



URBANIZATION IN INDIA: AN EVALUATION FROM ENVIRONMENTAL PERSPECTIVES

Dr. Aakuthota Srinivasulu

Assistant Professor, Department of Public Administration & HRM, Kakatiya University, Hanamkonda – 506009

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ABSTRACT

Urbanization is a process taking place globally intertwined with economic development. Urbanization is a process that leads to the growth of cities due to industrialization and economic development, and that leads to urban-specific changes in specialization, labor division and human behaviors. Urbanization refers to general increase in population and the amount of industrialization of a settlement. The population is growing at the rate of about 17 million annually which means a staggering 45,000 births per day and 31 births per minutes. If the current trend continues, by the year 2050, India would have 1620 million populations. It includes increase in the number and extent of cities. It symbolizes the movement of people from rural to urban areas. Urbanization happens because of the increase in the extent and density of urban areas. The most emerging issues are climate changes, freshwater scarcity, deforestation, and fresh water pollution and population growth. Although it is impossible to restrict urbanization it has to be ensured that urbanization proceeds in the right path causing minimum impact on environment.

KEYWORDS: Urbanization, Environmental, Growth, scarcity, deforestation

I. INTRODUCTION

Urbanization and environment has evinced interest from a wide range of experts. The multidisciplinary gamut of the subject invokes the interest from ecologists, to urban planners and civil engineers, to sociologists, to administrators and policy makers, and finally the common man. This is because of the multitude of activities and processes that take place in the urban ecosystems every day. Urbanization is an ongoing phenomenon. It is the movement of population from rural to urban areas and efforts to reduce time and expense in commuting and transportation while improving opportunities for jobs, education, housing, and transportation. Living in cities permits individuals and families to take advantage of the opportunities of proximity, diversity, and marketplace competition. Urban ecosystems are the consequence of the intrinsic nature of humans as social beings to live together. Thus when the early humans evolved they settled on the banks of the rivers that dawned the advent of civilisations. An inadvertent increase in the population complimented with creativity, humans were able to invent wheel and fire, created settlements and started lived in forests too. Gradually, with the development of their communication skills by the form of languages through speech and script, the humans effectively utilised this to make enormous progress in their life styles. All this eventually led to the initial human settlements into villages, towns and then into cities. In the process humans now live in complex ecosystems called urban ecosystems.

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staggering 45,000 births per day and 31 births per minutes. If the current trend continues, by the year 2050, India would have 1620 million populations. Due to uncontrolled urbanization in India, environmental degradation has been occurring very rapidly and causing many problems like shortages of housing, worsening water quality, excessive air pollution, noise, dust and heat, and the problems of disposal of solid wastes and hazardous waste s.

Urbanization is a process taking place globally intertwined with economic development. The urban global tipping point was reached in 2007 when for the first time in history over half of the world's population 3.3 billion people were living in urban areas. It is estimated that a further 500 million people will be urbanised in the next five years and projections indicate that 60 per cent of the world's population will be urbanised by 2030. This rush to the cities, caused in part by the attraction of opportunities for wealth generation and economic development, has created the phenomenon of 'megacities': urban areas with a population of 10 million or more. This incredibly rapid growth of megacities causes severe ecological, economical and social problems. It is increasingly difficult to manage this growth in a sustainable way. It is recognised that over 70 per cent of the growth currently takes place outside the formal planning process and that 30 per cent of urban populations in developing countries are living in slums or informal settlements, i.e. where vacant state-owned or private land is occupied illegally and is used for illegal slum housing.

II. OBJECTIVES OF THE STUDY

The specific objectives set out for this study are as follows:

1. To analyse the trends of urbanization.



2. To examine the basic amenities in urban areas like percentage of urban households having access to safe drinking water, health facilities, electricity and sanitation.
3. To examine the impact of growing urbanization on the overall quality of human life.
4. To examine the impact of urbanization on environmental factors.

III. METHODOLOGY

The study is based on secondary sources which include various publications by government agencies as well as non-governmental organizations/bodies. The data from various NSSO rounds and various Censuses (Registrar General of India) has been used for the collection of relevant and reliable statistics. Apart from this various issues of Economic Survey, different volumes of statistical outlines of India and various reports of CMIE published from time to time has also been the other source of data collection. The data on pollution has been taken from the Compendium of Environment Statistics, Ministry of statistics and programme implementation (MOSPI), government of India and from the publications of the Central pollution Control Board.

Impacts of Urbanization on Various Components of Environment

Most of the major environmental problems of the next century will result from the continuation and sharpening of existing problems that currently do not receive enough political attention. The problems are not necessarily noticed in many countries or then nothing is done even the situation has been detected. The most emerging issues are climate changes, freshwater scarcity, deforestation, and fresh water pollution and population growth. These problems are very complex and their interactions are hard to define. It is very important to examine problems through the social-economic-cultural system. Even the interconnections between environmental problems are now better known, we still lack exact information on how the issues are linked, on what degree they interact and what are the most effective measures. One problem is to integrate land- and water use planning to provide food and water security (UN EP 1999).

IV. IMPACTS ON VARIOUS RESOURCES

Erosion and other changes in land quality

Rapid development can result in very high levels of erosion and sedimentation in river channels

Pollution

Pollutants are often dispersed across cities or concentrated in industrial areas or waste sites. Lead- based paint used on roads and highways and on buildings is one such example of a widely dispersed pollutant that found its way into soil. Burying tremendous amounts of waste in the ground at municipal and industrial dumps.

Water Resources

Natural vegetation and undisturbed soil are replaced with concrete, asphalt, brick, and other impermeable surfaces.

This means that, when it rains, water is less likely to be absorbed into the ground and, instead, flows directly into river channels.

Higher, faster peak flows change streams channels that have evolved over centuries under natural conditions. Flooding can be a major problem as cities grow and stream channels attempt to keep up with these changes.

Degraded Water Quality

The water quality has degraded with time due to urbanization that ultimately leads to increased sedimentation there by also increasing the pollutant in runoff.

Modification of Habitats

The fertilizers that spread across lawns finds its way into water channels where it promotes the growth of plants at the expense of fish. The waste dumped into streams lowers oxygen levels during its decay and cause the die-off of plants and animals.

Destruction of Habitats

There is also complete eradication of habitats as an outcome of urbanization and native species are pushed out of cities.

Creation of New Habitats

New habitats are also created for some native and non-native species. Cities also create habitats for some species considered pests, such as pigeons, sparrows, rats, mice, flies and mosquitoes. Urbanization has, for example, eliminated many bat colonies in caves, but has provided sites such as bridges for these species to nest.

V. CONCLUSIONS

Numerous development experts perceive urbanization as a challenge. However, history shows that no nation has thrived without it, and every prosperous nation is predominantly urban. Economic growth over the past six decades has been closely tied to urbanization, with the poorest nations remaining largely rural. Urban areas offer numerous advantages for enhancing living standards, thanks to the efficiencies and conveniences they provide in infrastructure and services. Yet, many urban areas still grapple with severe development issues, such as rampant poverty, food insecurity, and high rates of infant and child mortality. Given this context and the vast potential for progress in the near future, it's imperative for India to take immediate action. Achieving inclusive growth requires urbanization that is socially equitable, economically viable, and environmentally sustainable.

1. From this we can conclude that some causes of damage to the environment due to urbanization lies in the legislation and the regulating agencies if the country.
2. Failure of governance in today's cities has resulted in the growth of informal settlements and slums that constitute unhealthy living and working environment.
3. Serious attention should be given to the need for improving urban strategies, which promote efficiency in



resource use.

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5. Vehicular pollution control in metropolitan cities and other cities deserves top priority.
6. Urgent attention should be given to reduce the generation of solid waste at the sources through mandatory standards and regulation fee and tax incentives, and education and voluntary compliance.
7. In case adequate steps are not taken to prevent pollution and to improve the quality of life by providing more social amenities, the life of the urban dwellers of India may become more miserable this may be the cause of health hazards and worst devastation.

VI. SUGGESTIONS

1. Based on the study and in the light of the observations the following suggestions are made for achieving high level of urbanization with maintaining environmental quality so that sustainable development could be achieved in India:
2. Developing spatial pattern of urbanization suited to the socio-economic conditions of India. With a total urban population of 286 million and 35 metropolitan cities and metropolises, India's urban issues with all their related challenges and opportunities demand their firm place on the national agenda.
3. It is one of the key features of India's urbanization. Unplanned urbanization has resulted in the growth of slums in the cities dividing them into formal and informal settlements. The non-recognition of this fact has contributed to enormous strains on urban infrastructure. It is evident that if cities fail to deal constructively with poverty, poverty would seriously undermine the sustainability of cities.
4. Government should provide health, education, housing, and pension services for rural migrants in urban areas which is essential for promoting human capital movement from rural to urban areas or to the industrial sector.
5. Government should create employment opportunities for low-income communities through the promotion of micro-enterprise and public works and also encourage and facilitate the participation of slum dwellers in housing construction and shelter up gradation so that it will aim at improving the quality of life and making cities free from the worst features of slums.
6. It is essential to make the public aware of the formidable consequences of the Environmental Degradation, if not retorted and reformative measures undertaken would result in the extinction of life. It is essential to get the country acquainted with these challenges so that their acts may be eco-friendly.
7. Organisations like TERI, CPCB UNEP/ WHO, World Bank, CESE/IIT, EIA/EPCA/NEP/MoEF etc have carried out studies in the past to estimate the contribution of various sources towards the environment but the main problem is the lack of

environmental awareness among the people. What is needed is strict enforcement of these laws and creation of environmental awareness among the masses.

8. The environment noise levels are to be checked with prescribed noise standards for residential, commercial and industrial areas. If the noise exposure levels are higher, suitable noise control measures like personal protective equipment, installation of barriers, enclosures etc., need to be suggested.
9. The use of gaseous fuels, that is, CNG and LPG, ULSD and electricity (in the form of battery operated vehicles) for automobile applications should be encouraged. Vehicles using CNG proved to be economically viable, can help in reducing the levels of pollutant emissions and are quite cost effective.
10. Strengthening inter-sectoral development between State and the Centre. There should be good cooperation between State Pollution Control Board, Central Pollution Control Board, Municipal Administration, Ministry of Urban Development and Poverty Alleviation, and Ministry of Health and Family Welfare etc.
11. The Planning Commission should note that "addressing the problems posed by the urban transformation that is likely to occur" is among the four key challenges for the next Five Year Plan (2012-2017). The others are described as those of managing energy and water and of protecting the environment. Greater emphasis should be given on urban infrastructure creation and management and on the need to ensure that the growing cities are "liveable" as ignoring the above formidable challenges are perilous because the adverse implications are not long term or even medium term: they are likely to come and bite us only too soon.
12. Finally in order to make policies effective, apart from making people aware of environmental concerns, there is a need to augment the available human resources capacity so that the environmental issues are addressed properly. For this we need to look into the existing facilities in this regard at higher levels of education, participation of NGOs and the private sector.

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