

Distribution and Growth of Population in Million Cities

This chapter attempts to examine the distribution and growth of population in million plus cities of India. It describes the current status, urban primacy, FDI inflows and their trends and growth pattern. The period of focus is 1901 to 2011.

Urbanisation is an increase in population and economic activities in the urban areas which leads to further development of towns and agglomerates to contain this rising population. It is a cause and effect of heightened economic progress in a region (Census of India, 2011). It plays an enormous role in social transformation and economic mobility all over the world. Infact, the process of urbanisation has been transforming the developing countries from 'countries of villages' to 'countries of cities and town'. The urban population today is growing between two to three times faster than the rural population and the greater part of it happens to be in the developing world (United Nations, 2011). Urban population of Africa and Asia is expected to double between 2000 and 2030. It will also continue to expand, but more slowly in Latin America and the Caribbean. This vast urban expansion in developing countries has global implications. Cities are already the locus of nearly all major economic, social, demographic and environmental transformations (UNFPA, 2007).

Asian cities are transforming over the past four decades, economically, physically, socially and from the viewpoint of information generation and transfer. They have succeeded in improving themselves by a large margin over this period and, by now some of them have catapulted themselves to the league of the most culturally dynamic, economically thriving and socially diverse cities in the world. China and India, along with other Asian countries and cities, have the potential and their strong and deep-rooted civilizations to lead the world to new vistas and horizons of development and prosperity (Yeung, 2011). The two most populated countries of Asia, China and India, are experiencing an urbanisation process of remarkable scale. However, the rapid growth of population in these countries is occurring mainly in cities at the cost of unplanned urbanisation. Southern Asia has the highest prevalence of overcrowding in the developing world that includes stress on land, habitat destruction, loss of biodiversity, water and air pollution etc. (Sarita and Sisodia, 2011).

The recent trends of urbanisation in developing countries point towards alarming growth of megacities and other metropolitan areas. This is true in the Indian context as well (Kumari, 1990). The first half of the 21st century is likely to be characterized by large scale

urban development. This is quite evident from the current trend and therefore Indian urban geographers should continue endeavouring to appreciate the causes and consequences of processes and patterns of urbanization in different geographical regions (Misra, 2008).

The urbanization process in India has continued to be top-heavy, oriented towards large cities. This is because of higher demographic growth in larger cities, attributable to both natural increase in the resident population and higher net in-migration. In turn, this is consistent with the fact that larger cities are generally more efficient in generating growth and attracting investments, thus attracting more population (Kundu, 2011). In India, the urbanisation has increased faster than expected. This has reversed the declining trend in the growth rate of the urban population observed during the 1980s and 1990s. For the first time since independence, the absolute increase in the urban population is higher than that in the rural population. This has huge implications for providing infrastructure and other civic amenities in urban areas (Bhagat, 2011).

The growth of metropolitan cities in India has been haphazard and largely unplanned. Population explosion is one of the most threatening issues facing contemporary India, particularly the Indian cities. One of the most important reasons for population explosion in the cities of India is the large scale rural to urban migration and rapid urbanization. Due to uncontrolled urbanization, environmental degradation has been occurring very rapidly and causing shortages of housing, worsening water quality, excessive air pollution, noise, dust and heat, expansion of slums, and the problems of disposal of solid wastes and hazardous wastes. The large metropolitan cities present a depressing picture today. The situation in metropolises like Mumbai, Kolkata, Chennai, Delhi, Bangalore, Kanpur, Hyderabad etc., is becoming worse year by year. The problems of finding space and housing for all have been intensified (Krishna, 1990; Maiti and Agrawal, 2005; Kumar et. al., 2009). The concept of high rise vertical expansion of cities rather than horizontal expansion is a better solution because of land becoming a costly unaffordable and scare resource. It helps to accommodate more population in less area (Macwan and Patel, 2004). Regional planning for large metropolitan cities is very necessary because of rapid urban development (Nath, 1988). The mega cities normally attract people from both rural and urban areas not only from within the country but also from abroad by providing employment opportunities in both formal and informal sectors. These are the major cities that to a great, extent decide the pattern of the Indian economy and policies on various issues (Premi, 2006). The newly emerged million

cities with a sound industrial base have grown at a much faster rate than the older mega cities. The result has been the lessening of the importance of the four traditional mega cities and their regional economy-driven urbanization (Lahiri Dutt, 2001; Sudhira and Gururaja, 2011).

A number of edited books have been published on million plus cities. The *Million Cities of India* edited by Misra (1998) has 40 chapters organized in two volumes. The book informs that India needs strategies for rural-urban integration; de-centralization of physical and social development planning; and environmental protection. It is one of the most comprehensive books on urbanization in Indian million cities. It has two volumes. Volume one consists of 19 chapters whereas volume second contains 21 chapters. The contributions analyse the cause and consequences of growth and global distribution of large cities and introduce the issues and problems that need urgent attention at national, regional and metropolitan levels; look at the urbanisation process in India since pre-historic times and bring to focus the contemporary problems requiring the attention of urban planners and policy makers; discuss the financial resources of metropolitan cities of India with focus on four mega cities i.e. Mumbai, Delhi, Calcutta and Chennai; account for the evolution, growth, problem and development of Hyderabad, Kanpur and Ahmadabad; and describe the characteristics of cities like Pune, Bangalore, Nagpur, Vadodara, Madurai, Vishakhapatnam, Varanasi, Vadodara, Patna and Ludhiana. In the end, it describes the logic, design and policy outline for sustainable urbanisation in India wherein the metropolitan cities would have space for a constructive and creative role in future. Management of metropolitan development in India is the main concern.

Another book on Urbanization, Urban Development and Metropolitan Cities in India, is edited by Nath in 2007. The book is an endeavour to study the process of urban growth, urban development constraints, urban policies and strategies to produce an integrated rural-urban model of urban development in India. It is divided into two sections. The first section deals with the urbanisation and urban development. The second section focuses on metropolitan cities. This section takes up specific problem-oriented issues like poverty, housing shortages and infrastructure inadequacies experienced by our few major metropolitan cities like Delhi, Mumbai, Kolkata and Chennai.

The latest book entitled 'Indian Cities: Managing Urban Growth' edited by Johnson (2011) is an endeavour to study the process of urban growth and managing it. This publication aims to highlight and explains 11 excellent current examples of managing India's

rapid urban growth. In this context, the case studies of nine cities could help inform governments and communities in other cities. Clearly, there is no simple solution to managing an extra 10 million people a year moving to India's cities. Because India is a diverse and varied country with a rich and diverse culture, the approach to managing city growth must also be diverse. The case studies therefore range from new satellite cities, to new urban hubs in existing cities, to renewing slum areas, to environmental and transport solutions for cities. To complement the case studies, two essays present the context of Indian urbanism. The first, at the beginning of the book, is by Professor Chetan Vaidya, Director of the NIUA, who explains current urban circumstances. He identifies eleven mega cities which will have population of over four million by 2026. Three of these will be the super mega cities of Mumbai, Delhi and Kolkata, each with projected population of over 20 million. Examples from each of the super mega cities are in the book as are case studies from seven of the eleven mega cities. This is followed by an essay by Sneha Palnikar from the AILSG on the Millennium Development Goals adopted by the United Nations and how Indian cities are responding to those goals. Her major focus is on Goal 7: Environmental Sustainability. All the nine chapters focus on individuals who are driving change in urban India by undertaking specific projects on the ground.

A series of 'The State of the World's Cities Report' published by UN Habitat from 2001, focuses on different issues. The aim of The State of the World's Cities report series is to provide information on urban conditions and trends around the world and, in doing so, on progress in the implementation of the Habitat Agenda and towards the realizations of the Millennium Development Goals and Targets on slums, water and sanitation. The first issue of the report, released in 2001, comprehensively reviewed urban conditions, emerging policies and best practices covering five main topics: urban shelter; urban society; urban environment; urban economy; and urban governance. The second report of 'The State of the World's Cities 2004/2005: Globalization and Urban Culture' in this series adopts a thematic approach and focuses on globalization and urban culture. It discusses the socio-economic impacts of globalization on cities that are relevant to urban development, including cultural impacts, as well as metropolitanization, international migration, urban poverty, urban governance and urban planning. In particular, the report highlights the challenges of multicultural existence within cities, in the context of globalization, and the need for an urban culture of inclusion. The edition of the State of the World's Cities Report 2006/07 provides an overview of a range of issues (employment, urban poverty, lack of education, environmental degradation,

basic services and housing provision) those link cities, slums and the Millennium Development Goals. The report highlights three inter-related issues: framework for linking the opportunities provided by cities with improved quality of life, governments' capacity to speed up progress in reducing urban poverty and inequality and in reversing current trends in slum formation and improving the living conditions of slum dwellers (housing, tenure, infrastructure and access to basic services). This report unfolds a new urban reality that shows how poor living conditions impact the world's slum dwellers: slum dwellers die earlier, experience more hunger, have less education, have fewer chances of employment in the formal sector and suffer more from ill-health than the rest of the inhabitants of cities.

The third edition of the State of the World's Cities Report 2008/2009 Harmonious Cities was published in 2008. The data and analysis contained in this report are intended to improve our understanding of how cities function and what we, as a global community, can do to increase their livability and unity. In that spirit, this report is useful for policymakers, mayors, citizens' groups and all those concerned with the welfare of our urbanizing world. The findings presented in this report clearly show that policies that promote energy-efficient public transport, reduce urban sprawl and encourage the use of environmentally-friendly sources of energy can reduce a city's ecological footprint and carbon emissions significantly. In fact, cities provide a real opportunity to mitigate and reverse the impact of global climate change. Properly planned cities provide both the economies of scale and the population densities that have the potential to reduce per capita demand for resources such as energy and land. Many cities are also coming up with innovative institutional reforms to promote prosperity while minimizing inequity and unsustainable use of energy. Enlightened and committed political leadership combined with effective urban planning, governance and management that promote equity and sustainability are the critical components to the building of harmonious cities.

The 2010/11 State of the World's Cities Report, "Bridging the Urban Divide" examines the social, economic, cultural and political drivers of urban poverty and deprivation. It argues that much inequality and injustice stems from inadequate policy-making and planning by local authorities and central governments alike. Typical remedies include removing barriers that prevent access to land, housing, infrastructure and basic services, and facilitating rather than inhibiting participation and citizenship. The report also emphasizes that lasting gains are best achieved through a combination of local action and national enabling policies. As we grapple with old and new challenges in a rapidly urbanizing

world, this timely report can help inform research, policy dialogue and development planning for years to come. In that sense, this report contributes to bridge the gap between scientific information and societal action, which is a simple, but fundamental requisite, to promote equity and sustainability for more harmonious cities.

The State of the World's Cities 2012/13 Prosperity of Cities report presents compelling evidence and factors which have strongly impacted on cities. The report proposes a fresh approach to prosperity, one that is holistic and integrated and which is essential for the promotion of a collective well-being and fulfilment of all. This new approach does not only respond to the crises by providing safeguards against new risks, but it also helps cities to steer the world towards economically, socially, politically and environmentally prosperous urban futures. In order to measure present and future progress of cities towards the prosperity path, the report introduces a new tool – the City Prosperity Index – together with a conceptual matrix, the Wheel of Prosperity, both of which are meant to assist decision makers to design clear policy interventions. To varying degrees of intensity, cities have been hit by different crises. However, this report tells us that cities can also be a remedy to the regional and global crises. In this report, UN-Habitat advocates for a new type of city – the city of the 21st century – that is a ‘good’, people centred city, one that is capable of integrating the tangible and more intangible aspects of prosperity, and in the process shedding off the inefficient, unsustainable forms and functionalities of the city of the previous century. This report serves as a useful tool in the necessary redefinition of the urban policy agenda at local, national and regional levels. It will provide valuable insights in the search for urban prosperity and related policy changes in the years ahead. The report is a bridge between research and policy, with inputs from more than 50 cities, individual scientists and institutions, particularly the Directorate-General for Regional Policy from the European Commission, and other partner institutions around the world that participated actively in the preparation of this study.

The concern for the cities at different spatial scales is evident from the surveyed literature. It is imperative to understand the trend and pattern of urban at the world level before focusing on the Indian context.

World urbanisation and million cities: 1950-2011

Urbanization is the process of transition from a rural to a more urban society. Statistically, urbanization reflects an increasing proportion of the population living in settlements defined as urban, primarily through net rural to urban migration. The share of the world's population

living in urban areas increased from just 3 percent in 1800 to 14 percent in 1900. By 1950, it had reached 30 percent (UNFPA, 2007). In 2011, for the first time, more than half of the globe's population (52%) is living in towns and cities. The number and proportion of urban dwellers will continue to rise quickly. Urban population is growing very fast and most of this growth is in developing countries. The urban population of Africa, Asia, Latin America and the Caribbean has rapidly increased at a rate of 3.8 percent, 3.2 percent and 2.6 percent respectively in the last four decades ending 2011. Historically, the process of rapid urbanization started first in today's more developed regions. In 1920, less than 30 per cent of their population was urban and by 1950 majority of their population was living in urban areas (Table 2.1). In 2011, high levels of urbanization with 78 percent inhabitants living in urban areas were noticed in developed regions of the world. These mainly include Australia, New Zealand, and North America and European countries. In contrast, only 47 percent people live in urban areas in the less developed regions. Interestingly, among the less developed regions, Latin America and the Caribbean have an exceptionally high level of urbanization (79 percent) in comparison to Europe. It is observed that urban population will continue to rise and concentrate in the developing countries in future.

Table 2.1: Trend of urban population in major regions of the World: 1950-2011

Major Areas	Population (in millions)			Percent Urban population			Rate of Urbanization (percent)		Average Annual rate of change	
	1950	1970	2011	1950	1970	2011	1950-1970	1970-2011	1950-1970	1970-2011
Africa	33	87	414	14.4	23.5	39.6	2.5	1.3	4.8	3.8
Asia	245	506	1895	17.5	23.7	45.0	1.5	1.6	3.6	3.2
Europe	281	412	539	51.3	62.8	72.9	1.0	0.4	1.9	0.7
Latin America and the Caribbean	69	163	472	41.4	57.1	79.1	1.6	0.8	4.3	2.6
North America	110	171	286	63.9	73.8	82.2	0.7	0.3	2.2	1.3
Oceania	8	14	26	62.4	71.2	70.7	0.7	-0.02	2.8	1.6

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization Prospects, 2011.

Equally impressive is the story of growth in the number and population residing in million cities of the world from 1950 to 2011 (Table 2.2). Cities all over the world with more than million inhabitants each have increased from 75 in 1950 to 456 in 2011 and the percent of world urban population residing in these cities has increased from 23.7 percent to 39 percent

respectively (Fig. 2.1). However, the distribution of million cities and their population varies among the major areas. In Northern America and Oceania regions, more than half of the urban population is markedly concentrated in million cities whereas it is 44 percent in Latin America and Caribbean and 40 percent in Asia. In Europe and Africa 23 and 31 percent urban dwellers respectively live in million plus cities (Table 2.3).

Table 2.2: Growth of million cities in the World: 1950-2011

Years	Number of Million Cities	Population (in millions)	Percent increase	Population of Million Cities as percent of World's	
				Total Population	Urban Population
1950	75	176.8	-	6.9	23.7
1975	161	454.3	156.9	11.1	29.5
2000	354	1027.3	126.1	16.8	35.9
2011	456	1416.8	37.9	20.3	39.0

Source: Computed from Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Urbanization Prospects, 2011

Table 2.3: Million cities in the World's major regions: 1950-2011

Region	No. of Million Cities				Population residing in million cities (in millions)				Share of Million Cities in Urban Population			
	1950	1975	2000	2011	1950	1975	2000	2011	1950	1975	2000	2011
Africa	2	9	37	51	3.53 (33.0)	19.3 (107.8)	86.6 (288.4)	140.3 (413.9)	10.7	17.9	30.0	33.9
Asia	26	61	167	231	55.7 (245.1)	186.3 (598.1)	522.9 (1392.2)	764.0 (1895.3)	22.8	31.1	37.6	40.3
Europe	23	38	53	53	55.6 (280.6)	90.2 (441.2)	116.2 (514.6)	124.7 (539.0)	19.8	20.5	22.6	23.1
Latin America and the Caribbean	8	20	50	63	18 (69.3)	67.1 (196.3)	160.5 (393.6)	207.7 (472.2)	26.0	34.2	40.8	44.0
North America	14	31	41	52	40.9 (109.7)	85.9 (179.0)	128.5 (247.9)	165.2 (285.8)	37.3	48.0	51.8	57.8
Oceania	2	2	6	6	3.02 (7.9)	5.5 (15.5)	12.7 (21.9)	14.8 (26.3)	38.2	35.7	57.7	56.5
World	75	161	354	456	176.8 (745.5)	454.3 (1537.7)	1027.3 (2858.6)	1416.8 (3632.5)	23.7	29.5	35.9	39.0

Source: Computed from Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Urbanization Prospect, 2011

Note: Population in parentheses indicate the urban population of the region.

In terms of number, million cities are growing very fast in developing countries. For example, there were only two million cities in Africa, 8 in Latin America and the Caribbean

and 26 in Asia in 1950. But their number markedly increased to 51, 63 and 231 respectively in these regions by 2011 (Table 2.3). In developed world million cities are continuously increasing but in slow speed in comparison to the developing countries.

Table 2.4: Urban situation in India: 1901-2011

Census Years	Number of Towns/UAs	Urban population (in millions)	Percent of total population	Decennial Growth (in percent)
1901	1827	26	10.8	—
1911	1815	26	10.3	0.4
1921	1949	28	11.2	8.3
1931	2072	34	12.0	19.1
1941	2250	44	13.9	32.0
1951	2843	62	17.3	41.4
1961	2365	79	18.0	26.4
1971	2590	109	19.9	38.2
1981	3378	159	23.3	46.1
1991	4689	217	25.7	36.5
2001	5161	285	27.8	31.1
2011	7935	377	31.2	31.8

Source: 1. Census of India, 1991. Part-II A (ii) – Towns and Urban Agglomerations classified by population in 1991 with variation since 1901.

2. Census of India, 2011: Provisional Population Totals, New Delhi.

Indian urbanisation and million cities: 1901-2011

India is at present the second most populous country after China in the world. The world population projections indicate that India's total population will be doubled over the next 30 years and is expected to overtake China to become the most populous country of the world. Population growth in India was slow during the first half of the 20th century; however growth accelerated after its independence. The level of urbanisation has increased from 10.8 percent in 1901 to 31.2 percent in 2011 witnessing a three-fold increase in more than a century (Table 2.4). The main reason for this slow urbanisation in India is the high rate of rural population growth. The population of India has increased from 238 million in 1901 to 1210 million in 2011. Of this, the rural population stands at 833.1 million and the urban population 377.1 million. In absolute numbers, the increase has been 90.5 million and 91.0 million persons in rural and urban areas respectively in the last decade. It is for the first time that increase in urban population is more than the rural. The growth rate of population in the last decade was 12.2% and 31.8% in rural and urban areas respectively with the average at 17.6 percent.

Table 2.5: Number of UAs/Towns and Out Growths (OGs), 2001-2011

Type of Towns/UAs/OGs	Number of towns	
	2011	2001
Statutory Towns	4,041	3,799
Census Towns	3,894	1,362
Urban Agglomerations	475	384
Out Growths	981	962

Source: Provisional Population Totals 2011, Census of India, New Delhi.

Among the states and union territories, the National Capital Territory of Delhi is the most urbanized with 97.5 percent urban population followed by the Union Territories of Chandigarh (97.3 per cent) and Lakshadweep (78.1 per cent). Goa is most urbanised state (62.2) of the country followed by Mizoram (51.5 percent), Tamil Nadu (48.5 percent) and Kerala (47.7 percent). The hill State of Himachal Pradesh is the least urbanized state (10.0 per cent) among all the states/union territories as per Census 2011 followed by Bihar (11.3 percent) and Assam (14.1 percent). Industrially advanced states of Maharashtra and Gujarat are moderately urbanised: 45.2 and 42.6 percent respectively.

Table 2.6: The break-up of class-I cities: 2011

Cities population	No. of Cities	Cities	Total population	Percent Population
More than 10 million	3	Greater Mumbai, Kolkata and Delhi	48841662	30.4
5-10 million	5	Chennai, Bangalore, Hyderabad, Ahmadabad and Pune	36346965	22.6
2-5 million	10	Surat, Jaipur, Kanpur, Lucknow, Nagpur, Ghaziabad, Indore, Kochi, Coimbatore, Patna, Kozhikode	28850634	18.0
1-2 million	34		46686245	29.1
Total Cities with Million plus population	53		160725506	100
0.5 million to 1 million	42			
1 lakh to 5 lakh	372			
Total Class-I Cities	468			

Source: Provisional Population Totals 2011, Census of India, New Delhi.

In India, growth of urban population during the past decade is reflected in higher growth in metro cities. With economic liberalization and expected higher economic growth, rate of urbanization in India in coming decades is likely to increase. Class I UAs/Towns which have at least 1,00,000 persons have increased from 24 in 1901 to 468 in 2011. The current census enumerated 264.9 million people, constituting 70% of the total urban population, living in Class I UAs/Towns. The proportion and growth has increased

continuously in class I UAs/Towns over the census. The graduation of number of urban centers from lower population size categories to class I cities has resulted in top-heavy structure of urban population in India. In the remaining classes of towns the growth has been nominal. The number of towns has increased by 2774 since last Census. Only 242 statutory towns have been added in the last decade in comparison to 2532 Census towns (Table 2.5). Many of these towns are part of UAs and the rest are independent towns. The total number of Urban Agglomerations/Towns that constitutes the urban frame in the country in 2011 is 7935, which has grown from 1827 in 1901.

Table 2.7: Configuration of million cities, 2011

State/Union territory	City with Million plus Population	No. of Million Cities	Million Cities' Population	State Urban Population	% Share of Million City	States % urban Population
Kerala	Kochi UA, Kozhikode UA, Thrissur UA, Malappuram UA, Thiruvananthapuram UA, Kannur UA, Kollam UA	7	12144251	15932171	76.2	47.7
Uttar Pradesh	Kanpur UA, Lucknow UA, Varanasi UA, Agra UA, Meerut UA, Allahabad UA, Ghaziabad UA	7	14005284	44470455	31.5	22.3
Maharashtra	Greater Mumbai UA, Pune UA, Nagpur UA, Nashik UA, Vasai Virar City (M Corp.), Aurangabad UA	6	29937422	50827531	58.9	45.2
Gujarat	Ahmadabad UA, Surat UA, Vadodara UA, Rajkot UA	4	14147756	25712811	55.0	42.6
Madhya Pradesh	Indore UA, Bhopal UA, Jabalpur UA, Gwalior UA	4	6422384	20059666	32.0	27.6
Tamil Nadu	Chennai UA, Coimbatore UA, Madurai UA, Tiruchirappalli UA	4	13333624	34949729	38.2	48.5
Andhra Pradesh	Hyderabad UA, Visakhapatnam (M Corp.)Vijayawada UA	3	10972867	28353745	38.7	33.5
Jharkhand	Jamshedpur UA, Dhanbad UA, Ranchi UA	3	3661181	7929292	46.2	24.1
Rajasthan	Jaipur (M Corp.), Jodhpur UA, Kota (M Corp.)	3	5214541	17080776	30.5	24.9
Chhattisgarh	Raipur UA, Durg-Bhilainagar UA	2	2188643	5936538	36.9	23.2
Punjab	Ludhiana (M Corp.), Amritsar UA	2	2799594	10387436	27.0	37.5
West Bengal	Kolkata UA, Asansol UA	2	15357555	29134060	52.7	31.9
Bihar	Patna UA	1	2046652	11729609	17.5	11.3
Chandigarh	Chandigarh UA	1	1025682	1025682	100.0	97.3
Haryana	Faridabad (M Corp.)	1	1404653	8821588	15.9	34.8
Jammu & Kashmir	Srinagar UA	1	1273312	3414106	37.3	27.2
Karnataka	Bangalore UA	1	8499399	23578175	36.1	38.6
Delhi	Delhi UA	1	16314838	16333916	99.9	97.5
India		53	160749638	340977286	47.1	31.2

Source: Calculated from Provisional Population 2011 Census of India, New Delhi

Million cities, 2011

Ongoing increase in the number of metropolises, that is, cities whose population exceeds one million inhabitants is tremendous. In India not only the size of million cities has increased

dramatically but also their number. These fifty three million cities are located in 18 States and Union Territories as per 2011 census. Their combined population is 16,07,25,506 which is 42.6 percent of the total urban population of the country (Table 2.8). The population of these million cities ranges from 10,01,365 in Kota (Rajasthan state) to 1,84,14,288 in Greater Mumbai (Maharashtra state). In other words, the largest million city is 18 times the size of the smallest in the hierarchy. 9 million cities are spread over more than one district but within the same state. These account for 47.1 percent population of the total 53 million cities. These are 1) Kolkata spread over the districts of Kolkata, South Twenty Four Parganas, North Twenty Four Parganas, Nadia, Harora and Hooghly in West Bengal, 2) Delhi covering the districts of Central Delhi, East Delhi, New Delhi, North Delhi, North-East Delhi, North-West Delhi, South Delhi, South-West Delhi, West Delhi, 3) Greater Mumbai constituting the districts of Mumbai, Mumbai (Suburban) and Thane in Maharashtra, 4) Hyderabad including the districts of Hyderabad, Rangareddi and Medak in Andhra Pradesh, 5) Ahmadabad covering the districts of Ahmadabad and Gandhinagar in Gujarat, 6) Chennai incorporating the districts of Chennai, Thiruvallur and Kancheepuram in Tamilnadu, 7) Vijayawada spread over the districts of Krishna and Guntur in Andhra Pradesh and 8) Jamshedpur including the districts of Purbi Singhbhum and Paschimi Singhbhum in Jharkhand and 9) Srinagar stretched over Badgam and Srinagar.

At the state level, greater concentration of million plus cities is found in Uttar Pradesh and Kerala (seven each) followed by Maharashtra (six), Tamil Nadu, Gujarat and Madhya Pradesh containing four each. Andhra Pradesh, Jharkhand and Rajasthan have three each cities with million plus inhabitants. The corresponding number is two in Chhattisgarh, Punjab and West Bengal. The states of Bihar, Haryana, Delhi, Karnataka, Chandigarh, Jammu & Kashmir contain one million plus city each (Table 2.7). The rest of the states/union territories are without any million plus city.

Among 53 million plus cities 32 are located along the golden quadrilateral or north-south and east-west corridors and remaining are located on the National and State Highways junction. Physiographically, 15 million plus cities are located in the Great Indian Plains, 18 are situated in coastal areas and 19 are positioned in the peninsular region. North western Himalayas have only Srinagar as million plus city whereas North-eastern region is without any million city (Fig. 2.2). Largely those towns have grown into million plus cities that have with enjoyed some initial advantage and better geographic location.

Table 2.8: Million cities, 2011

Name of UA/M.Corp	State	Population 2011 (numbers)	Absolute increase 2001-2011 (numbers)	Annual Exponential Growth Rate (2001-11)
Greater Mumbai UA	Maharashtra	1,84,14,288	1979902	1.1
Delhi UA	NCT of Delhi	1,63,14,838	3437368	2.4
Kolkata UA	West Bengal	1,41,12,536	906839	0.7
Chennai UA	Tamil Nadu	86,96,010	2135768	2.8
Bangalore UA	Karnataka	84,99,399	2797953	3.9
Hyderabad UA	Andhra Pradesh	77,49,334	2007298	2.9
Ahmadabad UA	Gujarat	63,52,254	1827241	3.4
Pune UA	Maharashtra	50,49,968	1289332	2.9
Surat UA	Gujarat	45,85,367	1773753	4.9
Jaipur (M Corp.)	Rajasthan	30,73,350	750775	2.8
Kanpur UA	Uttar Pradesh	29,20,067	204512	0.7
Lucknow UA	Uttar Pradesh	29,01,474	655965	2.6
Nagpur UA	Maharashtra	24,97,777	368277	1.6
Ghaziabad UA	Uttar Pradesh	23,58,525	1390269	8.9
Indore UA	Madhya Pradesh	21,67,447	650529	3.6
Coimbatore UA	Tamil Nadu	21,51,466	690327	3.9
Kochi UA	Kerala	21,17,990	762018	4.5
Patna UA	Bihar	20,46,652	348676	1.9
Kozhikode UA	Kerala	20,30,519	1150272	8.4
Bhopal UA	Madhya Pradesh	18,83,381	424965	2.6
Thrissur UA	Kerala	18,54,783	1524661	17.3
Vadodara UA	Gujarat	18,17,191	326146	1.9
Agra UA	Uttar Pradesh	17,46,467	415128	2.7
Visakhapatnam UA	Andhra Pradesh	17,30,320	384382	2.5
Malappuram UA	Kerala	16,98,645	1528236	22.9
Thiruvananthapuram UA	Kerala	16,87,406	797771	6.4
Kannur UA	Kerala	16,42,892	1144685	11.9
Ludhiana (M Corp.)	Punjab	16,13,878	215411	1.4
Nashik UA	Maharashtra	15,62,769	410443	3.1
Vijayawada UA	Andhra Pradesh	14,91,202	451684	3.6
Madurai UA	Tamil Nadu	14,62,420	259325	1.9
Varanasi UA	Uttar Pradesh	14,35,113	231152	1.8
Meerut UA	Uttar Pradesh	14,24,908	263192	2.0
Faridabad (M Corp.)	Haryana	14,04,653	348715	2.9
Rajkot UA	Gujarat	13,90,933	387918	3.3
Jamshedpur UA	Jharkhand	13,37,131	232418	1.9
Srinagar UA	Jammu & Kashmir	12,73,312	285102	2.5
Jabalpur UA	Madhya Pradesh	12,67,564	169564	1.4
Asansol UA	West Bengal	12,43,008	175639	1.5
Vasai Virar City (M Corp.)	Maharashtra	12,21,233	1046837	19.5
Allahabad UA	Uttar Pradesh	12,16,719	174490	1.6
Dhanbad UA	Jharkhand	11,95,298	129971	1.5
Aurangabad UA	Maharashtra	11,89,376	296893	2.9
Amritsar UA	Punjab	11,83,705	179788	1.7
Jodhpur UA	Rajasthan	11,37,815	276997	2.8
Ranchi UA	Jharkhand	11,26,741	263246	2.7
Raipur UA	Chhattisgarh	11,22,555	422442	4.7
Kollam UA	Kerala	11,10,005	729914	10.7
Gwalior UA	Madhya Pradesh	11,01,981	236433	2.4
Durg-Bhilainagar UA	Chhattisgarh	10,64,077	136213	1.4
Chandigarh UA	Chandigarh	10,25,682	217167	2.4
Tiruchirappalli UA	Tamil Nadu	10,21,717	155363	1.7
Kota (M Corp.)	Rajasthan	10,01,365	298215	3.5
Total		16,07,25,506	39667580	2.8

Source: Provisional Population 2011 Census of India, New Delhi

Urban primacy in India, 2011

Urban primacy is a measure of the supremacy of the largest city in the total urban situation of a country or a region. The issue is concerned with the ‘law of the primate city’. It was first proposed by the geographer Mark Jefferson in 1939. He defined that ‘a country's leading city is always disproportionately large and exceptionally expressive of national capacity and feeling. The primate city is commonly at least twice as large as the next largest city and more than twice as significant’. There are several measures of urban primacy. The most common measure is to calculate the ratio between the population size of the first and second ranking cities. Another method is to calculate the share of the first city in the total urban population of the country or state. This is to place the leading city in the context of the entire urban system. The advantage in opting for the last method here lies in that fact that it takes the whole urban system into account (National Institute of Urban Affairs, 1998).

In Indian context, urban primacy can be calculated country as a whole or regional level. The present study includes both national and regional level. Census of India, 2011 has categorised India into six regions. The current census of 2011 data shows that Mumbai is the largest million plus cities which account 4.9 percent of the urban population of the country. It is 1.1 times of the second largest metropolitan city of Delhi which is not an example of urban primacy at national level.

Table 2.9: India: Urban primacy, 2011

Census Regions	Urban Pop.	First Largest City	Pop. 2011	Second Largest City	Pop. 2011	% share of largest city in total urban pop of region	Ratio b/w first & second largest city	% Urban Population
Northern	57752208	Delhi UA	16314838	Jaipur (M Corp.)	3073350	28.3	5.3:1	36.4
Central	73557828	Kanpur UA	2920067	Lucknow UA	2901474	3.9	1.0:1	23.9
Eastern	56076344	Kolkata UA	14112536	Patna UA	2046652	25.2	6.9:1	20.7
Western	76882751	Greater Mumbai UA	18414288	Ahmadabad UA	6352254	23.9	2.9:1	44.4
Southern	104620560	Chennai UA	8696010	Bangalore UA	8499399	8.3	1.0:1	41.2
North-East	8216069	Guwahati UA	968549	Imphal UA	414288	11.8	2.3:1	18.3
India	377105760	Greater Mumbai UA	18414288	Delhi UA	16314838	4.9	1.1:1	31.2

Source: Calculated from Provisional Population Totals, 2011 Census of India, New Delhi.

At the regional level, picture of urban primacy is quite different. Urban primacy is very high in the eastern and northern regions where Kolkata and Delhi mega cities are largest nearly seven and five times from the second largest cities of Patna and Jaipur. Greater Mumbai and Guwahati reveal urban primacy in western and north-east region. Greater Mumbai contains three times more population than the second largest city of the region i.e.

Ahmadabad. Likewise, Guwahati contains two times more population than Imphal. By contrast, urban primacy is low in the central and southern region (Fig. 2.3). In the central region, 24 percent urban population lives in urban areas. The region is dominated by Kanpur and Lucknow million plus cities. Kanpur is an industrial city and holds 2.9 million population whereas Lucknow is the state capital of Uttar Pradesh constituting 2.9 million population (Table 2.9). In the southern region, Chennai and Bangalore comprise of nearly 8.7 and 8.5 million population presenting no primacy in the region.

Per capita income and Foreign Direct Investment (FDI)

The pattern of urbanisation and growth of urban population reveals a strong correspondence with per capita income of the states and the flow of FDI. The level of urbanisation shows a strong positive correlation ($r=0.76$) with per capita income. Also the correlation between per capita flow of FDI and infrastructure indicators like road, railway and telecom is positive and very strong. These investments directly or indirectly have been instrumental in infrastructure development (Sivaramakrishnan et. al., 2005). The states which are providing better facilities have been able to attract higher FDI. Thus, urban infrastructural development in the country has facilitated FDI which has also led to a widening of regional inequality in Indian states. People tend to migrate to those states which provide better opportunity for employment and FDI plays an important role in this field of Indian economy that can be seen from the change of per capita NSDP from 2004 to 2012 (Fig. 2.4).

Table 2.10: Growth of million cities: 1901-2011

Census Years	UA/M.Corp	Population in millions	Percent increase	Population of Million Cities as % of India's population	Population of Million Cities as % of India's Urban Population
1901	1	1.5	-	0.6	5.8
1911	2	2.8	82.8	1.1	10.7
1921	2	3.1	13.4	1.3	11.1
1931	2	3.4	8.9	1.2	10.2
1941	2	5.3	5.7	1.7	12.0
1951	5	11.8	21.3	3.3	18.8
1961	7	18.1	54.0	4.1	22.9
1971	9	27.8	53.8	5.1	25.5
1981	12	42.1	51.3	6.2	26.4
1991	23	70.7	67.8	8.4	32.5
2001	35	107.8	52.8	10.5	37.9
2011	53	160.7	48.9	13.3	42.6

Source: 1. Census of India, 1991. Part-II A (ii) – Towns and Urban Agglomerations classified by population in 1991 with variation since 1901.

2. Census of India, 2011: Provisional Population Totals, New Delhi.

Growth of million cities: 1901 - 2011

Urbanisation has become a major issue in 21st century and growth of million plus cities is the major concern. Population explosion is one of the most threatening issues facing contemporary large cities which are resulting in large scale rural-urban migration and rapid urbanisation. In this context, census data from 1901 to 2001 and existing literature has been used to concentrate on some aspects of population growth in the metropolitan cities of India. In order to comprehend the growth pattern of million plus cities, three time periods have been identified: British period (before 1951), post-Independence to initiation of economic liberalisation (1951-1991) and post-liberalisation (1991-2011) period.

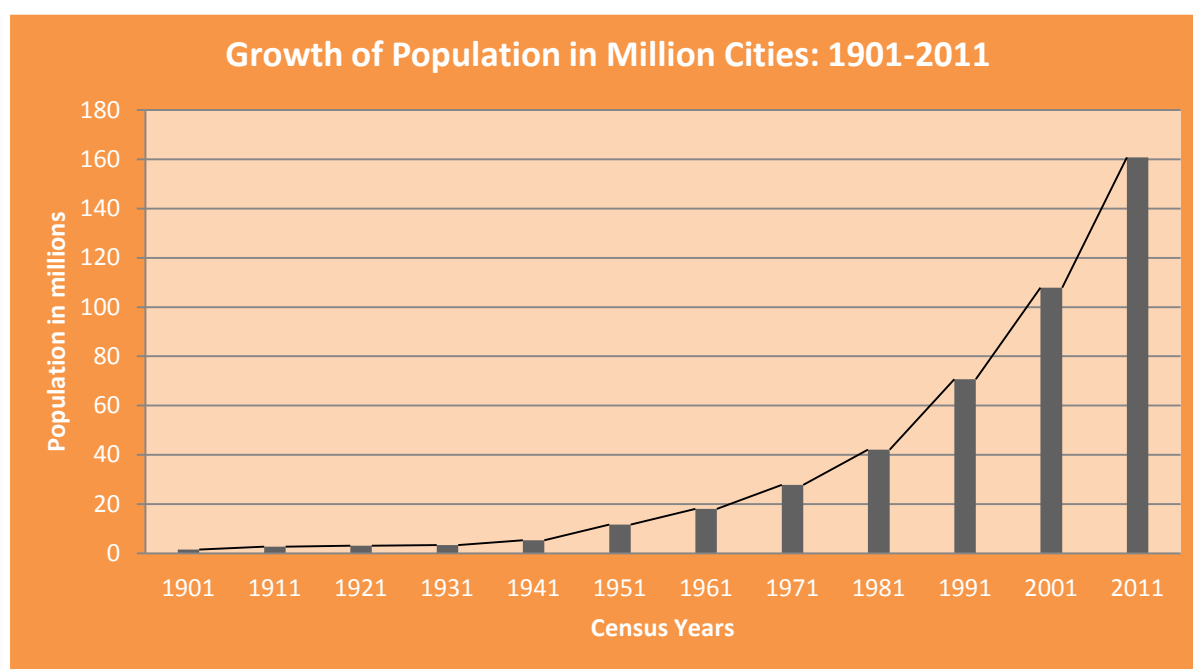


Fig 2.5: Growth of population in million cities from 1901-2011

British period (before 1951)

Since historic times, urbanisation has been instrumental in structuring the spatial landscape of the Indian cities. During British rule, urbanisation was characterised by selective development of a few port cities and their hinterlands. Ramachandran (2007) has associated the urbanisation of this period as a political process with the rise and fall of British Kingdom and dynasties. Cities like Kolkata, Mumbai, Chennai and Hyderabad were developed to facilitate trade of raw material for the imperial power whereas Delhi functioned as an administrative city. Kolkata was only million plus city in India in 1901. Mumbai was added

to this category in 1911 and the number of such cities remained constant at two till 1941. During this period urban population growth was very slow. In the beginning of the century Kolkata and Mumbai recorded slow growth rate of less than 25 percent but after 1931 decade both have recorded high growth rate. Kolkata recorded 69.34 and 28.94 percent in 1931-41 and 1941-1951 whereas Mumbai recorded 32.7 and 84.1 percent respectively.

Of the 53 cities that have upgraded to million plus status, 48 cities were in existence in 1901 also. These cities contained 12 percent of the total urban population of the country. This period saw frequent epidemics plague, cholera, malaria, small pox and influenza that not only took a toll of millions of human lives but also disrupted the economic life of urban and rural areas alike. The decline of India's exports of cotton, leather, sugar and coffee in the face of growing international competition was also responsible for arresting the growth of many market, manufacturing and port towns (Raj Bala, 1986).

The annual exponential growth rate of urban population during British period (1901-1951) was 2.2 percent which was one of the lowest in the history of Indian census (Table 2.12). It ranged between 4.7 percent in Asansol to 0.6 percent in Bhopal. Northern region except in Delhi, Ludhiana and Gwalior, the annual growth rate was below 2.0 percent. However, it was more than 2.0 percent in Mumbai, Kolkata and Delhi. Ranchi was the only city to register a growth rate of more than 4 percent (Fig. 2.6).

Post-Independence to initiation of Economic Liberalisation period (1951-1991)

After Independence, urbanisation had entered a new and important phase. In contrast with the British Period that witnessed a period of urban stagnation, the post-Independence period is notable for rapid urbanisation, particularly for one lakh and million plus cities. It is characterised by uneven distribution with few larger metropolitan and mega cities growing at a faster rate and containing disproportionate large share of urban population in India (Ramachandran, 2007). Massive public-sector investment in selected pockets, especially during the Second and Third Five Year Plans (1955–65), helped in restructuring the urban hierarchy (Kundu, 2011). Prakash Rao (1983) linked this rapid urbanisation to the advent of industrialisation and later sustained through the development of the tertiary sector. The share of urban population had not extended much in the backward regions of several states like Bihar, Rajasthan, Orissa, Madhya Pradesh, Andhra Pradesh and many North-eastern states. It

Table 2.11: Million cities: 1901-2011 (in millions)

Million Plus Cities	State/Union territory	1901	1911	1951	1961	1971	1981	1991	2001	2011
Kolkata UA	West Bengal	1.5	1.8	4.7	6	7.4	9.2	11	13.2	14.1
Greater Mumbai UA	Maharashtra		1	3	4.2	6	8.3	12.6	16.4	18.4
Delhi UA	NCT of Delhi			1.4	2.4	3.7	5.7	8.4	12.9	16.3
Chennai UA	Tamil Nadu			1.5	1.9	3.2	4.3	5.4	6.6	8.7
Hyderabad UA	Andhra Pradesh			1.1	1.3	1.8	2.6	4.3	5.7	7.7
Ahmadabad UA	Gujarat				1.2	1.8	2.6	3.3	4.5	6.4
Bangalore UA	Karnataka				1.2	1.7	2.9	4.1	5.7	8.5
Kanpur UA	Uttar Pradesh					1.3	1.6	2	2.7	2.9
Pune UA	Maharashtra					1.1	1.7	2.5	3.8	5
Lucknow UA	Uttar Pradesh						1	1.7	2.2	2.9
Nagpur UA	Maharashtra						1.3	1.7	2.1	2.5
Jaipur (M Corp.)	Rajasthan						1	1.5	2.3	3.1
Surat UA	Gujarat							1.5	2.8	4.6
Kochi UA	Kerala							1.1	1.4	2.1
Coimbatore UA	Tamil Nadu							1.1	1.5	2.2
Vadodara UA	Gujarat							1.1	1.5	1.8
Indore UA	Madhya Pradesh							1.1	1.5	2.2
Patna UA	Bihar							1.1	1.7	2
Madurai UA	Tamil Nadu							1.1	1.2	1.5
Bhopal UA	Madhya Pradesh							1.1	1.5	1.9
Visakhapatnam (M Corp.)	Andhra Pradesh							1.1	1.3	1.7
Varanasi UA	Uttar Pradesh							1	1.2	1.4
Ludhiana (M Corp.)	Punjab							1	1.4	1.6
Agra UA	Uttar Pradesh								1.3	1.7
Meerut UA	Uttar Pradesh								1.2	1.4
Nashik UA	Maharashtra								1.2	1.6
Jabalpur UA	Madhya Pradesh								1.1	1.3
Jamshedpur UA	Jharkhand								1.1	1.3
Asansol UA	West Bengal								1.1	1.2
Dhanbad UA	Jharkhand								1.1	1.2
Faridabad (M Corp.)	Haryana								1.1	1.4
Allahabad UA	Uttar Pradesh								1	1.2
Amritsar UA	Punjab								1	1.2
Vijayawada UA	Andhra Pradesh								1	1.5
Rajkot UA	Gujarat								1	1.4
Ghaziabad UA	Uttar Pradesh									2.4
Kozhikode UA	Kerala									2
Thrissur UA	Kerala									1.9
Malappuram UA	Kerala									1.7
Thiruvananthapuram UA	Kerala									1.7
Kannur UA	Kerala									1.6
Srinagar UA	Jammu & Kashmir									1.3
Vasai Virar City (M Corp.)	Maharashtra									1.2
Aurangabad UA	Maharashtra									1.2
Jodhpur UA	Rajasthan									1.1
Ranchi UA	Jharkhand									1.1
Raipur UA	Chhattisgarh									1.1
Kollam UA	Kerala									1.1
Gwalior UA	Madhya Pradesh									1.1
Durg-Bhilainagar UA	Chhattisgarh									1.1
Chandigarh UA	Chandigarh									1
Tiruchirappalli UA	Tamil Nadu									1
Kota (M Corp.)	Rajasthan									1

Source: 1. Census of India, 1991. Part-II A (ii) – Towns and Urban Agglomerations classified by population in 1991 with variation since 1901.

2. Census of India, 2011: Provisional Population Totals, New Delhi.

was mainly progressive in industrially and agriculturally state of Maharashtra, Gujarat, Tamil Nadu, Karnataka, Kerala, Uttar Pradesh, Punjab and Haryana.

The proportion of urban population living in the million plus cities had increased progressively from 18.8% in 1951 to 32.5% by 1991. In 1951 census, Kolkata and Mumbai added the Delhi, Chennai and Hyderabad in the million plus cities list. Ahmadabad and Bangalore became million plus cities in 1961 and Kanpur and Pune in 1971. Nagpur, Lucknow and Jaipur acquired the status of million cities in 1981. 1991 census had 23 million plus cities. 11 additional cities: Surat, Coimbatore, Patna, Madurai, Indore, Kochi, Varanasi, Vadodara, Jabalpur, Agra and Dhanbad had attained the status of million plus cities in 1991.

Among the cities, there is a marked concentration of population in very large urban centres. Over 11.8 million persons were concentrated in five million plus cities which are Kolkata, Mumbai, Delhi, Chennai and Hyderabad at the time of Independence and progressively increased to 67.7 million persons in 1991 which was six fold increase from 1951. These five cities contained 32.5 percent of the total urban population. The growth of million cities was maximum during 1951-1991. It was the highest of the entire period. Nearly all the million cities except Amritsar have grown at rate less than 2 percent due to partition of India in 1947 (Raj Bala and Krishan, 1982). The exponential growth rate of 22 cities spread all over the country is more than 4 percent.

An individual million city has its regional economy which seems to be the determining factor of its growth (Lahiri Dutt, 2001). Expansion in Government services, commerce and industry as a result of World War II and migration of displaced person from Pakistan after the partition of the country in 1947 are also accountable for rapid urban growth during immediate post-independence period (Nath, 2006).

A detailed analysis of the growth of the cities during 1951 -1991 census revealed that large urban centres are continuously growing but newly emerged cities are growing very fast comparatively (Fig. 2.7). The younger million cities with a sound industrial base have grown at a much faster rate than the older million plus cities. An individual million city has its regional economy which seems to be the determining factor of its growth (Lahiri Dutt, 2001). Expansion in Government services, commerce and industry as a result of World War II and migration of displaced person from Pakistan after the partition of the country in 1947 are also accountable for rapid urban growth during immediate post-independence period (Nath, 2002).

Post-liberalisation period (1991-2011)

India had launched a policy of economic liberalization since 1991. During the post-liberalization phase, the importance of cities and urban centres has been growing in India's economic development. To cite an example, the contribution of urban areas in GDP has increased from 29 percent in 1951 to 63 percent in 2007 and is expected to increase to 75 percent by 2021. However, with increasing economic growth, prosperity is getting concentrated in cities and urban centres, and the rural-urban gaps in income levels and wages and employment opportunities are widening (Bhagat, 2011). It is linked with the globalisation, industrialisation and economic development.

This period has seen tremendous increase in number of urban areas as well as concentration of population in such urban centres. As a result, the 'inner cities' have developed very fast along with the port cities. The proportion of the urban population living in the million cities has increased progressively from 32.5 percent in 1991 to 42.6 percent in 2011. The number of metropolitan cities has increased from 23 in 1991 to 35 in 2001 and 53 in 2011 (Table 2.10). There has been an almost fourteen fold increase in India's urban population since independence growing at a rate of more than 50 percent. In 2011 it was 48.9 percent.

As already mentioned, cities with million plus population are distributed in 18 states/union territories in India. In states, all the capitals have attained the status of million plus cities excluding Gandhinagar which is the capital of Gujarat. These continue to grow fast in comparison to other cities, because these are the hub of administrative and economic activities and have attracted investment in social and welfare activities. In addition, these are the sphere of governmental activities. Others million plus cities are the commercial centres of the regions in which they are located and growing fast from their hinterland. Large cities are extremely congested like; Mumbai, Kolkata and Delhi, especially in their central place. They are not likely to maintain the phenomenal growth rate of the last two decades. Their growth rate is slow and these are expanding in the peripheral zone. Greater Mumbai UA (18.4 million), Delhi UA (16.3 million) and Kolkata UA (14.1 million) are the largest urban agglomerations in the country. Kolkata UA which held the second rank in Census 2001 has been replaced by Delhi UA. The growth in population in these Mega Cities has slowed down considerably during the last decade. Greater Mumbai UA, which had witnessed 30.5% growth in population during 1991-2001, has recorded 12.1% during 2001-2011. Similarly

Table 2.12: Population size and annual exponential growth rate between different time periods (1901-2011)

UAs/M.Corp.	Census Years Population				Annual Exponential Growth Rate		
	1901	1951	1991	2011	1901-51	1951-91	1991-2011
Vasai Virar City (M Corp.)	10702	19640	83734	1221233	1.2	3.6	13.4
Malappuram UA	NA	10357	142204	1698645	NA	6.5	12.4
Thrissur UA	15585	75342	275053	1854783	3.2	3.2	9.5
Ghaziabad UA	11275	43745	511759	2358525	2.7	6.1	7.6
Kannur UA	55694	82471	463962	1642892	0.8	4.3	6.3
Kollam UA	15691	66126	362572	1110005	2.9	4.3	5.6
Surat UA	129500	237394	1518950	4585367	1.2	4.6	5.5
Kozhikode UA	76981	178187	801190	2030519	1.7	3.8	4.6
Raipur UA	32114	89804	462694	1122555	2.1	4.1	4.4
Faridabad (M Corp.)	9816	37393	617717	1404653	2.7	7.0	4.1
Chennai UA	541167	1427420	3841396	8696010	1.9	2.5	4.1
Rajkot UA	36151	132069	654490	1390933	2.6	4.0	3.8
Nashik UA	24384	156888	725341	1562769	3.7	3.8	3.8
Bangalore UA	163091	786343	4130288	8499399	3.1	4.1	3.6
Thiruvananthapuram UA	57882	191343	826225	1687406	2.4	3.7	3.6
Aurangabad UA	36837	66636	592709	1189376	1.2	5.5	3.5
Jaipur (M Corp.)	160167	304380	1518235	3073350	1.3	4.0	3.5
Pune UA	164117	608634	2493987	5049968	2.6	3.5	3.5
Coimbatore UA	53080	287334	1100746	2151466	3.4	3.4	3.4
Indore UA	97804	310859	1109056	2167447	2.3	3.2	3.4
Delhi UA	214115	1437134	8419084	16314838	3.8	4.4	3.3
Ahmadabad UA	185889	877329	3312216	6352254	3.1	3.3	3.3
Kota (M Corp.)	33657	65107	537371	1001365	1.3	5.3	3.1
Kochi UA	74198	211729	1140605	2117990	2.1	4.2	3.1
Patna UA	171899	326163	1099647	2046652	1.3	3.0	3.1
Agra UA	188022	375665	948063	1746467	1.4	2.3	3.1
Ranchi UA	25970	106849	614795	1126741	2.8	4.4	3.0
Chandigarh UA	NA	NA	575829	1025682	NA	NA	2.9
Bhopal UA	77023	102333	1062771	1883381	0.6	5.9	2.9
Hyderabad UA	448466	1135758	4344437	7749334	1.9	3.4	2.9
Vijayawada UA	31926	186394	845756	1491202	3.5	3.8	2.8
Lucknow UA	256239	496861	1669204	2901474	1.3	3.0	2.8
Jodhpur UA	79109	180717	666279	1137815	1.7	3.3	2.7
Meerut UA	125999	245179	849799	1424908	1.3	3.1	2.6
Amritsar UA	162429	336114	708835	1183705	1.5	1.9	2.6
Visakhapatnam UA	40892	108042	1057118	1730320	1.9	5.7	2.5
Vadodara UA	103790	211407	1126824	1817191	1.4	4.2	2.4
Asansol UA	14906	156165	763939	1243008	4.7	4.0	2.4
Jamshedpur UA	NA	218162	829171	1337131	NA	3.3	2.4
Durg-Bhilainagar UA	NA	20249	685474	1064077	NA	8.8	2.2
Ludhiana (M Corp.)	48649	153795	1042740	1613878	2.3	4.8	2.2
Gwalior UA	138612	241577	717780	1101981	1.1	2.7	2.1
Nagpur UA	127734	449099	1664006	2497777	2.5	3.3	2.0
Dhanbad UA	NA	73602	815005	1195298	NA	6.0	1.9
Greater Mumbai UA	839672	3216904	12596243	18414288	2.7	3.4	1.9
Jabalpur UA	90316	256998	888916	1267564	2.1	3.1	1.8
Kanpur UA	202797	705383	2029889	2920067	2.5	2.6	1.8
Allahabad UA	172032	332295	844546	1216719	1.3	2.3	1.8
Tiruchirappalli UA	127760	294233	711862	1021717	1.7	2.2	1.8
Varanasi UA	226105	369799	1030863	1435113	0.9	2.6	1.7
Madurai UA	105984	370791	1085914	1462420	2.5	2.7	1.5
Kolkata UA	1510008	4669559	11021918	14112536	2.3	2.1	1.2
Srinagar UA	122618	250724	NA	1273312	1.4	NA	NA
Total	7638854	23294481	87939207	160725506	2.2	3.3	2.9

Source: 1. Census of India, 1991. Part-II A (ii) – Towns and Urban Agglomerations classified by population in 1991 with variation since 1901.

2. Census of India, 2011: Provisional Population Totals, New Delhi.

Delhi UA (from 52.2% to 26.7%) and Kolkata UA (from 19.6% to 6.9% in 2001-2011) have also slowed down considerably. The process of growth in suburbs or satellite towns for example Ghaziabad (143.6%), Faridabad (33.0%), Noida and Gurgaon is much faster than Delhi.

The larger cities have attracted a significant proportion of migrants in their population as respect their status. Million plus cities in Kerala, like Kannur, Kollam, Malapuram and Thrissur have shown abnormal increase in the population registering growth rate more than 100 percent during 2001-2011. This may not be due to natural increase, but due to the twin process of change in the territorial boundaries of these urban agglomerations through incorporation of the surrounding rural areas and merging of the towns into them.

Cities like Allahabad, Amritsar, Asansol, Dhanbad, Greater Mumbai, Jabalpur, Kanpur, Kolkata, Ludhiana, Nagpur, Tiruchirappalli and Varanasi have registered growth rate between 10-20 percent indicating stabilization of the population. The exponential growth rate of the recent census indicates that the larger cities have experienced a decline in their population growth in a significant manner and Indian mega cities are the best example. On the other hand, cities that have recently acquired the status of million cities have registered a higher growth rate due to merging of outgrowths into these towns. One of the striking features that emerge from Fig 2.8 is that the growth rate is quite high in the million cities which are located in western side of north-south corridor. It is high only in the southern region of Tamil Nadu and Andhra Pradesh million plus cities such as Bangalore, Chennai and Hyderabad.

Growth of population during 1991-2011 in urban places which were million plus cities at the time of the census 1991 and have attained the status in 2011 indicate different growth rate. The fastest growth recorded on those urban centres which are become million plus cities in 2001-2011 census in comparison to the existed million plus cities (Fig. 2.9). Natural increase of urban population, in-migration from rural area and smaller urban places and expansion of urban boundaries which include adjacent towns and villages contributed the rapid growth. Reasonably, Southern India is more urbanised than its northern counterpart. The coastal areas is characterised by a higher degree of urbanisation due to development of port areas, industrialisation and commercialisation (Krishan and Singh, 1993).

Conclusions

Urbanisation is inevitable. Majority of the world's population is living in towns and cities. The developed countries of the world have already achieved a high level of urbanisation while developing countries are showing signs of tremendous growth in their urban population. In fact, the process of urbanisation has been transforming the developing countries from countries of villages to countries of cities and towns. Asian cities have become economically vibrant over the last 50 years. Resultantly, they are active agents in the global economy in the present times. Developing countries are the focus of an alarming growth of megacities and other metropolitan areas which are the spatial expression of a variety of economic, socio-cultural and technological forces operating at the global and national level.

Importantly, there has been tremendous increase in the size of population residing in very large cities. The number of such million cities has grown substantially over the period 1950- 2011. Cities with more than million inhabitants each all over the world have increased from 75 in 1950 to 456 in 2011 and the percent of world urban population residing in these cities has increased from 23.7 percent to 39.0 percent respectively. Very high rates of growth of metropolitan areas are observed in developing countries like India, China, Manila and Philippines. In India the number of million cities since 1951 has increased ten folds from 5 in 1951 to 53 in 2011. The million cities alone account for 42.6 percent urban population in 2011 in comparison to 18.8 percent in 1951. These contained 13.3 percent of total population of the country. India's urban areas hold 31.2 percent of its total population. The urbanisation has increased faster than expected in India. In 2011, for the first time, the absolute increase in the urban population is higher than the rural population since independence.

India added 91 million urban population in the last decade, in which 53 million population has been added by million plus cities alone which is 58 percent of the total urban population. Thus, the largest cities are generally more efficient in generating growth and attracting investments and are therefore attracting more population. The total number of Urban Agglomerations/Towns, which constitutes the urban frame, is 7935 in the country in 2011. Of these 468 are Class I towns containing 70 percent of the total urban population. This number has increased from 76 in 1951. Another important feature of the 2011 Census is a phenomenal increase of 2,774 new towns. This unexpected jump in the number of "census towns" from 1362 to 3894 is unprecedented in the history of the Indian census since 1901.

Many of these towns are part of UAs and the rest are independent towns. This growth of urban population during the past decade is reflected in higher growth in metro cities which is attributable to both natural increase in the resident population and higher net in-migration.

Population growth in metropolitan areas reflects a certain degree of variation. In British period, the process of urbanisation was quite slow. During this period, Mumbai, Kolkata and Chennai were the only three important cities located on the coastal areas that contained a very high share of urban population of the country. They attracted large number of migrants for their administrative, commercial and manufacturing activities. After 60 years they have maintained their status in terms of all economic activities and employment opportunities. Urbanisation has entered in a new phase, after Independence which witnessed a period of rapid urbanisation, particularly for one lakh and million plus cities. It is characterised by uneven distribution with few larger metropolitan and mega cities growing at a faster rate and containing disproportionate large share of urban population. The rate of annual increase of population noticed in million plus cities during this period was more than 3 percent; the highest since 1901. All this was the result of massive investments by government and public-sector in capital city and district headquarters during the second and third five year plans that saw advent the industrialisation and development of the tertiary sector.

After economic liberalisation (1991-2011) million cities have registered an extraordinarily large accretion in numbers from 23 to 53 and added nearly 53 million residents in a short span of twenty years. The inner cities have developed very fast along with the port cities. Indian mega cities have noticed a slow growth rate in 2011 census. The fastest growth rate is recorded in that have recently joined the million cities club in 2011 census. Cities like Malapuram, Vasai-Vivar, Thrissur, Kannur, Kollam, Ghaziabad and Kozhikode have seen more than 100% growth rate in the last decade because of jurisdictional change, natural growth and migration. These also have outgrowths, resulting in the expansion of their municipal boundaries resulting into their designation as urban agglomerations. Besides being, FDI inflows play an important role to strengthen the metropolitan areas function in terms of economic development. Those states which are already developed and high in competitiveness index received higher percent share of FDI like Maharashtra, Delhi, Gujarat, Tamil Nadu and Goa.

Million plus cities combined population is 16,07,25,506 which is 42.6 percent of the total urban population of the country. The population of these million cities ranges from 10,01,365 in Kota (Rajasthan state) to 1,84,14,288 in Greater Mumbai (Maharashtra state). Million plus cities are found dotting the country's landscape except the north-east, which is conspicuous by their absence. Coastal areas accommodate 18 million plus cities which are larger in size like Greater Mumbai, Kolkata and Chennai. The coastal region for its rich resource base and locational advantages had attracted large number of industries and associated service sectors as well as migrants. 19 cities are situated in the peninsular region in which Dhanbad, Asansol, Jamshedpur, Raipur and Durg-Bhilainagar have a solid mineral base especially for the industries and others have administrative status from the British time to develop as a large urban centre. 15 million cities are positioned in the Great Indian Plains. Allahabad, Varanasi and Patna are ancient cities that grew with the passage of time. Delhi, Agra, Meerut, Amritsar, Ludhiana are the medieval town which had administrative status at the British time. The growth of Faridabad and Ghaziabad are the result of the decision taken after the partition of the country to establish an industrial-cum-housing estate to relieve the pressure of population growth in Delhi and also to decentralize the location of industries. North Himalayas have only Srinagar million plus city. Largely these towns have grown into million plus cities have enjoyed some initial advantage since historic times.

Million plus cities are no longer confined to the coastal areas. They have fast developed in interior land except north-east part of India. The vast region of metropolitan cities is seen around Delhi (Ghaziabad, Faridabad, Meerut and Agra,), Greater Mumbai (Vasai-Vivar, Nashik and Pune) and in Kerala's (Kochi, Thiruvananthapuram, Malapuram, Thrissur, Kannur, Kollam, and Kozhikode) million plus cities. An individual million city's strong linkage with the regional and global economy seems to be the determining factor of its growth/ spurt in their population.