

# Population Change and Economic Restructuring in Mumbai

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## Introduction

The dominance of large metropolises is the most prominent feature of contemporary urbanization. However, the metropolises did not appear in the developed world until their economies had reached a comparatively advanced stage (Mohan, 1994). On the other hand, due to colonial intervention and reorganization of space economy in developing countries, metropolises have emerged in significant numbers. In fact, there is a trend of increasing concentration of large cities in the developing countries. In India, this is very marked with the rapid growth in the number of city/urban agglomerations having a population of over a million. When one considers the agglomeration tendencies around these 'million' cities, it is evident that "extended metropolises" are a feature of the emerging urban scenario in India (Sita & Chavan, 2001). The overwhelming functional dominance of these cities is out of all proportion to their numbers.

Until recently, studies of the urban process in India recognized three historical phases, each characterized by distinctive features. These were the pre-colonial or indigenous, the colonial and the post-colonial or national periods. It was during the colonial phase that the three port cities of Mumbai, Kolkata and Chennai together with the capital city of Delhi began to dominate the urban scenario in the country. The post-colonial period witnessed the emergence of other metropolitan cities such as Bangalore, Hyderabad, and Kanpur. In recent years, technological innovations resulting in a revolution in communications have led to cities responding to forces operating at

a global scale. In India, the deregulation of the economy in response to policies of liberalization was initiated during the final decade of the last century. It has ushered in a fourth phase, which Grant and Nijman (2002) have called the "global phase". This phase commenced only in 1991 and its effect, if perceptible, is likely to be evident in the metropolitan cities of India.

An attempt is made to decipher whether any distinctive features have emerged in the last decade in terms of population change in the metropolitan cities of India. Among these cities, Mumbai due to its position as a gateway city, particularly for a range of financial and IT related services, is likely to reflect the impact to a greater extent. An in-depth analysis is carried out for Mumbai both of intra-urban population changes as well as of processes resulting in functional changes and economic restructuring.

## Population Changes

The Greater Mumbai urban agglomeration is the largest in India in terms of population; in fact, it has the distinction of being among the largest cities of the world in this respect. In 2001, the population exceeded 16 million with the Brihanmumbai Municipal Corporation (BMC) itself nearing 12 million (Table 1). The main satellite towns, each of which has a population exceeding one million, are Kalyan-Dombivli and Thane. The other satellite towns are Navi Mumbai, a planned town established three decades ago, Mira-Bhayander and Ulhasnagar.

The growth rate of the urban agglomeration is significantly higher than that of the Brihanmumbai Municipal Corporation, indicating the faster growth

of satellite towns. The growth-rate of the urban agglomeration has however decreased in 1991-2001 compared to the previous decade, while that of the city has remained approximately the same. The growth rates of both the major satellite towns (i.e.) Kalyan-Dombivli and Thane have shown a marked decrease compared to 1981-91. This is partly due to administrative reorganization. The fastest growing satellite towns in 1991-2001 were Mira-Bhayander and Navi Mumbai. The former reflects the outward movement of

population along the western railway corridor, with relatively cheaper real estate acting as a pull factor. Navi Mumbai, after a sluggish start in the 70s of the last century took off during the last decade due to the completion of mass transport links with the main city as well as improvements in infrastructure.

If one considers the population changes that the BMC itself experienced, one finds that for the first time it crossed the 10 million mark in 2001, with the population reaching 11.9 million. The growth rate remained approximately the same as in the previous decade. However, it declined drastically during 2001-2011 in the municipal corporation areas of Greater Mumbai. The population data for entire Mumbai UA and its constituents are not yet available from 2011 census. However, if we look at population data of 2001 census in terms of intra-urban distribution of population, a noteworthy feature is the large population size of some areas. Greater Mumbai has been divided by the Census into 88 sections, each of which represents a locality with which one can identify. By 2001, there were as many

**Table 1: Greater Mumbai UA and its Constituents: Growth Rates of Population, 1981-91 and 1991-2011**

UA/Constituents	Total Population (000), 2001	Growth Rate 1981-1991 (%)	Growth Rate 1991-2001 (%)	Growth Rate 2001-2011 (%)
Greater Mumbai UA	16368	33.43	29.94	NA
Greater Mumbai (M.Corp.)	11914	20.21	20.03	04.7
Thane ( M.Corp)	1262	157.0	57.02	NA
Kalyan-Dombivili (M.Corp)	1495	130.8	47.42	NA
Ulhasnagar ( M.Corp)	473	34.77	28.14	NA
Mira-Bhayander (M.Council)	520	584.73	196.29	NA
Navi-Mumbai ( M.Corp)	704	-	128.76	NA

as 36 localities each having a population equivalent to that of a Class I town (i.e.)

**Notes**

1. Kalyan-Dombivili ( M.Corp.) includes Ambarnath and Badlapur which have separate Municipal Council in 2001, but were part of Kalyan (M.Corp.) in 1991.

2. Navi-Mumbai experienced extraordinary growth rate of 3716.9 per cent during 1981-91. The area also increased from 6.30 sq km in 1981 to 104.13 sq km in 1991. Area of Mira-Bhayander increased from 24.45 sq km in 1981 to 79.4 sq km in 1991. Area of Kalyan was 50.75 sq km in 1981 which increased to 225.26 sq km in 1991. Figures of area for 2001 census are not yet available.

**Sources** 1. *Census of India 1991, Series I, India, Part IIA (ii)- A series, Towns and Urban Agglomerations 1991 with Their Population, 1901-1991, Registrar General and Census Commissioner, India, New Delhi.*

3. *Census of India 2001, Series 28, Maharashtra, Provisional Population Tables, Paper 2 of 2001, "Rural-Urban Distribution of Population", Director of Census Operations, Mumbai.*

4. For 2011 Census, see website [www.censusindia.gov.in](http://www.censusindia.gov.in). NA- not available at the time writing this paper. The population of Greater Mumbai (M.Corp) was 12477 thousand as per 2011 census.

100,000 and above. Another 18 sections had populations equivalent to that of Class II towns, (i.e.) 50,000-99,999. Among them, Govandi exceeded ½ million while Sion, Dadar and Bhandup were nearing ½ million. The density of population was about 25,000 persons per square kilometer in the BMC areas as a whole and in some wards it was even more than 50 thousand persons (see Fig 1).

A number of studies (Sita & Phadke, 1984; Gupta & Prasad, 1996) had shown that the spatial distribution of population in Mumbai had undergone significant changes, particularly since 1961. The decrease in the relative share of population of the Island city continued. The trend towards suburbanization was very apparent, with the share of the suburbs increasing from 60% in 1981 to 75% in 2011 (see Tables 2 and 3).

A very visible feature regarding population distribution is the high

**Table 2: Size of Population in Mumbai (M. Corp), by City and Suburbs, 1981-2011**  
(Figures in 000s)

Unit/Year	1981	1991	2001	2011
Island City	3285	3175	3326	3145
Suburbs	4959	6751	8558	9332
Total	8243	9926	11914	12477

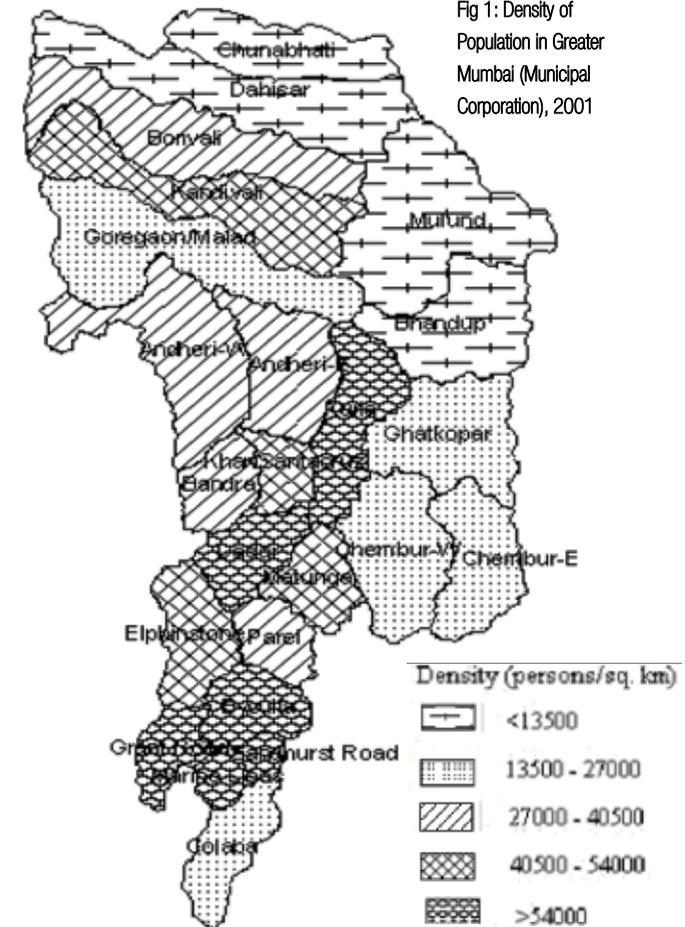
**Table 3: Growth and Distribution of Population in Mumbai (M. Corp), by City and Suburbs, 1981-2011 (%)**

Segment/year	Distribution				Growth Rate		
	1981	1991	2001	2011	1981-1991	1991-2001	2001-2011
Island City	39.8	31.9	27.9	25.2	-3.3	4.7	-5.4
Suburbs	60.1	68.1	72.1	74.8	36.1	26.7	9.0
Total	100	100	100	100	20.4	20.0	4.7

proportion living in slums. These are fairly widespread and account for over 50% of the population with the main concentration in the suburban zone. Various efforts have been made to tackle the slum issue (Sharma 1996). At present, a comprehensive Slum Rehabilitation Scheme has been launched (Knight 2002). Undoubtedly, the slum Transfer of Development Rights (TDRs) introduced in 1997 has helped to kick-start the slum redevelopment schemes. A large amount of slum TDRs has been generated in Dharavi and Mankhurd where the effects are quite visible. Recently attempts to improve the operation of the mass transit facilities, i.e., the suburban railway services, led to the resettlement of nearly 20,000 households at various permanent and transit sites. The presence of a number of these sites in Mankhurd has had an impact on population change.

**Processes resulting in a Restructuring of the Metropolis De-Industrialization**

Significant changes have taken place in the functional characteristics of Mumbai in recent decades. It had evolved



during the colonial phase as a major port city and hence as a center of trade and commerce. In the latter part of the 19th century it became established as an important industrial center with the textile industry dominating its economy. The industry developed on the outskirts of the then populated areas in Central Mumbai. Since the forties of the last century, the manufacturing sector became more diversified. Industries producing a wide range of engineering products evolved in an extensive suburban manufacturing zone extending from Vikroli and Bhandup in the east to Andheri and Goregaon in the west. Automobile production along with its ancillary industrial units was an important component. Petro-chemical and chemical industries developed in suburban areas such as Chembur-Trombay, Mulund etc. while within the city, there was a localization of drugs and pharmaceuticals. The manufacturing sector, which dominated the city's economy, began to decline since the 80s of the last century. The de-industrialization of Mumbai has been caused by a number of factors. According to Soman (n.d.), they are:

1. The industrial policy of the government, encouraging setting up and expansion of industries in backward areas,
2. Bias against the organized sector in the government's taxation and other policies,
3. Relatively high costs of inputs like electricity, water and transport,
4. The growing militancy of labour;
5. High property prices in the city.

Manufacturing has given way to finance and services as the major source of formal sector employment while commercial activities retained their importance.

The decline of manufacturing is most evident in Central Mumbai, where a number of textile mills have become 'sick'. As D'Souza (1997) points out, this is an area where at present vast spaces are underutilized. City planners are turning their attention to the 'recycling' of the mill lands and various proposals are under consideration. At present, a few piecemeal attempts at gentrification have resulted in tall skyscrapers developing side by side with the industrial chawls. In fact, the heart of the textile area has witnessed the entry of shopping arcades, bowling alleys, and other up-market developments.

In the manufacturing sector, it is not only the traditional industries that have suffered. The chemical industry which was hailed a decade ago, as a 'sunrise' industry has suffered due to liberalization and opening up of the economy to competition. This is evidenced by the closure of NOCIL in the Thane-Belapur belt recently and the general industrial sickness that has affected the area.

#### **Changes in the Commercial Structure**

The effect of the implementation of liberalization policies in India since 1991 is visible in terms of changing corporate presence in this gateway city. Grant and Nijman (2002) based on extensive fieldwork found that foreign corporate activity and integration into the global economy in the last two decades was without historical precedent. More than half the foreign companies currently active in Mumbai were established after 1985 and more than a third after 1991. The new foreign companies had increasingly concentrated in finance and producer services which were

localized in the Nariman Point area. They refer to it as the global CBD. The Fort area, which evolved as a CBD in the colonial period, was referred to as the national CBD, while the Kalbadevi area with a distinctly 'bazaar' atmosphere corresponds to the local CBD. They conclude, "the corporate geography of the global phase of urbanism is based on the formation of these distinctive CBDs that are differentially linked to the global economy." (Grant and Nijman, 2002, p.16)

Another land use change is that associated with the Commercial Core of Mumbai or the local CBD referred to above. Mukhopadhyay (2003) has highlighted the decline of both the wholesale and retail functions between 1980 and 1995 because of the shift of wholesale markets to Navi Mumbai. She draws attention to the emergence of semi-wholesaling, godown and container services and the need for a massive urban renewal and restructuring of functions.

Mumbai, as mentioned earlier, owed its initial growth to its function as a major port. In fact, the Port Trust owns vast stretches of coastal land. With the development of the JNPT in Navi Mumbai, which is better equipped to handle container traffic, the export/import functions of Mumbai port are on the decline. Again, as in the case of manufacturing, large amounts of valuable land are tied up in functions that have decreased in importance.

#### **Informalization of Work**

Another characteristic trend in recent years is the increasing importance of the informal sector as a source of employment in Mumbai. Employment

in the informal sector has grown at a faster rate than that in the formal sector resulting in its share of total employment increasing over time. By the end of 1990s, it accounted for the two-third of the jobs in Mumbai. Soman (n. d.) attributes the decline in formal sector employment to the decline in manufacturing industries and the inability of the service sector to fill this void. He draws attention to the polarization resulting in greater incidence of jobs at the high and low paying ends of the scale.

#### **Impact of Various Government Policies**

Some of the changes in population distribution are due to the Development Control Rules of Mumbai that were originally formulated under the Bombay Town Planning Act of 1955. They have undergone considerable modifications over time. The concept of FSI or Floor Space Index was introduced in 1964 (Pathak 2003). It enabled some control over density in different areas. Changes in the FSI have affected population distribution.

For example, Chembur is an area where a cluster of sensitive installations like oil refineries, BARC, a fertilizer plant and naval ammunition depot had prompted the government to initially limit FSI to 0.5. This was increased to 0.75 and later in 1998 to 1.00. It led to a sudden spurt in conversion of bungalows into high-rise apartments and consequent population growth.

Another concept that was introduced in the Development Control Rules in 1991 was that of Transfer of Development Rights (TDRs). The



primary purpose of the TDRs was to facilitate the acquisition of reserved plots of land and eliminate the payment of monetary compensation to the owners. It was expected to facilitate the implementation of the Development Plan by the State Government. There were various categories under which TDR was permissible and General, Road and Slum TDRs could be availed off only in the suburbs. Kewalramani (2001) has brought out the spatial variations in both the TDR generating and receiving areas. She points out that M/E ward has generated the maximum TDR while the major receiving areas have been in the western suburbs. The effect in terms of conversion of “once tranquil residential enclaves of bungalows and two storied structures in Juhu-Vile Parle Development (JVPD) in KW ward into high rise apartments is clearly visible” (Kewalramani, 2001, p.43). In the eastern suburbs such as Chembur and Ghatkopar use of slum TDR has also been a factor in the development of high-rise apartments.

#### Discussion

It is evident that metropolitan cities are increasingly becoming the focal points of urban population concentration in India. The spread effects around these cities have resulted in satellite towns and towns on the periphery experiencing high growth rates. It has given rise to extended metropolitan regions with the ones centered on Mumbai and Delhi being the most conspicuous. The growth rates have significantly declined in the satellite towns, but still remain high compared to the central city. In spite of varied growth pattern within the UAs of five metro cities studied above, it is nevertheless true that the centrifugal pattern of population

growth is operative in the last two decades albeit with the slowing down of the rate of peripheral urbanization.

A major cause for concern is the ecological costs of supporting these large urban agglomerations. While cities are no longer dependent on the immediate hinterland for economic sustenance, they depend on it for a variety of ecoservices. For example, the quantum of water needed to support these urban agglomerations is on a scale not found in nature. The generation of waste is again such that the immediate neighbourhood cannot disperse it. The “ecosystem appropriation” by large metropolitan centers has given rise to the concept of “ecological foot prints” of cities (Folke, et al 1997).

The trend of suburbanization in terms of intra-urban distribution of population, which was evident in earlier decades, has persisted in 1991-2001 as is reflected in Mumbai. However, a few micro level changes are apparent in the last decade. These are explicable when one takes the cognizance of changes in the economic structure. These were ushered in due to de-industrialization in the 1980s and have picked up momentum as a consequence of liberalization and opening up of the economy in the last decade. A consequence is that the economic base of Mumbai is increasingly shifting to the service sector dominated by financial and IT related services. Recycling of land is essential if the urban economy is to function efficiently. A few micro level changes have commenced such as gentrification in parts of the industrial belt of Mumbai as well as in the older parts of the city.

Mumbai has evidently experienced significant changes in its economic and spatial structure during the period under review. In 1931 though its areal extent was limited it had graduated to a million city in terms of population. Having evolved as a colonial port city it had by 1931 become established as an industrial centre with the textile industry dominating its economy. The spatial organization of the activities revealed a basic concentric pattern with multifunctional uses in the core giving way to more specialized uses as one moved away from it in any direction. Migration induced by the employment opportunities played an important role in the growth of the city. However, the migrants were primarily from other parts of the then Bombay Presidency, particularly from areas in close proximity such as Ratanagiri, Surat, etc. Among the other states, only U.P. was important. Since the population was concentrated in the core area that was characterized by multifunctional uses, place of work and place of residence were in close proximity for a majority of the workers. This was probably necessitated due to intra-urban transport not being developed. Hence, though migration from other parts of the region was significant, mobility in terms of commuting was limited.

By 1961, the city had experienced a tremendous growth in population. This had necessitated the incorporation of the suburbs, so that the suburbanization process gained momentum, but subsequently the population growth in island city started to decline. On the other hand, Mumbai's position as a major industrial centre got strengthened. It was no longer only

textiles, which was the mainstay of the economy. There was diversification of the industrial base and chemical, mechanical and other industries gained importance. The economic base of Mumbai changed; services had emerged as a major economic activity in addition to industry and trade. Among the industries, textiles had declined in importance.

### Conclusion

The detailed case study of Mumbai suggests that the functional changes it has experienced are not unique. Decline in manufacturing and shift to service dominated employment has characterized many urban economies and has given rise to the postindustrial city (Lever 1991). In fact, this trend reached a peak in USA and UK in the 1970s, while in other countries such as Japan it was later. Many established industrial centers declined due to geographical dispersal.

However, service activities in turn give rise to new forms of agglomeration as a service economy necessitates a high degree of centralization. Sassen (1991) clearly demonstrates the new type of locational concentration needed for activities such as planning, top level management and specialized business services. These trends would be accentuated by globalization and consequent increased mobility of capital.

The effect of a dynamic manufacturing sector on workers has been well documented. Generally, it has raised wages and contributed to the formation of a middle class. Sassen (1991) and Lever (1996) opine that the new structure of economic activity would result in a polarization in occupational

distribution of workers resulting in greater incidence of jobs at high and low paying ends of the scale. This feature is already evident in Mumbai.

Most of the studies carried out of the urban economies that have entered the stage of a post-industrial service economy have been carried

out in the developed countries. It is not clear how the transition would affect metropolitan centers such as Mumbai in a developing country like India, especially since it is taking place coincidentally with globalization. The biggest problem in Mumbai is the informalisation of work, issues in governance and improvement in the quality of life of slum dwellers.

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