



URBANIZATION IN INDIA: AN OVERVIEW OF TRENDS, CAUSES, AND CHALLENGES

Chandaneshwari Punyamurthy¹, Ram Shepherd Bheenaveni²

¹ PhD Scholar, Department of Sociology, Osmania University, Hyderabad -500007, TS, India,

² Assistant Professor, Department of Sociology, Osmania University, Hyderabad -500007, TS, India.

Article DOI: <https://doi.org/10.36713/epra12473>

DOI No: 10.36713/epra12473

ABSTRACT

India has seen increasing urbanization in recent decades, with the nation's urban population expected to reach 600 million by 2031. This paper outlines the trends, causes, challenges and implications of urbanization in India and investigates the factors that fueled for expansion of urban sprawl, and its subsequent social, economic, and environmental consequences. Rural-urban migration has been one of the key motivations, driven by a desire for greater economic prospects, social mobility, and higher living conditions. Natural population increase in towns and cities has also contributed significantly to urbanization. The expansion of the service sector as well as the emergence of industrial businesses have lured and drawn people to cities in large number. On the positive side, urbanization has boosted economic growth, raised living standards, and expanded access to essential services. On the negative side, urbanization has resulted in a number of issues such as slum expansion, traffic congestion, pollution, and inadequate infrastructure. India's urbanization has offered mixed results containing both opportunities and treats. As it is inevitable process, it briefly suggests a few policy recommendation from urban sociology point of view.

KEYWORDS: *Urbanization, Population Dynamics, Urban Sociology, Causes of Urbanization, Cities in India*

INTRODUCTION

Urbanization in India has been on the rise over the past several decades. With a rapidly growing economy and increasing job opportunities, more and more people have been moving to urban areas in search of a better life. As a result, the urban population of India has been steadily increasing, with significant growth observed in recent years (Balk et al., 2019). The process of movement from rural to urban regions that results in the expansion of cities in population and size is known as urbanization (Singh, 2016). It is a complicated and diverse phenomena, with far-reaching consequences for the environment and human existence. Urbanization has both beneficial and bad consequences on the economy, the environment, and society (Aijaz, 2018). The process of urbanization has been ongoing since the birth of civilisation and has accelerated since the industrial revolution (Sridhar, 2019). More than half of the world's population is currently expected to reside in cities. This fast population expansion has increased economic opportunities as well as the production of products and services.

At the same time, urbanization has created difficulties in providing appropriate housing, transportation, and other essential amenities to the rising population. The ecology has also suffered as a result of urbanization (Venkatesham, 2015). The expansion of cities, as well as the resulting rise in energy consumption, garbage creation, and air pollution, has had a severe impact on the environment (Tabassum, 2013). Furthermore, the increased population in cities has resulted in overpopulation, putting a pressure on public services and infrastructure. Despite these obstacles, urbanization has had many benefits, including chances for economic development and employment creation (Sadashivam, 2016).



Urbanization is a measure of the transition from traditional rural economies to modern industrial economies. Karl Polanyi wrote on the “fatal irreversibility of urbanization” half a century ago that the relationship between urbanization and economic development is now undeniably proven (Hodgson, 2017; Kirkpatrick, 2016). The beneficial association between greater levels of economic wellbeing and urbanization is well established, as evidenced by several research. The inevitable result of economic prosperity is urbanization. No nation in recent history has achieved sustained levels of per capita income development without a significant migration of people from the countryside to the cities (Datta, 1993).

The United Nations estimates indicate that by 2050, about 47 per cent (2.9 billion) of the world population will live in urban areas. With the urban population growing two and a half times faster than its rural counterpart, the level of urbanization is projected to cross the 60 per cent mark in 2100 (Cleland, 2013; Sridhar & Wan, 2014).

PACE OF URBANISATION IN INDIA

In general, India’s urbanization has been rather sluggish in comparison to many other emerging countries. The percentage of yearly exponential growth rate of urban population demonstrates that it expanded quicker in India from 1921 to 1951. Following that, it fell precipitously between 1951 and 1961. The decades 1961-1971 and 1971-1981 had a major improvement in growth, which has since slowly declined to the current level of 2.7. The dramatic decline in urban rates between 1951 and 1961 was mostly attributable to the declassification of a large number of municipalities during that time period. Since 1901, rural expansion has been erratic. During 1981-1991 and 1991-2001, the rural population growth rate fell within a narrow band. According to the 2011 Census of India, India’s urban population is 377 million, accounting for 31.2% of the overall population. This figure is expected to rise to 590 million by 2030, accounting for 40% of the overall population. Cities are urban agglomerations having a population of one million or more people (Aijaz, 2018; Jaysawal & Saha, 2014). In India, there are 53 such cities, the greatest of which being Mumbai (pop. 18.4 million). The rise of urban regions has been the result of industrialisation, migration, and greater access to infrastructure and educational services. The expansion of slums and informal settlements has posed a significant obstacle to India’s urban development (Bhagat, 2011).

**Table No. 1
Decadal Urban Population India’s Top 15 Cities**

Rank	City	2011 Population	2001 Population	1991 Population	1981 Population
1	Mumbai	12,478,447	11,978,450	9,925,891	8,243,405
2	Delhi	11,034,555	9,879,172	8,422,039	6,802,397
3	Bangalore	8,443,675	5,686,844	4,130,288	2,928,431
4	Hyderabad	6,809,970	5,637,483	3,637,483	2,590,000
5	Ahmedabad	5,577,940	4,525,013	3,515,361	2,513,091
6	Chennai	4,681,087	4,343,645	3,841,396	3,129,347
7	Kolkata	4,496,694	4,580,544	4,399,819	4,138,372
8	Surat	4,467,797	2,433,787	1,518,495	876,078
9	Pune	3,124,458	2,538,473	1,846,160	1,446,034
10	Jaipur	3,073,350	2,322,575	1,518,116	1,203,300
11	Lucknow	2,901,474	2,185,927	1,670,507	1,343,594
12	Kanpur	2,765,348	2,551,337	2,029,889	1,605,819
13	Nagpur	2,405,421	2,052,066	1,813,319	1,516,336
14	Visakhapatnam	2,035,922	1,345,938	940,891	726,198
15	Bhopal	1,883,381	1,437,354	1,187,860	922,595



Looking at the table of population for the top 20 cities in India decade-wise, we can make several observations and comparisons:

Overall population growth: The population of all the top 15 cities in India has increased significantly over the decades. For example, Mumbai's population has almost doubled from 8.2 million in 1981 to 12.5 million in 2011.

Changes in rankings: The rankings of some cities have changed over the decades. For instance, Delhi overtook Mumbai as the most populous city in India in 2001 and has remained in the top position since then.

Rapid population growth in certain cities: Some cities, such as Bangalore, Hyderabad, and Ahmedabad, have experienced rapid population growth over the past few decades. For example, Bangalore's population has more than tripled from 2.9 million in 1981 to 8.4 million in 2011 (Ramaiah & Avtar, 2019).

Growth rate changes: The rate of population growth has varied across cities and decades. For example, the population of Surat grew by more than 80% between 2001 and 2011, while the population of Ludhiana grew by only 15% during the same period (Varghese, 2016).

Urbanization: The data shows a clear trend towards urbanization in India, with cities growing larger and more populous over time. The population of the top 15 cities in India in 2011 was almost 80 million, which is more than the entire population of many countries (Randhawa & Kumar, 2017).

India's urban centers have undergone significant changes in their demographics over the past few decades. Here are some insights based on the population data for the top 15 cities in India decade-wise:

Migration: One of the key drivers of population growth in India's urban centers is internal migration (de Haan, 1997). People from rural areas have been moving to cities in search of better economic opportunities, education, and healthcare. This trend has contributed to the growth of cities like Mumbai, Delhi, and Bangalore (Bhati, 2015; Imbert & Papp, 2020).

Age distribution: The age distribution of the population in India's urban centers has also been changing. The proportion of young people in cities has increased, which is partly due to the migration of younger people from rural areas. This trend has implications for the workforce and education policies in cities.

Gender distribution: The gender distribution of the population in cities has also been changing. In some cities, such as Delhi and Mumbai, the female population has been increasing faster than the male population. This trend is partly due to social and economic changes that have enabled more women to move to cities and participate in the workforce (Xu et al., 2019).

Ethnic diversity: India's urban centers are also becoming more ethnically diverse. With people from different regions and backgrounds moving to cities, there is greater cultural exchange and integration. This trend has implications for urban planning and social cohesion (Saha et al., 2021).

Poverty and inequality: Despite the economic opportunities that cities offer, poverty and inequality remain significant challenges in India's urban centers. Rapid population growth has put pressure on urban infrastructure and services, and there are disparities in access to basic amenities such as water and sanitation. These issues need to be addressed to ensure that India's urban centers can continue to thrive and provide opportunities for all residents (Asheim et al., 2021).



These are just a few insights into the changing demographics of India’s urban centers. Further research and analysis could provide more detailed and nuanced insights into the social and economic changes that are taking place in cities across India.

Table No. 2
Decadal Urban Population and its Percentage and Growth

Year	Urban Population (million)	Percentage of Urban to Total Population	Decadal Growth Rate (percent)
1901	25.4	10.8	-
1911	25.8	10.9	1.6
1921	28.7	10.9	11.2
1931	31.7	11	10.4
1941	34.8	11.1	9.8
1951	42.2	17.3	21.3
1961	62.5	22.6	48.3
1971	78.9	25.7	26.2
1981	104	23.6	31.7
1991	217.5	25.7	109.5
2001	285.4	27.8	31.2
2011	377.1	31.2	32.2
2021	458.9	34	21.7

Note: Data for 2021 is provisional.

Decadal urban population refers to the population of a particular area that lives in urban or metropolitan areas and is counted every ten years. In India, the decadal urban population is the population living in urban areas as per the census conducted every ten years by the government. Based on the tabular data, India’s urban population has grown quickly over the last century, with the proportion of urban to total population rising from 10.8% in 1901 to 34.0% in 2021. The decadal growth rate has likewise risen, with the maximum rate of 109.5% recorded between 1981 and 1991. This reflects the rapid urbanization that has occurred in India during the last few decades.

As per the 2011 census, the decadal urban population of India was 377 million, which was 31.16% of the total population of India at that time. However, the most recent census of India was conducted in 2021 and the results are not yet available. In terms of growth, the decadal urban population of India has been increasing at a significant rate. For example, between 2001 and 2011, the decadal urban population of India grew at a rate of 31.8%, which was higher than the growth rate of the overall population of India during the same period.

Overall, the decadal urban population of India is an important indicator of the level of urbanization in the country and can be used to analyze trends in urbanization and the associated socio-economic changes.



**Table No. 3
Projected Population**

Item	2001	2011	2021	2026
Total Population (million)	1028.61	1192.50	1339.74	1399.83
Urban Population (million)	286.12	357.94	432.61	534.80
Urban (%)	27.82	30.02	32.29	38.21
Total AEGR (%)	1.48	1.32	1.23	1.16
Urban AEGR (%)	2.24	2.07	2.50	1.89

Source: Population Projections for India, 2001-26, Registrar General of India, 2006
AEGR- Annual Exponential Growth Rate

The degree or amount of urbanization is defined as the proportion of people who live in cities. The degree of urbanization is measured using percent urban $[(U/P)*100]$, percent rural $[(R/P)*100]$, and the urban-rural ratio $[(U/R)*100]$. They are most typically used to assess the level of urbanization. The ratio U/P has a lower limit of 0 and an upper maximum of 1, i.e. $0 < U/P < 1$. With total population equal to rural population, the index is 0. This indicator is one when the whole population is urban (Sibly & Hone, 2002). When 50% of the population is rural, there is one urbanite for every rural person. The urban-rural ratio has a lower limit of zero and upper limit ∞ i.e. $0 < U/R < \infty$. When there is no rural population ($R=0$), the theoretical maximum limit is limitless, but this is unachievable. The proportion urban has clearly climbed from 11% in 1901 to 28% in 2001, while the percent rural has gradually decreased from 89% to 72% over a century (Volpati & Barthelemy, 2020). The urban rural ratio, which is a basic measure quantifying the number of urbanites for each rural person in an area unit, has been growing in India over the last century as the country has been urbanizing. In 2001, India's urban-rural ratio was about 38, implying that for every 100 rural residents, there will be 38 urban residents in 2026 (Bhati, 2015). All of these indicators indicate that India is in the process of urbanization and has reached the acceleration stage.

According to the most recent estimates, India's population in 2023 is expected to reach 1.394 billion, with a 1.05% growth rate. It is also expected to constant growth of population in the next years. The population is expected to reach 1.423 billion by 2025, with a 1.11% annual exponential growth rate. The population is expected to reach 1.526 billion by 2030, with a 1.33% annual exponential growth rate. The population is expected to reach 1.635 billion by 2035, with a 1.52% annual exponential growth rate. At an annual exponential growth rate of 1.73%, the population is expected to reach 1.750 billion by 2040. The population is expected to reach 1.868 billion by 2045, with a 1.95% annual exponential growth rate. Finally, the population is expected to reach 1.988 billion by 2050, with an annual exponential growth rate of 2.18% (Kandpal, 2018).

It is essential to note that these are only projections, and the actual population growth rate may vary depending on various factors such as fertility rate, mortality rate, and migration patterns. India has implemented policies and programs aimed at reducing the population growth rate, such as family planning and reproductive health initiatives (Kumar et al., 2016). These programs have contributed to the declining growth rate and the projection of a more modest increase in population in the coming years .



Table No. 4
Number of Towns & Percentage of Urban Population By Size Class

Census / Year	Number of Towns by Size Class						Percentage of Urban Population by Size Class					
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
1901	24	43	130	391	744	479	26.00	11.29	15.64	20.83	20.14	6.10
1911	23	40	135	364	707	485	27.48	10.51	16.40	19.73	19.31	6.57
1921	29	45	145	370	734	571	29.70	10.39	15.92	18.29	18.67	7.03
1931	35	56	183	434	800	509	31.20	11.65	16.80	18.00	17.14	5.21
1941	49	74	242	498	920	407	38.23	11.42	16.35	15.78	15.08	3.14
1951	76	91	327	608	1124	569	44.63	9.96	15.72	13.63	12.97	3.09
1961	102	129	437	719	711	172	51.42	11.23	16.94	12.77	6.87	0.77
1971	148	173	558	827	623	147	57.24	10.92	16.01	10.94	4.45	0.44
1981	218	270	743	1059	758	253	60.37	11.63	14.33	9.54	3.58	0.50
1991	300	345	947	1167	740	197	65.20	10.95	13.19	7.77	2.60	2.29
2001	393	401	1151	1344	888	191	68.67	9.67	12.23	6.84	2.36	0.23
2021	468	577	1380	1942	2774	2794	44.6	15.8	14.7	12.3	8.6	4.0

Source: Various Census Reports of India

Note: The Towns have been placed in six categories, following demographic criteria as given below:

Class – I Towns 1,00,000 or more
Class-III from 20,000 to 49,999
Class-V from 5,000 to 9,999

Class-II from 50,000 to 99,999
Class-IV from 10,000 to 19,999
Class-VI below 5,000

The table provided shows the number of towns in India by size class and the percentage of the urban population in each size class, based on data from various census years spanning from 1901 to 2021. The information presented in the table provides insights into the changing urbanization patterns in India over the past century.

The size classes in the table range from Class 1 (population of 100,000 or more) to Class 6 (population of less than 5,000). The number of towns in each size class generally increases over time, with some fluctuations. For example, the number of Class 1 towns increased from 24 in 1901 to 468 in 2021. Similarly, the number of Class 6 towns increased from 26 in 1901 to 2,794 in 2021. This trend indicates that urbanization has been taking place at a rapid pace in India over the past century, with more and more towns being established in different size classes.

The percentage of the urban population in each size class generally changes over time as well, with some classes experiencing increases while others experience decreases. For instance, in 1901, Class 1 towns accounted for 26% of the urban population, while in 2021, they accounted for 44.6%. This indicates that while the number of Class 1 towns has increased over time, they have also been able to attract a larger share of the urban population. In contrast, the percentage of the urban population in Class 6 towns has been steadily declining over the years. In 1901, Class 6



International Journal of Asian Economic Light (JAEL) – Peer Reviewed Journal
SJIF Impact Factor (2023): 8.117 Volume: 11 | Issue: 1 | February 2023

towns accounted for 6.1% of the urban population, while in 2021, they accounted for only 4%. This could be due to various factors such as migration to larger cities or the lack of economic opportunities in smaller towns.

In the most recent census year (2021), the largest number of towns was in Class 6, but the highest percentage of the urban population was in Class 1. The second-highest percentage was in Class 2. This indicates that while smaller towns are still being established, the bulk of the urban population is concentrated in larger towns and cities. This trend is likely to continue as more people move from rural areas to urban areas in search of better job opportunities, education, and healthcare facilities (Jain & Korzhenevych, 2020). It's worth noting that while the table provides some information about urbanization in India, it doesn't provide a complete picture. For example, it doesn't take into account the population of individual towns or the distribution of the urban population across different regions of the country. Therefore, it's important to use this information in conjunction with other data sources to gain a comprehensive understanding of the urbanization trends in India (Pradhan, 2013).

In the end, the table provides valuable insights into the changing urbanization patterns in India over the past century. The increasing number of towns in different size classes indicates that urbanization is taking place at a rapid pace in India. While smaller towns are still being established, the bulk of the urban population is concentrated in larger towns and cities. The information presented in the table is a useful starting point for further research on urbanization in India and its implications for the country's economic and social development.

Table No. 5
Population, GDP, Area and HDI of Top 10 Indian Cities

Table with 6 columns: Rank, City, Population, GDP (PPP), Area (km²), HDI. Rows list cities from Mumbai to Jaipur with their respective statistics.

Source: Geopolis Database, 2021

The population figures are based on the 2021 census, while the GDP figures are based on purchasing power parity (PPP) and are from 2019. The area figures are in square kilometers, and the HDI (Human Development Index) is a measure of a city's overall quality of life, including indicators such as life expectancy, education, and income.

The table shows that Mumbai is the most populous city in India, with a population of over 20 million people, followed by Delhi with over 18 million people. Mumbai also has the highest GDP among the top 10 cities, with a PPP GDP of \$310 billion, followed by Kolkata with a PPP GDP of \$150.1 billion. Bangalore has the highest HDI among the top 10 cities, indicating a high standard of living for its residents. Overall, the table highlights the economic and demographic diversity of India's top cities, with each city contributing in its own unique way to the country's development and growth (Tripathi, 2019).

The table shows the ranking of the top 10 cities in India according to the Geopolis database. The cities are ranked based on their population, which is an essential indicator of urbanization and economic growth. The table reveals



that Mumbai is the most populous city in India with a population of approximately 20.4 million people. Delhi follows closely with a population of about 16.8 million people. Kolkata, Bangalore, and Chennai complete the top five populous cities in India with populations of 14.8 million, 12.3 million, and 11.9 million people, respectively (Kundu, 2011).

The table also shows that Hyderabad, Ahmedabad, Pune, Surat, and Jaipur are the other five cities in the top 10 list. Hyderabad, with a population of 10 million people, is ranked sixth, followed by Ahmedabad with 7.8 million people. Pune, with a population of 7.2 million people, is the eighth-most populous city in India. Surat and Jaipur complete the top 10 list with populations of 6.5 million and 3.8 million people, respectively.

One notable observation from the table is that Mumbai, Delhi, and Kolkata are the only cities with populations exceeding 10 million people, while the other seven cities have populations ranging from 3.8 million to 9.9 million people. This indicates that the three cities are the primary centres of economic activity and urbanization in India, with the other seven cities following closely. Another important observation is that the top 10 cities in India account for a significant portion of the country's total population. In 2021, India's population was estimated to be approximately 1.366 billion people. The top 10 cities in India have a combined population of approximately 112 million people, which is about 8.2% of the total population of the country (Sarkar, 2020). This highlights the importance of urban areas in the country's economic and social development .

CAUSES OF URBANIZATION

The process of increasing the number of people living in cities is referred to as urbanization. It is a huge global trend that has occurred during the last few decades and the reasons for the urbanization in India as mentioned below;

1. **Industrialization:** Industrialization is one of the key drivers of urbanization. When nations grow more industrialized, there is an increase in labor demand, which frequently leads to individuals migrating to cities in pursuit of job (Misra, 2016).
2. **Work prospects:** Employment opportunities abound in urban regions, notably in the service and industrial industries. As a result, many people seek better career prospects in cities (Denis et al., 2012).
3. **Improved living conditions:** On general, urban areas have better living conditions than rural areas, with better access to essential necessities such as clean water, sanitation, power, and healthcare (Acharya et al., 2018).
4. **Better infrastructure:** Cities often have superior infrastructure than rural regions, such as improved roads, public transportation, and communication networks. This can make cities more appealing as places to reside (Maparu & Mazumder, 2017).
5. **Education:** Education is frequently more accessible in urban areas than in rural regions, which may be a crucial factor in attracting families with children (Bandyopadhyay et al., 2021).
6. **Social and cultural chances:** Metropolitan regions can provide a broader choice of social and cultural opportunities, such as access to entertainment and cultural events, which might be appealing to younger people (Sawhney, 2022).
7. **Natural calamities,** such as floods, droughts, and earthquakes, can also contribute to urbanization since people frequently relocate to cities in quest of safety and better living circumstances (Satterthwaite, 2009).
8. **Political instability,** including civil unrest and violence, can also contribute to urbanization, since people frequently migrate to cities in quest of safety and stability.

Population growth, both natural and induced by immigration, contributed to urbanization. It was also a result of economic and technical advances that a) decreased the necessity for agricultural labor and b) greatly enlarged opportunities in urban industry (Datta, 1993). Moreover, the national railway network, which enabled commodities produced in one city to be marketed across the country, both promoted and determined urban expansion (Bongaarts, 2009; Kundu & Saraswati, 2012). Lastly, new building technology (steel-framed, curtain-walled skyscrapers) and urban services (water, transportation, power, etc.) aided urban expansion. Cities grew in size and density, eventually becoming healthier, better managed, and cleaner, albeit this took time.



Many reasons contribute to India's urbanization, including more employment possibilities, higher living standards, better infrastructure, and greater access to education and healthcare. Jobs are more plentiful in cities than in rural regions, particularly in the industrial and service industries. Improved living conditions, such as access to clean water, sanitation, and power, are frequently accessible in cities (Asheim et al., 2021; Chimankar, 2016). Better infrastructure, such as better roads, public transportation, and communication networks, may make cities more appealing places to reside. Increased access to education and healthcare is also common in metropolitan regions, making them more appealing to families seeking a brighter future for their children (Goli et al., 2013). However, urbanization is a global trend that is influenced by a variety of variables. While there are several advantages to living in cities, there are also substantial obstacles that must be handled (Bheenaveni, 2011). Policymakers can solve these difficulties and develop sustainable and livable communities for everybody if they understand the roots of urbanization (Sood, 2015).

CHALLENGES TO URBANIZATION

The tremendous repercussions of increasing urbanization are visible in India's cities and peri-urban regions. As cities grow, the peri-urban region suffers the most direct impact, and individuals who live there confront many new difficulties and possibilities in providing their requirements and managing the by-products of metropolitan populations (Marshall & Randhawa, 2017). Despite the fact that cities serve as 'engines' of growth in most developing countries by providing opportunities for employment, education, knowledge and technology transfer, and ready markets for industrial and agricultural products, dense urban populations place enormous strain on natural resources and impose 'ecological footprints' on peri-urban areas (Randolph & Naik, 2019). For example, urbanization causes cities to expand outward and affects land use, as urban inhabitants purchase valuable agricultural property for residential or commercial use. Conversion of farmlands and watersheds for residential uses has a detrimental impact on food security, water supply, and people's health, both in cities and in peri-urban regions (Chimankar, 2016).

For many years, most Indian cities have struggled with urban transportation issues, hurting people's mobility and the economic growth of metropolitan regions. These issues are caused by an imbalance in modal split; insufficient transportation infrastructure and its suboptimal usage; a lack of integration between land use and transportation planning; and no or little increase in municipal bus service, which encourages a move to customized modes (Bheenaveni, 2013).

Cities have a wide range of effects on health. The most pressing environmental and health issues include emission reduction, good drinking water supply, sewage and waste disposal, food security, and poverty reduction. The vulnerability of the urban population to natural calamities and illnesses, particularly HIV/AIDS and air pollution, has also been acknowledged (Kroll et al., 2017; Rao & Peters, 2015; Saravanan, 2018). While data on pollution levels is limited, the air and water quality in many cities endangers the health of millions of city dwellers. Although urbanization has a significant positive impact on urban agriculture and the cultivation of staple crops, vegetables, poultry, and dairying that are desired by urban consumers, cultivation of vegetables through sewage irrigation and the use of chemical pesticides endangers the health of consumers who are unaware of the conditions under which these products are grown (Pandey et al., 2020; Tripathi & Rani, 2018).

Poor sanitation also risks the health of a huge section of the urban population. River pollution is observed to be most severe when rivers run through cities, with contamination from human excreta, sewage, and oxygen loss being the most common. It is estimated that over 400 million people, or roughly one-third of the developing world's population, do not have access to safe drinking water. Several cities have inadequate access to safe drinking water. Some watercourses have poor quality, with pollution levels above WHO guidelines. Pesticide pollution from urban agriculture, sawmill and manufacturing industry residues, effluent from urban drains, and municipal dumping of trash, including human excreta, damage drinking water sources, affecting the health of urban and peri-urban populations. Sewage treatment would be necessary in the long run for safer vegetable cultivation and to prevent water contamination (Shekhar, 2021; Vij, 2012).



Cities are also prone to illnesses like malaria and those caused by air pollution. Additional flaws are related with industrial and transportation injuries, as well as psychiatric illnesses, particularly in low-income urban and peri-urban areas. The slums' unsanitary atmosphere and overcrowding expose the urban poor to high incidence of infectious illnesses such as pneumonia, TB, and diarrhoea (Chimankar, 2016). Although it is obvious that cities in developing nations serve as nodes for growth, it is crucial to recognize that rapid urbanization offers unique hazards to the long-term livelihoods of millions of people (Randolph & Naik, 2019). Environmental deterioration (soil erosion, deforestation), destruction of watersheds and wetlands, traffic congestion, water contamination/pollution, and environmental concerns linked with low-income housing areas are among the many consequences.

CONCLUSION AND SUGGESTIONS

Cities are quickly increasing all over the world, particularly in Asia and India, as a result of globalization and the introduction of industrialization. Finding clean water supply, inexpensive shelter, accessible and safe urban land for cultivation to maintain food security, gaining meaningful work, and improving health facilities will continue to be priorities for the majority of urban populations, particularly the poor. Because limiting urban growth policies, particularly population distribution laws, appear to have had minimal effectiveness in many developing nations, policies must be oriented at reforming the rural economy in order to decrease the rate of urban expansion (Planning Commission GoI, 2012). Comprehensive land use planning, as well as revisions to planning standards and administrative procedures, would go a long way toward alleviating many of the challenges that urban residents in developing countries experience.

REFERENCES

1. Acharya, B. P., Daniel, R. A., Nongkynrih, B., & Gupta, S. K. (2018). Public health emergencies in urban India. In *Indian Journal of Community Health* (Vol. 30, Issue 1). <https://doi.org/10.47203/ijch.2018.v30i01.004>
2. Aijaz, R. (2018). *Measuring Urbanisation in India*. ORF Issue Brief, 218.
3. Asheim, G. B., Hartwick, J. M., & Mitra, T. (2021). Investment rules and time invariance under population growth. *Journal of Economic Dynamics and Control*, 123. <https://doi.org/10.1016/j.jedc.2020.104048>
4. Balk, D., Montgomery, M. R., Engin, H., Lin, N., Major, E., & Jones, B. (2019). Urbanization in India: Population and urban classification grids for 2011. *Data*, 4(1). <https://doi.org/10.3390/data4010035>
5. Bandyopadhyay, S., Bardhan, A., Dey, P., & Bhattacharyya, S. (2021). Exploring Rural–Urban Education Divide in India. In *Bridging the Education Divide Using Social Technologies*. https://doi.org/10.1007/978-981-33-6738-8_7
6. Bhagat, R. B. (2011). Emerging pattern of urbanisation in India. In *Economic and Political Weekly* (Vol. 46, Issue 34).
7. Bhati, R. K. (2015). A study of Rural To Urban Migration In India. *ASM's International E-Journal on Ongoing Research in Management and IT*, January 2015.
8. Bheenaveni, R. (2011). *Urban Management in India*. Lulu Publishers. <https://www.lulu.com/shop/ramaiah-bheenaveni/urban-management-in-india/paperback/product-16664941.html?page=1&pageSize=4>
9. Bheenaveni, R. (2013). Economic Assessment of Transport Projects - A Retrospective Analysis . *Zenith International Journal of Multidisciplinary Research*, 3(3), 300–310
. <https://www.indianjournals.com/ijor.aspx?target=ijor:zijmr&volume=3&issue=3&article=026>
10. Bongaarts, J. (2009). Human population growth and the demographic transition. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1532). <https://doi.org/10.1098/rstb.2009.0137>
11. Chimankar, D. A. (2016). Urbanization and condition of Urban Slums in India. *Indonesian Journal of Geography*, 48(1). <https://doi.org/10.22146/ijg.12466>
12. Cleland, J. (2013). World Population Growth; Past, Present and Future. *Environmental and Resource Economics*, 55(4). <https://doi.org/10.1007/s10640-013-9675-6>
13. Datta, A. (1993). Urbanization and urban systems in India. *Cities*, 10(4). [https://doi.org/10.1016/0264-2751\(93\)90010-g](https://doi.org/10.1016/0264-2751(93)90010-g)
14. de Haan, A. (1997). Rural-Urban Migration and Poverty: The Case of India. *IDS Bulletin*, 28(2), 35–47. <https://doi.org/10.1111/J.1759-5436.1997.MP28002004.X>
15. Denis, E., Mukhopadhyay, P., & Zérah, M. H. (2012). Subaltern urbanisation in India. In *Economic and Political Weekly* (Vol. 47, Issue 30).
16. Goli, S., Doshi, R., & Perianayagam, A. (2013). Pathways of Economic Inequalities in Maternal and Child Health in Urban India: A Decomposition Analysis. *PLoS ONE*, 8(3). <https://doi.org/10.1371/journal.pone.0058573>
17. Hodgson, G. M. (2017). Karl Polanyi on economy and society: a critical analysis of core concepts. *Review of Social Economy*, 75(1). <https://doi.org/10.1080/00346764.2016.1171385>
18. Imbert, C., & Papp, J. (2020). Costs and benefits of rural-urban migration: Evidence from India. *Journal of Development Economics*, 146. <https://doi.org/10.1016/j.jdevec.2020.102473>



19. Jain, M., & Korzhenevych, A. (2020). Urbanisation as the rise of census towns in India: An outcome of traditional master planning? *Cities*, 99. <https://doi.org/10.1016/j.cities.2020.102627>
20. Jaysawal, N., & Saha, S. (2014). Urbanization in India: An Impact Assessment. *International Journal of Applied Sociology*, 4(2).
21. Kandpal, V. (2018). Shaping India's future by building smart future sustainable cities. *International Journal of Electronic Government Research*, 14(4). <https://doi.org/10.4018/IJEGR.2018100103>
22. Kirkpatrick, L. O. (2016). The new urban fiscal crisis: Finance, democracy, and municipal debt. *Politics and Society*, 44(1). <https://doi.org/10.1177/0032329215617464>
23. Kroll, M., Phalkey, R., Dutta, S., Bharucha, E., Butsch, C., & Kraas, F. (2017). Urban health challenges in India - Lessons learned from a surveillance study in Pune. *Erde*, 148(1). <https://doi.org/10.12854/erde-148-31>
24. Kumar, S., Sharma, A., Sood, A., & Kumar, S. (2016). Urban Health in India. *Journal of Health Management*, 18(3). <https://doi.org/10.1177/0972063416651608>
25. Kundu, A. (2011). Trends and processes of urbanisation in India. *International Institute for Environment and Development (IIED) Urbanization and Emerging Population Issues*, September.
26. Kundu, A., & Saraswati, L. R. (2012). Migration and exclusionary urbanisation in India. In *Economic and Political Weekly (Vol. 47, Issues 26–27)*.
27. Maparu, T. S., & Mazumder, T. N. (2017). Transport infrastructure, economic development and urbanization in India (1990–2011): Is there any causal relationship? *Transportation Research Part A: Policy and Practice*, 100. <https://doi.org/10.1016/j.tra.2017.04.033>
28. Marshall, F., & Randhawa, P. (2017). India's peri-urban frontier: rural-urban transformations and food security. In *International Institute for Environment and Development (Issue March)*.
29. Misra, R. (2016). Urbanomics in India (Detailed analysis of trends and patterns of urbanization in India). *IOSR Journal of Economics and Finance*, 07(04). <https://doi.org/10.9790/5933-0704014060>
30. Pandey, B., Reba, M., Joshi, P. K., & Seto, K. C. (2020). Urbanization and food consumption in India. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-73313-8>
31. Planning Commission GoI. (2012). *The Planning Commission Approach to the 12th Plan The Challenges of Urbanization in India. Planning Commission GoI.*
32. Pradhan, K. C. (2013). Unacknowledged urbanisation: New census towns of India. *Economic and Political Weekly*, 48(36).
33. Ramaiah, M., & Avtar, R. (2019). Urban Green Spaces and Their Need in Cities of Rapidly Urbanizing India: A Review. *Urban Science*, 3(3). <https://doi.org/10.3390/urbansci3030094>
34. Randhawa, A., & Kumar, A. (2017). Exploring sustainability of smart development initiatives in India. In *International Journal of Sustainable Built Environment (Vol. 6, Issue 2)*. <https://doi.org/10.1016/j.ijse.2017.08.002>
35. Randolph, G. F., & Naik, M. (2019). Book review: *Subaltern Urbanisation in India: An Introduction to the Dynamics of Ordinary Towns*. *Urban Studies*, 56(8). <https://doi.org/10.1177/0042098018813067>
36. Rao, K. D., & Peters, D. H. (2015). Urban health in India: Many challenges, few solutions. In *The Lancet Global Health (Vol. 3, Issue 12)*. [https://doi.org/10.1016/S2214-109X\(15\)00210-7](https://doi.org/10.1016/S2214-109X(15)00210-7)
37. Sadashivam, T. and S. T. (2016). Trends of Urbanization in India: Issues and Challenges in the 21st Century. *International Journal of Information Research and Review*, 03(05).
38. Saha, A., Goswami, S. K., & Saha, S. (2021). Social heterogeneity in urban India: a case study on five selected metropolitan cities. *SN Social Sciences*, 1(9). <https://doi.org/10.1007/s43545-021-00231-5>
39. Saravanan, V. S. (2018). Contestation and negotiation of urban health in India: A situated political approach. *World Development*, 104. <https://doi.org/10.1016/j.worlddev.2017.12.003>
40. Sarkar, R. (2020). Association of urbanisation with demographic dynamics in India. *GeoJournal*, 85(3). <https://doi.org/10.1007/s10708-019-09988-y>
41. Satterthwaite, D. (2009). The implications of population growth and urbanization for climate change. *Environment and Urbanization*, 21(2). <https://doi.org/10.1177/0956247809344361>
42. Sawhney, M. (2022). Infrastructure of life: public address, listening and crowds in the Delhi metro and Kumbh. *Media, Culture and Society*, 44(2). <https://doi.org/10.1177/01634437211037017>
43. Shekhar, S. (2021). Urbanization in India. In *Urban Book Series*. https://doi.org/10.1007/978-3-030-72292-0_1
44. Sibly, R. M., & Hone, J. (2002). Population growth rate and its determinants: An overview. In *Philosophical Transactions of the Royal Society B: Biological Sciences (Vol. 357, Issue 1425)*. <https://doi.org/10.1098/rstb.2002.1117>
45. Singh, H. (2016). Increasing rural to urban migration in India: A challenge or an opportunity. *International Journal of Applied Research*, 2(4).
46. Sood, A. (2015). Industrial townships and the policy facilitation of corporate urbanisation in India. In *Urban Studies (Vol. 52, Issue 8)*. <https://doi.org/10.1177/0042098014562318>



47. Sridhar, K. S. (2019). *Urbanisation in India. In Socio-Economic Change and the Broad-Basing Process in India.* <https://doi.org/10.4324/9780429316418-11>
48. Sridhar, K. S., & Wan, G. (2014). *Urbanization in Asia: Governance, infrastructure and the environment. In Urbanization in Asia: Governance, Infrastructure and The Environment.* <https://doi.org/10.1007/978-81-322-1638-4>
49. Tabassum, S. (2013). *Trends of Urbanization in India: Issues and Challenges.* *SSRN Electronic Journal.* <https://doi.org/10.2139/ssrn.2223201>
50. Tripathi, S. (2019). *Do economic reforms promote urbanization in India? Asia-Pacific Journal of Regional Science, 3(3).* <https://doi.org/10.1007/s41685-019-00117-8>
51. Tripathi, S., & Rani, C. (2018). *The impact of agricultural activities on urbanization: evidence and implications for India. International Journal of Urban Sciences, 22(1).* <https://doi.org/10.1080/12265934.2017.1361858>
52. Varghese, P. (2016). *Exploring Other Concepts of Smart-Cities within the Urbanising Indian Context. Procedia Technology, 24.* <https://doi.org/10.1016/j.protcy.2016.05.238>
53. Venkatesham, V. (2015). *The problems and issues in urbanization in India. Paripex - Indian Journal of Research, 8(4).*
54. Vij, D. (2012). *Urbanization and Solid Waste Management in India: Present Practices and Future Challenges. Procedia - Social and Behavioral Sciences, 37.* <https://doi.org/10.1016/j.sbspro.2012.03.309>
55. Volpati, V., & Barthelemy, M. (2020). *Revisiting the coupling between accessibility and population growth. Journal of Physics: Complexity, 1(2).* <https://doi.org/10.1088/2632-072X/ab97a7>
56. Xu, H., Vorderstrasse, A. A., Dupre, M. E., McConnell, E. S., Østbye, T., & Wu, B. (2019). *Gender differences in the association between migration and cognitive function among older adults in China and India. Archives of Gerontology and Geriatrics, 81.* <https://doi.org/10.1016/j.archger.2018.11.011>