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# **Smarter Area Development: A New Approach for Local Area Planning**

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### **ABSTRACT**

This paper briefly deals with the fact that our cities are getting expanded day by day and consuming more natural resources day by day. Still we are not practicing 4R concept that is regenerate, reuse, recycle and reduce. Without taking consideration of this horizontal growth we are following the smart cities initiatives. In this practice we need to focus on effective growth management through smarter solutions.

To deal with the transformation of India's urban areas and towns and successfully oversee new development requires viable urban positioning resolutions, procedures, and foundations supported by viable enactment. Taking a perspective that particular reactions are required to change the urban areas and towns from their present focused on conditions and managing new development in a way that does not bring about rehashing the present issues in the urban areas and towns. Our cities have been progressed from point to space and every time it is better from the preceding one. These changes have occurred due to the urbanization and increase in the needs of the citizens. So, to fulfil the citizens need this improvement should be the best options to implement

Keywords -Smarter development, Local Area planning, Urban Growth, Transit oriented Development, Urban Farming, Ground Water Recharging

### Introduction

There have been, overall, two ways to deal with controlling new urban development in India. In the first methodology the authorities and development agencies acquire large portions of land and then re-plan them in a required or appropriate manner. This is stated to as the "land acquisition" method. In the second approach, the agencies and development authorities, instead of acquiring land, bring together or "pool together" a group of owners and then re-plan the area by readjusting or reshaping every land parcel in a manner such that it is given a regular outline and access and in the process a portion of land parcel is appropriated to provide for roads, infrastructure, and public amenities. This is referred to as the "land readjustment and pooling" method.

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Gujarat has a fairly good and strong legislative structure for urban planning as compared to other states in India. Which is the, Gujarat Town Planning and Urban Development Act (GTPUDA), enacted in 1976 by the Gujarat legislative assembly. The act derives from early 20th century planning law devised by the British to expand and manage Indian cities. It also has been amended from time to time to keep pace with the varying requirements. The first step is to prepare a "Development Plan" (DP) for the entire city or development area. The second step is to prepare "Town Planning Schemes" (TPSs) for smaller portions of the development area for which the Development Plan is prepared.

### **Requirements of Smarter development**

Smarter is continues process to be better day by day. Our cities have been progressed from point to space and every time it is better from the preceding one. These changes have occurred due to the urbanization and increase in the needs of the citizens. So, to fulfil the citizens need this improvement should be the best options to implement. Which lead us towards the smarter. And as we all know that being smarter is a required for our Indian cities, and it also having traditional things. And this new generation has its own identity for development so we need to give more focus on balanced development of the traditional and the technological approach.

- Town planning scheme is an effective micro level tool for the orderly planned development and execution of development plan proposals in phased manner.
- The main objective of TP scheme is self-supporting development which gives approachability to all plots with amenities and facilities as per standards.
- There is a legislative provision for variation of scheme after it came into force.
- Our cities are getting expanded over the period of time and it's a continues process.
- Horizontal expansion consumes loads of natural resources directly or indirectly.

#### 2.1 **Introduction of Town Planning Scheme**

Town Planning Schemes are prepared at micro level for an area of about 100 hectares particularly in those pockets which are under pressure of urban development and need priority attention. The concept behind taking 100 hectares is that TPS becomes manageable and viable scheme for preparation and implementation at local level. The scheme is conceptualized as a joint venture between the local authority and the owners of land, who voluntarily agree to pool their land, redistribute the reconstituted plots of land among themselves and share the development cost.

For preparation of scheme land parcels with common ownership are marked with original survey number / plot number on a map. All such original plots form one area for planning purpose. In the layout plan taking out the area for roads and streets and public and semi-public spaces the remaining area is planned in regular plots known as final plots. The final plots though reduced in size better in shape, build ability and accessibility are allocated to the land owners preferably in close proximity to their original plots. The owner also gets compensation for the area reduced for public spaces and roads.

Since the reconstituted plot has the better accessibility and good potential for development, its value gets enhanced. The difference between enhanced value and the original value is liable to get. Part of such increment

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in land value is contributed for the cost of development work in the scheme. Under the Act it is clearly provided that the landowners will get the net amount of the increment value of the plot worked out after deducting the amount of compensation payable for the loss in area.

#### **Stages of Town Planning Schemes** 2.2

There are Four Stages for Preparation of Tow Planning Scheme

- Draft Town Planning Scheme
- Preliminary Scheme 2)
- Final Scheme 3)
- Board of Appeal

**Draft Town Planning Scheme** 

- Two times Public Participation
- Submission of Draft Town Planning Scheme

Sanction of Draft Town Planning Scheme by State Govt.

- Appointment of Town Planning Officer
- Split the Scheme into Preliminary and Final Scheme

Preliminary Scheme (Contains Physical Planning)

- Personal Hearing to every individual land owners / affected persons
- Final Decisions by the Town Planning Officers in terms of Physical Planning
- Submission of the Preliminary Scheme to the State Govt.

Final Scheme (Contains Fiscal Planning)

- Personal Hearing to every individual land owners / affected persons
- Final Decisions by the Town Planning Officers in terms of Fiscal Planning
- Submission of the Preliminary Scheme to the State Govt.

increase in the number of census towns has highlighted theneed for more attention to this class of settlements.

#### 2.3 Town Planning Scheme contents of Provision up to the extent of

- 10 % for Socially and Economically Weaker Section
- 15 % for Roads
- 5 % for parks, playgrounds, garden and open space.
- 5 % for social infrastructure such as schools, dispensary, fire brigade, public utility place
- 15 % for sale by appropriate Authority for residential, commercial or industrial use.

#### 3 **Smarter Approaches for Local Area Plan**

Urban Tools can help to improve the Usability of Area and Resources and can fit into the Town Planning Scheme Mechanism to made a Local Area Plan. Some of Urban Tools are

- Transit Oriented Development
  - For Mobility;

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- Mix type of Landuse
- Mass Transportation
- Less Carbon Emission
- **Urban Farming** 
  - Rooftop Farming (to make urban areas self-sufficient)
- Rain Water Recharging
  - Regenerate the Ground Water Table

#### 3.1 Section 76A of The Gujarat Town Planning & Urban Development Act, 1976

The Amendment in Gujarat Town Planning & Urban Development Act, 1976 done in 2014 i.e. Section 76A by Gujarat Legislative Assembly gives a statutory Provision to make a Local Area Plan.

Which states that the Local Area Plan may be made in Respect of any land which is a part of the sanctioned Preliminary scheme or not, however before making the Local Area Plan, the Appropriate authority shall publish in the Official Gazette.

### **Conclusions**

The study of emergence of growth of City which are expanding rapidly and as it crosses the City Limits and it becomes necessity to control the growth to sustain the agriculture area around the city which fulfils the need of Agriculture supplies of the city itself. So, these tools help to sustain the Growth. And the needs of city can be achieved.

After studying the Section 76A which allows us to make a Local Area Plan and gives authority to use Urban tools to the Planners for a better & Sustainable Future t should be used by ULBs and it shouldn't just to be leave on Paper.

#### 5 **Proposal**

Transit oriented Development gives mix Landuse that allows to grow commercial/Institutional at Ground level and residential at upper storeys with mobility & mass transportation; with Rooftop farming it ensures that the city become self-sufficient on its food demand with Ground water Recharging it helps to recharge the water so this kind of Local rea Plan can improve the Tow Planning Scheme at Micro Level an can be helpful to achieve the vision of Development Plan made by the Appropriate Authority

### References

- [1] Arup UrbanLife, "The smart solution for cities," Arup UrbanLife, New York, 2011.
- [2] Department of Urban Development and Housing, Government of Madhya Pradesh, "Transit Oriented Development Policy 2018," Department of Urban Development and Housing, Government of Madhya Pradesh, Madhya Pradesh, 2018.
- [3] P. Awasthi, "Urban Agriculture In India And Its Challenges," International Journal of Environmental

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Science: Development and Monitoring, 2013.

- [4] S. Ballaney, "TP scheme mechanism in Gujarat, India," The International Bank for Reconstruction and Development / The World Bank, 2011.
- [5] G. o. Gujarat, "GTPUD Act, 1976," Government of Gujarat, Gandhinagar, 2014.
- [6] I. f. T. &. D. Policy, "Transit Oriented Development for Pimpri Chinchwad: Workshop Outcomes and Action Plan," Institute for Transportation & Development Policy, Pimpri Chinchwad, 2013.
- [7] I. f. T. &. D. Policy, "STATION AREA PLANNING," Institute for Transportation & Development Policy, Chennai, 2012.
- [8] R. R. Shrestha, "Rainwater Harvesting and Groundwater Recharge for Water Storage in the Kathmandu Valley," Sustainable Mountain Development, ICIMOD, 2009.
- [9] C. J. &. L. G. Zhang Feifei, "How Urban Agriculture Is Reshaping Peri-Urban Beijing?," Open House International, 2009.