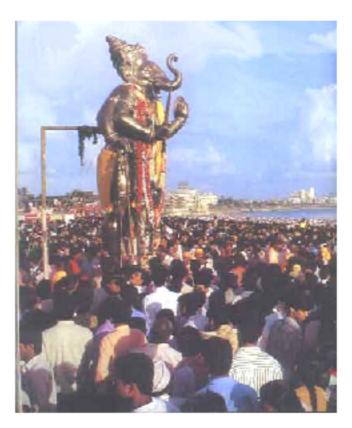
High Court



Flora Fountain



Fashion Street



Ganesh Festival



Gateway Of India



Dahi Handi Festivall



BEST Bus



Haji Ali Darga



Rajabai Tower



Nariman Point



Bombay Gymkhana



Hutatma Chowk



Sir J.J. Hospital



Juhu Beach



Juhu Beach



Vidhan Bhavan



Kanheri Caves



Local Train



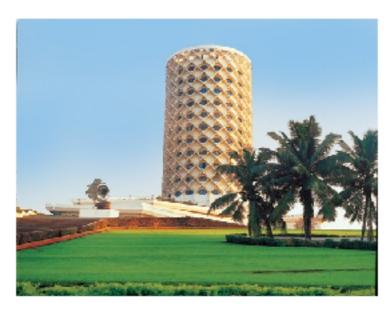
National Stock Exchange



Marine Drive



Marine Drive at night



Nehru Centre



Mt.Mary Church



Dabawala



Kamala Nehru Park



Banganga Festival



Mantralaya



National Park Train



Malabar Hill Garden



National Library



Race Course