

Principles of New Urbanism and Architecture in Indian Context

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Abstract:- With the world growing at a rapid rate New Urbanism seems to have lost its essence and humans have started shifting into a staggered development. Therefore it is a need of the hour to bring back the neighborhood planning, transit oriented development and traditional and cultural aspects in human life which have been limited and ceased to exist due to uneven growth. This paper tells us about how to bring back the concept of new urbanism in India the way initially it was through context and deriving architectural inferences by various case studies and literature review done.

Key Words: Connectivity, Mixed Use, New Urbanism, Transit Oriented Development

1. INTRODUCTION

Many cities are currently exploring the possibilities to make better use of the present-day urban fabric and its infrastructure, with the aim of enhancing local quality of life and improving urban sustainability. The wealth of urban data, the increased connectivity of urban objects through the Internet-of-Things and advanced energy and mobility technologies have opened up new avenues for the application of smart solutions and the transition to clean energy and mobility in cities. Numerous cities across the world are now looking into the potential of smart solutions, experimenting in living labs and applying smart technologies in ambitious integrated projects, such as the Horizon2020 lighthouse projects.

The aim is to create most livable cities and to provide answers and convenience for the quality life. New urbanism creates new urban design opportunities in the most tangible forms. This study will enhance the neighboring patterns and will allow growing gradually and reviving the basic principles of new urbanism that existed in the cities. New urbanism will influence the growth of human life bestowing standards of urban design New urbanism consists of various principles like mixed housing, increased density, easy connectivity, more sustainability and many more aspects of mixed use and diversity.

This paper will tell us about the aspects of identifying areas that will promote citizens towards maintenance and evolution which will nurture the human comfort and flourish the livable environment by providing solutions to development. New urbanism tells us about the eminence of usage used inside the space to make the spaces livelier, define the movement system off the space to ensure safety, proper regulations, enhance public participation from various cultural backgrounds and social context. Due to rapid population growth new urbanism and conventional

community design are a need of hour. Since the pattern of growth is completely staggered and increasingly unsustainable, to mitigate the problems associated with these designs new urbanism is the best alternative community design method and alternative to find explanations.

In recent years a new planning movement has developed popularly known as New Urbanism has also known by other names such as smart growth, neo-traditional planning, and traditional neighborhood development (TND). This movement has come out as an answer to typical divisions of design and implementation of single use zoning practices that are linked and associated with sprawling portions and communities divided for single usage, and which products in little diversification of income, areas devoid of any unique charm that defined the sense of place, growing social seclusion and reliance on the automobile, and increased utilization of land and added resources. New Urbanism seeks to alleviate this and other issues by complete manipulation of the fabricated and assembled environment. Amid other elucidations, classic New Urbanist communities integrate mixed use cores, underline the design of streets and public areas as well as other open space including parks, suggest a variety of housing types, and concentrate on transit-oriented development (TOD). However, as is often the case with "new" or different ways of doing things, implementing New Urbanism can be difficult. New Urbanism is a widespread advancing development movement that works together with old and new accumulation strategies in an attempt to develop and grow indifferent lasting societies of value. However, as this drive employs proceedings that are not presently premediated typical, developing in this aspect can be difficult. Few Challenges originating from prevailing practices of development that includes:

1. Sprawl
2. Single-use communities
3. Neighborhoods devoid of any unique character
4. Social isolation and dependence on the automobile
5. High consumption of land and other resources

If the obstacles to resolve and materialize the principles of New Urbanism can be identified and fixes can be found to astound these barriers, then principles of New Urbanism in communities can be implemented successfully in India.

2. LITERATURE REVIEW

New urbanism provides various uses for apartment, single houses, bungalows, villas and bringing together people from various cultural background and classes.

This evolution and new perspective of urban planning is one of prevalent efforts for resolving issues of wear and tear urban centers and unsustainability of exurbias of metropolises and cities. New urbanism tries to create a suitable environment with humanistic balance which is accountable for alterations and renovations of urban areas along with modern developmental strategies in the course of sustainable growth purposes. Ideas linked with new urbanism designing principles includes a major part of traditional designing principles related to humanistic situation in cities. Most of methods functioning in today's time aren't accountable for human's physical, psychological and mental needs but ignore humanistic hold and proportion. Regarding to the fact that most of the hitches in our time are due to mechanical outlooks instead of humanistic outlook in cities, changing the functioning point of views towards humanistic new urbanism is necessary. It associates human made environment with natural environment in order to generate environmental sustainability. This is all needed for connectivity of neighboring units within the environment and also to promote the idea of urban centers and open spaces for all by the combination of thoughts and features of Transit Oriented Development (TOD) and Traditional Neighborhood Development (TND). Traditional urbanization as an apt way for using new urbanism approach is suitable with environmental and social condition of different cities, its use will provide chances to solve most of available issues in cities in order to modify and beautify the quality of life. Urbanization is a directory of alteration from traditional rural ideas to modern industrial one.

Three stages in the process of urbanization.

1. Initial stage is defined by rural traditional society with prevalence in agriculture and isolated pattern of settlements.
2. Refers to hastening stage where basic rearrangement of the economy and investments in communal overhead capitals that includes transportation, communication and other activities.
3. Known as terminal stage where urban population exceeds 70% or more.

The outline of urbanization in India is regarded as by continuous focus of population and activities in cities. Presence of dysfunctional urbanization and urban growth which outcomes in a deliberation of population in a few large cities without relating to increase in their financial base. India's urbanization is trailed by some basic issues in the field of: housing, slums, transport, water supply, sanitation, inadequate provision for social infrastructure (school, hospital, etc.), pollution, etc. Indian urbanization is

undulating not unraveling. Urbanization is engendering social and economic differences which authorize societal conflicts, crimes and anti-social happenings. Effects of urbanization:

- A. Slums and allied problems.
- B. Transportation system.
- C. Garbage Disposal Issues.
- D. Sewerage Problems.
- E. Water Supply.
- F. Environmental Problem.

Progress energies and funds should be heading towards small cities which have been deserted so far so that functional base of urban economy is held together. Surrogating the ways of traditional surroundings with universal paradigm of development which is related to transmission of nearsighted and one-dimensional goals of effortlessness and advancement of lifestyle and living conditions in regions, which is understood to be disadvantageous by "MODERN" world. Ultimate traditional principles in architecture/ urbanism at a given place and time is like a knowledge system and has temporary speaking, which maintained a connectivity with changing parameters of its practice.

Ironically, we have imbibed more of global ideas because of our overexposure to them coupled with ignorance about our local knowledge system – which is why the dissemination of knowledge about these is a critical step towards acknowledging their presence and relevance. Cities are becoming worse place to live in, intersecting forces causing so are as: increase in population, failing infrastructure, automobile dependency, outward sprawling development and inability to provide adequate housing. Building great cities is civilizations greatest achievement. This legacy can and must be continued.

3. HISTORY

Since the very beginning i.e. from even the Indus valley civilization it is seen that people started development on the bank of river. They found a water source and grew along it in a very systematic way and followed a system of layout on rectilinear basis and strongly followed a system of growth. The towns were built by keeping the needs of the people in mind and were built along the walls of the forts and city centers were developed. It is found that initially new urbanism existed even during the Mohenjo-Daro and Harappa civilization and is said that these were the perfectly planned cities during the ancient times. New urbanism changed its characteristics along with the growth in population, mainly classified into Pre historic, early historic and medieval period. With vast advancement in studies people tend to move towards living a better lifestyle on their own comfort basis and with the introduction of health and sanitization, which led to the staggered growth slowly

ceasing the concept of new urbanism. After Independence factors like agriculture, technology, economy, industry and development, few of the cities are well planned and rapidly developing. The few well planned cities of India are Naya Raipur, Panchkula, Mohali, Dhule, Bhilai, Auroville, Sector 62 Noida, Bhubaneswar, Dispur, Cooch Behar, etc. and other least known planned city from different parts. Taking examples of cities like Fatehpur Sikri, it is large and decentralized in a way that experience of the city that changes its surrounding can be taken as we travel from courtyards to courtyards, while there are no boulevards and boards or any such landmark building that can be kept in view and still you feel connected and involved to the habitat.

4. UNDERSTANDING OPINIONS AND NEEDS

A study was conducted to analyze the need of New Urbanism in today's Indian context. It was conducted through google forms to study the perspectives of society so that better conclusions as per need could be drawn. People were asked about what they lack in their society and what things are they expecting in the coming future. The answers were very varied and up to the mark like use of public bicycle and bike for transportation should be improvised and more use of public transport system needs to be implemented. Vehicle pooling should be promoted for better traffic conditions and reducing the wastage of resources. Better control over traffic and management of traffic should be taken care of so as to make places easy to access and that too with time management. With the growing population at such a rapid rate, parking is a major problem therefore more public parking spaces should be designed and the construction that is taking place should cater its need of the parking according to the norms and regulations. Roads should be properly planed for better connectivity and should be broad enough so that the traffic congestion do not takes place. Walkover bridges and zebra crossing should be made so that there is no problem for the pedestrians. Proper care should be taken care to maintain the quality of life. Garden areas should be designed as interactive spaces where people can know about each other and revive the neighborhood culture. Since the world is turning smart it has now become a necessity that with the IOT technology a lot of things can be monitored for security purpose therefore, Wi-Fi access is a must in new urbanism. A good city is which is well managed in all the aspects, one of the major aspects is sanitation and hygiene therefore public toilets and dustbins are a must to maintain the same.



Chart 2

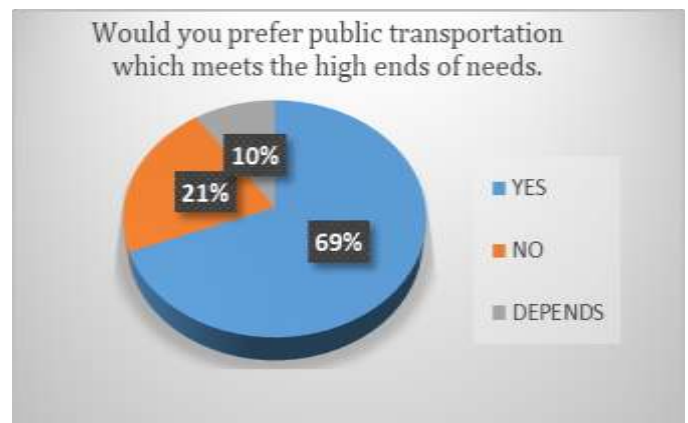


Chart 3

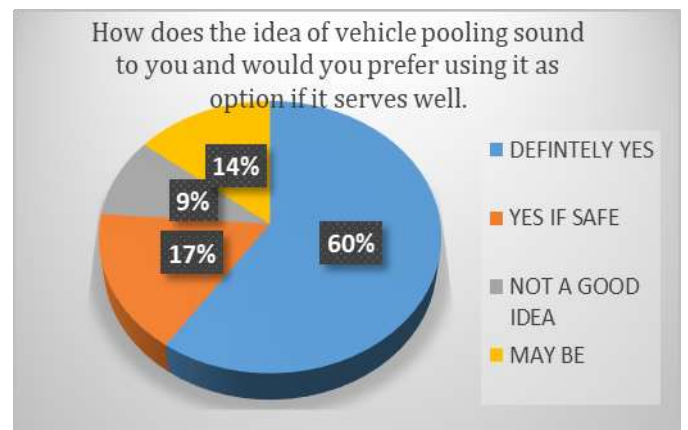


Chart 4



Chart 1

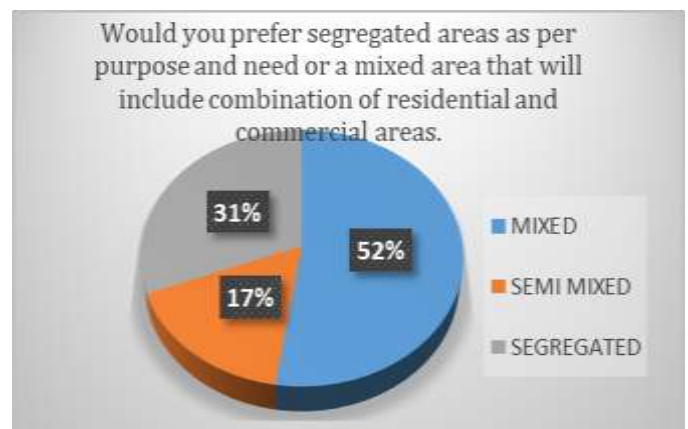


Chart 5

5. HOW CAN REVIVAL BE DONE, WITH WHAT WE HAVE

There can be few methods that can be worked upon to solve the issues and some examples which exhibited the prospect of the Indian residential community planning.

Firstly, comparison of the New Urbanism community construction principles and Indian ideas of residential planning. We can Improve and optimize our mode of residential community planning. Secondly, we can take evidences and examples of our past planned cities and how they were worked out practically following these principles. The theory as what it says is about the influence that is created on the suburbanization and other related urban issues in countries. There are many cases and evidences that explain the improvement and changing of the community and modes of construction in other countries; but in case of India instead of adopting from foreign cultures, we can practice our traditional methods incorporating technology to satisfy the needs of user in present scenario. India is a rapid growing country with increasing focus on urban development in a sustainable way and the concerned environmental issues, the trends to reform has to be followed by our urban creation. This will act as an opportunity and a challenge at the same time to turn back to the time and mode of residential and commercial community planning.

“The combination of each residential unit” should be developed based on “New Urbanism” that is it should incorporate few concepts of neighborhood planning. This will improve the prevailing planning ideas and which can be pertinent for the sustainable development in the forthcoming years. This may progressively deteriorate the notion of individual district, and emphasis on the concept of community living. Residential district integration has two basic levels, which includes integration between different districts and integration of residential districts. This process can brings us close to the reality of enclosed district, but also maintain an appropriate closed status. This will generate a sense of attachment by building patterns, while not being closed completely by buildings or gate. While doing this, concentration towards the connection amid different residential localities, creating unity at functional levels. This will help achieve a well running and sustainable development for each locality.

Considering reality of Indian background, there could be two methods that could be followed.

1. Mixing of residential buildings at certain levels moderately, and then reforming the structure of existing community gradually to benefit the user. The scenario of current development cuts off the relationships within locality and this is disadvantageous in context to integration of residential arena and urban facilities. The different social position of groups avoids contradiction and also contributes to more of contact and commotion. Maintaining the social indulgence of residents with each other within the same community will help

retain the homogeneity in culture that we had initially.

2. Considering residential being homogeneous, diversified activities relating communication can be promoted which can transform the current communities towards vitality. To promote more communication and interaction of residents, this is be ensured from our side to build enough spaces for people to connect, while at the same time encouraging them to stay out for longer in those open spaces. These spaces could be created in the left out urban pockets in the locality.

While talking about interaction and connectivity within city, a relatively clear boundary of district is to be maintained necessarily by having city centers at different junctions where localities intersect and so thus the people living in those areas.

6. CONCLUSIONS

New urbanism as what studies and analyzed is about creating sense of place while giving specific dimensions to that created place.

The principles were not only focused to write out the guidelines but they also dictated perspectives of relationship within the community and how can they be made strong by putting together the system that system of guidelines associated with that place to create a comfortable environment. Studies done by various urban designers ended by saying that places where people truly want to live are places that are not being built anymore. The places had everything to do with the relationship between the building and the street and nothing to do with the feeling of nostalgia and this is the thing that made those old towns and old neighborhoods lively and prevalent. Studies have even concluded that these places that relate to the human needs were not even being built prior to forty years from now; they were the old cities of the country which were built throughout the history since the first known civilization which came in action. It were these old cities that regained the desirability of user for a place to live in. based on the study few more ideas in the form of conclusions could be drawn:

An Ideal neighboring unit should include:

- A. A center and an edge to connect and isolate.
- B. Optimizing the sizes to one quarter of mile distance from center.
- C. A balanced combination of life, activities, work, shopping, education, recreation and worship.
- D. An integrated network that connects the streets and organizes place of buildings and traffic.

E. Priorities given to design of public spaces and appropriate positioning of urban buildings.

Other ideas included - Promotion of general to portion urbanization and its usage. Also creating a direct public relation with transportation pattern and land use and apart from immediately visible needs of people, latent needs should be taken care of like:

- A. Comfort and Livability
- B. Interfaces between Public and Private Domains
- C. Technological Needs
- D. Affordability and Sustainability
- E. Environmental issues.

To concern all the issues faced by existing development, a traditional yet convergent approach, with respect to all dimensional data while maintaining quality and providing with a healthy living atmosphere that is user based without compromising with environmental factors.

Lastly, approaching with a convergent method could add in including enough dimensions which can improve the quality of development and thus life. Also instead of rejecting traditional urban space and architecture, conserving them as a lesson for future developments.

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