New Urbanism

A Blueprint for Sustainable Urban Development in India

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Abstract - This essay delves into the New Urbanism movement, tracing its origins and principles, and examining its relevance in the context of rapidly urbanizing India. Drawing on the need for sustainable urban development, the paper postulates the importance of studying New Urbanism to address the challenges posed by urbanization in India. The paper further illustrates its applicability in the Indian context with a supporting case study. Key principles particularly the charrette methodology are explored in detail to ensure citizen participation in the highly contested Indian context. Through this analysis, the essay aims to highlight the potential of New Urbanism as a guiding framework for sustainable urban development in India.

Keywords - New Urbanism, India, Urban Development, Sustainability, Charrette

Introduction

The urbanization landscape in India has undergone a significant transformation in recent decades, marked by the rapid expansion of suburban areas around major cities. Unlike the gradual suburbanization observed in other nations, India's major urban centers, including Mumbai, Delhi, Bangalore, Kolkata, Chennai, Hyderabad, and Ahmedabad, have experienced a unique trend of suburban growth relatively early in their developmental phases.¹ Between 1998 and 2005, these metropolises faced a decline in employment within their city centers. However, during the same period, there was a remarkable surge in high-technology manufacturing, real estate, and various other industrial sectors in the peripheral areas, ranging from 10 to 50 kilometers from the city centers. This sprawling pattern of development raises critical questions about the sustainability, livability, and overall impact on communities and the environment.

¹ A World Bank report titled '<u>Urbanization beyond Municipal Boundaries</u>' investigates the cause of this phenomenon characterizing India's urbanization.

New Urbanism, originating in the United States in the early 1990s, responded to the adverse effects of suburbanization and low-density developments. The movement sought to counteract the negative consequences of car-dependent lifestyles and single-use zoning, emphasizing the creation of walkable, mixed-use neighborhoods that foster community engagement and sustainable living. Given the unique challenges posed by India's urbanization, a closer examination of New Urbanism becomes imperative. This paper aims to explore the applicability of New Urbanism principles in the Indian context, illustrated with a case study, focusing on its potential to address the pitfalls of suburbanization and promote holistic urban development.

Research Methodology

For the research on New Urbanism in India, my methodology was anchored in a comprehensive exploration of both secondary and primary sources. A pivotal aspect of my research involved delving into the rich repositories of University of Miami's Architecture Research Center (ARC), specifically using the Archive of the New Urbanism (ANU) Collection and the Congress for the New Urbanism (CNU) Collection. This experience allowed me to engage directly with primary materials, offering an unparalleled insight into the evolution and application of New Urbanist principles. Working within the Archives, I had the unique opportunity to closely examine BV Doshi's work, unraveling the intricacies of his contributions to urban design in the Indian context, and drawing similarities on the focus of people-centered design. Additionally, the collection facilitated an analysis of Charter Award-winning entries from India, enabling me to trace the practical implementation of New Urbanism principles and their impact on the creation of livable urban spaces. The juxtaposition of theoretical frameworks and real-world applications within the collections proved instrumental in shaping a comprehensive understanding of New Urbanism's role and efficacy in the Indian urban landscape. This direct engagement with primary materials at the ARC Archives not only enriched my research but also provided a reflective dimension to the project, offering a profound appreciation for the dynamic interplay between theory and practice in shaping urban environments.

Lessons from New Urbanism

The New Urbanism movement is characterized by a set of key principles that guide its approach to urban planning and development. Each principle reflects a fundamental aspect of creating livable, sustainable, and community-oriented urban environments.

Walkability:

Walkability is a cornerstone of New Urbanism, emphasizing the creation of pedestrian-friendly neighborhoods. This involves designing streets, sidewalks, and public spaces to encourage walking as a primary mode of transportation. The aim is to enhance social interaction, promote healthier lifestyles, and reduce reliance on automobiles.

Mixed Land Use:

New Urbanism advocates for mixed land use, integrating a variety of land uses within a neighborhood. This means combining residential, commercial, and recreational spaces in close proximity. The intention is to reduce the need for long commutes, foster local businesses, and create vibrant, diverse communities where residents can live, work, and play.

Smart Transportation:

The movement promotes efficient and sustainable transportation alternatives beyond private car use. This includes prioritizing public transit, cycling, and walking. By designing neighborhoods that facilitate these modes of transport, New Urbanism aims to reduce traffic congestion, decrease carbon emissions, and improve overall accessibility.

Sustainability and Environmental Stewardship:

New Urbanism places a strong emphasis on environmental sustainability. This involves incorporating green spaces, promoting energy-efficient buildings, and implementing sustainable infrastructure. The goal is to minimize the ecological footprint of urban development and create environmentally responsible communities.

Community Engagement:

Community engagement is a fundamental tenet of New Urbanism, involving residents in the planning and decision-making processes. This participatory approach ensures that developments align with the needs and aspirations of the people who live in the community. It fosters a sense of ownership and connection among residents.

Compact, Mixed-Income Housing:

New Urbanism encourages the development of compact, mixed-income housing. This means creating diverse housing options, including apartments, townhouses, and single-family homes, to accommodate a range of income levels. The aim is to foster social diversity, economic inclusivity, and a sense of community.

Traditional Neighborhood Design:

New Urbanism often draws inspiration from traditional neighborhood design, characterized by a well-defined center, a mix of building types, and a network of interconnected streets. This design approach enhances walkability, creates focal points for community activities, and contributes to a cohesive urban fabric.

The movement offers valuable lessons for urban development in India, particularly in addressing the challenges posed by rapid urbanization. The emphasis on walkability, mixed land use, and sustainable transportation can be pivotal in mitigating traffic congestion and fostering healthier, more livable cities. Implementing principles of mixed-income housing and community engagement can contribute to social inclusivity and a sense of belonging, essential in the diverse and dynamic Indian context. Furthermore, incorporating green spaces, energy-efficient design, and sustainable infrastructure aligns with the imperative for environmental stewardship in the face of escalating urban expansion. New Urbanism's lessons advocate for a thoughtful, community-centric, and ecologically responsible approach to urban planning, providing a blueprint for India to navigate its urban development challenges.

Case Study - Lavasa

This project is a village situated along the shores of the Warasgon Dam's backwater in the Pune district of Maharashtra, India. It spans an area of about 1,692 acres and is situated within the larger Hill Station community, which encompasses over 7,000 acres in the scenic Mose Valley.

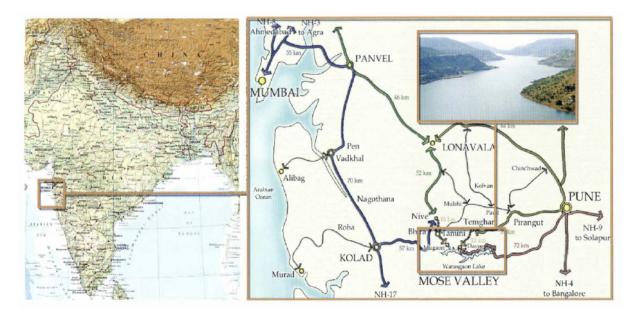


Fig. 1. Location map. Source: CNU 2005 Charter Award Winners

The project adheres to the following guiding principles:

- 1. Create a world class hill station to be the prime destination in India
- 2. Provide high-quality facilities for the visitors & residents of the new towns
- 3. Establish an attractive and strong public image/ identity to market the project
- 4. Optimize utilization of the land with appropriate uses
- 5. Develop a plan that responds to the local and regional context
- 6. Focus on the historical, cultural and natural aspects of the site
- 7. Create a flexible plan that allows for future growth and phased development
- 8. Develop a plan that is environmentally sensitive and promotes sustainability
- 9. Preserve natural open space corridors by encouraging compact development
- 10. Provide for an integrated & seamless development with the natural site
- 11. Create a place where people can Live, Work, Learn and Play

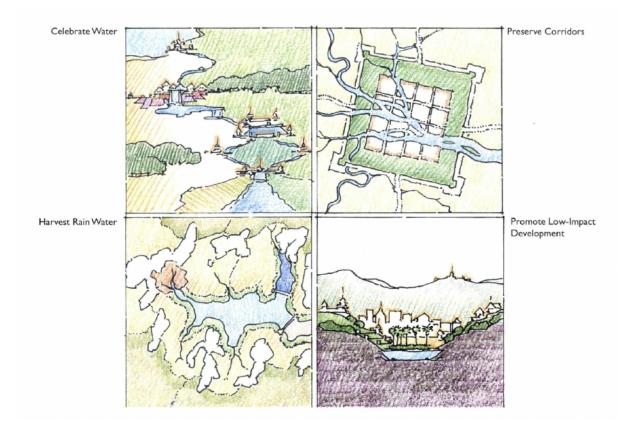


Fig. 2. Design Concepts. Source: CNU 2005 Charter Award Winners



Fig. 3. Aerial View of the Project. Source: CNU 2005 Charter Award Winners



Fig. 4. Village Master Plan. Source: CNU 2005 Charter Award Winners

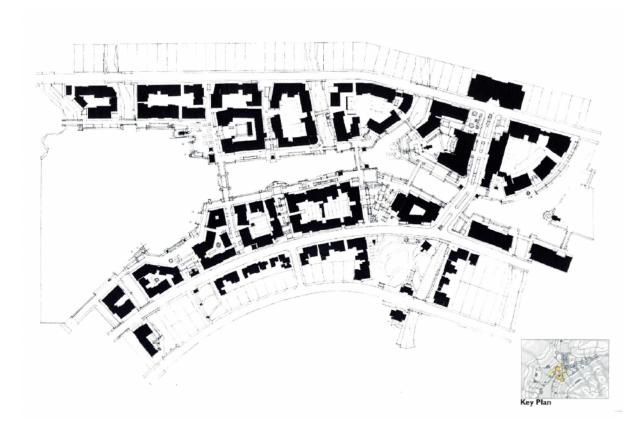


Fig. 5. Town Center Plan. Source: CNU 2005 Charter Award Winners

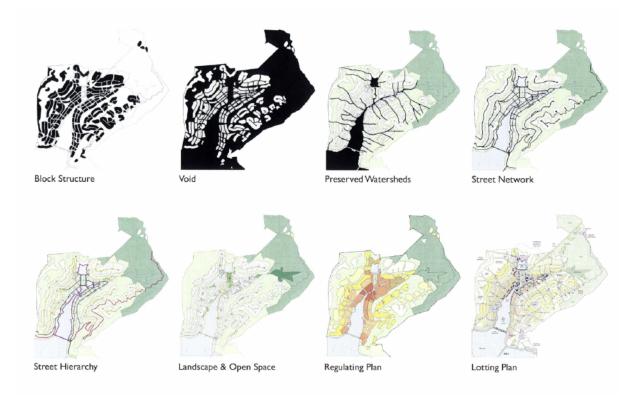


Fig. 6. Village Master Plan Analysis. Source: CNU 2005 Charter Award Winners

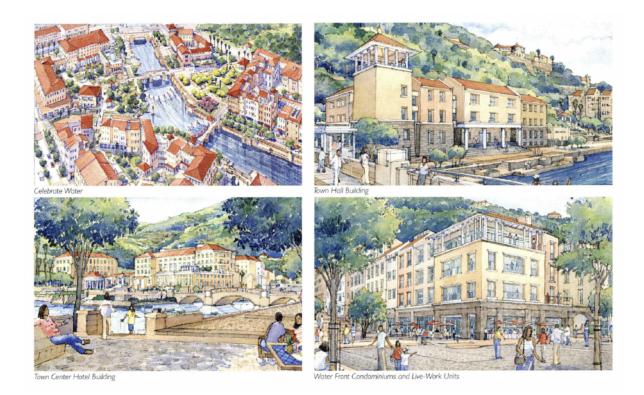


Fig. 7. Village Character Vignettes. Source: CNU 2005 Charter Award Winners

Lavasa is stylistically based on the Italian town Portofino, with a street and several buildings bearing the name of that town. It exemplifies the successful implementation of New Urbanism principles, providing a blueprint for sustainable and community-centric urban development. The city's meticulous planning is evident in its pedestrian-friendly design, where walkability takes precedence over vehicular dominance. Its layout is characterized by interconnected streets, wide sidewalks, and a network of cycling paths, facilitating easy mobility and encouraging residents to embrace an active lifestyle. This deliberate focus on creating an environment conducive to pedestrian movement enhances social interactions, fosters a sense of community, and contributes to the overall well-being of the residents.

The heart of Lavasa lies in its commitment to mixed land use, integrating residential, commercial, and recreational spaces seamlessly. This approach not only minimizes the need for extensive commuting but also creates a dynamic urban experience where residents can live, work, and play within close proximity. The city's architectural diversity complements this vision, offering a mix of housing options, from apartments to villas, catering to different lifestyles and preferences. By prioritizing diversity in land use and housing types, Lavasa cultivates a rich and inclusive social fabric, catering to a diverse demographic and ensuring that the city is adaptable to the evolving needs of its residents.

Furthermore, Lavasa stands as a sustainability trailblazer, incorporating green building practices and environmental conservation at its core.² The city embraces eco-friendly technologies and design solutions to minimize its ecological footprint. Parks, waterfronts, and green spaces are woven seamlessly into the urban fabric, not only enhancing the aesthetic appeal but also promoting environmental sustainability. Lavasa's commitment to preserving natural resources and maintaining a delicate balance between urban living and the surrounding ecosystem sets a precedent for responsible urban development. In essence, Lavasa is not just a city; it is a living testament to the successful integration of New Urbanism principles, offering a model for sustainable, inclusive, and well-designed urban living.

² The Vision for the Lavasa Project is 'People living in harmony with nature.' It aims to accomplish the following: • 70% Amount of previously deforested land that will be restored through detailed landscaping, reforestation and slope greening. • 30% Reduction in carbon emissions. • 65% Reduction in potable water consumption. • 95% Reduction of waste sent to landfill.

Charrette Methodology

Charrettes refer to intensive, collaborative workshops or planning sessions that involve various stakeholders, including planners, architects, residents, and community members. These sessions are designed to generate design solutions and make key decisions about the development of a particular project or neighborhood. The term "charrette" has its origins in architecture schools in France during the 19th century, where a cart, or "charrette" in French, would be used to collect students' work that had to be completed by a specific deadline. Today, the term has evolved to describe a collaborative and time-bound planning process. During a charrette, participants work together in a series of focused sessions, often spanning a few days, to address specific design challenges, discuss ideas, and develop creative solutions. The process encourages open dialogue, cross-disciplinary collaboration, and rapid idea iteration.

The applicability and relevance of charrettes in the Indian context are significant. India faces complex urbanization challenges, one of which includes bringing all stakeholders of the project on board and on the same page. In summary, the Charette methodology's collaborative and inclusive nature, emphasis on community engagement, and ability to address complex urban challenges make it highly relevant in the context of India's rapidly growing and evolving urban landscapes. It provides a structured and effective approach to address the unique urban planning and development challenges faced by the country. India often faces complex policy and regulatory challenges in urban planning. Charrettes can help streamline and clarify the planning process, bringing together experts and policymakers to work through these issues and create actionable plans. Charrettes can help bridge the gap between top-down planning and community needs, ensuring that the resulting urban designs resonate with the people who will inhabit and use the spaces. By adapting the charrette methodology to the Indian context, planners can harness its effectiveness in fostering collaborative decision-making and creating more sustainable, vibrant, and people-centric urban environments.



Fig.8. Author facilitating a table during the East Winter Garden, FL Charrette

Comparison of the two contexts

Both the United States and India confront shared challenges stemming from rapid urbanization. The surge in population density, strained infrastructure, and heightened environmental concerns necessitate a collaborative approach to urban development. Notably, traffic congestion is a common urban woe that both countries experience, prompting a mutual need to explore solutions that prioritize walkability, mixed land use, and sustainable transportation. Additionally, the global recognition of the imperative for environmental sustainability unites the two nations in their pursuit of green spaces, energy-efficient buildings, and sustainable infrastructure. These shared challenges form a foundational common ground for the application of urban development principles. Despite these commonalities, the socio-cultural and economic dynamics between the United States and India introduce nuances that demand distinct considerations in urban development strategies. India's profound socio-cultural diversity necessitates an adaptable approach to accommodate a wide array of social practices, traditions, and community structures, differing significantly from Western cultural contexts. Economic disparities in India are stark, requiring urban development approaches that address a spectrum of income levels, a challenge not as pronounced in the United States. Moreover, the substantial presence of informal settlements in India demands unique considerations, urging the integration of these communities into the urban fabric without displacement. Historical urban forms in Indian cities differ from their U.S. counterparts, requiring strategies that preserve and adapt these historical elements to maintain cultural continuity. Lastly, the dynamics of public transportation systems in India are diverse, necessitating strategies that align with a multitude of transport modes and address unique accessibility challenges.

In conclusion, while the challenges of rapid urbanization provide a common ground for both the United States and India, the socio-cultural and economic nuances underscore the need for tailored urban development approaches. Understanding and addressing these differences are pivotal for the successful implementation of effective strategies. A nuanced, culturally sensitive approach is crucial for India, recognizing the rich diversity and complex socio-economic landscape that characterizes its urban fabric. By embracing the commonalities and navigating the differences, urban development strategies can be crafted to not only address immediate challenges but also contribute to sustainable, inclusive, and culturally resonant cities in both nations.

Conclusion

This comprehensive exploration of the New Urbanism movement and its potential application in Indian cities underscores the significance of rethinking urban development strategies. As India grapples with the challenges posed by rapid urbanization, the integration of New Urbanism principles emerges as a transformative pathway towards a more sustainable and inclusive urban future. The framework envisions a departure from conventional suburbanization patterns, advocating for compact, mixed-use neighborhoods that prioritize walkability, diverse housing options, and community engagement. By addressing the challenges posed by sprawling urbanization, such as traffic congestion and environmental degradation, this framework seeks to create urban spaces that prioritize the well-being of residents. The emphasis on sustainable practices, including green spaces and energy-efficient buildings, aligns with India's growing commitment to environmental stewardship, offering a blueprint for resilient urban growth.

A central tenet of this proposed framework is the adaptation of the charrette methodology to the Indian context. Recognizing the need for collaborative, community-driven planning, the charrette process can serve as a catalyst for innovation in the urban planning process. By involving diverse stakeholders, including residents, local authorities, and experts, the charrette methodology fosters a sense of ownership and ensures that urban development strategies align with the unique needs and aspirations of Indian communities. This collaborative approach not only enhances the effectiveness of planning but also promotes a sense of shared responsibility for the urban environment.

Crucially, the proposed methodology seeks to strike a balance between economic growth and environmental and social well-being. It acknowledges that the success of urban development lies not only in economic prosperity but also in the quality of life and resilience of communities. By prioritizing a community-centric approach, the framework aims to create cities that are not merely economic hubs but also vibrant, inclusive spaces that enhance the overall living experience for residents. The journey toward sustainable urban development is an ongoing process, and this paper envisions that the proposed framework will serve as a guiding compass for urban planners, policymakers, and stakeholders invested in shaping the future of Indian cities. By embracing the principles of New Urbanism and adapting them to the Indian context, there exists a tangible prospect of creating cities that are not only economically prosperous but also environmentally sustainable and socially vibrant. In this way, we hope to contribute to the ongoing dialogue surrounding urban development in India and inspire meaningful, positive change in the urban landscape.

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