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## ENVIRONMENTAL SUSTAINABILITY IN INDIA: AN OVERVIEW

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### ABSTRACT

Cities are not only the place of production and consumption but also has some space of cultural and social interaction which provides opportunity of gaining information, knowledge sharing, cultural exchange, health and education. India's level of urbanization keeps on accelerating at unprecedented scale that ultimately caused threat to environment sustainability. Because of the unplanned urban growth causes the formation of slum and increased the burden on the existing infrastructure. Consequently, the issue of management of urbanization becomes critical because it imposes a heavy cost on the current natural resources. Presently Indian cities are facing a lot of environmental challenges in the form of pollution, stress on urban land, Water shortages, losses of green cover and biodiversity etc. A few substitutes have been suggested to resolve the issues emerged during development process in the cities are cooperation among authorities at local, state, national and international levels, magnetize private investment and utilize natural resources within a limited extent and consultation with different stakeholders. Besides, an integrated approach to rural and urban development is very important in this regard but unfortunately it is missing on the ground reality.

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**Keywords:** Urbanization, Environment Sustainability, natural resources, Social Interaction

### INTRODUCTION

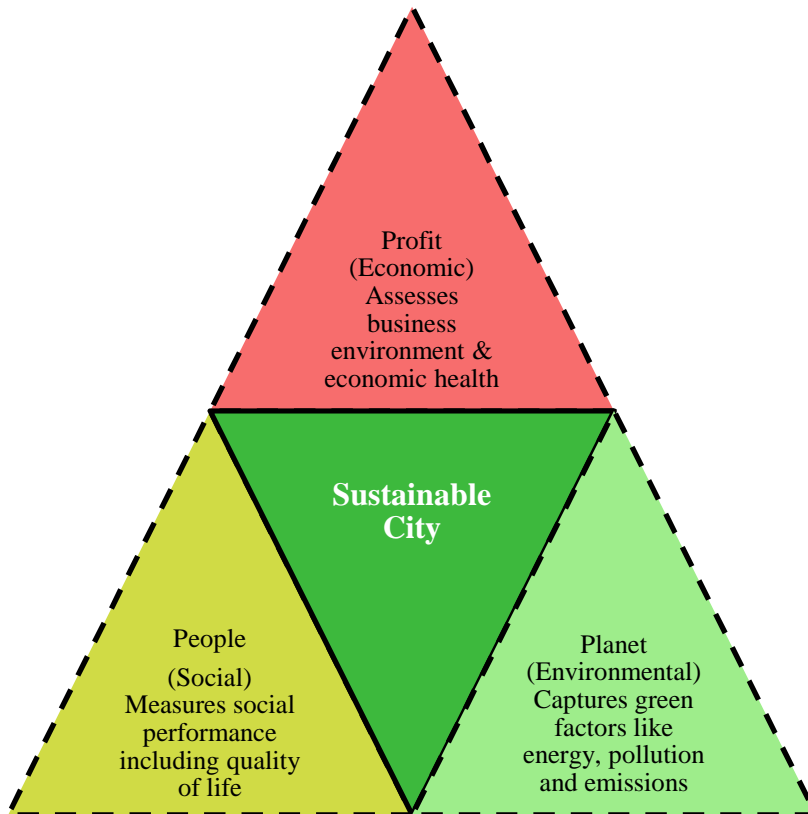
Cities are the hub for ideas, commerce, diverse culture, social, human and economic activities and development. Cities are not only the place of production and consumption but also assist in upgrading and shaping the new global networks on the basis of economic activity and provide some basic infrastructural facilities such as physical infrastructure, human resource and institutional framework etc. Apart from the economic function, city has some space of cultural and social interaction which provides opportunity of gaining information, knowledge sharing, cultural exchange, health and education. Moreover, cities are the centre of power and administration where people have opportunity to manipulate the decisions taken by policy makers at all levels. India's level of urbanization keeps on accelerating at unprecedented scale and pace that have doubled the issues such as insufficient water and power supply, unreliable transport systems and limited access to health centres that ultimately caused threat to environment sustainability. Through the ages India has been primarily a state of rural character, but with the introduction of Liberalisation, Globalisation and Privatisation new urban centers emerged from time to time. The new economic era may also be defined as a global network of flows of people, ideas, finance and goods (Castells 1996, Harris 2001). As a result, the process of urbanization began with the changes in the proportion of population living in urban areas by giving enormous opportunity in the form of employment generation, the source of trade,

facilities and utilities. In this regard India lies in the midst of transition from predominantly rural to partial urban culture. This transition described as three forms of structural transformation; the first movement of agriculture sector in industrial & service sector, secondly a gradual shift from the informal to the formal sector and finally expansion of economic activities not only in urban areas but even in and around the rural areas. Accordingly, physical transformation led the behavioural alteration in terms of consumption pattern, lifestyle, attitude, education level, etc. Not even this, due to unparalleled urban growth, a pressure has arisen on the limited natural resources resulting into degradation of natural ecosystem. Due to continuous and unplanned growth, cities have become an origin of urban environmental degradation and wasteful use of resources which will be proven intolerable for our present as well as future generations (Mehta, 2014).

### **ENVIRONMENTAL SUSTAINABILITY**

The term sustainable development was divided by the report entitled “*Our Common Future*” in 1987 published by Brundtland Commission. The concept of sustainable development was evolved between 1972 and 1992 through a series of international conference and initiatives. Sustainable development intends to maintain the economic progress while protecting environmental value. It appeals to the integration of economic, environmental and social aspects throughout the decision making process. It ensures that it meet the need of the present without compromising the ability of future generation to meet their own needs. Human beings are at the center of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature (United Nations, 1992).

Sustainable development emphasizes not only on the environment, it's all about health of the society in which we live. It allows to fulfill the basic needs of present and future generation, such as access to safe drinking water, sufficient education facilities, better health services, employment opportunities and the battle against malnutrition. Similarly, it accentuates on the quality of life of the people by providing access to medical care, social services, culture and social being. Sustainable development also draws attention towards the new forms of renewable energy such as wind, solar and geothermal power etc. The concept of Sustainability is being understood in a right perspective since the beginning of 21<sup>st</sup> century. But unfortunately it is not a priority for many nations and the institutional framework has been able to providing a lip service. It cannot work in bits and pieces. The civil societies and other communities will have to accept wholeheartedly that it is a necessity and they have to make it into peoples lifestyle. Therefore, an urgent need arises to develop a lifestyle that reduces consumption but give emphasis to conservation. According to the Arcadis Sustainable Cities index report ,2016 there are primarily three dimensions such as social, environmental and economic sustainability which present the real picture of cities in terms of health and wealth for present and future generation.



Source: Arcadis Sustainable Cities Index Report, 2016

**Figure-1 Three Pillars of Sustainability**

The people sub index rate comprises health (life expectancy, obesity), education (literacy and universities), income inequality, dependency ratio, crime, housing and living costs. These indicators will ultimately capture quality of life. While the Planet sub index rank cities on energy consumption and renewable energy share, green space within cities, recycling and composting rates, greenhouse gas emissions, drinking water, sanitation and air pollution in order to capture the green factor of cities. The profit sub index investigates performance from a business point of view with all transport infrastructure, tourism, GDP per capita, city's performance in global economic network, employment, telecommunication etc for gaining economic health of the city. Besides, it has also been identified that cities all around the world are not balancing these three pillars of sustainability. One of the important reason behind the imbalance is the lack of sense of community from built to natural environment, secondly the degree of equality which reveals that if the differences will be visible among rich and poor then there would be weak sense of community. It doesn't mean that there should be no variation on income basis but at least people should enjoy a basic standard in the quality of life with water, food, shelter, health and education.

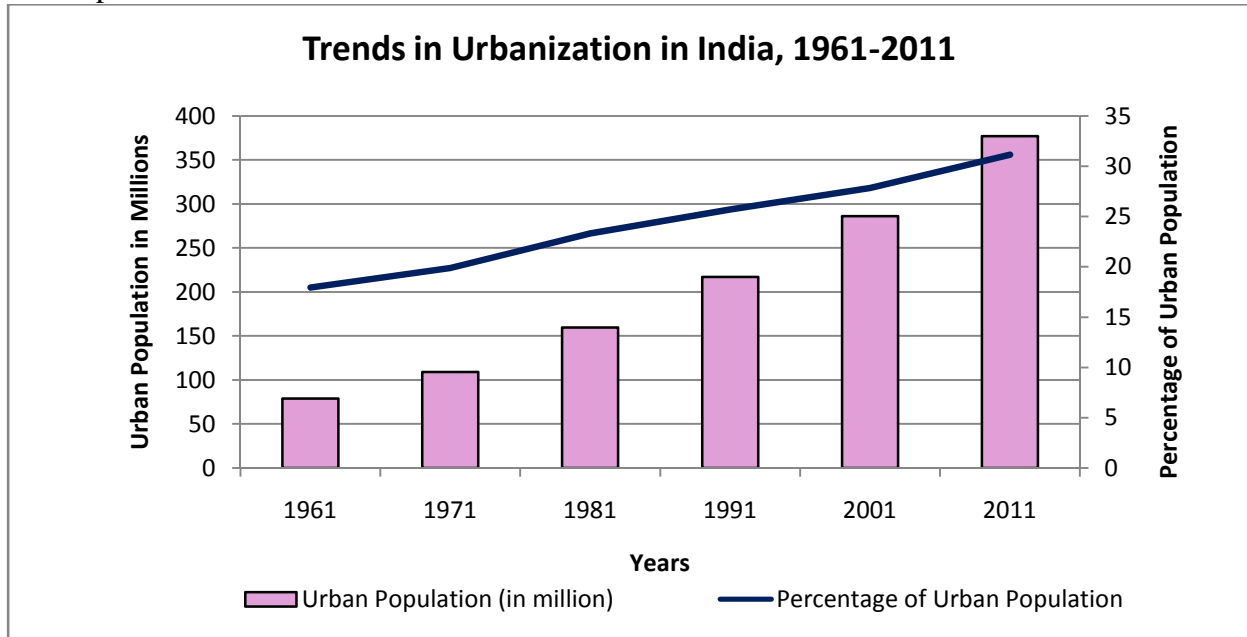
### **ENVIRONMENT SUSTAINABILITY IN INDIA CONTEXT**

India is the second most populous country in the world after china with 377 million populations as per report 2011. It has been observed that the growth of a number of towns has increased from 5161 (Census, 2001) to 7935 (Census, 2011). It reflects almost all the increase in census towns that grow in rural and peri-urban areas without any governance structure or requisite infrastructure rather than statutory towns with municipalities and corporations.

The process of urbanization seems to be a key factor for the growth of economic and social fabric. Although it has been observed that there is a positive relation between urbanization and

economic growth, but there is a negative impact has been seen between the two by creating a burden on civic amenities and facilities.

The urban population of India raised up to 377 million with a growth rate of 2.76% per annum for the period of 2001-11.



**Figure-2 Trends in Urbanization in India, 1961-2011**

The level of urbanization in the country as a whole increased from 27.7% in 2001 to 31.1% in 2011(Census of India, 2011). The status of infrastructure in these Indian towns is very poor, which affect the lives and livelihood of the people.

The importance of environmental sustainability has been discussed in India through various laws and plan like in the Article 21 of constitution of India gave Right to life includes right to clean environment, right to livelihood, right to live with dignity etc. Similarly, National Environment Policy addresses “only such development is sustainable which respects ecological constraints and the imperatives of social justice”. “If the gains in productivity are to be sustained, resources must also continue to be available over time. This requires that, while providing for current needs, the resources base be managed so as to enable sustainable development.” (7<sup>th</sup> Five Year Plan, Volume 2, Chapter 18, 1990).

Thus, environment sustainability doesn't talk about only environment conservation but also emphasize on dependent communities. Because of the unplanned urban growth causes the formation of slum and increased the burden on the existing infrastructure. Consequently, the issue of management of urbanization becomes critical because it imposes a heavy cost on the current resources. In a recent survey conducted by World Health Organization (WHO) reported that India's environmental quality is far below among all BRIC countries and thirteen cities of India out of the twenty are coming under the polluted category in terms of air and water. Presently Indian cities are facing a lot of environmental challenges in the form of pollution, stress on urban land, Water shortages, losses of green cover and biodiversity etc.

Pollution:

The increasing level of pollution in these cities are giving birth to numerous types of health issues linked with respiratory problems. This is due to the number of vehicles increasing day by day leading to heavy congestion as a result increased travel time and constructional activities that have converted into smog covered city. Thus, a sense of urgency developed for improving the transport facilities with the emphasis on efficient public transportation system in order to reduce the reliance on private vehicles which will lead further lessen greenhouse gas emissions as well as fuel demand. In New Delhi, government has plans to introduce congestion taxes as well as increasing parking prices to minimize the volume of private vehicles on road.

### **Pressure on Land**

Because of the population growth and migration from rural to urban in the search of job opportunity an unnecessary burden posed on limited land available in the urban area and give birth to several issues such as soil erosion, soil infertility, deforestation, reducing open spaces etc. Thus the issue of conversion of natural land into anthropogenic landscapes symbolizes the more visible and pervasive impact on urban land use. The extent of agricultural intensification attributed by excessive use of chemical fertilizers and further contributing to eutrophication and water pollution, waterlogging, salinization and ultimately reductions in biodiversity.

### **Water Shortages**

Water is a scarce resource and one of the basic need of human beings. As the population has risen agriculture has become more intensive and urbanisation has pushed up the demand for clean water and a change noticed in the consumption pattern and lifestyle of people. The issue of shortages of water is not associated with the quantity of water but its distribution and the manner it is being used. In spite of having unequal distribution of water and inadequate availability misuse of water is prevalent resulting declining water table. This can be seen in the periphery area of Gurgaon city where rigorous development activities concentrated and extracting of ground water is taking place through borewells at an unsustainable rate.

### **Weak Governance**

Although the provision were made for the environmental protection and safety in the XI and XII schedules of 73rd and 74th Constitutional Amendment Act. Both schedules comprise environmental subjects as the Panchayats can deal agriculture, land improvement and soil conservation, water management, watershed development, social forestry, drinking water, fuel and fodder and non conventional energy sources. While the municipality can handle town planning, regulation of land use and construction of building roads, bridges, solid waste management, urban forestry, protection of environment and promotion of ecological aspects etc. But it has been observed that there is huge variation found in the environment function delivered by local government and their actual role in environment policy and implementation is very weak.

### **CONCLUSION**

In the era of globalization, many cities are emerging as international business node, industrial node but at the same time some of the cities are rapidly developing their infrastructural, institutional and transportation services in order to improve their position in the world market. The impact of globalization is so much wider that has affected not only the large urban clusters but also on smaller cities, town, peri urban areas and even villages. The current pattern of growth is leading the accumulation of wealth in the hand of limited people and added the pressure on current resource base resulting into increases demand of water, sanitation, energy, education and healthcare. Although, city provides the greatest promise to facilities, economic opportunity for residents but the forthcoming growth pattern is not favorable for sustainable development. The

most effective condition for urban areas in order to achieve sustainability is the effective urban management on cities growing out of limit. A few substitutes have been suggested to resolve the issues emerged during development process in the cities are cooperation among authorities at local, state, national and international levels, magnetize private investment and utilize natural resources within a limited extent and consultation with different stakeholders. Besides, an integrated approach to rural and urban development is very important in this regard but unfortunately it is missing on the ground reality. There are numerous projects have been launched by the government for making cities more smart, intelligent, green, eco friendly etc. but none of the projects address the issue of gap between urban and rural. At present, the creators of cities would like to develop urban areas in such an enchanted way without knowing the harsh fact. It is important to understand the synergy and reliance between urban and rural areas can't be perceived in isolation. The investment in economic and social infrastructure in urban along with rural areas might improve standard of living, reduce poverty and inequality which will further create opportunities for sustainable livelihood.

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