

A Critical Interpretation of Urban Sprawl in Alwar District of Rajasthan



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Abstract

In the present era, urbanization and urban sprawl is a worldwide phenomenon which is an indication of the transformation of the world through linking the people with the complex urban life. Under the influence of modernity and modernization and westernization, everyone in India has developed a readiness to settle down in cities for several reasons. Individual liberty, bent of mind on education and career, love for the materialistic urban culture and civilization, individualism, non-traditional approach to working are the key reasons of linking the people of India with the urban modes of living. Urban sprawl is a global process, but it is a serious concern to the geographers, geologists and environmentalists who find it a great risk to the environment and to the so called boons of nature to man.

As in all the four corners of the world, the process of urban sprawl is constantly on move, in India and in all its states including Rajasthan in particular, this process is notably apparent. It has forced the thinkers and scholars to find certain measures through which the target of urban sprawl is met, and at the same time, the long age cultural values, geographical and geological features, beauties of nature that lie in the flora and fauna can be preserved and protected.

The paper, a theoretical qualitative study in nature, reflects the ongoing trends in the field of urban sprawl in the district of Alwar in Rajasthan. The paper covers some of the major aspects of the urban sprawl, such as, need and relevance of urban sprawl, causes and effects of urban sprawl and the challenges being caused by it

Keywords: Review, Literature, Content Analysis, Urban Sprawl, Natural Resources, Main Stream

Introduction

Urban sprawl or suburban sprawl describes the expansion of human populations away from central urban areas into low-density, monofunctional and usually car-dependent communities, in a process called suburbanization. In addition to describing a particular form of urbanization, the term also relates to the social and environmental consequences associated with this development. The term urban sprawl is highly politicized, and almost always has negative connotations. It is criticized for causing environmental degradation, and intensifying segregation and undermining the vitality of existing urban areas and attacked on aesthetic grounds. It is characterized by [an] unplanned and uneven pattern of growth, driven by multitude of processes and leading to inefficient resource utilization.

Urban sprawl is the result of the density of population. In the context of India, the country is a rural one where more than two-third of its total population lives in villages. The rate of density of population in the country is too high, and even the villages have shrunk forcing the people to migrate to the nearby cities in order to survive in a better way. The same notion is at the root of urbanization affected by which the village dwellers are running towards cities seeking a safe life that can ensure them a smooth survival, satisfaction of needs and a carefree life. The density of population leads to urban sprawl under which the people failing to get shelter in the main part of the city, start living and surviving in the geographical areas nearby. At present the whole India is witnessing urban sprawl. The present day need is that the people desirous of living in cities should not cause any harm to flora and fauna in order to settle themselves. Urban sprawl is a serious concern which needs some immediate solution to the increasing density of population in the cities. It can be given a directional shape through town planning, policy formulation for the protection and preservation of flora and fauna, and through awareness

campaigns and programmes. Though a threat to wild life, natural and mineral resources, objects of nature, the urban sprawl needs to be given room.

Alwar: An Overview of Geographical & Environmental Status



The Alwar district, situated in the north-east of Rajasthan between latitudes 27o03' and 28o14' North and longitudes 76o07' and 77o13' East, covers an area of 8380 square kilometers and occupies about 2.45% of the total area of State. The entire Alwar district is also part of National Capital Region (NCR). Alwar district, in the State of Rajasthan lies under Aravali Notification dated 7th May, 1992 issued by Ministry of Environment & Forests, Government of India. The Aravali Notification dated 7th May, 1992 issued by Ministry of Environment & Forests, Government of India does not allow the urban sprawl on the following in the district-

1. All reserved forests
2. All areas shown as: - (a) Gair Mumkin Pahar, or (b) Gair Mumkin Rada, or (c) Gair Mumkin Behed, or (d) Banjad Beed
3. All areas of Sariska National Park and Sariska Sanctuary notified under the Wildlife (Protection) Act, 1972 (53 of 1972)

The air quality data in northern and central part of the district reveals the levels above the permissible limits. In the southern part, at one location, the suspended particulate matter has been found to be above permissible limits. The surface water availability is poor and there is increased dependence on the ground water for drinking, irrigation and industrial usage. The status of ground water in most of the blocks is under overexploited stage and therefore calls for careful planning to ensure availability to the consumers in future. ☐

The forests resources have already been degraded beyond their carrying capacity and therefore calls for strategies at all levels to enhance the vegetative cover to promote eco-restoration in the district. The land resource is another resource which is likely to be stressed as the district is part of the NCR and there is likely to be growth of industries, residential complexes etc.

Objectives of the Study

1. To study the ongoing trends of urban sprawl world-wide
2. To brood over the necessity and relevance of urban sprawl in India
3. To concentrate on the various dimensions of urban sprawl in the Alwar district of Rajasthan
4. To spot out the factors responsible for the urban sprawl in the Alwar district

5. To make focus on the scenario of the urban sprawl in the Alwar district
6. To study the town planning in the context of the Alwar district
7. To find out the positive aspects of the urban sprawl in the area
8. To find out the negative aspects of the urban sprawl in the district
9. To explore the problems in the path of the urban sprawl in the district
10. To make a causal-effect interpretation of the issue

Review of Literature

Aneesh Mishra (2012) in Urban Master Plans in Rajasthan, India: The Case of Alwar observes that Master Plan is an important tool for urban development as such it guides, controls and manages urban growth in planned manner. Despite being outdated in developed countries, it is still used in developing countries like India. The study critically analyzes master plan for Alwar as a case in detail to find out different causes and factors hindering full implementation of master plans in Rajasthan. Lacunas in plan preparation reflect in nature and proposals of plan which affect implementation process immensely. Further, implementation process is also impeded by a host of factors. However, considerable progress of Master plan for Alwar 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.

Sunil Sankhala & B. K. Singh (2013) in Evaluation of Urban Sprawl and Land use Land cover Change using Remote Sensing and GIS Techniques: A Case Study of Jaipur City, India carried out, using the techniques of GIS and remote sensing to identify and detect the urban sprawl, comment that urban sprawl is seen as one of the potential threats to sustainable development where urban planning with effective resource utilization and allocation of infrastructure initiatives are key concerns. This research conceptualized urban sprawl from a geographic perspective in order to assess the spatial distribution of Sprawl patterns and LULC change. The Research shows that Jaipur City has expanded towards south and western directions in uncontrolled manner, engulfing used productive cropped areas. Sprawl may be found having impact on the city and its surrounding environment in the following way:- I. Slums and associated health hazards, II. Traffic congestion, pollution and health hazards, and III. Reduced social interactions due to low-density suburban development.

Nand Kishore, Pritikana Das & M. Parida (2015) in Pedestrian Flow Characteristics Around Bus Terminal, Dehradun observe that inter-modal transfer terminal in Kolkata experienced higher speed since there was no friction with plying vehicles and moreover all pedestrians are daily passengers having no luggage with them and have to reach office in time. ISBT New Delhi and a metro station in China show

comparable results. The study elaborates different flow characteristics of pedestrians near ISBT when pedestrian move along with vehicles. The characteristics of bus time table (arrival and departure) and friction of traffics have their effect on pedestrian flow characteristics. The plying vehicles play important role to affect the flow and speed of pedestrians. It is therefore important to provide pedestrian facilities fully protected from encroachments by elevating or guard-railing pathways. So that pedestrians are not forced to move on carriage-ways. The optimum area required per pedestrian may decide the size of a pedestrian facility to be provided. Segregation of pedestrian from vehicular traffic should be based on the flow characteristics i.e. flow-density. Speed can help to find out the time in which facilities can be cleared out. Thus, the findings of this paper have some implications for designing pedestrian facilities around transport terminals.

Seema Rani ,Ritu Sharma, Rajeev & Vinay Matri (2015) in their study entitled 'Landuse Changes Due to Urban Sprawl in Alwar City of Rajasthan- A Geo-Spatial Approach observe that urban sprawl in the United States has its origins in the flight to the suburbs that began in the 1950s. Sprawl is the spreading out of a city and its suburbs over more and more rural land at the periphery of an urban area. Urban sprawl refers to the extent of urbanization, which is a global phenomenon mainly driven by population growth and large scale migration. In developing countries like India, where the population is over one billion, one-sixth of the world's population, urban sprawl is taking its toll on the natural resources at an alarming pace. Urban planners require information related to the rate of growth, pattern and extent of sprawl to provide basic amenities such as water, sanitation, electricity, etc. In the absence of such information, most of the sprawl areas lack basic infrastructure facilities. Pattern and extent of sprawl could be modeled with the help of spatial and temporal data. The study area covers the city part of the Alwar district of Rajasthan. Total three categories of land use were identified in the study area which area Open Land, vegetation and Built-up Land. In Vegetation is 38.49%, Openland is 28.07%, Builtup land 33.43% and total area is 100%. And total area was covered In 2008 Vegetation is 21.067%, Openland is 25.07%, Builtup land 53.707% and total area is 100%.

Sindhuja Kasthala & Harshit S. Lakra (2015) in their study Mass Religious Gatherings and Disaster Preparedness: A Planning Perspective observe that the influx of millions of people during religious gatherings and pilgrimages creates tremendous amount of pressure on their host cities. And the result of any kind of disaster in those gatherings will result in widespread human and infrastructure impact. With the current trend of increase in both man-made and natural disasters there is a huge need of disaster preparedness. The study examines a few incidents during the Saudi Arabia's Hajj pilgrimage in 2006, incidents during the Cambodia's water festival in 2010 and incidents during the India's Kumbh mela in 2013.

Several mass gatherings, mainly the religious gatherings in India, have not yet realized the importance and crucial role of disaster preparedness in event management. A review of past gatherings says that any small trigger can cause huge impacts on mass gatherings. Although few Governments and organizations have recognized the importance of disaster preparedness, a study of the past gatherings will help in identifying the existing problems and will help in formulating strategies to overcome the problems. Even after the infrastructure development and technological interventions by the Governments, the gatherings such as Hajj continue to face major challenges. The results in this study indicate a major gap in the strategies adopted for disaster preparedness.

Mani Dhingra & Subrata Chattopadhyay (2016) in their study Direct Advancing Smartness of Traditional Settlements-Case Analysis of Indian and Arab Old Cities conducted with the aim to investigate the concept of smart sustainable cities in traditionally planned and organically grown settlements, observes that Smart Cities Mission is an ambitious project of Government of India targeting 100 cities for improving their urban quality of life. However, there is no universally accepted definition of smart cities because of its vast and vague scope. In such a situation, it becomes important to understand where our old cities stand in terms of smart sustainability and inclusiveness. The methodological approach adopts case analysis of old Indian cities and Arab cities in terms of their environmental, economic and social planning paradigms. These 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. The study enlists smart urban elements in our existing old cities, which are derived from extensive literature study of Middle East cities and primary surveys of around 160 samples in a medium sized old Indian city in Rajasthan.

Dr. Saheed (2017) in the study Urban Growth, Spatial Dynamics and Social Segregation in India: A Study of Growth of Alwar City of Rajasthan in National Capital Region critically analyzes the growth of Alwar, a small sized city of the state of Rajasthan, located in the national capital region in India. The study examines the ways in which physical and social landscape of the city has been shaped by the socio-economic and political forces. Amidst current debates of India's attempt to develop smart cities, it is pertinent to examine state's approach and the role of non-state actors in urban growth in India. Both the state and the private sector are playing critical role, though with different motives, in the development of Alwar city. The private sector has the major stake in the shaping up of the landscape of the city. Eventually, it has an adverse impact on the realisation of state's urban policy goals. The growth of Alwar city is witnessing various exclusionary or unruly practices. 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. The city however also has got developed posh areas catching upon the needs of mobile and aspiring middle classes. This uneven and contrasting urban growth raised questions on state's vision to make city dynamic, democratic and inclusive space.

Dr. M. M. Sheikh (2018) in the study Smart City and Urban Issues: A Case Study of Jaipur City, Rajasthan, India comment that The urgent burden has been that of providing a better quality of life to the urban population given the complex problems spanning poverty, disasters, pollution, and governance, preservation of heritage and culture, and urban planning. The Prime Minister of India has a vision of developing 100 smart cities including 04 cities in Rajasthan State by 2022. Rajasthan has a population of 68.6 million, and forms 5.66 percent of India in 2011. The concept of smart city is influenced by the idea of developing the urban hubs which would be running on technology to provide better electricity and water supply, improved sanitation and recycling of waste, proper traffic and transport management systems. Information and Communication Technologies is the master key to Smart Cities provided there is adequate preparation and training before such systems are implemented throughout India.

Hypothesis

1. Urban sprawl is a worldwide phenomenon which is apparent all over the world
2. The ongoing trends of the urban sprawl in India are significant
3. Urban sprawl is the need of the day
4. The Alwar district in Rajasthan is a popular district known for urban sprawl
5. The urban sprawl in the Alwar district is notable for its varied dimensions
6. Several factors are responsible for the urban sprawl in the Alwar district of Rajasthan
7. The scenario of urban sprawl in the Alwar district of Rajasthan is enthusiastic
8. The town planning in Alwar needs revision and improvement in accordance with the needs of the people and density of population
9. Urban sprawl has both the positive and the negative aspects
10. Urban sprawl is facing much problem

Methodology

The methodology adopted for the study include- selection of the problem, observation and perception of the issue to be studied, searching the relevant study material through the various search engines on the available sites on the theme, study of related literature, selection of 8 studies from the studies gone through, content analysis of the secondary data, formulation of hypothesis on the basis of the reading of the related literature and personal observations and experiences, analyzing the data attempting to explore causes and effects of the problem studied, arriving at the findings and conclusions. The factual information for the study was taken from the official sites, while the qualitative data-oriented thought was developed by the author himself.

In order to make the study specific, 24 research questions were developed by the author that were answered later in the form of findings.

Research Questions

1. What is the ongoing scenario of the urban sprawl in India?
2. Are the trends of the urban sprawl apparent in Rajasthan state of India?
3. If yes, are they satisfactory or they need amendment and change?
4. Why is the speed of the urban sprawl is fast?
5. What special features are required for a successful urban sprawl?
6. What is the status of Alwar district in Rajasthan in terms of urban sprawl?
7. What are the varied dimensions of Alwar-urban sprawl?
8. What are the demands that are encouraging urban sprawl in the Alwar district?
9. How are urbanization and urban sprawl related to each other?
10. How are modernity and urban sprawl correlated?
11. How are geographical and geological features related to urban sprawl?
12. How are demographic features and urban sprawl related to each other?
13. What is the relationship between civilization and urban sprawl?
14. What is the relationship between economic growth and urban sprawl?
15. Is the urban sprawl in the Alwar district satisfactory?
16. What factors are responsible for the speedy urban sprawl in the Alwar district?
17. What are the major geographical features of Alwar that are promoting urban sprawl?
18. Is the town planning being adopted for the urban sprawl satisfactory or it needs change?
19. What are the positive things associated with the urban sprawl in the Alwar district of Rajasthan?
20. What are the negative things associated with the urban sprawl in the Alwar district of Rajasthan?
21. How is the rural sector affected by the urban sprawl in the Alwar district?
22. What are the major problems that are being faced by the government and other associates in the flourishing of the urban sprawl in the Alwar district of Rajasthan?
23. Is the urban sprawl in favour of the socio-economic development and geographical and geological preservations?
24. What suggestions can be given for an ethically judicious urban sprawl in the Alwar district of Rajasthan?

Findings

1. The urban sprawl in India is on move with the higher horizons of success every hour
2. The ongoing scenario of the urban sprawl in India is enthusiastic as every one is eager to be a witness to it
3. The urban sprawl in Rajasthan is not satisfactory as still there are the cities and towns in the state that are not properly planned and built

4. The urban sprawl in Rajasthan needs much improvement to join the mainstream
5. The speed of the urban sprawl is fast as the increasing population in the cities and towns creating challenges and problems to the government
6. The special things required for a successful urban sprawl include- sufficient geographical area, environmental and climatic conditions, moderate population, proper town-planning, proper housing schemes, growth of industries, job opportunities, advanced means of transport and communication, knowledge of advanced technology, modernistic approach of the people, adequate supply of electricity and water, moderate income etc.
7. In Rajasthan, the Alwar district occupies a very important place in terms of urban sprawl
8. The major urban sprawl dimensions associated with the Alwar district of Rajasthan are- preservation of flora and fauna, preservation of heritage, preservation of the socio-cultural values, preservation of the natural and mineral resources, maintaining a balance between the urban and the rural sector, paving a path for constant economic and industrial growth, constant generation of employment opportunities, accessibility of the advanced means of transport and communication, sustainable development in all the fields related to city life etc.
9. Education, career, job, love for urbanity, civilization and materialistic culture are encouraging urban sprawl in Alwar district
10. Urbanization and urban sprawl are correlated, as the process of urbanization creates platform and ground for urban sprawl
11. Modernity allows personal liberty, innovative approach, education and career orientation to the people, and so modernity and urban sprawl are integrally correlated
12. Urban sprawl depends chiefly on the geographical and geological conditions of the place. The geographical and geological conditions of the Alwar district allow it for urban sprawl
13. The urban sprawl is helpful in accommodating the dense population of the place. In the Alwar district of Rajasthan, affected by the process of urbanization and for the sake of the city culture, education, career and jobs, the village dwellers in the district are settling down in Alwar city
14. Civilization the people's love for civilization lead to urban sprawl. The same is true of the urban sprawl in the Alwar district of Rajasthan where the people's sense of civilization is linking them to urban life
15. The trends of urban sprawl in the Alwar district are not satisfactory. There is still much to be considered. The colonies are not well-planned and approved; the drainage system is faulty; the city fails to provide employment to all, as a result of which slums are developing and the people with the lower income groups are forced to live in the slums; the cheap means of transport to all the

parts of the city are not easily available; the industrial sector in the Alwar district is passing through the hard times; the flora and fauna in the district is in danger, the administration fails to control the crime.

16. Alwar District Urban Part, with population of about 6.5 lakh is Rajasthan's the 6th most urban populous district, located in the state Rajasthan in India. Total geographical area of Alwar district urban part is 234 km and it is the 11th biggest urban district by area in the state. Population density of the district is 2802 persons per km. The geographical conditions in the Alwar district are conducive to urban sprawl with certain limitations
17. The urban sprawl in the district of Alwar should be in an organized way so as to ensure preservation of flora and fauna. Siliserh Lake, Sariska and the other spots of flora and fauna should be protected
18. The situation of the city, its geographical area, man power, climatic conditions, linkage with the neighbouring districts and states, availability of facilities etc. are the reasons that pave a path for the urban sprawl of the Alwar district
19. The town planning forms the basis of the urban sprawl. For it a master plan is prepared. The same applies to the Alwar district. The urban sprawl is made under the provisions laid down in the master plan and under town planning
20. Development of colonies, separate location of the industrial area, drainage system, availability of highways, subhighways and service roads, link-roads, railway lines etc. form the positive aspect of the urban sprawl
21. Development of slums, environmental pollution, cultural pollution, increase in urban sprawl, deforestation, excessive exploitation of the natural resources etc. form the negative aspect of the urban sprawl
22. The urban sprawl is not in favour of socio-economic development and natural, mineral, geographical and geological preservations. It can be turned into favour only through the formulation of rigid and decisive policies.
23. The problems being faced during the process of urban sprawl in the Alwar district include- growing density of population, problem of accommodation, increasing pollution in air, water and noise, deforestation, development of slums, increasing graph of crimes in the district

Conclusion

Alwar is a progressive district of Rajasthan paving a constant path for urban sprawl. Its location, plentiful availability of natural and mineral resources, availability of manpower, possibilities of growth and development, availability of raw material meant for the various products etc. are the reasons why there is an immense urban sprawl in the district. It being one of the important districts of the state of Rajasthan, always attracts the attention of the policy makers and town-planners. Town-planning links it with urban horizons of development, while the flora and fauna in the district restricts the development and urban sprawl to certain

limits as specified in the master plan approved for the Alwar district.

Urban sprawl is constantly on move in the Alwar district, still it needs its speed and directions to be improved in the interest of the flora and fauna, and of course, in the interest of those who live in the urban and the rural sector of the district. Perfection in the urban sprawl can be brought about through a balance in all its components and aspects. Being important everything and everybody needs security, safety and preservation. First it is the human life that should be ensured security of life, goods and health. It is possible when every one has his own roof over his head to cover with; satisfaction of all the basic needs, clean and unpolluted air to breathe in, pure and unpolluted water to drink, and mental peace. It can be ensured through an improved town planning.

Secondly, it is the preservation of heritage, wild life, vegetation and beautiful objects of nature. The urban sprawl policy should give an ample room to the preservation of flora and fauna and the invaluable natural resources. They should be exploited so far as their exploitation is helpful in the satisfaction of the basic needs. They should not be exploited excessively.

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