Urban Sprawl & Environmental Crisis

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Abstract

The modern man is living in a situation of environmental risk when he fails to breathe pure air, to drink pure water and enjoy momentary mental peace. AQI or air quality index of most of the cities in India is above 300, and life has become hard. Of the various causes of environmental pollution, the urban sprawl is one which has shaken the urban roots in India. It has caused a great loss to the natural resources which impart a special identity to India of being tremendously rich in natural resources. Urban sprawl, though negative in nature, can be made positive through planned measures and policies for the shaping and reshaping of cities.

The current scenario of urban sprawl which forces the people in most of the Indian cities in insecurity is too unenthusiastic as every now and then there is noticed the occurrence of natural calamities and disasters. More or less, it is the population explosion in India that is responsible for the urban sprawl. In cities no safe place is left for the construction work. As it is essential to construct houses for dwelling, they are being constructed outside the main city blocks. Even the hills and mountains are not unoccupied these days, and residential blocks and offices are seen even there which were once all unapproachable to man. Urban sprawl can be checked provided the government launches effective schemes and provided every individual is determined to protect his environment.

The paper is a review study of the effects of urban sprawl on the environment. It deals with all the major aspects of both the environment and urban sprawl. The review of the selected papers on the theme forms the basis of the study. The findings reveal that the root cause of urban sprawl which leads to environmental pollution and environmental risk is population growth, explosion and density in the urban spaces. The study also concludes that urban sprawl and environmental pollution can be checked.

Introduction

The air quality index (AQI) is good when it is upto 50, and satisfactory when it is upto 100. When in most of the metropolitan cities, NCR, and other cities, the AQI is above 300 with the emergency like circumstances there, there is going a hot discussion on the factors that are responsible for such a situation. Obviously, the industrial sector is considered the first major factor for it. To begin with, urbanization is in process all over the world including India. For the sake of joining and enjoying the urban materialistic modes of living, the people are leaving the villages and feel proud while settling down in the various cities. With the exception of very few who are the lovers of solitude, nobody is interested in living in villages rearing animals or ploughing the farms or harvesting the crop. The city culture has magnetically attracted the people towards it, and they are ready to take any risk to their life for its enjoyment. The result is that the density of population is increasing too fast in the cities that seem to have lost their original form. While leaving the villages, they are ignorant of the harsh urban realities that they have to face later, and are quite enthusiastic while settling down in the various parts of the cities with their families.

The cities are already over-crowded. The new arrivals in thousands and ten thousands every day bring new problems to the cities and the urban space where the cities are situated. Failing to accommodate themselves within the main-city block, they start living in the areas that fall beyond the main-city block. Often the houses are built at the hills, mountains, near the river banks. While doing so they cause deforestation and loss to nature and wild life. Today every city whether small or big is in

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the grip of urban sprawl where the people are forced to live at unsafe places. Slums attract those who are unable to afford the expenses of the highly rented buildings or get houses built for themselves, while the open spaces that lie a few miles away from the cities attract the rich who get new houses built for themselves at the points of places which are all unsafe. The result is that in all the cities there is the scenario of unplanned construction of residential houses and other buildings. With the construction of the houses and other buildings, industries are also developed there. All combinely adversely affect the environment to an extent that all the forms of environmental pollution that include both the physical environmental pollution and the cultural environmental pollution.

It is the best time when urban sprawl is given a planned shape through the shaping and reshaping of the cities through the various planned government schemes to be prepared by the expert city planners. It can be possible only when feeling his own concern and liability, every citizen of India resolves to protect environment through his sensibility. Population control, return to nature and village campaigns and development of master plans for the cities can be quite effective in this case.

Specific Objectives

1. To produce the picture of urbanization in India
2. To discuss the urban sprawl as a burning issue of the day
3. To correlate urban sprawl with environment
4. To delineate the picture of disfigured picture of urban space at present
5. To discuss the scenario of environmental crisis as a result of urban sprawl
6. To point out the various forms of pollution found in the urban space
7. To produce the picture of the people living in the big cities
8. To focus the major causes of urban sprawl in India
9. To find out the positive and the negative effects of urban sprawl
10. To provide valuable suggestions to check urban sprawl

Review of Literature

Colin Dunn (2010) observes that of the various negatives associated with urban sprawl, coverage of prime agricultural areas, loss of wildlife habitat are some important negatives. The study concludes that cities will devour agricultural lands and forests all with impunity, driven by a perceived need for more space. The other negative environmental effects include the pollution associated with increased car use, increased runoff due to the quantity of land under pavement, and the loss of habitat and a local decline in biodiversity. The adverse environmental effects also result into a number of social ills that are seen in the form of loss of community spirit and values, higher costs of providing infrastructure, higher taxes, and a number of other concerns at the feet of urban sprawl,.

Aneesh Mishra (2012) finds that urban development can be maintained through Master Plan as

it guides, controls and manages urban growth in planned manner. Master Plan has a significant role in developing countries like India. Considerable progress of Master plan shows that rather than questioning relevance of master planning approach in Rajasthan, positives steps to strengthen institutions, and greater involvement of public in planning processes is essential for preparation of a good master plan and its implementation on ground level.

Vittorio Gargiulo , Adele Sateriano , Rosanna Di Bartolomei and Luca Salvati (2012) observe that urban sprawl is the most debated topic today. As a result of urban sprawl, cities are expanding over more and more area, and causing natural disasters, such as earthquakes and floods.

Sunil Sankhala & B. K. Singh (2013) consider urban sprawl as one of the potential threats to sustainable development as it puts a barrier to the sustainable development. The study discusses the disfiguring condition and shape of Jaipur city of Rajasthan and reports that Jaipur has expanded towards south and western directions in uncontrolled manner, engulfing used productive cropped areas. The study enlists the several ways through which urban sprawl affects the environment. They are- Slums and associated health hazards, Traffic congestion, pollution and health hazards, and Reduced social interactions due to low-density suburban development.

Seema Rani ,Ritu Sharma, Rajeev &Vinay Matri (2015) defines urban sprawl as the spreading out of a city and its suburbs over more and more rural land at the periphery of an urban area. The study generalizes urban sprawl as a global phenomenon mainly driven by population growth and large scale migration. In developing countries like India, urban sprawl is taking its toll on the natural resources at an alarming pace.

Mani Dhingra & Subrata Chattopadhyay (2016) consider Smart Cities Mission an ambitious project of Government of India targeting 100 cities for improving their urban quality of life. It is the utmost need to understand where our old cities stand in terms of smart sustainability and inclusiveness. The study refers to old Indian cities and Arab cities in terms of their environmental, economic and social planning paradigms, which include land use mix, compact development, dwelling density, internal and external connectivity, open spaces, walkable neighbourhoods, access to social services, collective cohesiveness, local area governance, crime & safety, economic diversification and socio-cultural diversity.

Arpit Tiwari & Vidhi Goel (2017) find that in developed nations people love to settle on outskirts for better living space but developing nations do not reveal this tendency of man. The study suggests that control of sprawl can be brought about by re-densification of suburbs, improving their walkability,

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avoiding change in land use and mixing the use with proper effective policy measure.

Parvaiz A. Bhat, Mifta ul Shafiq, Abaas A. Mir & Pervez Ahmed (2017) hold that the population explosion from 79 million in 1961 that was about 17.92 percent of India's total population to 388 million in 2011 that is 31.30 percent of India's total population is responsible for urban sprawl in India. Large scale migration of people from rural and smaller towns to bigger cities in search of better employment opportunities and better quality of life are some of the causes of the fast increasing urban population in India. The study emphasizes that in India, urban sprawl has resulted in loss of productive agricultural lands, open green spaces and loss of surface water bodies, and suggests there is a dire need to study, understand and quantify the urban sprawl.

Saheed (2017) examines the ways in which physical and social landscape of the Alwar city in Rajasthan has been shaped by the socio-economic and political forces. The study finds the private sector responsible for the urban sprawl as it concerns the shaping up of the landscape of the city, which has an adverse impact on the realisation of state's urban policy goals. Consequently, people belonging to certain social groups are segregated into areas labelled or seen as ghettoised, illegal and unwanted. Such areas do lack basic amenities to live a dignified life.

Vishnu Prasad (2017) reports that according to the 2011 Population Census data, urban India grew by 90 million people in the previous decade. During this period, 2774 new towns were born with over 90% of the new towns belonging to the category of census towns. The report outlines the following three priority areas that warrant immediate attention-

1. there is an urgent need to reform the land valuation process in India;
2. the efforts to leverage the potential of land markets as a financing tool needs to be complemented by an integrated urban planning process; and
3. India needs to resolve the question of who is responsible for urban planning and reforms in a federal system where the multiple jurisdictions of national, state and urban local bodies overlap.

Working Hypothesis

1. Everyone has the passion for enjoying the city-life and city culture
2. The process of urbanization is in progress all over the world including India
3. The rural people join the process of urbanization for the sake of better living, education of the children, job opportunities, modernity, improved status of women and socialization of children
4. The fast increasing population in India has taken the form of explosion that needs to be checked through certain effective measures and policies
5. Population growth and urbanization are responsible for urban sprawl in India

6. Urban sprawl disfigures the original shape of the cities and forces the people to dwell miserably and unsystematically in the areas which are all unplanned and unsafe
7. Urban sprawl is a threat to the environmental peace
8. Urban sprawl causes environmental crisis in the form of pollution
9. Urban sprawl makes life hard and miserable
10. Though risky to the public life and environment, urban sprawl can be planned in the interest of the public through master plan

Method

All theoretical at its root, the study is scientific and displays the picture of urban sprawl in the urban space in India along with extending various valuation suggestions about how to check and control the situation in the interest of public health and security as well as environmental peace. Since the study is scientific in spirit, scientific method was adopted for the purpose and all the steps of research were adopted. The feedback on the theme was taken from the ten of the research papers selected for the feedback. The selected papers were gone through thoroughly considering the theme-element in them. They were reviewed with a serious concern for their content analysis. Finally, the theme was elaborated and findings were drawn covering the major aspects of the theme and subject.

Findings

1. The urbanization in India is at the peak and most of the cities are in the grip of environmental crisis that needs to be faced in a planned way
2. Urbanization is magnetically drawing the rural folks to the cities through its various socio-cultural attractions, such as, modernity and fashion, materialistic modes of living, education, employment and easy fulfillment of the basic needs
3. The bitter and harsh realities of the urban life that most of the people have to face- slums, crime, transportation problem, accommodation problem, expensive life style and unemployment
4. Environmental pollution is disfiguring the beauty and shape of the urban space
5. The air quality index (AQI) in all the metropolitan cities and the other cities is above 300 which is an indication that in the cities it is very difficult to breathe
6. In addition to the other things, the industrial sector is responsible for the fast increasing AQI in India
7. Environmental pollution in NCR in particular has caused the circumstances of emergency, and it is difficult to survive successfully there
8. There are several factors that are liable to the environmental pollution
9. Urban sprawl and environment are related to each other, and the urban structure in particular affects the environmental conditions
10. Urban sprawl is one of the serious factors of environmental crisis, hence one of the most burning issues of the day

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11. Population growth and explosion is chiefly responsible for the urban explosion
12. The major forms of pollution include the air pollution, water pollution, noise pollution, chemical pollution and cultural pollution
13. The positive effects of urban sprawl include an opportunity to live in cities, fulfillment of the desire of enjoying city culture, and joining the main stream of the nation
14. The negative effects of urban sprawl include living in unsafe geographical and ecological conditions, invitation to known and unknown natural disasters like earthquake, landslide, flood, and deforestation
15. Urban sprawl is the demand of time as the cities fail to accommodate the increasing population. It can be given a planned shape in the interest of the people through Master Plan so that the cities can be reshaped in a way that the increasing population can be ensured safety, security, health, environmental peace etc.
16. Environmental threat in the urban space can be faced successfully only through the planned shaping and reshaping of cities and towns, and through the check on the fast growing population.

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