Managing Urban Growth using the Town Planning Schemes in Andhra Pradesh

Final Report

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Acknowledgements

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This report has been prepared by Sri Ramakrishna Nallathiga, Knowledge Manager (Infrastructure & Environment), CGG under the overall coordination of Sri S P Shorey, Director (Urban Management Resource Group), CGG with the overall direction of Dr Rajiv Sharma, IAS, Director General and Executive Director, CGG.

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<td></td>
<td>References</td>
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**Annexure 1** G.O. Ms No. 288 HMDA Layout and sub-division regulations 2008 incorporating Town planning schemes (land pooling schemes)
1.1 Background

Andhra Pradesh has been witnessing a rising urban population and the growth of urban areas – both in number as well as geographical area - over last more than two decades. Urban planning is a critical challenge in the face of burgeoning problems of urban growth and population concentration in cities. Land use control, town planning and urban development legislations have a direct impact on urban growth and development. The legislations dealing with land use planning control, spatial growth management and urban development comprise of zoning, land sub-division, layout and building regulations to provide for and regulate the use of land and built space. These are of greatest concern to the urban development sector as they affect the initiatives of individuals. The implementation of plan and accompanying regulations either makes or mars a city’s development prospect.

Transparency in understanding and applying land use planning and development control is crucial, particularly at the implementation stage of plan. Unfortunately, the track record in most towns of AP points towards ambiguity in interpretation, application and implementation of development plan by the municipalities/ development authorities. This leads to considerable delay in clearances of land use and development plans, increase the transaction costs. In many instances, there are gross violations of zoning and building regulations, unauthorised constructions and unplanned settlements. All these place undue strain on city infrastructure systems and reduce the potential of cities to contribute as engines of economic growth. The focus of reforms, therefore, ought to be on streamlining the urban planning process, judicious and optimal land use, efficient plan implementation mechanisms, improvement of titling and registration
proceses. The mechanisms that help in realizing the development plan on ground assume a greater importance in this context.

The Master plans have traditionally laid focus on the town planning so as to provide for zoning and land use, control of ribbon development, location of industries, clearance of slums, civic and diagnostic surveys and preparation of Master Plans. Although a significant step in urban development was undertaken in these Plans in the form of various plan proposals for the areas, comprehensive action was not taken by the States/ULBs to adopt and implement these plans. It is estimated that hardly 20 percent of the urban centres have some sort of an updated Master Plan, which in many cases is merely a policy document. Several master plans have been prepared by various agencies responsible for plan preparation, but their implementation has not been encouraging.

Given this scenario, the Strategy and Performance Innovation Unit (SPIU) (MA&UD) has undertaken current project under DISA C&D Plan 2008-09 to study the current scenario of planning system and to come out with suggestions for improving it by using town planning scheme for better planning, implementation and growth management of urban areas in Andhra Pradesh.

1.2 Objectives

The broad objective of the project is to enable the MA & UD department to undertake an effective action towards using town planning schemes in managing urban growth and achieving overall master plan implementation. The specific objectives with reference to this shall include:

- To review the urban growth in Andhra Pradesh and the rising needs of infrastructure development (in the context of JNNURM).
- To review the master plan/development plan system followed in the towns of Andhra Pradesh in managing urban growth.
To describe the process, features and importance of town planning schemes in the context of urban areas.

To document the successful practice of town planning schemes implementation in Indian states.

To suggest a road map for the introduction of town planning schemes into master plan implementation/ infrastructure development process, including its integration into current planning and development legislation of AP.

To discuss the road map for introducing town planning schemes and for taking forward their implementation by the Government.

1.3 Scope of Work

The introduction of town planning schemes for managing urban growth in MA & UD Department involved the following key tasks:

- Overview of urbanisation and urban growth process in Andhra Pradesh and the rising needs of urban infrastructure development.
- Review of the master plan system of town planning and the need for strengthening its implementation through mechanisms like town planning schemes.
- Documentation of successful cases of implementation of town planning schemes in Indian states i.e., Gujarat and Maharashtra, and parts of AP.
- Visit of the study team, comprising CGG, SPIU and DTCP officials, to the case study areas for further details and learning the implementation.
- Discussing the adoption of town planning schemes into the town planning system with the MA&UD department, DT&CP, and practising planners.
- Preparation of road map for effective implementation of master plan and infrastructure development using town planning schemes.

1.4 Expected outcomes

The expected outcomes of the study are:
• Re-viewing/re-visioning of master plan implementation process in AP
• Reasons for the failure of master plan implementation and town planning schemes as alternative to it
• Key learnings from the successful implementation of town planning schemes in other states
• Road map for the introducing town planning scheme in urban areas of Andhra Pradesh and its integration with current planning framework

1.5 Methodology

The following step-by-step approach that would be adopted in the project is discussed below.

[Step 1] Overview of urbanisation and urban growth process in Andhra Pradesh and the rising needs of urban infrastructure development

As a first step, the urbanisation and urban growth process in Andhra Pradesh shall be reviewed with the help of primary and secondary data and the growth needs in terms of physical and financial resources for infrastructure development to sustain the urban development shall be spelt out. Data regarding the same would be available from:

(i) the Census of India
(ii) the MA&UD department
(iii) the Department of Town and Country Planning
(iv) other Secondary sources

The infrastructure needs shall be estimated, wherever possible, and the emergence of JNNURM as one of the avenues to address it will be discussed.

[Step 2] Review of the master plan system and the need for strengthening its implementation through town planning schemes.
This involves a study of current system of master plan followed in the towns of Andhra Pradesh (in all three regions). The shortcomings of master plan implementation shall be analysed with the primary focus on the implementation process and proactive planning measures. The need for strengthening current system of master plan will be emphasized and the introduction of town planning schemes, as an important option/means, will be discussed.

[Step 3] Documentation of the successful cases of town planning scheme implementation in Indian states.

This step involves bringing out the case studies of successful town planning scheme implementation in some of the Indian states. In particular, the success of this scheme is well known in:

(a) Gujarat  
(b) Maharashtra  
(c) Coastal Andhra areas of erstwhile Madras Presidency

It is proposed that the case studies of Gujarat and Maharashtra shall be commissioned to expert planning consultants in this field in the respective States, who have been identified, and a study of the parts of Andhra Pradesh, where town planning schemes did exist in the past, shall also be commissioned to an expert planner.

[Step 4] Visit to the case study areas for gaining the learnings at an implementation level

The learnings from successful case studies in other States should give a good case for/point to introducing it in the urban areas of Andhra Pradesh. The adoption of town planning schemes needs to be planned and firmed up through visits to the respective States by the Study team comprising the officers of CGG, SPIU (MA&UD) and DTCP.
[Step 5] Discussing the adoption of town planning schemes into master plan system in a Workshop

The findings from the review of master plan implementation and the case studies of town planning schemes shall be discussed in a workshop mode to understand the need for as well as the impediments to the adoption of town planning schemes in Andhra Pradesh. Legal and institutional issues may arise and they need to be addressed in the strategy for the adoption of this system. The primary participants of the workshop include:

- the MA&UD department,
- the DT&CP
- planning consultants
- practising planners
- Others

[Step 6] Preparation of road map for introducing town planning schemes

Based on the review, analysis, case studies and the deliberations in the workshop, a road map for introducing town planning schemes will be structured. The integration of town planning schemes with other planning legislations i.e., AP Town Planning Act 1970 (with modification), AP Urban Areas (Development) Act, 1975 and Hyderabad Metropolitan Development Act, 2008 etc., shall be addressed. The road map is expected to address the issues of:

- The Process of Town Planning Schemes (TPS)
- The Learnings from Successful Implementation of TPS
- The Plan for the adoption of TPS in AP
Chapter 2

The Urban Scenario in Andhra Pradesh

2.1 Urbanisation Patterns and Trends

Andhra Pradesh is a well urbanised state in the country and stands at par with the national average. As per the 2001 Census, the proportion of population living in urban areas in the state stood at 27.08% compared to 27.78% for the country. Andhra Pradesh stood third among the four southern states in terms of the level of urbanisation. The pace of urbanisation in the state between 1901 and 2001 also more or less followed the pattern for the country as a whole.

Table 1 shows the trends in urbanisation in Andhra Pradesh – total number of urban agglomerations/towns, total population, urban population, per cent of urban population in total population and decadal growth in urban population for the period 1901-2001. The percentage of population living in urban areas in the state went up from 9.65% at the beginning of the century to about 27% towards the end.

Table 1

Urbanisation Trends in Andhra Pradesh: 1901-2001

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Total Number of Towns</th>
<th>Total Population</th>
<th>Total Urban Population</th>
<th>Per cent of Urban Population</th>
<th>Growth in Urban Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>116</td>
<td>19065921</td>
<td>1839750</td>
<td>9.65</td>
<td>-</td>
</tr>
<tr>
<td>1911</td>
<td>133</td>
<td>21447412</td>
<td>2165095</td>
<td>10.09</td>
<td>17.68</td>
</tr>
<tr>
<td>1921</td>
<td>153</td>
<td>21420448</td>
<td>2187317</td>
<td>10.21</td>
<td>1.03</td>
</tr>
<tr>
<td>1931</td>
<td>176</td>
<td>24203573</td>
<td>2694147</td>
<td>11.13</td>
<td>23.17</td>
</tr>
<tr>
<td>1941</td>
<td>212</td>
<td>27289340</td>
<td>3665928</td>
<td>13.43</td>
<td>36.07</td>
</tr>
<tr>
<td>1951</td>
<td>291</td>
<td>31115259</td>
<td>5420325</td>
<td>17.42</td>
<td>47.86</td>
</tr>
<tr>
<td>1961</td>
<td>223</td>
<td>35983447</td>
<td>6274508</td>
<td>17.44</td>
<td>15.76</td>
</tr>
</tbody>
</table>
Table 2 shows the comparative pace of urbanisation for Andhra Pradesh and India for 1901-2001. It is evident that the urbanisation in the State has more or less followed the country throughout the history so far.

Table 2

Pace of Urbanisation in India and Andhra Pradesh: 1901-2001

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Urbanisation Pace (Percent of Urban Population to Total Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>India</td>
</tr>
<tr>
<td>1901</td>
<td>10.84</td>
</tr>
<tr>
<td>1911</td>
<td>10.29</td>
</tr>
<tr>
<td>1921</td>
<td>11.18</td>
</tr>
<tr>
<td>1931</td>
<td>11.99</td>
</tr>
<tr>
<td>1941</td>
<td>13.86</td>
</tr>
<tr>
<td>1951</td>
<td>17.29</td>
</tr>
<tr>
<td>1961</td>
<td>17.97</td>
</tr>
<tr>
<td>1971</td>
<td>19.91</td>
</tr>
<tr>
<td>1981</td>
<td>23.34</td>
</tr>
<tr>
<td>1991</td>
<td>25.71</td>
</tr>
<tr>
<td>2001</td>
<td>27.78</td>
</tr>
</tbody>
</table>

Table 3 shows the decadal as well as average annual exponential growth rate of population for rural and urban areas in Andhra Pradesh during 1961-2001. An analysis of both the growth rates shows that the difference between urban and rural growth rates has been on a decline except during 1971-81, and the difference being only marginal during 1991-2001.

### Table 3

**Growth Rate of Rural and Urban Population in Andhra Pradesh: 1961-2001**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decadal Growth Rate (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20.90</td>
<td>23.10</td>
<td>24.20</td>
<td>13.86</td>
</tr>
<tr>
<td>Rural</td>
<td>18.15</td>
<td>16.99</td>
<td>18.40</td>
<td>13.58</td>
</tr>
<tr>
<td>Urban</td>
<td>33.92</td>
<td>48.62</td>
<td>43.24</td>
<td>14.63</td>
</tr>
<tr>
<td>Urban-Rural Growth Difference</td>
<td>15.77</td>
<td>31.63</td>
<td>24.84</td>
<td>1.05</td>
</tr>
<tr>
<td><strong>Annual Exponential Growth Rate (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>1.67</td>
<td>1.57</td>
<td>1.69</td>
<td>1.27</td>
</tr>
<tr>
<td>Urban</td>
<td>2.92</td>
<td>3.96</td>
<td>3.59</td>
<td>1.37</td>
</tr>
<tr>
<td>Urban-Rural Growth Difference</td>
<td>1.25</td>
<td>2.39</td>
<td>1.90</td>
<td>0.10</td>
</tr>
</tbody>
</table>


#### 2.2 Distribution of Urban Population

The urban areas in Andhra Pradesh include Municipal Corporations, Municipalities, Nagar Panchayats etc. In addition to these “statutory towns”, two more urban units are recognised by the Census Organisation, known as Census Towns and Out-growths. The villages satisfying the following criteria are treated as Census Towns:

1. It should contain a minimum population of 5,000;
(2) At least 75% of the male working population should be engaged in non-agricultural pursuits; and
(3) Density of population should be 400 persons per Square Kilometre.

An Out-growth is a village or a part thereof which is immediately adjacent to a town and has urban characteristics but does not qualify to be a Census Town. A continuous urban spread consisting of a core statutory town and adjoining Out-growths or two or more physically contiguous towns together with their Out-growth, if any, is called an Urban Agglomeration (UA).

Table 6 shows the number of UAs and Towns in Andhra Pradesh in 2001 grouped into different size classes. As may be seen, out of 37 urban agglomerations in the country, the population in 28 UAs exceeds 100000. Table 7 shows the distribution of population by size class of UAs and towns for the period 1901-2001. It reflects the increasing concentration of population in agglomerations with more than 1 lakh population.

### Table 6

**Classification of Urban Agglomerations/Cities/Towns in Andhra Pradesh according to Size Class: 2001**

<table>
<thead>
<tr>
<th>Class</th>
<th>Population Range</th>
<th>No. of UAs and Towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>100000 and above</td>
<td>28 UAs and 11 Towns</td>
</tr>
<tr>
<td>Class II</td>
<td>50000 – 99999</td>
<td>8 UAs and 35 Towns</td>
</tr>
<tr>
<td>Class III</td>
<td>20000 – 49999</td>
<td>1 UA and 45 Towns</td>
</tr>
<tr>
<td>Class IV</td>
<td>10000 – 19999</td>
<td>23 Towns</td>
</tr>
<tr>
<td>Class V</td>
<td>5000 – 9999</td>
<td>20 Towns</td>
</tr>
<tr>
<td>Class VI</td>
<td>Less than 5000</td>
<td>2 Towns</td>
</tr>
<tr>
<td>All Classes</td>
<td></td>
<td>37 UAs and 136 Towns</td>
</tr>
</tbody>
</table>

Table 7
Distribution of Population (No. in Lakhs) by Size Class of Towns in Andhra Pradesh: 1901-2001

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
<th>Class V</th>
<th>Class VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>4.48</td>
<td>0</td>
<td>4.22</td>
<td>5.51</td>
<td>4.17</td>
<td>0</td>
</tr>
<tr>
<td>1911</td>
<td>5.02</td>
<td>1.12</td>
<td>4.32</td>
<td>5.93</td>
<td>5.10</td>
<td>0.13</td>
</tr>
<tr>
<td>1921</td>
<td>4.05</td>
<td>1.71</td>
<td>4.54</td>
<td>5.71</td>
<td>5.26</td>
<td>0.57</td>
</tr>
<tr>
<td>1931</td>
<td>4.66</td>
<td>5.09</td>
<td>3.57</td>
<td>7.34</td>
<td>5.47</td>
<td>0.78</td>
</tr>
<tr>
<td>1941</td>
<td>7.39</td>
<td>7.39</td>
<td>5.67</td>
<td>7.26</td>
<td>8.83</td>
<td>0.09</td>
</tr>
<tr>
<td>1951</td>
<td>18.07</td>
<td>7.43</td>
<td>8.69</td>
<td>10.54</td>
<td>8.21</td>
<td>12.40</td>
</tr>
<tr>
<td>1961</td>
<td>27.63</td>
<td>5.93</td>
<td>14.23</td>
<td>9.49</td>
<td>5.42</td>
<td>0.02</td>
</tr>
<tr>
<td>1971</td>
<td>41.50</td>
<td>11.59</td>
<td>17.67</td>
<td>10.34</td>
<td>2.74</td>
<td>0.15</td>
</tr>
<tr>
<td>1981</td>
<td>70.09</td>
<td>20.08</td>
<td>24.24</td>
<td>8.75</td>
<td>1.53</td>
<td>0.14</td>
</tr>
<tr>
<td>1991</td>
<td>119.81</td>
<td>22.46</td>
<td>29.47</td>
<td>5.88</td>
<td>1.13</td>
<td>0.08</td>
</tr>
<tr>
<td>2001</td>
<td>154.40</td>
<td>28.59</td>
<td>17.11</td>
<td>3.46</td>
<td>1.38</td>
<td>0.07</td>
</tr>
</tbody>
</table>


2.3 Some Urban Issues

Increasing urbanisation and concentration of population are bound to be associated with an escalation of problems in cities and towns in terms of high population density, traffic congestion, pollution, shortage of housing, civic services and infrastructure, slums, rise in urban poverty, environmental degradation, etc. However, urbanisation is considered inevitable and the problem of urbanisation can be viewed as one emanating from poor city planning, management and finances rather than being endemic to city growth per se.

The growth of agriculture in Andhra Pradesh is gradually decreasing while that for the tertiary sector is exhibiting a rising trend. With a shift in economic
activities, especially the concentration of services in urban areas, there will be a movement of population from rural areas to cities and towns. The sectoral shifts in the State are consistent with the national trend and pattern. Estimates reveal that Urban India contributes more than 60% of the country’s Gross Domestic Product, although it contains about 28% of its total population. The largest of our cities, particularly Mumbai, Calcutta, Delhi and Chennai, and increasingly, Hyderabad, Bangalore, Ahmedabad, and Pune contribute significantly to the country’s national income and exchequer.

Urbanisation and urban areas growth are also inevitable due to the advantages offered by the process. Urbanisation economies result due to the concentration of population leading to larger, nearer and more diverse markets, enabling greater division of labour. These economies occur to all firms located in an urban area and are not limited to any particular group. Larger urban areas often provide better matching of skills to jobs and reduce the job search costs. The provision of urban infrastructure and services: water supply, sewerage, transport, solid waste management, etc., involves economies of scale and these facilities become financially viable only if the tax-sharing population exceeds a certain threshold. Cities offer returns to scale, scope and sharing.

The economies from urbanisation are, however, not without limits. The disadvantages of agglomeration externalities – known as congestion diseconomies – include shortage and high cost of housing, overcrowding, traffic congestion, environmental pollution, deterioration in civic services, poverty, crime, social unrest, etc. Appropriate policies and plans are required to be in place in order minimise and effectively manage these congestion diseconomies. These may include urban land use planning, management of urban growth and better municipal management.

The analysis in the foregoing paragraphs suggests that the problem of urbanisation can be viewed as one of management – managing urban growth and
services to the changing needs and priorities, rather than curtailing them through rigid laws and enforcement. In this regard, the role of integrated regional and urban planning, strategy to facilitate housing and infrastructure development could be of critical importance. Thus, the planning and development of urban infrastructure and services could play a significant role in shaping the urban landscape and managing cities effectively.

In the next Chapter, a review of the planning system in general and of urban planning system in Andhra Pradesh in particular is done. In particular, the shortcomings of Master plan approach are discussed and the criticism of the same is reviewed.
Chapter 3
Urban Planning System in Andhra Pradesh: An Overview

3.1 Institutional Framework

Plans for urban development in Andhra Pradesh are in the form of Master Plans or General Town Planning Schemes, Zonal Development Plans or Detailed Town Planning Schemes, Area Development Plans and Road Development Plans prepared under the Andhra Pradesh Urban Areas (Development) Act, 1975 and Andhra Pradesh Town Planning Act, 1920. The relevant laws, regulations and executive orders governing planned development of urban areas are briefly described hereunder.

The Andhra Pradesh Urban Areas (Development) Act, 1975
This Act deals with the preparation and implementation of Master Plans and Zonal Development Plans for major urban agglomerations, declared under the Act, in the entire State. The Act prescribes for the constitution of Urban Development Authorities with the objective of promoting and securing the development of designated urban development areas according to plan. The Municipal Corporations, Municipalities and Panchayats falling under the jurisdiction of an Urban Development Authority exercise the powers of development control and enforcement delegated to them by the Authority under the AP Urban Areas (Development) Act, 1975.

The Andhra Pradesh Urban Areas (Development) Act, 1975 was amended in 2001 for making a provision to constitute a smaller Special Area Development Authorities for any area in the State in the interest of specific development. Under this provision, Special Urban Development Authorities have been constituted for Buddha Poornima Area in Hyderabad city, Cyberabad Development Authority,
Hyderabad International Airport Development Authority and Basara Development Authority.

**The Andhra Pradesh Town Planning Act, 1920**

It provides for the preparation of General Town-Planning Schemes (GTPS) and Detailed Town-Planning Schemes (DTPS) in respect of all lands within the municipal area to ensure regulated development of towns to secure their present and future inhabitants, sanitary conditions, amenity and convenience. The Act operates through the Director of Town and Country Planning, the respective Municipalities and Town Planning Trusts.

**The Andhra Pradesh Municipalities Act, 1965**

This Act provides powers to elected Municipal Councils to have greater voice and control in civic administration including town planning and development and also to ensure that the control of the Government over such municipal bodies is minimised to the extent possible. Sections 171 to 201 of the APM Act give exhaustive powers for acquisition of land and buildings for street improvement. Sections 202 to 230 provide building regulations. The Act is applicable to all Municipalities in Andhra Pradesh.

The Acts and Regulations described above prescribe the following processes for preparation of Master Plans and Zonal Development Plans. According to AP Urban Areas (Development) Act, 1975, development ‘with its grammatical variations means the carrying out of all or any of the works contemplated in a master plan or zonal development plan and carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in any building or land and includes redevelopment’. However, the following operations or uses of land shall not be deemed to involve the development of land:
• The carrying out of any temporary works for the maintenance, improvement or other alteration of any building, being works which do not materially affect the external appearance of the building;
• The carrying out by a local authority of any temporary works required for the maintenance or improvement of road, or works carried out on land within the boundaries of the road;
• The carrying out by local authority or statutory undertaking any temporary works for the purpose of inspecting, repairing or renewing any sewers, mains, pipes, cables or other apparatus, including the breaking open of any street or other land for that purpose;
• The use of any building or other land within the cartilage purpose incidental to the enjoyment of the dwelling house as such; and
• The use of any land for the purpose of agriculture, gardening or forestry (including afforestation) and the use for any purpose specified in this clause of any building occupied together with land so used.

3.2 Plan Preparation

Master Plan Preparation

The Andhra Pradesh Urban Areas (Development) Act, 1975 stipulates an elaborate process for Master Plan preparation under Sections 6 to 8. The provisions are:

(1) The Urban Development Authority shall carry out a civic survey and prepare a Master Plan for the development area concerned.

(2) The Master Plan shall

• define the various zones into which the development area may be divided for the purposes of development and indicate the manner in which the land in each zone is proposed to be used (either after carrying out development thereon or otherwise) and the stages by which any such development shall be carried out, and
serve as a basic pattern of framework within which the zonal development plan of the various zones may be prepared.

(3) The Master Plan may provide for any other matter which is necessary for the proper development of the development area.

**Zonal Development Plans**

Along with the preparation of Master Plan or as soon as may be thereafter the Authority shall proceed with the preparation of zonal development plan for each of the zones into which the development area may be divided. Section 7 of the Act lays down the specifications for zonal development plans.

**General Town-Planning Scheme**

The AP Town Planning Act, 1920 provides for the preparation of General Town-Planning Schemes (GTPS) and Detailed Town-Planning Schemes (DTPS) in respect of all lands within the municipal area. Under Section 8 of the APTP Act, every Municipal Council, within 4 years of its constitution shall prepare, publish and submit a General Town-Planning Scheme to the Government for its approval. Under Section 9 of the Act, the Municipal Council is required to declare its intention to make a GTPS. Under Section 10, the resolution under Section 9 shall be published by notification by the Chairman of the Municipal Council. Under Section 11 the Municipal Council is required to prepare the GTP within 12 months of publication of the notification under Section 10 in consultation with all stakeholders. The content of the draft scheme is laid down under Section 13 of the Act. The process for preparation of the General and Detailed Town-Planning Schemes is further detailed in the Rules under Town Planning Act, 1920.

Rules under the APTP Act prescribe for the following mandatory elements under a General Town-Planning Scheme to secure a settled policy and plan for the improvement and development of the town generally and control both municipal and private activities connected therewith:

(a) The construction, diversion, extension, alteration, improvement or
closure of streets, roads and communications, to the extent required for the needs of the public generally;
(b) The reservations of land for streets, roads, open spaces, recreation grounds and sites for public buildings;
(c) The determination of what shall be residential, commercial, industrial and hutting areas;
(d) The preservation of objects and buildings of archaeological or historic interest or of natural beauty or which are actually used for religious purposes or regarded by the public with special religious veneration;
(e) The prescription of building lines and street alignments;
(f) The imposition of house density restrictions in different parts of the area included in the general town-planning scheme;
(g) The allocation of land for housing and infrastructure such as transport facilities, water supply, drainage inclusive of sewerage and surface drainage and sewage disposal, the inclusion of which may be considered desirable;
(h) The allotment or reservation of land for streets, roads, square houses, buildings for religious and charitable purposes, open spaces, gardens, recreation grounds, schools, markets, shops, factories, hospitals, dispensaries, government and municipal buildings, and public purposes of all kinds and
(i) Regulations for achieving the scheme objectives.

The draft General Town-Planning Scheme prepared by the Municipal Council is required to be published inviting objections and suggestions. After modifying the Scheme based on feedback from the public, the Municipal Council shall submit the GTPS to the Government through the Director of Town and Country Planning for approval. After the Government approves the Scheme, the same becomes binding and has to be implemented by the Municipal Council and other agencies.
The first planning law in Andhra Pradesh dates back to 1920, when the Andhra Pradesh (Andhra Area) Town Planning Act, 1920 was passed. This Act provided for a Municipal Council to prepare Town Planning Schemes (Master Plan) for the town within 4 years of its constitution. In 1930, Sir M. Visvesvaraya, eminent engineer of his time, prepared a Report entitled “City Improvement Schemes: Hyderabad Deccan”. This had a road network and land use plan in addition to specific projects for the city area. Later, around 1945, Mohd Fayazuddin prepared a Perspective Plan not only for the city but for the suburbs as well. These plans were not notified under law though they had extremely valuable suggestions for city development.

Table 8 traces the evolutionary highlights of urban planning system in Andhra Pradesh from 1920 to 2001.

Table 8
Evolutionary of Urban Planning in Andhra Pradesh (1920-2001)

<table>
<thead>
<tr>
<th>Authority</th>
<th>Key Highlights and Associated Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town and Country Planning</td>
<td></td>
</tr>
<tr>
<td>Planning Department</td>
<td>1920: Andhra Pradesh Town Planning Act To give powers to municipal councils to undertake the preparation of town planning schemes</td>
</tr>
<tr>
<td></td>
<td>1975: Andhra Pradesh Urban Areas (Development) Act To empower the Government to constitute Urban Development Authorities</td>
</tr>
<tr>
<td></td>
<td>1981: Telangana Region Municipal Councils empowered to prepare Master Plan and enforce it To extend town planning activities to Telangana Region</td>
</tr>
<tr>
<td>Organization</td>
<td>Year(s)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Housing Board, Hyderabad (1960)</td>
<td>1956: City Improvement Board</td>
</tr>
<tr>
<td></td>
<td>1960: City Improvement Board converted into Andhra Pradesh Housing Board</td>
</tr>
<tr>
<td></td>
<td>1969: Post of Town Planner created</td>
</tr>
<tr>
<td>Hyderabad Urban Development Authority (1975)</td>
<td>1975: Notification for Master Plan of Hyderabad Municipal Area</td>
</tr>
<tr>
<td></td>
<td>1976: Development of three Satellite towns</td>
</tr>
<tr>
<td></td>
<td>1980: Notification of Master Plan for non-municipal area and two Zonal Development Plans</td>
</tr>
<tr>
<td></td>
<td>1981: Completion of first District Commercial Centre</td>
</tr>
<tr>
<td></td>
<td>1981: Major multi-purpose projects of regional importance</td>
</tr>
<tr>
<td>Visakhapatnam Urban Development Authority (1978)</td>
<td>1962: Visakhapatnam Town Planning Trust</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>1920: Sanction of Master Plan for Visakhapatnam City</td>
<td>Comprehensive development of Visakhapatnam urban area</td>
</tr>
<tr>
<td>1976: Sanction of I.U.D.P. Scheme under Central Assistance</td>
<td>Implementation of the urban development master plan</td>
</tr>
<tr>
<td>1978: Establishment of Visakhapatnam Urban Development Authority</td>
<td>Need for area-wide development authority</td>
</tr>
<tr>
<td>1980: Sanction of I.D.S.M.T. Scheme for three towns</td>
<td>Focus on small and medium town development</td>
</tr>
<tr>
<td>Quli Qutub Shah Urban Development Authority (1980)</td>
<td>1981: QQSUD Authority constituted</td>
</tr>
<tr>
<td>1985: Registration of QQSUDA under Societies Act</td>
<td>Quick implementation of policies and programmes</td>
</tr>
<tr>
<td>1986: Major Projects on EWS. Housing, Construction of Schools, etc.</td>
<td>Development of the old city in a focused manner</td>
</tr>
<tr>
<td>1987: Major Road-widening Programme started</td>
<td>To improve circulation capacity in the old city</td>
</tr>
</tbody>
</table>
Table 9 gives the current status with respect to preparation of Master Plans in Andhra Pradesh.

**Table 9**  
**Status of Master Plans in Andhra Pradesh (Upto 2002)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Master Plans sanctioned</td>
<td>73</td>
</tr>
<tr>
<td>No. of Towns covered under Urban Development Authorities</td>
<td>22</td>
</tr>
<tr>
<td>No. of Master Plans pending with Municipalities (Bodhan, Peddapuram, Pithapuram)</td>
<td>03</td>
</tr>
<tr>
<td>Master Plans under approval by Government (Jaggiahpet, Gudur, Chirala, Srikalahasti)</td>
<td>04</td>
</tr>
<tr>
<td>Master Plans under preparation (Amalapuram, Siricilla, Bobbili, Salur, Palwancha, Vikarabad, Kandukur, Paravathipuram)</td>
<td>08</td>
</tr>
<tr>
<td>Master Plans to be prepared (Amudalavalasa, Itchapuram, Koratla, Palasa-Kasibugga, Bellampally, Mandamarri)</td>
<td>07</td>
</tr>
</tbody>
</table>

*Source: Office of Director, Town and Country Planning, Government of Andhra Pradesh*
4.1 Institutional Coordination in Planning System

In India, the planning system created at federal level is heavily focused on socio-economic development in general and urban planning system is governed by the state and local legislations and institutions. A critical examination of the available literature on the current planning practices in the country indicates that planning objectives, policies and strategies at the national level are basically formalised in the Five Year Plans, which are economic and social in nature and content. These plans are the major documents which determined the course of national development. These are sectoral and there is hardly any description of inter-sectoral coordination in the Plan documents.

According to the item 20 of the Concurrent List in the Seventh Schedule of the Constitution of India, social and economic planning is a joint responsibility of the central and state governments. However, land being a state subject, the role of state governments becomes more pronounced in the implementation of spatial plans related to social and economic development plans. At the state level, the system of socio-economic planning is similar to the one at the national level.

Spatial or physical planning is generally limited to a few selected urban settlements. The spatial plans, which are called as master plans or development plans, are prepared by the municipal and urban development authorities. However, these are not well integrated into the sectoral plans of the states as well as national Five Year Plans. Thus, there is no integration and coordination between sectoral planning and spatial planning in India.
This being the case, none of the master plans was able to achieve a translation into actual development in practice. The reason is the lack of tie-up with financial resources flow. While spatial plans prepared at the local level did not receive any sectoral (fiscal) allocations, until recently planning for socio-economic development at the local level was outside the purview of the urban local bodies. It was the Constitution (74th Amendment) Act, 1992 that prescribed planning for social and economic development as a legitimate function of the urban local bodies in addition to urban planning.

4.1.1 Urban Planning Institutions

Institutional framework for urban planning and development varies between states. So do organisational structures dealing with management and regulation of urban land. Under the Constitution of India, urban development is a state subject. Land and its sustainable usage fall primarily into the local domain within the State Government. However, a broad inter-State pattern is emerging in India with regard to the organisational interface for planned urban growth after the enactment of 74th Amendment. This is summarised in Box 1.

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Organisational Interface for Planned Urban Growth in India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Actions</td>
</tr>
<tr>
<td>Central Government</td>
<td>National policies, devolution of funds to states, plan funds and programmes, centrally-sponsored schemes, bilateral and multilateral aid programmes, inter-state coordination, collaborative programmes, etc.</td>
</tr>
<tr>
<td>State Government</td>
<td>State strategies, industrial policy, population distribution policy, backward area development policy, urban land policy, state physical infrastructure networks plan, state plans for social infrastructure, environmental conservation, etc., state plan implementation and monitoring, inter-district coordination, etc.</td>
</tr>
<tr>
<td>District Planning Committee</td>
<td>District perspective and structure plans, District Development Plan, regional plans for physical infrastructure, social</td>
</tr>
<tr>
<td>Role</td>
<td>Responsibilities</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Metropolitan Planning Committee</td>
<td>Metropolitan perspective and structure plans, Metropolitan Development Plan, metropolitan network plans, metropolitan plans for social infrastructure, environmental conservation, etc., metropolitan fringe coordination plan, identification of major projects, allocation of state funds for projects included under Metropolitan Development Plan, monitoring implementation of plans/projects, including those on public-private partnership, etc.</td>
</tr>
<tr>
<td>Local Government: Municipal Corporations</td>
<td>Detailed city land use and development plans, formulation, financing, implementation and monitoring of projects included under City Development Plan, coordination between Wards Committee plans and programmes (one Wards Committee for about 3 lakhs population), supply of inputs to Metropolitan/District Development Plan.</td>
</tr>
<tr>
<td>Local Government: Municipal Council/Town Panchayat</td>
<td>Detailed city/town land use and development plans, formulation, implementation and monitoring of projects of city- or town-wide importance, prioritisation and financing of projects, preparation and implementation of local area development plans, supply of inputs to Metropolitan/District Development Plan.</td>
</tr>
<tr>
<td>Ward and Local Level Committees</td>
<td>Ward/local area-specific action plans, plan formulation, implementation and monitoring, coordination with local government, supply of inputs to city/town development plan.</td>
</tr>
</tbody>
</table>

The urban planning system in India mainly consists of the Master Plan, detailed further through zonal plans. Preparation of Master Plans has been a long process. Implementation has generally been very poor. The Master Plan, as an instrument to guide urban development, has been found deficient in many ways requiring necessary redressal.

4.2 Review of the Master Plan Approach

The concept and methods of Master Planning in India owe their origin to the British town planning laws. The Master Plan, which was perceived to be a process rather than a conclusive statement, provides guidelines for the physical development of a city or town and guides people in locating their investments and residences in the city. In short, Master Plan is a design for the physical, social, economic and political framework for the city, which greatly improves the quality of urban governance also.

The functions of the Master Plan, increasingly being called Development Plan, are:

- To guide development of a city in an orderly manner so as to improve the quality of life of the people;
- Organise and coordinate the complex relationships between urban land uses;
- Chart a course for growth and change, be responsive to change and maintain its validity over time and space, and be subject to continual review;
- Direct the physical development of the city in relation to its social and economic characteristics based on comprehensive surveys and studies on the present status and the future growth prospects; and
- Provide a resource mobilisation plan for the proposed development works.
There is a widely held view that the Master Planning method, adopted by many developing countries over the last several decades, has not produced a satisfactory physical environment. The Master Planning process has been unduly long. Moreover, Master Plans have primarily been confined to the aspects of land use and development control. In most cities, the plans have not been translated into socio-economic development and investment programmes.

Often, the physical planning exercises have been restricted to core cities/towns without much integration with the peripheral areas and rural hinterlands. Attempts to adopt an integrated development planning approach, based on national, state and regional strategies and recognition of spatial and functional linkages between settlements of different orders, are relatively new. Box 2 shows the main drawbacks of the Master Planning approach.

<table>
<thead>
<tr>
<th>Box 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shortcomings of Master Plan Approach</strong></td>
</tr>
</tbody>
</table>

(a) Large Master Plans are too static in nature and they take a very long time to prepare and are too infrequently updated (though there are frequent case-by-case relaxations in plan stipulations with a view to serving vested interests);

(b) Master Plans rarely provide guidelines on the phasing or techniques of implementation;

(c) Master Plans rarely evaluate the costs of the developments they propose or the methods of financing them;

(d) Master Plans are often based on unrealistic appraisal of the economic potential of the planning areas and, in some cases, on unrealistic needs;
(e) Master Plans seldom provide a compelling rationale for detailed land use and elaborate land use regulation or control; and

(f) The Community or elected representatives or NGOs are seldom involved in the planning process meaningfully.


4.3 Major Criticisms of Master Plan Approach’

The major criticisms of the Master Plan approach as practiced in the country are as follows:

- The Plan projects and details the ‘end state’ scenario for 20-25 years and is not detailed enough for short and medium-terms actions.
- The Plan is mostly static and not amenable to quick mid-course corrections.
- There are inordinate delays in master plan preparation and approval, and in addition, acquiring land is one of the main handicaps in the speedy and successful implementation of the Master Plan.
- There is inadequate participation or involvement of the local bodies in the master planning process; they take the Master Plan as given for implementation.
- The mechanism for public participation is ineffective in the process of development planning, in both its preparation and implementation. It is more a top-down than a bottom-up approach and does not reflect the aspirations of the community at large.
- The Master Plans prescribe impractical densities and high layout standards in an effort to improve the quality of life in a city. These are
generally higher than what the city population, particularly the poor, can afford.

- Estimates of financial outlay do not match the development works envisaged in the Master Plan. The strategies for raising resources required for plan implementation are seldom an integral part of the plan.
- The absence of machinery for systematic and continuous collection of data on the movement of land and tenement prices undermines the implementation of the Master Plan.
- Though a significant portion of the development is due to the initiative of the private sector, the private sector is not involved adequately in plan preparation. This factor is also not recognised in the plan.
- An institutional and information system does not, generally, exist for plan monitoring. Since the budgetary system does not explicitly take into account the requirement of plan implementation, problem of resources is not periodically highlighted.

As the Master Plans in the past did not adopt an integrated development planning approach, the required integration of existing and planned uses, spatial and economic development planning, rural and urban planning, transportation and land use planning, and physical and financial planning has not taken place in most cities. It is increasingly being realised that the plans need to have operational elements in terms of finance and operating mechanisms to support its implementation. Land assembly methods are looked upon as one means of achieving the same, which is reviewed in next Chapter.
Chapter 5

Land Assembly Tools for Achieving Urban Development

Given the lack of framework as well as several operational constraints to implement the master plan vision, it has become important to look for the tools and instruments for achieving the urban development goals. Land Assembly tools offer a greater potential for this purpose, through which land can be brought into urban development by providing developed land with suitable local infrastructure. The local government or authority has to make provision for the city-wide infrastructure reaching out the schemes by formally earmarking or recognising the schemes within the development or master plan.

There are two major types of tools used for achieving land assembly for the development of urban areas. Although, there is a subtle distinction between the two tools/instruments, they are sometimes used synonymously and in place of each other. The following sections describe each of the tools in detail.

- Land pooling/ readjustment
- Plot reconstitution/ town planning schemes

5.1 Land Pooling/ Readjustment

Land pooling is a process whereby a public authority assembles numerous small parcels of land without paying compensation to its owners. The authority then sub-divides such assembled lands for urban use returning most of the building sites to the original owners in proportion to the value of their land contribution (cost equivalent land) and permitting them the right of alienating such sites. The authority retains a portion of the assembled lands, applying them partly to provide civic infrastructure amenities such as roads, parks and gardens or schools, and the remainder for public sale to recover the cost of development.
Thus, land pooling is a temporary and hypothetical form of public ownership to achieve unified control over large areas of land and an instrument of financing public service installations during the crucial and expensive land development stage of urban growth. It is also known as urban land consolidation, land adjustment, land replotting, and land redistribution in particular countries because it involves these processes. It is widely used in Japan, South Korea and Taiwan and in some cities in Australia and Canada. A somewhat similar technique known as plot reconstitution is used in some cities in India.

**The Benefits of Land Pooling**

The conversion of urban-fringe lands from rural to urban uses usually takes place by the separate subdivision of the separate landholdings and is subject to the problems of scattered land and building development, poor subdivision design, backlogs in the provision of public utility and road works, land shortages, excessive land speculation and high land prices. Land pooling can reduce these problems. It can provide many of the benefits of large-scale land development projects. Pooling can improve the process of land subdivision for urban development in various ways. The consolidation of small landholdings for their unified planning, servicing, subdivision and redistribution by a government agency provides the opportunity.

**Land Pooling Steps**

The main steps and stages in carrying out a typical pooling project can be listed as follows:

- Identification of the group of adjoining landholdings for pooling which is then designated as the land pooling area;
- Assessment of the value of each landholding in order to calculate each landowner’s share in the project;
- Preparation of a draft pooling scheme (and supporting financial plan) in consultation with the landowners and the relevant government authorities (the highway, public utility, etc. authorities);
- Public exhibition, review and amendment of the draft scheme followed by
central government approval of the final scheme and its publication;

- Preparation of engineering works designs;
- Compulsory acquisition and consolidation of the landholdings, roads, etc. in the designated pooling area;
- Raising of short-term loan for working capital;
- Carrying out of land servicing and subdivision works by contractors and relevant government authorities;
- Physical and legal subdivision of land into streets, parkland and sites for buildings;
- Sale of some of the building sites to recover costs and repay the loan;
- Distribution of the other sites to the landowners; and
- Final cash adjustments to achieve each landowner's precise share of the project.

**Conditions for Successful Land Pooling**

A number of factors contribute to the success of pooling projects. It is appropriate to use the land pooling technique when:

- The relevant local government (or other government pooling agency) is genuinely interested in achieving orderly urban development to a planned pattern of urban land use;
- The ownership of the urban-fringe lands is fragmented into numerous separate holdings;
- The urban-fringe lands are ripe for urban development with the utility network mains nearby and a market demand for serviced sites for building development;
- A majority of the landowners in a proposed pooling area understand and support the use of pooling;
- The central government has set up machinery to authorise and regulate the preparation and implementation of pooling projects.
Assuming that these general conditions are met then each pooling project will also need to be financially viable and soundly managed. Each project will need to generate land value increases sufficient to cover the project costs and leave the landowners with a significant land value gain. Each project will need to be well-managed in order to achieve efficient and economical land servicing and subdivision. This financial viability and sound management is assisted by the preparation and publication of a pooling scheme for each project. The scheme should be supported by a financial plan. The pooling agency will need to liaise and consult with the landowners and government works authorities, particularly in preparing the scheme, in order to obtain their support and cooperation.

5.2 Plot Reconstitution/ Town Planning Schemes

The plot reconstitution technique/town planning scheme is much more limited in scope than the Land Pooling/Readjustment scheme but it has often been described as LP/R because it has similar features (See Table 10). The plot reconstitution (PR) technique was introduced to India by the Bombay Town Planning Act, 1915 and has been widely used in the states of Gujarat and Maharashtra, selectively used in Kerala and Punjab, and occasionally used in Tamil Nadu and Andhra Pradesh (Gurumukhi 2003).

In order to implement the Master Plan/Development Plan prepared under the Gujarat Town Planning and Urban Development Act, 1976, Town Planning Schemes are prepared at micro level for an area of about 100 hectares particularly in those pockets which were under pressure of urban development and need priority attention (Gurumukhi 2003). The concept behind taking 100 hectares is that TPS becomes manageable and viable scheme for preparation and implementation at local level.
**Table 10**

Comparison of the Land Pooling/Readjustment and Plot Reconstitution Techniques

<table>
<thead>
<tr>
<th>Component</th>
<th>Typical Land Pooling/Readjustment</th>
<th>Typical Plot Reconstitution Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Objectivel</td>
<td>To convert rural land to a planned layout of public roads, utility service lines, open spaces, and serviced building plots</td>
<td>To convert rural land to a planned layout of public roads, public facility sites and reshaped land parcels</td>
</tr>
<tr>
<td>Project Focus</td>
<td>To expedite planned urban development of the project area by completion of the land development stage.</td>
<td>To acquire land required for public roads and facilities. To establish a planned road layout. To implement compensation and betterment scheme.</td>
</tr>
<tr>
<td>Plan</td>
<td>Planned layout for the zoned urban land uses</td>
<td>Planned layout for the zoned urban land uses</td>
</tr>
<tr>
<td>Land Acquisition</td>
<td>Government acquisition of road and open space land, at no cost</td>
<td>Government acquisition of road and public facility land, at no cost</td>
</tr>
<tr>
<td>Network Infrastructure</td>
<td>Roads and utility networks constructed within the project and at no cost to government</td>
<td>Roads constructed within the project and utility networks after the project</td>
</tr>
<tr>
<td>Project Cost Recovery</td>
<td>Full cost recovery be sale of building plots from project</td>
<td>Partial cost recovery mainly by collection of 50% of betterment from each landowner less the compensation for land taken.</td>
</tr>
<tr>
<td>Project Funding</td>
<td>Short-term project loan</td>
<td>Annual budget of the local government or urban development authority. (The betterment collected is not paid into a project fund or account).</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Project Management</td>
<td>Unified project preparation and implementation by local government or other implementing agency</td>
<td>Project preparation is divided between local government, state government and tribunal, and implementation is divided between local government and public utility</td>
</tr>
<tr>
<td>Landowner Participation</td>
<td>Consultation with landowners and landowner majority support for project</td>
<td>No consultation with landowners but individual negotiations and right of appeal.</td>
</tr>
<tr>
<td>Sharing of Project Costs and</td>
<td>Equitable sharing of project net benefits on partnership basis</td>
<td>Uneven sharing of project net benefits, mainly on land area basis</td>
</tr>
<tr>
<td>Project Duration</td>
<td>Preparation and implementation within 3 years</td>
<td>Preparation of project takes up to 10 years, and implementation depends on funds available.</td>
</tr>
<tr>
<td>Landownership</td>
<td>In pooling projects the land parcels are amalgamated into one ownership, whereas in readjustment projects the land parcels remain under separate ownerships</td>
<td>The land parcels remain under separate ownerships</td>
</tr>
</tbody>
</table>

Source: Archer (1992)
Town Planning Scheme (TPS) has been contemplated as an operational part that reinforces the master plan by providing an implementation framework. Figure 1 shows the relationship between Master Plan and TPS. The TPS is conceptualised 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 the 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 after taking out the area for roads and streets, and for 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, buildability 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. Part of such increment in land value is contributed for the cost of development work in the scheme. 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. TPS has widely been used in two major States – Maharashtra and Gujarat, the case studies of which are provided in next chapter. Kerala has also used it to a limited extent (see Box 3).

The Bombay Town Planning Act, 1915 was passed to authorize local governments in Bombay state to plan and control the development of their newly urbanizing areas. In the state of Maharashtra, which is a pioneer in the field of TPS, it is implemented under the Maharashtra Regional and Town Planning Act, 1966. In Gujarat, it is implemented under the Gujarat Town Planning and Urban Development Act, 1976. Projects with area coverage ranging from 200-800 hectares were implemented in several towns of Maharashtra between 1915 and 1985. Due to inordinate delays in their completion, all the parties, especially government showed less and less interest. Gradually, the scheme was phased out in Maharashtra. However, in Gujarat (Ahmedabad) nearly 50 per cent of the new developments on land were through town planning scheme.

In Gujarat, the use of Town Planning Schemes as an instrument for urban development has a long history. The first Town Planning Scheme was taken up as early as in 1917 for Jamalpur area of Ahmedabad city. Perhaps Jamalpur area Town Planning Scheme was also the first TPS in the country. The Gujarat Town Planning and Urban Development Act, 1976 provides for Town Planning Scheme as a tool for implementation of Master Plans. Under this Act the Town Planning Scheme is divided into 2 parts namely physical planning of the scheme and financial aspects of the scheme. It identifies the stages of TPS in the form of Draft Scheme, Preliminary Scheme and the Final Scheme with a view to expedite the process of implementation of different stages.
Box 3

Plot Reconstitution Scheme, Trissur, Kerala

The Kannankulangara scheme in Trissur is the first Plot Reconstitution (PR) scheme implemented in Kerala. St has been used as a model for initiating other schemes in Trissur and several towns such as Kollam, Palakad, Kollam, Kochi and Thiruvananthapuram. Only six of these have been successfully completed.

The application of the PR technique in Kerala has proved to be effective in situations where compulsory land acquisition for undertaking planned urban development has met with stiff opposition from land owners. The Kerala approach differs from other Indian examples in three important ways. Firstly, it is in the form of a time-bound scheme. Secondly, it ensures complete recovery of land development costs without any financial burden to the agency or to land owners. Finally, the public agency gets land for uses other than roads and open spaces also.

In Trissur, PR was resorted to only after the original proposal to compulsorily acquire about 6.2 hectares of land as a part of the Detailed Town Planning Scheme for Kannakulangara met with stiff opposition from land owners. In the agreement the nine land owners agreed to give portion of their land varying from 0% to 45% amounting to a total of 2.2066 hectares to TUDA. The remaining land was to be developed and returned to the land owners as per the reconstitution plan with complete ownership rights and the commitment to develop the land as per the proposals of the detailed town planning scheme. TUDA was to provide roads and other services like water and electric supply and reclaim the entire area at their own expense within three years of signing the agreement. Failing this the land owners would have the option to take over the land surrendered to TUDA, unless the delay was due to unavoidable circumstance, upon which the period could be extended by a fresh agreement between the concerned parties. The land owners, in their turn were bound to develop their land and carry out
construction work within three years from the date of provision of services by TUDA. Failing this TUDA would have the option to acquire the land as per the provisions of the Land Acquisition Act, unless unavoidable circumstances necessitated the extension of the time by mutual agreement between the parties. TUDA was also to bear the expenses related with registration after surrender of land and reconstitution of boundaries. Later the State Government, at the request of the District Collector, decided to exempt the registration charges.

The scheme has resulted in obvious benefits to all parties concerned. TUDA got more than two hectares of land free of cost and without lengthy legal procedure. Private land owners got developed land instead of low-lying “wet land” with enhanced development potential and appreciation of value, the scheme has hastened the conversion of agricultural land into buildable plots across the road from a prime area. It also demonstrated that it is possible for several public agencies to work together along with people to solve local problems.

Source: ESCAP/CITYNET (1995)
6.1 Town Planning Schemes in Maharashtra

A. BACKGROUND

Towards the turn of the 19th century, Bombay Improvement Trust was established which undertook physical improvements in Mumbai in the nature of urban renewal in core areas, housing for the poor and plotted area development in urban fringe areas. The Trust was subsequently merged with the Mumbai Municipal Corporation which had many more and city wide functions to perform. The Bombay province was also the first to enact town planning legislation in India, the Town Planning Act, 1915. The Act enabled the Municipalities in the province to adopt the mechanism of Town Planning Schemes (TPS) for development of fringe areas and was extended to Mumbai city in 1944.

Traditionally in India, there were forms of public private partnerships without being heralded as such. TPS is the oldest and the most direct form of partnership between landowners and municipal authorities for the purpose of development of land. Practiced following the TP Act of 1915, the municipalities provided TPS with necessary physical infrastructure, while the original plots are reconstituted in area and shape. Benefit sharing is the underlying principle in the Town Planning Schemes and therefore, it is a partnership between the land owners and the local authority facilitating the planned development of the TPS area.

There have been variations of this model in the form of land pooling and readjustment of German origin, executed outside any legislative framework. A

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1 This part of the chapter is a case study prepared by Mrs Uma Adumusmilli, Chief-Town Planning, Mumbai Metropolitan Region Development Authority, Mumbai.
variation also is practiced in the informal sector, in the form of ‘land sharing’ between the private landowners and the squatter communities. The Bombay Town Planning Act, 1915 authorized rather than required local governments to prepare PR planning schemes for their urban-fringe areas "coming into development" and it was the local governments in only a few of the larger cities that prepared schemes.

The 1915 Act was replaced in 1957 with the Bombay Town Planning Act, 1954 and introduced development planning for an entire urban area. While under the Act of 1915 local authorities were enabled to prepare TPS for those parts of the municipality “coming into development”, they were now required to prepare a development plan for the whole urban area of the municipality. Thus TPS were to be prepared for the developing areas of the municipality in the context of the development plan, and were to be the main means of implementing the development plan.

The Bombay Town Planning Act, 1954 was transformed into the Maharashtra Regional and Town Planning Act of 1966. Chapter – 5 of the Act is exclusively devoted to the Town Planning Schemes where TPS is envisaged as a mechanism of implementing the Development Plans, with provisions for ‘laying out’ and ‘re-laying out’ of land and thus can be seen as a mechanism for undertaking Urban Renewal of core urban areas as well as for development of new areas.

B. ADVANTAGES OF TOWN PLANNING SCHEMES

The Town Planning Schemes offered advantages to the local authority and the town such as:
1. allowed the planning process all the freedom that a new town offers, while not burdening it with acquisition of land and the associated cost and pain.
2. spread the land area reduction and the costs and returns of the project across all the lands and landowners in an equitable way,
3. development control could be exercised for unified development of the areas
4. enabled the local authority to recover betterment charges from the land owners in proportion to the increased land value on account of the improvement in infrastructure

However, what really makes the TPS a success is the benefit to the landowners. A sound and well-managed TPS has the potential to provide each landowner with the opportunity to
1. receive plots that are usable and marketable in exchange for the undeveloped/rural land,
2. gain a significant net increase in the market value of land,
3. develop undeveloped/rural land parcels that separately may not have been suitable for urban development,
4. have the land serviced and subdivided without having to contribute cash to share the costs;
5. have a govt. agency use its powers and status to benefit landowners, and retain substantial part of the original land after its conversion to serviced urban land.

C. PROCEDURE OF PREPARATION OF T.P. SCHEME

As per the legal framework currently available, there are two important stages in preparation of T.P. Scheme viz.

a) Preparation of Draft T.P. Schemes by Planning Authority, and
b) Finalisation of Draft Scheme by an Arbitrator to be appointed by Government.

The steps for preparation of draft scheme are:
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a. Planning Authority to declare the intention to prepare a T.P. Scheme by resolution to be published in official gazette,

b. Framing of draft scheme proposals and discussion with landowners and Director of Town planning,

c. Preparation and publication of draft scheme, within 12 months for inviting suggestions and objections from the owners,

d. Draft T.P. scheme to be modified if necessary in light of the objections and then to be submitted to Government for sanction, and

e. Government may sanction the scheme with or without modifications, when it becomes sanctioned Draft T.P. Scheme Government then appoints Arbitrator to prepare the Final T.P. Scheme.

The steps for preparation of final schemes are:

a. Arbitrator to scrutinise the draft scheme and after giving hearing to parties prepares final scheme known as Arbitrator’s draft award of which extracts are sent to owners who can appeal to Tribunal of Appeal on incremental contribution levied,

b. The Tribunal of Appeal decides on the appeals made to it and sends it decisions to the Arbitrator,

c. The Arbitrator draws final scheme after incorporating the decisions of Tribunal and submits the final scheme to Government for sanction, and

d. Government sanctions the T.P. scheme by notifying in the official gazette and specifies date for coming in to force of the scheme.
The above procedure, in practice, took several years for the schemes to be completed, despite the time limits being prescribed in the Act. Generally a period of 10 to 12 years was necessary to bring the schemes into effect. Even though the MRTP Act lays down formulation of TPS as a means of implementing the Development Plan, only a few big cities in Maharashtra took advantage of the scheme. There were 2 reasons for this. One, it was only an enabling provision and not an obligatory means, and two, the time required.

D. THE EXPERIENCE OF MAHARASHTRA

The TPS is executed in Maharashtra, Gujarat and Karnataka. The land pooling variation is also executed in Kerala. More than 120 TPS were prepared in Maharashtra covering an area of over 10,000 ha. These were mostly for housing development, but for industrial development in some cases and provided good urban environment. 40 schemes were executed in Mumbai alone, mostly covering the western and eastern suburbs of Mahim, Bandra, Santacruz, Vile Parle, Andheri, Borivali, Ghatkopar, Malad and Mulund. Even though the infrastructure developments in TPS were to be entirely financed from the betterment levies, often local authorities had to shell in additional amounts. This was primarily due to the cost increases on account of the time delays in preparation and finalization of the schemes.

The most well planned areas in major cities of Maharashtra are those developed using TPS. However, in the post independence era, this technique has attracted much criticism on account of procedural duplication, protracted delays and the land redistribution often being arbitrary leading to litigation.

On the one hand provision of serviced land at affordable prices and locations in cities is unable to keep pace with the population growth and on the other,
procedural delays in implementing the TPS have made the urban local bodies increasingly becoming reluctant to adopt TPS in the recent years.

E. PROPOSED AMENDMENTS TO THE SCHEME

The Directorate of Town Planning, Maharashtra has submitted proposals for amending the provisions of MRTP Act, 1966 to the Government of Maharashtra over the last three decades. The moist important suggestion pertains to splitting up the scheme into two parts in order to implement the scheme without waiting for the finalization of financial details. A committee appointed by the All India Institute of Local Self Government (AIILSG) has also examined the shortcomings in the legal framework and practice of TPS in Maharashtra and suggested ways to improve it for better performance. In 1994, an in-house Committee with members from the Directorate looked at all earlier reports and made the following recommendations:

a. The area to be included in scheme should not be unmanageable.

b. Amendment to the existing provisions of the MR&TP Act relating to the Town Planning Scheme Chapter would not serve any purpose. The Chapter needs total replacement

c. Town Planning Scheme should be considered as a Project and managed as a project.

d. Instead of an Arbitrator, a full time Project Officer for the TP Scheme should be appointed who should be responsible for formulating the scheme, processing it, getting it sanctioned, getting land records changed and implementing it on site. He should continue until the project is completed within the specified time frame.

e. Statutory mechanisms should be made available to supervise and correct the Project officer’s work with a provision to give him/her suitable directives
whenever called for and he/she should be statutorily duty bound to comply with such directions.

f. Land acquired for public purpose should be paid either in terms of FSI or in terms of money on the basis of 100 times the net average monthly income. For this, Chapter on Land Acquisition in the MR&TP Act, 1966 should also be amended. Development Charges should be levied for financing the actual development of infrastructure.

g. There should be a permanent Tribunal to look into only the monetary compensation decided on the basis of 100 times net average monthly income.

h. Guidelines should be issued as an administrative fiat, to the Project Officer for preparation of the scheme layout and redistribution of plots.

i. Sanction to the Scheme by Government should be necessary only once, at the final stage.

The In-House Committee also detailed out the following procedural steps to be followed in view of the recommended changes in the TPS:

a. The Planning Authority shall declare its intention to prepare a Town Planning Scheme for a specific area

b. The Govt. shall appoint a Project Officer (PO) for preparation and implementation of the TPS

c. PO shall make an inventory of areas & ownerships of all original plots included in the Scheme
d. PO shall then prepare the draft layout of the TPS area taking into consideration:

i. Lands required by the Planning Authority for public amenities and roads,

ii. Redistribution of remaining lands amongst all the owners in equitable manner, excluding only such lands which are built over and therefore incapable of reconstitution,

iii. Work out monetary compensation payable to each owner on the basis of loss of area based on 100 times of net average monthly income. Also work out additional FSI/TDR to be granted, if so opted by the owner in lieu of monetary compensation.

iv. Project Officer shall give individual notices and hearing to all the land owners and record their say including suggestions and objections if any, and

v. Work out development charge payable by each owner of the reconstituted Final plot to the planning authority and to set off the same against the amount payable in lieu of reduction in area of original plots. Such setting off shall not be applicable in case the owner opts for additional FSI/TDR.

vi. PO shall submit the scheme to the Director of Town Planning for his approval and Director shall examine it from the point of view of equity considerations and shall accord administrative approval.

vii. The PO shall then declare the final award and submit the same to the Govt. and simultaneously give individual notices to the owners.

viii. Govt. shall sanction the scheme and the same shall come into operation on a specified date.
ix. PO shall forward objections about the awards to a permanent tribunal and monetary aspects of the scheme shall stand changed as per the decision of the Tribunal.

x. As soon as the scheme comes into operation, Project Officer shall hand over possession of final plots to respective owners including the planning authority and shall move the concerned Revenue officer for effecting changes in ownership record,

xi. PO shall recover the development charge and shall implement the TP Scheme proposals on site within the prescribed time limit, after which the functions of the project officer shall be deemed to have been completed.

The government is yet to act on the above recommendations. However, since 2005, the Government of Maharashtra has made significant efforts at revisiting the urban planning process in Maharashtra and as a part of that, has shown willingness to consider amending the MRTP Act in many ways, including the provisions pertaining to the TPS.

F. CONDITIONS WHERE TPS WORKS

Ray Archer (1992) considers it appropriate to resort to TPS and similar techniques when:

1. Government sets up machinery to authorize, regulate and monitor preparation and implementation of TPS projects,

2. The urban-fringe lands are fragmented into numerous separately-owned land parcels,
3. Local Govt. or the Planning Authority is genuinely interested in achieving the progressive and efficient development of the urban-fringe lands in its jurisdiction,

4. Land parcels selected for TPS are physically and economically ripe for urban development, (i.e., when public roads and utility service lines reach the vicinity, and the market demand for serviced land is adequate to ensure profitable subdivision of the land)

5. A majority of the landowners understand and support the use of TPS,

6. There are skilled and competent personnel available to manage the preparation and implementation of TPS.

G. TOWN PLANNING SCHEME AS A PARTNERSHIP MODEL OF LAND DEVELOPMENT

The TPS can be evaluated as a partnership model of urban land development against a set of criteria as below:

   a. *Stimulation of land supply for housing*: Converted vacant or agricultural lands in urban fringes into serviced land for housing and accelerated the housing developments by plot reconstitution.

   b. *Improving the efficiency of land market*: TOS acted as a planned intervention to open areas for market mechanisms. Being owner-based approach, simultaneous developments across the city facilitates a healthy competitive market.

   c. *Improving access to land for low income groups*: Amendments to TPS could include provision for housing the poor, as is done in Gujarat.
d. Providing the basis for a more productive relationship between public and private sectors: Based on the experience of TPS and other approaches to participatory land developments, more democratic patterns of sharing are being experimented in India as well as in other countries.

e. Extent of public subsidy involved: Delays increase infrastructure costs while betterment charge did not match this thereby involving additional financial resources to be deployed by the local authorities. Amendments to the MRTP Act on the lines of Gujarat Act can address this issue.

f. Constraints for replicability: Delays, lack of clear title of lands, disputes over valuation of land before and after scheme are some of the constraints. Fragmentation of land is another issue in Maharashtra as the average land parcels in rural areas are very small thereby requiring the TPS to deal with many landowners. Lastly, MRTP Act, 1966 currently provides for TPS to be undertaken only for implementation of a Development Plan and therefore cannot be used for undertaking planned development of non-urban areas.

g. Options for addressing the constraints: Certain changes in MRTP Act, 1966 can minimise the constraints. Specific institutional set-up may reduce the constraints further.
6.2 Town Planning Schemes in Gujarat

1. INTRODUCTION

The Gujarat Town Planning and Urban Development Act, 1976 (GTPUDA) provides for a very effective two-stage techno-legal process for urban planning and plan implementation. The ‘Development Plan – Town Planning Scheme’ mechanism (or the DP-TP mechanism in short) involves first preparing and ratifying a strategic, city-wide Development Plan. In the second stage, it involves preparing and implementing one or many Town Planning Schemes; to realize proposals of the Development Plan.

Preparing and implementing a Town Planning Scheme involves delimiting an area, and, within it, reconstituting properties, appropriating land, levying charges for infrastructure provision and for other costs, levying betterment charges, compensating dispossessed landowners, formally informing landowners of proposed plans, seeking a majority consent and recording their suggestions and objections, and empowering quasi-judicial officers for redressing grievances. The Town Planning Scheme process is therefore a powerful and well coordinated statutory tool for simultaneously preparing a detailed land appropriation, land readjustment and infrastructure development plan, a mechanism for financing and implementing the plan and a mechanism for involving landowners in the process.

Taken together, the DP-TP mechanism is a general purpose techno-legal mechanism and therefore can be used for addressing a variety of urban land appropriation and infrastructure provision problems. Use of the DP-TP mechanism to appropriate land has proven far more effective than use of the process defined by the Land Acquisition Act 1894 as amended time to time.

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2 This part of the chapter is a case study prepared by Ms Shirley Ballaney, Executive Director, Environmental Planning Collaboratives, Ahmedabad.
This paper explains how the DP-TP mechanism is used to deliver serviced land for urban expansion in the periphery of cities – this being its most extensive use. It also briefly lists the reasons underpinning the efficacy of the mechanism.

2. LEGISLATIVE HISTORY IN GUJARAT AND AHMEDABAD

Modern urban planning in India did not evolve out of a pre-existing ideology as it did in the west. There is a break in process of city planning and design traditions with the introduction of British Colonial Rule. Modern town planning emerges out of the British interventions in Indian cities. These were modelled heavily on the prevailing ideologies and movements in town planning in England.

Right through the British Colonial rule, a number of measures were undertaken and laws were enacted. These were then continued by Indian Planners after Independence. However it is not till very recently that the legislations have been amended to take cognizance of the emerging situation in India. This has resulted in the chaotic and unplanned growth of cities and towns.

In the early 1900’s town planning or urban planning was regarded as part of the municipal administration. However as the problems in urban areas assumed greater proportions both with regard to scope and complexity, Improvement Trusts were set up under various Improvement Trust Acts to formulate and implement town improvement schemes. These dealt with portions / parts of cities and towns.

These gradually gave way to Town Planning Acts to prepare town improvement schemes by some States. Different States enacted different legislation for town planning and there was no continuity or uniformity across states. Thus different states had different legislation for town planning either under Municipal Acts or Town Planning Acts.
The Bombay Town Planning Act, 1915 was the first to be introduced in India and applied to the present states of Maharashtra and Gujarat. Such laws empowered the local authorities to control the use of land and development through the instruments of zoning and building regulations, acquire land for public purpose and recover betterment contributions in respect of land parcels benefiting from improvements.

This act largely came about as a response to remedy the chaotic and unhealthy environment created due to industrialization in the form of textile mills in Ahmedabad. Its objective was sanitation, some social amenities and orderly development of the area. The local authorities were given the powers to prepare town planning schemes.

Both the type of Acts – improvement and town planning – did not provide for comprehensive planning of cities and towns but only improvements for portions from the viewpoint of public health, sanitation and safety. Further the Bombay Town Planning Act was voluntary and depended on the initiative of the local body.

A Town Planning Handbook produced by the PWD of the Government of Maharashtra published in 1876 was the main source book for preparing town planning schemes. It provided new models for layouts. Recommending Ebenezer Howard’s Garden City concept it reproduced only the physical elements of the plan while ignoring the social and economic content. Consequently the concept as understood by Indian Planners translated into low density suburban dormitories. Instead of the self contained towns as envisaged by Howard, only the elements of zoning, “neighbourhood units” and “green belts” were incorporated and absorbed in the local planning vocabulary.
Soon after independence town planners realized that suburban developments were not solving problems. To enable local authorities to tackle the issues of growth and planned development in a comprehensive and integrated manner for the entire city / town based on surveys, studies and analysis of physical, social and economic conditions, a more comprehensive legislation was required. The Bombay Town Planning Act was enacted in 1954 keeping this objective in view by the State of Maharashtra. It replaced the 1915 Act and was applicable both states of Maharashtra and Gujarat. It came into force in 1957. Under this act it was mandatory for every local authority to carry out a survey of the area within its jurisdiction and to prepare and publish a development plan.

Even the 1954 Act was heavily modeled on the Britain’s Town and Country Planning Act of 1947 and did not emerge in response to the local planning problems. While the British legislation and planning ideologies continued to evolve, in India they unfortunately remained more or less frozen in 1947. There were a couple of clear drawbacks:

- The process of preparing town planning schemes took very long as physical planning proposals and the financial proposals were required to be resolved prior to implementation.
- The jurisdiction was limited only to that of the local authority. With the increasing pace of urbanization and migration, the pressure of development just outside the limits began to be felt. The periphery or the fringe began to see unplanned development and could not be left unattended.

This Act was eventually replaced in by the more recent act – the Gujarat Town Planning and Urban Development Act (GTPUDA) enacted in 1976 by the State of Gujarat. It came into force in 1978. It is a far more comprehensive legislation and responded to the local challenges of growth. The above two drawbacks were addressed:

- The act allows for delineation of a large planning area around the jurisdiction of the local authority
• The physical planning proposals and financial proposals in the town planning schemes were de-linked. The process of preparing a TPS was divided into three parts – draft TPS, preliminary TPS and final TPS to expedite implementation.

Apart from this, the act has been amended several times to improve the process of planning.

3. IMPLEMENTATION HISTORY IN AHMEDABAD

Almost all of Ahmedabad has been developed using the TPS mechanism. The process began as early as 1915. TPS were prepared continuously under the various Acts described above. About 100 TPS have been prepared or underway within the Ahmedabad Municipal Corporation (AMC limits). About 105 TPS have been prepared or are underway within the Ahmedabad Urban Development Authority (AUDC) limits and another 200 are envisaged in the current DP, 2002.

Clearly there is a long history of implementation of the town planning schemes which has made the process acceptable to the people. There have been continuous improvements in the contents of the proposals over the years.

The Process of Preparing a TP Scheme – An Example

This section describes the process preparing a typical TPS in the periphery of the city is being focused upon here. The example used is TPS No. 90 Vinzol 23 in Ahmedabad. The area of this scheme, measuring 82 hectares and consisting of 80 separate plots of land around Vinzol village in the southern periphery of Ahmedabad, was zoned for urban expansion in the Ahmedabad Urban Development Authority’s DP prepared in 1999. Being close to the Mehmedabad

\[3\] Prepared for Ahmedabad Municipal Corporation (AMC) by EPC Development Planning and Management Pvt Ltd (EPCDPM), Ahmedabad.
Highway and the Sardar Patel Ring Road (which encircles Ahmedabad), it was envisaged that the area would come under intense growth pressure from surrounding industries. The north of the TPS area is bounded by Khari river, on the west by the Mumbai – Ahmedabad Railway line and on the east and south by TPSs. At time of preparing the TPS, most of the 82 hectares was vacant agricultural land with Vinzol village settlement within it.

- **Surveying the Area**
At the outset the area over which a T P Scheme is to be planned is surveyed in detail using a ‘Total-Station’. A large number of features are marked: topographic features, buildings, structures, trees, fences, infrastructure (e.g. canals and electrical lines), and so on. An attempt is made to capture all aspects of the area necessary for preparing a detailed plan and, all private possession that may have to be compensated for when the plan is implemented.

- **Compiling Details of Land Ownership**
While the area is being surveyed, existing cadastral maps and records are obtained from the relevant office of the Revenue Department and compiled in a prescribed format. Name of the owners (on record), plot area, type of tenure and encumbrances on the land, if any, are the key pieces of information that are compiled.

Note that available revenue records are the sole basis for compiling the information. Neither the Development Authority nor the Revenue Department is required to collect fresh data to update or correct the information on record. The reason for this, which will become clearer as we go through the process, is that except for appropriating a portion of land preparing and implementing a T P Scheme, does not make any change in the nature of ownership of any plot in the scheme area. Encumbrances on a plot also remain unaffected.

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4 Of course, all correction, reconciliation and updating that can be done on the basis of data available in existing records is undertaken.
5 On account of this, Development Authorities do not hesitate in undertaking TP Schemes in areas where available land records are in poor condition or outdated.
Preparing a Base Map
The detailed ground survey and existing cadastral maps are collated to prepare a ‘Base Map’. Discrepancies are resolved in favor of the plot area in cadastral records unless a portion of the plot has been acquired or has been subdivided/amalgamated and the records have not been updated. Base Maps are today prepared on computer. Official copies of maps are required to be printed at 1:2000 scale. By custom, the base map prepared by the Development Authority is approved and authorized by relevant officer of the Revenue Department.

Establishing Boundaries of the TP Scheme
The boundary of the TP Scheme is now clearly marked on the base map. Planning considerations, physical features and other administrative boundaries (e.g. village boundaries) are all taken into consideration when drawing up the boundary for a TP Scheme. At this stage, the intention to prepare a TP Scheme for the area is clearly published in local newspapers. This stage then is the first stage at which the Authority is required to inform landowners.

Marking Original Plots on the Base Map
Developing a new plan for the area begins by clearly identifying ‘original plots (OPs)’ on the base map and giving each a serial number referred to as the OP number. At this stage contiguous plots held by the same owner are consolidated as single OPs. The map showing the OPs is referred to as the OP Map. As one can guess, the only reason for consolidating contiguous plots (belonging to the same owner) and giving serial numbers to plots is to simplify subsequent planning and tabulation of information and reduce land fragmentation.

Tabulating Ownership, Original Plot and Original Plot Value Details in Prescribed Format
The ‘F Form’ as it is called is the key statutorily prescribed format in which operative information regarding the TP Scheme is tabulated. First, ownership details (name of the owners, land tenure, revenue survey numbers) of each OP are tabulated. Following this area of each plot is recorded. Based on available

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6 Say, for example, if a plot owner has encroached upon a neighbor’s plot and thus the plot appears larger than what the record shows, the boundaries of the plot are corrected in the base map to truly reflect the area in the record.
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land sales data from within the TP Scheme area, each OP’s value is estimated and tabulated. The most important aspect to be kept in mind is that while estimating the value of the OPs, increments in value, expected on account of the implementation of the TP Scheme, are not taken into consideration.

- **Planning Roads**

  Any major (city-level) roads, already indicated in the DP and passing though the TP Scheme area are first drawn up on the OP Map. Since the OP Map is based on a detailed land survey, road alignments can be precisely fixed with a view to minimizing problems during implementation. Following this, the subsidiary road network is designed and drawn up. While doing this the planner has to envision the future urban character of the area and keep a number of planning, transportation and urban design issues in mind. Efficiency of the road network (proportion of the land used up for the road network) is also a key parameter governing the design of the network of roads.

- **Planning Plots for Public Use**

  Following determination of the road network, plots for a variety of public uses are drawn up. A typical list of plots for public uses includes plots for schools, parks, health facilities and housing for economically weaker sections. Increasingly, plots are also being set aside for the Development Authority’s land bank\(^7\) – to be sold to raise finance for infrastructure development. A key design concern at this stage is to keep the total proportion of land allotted for public plots within prevailing norm.

- **Tabulating Final Plot Sizes**

  At this stage the total land area used up for roads and plots for public uses is calculated as a proportion of the total land area of the TP Scheme. This is a key figure usually predetermined. Each OPs area is reduced by this proportion and tabulated as the area of the ‘Final Plot (FP)’ to be allocated to each original plot holder. In other words, each OP holder gets a smaller FP. The percentage of land deducted from each OP is the same as the percentage of land of TP

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\(^7\) This being a relatively recent practice, a clear policy for use of land banks has not emerged as yet. The Ahmedabad Urban Development Authority has begun auctioning such plots to raise finances for infrastructure development.
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Scheme used up for roads and plots for public uses. Therefore each land owner contributes the same proportion of his land for the creation of public facilities.

- **Delineating Final Plots**
  After road and amenity plots are drawn up and sizes of FPs tabulated, they are designed and drawn up. At this stage the planner has to envision future character of the area and reshape each of the plots. As far as it is possible, the FP is allotted in the same location as the OP; the OP is trimmed to make it smaller.

- **Tabulating Semifinal Values**
  The process of valuation is continued further. A semifinal (SF) value is ascribed to each FP. Usually, this is the same as the OP value. In some instances, however, there can be a marginal change in the value of the OP before the provision of infrastructure – it may increase or decrease owing to the planning proposals such as zone changes, changes in plot shape, changes in the plot size that are impacted certain development control regulation, a substantial shift in plots, and proximity to features that may negatively impact development, such as a high tension lines, eroded lands, etc. It is this value that is used to calculate the compensation for the land appropriated from each land owner.

- **Computing Compensation for the Land Appropriated**
  The compensation for the land appropriated is now calculated. The compensation to be paid to each land owner is the difference between the product of OP value & OP area and SF value & FP area.

- **Designing and Estimating the Cost of Infrastructure**
  The TP Scheme’s infrastructure is designed and its cost is estimated. Prevailing norms are followed to set engineering standards. Infrastructure normally includes roads, street lighting, water supply, sewerage and storm water drainage. However, this list can be expanded.

- **Estimating the Cost of the Town Planning Scheme**
  The total costs of the TP Scheme are worked out. These include cost of providing the infrastructure (roads, street lights, water supply, sewerage and storm water network); compensation to be paid to each land owner,
administrative & legal costs involved in preparing the TP Scheme and administrative costs for implementing the TP Scheme (salary & administrative expenses for a Town Planning Office (TPO)).

- **Establishing the Value of Final Plots**
  All the costs are added and the total cost is divided by the total land that is given as FPs. This gives the cost of development per unit area of land which is then to be loaded on all FPs. However it is not equally loaded, some amount of locational advantage of the FP is factored in. For instance a plot that gets access to two or more roads, is next to public appropriation etc., is assigned a slightly higher cost of development per unit area. The value of the FP is now calculated. It is the sum of the cost of development and the SF value, meaning the increase in the value land after doing the TP Scheme is equal to the sum of SF value and cost of development at the very least.

- **Computing Betterment Charges**
  The compensation for the land appropriated is calculated as the difference between the product of OP value & OP area and SF value & FP area. Next, the total increment or increase in the value for each plot of land is worked out. This is the product of the FP value and FP area. The GTPUDA stipulates that about half of increment can be taken by the development authority to finance the cost of works and administrative expenses of preparing the TPS. Taking 50% of the increment in the land value from each plot and deducting the compensation to be paid in lieu of the land appropriated, the net demand or betterment charges are estimated for each plot.

- **Presenting the TP Scheme at a Meeting of Land Owners**
  At this stage the TP Scheme is ready for presentation: land owners have been identified; land holdings have been drawn up; land appropriation and reconstitution proposals have been worked out; infrastructure development proposals have been conceptually designed; and, costs, compensations and levies have been calculated. Now a public meeting of land owners is called to present the draft proposal and to solicit their opinions and objections, if any. Notice inviting all owners to attend the meeting is publicized through news
Managing Urban Growth using the Town Planning Schemes in Andhra Pradesh

papers. The meeting is held in a public venue (e.g. a hall in a local school) and is conducted primarily by urban planning staff of the development authority. Much depends on the skill of the planning staff to keep the meeting civil and constructive. The objective of the meeting is to clarify the procedure and proposals of the TP Scheme, to build a consensus regarding the merits of the TP Scheme proposals and to get a sense of the opposition to the scheme.

- **Modifying the TP Scheme and Seeking State Government Approval**

Based on objections and suggestions raised during the land owners’ meeting and on written objections and suggestions sent in by individual owners the Development Authority now modifies the TP Scheme. Modifications are aimed at ensuring that all ‘reasonable’ objections are addressed. Once the Scheme has been modified, it is sent to the State Government for its approval. At this stage, it is referred to as the ‘Draft TP Scheme’. Once approved, it is referred to as the ‘Sanctioned Draft TP Scheme’.

- **Appropriating Land for Roads and Building Infrastructure**

At this stage, the development authority can take physical possession of the land designated for roads in the Sanctioned Draft TP Scheme and start building the roads and all other infrastructure located on them. At this stage, however, the development authority has to use its own funds to build the infrastructure. Power to appropriate land at this stage was granted to development authorities by an amendment to the GTPUDA in 1999. Earlier all proposals could be implemented only after complete finalization of the scheme.

- **Appointment of the Town Planning Officer**

On approval of the Draft TP Scheme, the State Government appoints a quasi-judicial officer called a Town Planning Officer (TPO) to further finalize the Sanctioned Draft Town Planning Scheme. The TPO is supposed to systematically and individually hear each land owner. The subject of the hearings is limited to individual land owners’ concerns regarding: the shape, location and access provided to the Final Plot allotted to him; compensation being given to him; and, betterment charges being levied on him. The TPO is responsible for modifying the scheme as he sees fit, finalizing it, overseeing
actual demarcation of the reconstituted plots, and for handing over possession of Final Plots to land owners. On account of this TPOs are required to be technically competent and, by custom, are selected from the pool of urban planners available with the State Government.

- **Conducting First Set of Hearings**

  Three individual hearings are given to each landowner in the T P Scheme. The TPO undertakes two successive sets of individual hearings at this stage. The first set focuses on physical proposals of the T P Scheme and the second set deals with financial proposals of the scheme. Land owners are individually notified regarding the opportunity to be heard and submissions or presentations are duly recorded in writing. If necessary, clarifications are also sought from the development authority and state government. After satisfying himself, the TPO modifies the TP Scheme to address the objections and concerns raised during the hearings.

- **Conducting Second Set of Hearings**

  Following the first set of hearings, the TPO gives a second opportunity to all land owners to examine the modifications made by him. Once again if necessary, the TPO may seek clarifications from the development authority or state government.

- **Modifying the Sanctioned Draft T P Scheme**

  Following the second set of hearings, the TPO now finalizes his modifications to the Sanctioned Draft TP Scheme. Justifications for decisions regarding each of the plots have to be recorded in writing. The TP Scheme thus modified is referred to as the Preliminary TP Scheme. Notice of ‘Award of the Preliminary TP Scheme’ is published in local newspapers and the scheme is once again sent to the state government for its approval. The state government is required to approve the Award within two months. After grant of approval, it is referred to as the Sanctioned Preliminary Scheme. Sanction of the Preliminary TP Scheme implies that the development authority now owns all plots for public use in the scheme.
However, if at any point in time before the “Award of the Preliminary TP Scheme” is published, if majority of the owners (more than 50%) and the development authority feel that they do not want the TP Scheme to be implemented then they can make a representation to the TPO. The TPO upon receiving such a representation invites objections & suggestions from all the land owners that such a request has been received and that he may consider it. After resolving all the objections and suggestions, he may forward the proposal to the state government. At that stage, the state government based on the merits of the proposal may withdraw the proposal to prepare the TP Scheme.

- **Conducting Third Set of Hearings**
  The TPO undertakes a third set of individual hearings at this stage. These hearings are focused solely on financial issues. Land reconstitution proposals are considered to be final and residual objections pertaining to them are not entertained.

- **Finalizing the TP Scheme**
  Based on the hearings and any clarifications or opinions sought by him from the state Government, the TPO now makes final modifications to the financial proposals of the scheme. The scheme thus modified is referred to as the Final TP Scheme. He notifies ‘Award of the Final TP Scheme’ in the local papers.

- **Board of Appeals and State Government Approval**
  Appeals against the Final TP scheme can only be made in the Board of Appeals constituted for the purpose by the State Government. Once appeals are resolved and the Final TP Scheme is modified, the State Government is required to sanction the Final TP Scheme within three months. Once sanctioned, the Sanctioned Final TP Scheme is sent to the relevant office of the Revenue Department for updating land records.

4 **VARIOUS USES OF THE TP SCHEME MECHANISM**

Managing urban expansion in the periphery of cities is only one use to which the DP-TP mechanism can be put. Considered in abstraction, it can easily be seen
that The D P process is a powerful strategic planning tool and that TP Scheme Process is a general purpose techno-legal mechanism for delimiting an area and, within it, reconstituting properties, appropriating land, levying charges for infrastructure provision and for other costs, levying betterment charges, compensating dispossessed landowners, formally informing landowners of proposed plans, seeking a majority consent and recording their suggestions and objections, and for empowering quasi-judicial officers for redressing grievances. The ‘TP Scheme’ mechanism is therefore a powerful and well coordinated statutory tool for simultaneously preparing a detailed land appropriation, land readjustment and infrastructure building plan, a mechanism for financing and implementing the plan and a mechanism for involving landowners in the process. Being a general purpose mechanism, it can and has been used for addressing a variety of urban land appropriation and infrastructure provision problems.

The usefulness of TPS can be shown through four case studies to illustrate how the TP Scheme mechanism can be used in different circumstances:

a. Redeveloping older areas of the city
b. Building city wide infrastructure
c. Regularizing unauthorized construction
d. Consolidating land for developing an institutional zone

A. Redeveloping Older areas of the City
   Case Study of Relaying out the Walled City, Bhuj

Bhuj was established as the capital of Kutch Region in 1549 AD. The early settlement was fortified in 1723 AD. The Walled City also functioned as the regional trade and business center. It is 1 sq km in area and had 5 gates. Growth beyond the fort wall began from 1960’s onwards. Today, Bhuj is the administrative headquarter of Kutch district and continues to function as an important centre for trade & commerce, tourism and traditional handicrafts. According to the 1991 census, approximately 38,600 persons inhabited Walled
City. Bhuj Municipality covered an area of about 20 sq km and had a population of 125,000 persons.

On January 2001, Bhuj was devastated by a severe earthquake of magnitude 6.9 on the Richter scale. Most of the buildings and existing public infrastructure such as the roads, sewerage network, water supply network & street lights saw considerable damage. In particular the densely built and populated Walled City was severely affected. Over 7000 people perished in Bhuj of which the majority died in the Walled City area, as buildings constructed of stone and mud mortar came crashing down on extremely narrow streets. About 40 to 50% of the standing structures were razed to ground. The lack of an effective street pattern was a major obstacle to disaster management in the earthquake’s aftermath.

The DP – TP mechanism was adopted to facilitate the reconstruction of Bhuj after the earthquake and also plan for a larger area around it as the city had been witnessing growth. The earlier Development Plan (DP) was archaic; it was prepared in 1968 under the 1954 Bombay Town Planning Act and had not been revised since then. A lot of growth had already taken place in the periphery and outside the municipal limits and it was haphazard, without any basic infrastructure services. Post the earthquake a larger planning area was delineated with a total area of 56 sq km. Bhuj Area Development Authority was established and a comprehensive DP was prepared within a span of 6 months.

This then became the framework for building a brand new road networks and infrastructure. The planning process was participatory, involving over a 100 consultations and ward meetings.

In case of the Walled City the situation was quite complex, a lot of buildings had collapsed as the building stock was old and densely built. The infrastructure also

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8 Environmental Planning Collaborative (EPC), Ahmedabad were appointed at Town Planning Consultants; the entire task of planning, reconstruction and rebuilding of Bhuj was supported by the Asian Development Bank and the nodal agency to manage the assignment was the Gujarat Urban Development Company (GUDC), Gandhinagar.
had been almost totally damaged. There was a clear consensus that the Walled City needed to be drastically improved. The key requirement was to enhance safety and enable effective disaster management. For this was necessary to make the street network more efficient and create more open spaces. The existing street network was full of bottlenecks. There were two options:

**Option 1 Widen existing main streets:** This would have meant demolition of large numbers of standing buildings, particularly the thriving market streets that survived the earthquake. It would have resulted in massive displacement of people and businesses which drive Bhuj’s economy.

**Option 2 Create new streets using space created by collapsed buildings:**

The second option was clearly the better one not only from the economy point of view but also from a practical implementation point of view. The DP published in September 2001 proposed that a set of new wide loop roads be created utilizing patches of open land created by collapsed buildings. These roads would give access to the markets and the entire walled city, while the market streets could be converted into pedestrian areas. This approach was endorsed by all levels of decision-making from the general public in Bhuj to the officials.

Now there were three options again for realizing the proposed plan:

1. Put “road widening lines” in the Development Plan and hope that the roads will be created over many years when buildings are rebuilt
2. Acquire the land and buildings coming in the major road alignments through the land acquisition process (leaving the rest of the walled city as it is)
3. Reorganize all the open plots using the Town Planning Scheme process, improving the plot layout and also creating the new streets.
Since urban renewal in such a complex situation had never been attempted before in India and perhaps rarely in the world, it was a difficult decision for the government to take. Having evaluated all options, it was decided that the TP Scheme option as it would create an overall improvement and at the same time, spread the burden of land/property loss evenly over all affected properties. Displacement would be minimized.

The walled city was quite complicated – there were about 12000 land holdings in an area of 1 sq km, the plot sizes ranged from 5 sq m to over 500 sq m and the land records were in a mess. Using municipal ward boundaries, the entire walled city was divided into 8 which would make each TPS a manageable design unit.

In the case of the walled city of Bhuj, in order to ensure equity and taking the practical situation into consideration, the following deduction policy was adopted:

<table>
<thead>
<tr>
<th>Plots size</th>
<th>Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 30 sq.m</td>
<td>no deduction</td>
</tr>
<tr>
<td>30 sq.m to 100 sq.m</td>
<td>10%</td>
</tr>
<tr>
<td>100 sq.m to 200 sq.m</td>
<td>20%</td>
</tr>
<tr>
<td>200 sq.m to 500 sq.m</td>
<td>30%</td>
</tr>
<tr>
<td>More than 500 sq.m</td>
<td>35%</td>
</tr>
</tbody>
</table>

It was decided that standing buildings would be spared from deduction unless they were affected by proposed road alignments. Against every “Original Plot”, a “Final Plot” is allotted after deduction as per policy. The ownership rights associated with the Original Plot are transferred into the Final Plot.

The planning process carried out for the redevelopment of the walled city of Bhuj is perhaps the most complex physical planning exercise ever attempted in India. It has already consumed over 100,000 hours of work by highly qualified professionals using the best available technology, coordinating the work of nearly a dozen organizations and dealing with over 12,000 plots for which over 30,000 persons have ownership claims.
B. Building City Wide Infrastructure

Case Study of the Sardar Patel Ring Road, Ahmedabad

The Sardar Patel Ring Road was envisaged in Ahmedabad’s Draft DP 1999 to handle increased traffic volumes, segregate the regional and urban traffic, ease congestion on present highways & peripheral roads, provide good infrastructure to support the new growth and support a mass transportation system if required.

The total length of the Ring Road is about 76 km and the right of way is 60 m. To implement a road project of such a scale typically a Development Authority would have to go through the process of land acquisition. The total land to be acquired in this case worked out to approximately 456 ha/ 4.56 sq km. The Ahmedabad Urban Development Authority (AUDA) was responsible for implementing the road as it was outside the Ahmedabad Municipal Corporation (AMC) limits. This was a formidable task as it would not only be very expensive given the land prices in the area, but the whole process of acquisition would be extremely time consuming as it could easily involve over several hundred land owners. The other impacts of taking the land acquisition approach would be that the affected land owners would be forcibly evicted and the benefit of the project would accrue to the adjacent land owners.

The AUDA instead of taking the conventional approach of land acquisition for the entire length, decided to use a combined approach of using the TPS mechanism and land acquisition. This is because although a major portion of the alignment fell in the developable area or the area zoned for development in the DP wherein it was possible to introduce TPS, there was a stretch of about 13 km that was in the agricultural zone and here land acquisition was the only way out. By taking such an optimal approach the cost of land acquisition was minimized.
AUDA declared a series of about 47 TPS having a total area of about 91.2 sq km along the alignment of the Ring Road on both the sides of the Ring Road to appropriate land for the Ring Road. The process of preparing the TPS was initiated as soon as the revised Draft DP was submitted to the State Government in 1999, not waiting its approval. Treating this as a special project the AUDA Chairman and Officials had initiated systematic consultations with the land owners since the very beginning to ensure their cooperation.

The draft TPSs were rapidly prepared and land plots on both the sides of the road were reconstituted and land for a 60 m wide road was carved out. Most of the TPSs were submitted to the State Government by 2006. Usually as per the provisions of the GTPUDA, the Development Authority can get the possession of the roads only after the Draft TPS has been approved by the State Government. However in this particular case, since AUDA had been working closely with the land owners while preparing the TPS and had played a very proactive role in building consensus around the project, it was able to get advance possession of the land required for the Ring Road from the land owners by their “voluntary consent” even before the approval of the Draft TPS by the State Government. In this case the land owners were assured that the land that they were contributing would be considered towards their contribution in the TPS and that they would get FPs abutting the Ring Road. Table below summarizes the salient features:

<table>
<thead>
<tr>
<th>Detail</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length of the Ring Road</td>
<td>76 km</td>
</tr>
<tr>
<td>Length of Ring Road acquired under Land Acquisition Act</td>
<td>13 km</td>
</tr>
<tr>
<td>Total length of the Ring Road appropriated through TPS</td>
<td>63 km</td>
</tr>
<tr>
<td>Total No. of TP Schemes</td>
<td>47</td>
</tr>
<tr>
<td>Total Area under the TP Schemes</td>
<td>91.2 sq km</td>
</tr>
<tr>
<td>Total Area under the Ring Road</td>
<td>4.56 sq km</td>
</tr>
<tr>
<td>% area of the Ring Road to the total area under TPS</td>
<td>5%</td>
</tr>
</tbody>
</table>
C. Regularizing Unauthorized Construction

Case Study of TP Scheme 97 Naroda North, Ahmedabad

The TPS Mechanism has been extensively used in Ahmedabad in many such situations, primarily to provide basic infrastructure services and levy development charges. An example of one such TPS is TPS No. 97 Naroda North in Ahmedabad. The revenue village of Naroda lies in eastern part of Ahmedabad. It was outside the Ahmedabad Municipal Corporation limits when the two successive DPs were prepared in 1965 and 1976. In around early 1970s the Gujarat Industrial Development Corporation (GIDC) established the three major industrial estates of Naroda, Odhav and Vatva encompassing the entire eastern periphery of Ahmedabad. The entire eastern periphery saw development because of the industrial estates. In 1983 the limits of AMC were extended to include the entire periphery. The next Revised DPs were prepared in 1987 & 2002 and included the extended limits. For AMC it was crucial to build some of the major roads indicated in the successive Revised DPs and provide the existing developments with infrastructure such as roads, water supply, drainage and street lights. Several TPS were declared and prepared in the area. One of these, TPS No. 97 Naroda North is illustrated.

The TPS was declared in June 2004, prepared within 13 months and submitted to the State Government for approval in August 2005. The State Government approved it in 30 August 2006. It is evident approximately 70% of the area of the TPS was already developed. There were a few access roads which accounted for about 3.6% of the area. The TPS proposals were prepared and as a consequence it was possible to appropriate an additional 18.08% (aside from 3.6% already under roads) of total area for more roads and plots for amenities & revenue generation. The salient features of TPS are summarized in table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Detail</th>
<th>Area (Ha)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total TPS Area</td>
<td>87.45 Ha</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Before the TPS was prepared

<table>
<thead>
<tr>
<th></th>
<th>Area under original plots</th>
<th>84.30 Ha</th>
<th>96.40</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Area under access roads</td>
<td>3.15 Ha</td>
<td>3.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| After the TPS was prepared
|   | Area under final plots    | 68.47 Ha | 78.32 |
| 1 | Area under access roads   | 8.27 Ha  | 09.46 |
| 2 | Plots for amenities and poor | 5.90 Ha | 06.75 |
| 3 | Plots for revenue generation | 4.78 Ha | 05.46 |
| 4 | Total area under roads and plots for amenities and revenue generation (2+3+4) | 18.95 Ha | 21.68 |

Since in this TPS it was not possible to appropriate the usual prescribed 35 to 40% of land, a higher betterment charges was levied in comparison to the TPSs where usually the amount of land appropriated is usually in the prescribed range.

D. Consolidating Land for Developing an Institutional Zone

Case Study of TP Schemes 19 and 20, Gandhinagar

In 2005, the State Government intended to create an “institutional enclave” or a special zone to bring together a host of institutions such as Institute of Seismological Research (ISR), Gujarat Institute for Disaster Management (GIDM), Gujarat Energy Research and Management Institute (GERMI) & its Convention Center (now known as Pandit Deen Dayal Petroleum University) etc, between Ahmedabad and Gandhinagar along the highway connecting the two cities. The possible location was in and around the villages of Koba, Raysan and Randesan situated within Gandhinagar Development Authority (GUDA) Area.

There were several land plots belonging to the State Government in the area and it was proposed to allot these to the various institutions that needed land to establish their campuses. However it was soon realized that there were two issues. First the Government plots were not contiguous and had irregular
shapes. Further, the quantum of land was not adequate for the agglomeration of institutions of public importance that was being envisaged. Second, it was also necessary to give appropriate access to each institution from the highway connecting Ahmedabad and Gandhinagar.

To address this issues, the use of the TPS mechanism was proposed, the idea was to consolidate the Government lands as well as to augment additional land requirements by earmarking the plots that would be appropriated for revenue generation in the TPS for the use of institutions. Initially there only one TPS was envisaged – TPS 19 Raysan – Randesan in the area but as the task of preparing this proceeded, a second TPS – TPS 20 Koba was immediately declared to scale up the idea and create an "Institutional Zone".

Through the process of the TPS a fairly large “Institutional Zone” of about 150 ha is created to house several public institutions. Both the TPS were prepared and implemented rapidly; construction of some of institutions is already underway. The following table gives the details.

<table>
<thead>
<tr>
<th>No</th>
<th>TPS Name</th>
<th>Area (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>TPS 19 Raysan – Randesan</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total TPS Area</td>
<td>263.62 Ha</td>
</tr>
<tr>
<td>2</td>
<td>Government Land in the TPS Area</td>
<td>17.53 Ha</td>
</tr>
<tr>
<td>3</td>
<td>Plots appropriated for Institutions in the TPS Area</td>
<td>38.50 Ha</td>
</tr>
<tr>
<td></td>
<td>Total appropriation for Institutions</td>
<td>56.03 Ha</td>
</tr>
<tr>
<td>B</td>
<td>TPS 20 Koba</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total TPS Area</td>
<td>186.35 Ha</td>
</tr>
<tr>
<td>2</td>
<td>Government Land in the TPS Area</td>
<td>74.86 Ha</td>
</tr>
<tr>
<td>3</td>
<td>Plots appropriated for Institutions in the TPS Area</td>
<td>20.00 Ha</td>
</tr>
<tr>
<td></td>
<td>Total appropriation for Institutions</td>
<td>94.86 Ha</td>
</tr>
<tr>
<td>C</td>
<td>TOTAL LAND FOR INSTITUTIONS</td>
<td>150.89 Ha</td>
</tr>
</tbody>
</table>
Chapter 7

Conclusions & Recommendations

7.1 Conclusions

Urbanisation and urban population growth have been assuming a greater attention of policy and decision makers. Andhra Pradesh has experienced comparatively similar levels of urbanisation and urban population growth as that of the country as a whole. Yet, both urban population growth and urban area expansion have reached new levels that require significant amount of focus than that given in the past, particularly when the economic importance of urban areas is also growing.

There is a greater consensus that the urban growth is not only inevitable but also it needs to be promoted through well laid planning and policy interventions that support the same. It is here that the planning is increasingly sought to act as a growth enabling and development promoting institution, rather than a restrictive force, in order to sustain the urban pressures while avoiding the other effects like pollution, congestion and breakdown of infrastructure.

Urban planning system has been well established in the State of Andhra Pradesh starting with the foundations laid down in AP Town Planning Act, 1920. There have been other legislations that were made from time to time to establish the legal space for the emerging urban development institutions, which have been established to both promote development and regulate it. However, in the urban planning system, primacy is attached to the preparation of master plan, or development plan, for the urban area, while not taking it further to the next level of implementation through area level plans/schemes.
The study of master plan or development plan system also pointed to the problems associated with the primacy attached to master plans. It stated that master plans not only remained mere statements and/or maps of development vision with a lack of implementation framework, thereby failing to attain the goals, but also they have not been prepared with any urgency or importance or pace with which they would have been brought out. There have been severe delays in the preparation of plan itself, which was not followed up with any schemes/proposals that lead to the realisation of plan objectives.

An important instrument/mechanism that has been forgotten in the process of attaching primacy to master plans is the Town Planning Scheme (TPS), which seeks to bring out development of areas through proposals that will have land pooling and readjustment after the development of adequate common infrastructure. TPS, thereby, can also be used to attain the objectives laid down under master plan/development plan in a gradual manner but with a well laid proposal developed at a rapid pace.

The TPS can be evaluated as a partnership model of urban land development against a set of criteria as below:

a. Stimulation of land supply for housing: Converted vacant or agricultural lands in urban fringes into serviced land for housing and accelerated the housing developments by plot reconstitution.

b. Improving the efficiency of land market: TPS acted as a planned intervention to open areas for market mechanisms. Being owner-based approach, simultaneous developments across the city facilitates a healthy competitive market.

c. Improving access to land for low income groups: Amendments to TPS could include provision for housing the poor, as is done in Gujarat.

d. Providing the basis for a more productive relationship between public and private sectors: Based on the experience of TPS and other approaches to
participatory land developments, more democratic patterns of sharing are being experimented in India as well as in other countries.

e. **Extent of public subsidy involved:** Delays increase infrastructure costs while betterment charge may not match this, thereby involving additional financial resources to be deployed by the local authorities. Amendments to the MRTP Act on the lines of Gujarat Act can address this issue.

f. **Constraints for replicability:** Delays, lack of clear title of lands, disputes over valuation of land before and after scheme are some of the constraints. Fragmentation of land is another issue thereby requiring the TPS to deal with many landowners. Lastly, the TPS need to be undertaken not only for the implementation of a Development Plan but also for undertaking planned development of non-urban areas.

### 7.2 Recommendations

The AP Town Planning Act, 1920 has rightly recognised the importance of such an instrument/mechanism to bridge the plan implementation by making provision for it in the Act itself. Although some schemes were developed in the erstwhile Madras presidency rule, they were given away and the focus shifted much to the development and its regulation. It is important to revive the TPS instrument to achieve the master plan objectives, thereby support the urban development to take place in an orderly and organised manner. In this context, the provision made for land pooling schemes in the Hyderabad Metropolitan Act, 2008 are quite enthusiastic and the same may be provided for with extension to TPS in the appropriate legislation at the State level.

The Case Studies of TPS in Maharashtra and Gujarat states clearly point to the successful practice of the TPS at a different pace and intensity. Between the two, Gujarat has achieved far greater success - it has been able to use TPS in different and difficult situations like earthquake victim resettlement or inner city
development. Maharashtra also used TPS vigorously in the past but it has been moving cautiously in the recent past and even not using much. Maharashtra, it appears, to have been caught in the procedural and institutional matters, that have been hindering the roll out of TPS; whereas, Gujarat has been using TPS much more vibrantly than the master plans per se.

The State of Andhra Pradesh has to revive the town planning schemes as an integral part of the planning system, as intended in the founding legislation of 1920. However, it needs to gear up a lot in order to be able to do so, as master plan preparation itself is pending in several towns and cities. At the same time, it needs to learn lessons from the Maharashtra experience of not getting into institutional and procedural matters that take away the time and focus. It may follow a Gujarat model in order to make the TPS paving way for providing a better linkage between Master plan and the actual development of town/city.

While TPS can play an important role in promoting urban development and realising master plan vision, it may not be able to achieve all the objectives and in under all circumstances. It is important, therefore, to make TPS applicable in different contexts and settings. Archer (1992) considers that it is appropriate to resort to TPS and similar other techniques when:

- Government sets up machinery to authorize, regulate and monitor preparation and implementation of TPS projects,
- The urban-fringe lands are fragmented into numerous separately-owned land parcels,
- Local Government or the Planning Authority is genuinely interested in achieving the progressive and efficient development of the urban-fringe lands in its jurisdiction,
- Land parcels selected for TPS are physically and economically ripe for urban development, (i.e., when public roads and utility service lines reach the vicinity, and the market demand for serviced land is adequate to ensure profitable subdivision of the land)
A majority of the landowners understand and support the use of TPS,

There are skilled and competent personnel available to manage the preparation and implementation of TPS.

In essence, the road map for the revival of TPS into current urban planning system of AP would require some of the following steps:

- Instituting TPS integral to the town planning system by making provisions for the same in the concerned legislation of town planning and urban development. The provisions in the recent Hyderabad Metropolitan Development Authority (HMDA) Act, 2008 act as a pointer for the same. All other legislations have to find reflection of the same kind, more elaborately, in the respective Acts through amendments.

- The preparation of TPS needs to take place while development/master plan preparation work is in place and the implementation of TPS needs to start as much early as possible in order to become successful. Guidelines need to be given by the Government to the towns/cities on the preparation of TPS. Manuals for the development of TPS may be prepared by DT&CP for this purpose. The manuals in other States, if any, viz., Gujarat, may be referred.

- The resources available in current town planning system of Andhra Pradesh for the preparation of TPS may be given consideration. Wherever it can be done in a relatively short time span with existing resources, TPS may be prepared by local government or development authority. However, for a better and faster implementation, the preparation and implementation of TPS may be left to the agencies outside the state/local government system, with the approval power remaining vested with them.
REFERENCES


5. CGG (2004), Urban Reforms and Municipal Services in Andhra Pradesh: Urban Land use and Regulatory Audit Study, Centre for Good Governance, Hyderabad.


GOVERNMENT OF ANDHRA PRADESH

ABSTRACT

Municipal Administration & Urban Development Department – Hyderabad Urban Development Authority – Extended Modification to the Master Plan of Hyderabad Urban Development Authority Area (excluding the erstwhile MCH area and the newly extended area of HUDA) – Approved – Orders – Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (I) DEPARTMENT

G.O.Ms.No. 288

Dated: 3rd April 2008

Read the

following:


***

The appended notification shall be published in the extraordinary issue of the A.P. Gazette dated: 04-04-2008

2. The Commissioner of Printing, Stationery and Stores Purchase, Hyderabad is requested to supply 100 copies to the Government.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

S.P.SINGH

PRINCIPAL SECRETARY TO GOVERNMENT

To

The Commissioner, Printing Stationery & Stores Purchase Hyderabad.
The Vice Chairman, Hyderabad Urban Development Authority, Hyderabad.

Copy to:
The Revenue Department.
The Industries & Commerce Department.
The Environment, Forest, Science & Technology Department.
The Panchayati Raj & Rural Development Department.
The Transport Roads & Building Department.
The Law (A) Department.
The Commissioner, GHMC, Hyderabad.
The Commissioner & Director of Municipal Administration, A.P., Hyderabad.
The Director of Town and Country Planning, A.P., Hyderabad.
The Managing Director, HMWS&SB, Hyderabad.
The Collector, Ranga Reddy District, Hyderabad.
The Collector, Hyderabad District, Hyderabad.
The Collector, Medak district.
The P.S to Special Secretary to Chief Minister.
The P.S to M (MA & UD).
The P.S to Chief Secretary to Government.
St/sc.

//FORWARDED BY ORDER//

SECTION OFFICER

APPENDIX
NOTIFICATION


2. And whereas Government, after reviewing the above Master Plan and Zonal Development Plans, considered that the above plans needed overall modifications in the form of Revised Master Plan for the entire Hyderabad Urban Development Authority area. Therefore, Government after careful examination of the matter have proposed to make extensive modifications to the above said Master Plan and Zonal Development Plans in the form of overall modifications to the above said Master Plan / Zonal Development Plans as provided under section 12 (2) of the Andhra Pradesh Urban Areas (Development) Act, 1975;

3. And whereas Government, while exercising the powers conferred under section 56 (2) of the Andhra Pradesh Urban Areas (Development) Act, 1975 (Act-1 of 1975), issued orders in G.O.Ms.No.22 MA & UD Department, dated 22.01.2003 delegating the powers to Vice Chairman, Hyderabad Urban Development Authority to prepare the revised Master Plan in the form of an overall modification to the Master
Plan and Zonal Development Plans and publish the same for inviting the objections and suggestions from the public;

4. And whereas, in pursuance of the above orders, the Vice Chairman, Hyderabad Urban Development Authority has prepared the Draft Revised Master Plan comprising of 18 Zones covering the Non-MCH area of Hyderabad Urban Development Authority jurisdiction (i.e., excluding the erstwhile MCH area and newly extended HUDA areas the plans for which are being taken up separately by HUDA) along with the Land Use Zoning, Building & Layout Regulations and published the same in News Papers inviting objections and suggestions from the Public. After examining and considering the objections and suggestions received from public on the proposed Draft Revised Master Plan, the Vice Chairman, Hyderabad Urban Development Authority, vide his letter Nos. 11109/P/H/RMP/02, dated: 19-04-2005, 11109/H/RMP/02, Dated: 22-07-06 and 11109/H/RMP/2002, dated: 11-12-08 has submitted the comprehensive Revised Draft Master Plan along with the Land Use Zoning, Building & Layout Regulations for approval of the Government.

5. And whereas, after examining the above draft Master Plan comprising of 18 Zones, Government have directed the VC-HUDA to make certain modifications / incorporations in the draft revised Master Plan like (i) to delete multiple use zone proposed in the areas covered by the G.O. Ms. No. 111 MA dated 03-03-1998; (ii) to incorporate the areas identified for 22 proposed Satellite Townships along and around the proposed Outer Ring Road; (iii) to earmark High-rise development zone along the MMTS / MRTS corridors; (iv) to demarcate 10 proposed routes of MRTS with clear Right of Way; (v) to delineate specific areas as Sky Crapper Zone as envisaged in the G.O. Ms. No. 86, dated: 03.03.2006; (vi) to remove the Solid Waste Disposal sites which do not conform to the Government of India guidelines; (vii) to incorporate the Outer Ring Road alignment; and (viii) recent modifications made by Government in the Master Plan/ Zonal Development Plans and submit the same to Government for approval. Accordingly, the V.C., HUDA has submitted the draft Master Plan to the Government for approval.

6. And whereas Government, after careful consideration of the matter, have proposed to approve the above Revised Draft Master Plan which is an extensive modification to the present Master Plan / Zonal Development Plans which were approved as given in para (1) above along with Land Use Zoning, Building & Layout Regulations, as submitted by Hyderabad Urban Development Authority, in exercise of the powers conferred under section 12 (2) of Andhra Pradesh Urban Areas (Development) Act, 1975 read with rule 13-A of the Urban Development Authority (Hyderabad) Rules, 1977;

7. And whereas, since the above modifications were extensive and major in nature, and there was considerable time gap from the date of first notification issued by the HUDA, Government have decided to issue a fresh notification inviting objections / suggestions on the draft revised Master Plan and Land Use Zoning, Building & Layout Regulations.

8. Accordingly, a notification has been published in the Extraordinary issue of A.P. Gazette dated 31.05.2007 as required under sub-section (3) of section 12 of Andhra Pradesh Urban Area (Development) Act, 1975 inviting objections and suggestions on the above Draft Revised Master Plan comprising of 18 Zonal
segments and the Land Use Zoning, Building & Layout Regulations for non-MCH area of Hyderabad Urban Development Authority jurisdiction (excluding the erstwhile MCH area and the newly extended area of Hyderabad Urban Development Authority).

9. In response to the above notification, a number of objections / suggestions have been received from the public and various institutions and organizations with regard to certain land uses, road widths and road alignments along with some general suggestions on improving the quality of Draft Master Plan.

10. And whereas Government, after careful examination of the objections and suggestions received, decided to make certain modifications to the said notified Draft Revised Master Plan comprising of 18 Zonal Segments as shown in the Annexure – II to this order. Further, since new buildings byelaws as applicable to HUDA areas issued in G.O.Ms.No. 86, MA&UD (M) Deptt, dated: 03-03-2006 have removed height restrictions in buildings, the proposed High Rise and Sky-scraper zones have been omitted and lands earmarked for these zones shall be restored to their earlier uses as suggested prior to earmarking these for the High Rise and Sky-scraper zones.

11. Now, therefore, in exercise of the powers conferred by sub-section (2) of Section 12 of A.P. Urban Areas (Development) Act, 1975 (Act–1 of 1975), Government hereby approve the Revised Master Plan comprising of 18 Zonal Segments covering the Non-MCH area of HUDA (excluding the erstwhile MCH Area and the newly extended area of HUDA) along with the Land Use Zoning, Building and Layout Regulations specified in Annexure – I to this order with the modifications specified in Annexure – II to this order and also all the change of land uses and road alignments ordered by Government from time to time in the interregnum period.

12. The Land Use Plans, Zoning and layout regulations and copy of Report can be seen in the Office of the Vice-Chairman, HUDA during the office hours till such time these are printed and made available for General Public.

S.P.SINGH
PRINCIPAL SECRETARY TO GOVERNMENT

SECTION OFFICER
ANNEXURE-I
(G.O. Ms. No. 288, MA & UD (I) Department, Dated: 3-4-2008)

LAND USE ZONING, BUILDING AND LAYOUT REGULATIONS

I. LAND USE ZONING REGULATIONS

The Land Use Zoning Regulations contain the following classification of land uses:

1) RESIDENTIAL ZONE
2) COMMERCIAL ZONE
   - RETAIL
   - WHOLESALE
3) MANUFACTURING ZONE
4) PUBLIC AND SEMI-PUBLIC ZONE
5) MULTIPLE USE ZONE
6) PUBLIC UTILITIES
7) OPEN SPACE ZONE
8) CONSERVATION ZONE
9) FORESTS
10) WATER BODIES
11) SPECIAL RESERVATIONS
    - HERITAGE BUILDINGS AND AREAS
    - MILITARY LANDS
    - OTHERS
12) TRANSPORTATION AND COMMUNICATION ZONE
    - ROADS
    - RAILWAYS
    - AIRPORTS
    - BUS DEPOTS AND TRUCK TERMINALS

Uses permitted and prohibited in different categories of land use zones are described against each. The uses are not to be treated as exhaustive. Similar uses and activities may be permissible in the appropriate locations by the HUDA Board and shall be subject to such restrictions and conditions as may be imposed.

1. RESIDENTIAL ZONE.
<table>
<thead>
<tr>
<th>SL. NO</th>
<th>CATEGORY</th>
<th>USES PERMITTED on all locations</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RESIDENTIAL</td>
<td>• All types of residential buildings</td>
<td>heavy, large and extensive industries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• hostels &amp; boarding houses</td>
<td>obnoxious and hazardous industries</td>
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<tr>
<td></td>
<td></td>
<td>• Group housing / Apartment Complexes</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• police posts</td>
<td>warehousing</td>
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<tr>
<td></td>
<td></td>
<td>• colleges</td>
<td></td>
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<td></td>
<td></td>
<td>• fire stations</td>
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<td></td>
<td></td>
<td>• schools</td>
<td></td>
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<td></td>
<td></td>
<td>• guest houses</td>
<td>storage godowns of perishables, hazardous and inflammable goods</td>
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<td></td>
<td></td>
<td>• research institutes</td>
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<td></td>
<td></td>
<td>• convenience shopping</td>
<td>workshops for buses etc.</td>
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<tr>
<td></td>
<td></td>
<td>• night shelters</td>
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<td></td>
<td></td>
<td>• doctors clinics and dispensaries</td>
<td>slaughter-housing</td>
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<td>• dharamshalas</td>
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<td></td>
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<td>• health facilities with not more than 20 beds</td>
<td>wholesale mandis</td>
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<td></td>
<td></td>
<td>• petrol pumps</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• professional offices</td>
<td>hospitals treating contagious and infectious diseases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• motor vehicle repairing workshops/garages</td>
<td>Sewage treatment plant/disposal work</td>
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<td></td>
<td></td>
<td>• other educational buildings other than professional colleges/institutions</td>
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<td></td>
<td></td>
<td>• hotels on plots of above 2000 sq. meters and abutting road of minimum width of 18 meters</td>
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<td></td>
<td></td>
<td>• community centres</td>
<td>water treatment plant</td>
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<tr>
<td></td>
<td></td>
<td>• auditoriums</td>
<td>solid waste dumping yards</td>
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<td></td>
<td></td>
<td>• foreign missions</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• religious premises</td>
<td>outdoor games stadium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• function halls on plots above 3000 sq. meters and abutting road of minimum 18 meters width</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• weekly markets</td>
<td>indoor games stadium</td>
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<tr>
<td></td>
<td></td>
<td>• bakeries and confectioneries</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• library</td>
<td>shooting range</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• auditoriums</td>
<td>zoological garden</td>
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<tr>
<td></td>
<td></td>
<td>• gymnasium</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• parks/foots</td>
<td>botanical garden</td>
</tr>
</tbody>
</table>
8

<table>
<thead>
<tr>
<th>Commercial Zone</th>
<th>Maximum Floor Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic printing press</td>
<td>international conference centre</td>
</tr>
<tr>
<td>plant nursery</td>
<td>Courts of law</td>
</tr>
<tr>
<td>technical training centre</td>
<td>Reformatory</td>
</tr>
<tr>
<td>bus depots without workshop</td>
<td></td>
</tr>
<tr>
<td>yoga centres/health clinics</td>
<td></td>
</tr>
<tr>
<td>cinema halls on plots above 3000 sq. meters and abutting road of minimum 18 meters width</td>
<td></td>
</tr>
<tr>
<td>exhibition and art gallery</td>
<td>storage of gas cylinders</td>
</tr>
<tr>
<td>retail shopping centres</td>
<td>All other uses not mentioned in Col 1</td>
</tr>
<tr>
<td>banks</td>
<td></td>
</tr>
<tr>
<td>transit visitors camp</td>
<td></td>
</tr>
<tr>
<td>police stations</td>
<td></td>
</tr>
<tr>
<td>municipal, state and central government offices</td>
<td></td>
</tr>
<tr>
<td>taxi stand/three wheeler stands</td>
<td></td>
</tr>
<tr>
<td>burial-grounds/ Cremation ground</td>
<td></td>
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<tr>
<td>electrical distribution station</td>
<td></td>
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<tr>
<td>water pumping station</td>
<td></td>
</tr>
<tr>
<td>post offices</td>
<td></td>
</tr>
<tr>
<td>games facilities of local nature both indoor and outdoor</td>
<td></td>
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<tr>
<td>public utilities and buildings except service and storage yards</td>
<td></td>
</tr>
<tr>
<td>clubs</td>
<td></td>
</tr>
<tr>
<td>computer software units /IT Enabled Services</td>
<td></td>
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<tr>
<td>restaurants/eating places</td>
<td></td>
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<tr>
<td>Showroom for sale &amp; distribution of LPGas</td>
<td></td>
</tr>
<tr>
<td>customary home occupation/household units</td>
<td></td>
</tr>
<tr>
<td>Bus stands</td>
<td></td>
</tr>
</tbody>
</table>

2. COMMERCIAL ZONE
<table>
<thead>
<tr>
<th>SL. No.</th>
<th>CATEGORY</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMMERCIAL ZONE: Retail and Wholesale</td>
<td>- retail shops and retail shopping centers, Shopping Malls, offices, hotels, banks, function halls on plots of minimum 3000 sq m and abutting road width of minimum 18 meters, stock exchange/financial institutions, cinema halls and multiplexes, bakeries and confectionaries, health facilities with maximum 200 beds, guest houses, wholesale trade/markets, restaurants, godowns and warehousing, repair garages, weekly market, non polluting non-obnoxious light industries, petrol pumps, timber yards, hostel/boarding houses, bus and truck depots, colleges, gas installation and gas works, all health facilities, polytechnic and higher technical institutes, religious places, junk yards, post offices, water treatment plant, multistorey parking complexes, railway yards/stations, research/training institute, sports/stadium and public utility installations, service centres/garages/workshops, religious buildings, weekly / informal markets, all residential uses, library.</td>
<td>hazardous and extractive industrial units, hospitals/research laboratories, treating contagious diseases, poultry farms/dairy farms, slaughter-houses, sewage treatment/disposal sites, storage of perishable and inflammable commodities, reformatory, all activities which cause nuisance and are noxious and obnoxious in nature.</td>
</tr>
</tbody>
</table>
Managing Urban Growth using the Town Planning Schemes in Andhra Pradesh

10

- conference centers
- parks/open space
- courts
- museum
- sports and related facilities
- police stations/posts
- Fire Station
- clubs
- taxi stand/three wheeler stands
- parking sites
- telephone exchange
- research institutions
- computer software units /IT Enabled Services

Note: Special Commercial Zones Along All Highways, Ring Roads, Radial Roads And Expressways (Upto a depth of 80 M after proposed Right of Way of road) wherever Indicated on the plan; are conditional. These can be used subject to the following conditions:

(i) Free handing over of land to local body/authority for widening of the road up to the proposed width.

(ii) Construction of service road

(iii) Access from property to road only through service road.

(iv) Conformity with provisions of Hyderabad Revised Building Rules, 2006
### 3. MANUFACTURING ZONE.

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>CATEGORY</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MANUFACTURING ZONE</td>
<td>• all kinds of industries</td>
<td>• Residential dwellings other than those essential for operational and watch and ward staff</td>
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<tr>
<td></td>
<td></td>
<td>• Residential buildings for essential staff and for watch and ward</td>
<td>• schools and colleges</td>
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<tr>
<td></td>
<td></td>
<td>• obnoxious and hazardous industries except storage of perishable and inflammable goods</td>
<td>• hotels</td>
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<td></td>
<td></td>
<td>• public utilities</td>
<td>• All other uses not mentioned in Col I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• junkyards</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• parking of vehicles</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• sports/stadium/playgrounds</td>
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<td></td>
<td></td>
<td>• loading and unloading spaces</td>
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<td></td>
<td></td>
<td>• sewage disposal works</td>
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<td></td>
<td></td>
<td>• warehousing</td>
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<tr>
<td></td>
<td></td>
<td>• electric power plants</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• storage and depot of non-perishable and non-inflammable commodities and incidental use</td>
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<td></td>
<td></td>
<td>• service stations &amp; repair garages</td>
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<td></td>
<td>• cold storage and ice factory</td>
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<td></td>
<td>• crematoria</td>
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<td></td>
<td>• gas godowns, godowns &amp; warehousing</td>
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<tr>
<td></td>
<td></td>
<td>• government/semi-government/private business offices</td>
<td></td>
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<td></td>
<td></td>
<td>• bus terminal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• banks and financial institutions</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• bus depot and workshop</td>
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<td></td>
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<td>• helipads</td>
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<tr>
<td></td>
<td></td>
<td>• wholesale business establishments</td>
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<td></td>
<td></td>
<td>• religious buildings</td>
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<td></td>
<td></td>
<td>• taxi stands</td>
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<tr>
<td></td>
<td></td>
<td>• parks and playgrounds</td>
<td></td>
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<td></td>
<td></td>
<td>• gas installations and gas works</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• health facilities incidental to main uses</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• animal racing or riding stables</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• restaurants</td>
<td></td>
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<td></td>
<td></td>
<td>• workshops/gerages</td>
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<tr>
<td></td>
<td></td>
<td>• computer software units /IT Enabled Services</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• dairy and farming</td>
<td></td>
</tr>
</tbody>
</table>
4. PUBLIC AND SEMIPUBLIC ZONE.

<table>
<thead>
<tr>
<th>SI. No.</th>
<th>CATEGORY</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
</table>
|         | PUBLIC AND SEMIPUBLIC ZONE | • offices  
• universities and specialised educational institutions  
• residential plotted or group housing for staff / employees as incidental to the main use  
• colleges  
• open air theatre  
• schools  
• clubs  
• research and development centres  
• guest house  
• social and welfare centres  
• bank  
• libraries  
• museum  
• hospitals  
• hostels  
• health/primary centres  
• water supply installations  
• dispensaries  
• sewage disposal works  
• clinics and laboratories  
• service stations  
• social and cultural institutions  
• railway stations/yards  
• religious buildings/centres  
• polytechnics  
• conference halls  
• cultural and religious buildings  
• community halls  
• bus/truck terminals  
• dharam shala  
• warehouses/storage godowns  
• museums/art galleries  
| | • heavy, extensive and other obnoxious and hazardous industries  
• slaughter houses  
• junk yards  
• wholesale markets  
• dairy and poultry farms  
• farm houses  
• workshops for servicing and repairs  
• processing and sale of farm products and uses not specifically permitted herein  
| | All other uses not mentioned in Col I |
5. MULTIPLE USE ZONE.

<table>
<thead>
<tr>
<th>SL NO</th>
<th>Land use categories</th>
<th>USES PERMISSIBLE</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MULTIPLE USE ZONE</td>
<td>All activities except Industries</td>
<td>All other types of industries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer software and Hardware units</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>function halls</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>cinema halls</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hotels</td>
<td></td>
</tr>
</tbody>
</table>

6. PUBLIC UTILITIES

<table>
<thead>
<tr>
<th>SL NO</th>
<th>Land use category</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PUBLIC UTILITIES

- Water supply, drainage, storm water, solid waste disposal, electricity, communication systems and related installations, Parking lots, Public utility buildings

### 7. OPEN SPACE ZONE

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>land use category</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN SPACE ZONE</td>
<td>• Regional parks</td>
<td>• Building and structures ancillary to use permitted in open spaces and parks, subject to the total ground coverage not exceeding 2%</td>
<td>Any building or structure which is not required for open air recreation, dwelling units except for watch and ward</td>
</tr>
<tr>
<td></td>
<td>• local parks</td>
<td>• playgronds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Building and structures ancillary to use permitted in open spaces and parks, subject to the total ground coverage not exceeding 2%</td>
<td>• commercial use of transit nature like circus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• children traffic parks</td>
<td>• camping grounds</td>
<td>• botanical/zoo logical garden</td>
</tr>
<tr>
<td></td>
<td>• restaurants as part of sports, recreational outdoor facilities not exceeding 5% ground coverage</td>
<td>• children traffic parks</td>
<td>• sports training centres</td>
</tr>
<tr>
<td></td>
<td>• picnic huts with built up area not exceeding 2%</td>
<td>• open air cinemas/auditoria</td>
<td>• specialised parks/maidans for multi-use</td>
</tr>
<tr>
<td></td>
<td>• open air cinemas/auditoria</td>
<td>• bird sanctuary</td>
<td>• swimming pools with built up areas not exceeding 2% of total area</td>
</tr>
<tr>
<td></td>
<td>• bird sanctuary</td>
<td>• outdoor sports stadiums</td>
<td>• public &amp; institutional libraries with total built up area not exceeding 2% of total site</td>
</tr>
<tr>
<td></td>
<td>• outdoor sports stadiums</td>
<td>• holiday resorts with ground coverage not exceeding 2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• holiday resorts with ground coverage not exceeding 2%</td>
<td>• shooting range</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• shooting range</td>
<td>• sports training centres</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• sports training centres</td>
<td>• specialised parks/maidans for multi-use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• specialised parks/maidans for multi-use</td>
<td>• swimming pools with built up areas not exceeding 2% of total area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• swimming pools with built up areas not exceeding 2% of total area</td>
<td>• public &amp; institutional libraries with total built up area not exceeding 2% of total site</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** On sites specifically indicated as parks, playgrounds or Green Belt Project, no other activity except the specified use shall be allowed.
8. CONSERVATION ZONE

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>Land use categories</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONSERVATION ZONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• agriculture</td>
<td>Residential use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• horticulture, floriculture, forestry</td>
<td>except those ancillary uses</td>
</tr>
</tbody>
</table>
|        |                     | • sewage disposal works and public utility facilities | permitted in
|        |                     | • poultry and dairy farm | agricultural use zone
|        |                     | • electric power plant | subject to 2% ground coverage
|        |                     | • agro based cottage industries without use of power | The activities
|        |                     | • quarrying | mentioned in Col I
|        |                     | • storage, processing and sale of farm produce | are not allowed in the
|        |                     | • petrol and other fuel filling stations | prohibited areas
|        |                     | • public utilities | mentioned in
|        |                     | • Dwellings and ancillary buildings for the people engaged in the farm (rural settlement) subject to a maximum height of 7 meters and maximum ground coverage of 10% with minimum land extent of one acre. | G.O.Ms. 111 MA
|        |                     | • milk chilling stations and pasteurisation plants | dt.8-3-1996
|        |                     | • Transport and communication facilities | |
|        |                     | • Village settlement expansion | |

9. FORESTS ZONE

(i) This zone indicates all Reserved Forests as notified by the Forest Department
(ii) No activity other than forest is permitted in this zone unless expressly allowed by the Forest Department.

10. WATER BODIES.

Water Bodies Zone generally indicates all existing water bodies, rivers, streams, lakes, tanks and kuntas as indicated in the topographical sheets published by the Survey of India, the State Irrigation Department or revenue or other competent authorities. The boundary of the water bodies relate to the Full Tank Level as indicated in relevant maps, covering both perennial and non perennial parts when such distinction exists.

In Water Body Zone no construction is permitted in the water-spread and the buffer belt of minimum 30 meters around the FTL. The only exception is fishing, boating, and picnics along the banks provided that only construction allowed is open to sky jetties for boating,
platforms for fishing and rain shelters and snack bars each not exceeding 10 sqm in area and not exceeding four in numbers around one water body.

11. SPECIAL RESERVATIONS.

(i) HERITAGE BUILDINGS AND AREAS

a) Heritage Buildings and areas shall indicate the location of notified Heritage Buildings and will indicate the boundaries of notified Heritage Precincts.

b) In Heritage Buildings and Heritage Precincts, it is necessary to obtain specific clearance from HUDA, after consultation by Heritage Conservation Committee before undertaking certain kinds of development and redevelopment as specified by the Government or issued as specific guidelines. Special exemption from land use controls are allowed subject to approval from the Government in the interest of conservation of the Heritage Buildings.

c) The Heritage Regulations issued vide GOMs No. 542, MA dated 14-12-1995 and other relevant orders/amendments issued by the Government from time to time shall be applicable.

(ii) MILITARY LANDS.

Military Lands are lands under occupation of the Defense Services or otherwise earmarked for defense services. These cannot be put to other uses. The areas covered by Defense lands and certain adjoining areas as may be specifically notified, may be subjected to restrictions on constructions or on the use of lands in the interest of safety and security of the defense services or the civil population living in the contiguous areas.

(iii) OTHERS

Any other Special Reservations earmarked in the Master Plan.

(iv) Bio Conservation Zone

The developments in the Bio Conservation zone shall be strictly in accordance with the provisions of G.O.Ms.No.111 M.A dated 8-3-96, and as per the regulations/stipulations issued by the Government from time to time.

12. TRANSPORTATION AND COMMUNICATION ZONE.

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>CATEGORY</th>
<th>USES PERMITTED</th>
<th>USES PROHIBITED</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>TRANSPORT AND COMMUNICATION ZONE</td>
<td>• Road transport terminals (bus terminals and depots)</td>
<td>Use/activity not specifically permitted herein.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• goods terminals</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Any other use/activity incidental to transport and communication</td>
<td></td>
</tr>
</tbody>
</table>
II. BUILDING REGULATIONS:

The Hyderabad Revised Building Rules, 2006 issued vide G.O.Ms.No.86, M.A. & U.D. (M) dated 03-03-2006 and as amended by the Government and other instructions issued or to be issued by the Government from time to time shall be followed.

III. LAYOUT AND LAND SUB-DIVISION REGULATIONS, 2008

1. Assemblage of land requirements:

   (i) Land development in HUDA area would be promoted and facilitated in any of the following manner:

       (a) Land Pooling or Township Development Scheme
       (b) Layout Development Schemes
       (c) Group Housing Schemes/Cluster Housing
       (d) Individual plot sub-division/amalgamation

   (ii) Excepting in cases of 1.0 (d) above, no Assemblage of land for development shall be permitted unless such a scheme or layout development is undertaken through a licensed developer, i.e.,

   (iii) Land Pooling Scheme or township development should be a self-contained township planned and developed through a licensed developer/firm/development Company together with work place and places of residence with all attendant facilities and amenities in such township and in accordance with the approved township policy of the Government.

   (iv) Layout development scheme may be permitted for residential, commercial, industrial, institutional, recreational and truck terminal/traffic node and other activities like Corporate Townships, etc. subject to the compliance of these regulations and development specifications of HUDA.
(v) Individual plot sub-division/amalgamation would be allowed only in case of plots forming part of approved Land Pooling Schemes or layouts approved by the Competent Authority.

(vi) All land assemblage developments as mentioned above would be considered only if:

a. The proposed Scheme or development conforms to the Statutory Master plan and the rules/regulations and conditions governing such development requirements like:

i. All facilities and services like roads, storm water drainage, water supply, electricity, landscaping and greenery, rainwater harvesting structures, and provisions of other public utilities, are provided and developed.

ii. Comply with the obligations and conditions for implementation of the Statutory Master Plan roads and other communication network system and the area of land so affected is surrendered free of cost to HUDA after development.

2. Undertaking of Land Pooling Schemes:

Land Pooling Schemes may be undertaken either by public authority or licensed private developers, provided the area of such a Scheme is not less than 20 Hectares. These shall apply to all new areas and greenfield sites. These shall be subject to the following:

(i) The lands covered by such land pooling scheme shall be contiguous and approachable by an existing black-topped road of 18 mts (60 feet) – where such a road does not exist the developer shall first provide for the same at his own cost; apply with copies of necessary ownership documents, Revenue sketches, etc. of the site;

(ii) A Joint Undertaking between the owners, licensed developer, qualified technical personnel for provision and compliance of the services and facilities;

(iii) Apply to the Competent Authority for necessary development permission as prescribed and in accordance with these Regulations;

(iv) Carry out all the development works and facilities as per specifications and standards.

(v) The owner and licensed developer are required to mortgage 25% of the saleable land to HUDA as surety for carrying out the developments and complying other conditions in the given time period, in the failure of which, the HUDA shall be empowered to sell the mortgaged plots and utilize the amount so realized for completing the development works. In such an eventuality the developer his associates and the engineer/architect shall be black-listed and not be allowed to undertake development works in the HUDA area.

(vi) The owner shall be entitled to dispose off the non-reserved sites and non-mortgaged plots.

(vii) The owner shall hand over the specific sites stated in Regulation 3 (iii), (v) and (vi) below to the HUDA free of cost and encumbrances before undertaking development as per the approved plans.

3. Any Land Pooling Scheme shall make for the following provisions:
Managing Urban Growth using the Town Planning Schemes in Andhra Pradesh

19

(i) Comply with the hierarchy of road network requirements as given in these Regulations;
(ii) Earmark at least 1/3rd of total land area for Work center which may include activities like commercial/offices/ market/ Information Technology Enabled Services (ITES) / Light industries/ Service industries/ Transportation Node activities/ Recreation based activities and Amusement.
(iii) Minimum of 10% of total area for parks, playgrounds, open spaces and properly distributed within the Scheme and shall be of regular shape;
(iv) 2.5% for social infrastructure such as schools, dispensary/hospital, public utilities spaces, shopping centres and other community spaces and earmark specific sites for bus stands, auto stands, garbage collection points, etc. These could be planned as part of the area earmarked for Work center mentioned in (b) above;
(v) 5% for sale by HUDA for residential/commercial use and as per location decided by the Competent Authority;
(vi) 5% reservation of land for the purpose of providing housing accommodation for Economically Weaker Sections (EWS)
(vii) 10% of the total land is earmarked for Lower Income Group (LIG) Housing with maximum plot size upto 100 sqm
(viii) 10% of the total land is earmarked for Middle Income Group (MIG) Housing with maximum plot size upto 100 sqm
(ix) The owner shall develop and dispose of the areas earmarked for LIG and MIG given in (vii) and (viii) above. No amalgamation of plots in such blocks shall be allowed.

4. There is no restriction on the plotted area. The balance area of saleable area shall clearly give the type of housing development that would be undertaken viz., detached houses, semi-detached houses, row type houses, duplex housing, condominiums, apartment complexes, cluster housing, etc or a mix of all or combination of the above. For each of the above, separate utilities and services plans and building type designs as required under these regulations shall be got approved and development and civil works undertaken as per approved plan and conditions. Approval would be considered for these as a comprehensive approval as a project in which not only the layout and development specifications and conditionalties are covered but also the approval of individual blocks, buildings, scheme for development of on site infrastructure facilities and amenities, etc are also included. The owner shall be entitled to dispose off non-reserved sites and non-mortgaged sites either as plots or as developed houses.

5. Maintenance to be under a single body:

The Land pooling Scheme developed shall be under the overall control and management of a single management body who shall be responsible for the maintenance and upkeep of the common facilities, greenery and the township.

6. Layout development schemes:

Layout provisions shall primarily apply to interstitial pockets of lands and redevelopment schemes, plots sub-divisions, and those areas not covered in land pooling schemes.

The owner of any land or groups of owners/developers who intend to sub-divide or layout the land in such areas into building plots shall:
(i) Apply along with a licensed developer to the Competent Authority for necessary layout permission as prescribed and in accordance with these Regulations;
(ii) Apply with copies of necessary ownership documents, Revenue sketches, etc. of the site;
(iii) Carry out the layout development works as per specifications and standards.
(iv) The owner and licensed developer are required to mortgage 25% of the salable land to HUDA as surety for carrying out the developments and complying other conditions in the given time period, in the failure of which, the HUDA shall be empowered to sell away the mortgaged plots and utilize the amount so realized for completing the development works. In such an eventuality the developer his associates and the engineer/architect shall be black-listed and not be allowed to undertake development works in the HUDA area.
(v) The owner shall hand over the specific sites stated in Regulation 8 (ii), (iii) and (iv) below to the Competent Authority free of cost and encumbrances.

7. Plot sub-divisions/Amalgamation requirements:

(i) No plot sub-division/amalgamation shall be allowed unless these are permitted by the Competent Authority. No building permission shall be entertained unless such a sub-division permission is obtained first from HUDA.
(ii) The abutting road requirements, minimum plot size and other requirements shall be in conformity with the Hyderabad Revised Building Rules, 2006.
(iii) However, for a plot abutting existing major roads or highways, no plot subdivision/amalgamation permission is necessary.
(iv) Such a site shall be minimum 125 sq mtrs with a minimum frontage of 9 m and abutting road shall be 9 m for residential and 12 m for other non-residential uses.
(v) The minimum access permitted in case of sub-division of plots shall be 3.6 m for residential and 6 m for non-residential plot sub-divisions.
(vi) Pro-rata open space charges (equivalent to 10% of the total layout/colony area) is required to be paid where there are no open spaces or shortfall.

8. Minimum area & other requirements for Layout Development:

The minimum area for layout application shall be 4 hectares. Owners of sites less than 4 hectares have to jointly apply so as to conform to the minimum land area. The layout proposals shall provide for the following:

(i) Comply with the hierarchy of road network requirements as given in these Regulations;
(ii) Earmark minimum of 10% of total area for parks, playgrounds, open spaces,
(iii) Reservation of 5% of total area to be given free of cost to HUDA for disposal for residential/commercial use
(iv) 5% reservation of land for the purpose of providing housing accommodation for EWS.
(v) Earmark 2.5% for social infrastructure such as schools, dispensary/hospital, public utilities spaces, shopping centres and other community spaces;
(vi) Earmark specific sites for bus stands, auto stands, garbage collection points, etc.
(vii) 10% of the total land is earmarked for Lower Income Group (LIG) Housing with maximum plot size upto 100 sqm
(viii) 10% of the total land is earmarked for Middle Income Group (MIG) Housing with maximum plot size upto 100 sqm
(ix) The owner shall develop and dispose of the areas earmarked for LIG and MIG given in (vii) and (viii) above. No amalgamation of plots in such blocks shall be allowed.
(x) The owner shall be entitled to dispose off the non-reserved sites and non-mortgaged sites either as plots or as developed houses/buildings. The owner shall hand over all the above reserved sites at (iii) and (iv) to HUDA free of cost.
(xi) HUDA shall have the discretion of grouping the areas surrendered for LIG/EWS Housing at one place or elsewhere and disposing the area earmarked for EWS in the layout as normal building plots.
(xii) Residential enclaves may be permitted only if a through public road of width as specified in Regulation 9 is developed at the periphery for the convenience of accessibility of other sites and lands located in the interior.

9. **Hierarchy and width of roads required in Land Pooling/layout schemes:**

Land Pooling Scheme requirements shall conform with Regulation 2 and 3 above. In case of layouts and sub-division of land for building purpose shall be carried out only in accordance with the provisions of Regulation specified below:

(i) The layout shall have an approach from existing public or private roads of width not less than 9 metres which shall be black-topped.

The width of the internal roads in a land pooling/layout scheme for different purposes shall be regulated as follows:

<table>
<thead>
<tr>
<th>Road length (in Mt.)</th>
<th>Width of road for normal residential plot/use (in mt.)</th>
<th>Width of road for commercial, Group Housing, Industrial, other non-residential plot/use or for mixed use (in mt.)</th>
<th>Other requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 300</td>
<td>9.00</td>
<td>12.2</td>
<td>Utilities and services to be underground and located preferably under the footpaths and not under the main carriageway</td>
</tr>
<tr>
<td>Above 300 &amp; up to 500</td>
<td>12.2</td>
<td>15.0</td>
<td>-Do-</td>
</tr>
<tr>
<td>Above 500 &amp; less than 1000</td>
<td>16.0</td>
<td>16.0</td>
<td>-Do- &amp; mountable Road Divider essential</td>
</tr>
<tr>
<td>1000 and above</td>
<td>36.00</td>
<td>36.00</td>
<td>Median and Service road development essential; Utilities and services to be underground and located preferably on service roads and under the footpaths and not under the main carriageway</td>
</tr>
</tbody>
</table>
10. **Splay at Road junctions:**

Splay at road junctions shall be provided as prescribed below:

- 3.0 m x 3.0 m offset/splay if the width of the road is 9.00 m or less;
- 4.5 m x 4.5 m offset/splay if the width of the road is above 9.00 m but less than 18 m
- 6.0 m x 6.0 m offset/splay if the width of the road is more than 18 m in width

The area of such splay would be deemed to form an integral part of the road junction.

11. **Development for EWS Housing:**

These shall be permitted as group Housing and not as individual plotted developments. The norms and specifications of development shall be as given by the AP Housing Corporation Ltd/ A.P. Weaker Section Housing Programme/Government issued from time to time.

12. **Group Housing Schemes/Group Development Schemes:**

   (i) Such type of developments shall be in accordance with the provisions of the Hyderabad Revised Building Rules, 2008.

   (ii) In such type of developments in sites 4000 sq m and above:

   - a. at least 10% of the total built up area/dwelling units shall be developed for EWS dwelling units with a maximum plinth area of 20 sq m for each unit
   - b. at least 5% of the total built up area/dwelling units shall be developed for LIG dwelling units with a maximum plinth area of 40 sq m for each unit;
   - c. at least 5% of the total built up area/dwelling units shall be developed for MIG dwelling units with a maximum plinth area of 60 sq m for each unit
   - d. The areas mentioned in (a) to (c) above, shall be allotted/disposed off only for these categories. No amalgamation of units shall be allowed.

13. **Application for Permission:**

*For Land Pooling Scheme/Layout development:*

Every licensed developer or body who intends to carry out development work or undertake assemblage/ parceling of land into plots, or layout activity or Group Housing Scheme/Cluster Housing Scheme or subdivide or make material alterations shall apply in writing to the Vice-Chairman, Hyderabad Urban Development Authority of such intention in the Form prescribed in Annexure A and the application for any such permission shall be accompanied by Plans and statements in original ( drawn on any durable medium) plus four prints along with copy of the ownership documents of the plot/property/land concerned and payment of prescribed application fees and charges.
14. **The Application for permission for a Land pooling Scheme or layout development shall be accompanied by**

i) a site plan drawn to scale of not less than 1:500 showing all physical details of the land, boundaries of the land, the surrounding lands, airport zoning safety & obstacle limitation surfaces and existing approach road to the land where the layout is proposed;

ii) a Layout Plan (in required number of copies) drawn to a suitable scale preferably on 1:1000 for Land Pooling Schemes and 1:600 for layout applications, showing boundaries of land, sub-division of the land into building plots/ uses with dimensions and area of each plot and its uses as per these regulations; width of the proposed streets/roads; dimensions and areas of open space provided according to these regulations; dimensions and areas to be set apart for EWS housing, area for social and cultural amenities, and area to be handed over to HUDA in case of a Land pooling Scheme;

iii) Certificate of Undertaking in prescribed Form jointly by owner, licensed developer and Licensed surveyor/engineer for carrying out the development works as per standards.

iv) A topographical plan drawn to scale with contours and indicating the proposed location of the water supply system, drainage and sewerage network and other utilities of the proposed scheme

v) Land development schemes involving housing construction activity/civil works, the building type designs together with the details of facilities proposed to be provided shall be submitted. Such Land Pooling Schemes shall be prepared and signed by a qualified town planner

Provided that before submission of such an application, pre-application consultation shall be undertaken by the licensed developer/body with the Chief Planning Officer of HUDA prior to the formal filing of an application for approval of a Land Pooling Scheme or layout development scheme. This step does not require formal application or the payment of a fee. When submitted, this Sketch Plan shall show in simple sketch form the proposed Land Pooling Scheme and layout of streets, roads, location of amenities, open spaces and other features in relation to existing conditions.

Within fifteen (15) days, the Chief Planning Officer shall inform the licensed developer wherein the plans and data as submitted or as modified do or do not meet the objectives of the master plan/these Regulations and shall inform the licensed developer as to how said objectives may be met. Any such consultation or advise by HUDA shall not constitute approval or be binding on HUDA.

15. **Sanction or Refusal of Permission:**

The Land Pooling Scheme or Layout plans/ building plans with drawings and specifications in accordance with these Regulations may be technically approved with or without modifications or directions as are deemed necessary or refused by
the Hyderabad Urban Development Authority within 60 days from the date of receipt of application.

Where no orders are communicated by the VC, HUDA of sanction or refusal of the permission, the HUDA shall deemed to have permitted the proposals and the owner may go ahead with the works after intimation and paying the requisite fees and charges to HUDA before undertaking such development, and provided, the same is in accordance with these regulations.

16. Payment of necessary fees and charges

The layout/Land Pooling Scheme applicant shall pay the necessary scrutiny fees and charges including development charges before receiving the tentative approved layout copy to VC, HUDA.
17. **Duration of Technical Approval:**

   The technical approval shall be valid as follows:
   
   - for land pooling scheme – 3 years
   - for layout development approval – 2 years

   during which time the land pooling scheme works/layout works/building construction shall be completed, and if not completed the permission for land pooling scheme/layout/building construction shall be revalidated on application subject to the requirements then in force.

   The revalidation fees shall be 50% of the scrutiny fees.

18. **Revoking of Permission:**

   HUDA or the Collector or the Government as the case may be, may revoke any permission issued under these regulations whenever it is found that there has been any error or false statement or any misinterpretation of any material fact or regulation on which the permission was sanctioned.

19. **Deviations during construction/undertaking of layout works:**

   If during the execution of any land pooling scheme/layout or building construction any deviation is made from the approved plan, the licensed developer/owner shall obtain revised approval by duly following the above-mentioned procedure.

20. **Responsibilities and Duties of Licensed developer/ Builder/Owner:**

   The licensed developer/builder/owner who has been given approval and the technical personnel shall be wholly and severally responsible for the quality of workmanship of the building/layout development works, and/or structural safety of the building and for ensuring safety during the construction/development works, and for complying with the conditions laid down in these Regulations and the approved plans/drawings.

21. **Obligations of the owner and licensed developer/builder/licensed technical personnel to implement and develop the Master Plan circulation network and specific land uses:**

   The owner and licensed developer/builder shall incorporate in the land pooling scheme or layout all Master Plan specific land uses and amenity areas like recreational buffer zone/Sector level open space and amenity space and road network and shall develop the Master plan roads as part of the land pooling scheme or layout at his cost. However, such area of Master Plan road alignment/recreational buffer zone/Sector level open space and amenity space shall be deducted from the total site area of the Land Pooling Scheme or layout. The proposals of the Scheme and the land utilization analysis would be taken on the remaining net area, and no fees and development charges and other charges are leviable for such Master Plan reservation areas and Master Plan circulation network.

22. **Scrutiny by the Authority and responsibilities of layout developer for providing services and facilities in the layout site:**
(i) Layout shall be finalised by the Planning Department on the proposals submitted by the applicant as per the notified Land Use and layout rules in force from time to time and also as per the conditions imposed in change of land use wherever applicable and should obtain the approval of Competent Authority.

(ii) A copy of such approved layout (unsigned) shall be handed over to the applicant for demarcation of plots and open spaces as shown in the plan on ground, only after payment of Development charges and processing charges etc., to HUDA by the applicant.

(iii) The applicant shall submit a layout plan showing the measurements of plots and open spaces along with the layout boundary measurements within a week from the date of receipt of information.

(iv) The layout plan as submitted by the applicant should be recorded by giving the L.P.No. ____________ (Layout Plan No., with year) i.e., year-wise separately and then the same will be forwarded to the concerned Local Authority for its release after obtaining the approval of Competent Authority (Vice-Chairman), along with earmarking 25% of plotted area in the layout plan duly imposing the following conditions that:

a) The applicant shall execute the Deed of Mortgage by conditional sale to HUDA as per rules.

b) The applicant shall solely be responsible for the development of layout and in no way HUDA will take up the development works.

c) The deed of mortgage by conditional sale executed by the applicant in favour of HUDA is purely a measure to ensure compliance of the condition of development of infrastructure by the applicant/developer and HUDA is in no way accountable to the plot purchaser in the event of default by the applicant/developer.

d) In case the applicant/developer fails to develop the layout area with the infrastructure facilities as specified by the HUDA, the area so mortgaged in favour of HUDA shall be forfeited and also HUDA is liable to take criminal action against such applicants/developers as per provisions of A.P.U.A. (D), Act, 1975.

e) The concerned Registrar of the Registration Department shall be informed by HUDA, duly enclosing a copy of layout plan indicating clearly the mortgaged area and the other plotted area, which can be permitted for sale by the applicants.

f) The deed of mortgage by conditional sale executed by the applicant is purely a measure to ensure compliance of the conditions of development of infrastructure by the applicant/developer and HUDA is in no way accountable to the plot purchaser in the event of default by the applicant/developer.
g) The Local Authority shall release such layout plan duly collecting the required fee and charges as per their rules and also imposing any condition on development of open spaces in the layout if necessary and the Local Authority shall also ensure taking possession of roads and open spaces in the layout.

h) The applicant shall take up the development of amenities such as formation of roads, drainage line with septic tank as per standards, electric lines including street lighting, water supply lines including overhead tank if necessary and Avenue plantation along the roads and in open spaces to the satisfaction of the HUDA within the stipulated period and the applicant shall submit a requisition letter to the said effect to HUDA for taking further action on release of mortgage plots/area which is in favour of Estate Officer, HUDA, duly handing over open spaces and roads to the concerned local authority.

i) In case the applicant does not want to take up the developmental works in layout as mentioned at item ‘h’ above, he may as well be permitted to pay the betterment charges to the Local Authority as per the rate prescribed by them or the actual cost of development as arrived.

j) The Local Authority shall open a separate account for each layouts, where the betterment cost has been paid by the applicant and the Executive Officer of Local Authority shall ensure to spend the amount for development of amenities in the same layout.

k) The concerned Executive Officer of Local Authority shall be responsible for any problems in future either from the residents of the same layout area or from any other person for non-implementation of amenities.

l) In case the applicant fails to implement Item ‘h’ above, the Vice-Chairman, HUDA is competent to take up auction of mortgaged plots/area without any further notice to the applicants and the amount so received in the auctioning of plots/area shall be spent for providing amenities in the same layout.

m) The applicants/owners of plots in the layout are not competent to question HUDA about the receipt of amount in the auction and also expenditure towards the developmental works.

n) The concerned local authority shall not approve and release any building permission or allow any unauthorised developments in the area under mortgage to HUDA in particular and in other plots of the layout in general until and unless the applicant has completed the developmental works/pay required betterment charges etc., to the Municipality and then got released the mortgage land from HUDA.

o) In case the said procedure is violated by the concerned local authority, stringent action will be taken up against the responsible officers as per rules.
p) Open areas shall be developed by the concerned developer along with other developments of the layout as per the directions of the Director, Urban Forestry, neatly with ornamental compound wall.

23. The licensed developer/owner while advertising/disposing the plots/blocks shall clearly state the above status or category of the Land Pooling Scheme/layout development with break up of infrastructure costs. In the case of Grade II development, the pricing shall clearly mention the infrastructure facilities provided and assurance of the time frame for completion of the full infrastructure facilities required.

S.P. SINGH
PRINCIPAL SECRETARY TO GOVERNMENT

SECTION OFFICER
ANNEXURE A


(Read the provisions of the HUDA Development Promotion Regulations for the conditionalities and requirements for permitting/undertaking such development)

FORM - A

To
The Competent Authority
Hyderabad Airport Development Authority
Secunderabad - 500 003.

Sir/Madam,

Application for (specify -- Land Pooling Scheme/Layout/Group Housing Scheme )

1. I/We hereby submit application for (specify - Land Pooling Scheme/Layout/Group Housing Scheme and permission to carryout development works in the site covered by Sy. No. ____________ of ____________ Village, ____________ Mandal, District admeasuring _______Ha/____ sq m / _______ Acres in accordance with section 13 & 14 of the A.P. Urban Areas (Dev.) Act, 1975.

2. I/We intend to undertake: (tick /specify which is applicable and strike out the ones not applicable.)
   a) Plotted layout development ;
   b) Residential colony development with Civil construction as per approved type design;
   c) Group Housing Scheme/ Cluster Housing Scheme with blocks of proposed residential / dwelling units with Civil construction as per approved type design;
   d) A mix of ________________ with Civil construction as per approved type designs ;

3. I/We hereby enclose the necessary building type designs drawn to scale and in accordance with the provisions of the Hyderabad Revised Building Rules,2006 (applicable only in case of (b) to (d).

4. The total extent of the site for the proposed development mentioned in 2 above is ___________ hectares ___________( acres).
1. The net area of the proposed development after deducting the area under the following Master plan roads: (a) ........................................... (b) ........................................... 

(c) ........................................... is _______ hectares _________

( acres).

6. I submit the following documents & Plans and particulars in respect of the above site proposed ____________ development (All copies of documents to be attested by a Gazetted Officer).

i) Ownership and one link document copy.
   a) Latest copy of the Pahani issued by Mandal Revenue Officer;
   b) Record of Rights pass Book/title deed for the proposed site.
   c) Registered documents for the proposed site.
   d) Copy of the Registered General Power of Attorney.
   e) Copy of the Non-Encumbrance Certificate for the past 13 years
   f) Copy of the Link Document

f) An affidavit declaring the total holding of the proposed site is within Urban ceiling limits by each owner (wherever applicable).

h) Court orders / decrees confirming ownership/U.L.C clearance (wherever applicable).

i) Revenue sketch of proposed site duly attested by Revenue Authorities.

ii) Location Plan of site and surrounding developments/lands drawn to a minimum metric scale of 1:1000 showing surrounding roads, electricity lines, approved layouts/Land Pooling Scheme/Group or Cluster Housing Scheme, drainage, sewerage etc. within 500 meters radius.

iii) A detailed surveyed topographical plan of proposed site for development to a metric scale of 1:600 showing the contours of the land at 2 meters intervals, nalis, drains, wells, trees, roads, electricity lines, sewer lines, etc.

iv) The proposed Land Pooling Scheme Land Pooling Scheme/Layout/ Group Housing Scheme pattern draw to a scale 1 : 600 (original in any durable medium like tracing cloth, film or reproduction tracing film, etc., & 3 sets of prints). Showing the following details:

a) The boundaries of the proposed site distinctly shown in red;

b) The proposed plots/blocks with clear dimensions (limited to 55 % of total site areas in case of layout applications).
c) The Public Open spaces of minimum 10% of the site area in one or more places and in centre of proposed site's blocks.

d) The area to be left for 5% EWS housing; 5% for HUDA in prominent location of the site with clear approach roads to these Blocks.

e) The area earmarked for 10% LIG Housing of total land area with clear approach road of 12.2 m.

f) The area earmarked for 10% of total land area for MIG Housing with clear approach road of 12.2 m.

e) The area for common amenities like, Overheard Water Reservoir, common septic tank areas, electricity Sub-station, Garbage disposal points etc., at proper locations (which shall be over & above area mentioned in (c) above).

e) The sites for social and community facilities (up to 2.5%) like Community Centre/ Shopping Centre/ Educational Center/ Medical Centre

(f) The proposed road network within the site and integrating with neighboring and surrounding road network and pattern, and incorporating the alignment of the statutory Master Plan roads and developing these as required as per the HUDA Development Promotion Regulations.

(g) The proposed channelization of natural drains & nalas with proper width and green belt buffer within the site as required as per the HUDA Development Promotion Regulations.

(h) Separate plans showing the proposed drainages, sewerage disposal system and water supply, supply system for the project as per BIS code & standards.

(i) All the above plans, and details of the above proposed project and implementation are being undertaken through the following licensed technical personnel:

<table>
<thead>
<tr>
<th>Licensed Technical Personnel</th>
<th>Developer/ Builder</th>
<th>Architect</th>
<th>Town Planner</th>
<th>Civil Engineer</th>
<th>Structural Engineer</th>
<th>Real Estate Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Address</td>
<td>(Registration No. only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(j) I/we am/are herewith submitting the Joint Declaration & check list jointly filled by me and the registered Architect and licensed Civil Engineer and request that our application/development project may be considered and approved.

Dated: Signature of Owner (s) & Licensed developer/builder
Name Of Owner(s) & Licensed Developer/Builder ________________________________

Complete Mailing Address ________________________________________________

Phone No __________________________

DECLARATION

(TO BE SUBMITTED ON RS. 100/- STAMP PAPER & NOTARISED)

1. I/We hereby declare that I/We am/are the Owner(s) of the site in Survey No. (s) of ________________ Village, ________________ Mandal, admmeasuring ________________ Hectares on which the Land Pooling Scheme/layout development/Group/Cluster Housing Scheme is proposed.

2. I / We hereby affirm/declare that the site/plot/property is not declared surplus under the provisions of Urban Land ceiling Act, 1976. and is not a Government land.

3. The boundaries of the site and the areas mentioned in the layout plan are correct and true.

4. I/We hereby affirm that I/we will abide by the Land Pooling Scheme/Group/Cluster Housing Scheme/layout approval conditions and the provisions of the HUDA Layout Development Regulations, 2008, and will execute all works including development of the Master Plan roads at our cost and as per the specifications.

5. I/We affirm that I/we shall not sell or lease the plots of the areas earmarked for mortgage sites until the final layout is approved;

6. I / We will hand over the sites/areas/plots duly developed and earmarked for EWS housing, for HUDA, for public open spaces and for social & community facilities to HUDA free of cost and without encumbrances through registered Gift deed to HUDA before the release of the approved plans;

7. I/We agree that if I/we do not comply with the same within the given time period from the date of approval, and HUDA would be at liberty to dispose off the mortgaged plots and undertake the development works and we would not have any claim whatsoever in the matter.

Dated: __________________________
Signature/s of Owner(s) & Licensed Developer/Builder _________________________