



## A Study on the effect of Urbanization on Environment

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### ORIGINAL ARTICLE



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### ABSTRACT

Urbanization refers to the overall population growth and expansion of cities. It indicates the move or movement of person from a rural to an urban area. There is a problem here. Why is urbanization happening? This is the result of the sprawl and density of the city. Endless urbanization is degrading India's environment and this environmental degradation is causing many problems like air pollution, noise pollution, land insecurity and deteriorating water quality. This study examines the impact of urbanization on the environment. The environment has many components. However, this article focuses primarily on the climate, soil, water sources, and biosphere. It is impossible to limit urbanization, but it is possible to follow the right path of the urbanization process and take a path that has less impact on the environment.

### KEY WORDS

Urbanization, Environment, Air Pollution, Water Pollution.

### INTRODUCTION

Today, 55% of the world's population lives in urban areas, a proportion that is expected to rise to 68% by 2050. Projections show that urbanization, the gradual migration of 4,444 people<sup>6</sup> from rural to urban areas and global population growth will drive 4,444 people, or 2.5 billion people, to urban areas by 2050, including almost 90% of the 4,444 in Asia and Africa. , according to the new UN dataset released today. Urbanization is the increase in the number of people living in cities. The concept of urbanization emerged with the migration of population from rural to urban areas. This usually happens when the country

is still developing. The development of human civilization is supported by the inhabitants of rural areas characterized by agriculture, fishing and trade. Over time, the rural population increased and towns and towns 10 began to grow. Urban areas are characterized by large buildings of various types, dense population, immigration and other structures, and heavy economic dependence on trade. Despite being one of the least urbanized countries in the world with only 27.78% of the population living in cities and towns, India is currently facing a severe crisis of urban growth and urbanization is a tool for economic, social and political progress. It has caused serious socio-economic problems.

Urbanization is the process of urban growth through industrialization and economic development. The population is 4,444 per year and growing at a rate of 4,444 to approximately 17 million. This equates to 14 to 45,000 babies born every day, or 31 babies born every 4,444 minutes. If current trends continue until 2050, India's population will reach 1.62 billion. Controlled urbanization in India has led to rapid environmental degradation, causing many problems such as housing shortage, water quality, excessive air pollution, noise, dust, heat and waste disposal issues. Causing serious health problems. India is the fastest urbanizing country, tied with China and Nigeria, and accounts for 35% of global urban population growth expected between 2018 and 2050. In 2018, many Indian cities had between 300,000 and million inhabitants. There are 120 medium cities with this population, and there are only 5 urban agglomerations with over 20 billion. population. This number increases by 2.3% every year. It is estimated that by 2031, 75% of India's national income will come from cities. Providing the necessary urban infrastructure is a major challenge, with 70-80% of the infrastructure needed by 2050 yet to be built, with an estimated investment gap of around \$827 billion.

## Causes of Urbanization

As per data available, about more than 50% of world population is living in cities in the beginning of 21st century. The main causes of urbanization in India are:

- Expanding Government services as a result of World War II.
- Movement of people during the partition of India.
- Industrial development in urban areas.
- Economic Opportunities, Including Employment.
- Better Education Opportunities.
- Urban Infrastructure.
- Private Sector Growth Since 1990.
- Land Fragmentation; Destroyed by construction of dams and other infrastructure.
- Unprofitability of agriculture.

## Major Problems of Urbanization in India

There are many major problems of urbanization in India. Some important are following:

**Overpopulation:** Rising levels of education and the need for employment are attracting young people to cities. To overcome this, the extent of the city's geographic reach must be expanded. In addition to projects such as smart city missions, smart village projects should also be developed.

**Settlements:** Overpopulation causes slum development and congestion in cities. Over 40% of the city's population now lives in slums. Affordable Housing Projects Governments and people expropriating obsolete land, innovative housing solutions such as smart skyscrapers and demolishing illegal settlements can be part of the solution.

**Transportation:** Lack transport availability and connectivity is a major issue with the scenarios could be improved by implementing metro projects, increased availability and frequency of public transport, better traffic rules and their enforcement, road improvements and accident insurance.

**Health and Hygiene:** Population growth leads to a deterioration of living conditions and creates a burden of disease. Poor housing and slums have fueled outbreaks of disease, making the situation even more worrying. Access to clean and safe drinking water, good local hygiene practices, affordable healthcare facilities and increased awareness can certainly help.

**Unemployment:** Overpopulation leads to fewer jobs in cities. The development of agriculture should not be limited to rural areas and should also create employment opportunities, taking into account the rural economy while developing rural areas.

**Waste Management and the Environment:** Waste management is one of the biggest problems in cities due to the lack of proper waste treatment and disposal facilities and locations. Lack of available space makes outdoor spaces vulnerable to waste disposal and congestion. This leads to water and air pollution, which makes matters worse. In order to eliminate this situation, effective waste management and disposal policies must be developed and implemented.

**Fiscal:** According to NitiAayog, India needs about INR 400 trillion for infrastructure rehabilitation but raises only INR 20 trillion through municipal facilities, which equivalent to only about 1% of GDP, far behind India and other countries. South Africa, Brazil (8%) and Denmark (37%). After its GST, the inefficiency multiplied as the GST took over some taxes like the local corporation tax. ULBs should delegate more of their grant-making and fund-raising powers. Municipal bonds can be an option to raise capital for municipal Government.

**Poor Governance:** The lack of political will and the inefficiency of the 4,444 local civil servants and employees also contributed to poor governance. Staff should provide appropriate training based on the needs of the City and the implementation of the plan.

**Research and Innovation:** We need to develop more innovative ideas for affordable and better urban management. Public-private partnerships should be invited to participate in research activities. Governing cities must also draw lessons from other countries.

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## **The Impact of Urbanization on the Environment**

This is mainly due to the large size of the urban population, the blind and unplanned expansion of urban areas and the glaring lack of infrastructure. The rapid growth of the urban population, due to nature and migration, has put great pressure on public services such as housing, sanitation, transport, water, housing, sanitation, transport, water, electricity, sanitation and education. Social ills such as poverty, unemployment, underemployment, begging, theft, crime and theft among migrant workers are rampant. Urban sprawl is rapidly eroding valuable farmlands.

In 2001, India's population exceeded 285 million. By 2030, more than 50% of India's population is expected to live in poor conditions. The impacts on space, the environment and the quality of life of this growth are enormous to say the least. The provision of the infrastructure necessary to support such a concentration of population lags far behind the pace of urbanization. As a result, the urban environment, especially in large cities, is rapidly deteriorating. Some important environmental issues are discussed below:

### **Over use of Natural Resources**

Due to high population density and high cost of living, urban areas consume large amounts of natural resources (water, energy, fuels fossils, forest products, etc.) In addition to, there is also the misuse of natural resources, which is difficult to compensate for quickly. Serious problems in urban areas are shortage of drinking water, especially groundwater, shortage of forest products and power outages due to excessive electricity consumption.

### **Air Pollution**

Urban air is polluted by many human activities, numerous motor vehicle air travel, and industry. These activities release pollutants such as carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, hydrocarbons, organic compound fumes, particulates and toxic metals, which can cause many health hazards.

### **Noise Pollution**

Noise generated by cars, vehicles, social events and industries causes noise pollution in urban areas and has psychological and physical effects.

### **Unusual Increase in Temperature**

Unplanned construction of tall buildings in urban areas will absorb solar radiation and emit thermal radiation in the afternoon, increasing climate stress. As a result, 2015 was the hottest year. The city generally receives more precipitation than the surrounding area because dust can condense water vapor into raindrops.

### **Solid Waste Disposal**

Densely populated urban areas consume large amounts of materials while generating large amounts of solid waste. Solid waste includes general waste, industrial waste and hazardous waste. Solid waste generation increases with population growth, and foul odors and noxious gases become breeding grounds for various disease vectors. The gases produced pollute the air, the runoff of waste pollutes the water and the vectors cause various diseases.

### **Development of Slums**

Areas of a town or village without municipal facilities or infrastructure are called slums. Slums arise because rural residents do not migrate to urban areas and lack housing options.

- (i) In areas with insufficient water supply, waste is disposed of unplanned polluting the air and water.
- (ii) Water pollution causes diseases such as typhus, cholera and enteric fever. This would create a health hazard not only in the slum, but in other places nearby.

### **Urbanization in India**

India is the fastest urbanizing country, joining China and Nigeria and accounting for 35% of the global urban population growth projected between 2018 and 2050. In 2018, the population many Indian cities has grown from three hundred thousand to one million. There are 120 medium cities with this population of inhabitants and only, localities with an urban population of more than 20 million (approximately). In India, more than 461 million people live in cities.

This number increases by 2.5% every years. It is estimated that by 2031, 75% of India's national income will come from 4,444 cities. Providing the necessary urban infrastructure is a major challenge, as 70-80% of the infrastructure needed to 2050 still needs to be built, with an estimated investment gap of around \$827 billion.

Indian Urbanization Rate by State Wise (%)

S.No	Name of The States/Union Territory	Urbanization Rate(%) 2011 Census
01.	Delhi	97.5%
02.	Chandigarh	97.3%
03.	Pondicherry	68.3%
04.	Goa	62.2%
05.	Mizoram(NE)	51.5%
06	Tamil Naidu	48.5%
07	Kerela	47.7%
08	Maharashtra	45.2%

09	Gujarat	42.6%
10.	Karnataka	38.6%
11.	Punjab	37.5%
12.	Andaman And Nicobar Islands	35.7%
13.	Haryana	34.8%
14.	Andhra Pradesh	33.5%
15.	West Bengal	31.9%
16	Uttrakhand	30.6%
17.	Manipur (NE)	30.2%
18.	Nagaland (NE)	29.0%
19.	Madhya Pradesh	27.6%
20.	Jammu and Kashmir	27.2%
21.	Tripura (NE)	26.2%
22.	Sikkim (NE)	25.0%
23.	Rajasthan	24.9%
24.	Jharkand	24.1%
25.	Chattisgarh	23.2%
26.	Arunachal Pradesh (NE)	22.7%
27.	Uttar Pradesh	22.3%
28.	Meghalaya	20.1%
29.	Orissa	16.7%
30.	Assam (NE)	14.1%
31.	Bihar	11.3%
32.	Himachal Pradesh	10.0%
33.	Telengana (part of Andhra Pradesh)	

According to the 2011 census, Goa is currently the most urbanized state with 62.2% of the state's urban population of 4,444. Of all the states and union territories, the metropolitan area of Delhi and the union territory of Chandigarh are the most urbanized with 97.5% and 97.3% of the city's inhabitants respectively, followed by Daman and Diu (75.2%) and Pondicherry (68.3%).

Among the 9 major states, Tamil Nadu remains the most urbanized state with 48.4% of the population living in urban areas, followed by Kerala (47.7%) and ahead of Maharashtra 45.2%. State wise scenario:

### Number of People Living in Urban Areas

Over 75% of the country's urban population lives in 10 states:

Maharashtra, Uttar Pradesh, Tamil Nadu, West Bengal, Andhra Pradesh, Gujarat, Karnataka, Madhya, Rajasthan and Kerala.

- Maharashtra leads with a population of 50.8 million (13.5% of the country's total urban population 20).
  - Uttar Pradesh with around 144.4 million followed by Tamil Nadu with 34.9 million.
- State with the highest score:
- Goa is the most urbanized state with 62.2% urban population.
  - Tamil Nadu, Kerala, Maharashtra and Gujarat have reached over 40%

### Urbanization

Among the northeastern states, Mizoram is the most urbanized with 51.5% of its urban population .

## Low-Scoring States

Bihar, Odisha, Assam and Uttar Pradesh are still below the national average of in terms of urbanization.

## Union Territories

Delhi NCT and Chandigarh UT are the 6 most urbanized cities at 97.5% and 97% respectively. The 25% urban population is each, followed by Dammam, Diu and Lakshadweep (each, with an urbanization rate of over 75%).

## The Projection Methodology and Results for the Period 2011-2050

The increase of city population, the growth of 13 existing cities and the creation of new cities. We calculate the population of cities with more than 10,000 inhabitants from 2011 to 2050. The growth rate of existing cities in 1961 results in determining the total urban population growth from 1961 to 2011. The formula is determined by the trajectory from 1961 to 2011, which is the average growth of cities and the growth of the city's total population.

## The Future of Urbanization in India

A gathering held after the completion of the 5th smart city India 2019. Expo was held at Pragati Maidan in New Delhi on Wednesday, Mishra said: "According to the 2011 census, the population of our city of is about 31% and it is expected to exceed 40% of by 2030 and 60%-70% by 2011. Governance Government Program.

## Urbanization Smart City Mission

The National Smart City Mission is an urban renewal mission launched in 2015 to enable cities to provide their citizens basic infrastructure, clean and a sustainable environment and cities of adequate quality improve lives through the application of "Smart Solutions."

## AMRUT (Atal Mission for Urban Rejuvenation and Transformation) Mission

The objectives of the 'AMRUT are to ensure that all households have access to safe water taps and a sewer interface. Improve the quality of urban life through the development of green and well-maintained spaces such as parks. Supplementary Reduce pollution by adopting public transport or constructing non-motorized facilities Transport (e.g. walking or cycling).

## Swacch Bharat Mission

(ODF) Created in 2014 to ensure the continuation of outdoor defecation studies Yes, No product and no fluid retention, work will continue to the next SBMG step. Same goes for ODF Plus.

## Swachh Bharat Urban Mission 2

Funding allocated in Federal Budget 2021. Swachh Bharat Mission Urban 2.0 aims to make every city waste-free through advanced waste management systems.

## HRIDAY (Heritage City Development and Augmentation Yojana)

National Heritage City Development and Augmentation Yojana (HRIDAY) was launched on 21 January 2015 to fully integrate urban planning, economic growth and heritage preservation. It protect the character of the city and the heritage of cities of all cultures.

## PM Awas Yojana

Housing for all Scheme is an initiative of the Government of India to provide housing to slum dwellers and implemented by the Ministry of Housing and Urban Affairs, Government of India. Mission has urban and Grameen parts to fully appreciate the diversity of the Indian landscape.

## Atmanirbhar Bharat Abhiyan

Atmanirbhar Bharat Abhiyan (Indian Independence Mission) is a campaign by the central Government of India which includes a stimulus package of Rs 200 crore and various reform proposals. The five pillars of its mission are economy, infrastructure, institutions, democracy and needs.

### Suggestion

Sustainable, Planned, and Green Cities: Government efforts to build smart, safe, green, and affordable cities are gaining momentum and legal support.

**Private Investment:** We can encourage more investment in green housing and other sustainable landscape city initiatives.

**Health and Population Control:** Population control is essential to controlling the spread of disease. We will contribute to the realization of a healthy society through medical facilities accessible to all.

**Accessible to all:** All residents must have access to all services without discrimination. Accessible and inclusive infrastructure must be applied in urban areas.

**Employment:** Private investment in the use of environmental resources and job creation should be encouraged to mitigate the negative impacts of increasing urbanization while protecting natural ecosystems.

**Poverty Reduction:** We can take a bottom-up approach to better understand the unique challenges that the urban poor face and struggle with.

### CONCLUSION

World population will continue to grow as we enter the 21st century. The urban population of inhabitants continues to grow. By 2050, two-thirds of the city's inhabitants will live in urban areas. This equates to approximately 7 billion people in cities alone. It can be concluded that part of the cause of environmental damage caused by urbanization lies in national laws and regulations. Mismanagement in cities today has led to the development of informal settlements and slums, leading to unsanitary living and working conditions. Serious focus on improving urban policies to promote resource efficiency. Urgent attention should be given to reducing solid waste generation at source through mandatory standards, statutory fees, tax incentives, education and voluntary compliance. If proper measures are not taken to prevent pollution and provide more social amenities to improve their quality of life, the lives of urban Indians can become more miserable. Therefore, it is the responsibility of the Government to take necessary measures to prevent environmental degradation through reliable solutions, and planners should pay attention to these views when planning and protecting the environment.

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