Issues and Challenges of Urbanization in India

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Abstract

Urbanization, no doubt, has a positive impact on income level, employment, production infrastructure and education, but is accompanied by a number of problems such as shortage of housing, inadequate water supply, inadequate sanitation and waste disposal facilities. Added to all these problems, in the developing countries, administration is weak and slack, traffic system are not managed properly, industrial rules and regulations are flouted, they are not implemented seriously. As a result, deterioration of urban environment has increased many fold than what it should have been actually. This research paper aims at highlighting issues and challenges of Urbanization in 21st centaury with special focus on urban environmental issues like air, water, land and noise pollution, problems of housing, traffic congestion, slums, solid waste management, and also to suggest measures to overcome all these problems. The study reveals that rapid growth of population in the small and large cities of India has resulted in serious shortfalls in housing, public utilities, and community facilities. The urban environment has deteriorated, giving rise to shanty towns and slums, heavy population concentration, uncontrolled land use, problem of solid waste traffic congestion, and pollution.

Keywords: Urban Growth, Urban Services, Urban Issues, Pollution, Ecological Management

Introduction

The onset of modern and universal process of urbanization is, relatively, a recent phenomenon and is closely related to industrial revolution and associated economic development. As industrial revolution started in Western Europe, United Kingdom was the initiator or industrial revolution. Historical evidence suggests that urbanization process is inevitable and universal. The United Nations estimate indicates that, in mid 2050s, about 68 per cent of the world population lived in urban areas. With the urban population growing two and a halftimes faster than its rural counterpart, the level of urbanization is projected to cross the 46 percent mark by 2025 . United Nations projections further show that by 2050 , more than half or 56 % of the Indian population will live in urban areas. Although India is one of the less urbanized countries of the world with only 31.16 per cent of her population living in urban agglomerations/towns, this country is facing a serious crisis of urban growth at the present time. Whereas urbanization has been an instrument of economic, social and political progress, it has led to serious socio-economic problems. The rapid growth of urban population, both natural and through migration, has put heavy pressure on public utilities like housing, sanitation, transport, water, electricity, health, education and so on. Urbanization, no doubt, has a positive impact on income level, employment, production, infrastructure and education, but it is accompanied with a number of problems such as shortage of housing, inadequate water supply, inadequate sanitation and waste disposal facilities. Added to all these problems, in the developing countries, administration is weak and slack, traffic systems are not managed properly, industrial rules and regulations are flouted, they are not implemented seriously.

Objectives of the Study

To study the process of urbanization in India. To assess urban issues and challenged with reference to India in 21st century. To suggest remedial measures to upgrade ecological conditions of Indian cities.

Methodology

In this part of the study, we have made an attempt to analyze urban issues and challenges with reference to India in the 21st century. An

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integrated approach has been adopted in the present study analysis. The required data for the present study analysis have been obtained from secondary sources like Census of India, Environmental Survey by The Hindu Daily, CPCB report, news papers, magazines etc. The collected data have been classified, proceed and presented in the form of different cartographical and GIS techniques.

Process of Urbanization

Urbanization is an index of transformation from traditional rural economics to modern industrial ones. It is progressive concentration (Davis 1965) of population in urban unit. It is a finite process, a cycle through which a nation passes as they evolve from agrarian to industrial society (Davis and Golden, 1954). Davis has mentioned three stages in the process of urbanization. Stage one is the initial stage characterized by rural traditional society with predominance in agriculture and dispersed pattern of settlements. Stage two refers to the acceleration stage where basic restructuring of the economy and investments in social overhead capitals including transportation, communication take place. Proportion of urban population gradually increases from 25% to 40%, 50%, 60% and so on. Dependence on primary sector gradually dwindles,. Third stage is known as the terminal stage where urban population exceeds 70% or more. At this stage, level of urbanization (Davis, 1965) remains more or less same or constant. Rate of growth of urban population becomes same at this terminal stage. Urban areas have been recognized as "engine of inclusive economic growth". Of the 121 crore Indians, 83.3 crore live in rural areas while 37.7 crore stay in urban areas, i.e., approximately 32% of the population. The census of India, 2011 defines urban settlement as:- All the places which have municipality, corporation, cantonment board or notified town area committed. All the other places which satisfy following criteria: A minimum population of 5,000 persons. b. At least 75% of male main working population is engaged in non-agricultural pursuits. and c. A density of population of at least 400 persons per square kilometer.

Urbanization in India

The process of Urbanization is not only desirable but essential for generating economic growth and social change in developing countries like India. Number of urban centers have grown from 1,827 in 1901 to 5,161 in 2001 and number of population residing in urban areas has increased from 2.58 crore in 1901 to 37.7 crore in 2011.

Issues and Challenges of Urbanization in India

The population of the world is growing at a fast pace. Besides this, world's population is urbanizing much faster than its growth. As a result of this process, population of cities is swelling fast. Phenomenal population growth, coupled with fast pace of industrialization, is responsible for urban environmental hazards. Human activities are disturbing the equilibrium of the atmospheric environment, particularly by changing the chemistry of the atmosphere. Disposal of human and industrial waste into rivers, land, air not only affect the atmosphere and the climate but also degrade the quality of fresh water and also damage the ecosystem. There are many evidence to show that urbanization in India is producing a great stress on the environment.

Dr. Wiesner, a scientific advisor said that we are "engaged in a race between catastrophe and intelligent use of technology, and it's not at all clear we are going to win." There can be no question that the earth's capacity to absorb and assimilate pollution are no longer what they were. Almost every day, the news papers publish reports about death of some people from all over the world.

Census Years	Number of Urban Agglomeration N/Town	Total Population	Urban Population	Rural
1901	1,827	23,83,96,327	2,58,51,873	21,25,44,454
1911	1,825	25,20,93,390	2,59,41,633	22,61,51,757
1921	1,949	25,13,21,213	2,80,86,167	22,32,35,046
1931	2,072	27,89,77,238	3,34,55,989	24,55,21,249
1941	2,250	31,86,60,580	4,41,53,297	27,45,07,283
1951	2,843	36,10,88,090	6,24,43,709	29,86,44,381
1961	2,363	43,92,34,771	7,89,36,603	36,02,98,168
1971	2,590	53,81,59,652	10,91,13,977	48,90,45,675
1981	3,378	68,33,29,097	15,94,62,547	52,38,66,550
1991	3,768	84,43,24,222	21,71,77,625	62,71,46,597
2001	5,161	1,02,70,15,247	28,53,54,954	7,41,66,02,293
2011	7,935	1,21,01,093,422	38,85,24,900	82,16,68,522

Source : (Census of India Report)

Poverty

Roughly a third of the urban population today lives below the poverty line. There are glaring disparities between haves and have-nots in urban areas.   The most demanding of the urban challenges, unquestionably, is the challenge posed by poverty, the challenge of reducing exploitation, reliving misery and creating more human conditions for urban poor. There is a rise in urban inequality, as per UN habitat report, 2016, Urban inequality in India rose from 34 to 38% based on consumption in period 2005 to 2015. While the rate of poverty   increase is 7.11 % per year in 2017 . Some of the main causes of urban poverty is lack of opportunities and skill training

for most of the working age population besides huge migration and overcrowding in the already packed urban infrastructure increases urban poverty i e rural poverty become urban .Some of the ways to reduce poverty in urban areas are as to promote medium and small scale industry in rural as well as urban areas to stop migration and reduce poverty in both rural and urban areas besides this we also need more investment into basic services such as health care ,education ,and skill development for long term solution in economic disparity .

Urban Crime

Prevention of urban crime is another challenge before the government of states having more number of urban areas and particularly metropolitan cities. The mega cities are facing increased criminal activities on account of unchecked migration, illegal settlements and diverse socio-cultural disparities, organized groups, gangsters, professional criminals for wishing a lavish life in metropolis. The cities of Delhi, Mumbai and Bengaluru have accounted for 16.2 per cent, 9.5 percent and 8.1 per cent respectively of the total crime reported from 35 mega cities. Prevention of crime in mega cities is a challenge before the city government in India.

Traffic Problems

The traffic problem in urban areas is one of the greatest problems of the day. Most of the cities and towns are growing in an unplanned way. Due to lack of proper enforcement agencies, encroachment in all parts of the cities is growing rapidly and, due to political interference, authorities become incompetent. Most of the roads are narrowing haphazard and ill-maintained. Traffic problem is going from bad to worse because of high density of population, desire to have personal means of transport and to live near the city, mixed traffic, lack of civic sense, ill- maintained roads, poor regulation of traffic, etc. Some of the major losses due to traffic congestion are as –loss of time for passengers, fuel loss , loss of life due to not reaching hospital in time, increase road accident due to over speed taken to make up the lost time, increase carbon di oxide emission and more pollution, more diseases ,increased mental tension ,increased cost of travel and increased cost of doing business . Some of the measures to reduce traffic congestion are as follows increase public transport system, better infrastructure development , widening of busy roads, develop waterways wherever possible and promote suburban railways .

Growth of Slums

The other type of problem which should concern us the most is the incidence of large number of sub-standard 'Bastis' or slums (Communities). There are varying estimates regarding slum population but the fact is that a sizeable proportion of our urban population lives under sub-human conditions. Not to speak of houses, even the essential facilities of water supply and sanitation are not available in such slums. Such communities are there not only by choice but by compulsions and necessities; our planning system does not recognize these compulsions. The prevalence of slums is very common in Third World countries, in general, and India, in particular. But the origin of the slum dates back to the period of industrial revolution that came into existence in European countries. Presently, India's slum population is 25 per cent of the country's urban population. The slum dwellers in many cities account for between 30 to 40 per cent of the total population. Kolkata, among mega cities, tops the list with over a third of its population in slums, followed by Mumbai where DHARAVI is the largest slum of Asia , Delhi , Chennai, and Hyderabad, etc.

Air pollution

The main source of air pollution are industrial plants, power plants, automobiles, locomotives, missiles, burning of dead bodies, burning of oils, refuse burning, etc. Common contaminants that are harmful to health or property area ammonia, sulfur oxides, nitrogen oxide, hydrogen sulfide, carbon monoxide, dust, radioactive gases, methane, chorine and various organic solvents. In Mumbai, industries daily throw up more than 2,600 tonnes of pollutants. This is followed by Delhi (2020 tonnes), Kolkata (985 tonnes), Chennai (880 tonnes), Bangaluru (800 tonnes) & Pune (800 tonnes), etc. According to WHO latest report Kanpur is the most pollutant city in respect of RSPM emission worldwide .

Disposal of Solid Waste

Disposal of human waste has become a big problem in urban areas. As such, Indian cities have small amount of garbage per person per day when compared with those of developed countries. The National Commission on Urbanization (2015), on the basis of sample of 40 cities over 1000,000 population, found that the mean per capita waste/day was 570gms per day. An average Indian generates about 450-500 gms/day of solid waste and on an average 82.8% of solid generated in metropolitan cities is collected and disposed in class I and Class II cities. Besides the healthier ways of solid waste disposal, the municipalities are also confronted with the monstrous problem of managing wastewater. Many of the urban cities in India do not have either proper drainage system nor are following proper methods of disposal of garbage whether from houses or industries. These tend to spoil not only the environment, it also effects the land, health of the people and water.

Providing gainful employment to the growing urban population is a major challenge before the government. It is generally observed that the literate and semi-literate migrants are absorbed with minimal works, carrying lower wages and more hours of work, The UN Habitat Report (2016) has rightly remarked "The cities have become a dumping ground for surplus population working in unskilled, unprotected and low wage informal service industries and trade".

The Urban workers are increasingly being pushed into the informal sector and without any adequate facilities in the cities are forced to defecate in public places like footpaths, open drains, etc.

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Challenges in Urban Development

Health Conditions

The important indicators of urban developments are education and health. The health conditions of the urban poor in some areas are even more adverse compared to rural areas. As many as 20 million children in the developing countries are dying consequent to drinking polluted water. About 6,00,000 persons are losing their lives on account of indoor air pollution (Jagmohan, 2015). The National Family Health Survey, 2016-17 has envisaged that a lot of women and children are suffering from nutritional anemia and disease like tuberculosis and asthma which are occurring in good in good numbers. Providing health care services to the growing urban population is a major challenge before the government health care delivery system.

Regulator

There is exponential increase in real estate, encroaching agricultural lands. Also the rates are very high, which are not affordable and other irregularities are also in practice. For this, we need a regulator, which can give a level playing field and will be instrumental for affordable housing and checking corrupt practices in real estate sector.

Planning

Planning is mainly centralized and, till now, the state planning boards and commissions have not come out with any specific planning strategies and depend on Planning Commission (Niti aayog) for it. This is expected to change in the present government, as planning commission has been abolished and now focus is on empowering the states and strengthening the federal structure. In fact, for big cities, the plans have become outdated and do not reflect the concern of urban local dwellers. This needs to be taken care of by metropolitan planning committee as per provisions of 74th amendment act. Now the planning needs to be decentralized and participatory to accommodate the needs of the urban dwellers. Also, there is lack of human resource for undertaking planning on a full scale. State planning departments and national planning institutions lack of qualified planning professionals. The need is to expand the scope of planners from physical to integrated planning land use, infrastructure, risk reduction, economic productivity and financial diversity.

Finances

Major challenge is of revenue generation with the ULBs (Urban Local Bodies) . This problem can be analyzed from two perspectives. First, he states have not given enough autonomy to ULBs to generate revenues and second, in some cases, the ULBs have failed to utilize even those tax and fee powers that they have been vested with. There are two sources of municipal revenue, i.e., municipal's own revenue and assigned revenues. Municipal's own revenue are generated by the municipal through taxes and fees levied by them. Assigned revenues are those which are assigned to local government by a higher tier of government. There is a growing trend of declining ratio of own revenue. There is poor collection of property taxes. Use of geographical information system to map all the properties in a city can have a huge impact on the assessment rate of properties that are not in the tax net.

Sanitation

The poor sanitation conditions is another gloomy feature in urban areas and particularly in slums and unauthorized colonies of urban areas. The drainage system in many unorganized colonies and slums are either not existing and if existing , are in a bad shape. These cause related disease such as diahorrea and malaria. Unsafe garbage disposal is one of the critical problems in urban areas and garbage management always remains a major challenge.

Suggestions for Urban Planning and Development

The measures suggested for urban planning and development, and also to improve the quality of urban environment.

1. Overpopulation is the root of all pollution problems. The total impact on environment is simply proportional to total population. Population control is needed both in urban and rural areas. There is also need for checking rural to urban migration by providing employment opportunities and better civic amenities.

2. Automobiles are the main source of pollution in urban areas. To check this, public transport system should be encouraged. No vehicles should be allowed to emit pollutants above the maximum permissible limit.

3. Noise can be easily reduced without adding much cost of removal. The noise producing industries should use all devices to reduce the level of noise inside the industries. There should be complete banning of the use of loudspeaker in school college zones in the nights.

4. Minimize of garbage accumulation, use of gunny/nylon bags for carrying consumable goods, reusing bottle and recycling of paper should be adopted since garbage has a major share in polluting land, air and water and also indirectly affect flora and fauna. Complete ban on plastic bags

5. There is need for reservation of the land for green areas, recreation, takes and ponds and parks and playgrounds, etc.

6. There is need to apply GIS in urban planning specially in mapping of slum areas, management of solid waste, land use planning and also mapping of all the properties in a city, which helps local bodies in planning, controlling encroachment and smooth administration.

7. There is need to change the life style and outlook of urban people.

8. The indiscriminate exploitation of groundwater and other natural resources like agricultural, pastoral grazing and forest lands should be discouraged.

9. Development of fast local transport network

10. Construction of good number of water bodies in side urban areas and its periphery.

11. Use of ecofriendly constructional material.

12. Green carbon tax if an industry emitting more pollutants.

References

1. Bhagat R.B., 1992, Component of Urban Growth in India with Refrence to Haryana; Finding from Recent Census-Nagalork, Vol.25, No.3, pp. 10-14
2. Davis Kingsey., 2015, "Urbanization in India-Past and Future", University of California Press; Barkley.
3. Kundu, A, 2013, Pattern of Urbanization with Special Reference to Small and Medium Towns in India in Chanda, K, Sectoral Issues in the Indian Economy, Har-Anand Publications, New Delhi.
4. Muna, R E., 2005, Environment Impact Assessment Principles & Proceedings Impact Scope Reports, Toronto Canada.
5. Kurani, M.S., 2017, Urban Growth and its Impact on Environment in Belgaum City-A Spatial Analysis, (in Published Ph.D Thesis KarnatakUniversity.
6. Singh, Pramod 2017, Ecology of Urban India, Vol. No. 2, Ashish Publishing House New Delhi, pp. 3-19.
7. Breeze, G., 2011, Urban Development in India, National Association of Geographers India, Vol. 14 (4), P. 269.