Potentiality of the Satellite Town

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***Abstract*—Urban areas are transforming the world. Many of these are initially to break down. In India, the concept of a satellite town is not new. During the British era, many attempts were made, and following independence, the Indian government started a number of large-scale projects through laws, policies, and corporate partnerships. India's satellite cities are ignoring traditional planning and design elements, sustainable building methods, the problem of unemployment, and the city's economic vitality—all of which are essential for the revival of satellite town culture. These autonomous towns work to manage and reduce the growing urban sprawl. They are intended for a major urban center to expand in every direction possible. They are meant to accommodate and serve a rapidly increasing population; individuals may generate an interest in advancing the development of the current settlement in an urban area. They function as self-sufficient, autonomous municipalities. This study aims to collect all the necessary data to address problems that arise in satellite cities, such as traffic jams, environmental issues, economic considerations, and unemployment, among other things.**

***Index Terms*— Development, Satellite cities, Urbanization.**

I. INTRODUCTION

In addition to bringing a significant number of new inhabitants to cities, the migration from rural to urban areas is also placing strain on these metropolitan areas' infrastructure and resources. The lack of housing and its poor condition, pollution of the environment, deterioration of the building stock, inadequate infrastructure, high unemployment, and traffic congestion are some of the problems preventing the sustainable growth and development of metropolitan areas. Although they are separate from the urban area, they operate as a part of a metropolis and offer their citizens commercial and residential spaces, such as retail shops and educational facilities. By establishing housing, industrial bases, retail establishments, social and technical infrastructure, and services at a different location, satellite towns aim to relocate residents away from metropolitan areas. In order to lessen suburban sprawl, these towns are also furnished with cutting-edge amenities and environmentally friendly development elements. Future satellite cities are becoming more and more popular as a way to address the issues brought on by large cities' overcrowding as urbanization becomes a more urgent problem. Both an independent municipal government and a genuine historic downtown are essential for these communities. While some satellite towns are still autonomous or have grown closer to their main city as a result of suburbanization, others were formerly independent communities outside of their larger metropolitan areas. Since satellite towns are in a unique position to be a successful alternative to the back-to-the-city movement and have strong urbanism elements far from the core city, it is crucial to look at their role and impact on urban development. In order to help alleviate some of the pressures that typically accompany rapid population

II. NEEDS OF SATELLITE CITY

A. Congestion reduction

One of the major problems caused by an excessive number of people and cars is metro blockage. For instance, satellite town like Gurgaon and Noida are very effective at reducing Delhi's metropolitan congestion. The amount of in-relocation they absorb is enormous. These communities provide migrants with the best opportunities for legal housing, economic opportunities, and biological awareness.

B. Sub Center of Economic Activity

Metropolitan regions act as a draw for business ventures. The growth of small and medium-sized businesses in the heart of the city area reveals opportunities for speculation. It could emerge as a sub-location for major cities.

C. The most beneficial utilization of land

There is a connection between urbanization and climate degradation. The quality of the city's air and water will deteriorate as it grows faster. The creation

of concrete jungles and the loss of greenery are the main causes. Utilization is more advantageous to people and more optimal. The fixation variables of corruption may be addressed by satellite cities. Reuse in the centre and periphery, water conservation, and tree estates will all help to prevent environmental and ecological degradation.

D. Making the Workforce Out of Labour

The full development of a region and a country depends on the labour force having equal opportunities. Unemployed people, low-income migrants, and seasonal agricultural workers can play a critical role in the local manufacturing and construction sectors. By creating jobs in small and medium-sized businesses, this goal can be effectively accomplished. social and ethnic liberty. Therefore, "Density Optimization" can be used to describe the decongestion of individuals.

E. The Economy

New financial investment opportunities will be provided by satellite towns on the outskirts of the major metro. When resources are used properly, satellite towns have a greater potential for regional growth that is advantageous to people.

F. Architecture

A wide range of structures, design elements, and aesthetics are covered by architectural finishes. architectural oversight of historic and ancient structures, as well as public and semi-public buildings.

III. UNDERSTANDING THROUGH LITERATURE STUDY

- "Satellite town development in Asia: The case of new Bombay, India (1995)" The original goal of the city in this paper was to create a self-contained counter-management to the old city. With strong commuting link to old city such an outcome is unlikely even in future. Also, should suitable for linking to the old city by railway in future under a development of Government.
- "A real time study for a town planning scheme. (2003)" These Papers deals with the land classification in town. Using RS and GIS can help in following manners: Computerization of records (through RS and GIS, old surveys) help an easy access to each Govt. Department as well as to common people, as well updating record simultaneously on in conjunction with drawing is possible.
- "Design Concept of New Urbanism for Planning Second Renaissance in Developing Fringes of Metropolitan Cities: Case Example of Pune, Maharashtra, India. (2017)" Pune's landscape exposes a mix of kuccha and pucca elements, alternated with authorized and unauthorized structures, as the new country approaches. Modern Pune 's urban sprawl and built up development is controlled by theoretical rules or mechanisms of floor space index. However, in practice they are blatantly ignored. The existing planning policies of development rules and implementation need to be modified. The reality is that there is serious mismatch between socio-economic structure and the speed in which inward migration outgrows infrastructure.
- "Planning of Urban Development in India." The study of achievement of rapid growth that is both inclusive and sustainable, presents formidable challenges for urban planning. Limitation of floor space index. Integration of transportation and land use: A good road network, combined with an efficient public transportation system, helps cities improve their "working efficiency" by reducing commuting costs, travel time, traffic congestion, and pollution. Economic planning of town and study of land use planning and transportation.
- "Satellite Cities of the Twentieth Century: A Sustainability Analysis of Milton Keynes and Reston, May 2017. Infrastructure planning with all technical details is possible using the various base maps. Property details, area, density pattern over a particular area, taxation and payment information, etc. are easily retrievable.

V. INDIAN GOVERNMENT INITIATIVES

The development of urban satellite towns in India is the focus of government initiatives like the "Metropolitan Planning Initiatives." Twenty-seven new cities nationwide have been announced as part of the 2015 "Smart Cities Mission." Furthermore, practically every major city has satellite towns; however, effective planning and resource distribution are still necessary to achieve the intended results from the peripheries. The ultimate goal of the Indian government is to transform the

current mid-sized cities into satellite communities of bigger cities. A flood of migrants from all over the nation has been brought about by the availability of employment opportunities and improved living conditions. As a result, the amount of developable space in cities has reached a saturation point. Due to the lack of available space, buyers are reconsidering their plans to purchase real estate because developable land is now selling for outrageous prices. On the other hand, city planners must find ways to balance the approval of residential areas and the development of infrastructure within the city's developable area.

VI. INFERENCE

In terms of environmentally friendly development, satellite towns are designed to offer the ideal balance between population and resources. The development of satellite towns is fundamentally necessary. accommodating the growing population. use of land and the preservation of open space. supporting the expansion of bigger cities. Satellite towns provide opportunities to enhance the city's economic development. Since satellite towns have the potential to hold the future and can support the growing population, they can be developed using their own special characteristics. Additionally, it can create jobs in India and maintain strong ties to both rural and parent cities. The proper time and distance to the parent city should be considered when planning the satellite town's residential and industrial development. In India, the establishment of new satellite towns will help ease traffic in the main cities. The parent cities that are connected to the respective satellite towns will find this to be a relief. Satellite towns will gradually start to emerge as a significant element in the urbanization scenario in India.

VII. CONCLUSION

Developed countries with large open spaces and densely populated areas are able to investigate various options for the development of new municipalities. The ongoing projects are essential for the government in the current circumstances. It will be a complete and irreparable error to ruin the chance. If properly executed, satellite cities can be a useful tool for managing urbanization in major cities. Therefore, in order to make these projects a model for future development, priority must be given to integrating land use, transportation, urban design, and local plans. Water bodies and open areas need to be protected. The satellite towns must adopt a sustainable approach to solid waste management and wastewater treatment. There is not much scope for new development in a populous nation like India. Both developed nations with expansive open spaces and developing nations with less dense populations have the opportunity to test out new township development. In the current scenario, the government's ongoing projects are essential. To neglect the opportunity would be a total and irrevocable error. When established correctly, satellite towns can aid in regulating urbanization in downtown areas. When implemented correctly, satellite towns can assist metropolises in managing urbanization. Priority must be given to integrating land use, green policy, the city's economic strength, architectural design, and local plans in order to use these project methods for satellite city development in the future. It is essential that water bodies and open spaces be preserved. With an emphasis on the Indian context, this study has investigated the idea of satellite towns, evaluated the main problems they encounter.

Indian policymakers and urban planners can use satellite towns as models for sustainable urban development by studying case studies and best practices. To guarantee that Indian satellite towns continue to be responsive to the changing needs of their citizens and the larger metropolitan areas they serve, it is also imperative that these strategies be regularly assessed and modified.

Satellite towns present a viable way to control growth and promote sustainable development as India's urbanization continues to take shape.

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