
UNIT 3 URBAN LAND USE PLANNING

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3.1 INTRODUCTION

Land is one of the most precious assets in any nation-state. Judicious utilization of land in general, and that of urban areas in particular is critical. In recent years, many states in India have been facing problems in designing the appropriate use of urban land.

The improper use of land in metropolitan cities has given rise to urban conflict. This unit will enable you to acquire knowledge on urban land use planning. After reading this unit you will be able to:

- Explain the meaning and types of urban land use planning;
- Narrate the objectives and processes of land use planning;
- Discuss the principles of urban land use planning;
- Describe various legislations on land use planning; and
- Prepare legends on land use planning.

3.2 LAND USE PLANNING – MEANING AND TYPES

Land is required for various uses in both the urban and rural areas of all societies. It is one of the most important and immovable asset of an individual and also that of the nation-states. It is a major factor of production and a vital element in the socio-economic development of any country or society.

3.2.1 Meaning of Land Use Planning

Land use refers to the use of the land in urban areas, i.e., cities and towns. In case of areas beyond the city limits into the hinterland of the city, the uses the land is put to, is referred to as Land utilization. The categories of land utilization are agricultural land, fallow land, forest areas, areas under settlements including urban and rural settlements, etc.

Before knowing about the meaning of land use planning, you should know some important concepts such as the land use plan and the land use map. A land use

plan is a guide for the location and intensity of future development in a community. It is a part of a comprehensive plan which deals with the interrelationship between the different land uses. It designates the present and future location, form, class and extent (size) within a planning jurisdiction for residential, commercial, industrial, and institutional (public areas and buildings) use or reuse. The land use plan includes a map and a written description of the different land use areas or districts. A land use map geographically and specifically locates existing and future land uses such as residential, commercial, industrial, and institutional (public areas and buildings) that has been established in the land use plan. The land use plan serves as the guide for official land use decisions. Zoning is one means of implementing a land use plan. A land use plan is part of a Master Plan that is formulated for the city for its planned development and to guide the development of the city in the future.

Land use planning is the term used for a branch of public policy, which encompasses various disciplines, which seek to order and regulate the use of land in an efficient and ethical way, thus preventing land use conflicts. In most developed countries, land use planning is an important part of social policy, ensuring that land is used efficiently for the benefit of the wider economy and population as well as to protect the environment. According to Magigi and Majani, land use planning refers to future-oriented and uses of the broad categories of land which introduces a degree of uncertainty about the specific type and scale of land use on a given piece of land. According to another definition, land use planning is a public policy exercise that designates and regulates the use of land in order to improve a community's physical, economic and social efficiency and well-being. By considering socio-economic trends and physical and geographical features, planning helps identify the preferred land uses that will support local development.

3.2.2 Typology of Land Use

Land in an urban area i.e., a city or a town, is put to use for different purposes: living areas, working areas, recreational areas, areas for provision of education, for movement, etc.

The land uses can be categorized as follows:

- i) **Residential use-** includes residential areas of varying densities.
- ii) **Commercial use-** includes commercial establishments i.e., retail shops, wholesale and warehousing i.e., storage areas and hotels. Retail commerce at various levels includes local shopping centres to community centres to district centres.
- iii) **Industrial use-** includes manufacturing, service, and repair industry.
- iv) **Recreational use-** includes parks at various levels i.e., community parks, city parks, district parks, and historical monuments.
- v) **Public and semi public use-** includes
 - i) Educational facilities, health facilities, socio-cultural and civic/ community facilities at various hierarchical levels. Educational facilities at all levels include nursery schools, primary schools, senior secondary schools, higher secondary schools, colleges and universities in ascending order;

- ii) Health facilities include dispensary, health centres and hospitals;
- iii) Socio-cultural and civic/ community facilities include religious buildings, socio-cultural centres, clubs, police stations, fire stations, burial grounds/ cremation grounds, sports facilities, stadium, sports centres;
- iv) Government offices, courts, etc., are part of the area categorized as government use;
- v) Areas categorized as Green Belt and Water Bodies include rivers, lakes, city forest, etc.
- vi) Transportation includes roads, including national highways, state highways, arterial roads, collector roads, bye passes, roads in residential colonies, etc. ;railways, bus depots and bus terminals, truck terminals, mass rapid transportation systems including bus rapid transit (BRT) routes, light rail transit (LRT) routes, metro routes, airports; and
- vii) Areas categorized as Utility include water treatment plants, sewerage treatment plants, electricity generation plants, electricity substations, sanitary land fills, etc.

3.3 OBJECTIVES, PROCESSES AND STEPS IN LAND USE PLANNING

3.3.1 Objectives and Processes

Land use planning provides the prerequisites for achieving a sustainable form of land use that is acceptable as far as the social and environmental contexts are concerned and is desired by society, while making sound economic sense. Land use planning in the context of technical co-operation is an iterative process based on dialogue amongst all participants.

Land use planning is, first and foremost, a process of clarification and understanding between people who, together, wish to change something and prepare future actions systematically. In the process, the elements of a plan are worked out co-operatively. Planning needs to start with a vision for the city. The core part of a planning process is, therefore, a commonly desired objective to be achieved by implementing the plan. Time planning is linked to the physical/geographic/ecological planning of areas, and the two are mutually dependent. A major task of land use planning is to accompany and motivate the participants and those who will be affected, in order to attain a conciliation of interests concerning land resources, types, and extent of land use. The dialogue-orientated learning and negotiation process amongst participants leads to the development of their planning capacities and to sustaining co-operative relations at a local level. Participants in land use planning are direct and indirect land users, as well as those affected by the consequences of land use activities. People who often have political or economic influence form another group; this includes authorities, organizations, middlemen and women, processing industries for agricultural products, etc. However, the most important target group in land use planning is made up of the direct land users.

The Land Use Planning process covers all steps extending from setting up of vision, formulating objectives, generating information base, processing, analysis, discussion and evaluation, right up to the negotiation for a consensus concerning

the form of land use to be practiced. This includes the prerequisites for preparing, initiating and implementing the plan. New developments and knowledge gained during the planning process should be incorporated and may require revision and updating. This may result in a repetition of steps, which have already been taken and, e.g., can mean a renewed data collection, analysis, discussion and decision.

Land use is considered to be sustainable when it is both socially and environmentally compatible desired by the society, technically viable and when it makes economic sense. It sets in motion social processes of decision making and consensus building concerning the use and protection of private, common or public areas. The objectives of land use planning at different levels of planning are given in Table 3.1.

Table 3.1: Objectives and Responsibilities in Land Use Planning(LUP) According to Planning Levels

Planning Level	Objective of LUP	Responsibilities
National	<ul style="list-style-type: none"> • Guidelines for policies on conservation and resources use; • Normative directives for the use of resources: legal framework (land and planning rights); • Drafting national programmes for the use and protection of land resources (tropical forest action plan, desertification control programmes, investment guidelines); • Integration of directives relevant to LUP; • Establishment of national conservation areas (national parks); • Co-ordination of activities also relevant to LUP (comprehensive spatial planning); • Considering and transmitting the need for action articulated at lower level. 	<ul style="list-style-type: none"> • Relevant ministries or technical authorities and organisations; • Inter-ministerial committees.
Federal State/ Province	<ul style="list-style-type: none"> • Political and administrative acceptance of LUP activities; • Establishment of institutional and organisational structures; • Translating national and regional guidelines (comprehensive spatial planning, regional and sectoral planning into strategies); • Formulating basic directives of LUP at lower level (translating regional guidelines into strategies); • Identifying areas with potentials and areas with risks; • Establishing protected areas; • Co-ordination of activities relevant to LUP; • Considering and transmitting the need for action articulated at lower level. 	<ul style="list-style-type: none"> • Political and administrative committees; • Governmental and non-governmental technical services and sectoral agencies. • Political and administrative committees;
Region/ District	<ul style="list-style-type: none"> • Regulation of land use and of checking procedures; • Establishment of technical services; 	<ul style="list-style-type: none"> • Forum with responsibility for application of guidelines;

	<ul style="list-style-type: none"> • Training for participants (capacity building); • Promoting dialogue; • Putting strategies for land use in concrete terms; • Offering solutions to problems (problem resolution platform); • Establishment of mechanisms for transmitting the needs identified at lower level. 	<ul style="list-style-type: none"> • Governmental and non-governmental technical services.
Community/ Village	<ul style="list-style-type: none"> • Conciliation of interests; • Offering solutions to problems, establishing institutions dealing with LUP issues; • (if necessary based on a traditional system); • Decisions on the implementation of LUP; • Including farms/households in the LUP process; • Articulating the need for action for superior levels. 	<ul style="list-style-type: none"> • Socially accepted committee; • Planning group as service unit of the higher level (including local experts and facilitators).
Farming Household Agricultural Operation	<ul style="list-style-type: none"> • Organisation and planning of living area and area for other land uses. 	<ul style="list-style-type: none"> • Farmer's family.
Individual	<ul style="list-style-type: none"> • Satisfying individual needs by using land. 	<ul style="list-style-type: none"> • Individual.

3.3.2 Steps in Land use Planning

The following steps are needed to be followed during land using planning

Step-1: Establishment of goals and terms of reference

Step-2: Organization of work

Step-3: analyse the problems

Step-4: Identify opportunity for change

Step-5: Evaluate land suitability

Step-6: Appraise the alternatives: environmental, economic and social analysis

Step-7: Choose the best option

Step-8: prepare the land use plan

Step-9: Implement the plan

Step-10: Monitor and revise the plan

Step-1: Establishment of goals and terms of reference: At the outset the decision-maker and the representative of the people has to sit down and discuss various problems of the area. Later on, the planner has to prepare a goal as how a land-use plan be helpful. Some of the procedures needed to be followed in this stages are defining plan area, contacting the people of the area, gathering basic information about the area, and then establishing the goals.

Step-2: Organization of work: The tasks those are required to be performed during this stage are identification of participants, assemble of materials, arrangement of venue, support staff and transport. The bar chart is a clear way of displaying the work plan.

Step-3: analyse the problems: It is a big-setp, which will include detailed technical aspects of land-use planning. Here existing land-use situation has to be analysed and compared with the development goals and this can be done by identification of land units and land-use system.

Step-4: Identify opportunity for change: When the problems needing attention are known, then the planner has to consider what can be done to solve or meliorate these problems. It requires a coordinated effort between the planning team, land users and decision makers.

Step-5: Evaluate land suitability: This step is the central part of land evaluation. Here two main things has to be taken into consideration i.e. which areas of land are best suited? And which kind of use is it best suited?. Here also selection of land qualities and characteristics have to be taken into consideration.

Step-6: Appraise the alternatives: environmental, economic and social analysis: Besides the physical evaluation, an assessment has to be made for the sustainable land use. Here the appraisal of environment economic and social conditions are crucial to land use planning. Some of the aspects to be taken into consideration while assessing environmental impact are soil and water resources, pasture and forest resources, quality of wildlife habitat, etc. the economic analysis way include quantification of land use practice that is use of land for cultivation, etc. The social impact is usually calculated on the basis of population, access to basic needs, employment and income opportunities, etc.

Step-7: Choose the best option: Here after considering all these aspects, the planner and decision maker has to choose the best option available.

Step-8: prepare the land use plan: In this step the planner has to prepare a land use plan for implementation. The map with the legends and writing the plan in more detail are done in this stage. The usual format of the plan include: (i) title; (ii) summary; (iii) introduction; (iv) management problems and opportunities; (v) direction; (vi) monitoring and revision; (vii) work plan for implementation and (viii) appendixes.

Step-9: Implement the plan: The planning team in this stage ensure that the measures recommended in the plan are correctly understood and put into practice by the implementing agency. Representatives of the planning team form an essential link between planning and implementation.

Step -10: Monitor and revise the plan: Once the planning process comes full circle the planning team monitor the plan. During monitoring following key aspects are taken into consideration:

Are the land-use activities being carried out as planned?

Are the effects as predicted?

Are the costs as predicted?

Have the assumptions on which the plan was based proved to be correct?

Are the goals still valid?

How far are the goals being achieved?

After monitoring the above said aspects, the planner makes necessary revision in the plan.

After reading this section, you would have gained some idea about land use planning. Now you should be able to answer the questions given in *Check Your Progress 1*.

Check Your Progress 1

Note: a) Write your answer in the space given below.

b) Compare your answer with those given at the end of the unit.

1) Name the different categories in which land use can be categorized?

.....

2) What are the objectives of land use planning at the community level?

.....

3.4 PRINCIPLES OF LAND USE PLANNING

Various principles of land use planning are discussed below:

i) Land use planning should be context specific, i.e., oriented to local conditions or for a city in particular, both in terms of method and content

Land use planning is not a standardized procedure that is uniform in its application worldwide. Its content is based on an initial regional or local situation analysis and checking on the applicability of the approach on the particular city/town. Planning approaches for any particular city or town often fail because global models, approaches and implementation strategies are applied to cities or towns without any considerations of the baseline situation and characteristics of the area.

ii) Land use planning for developing new sites for urban settlements should be based on an assessment of the suitability of the land for various urban uses

A city is a dynamic and continuously growing organism. It engulfs adjoining lands to meet the demands for new development. The land to be developed for

urban expansion needs to be assessed for suitability for urban development. The suitability of the land for urban uses is based on the assessment of landform or slope, drainage characteristics, groundwater resources, soil productivity, water bodies, present use of the land, i.e., agriculture, forests, etc. This process ensures that steep slopes, water bodies, wetlands, productive agricultural lands, dense forest areas, heritage areas are not taken up for urban development and are conserved. It aims at a sustainable form of land use for urban development.

iii) Land use planning is an iterative process; it should be flexible and open based on new findings and changing conditions

The city is a dynamic entity; it changes and develops with time. Land use planning is more than the preparation of a planning document. It is an iterative process in terms of both the principle and the method simultaneously. New developments and findings are observed and incorporated into the planning process. It may lead to the revision of decision and the repetition of steps already taken.

iv) Land use planning should be implementation-oriented

Land use planning (LUP) has to consider how the negotiated decisions and the solutions identified are to be implemented. LUP does not end with the land use plan. The implementation of limited measures (e.g., the development of cultivation techniques which conserve land resources) right at the outset, or parallel to the LUP process, plays an important role in increasing the trust of the people in the village as far as the planning process is concerned.

v) Land use planning should be based on an interdisciplinary approach

Land use planning should be based on an interdisciplinary approach that considers the ecological, economic, technical, financial, social and cultural dimensions of land use. Land use planning provides many interfaces with other technical disciplines and planning fields.

vi) Adherence to prerequisites for Land use Planning

The local preconditions that are necessary for land use planning are as follows:

- the existence of a clearly defined need;
- availability of information on national and regional plans;
- directives and regulations; as well as their analysis and consideration during implementation;
- clarification of work to be accomplished and responsibilities during the implementation, as well as a realistic time plan, in which the priorities of the stakeholders must be taken into account;
- ensuring the necessary extension and financial services;
- using all alternatives of compensation where use is going to be restricted.

vii) Ascertain prerequisites for implementation of the Land use Plan

In order to implement the land use plan, certain prerequisites are required. Essentially, the framework of the general conditions prescribes these: the extent to which the framework of general conditions can or cannot be influenced by the project is dependant on the case. To a limited extent, the implementation of a land use plan will always have repercussions on the general conditions. These can have also negative effects and must be considered from the beginning and

avoided as far as possible. The framework of general conditions in LUP considers land law, the situation of the natural resources, the interests of the participants, the economic system, the equipment of the responsible organizations in terms of materials and staff, or the traditional value systems of the target population. In conjunction with the need, clear objectives shared by all participants and involved parties resulting from negotiation processes are also imperative.

viii) Land use planning should take into account traditional strategies for solving problems and conflicts

Traditional urban and rural societies have their own way of approaching problems and settling conflicts concerning land use. In the process of land use planning, such mechanisms have to be recognized, understood, and taken into account.

ix) Land use planning should consider cultural viewpoints and buildup on local environmental knowledge

Local knowledge, i.e., complex indigenous knowledge of the environment often provided by a city or a town or villages in the city should be part of the basis for planning and implementing a sustainable land use.

x) Land use planning should consider urban development to be a “bottom-up” process, based on perceptions of the local population

Planning is not just a matter for experts, planners, and professionals but should be carried out together with those who will be affected by it. The people should actively participate in the process of land use planning. People who are affected have to be involved in the planning process from the initial stages of plan preparation and also need to be involved in the subsequent stages also in order to ensure a feeling of ownership concerning self-help activities. Plans would get implemented if the opinions and suggestions of the people are considered in the planning process. The results of planning and implementation of measures can then only be sustainable.

The local population often perceives environmental risks differently from authorities, consultants, or technical specialists. Dangers to, or the destruction of, land resources often do not become a critically recognized issue until they actually influence the land use. Any potential risk to the environment should, therefore, be discussed in the problem analysis stage by the different interest groups. The risks should be evaluated and taken into account both at the planning stage and during the plan implementation. The problems and needs expressed by the local population may be the result and consequence of environmental problems already perceived. In this case, the causes must be identified and weighed up during the participatory problem analysis in order propose appropriate solution strategies during the planning process. The basis for determining the need for land use planning is the problem analysis, during which the causes and interconnected causes are being identified, analyzed, evaluated and discussed.

xi) Land use planning is a dialogue; it should create the prerequisites for the successful negotiation and co-operation among stakeholders

The core task of land use planning consists of initiating a process of communication and co-operation that allows all participants to formulate their interests and objectives in the dialogue. On the basis of sound decisions, a sustainable form of land use is proposed whereby the aims and interests of other

participating groups are taken into account to the greatest possible extent. An important element of participation-oriented Land use Planning is the identification of the various groups of participants and differentiating them in terms of their use of and access to land resources. In addition, their position on the social scale (gender approach) and their capacities, either as stakeholders, or, as members of authorities and of other organizations has to be considered.

xii) Land use planning should be based on an effective feed forward process so as to achieve desired feedback. Therefore, free access to information for all participants is a prerequisite

An effective feed forward process is imperative in order to achieve proper feedback from stakeholders. Feed forward process entails informing the people about the plan at the right time. The extent to which stakeholders are informed, strengthen both their willingness and capacity to participate in planning and decision-making. It increases the motivation of the people for creating sustainable results. An open exchange of information leads to discussions about objectives among the key figures and promotes the willingness to reach a consensus. The dissemination of information in the local language(s) contributes to an improved transparency. In addition, it strengthens the trust of the population in land use planning activities.

xiii) Stakeholder identification, i.e., representation from various interest groups, is an important principle in land use planning

A prerequisite for realistic land use planning is the detailed analysis of the various interest groups. Since there are differences in interests specific to gender (i.e., men and women), age (young and old people), income (i.e., low income and high income communities), capability (i.e., disabled and differently abled groups), approaches (i.e., entrepreneurs, conservationists), etc., the aim is to uncover the various interests of the participants in order to identify different priorities concerning the planning of land use, and to create a basis for the negotiation and decision-making process.

xiv) Land use planning is a process leading to an improvement in the capacity of the participants to plan and take actions

The participatory methods used in all planning steps of land use planning promote the technical and organizational capabilities of all participants, thereby extending their capacity to plan and to act. In the medium term, this qualification process leads to an improvement in the capacity of local groups for self-determination.

3.5 KEY LEGISLATIONS ON LAND USE PLANNING

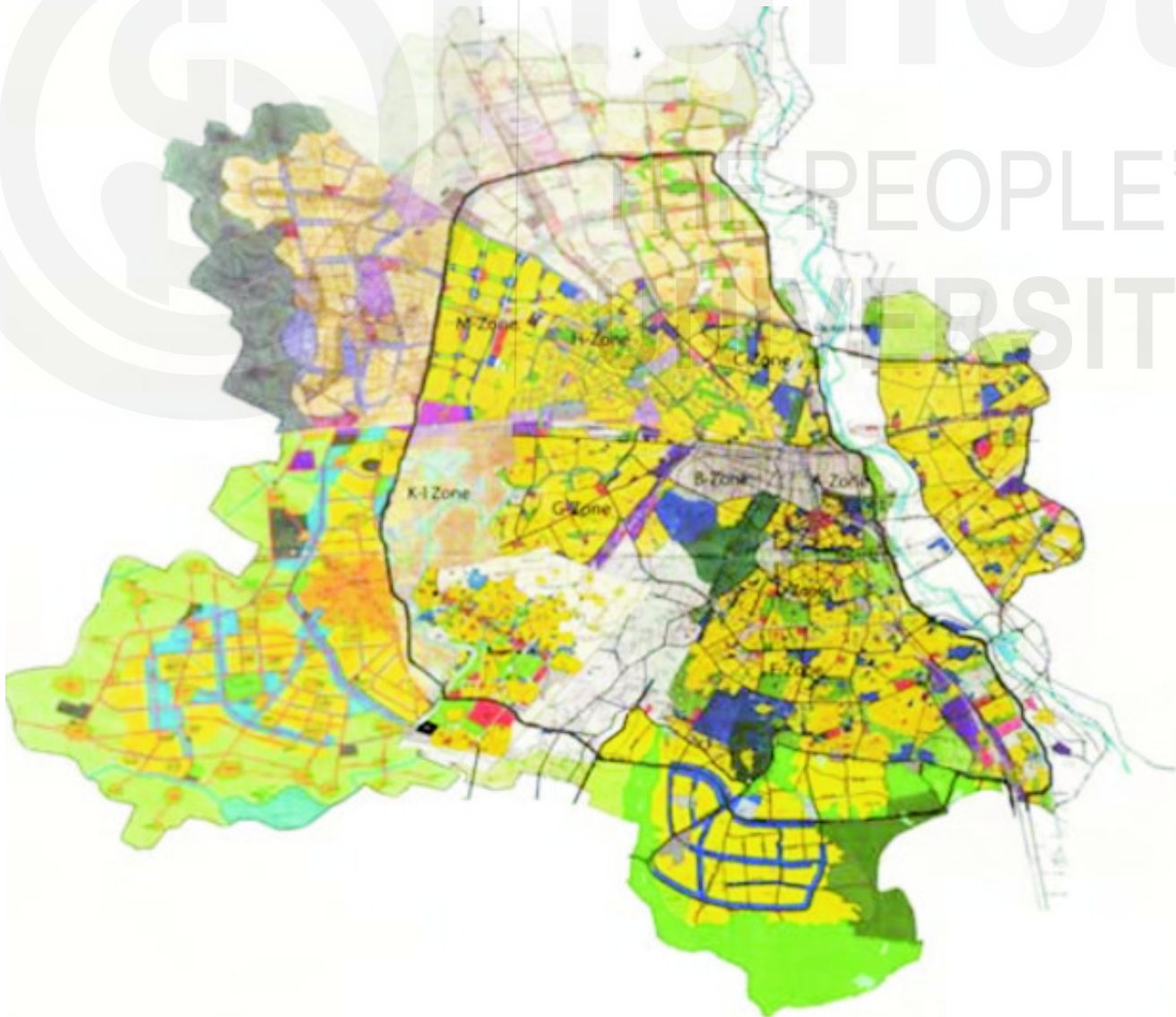
A master plan is a statutory instrument for guiding planned development and regulating improvement of towns and cities over a period of time, and contributes to development conceptually rather than operationally. The master plans are detailed out through zonal plans and layout plans. The focus of a master plan is primarily on land use planning. The master plan came into being through the Town and Country Planning Act of 1947 in the U.K. The Town Improvement Acts were formulated for various states of India. Master plans are formulated by development authorities of the particular cities. The development authorities are also guided by the respective Development Authority Act, e.g., DDA (Delhi

Development Authority Act). The Delhi Development Authority came into being in 1957 under the provision of the Delhi Development Act (1957), “to promote and secure the development of Delhi”.

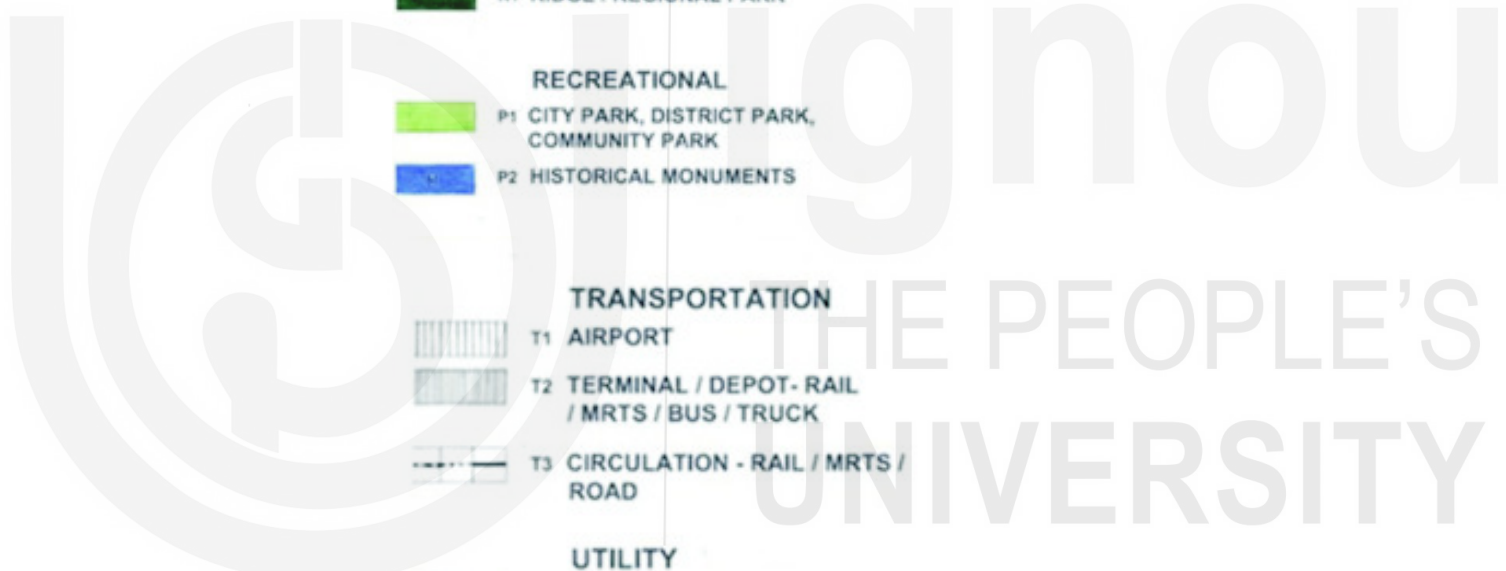
The Improvement Trust Act was modeled not only on the Glasgow City Improvement Act but also on the Bombay Port Trust Act of 1873. The mandate of the Act included clearance of blighted areas, street improvement schemes, provision of housing for displaced persons and plots with development control in reclaimed or other lands. Since most of the Town Improvement Acts of various states did not have provisions for preparation of a master plan, a Model Town and Regional Planning and Development Law, which formed the basis for various State Town and Country Planning Acts, was enacted by the State Governments. The municipal corporations and municipalities are fully representative bodies, while the notified area committees and town area committees are either fully or partially nominated bodies.

3.6 URBAN LAND USE AND LEGEND

The use of legends is important for sketching any plan, particularly a land use plan. Various colors depict different uses of land. There are two sets of colour codes for land uses. Some states have adopted one colour code and some states, another colour code.

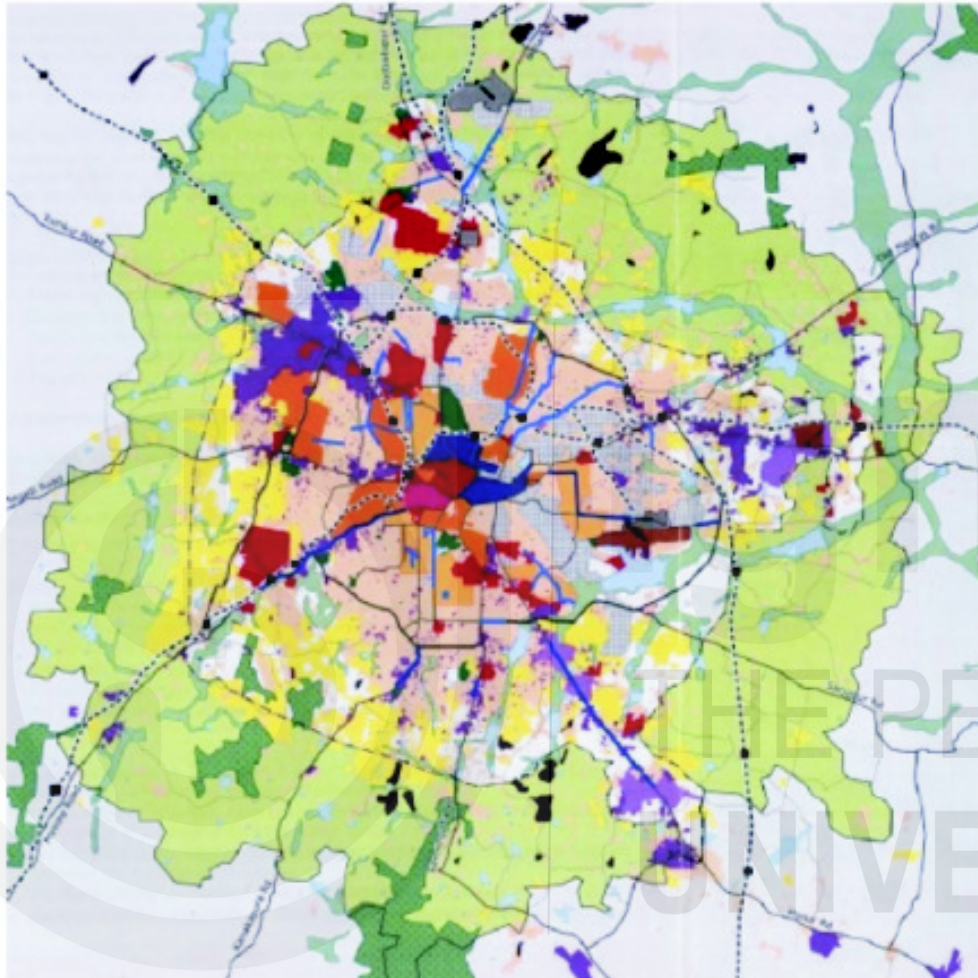























RESIDENTIAL	
	RD RESIDENTIAL AREAS WITH DENSITY
	RF FOREIGN MISSION
COMMERCIAL	
	C1 RETAIL SHOPPING, GENERAL BUSINESS AND COMMERCE
	DC DISTRICT CENTRE
	C COMMUNITY CENTRE
	NC NON HIERARCHICAL COMMERCIAL CENTRE
	C2 WHOLESALE & WAREHOUSING
	COLD STORAGE & OIL DEPOT
	C3 HOTELS
INDUSTRY	
	M1 MANUFACTURING, SERVICE & REPAIR INDUSTRY
RIDGE / REGIONAL PARK	
	R1 RIDGE / REGIONAL PARK
RECREATIONAL	
	P1 CITY PARK, DISTRICT PARK, COMMUNITY PARK
	P2 HISTORICAL MONUMENTS
TRANSPORTATION	
	T1 AIRPORT
	T2 TERMINAL / DEPOT- RAIL / MRTS / BUS / TRUCK
	T3 CIRCULATION - RAIL / MRTS / ROAD
UTILITY	
	U1 WATER (TREATMENT PLANT ETC.)
	U2 SEWERAGE (TREATMENT PLANT ETC.)
	U3 ELECTRICITY (POWERHOUSES, SUBSTATIONS ETC.)
	U4 SOLID WASTE (SANITARY LANDFILL ETC.)
	U5 DRAIN
GOVERNMENT	
	G1 PRESIDENT ESTATE & PARLIAMENT HOUSE
	G2 GOVERNMENT OFFICES / COURTS
	G3 GOVERNMENT LAND (USE UNDETERMINED)

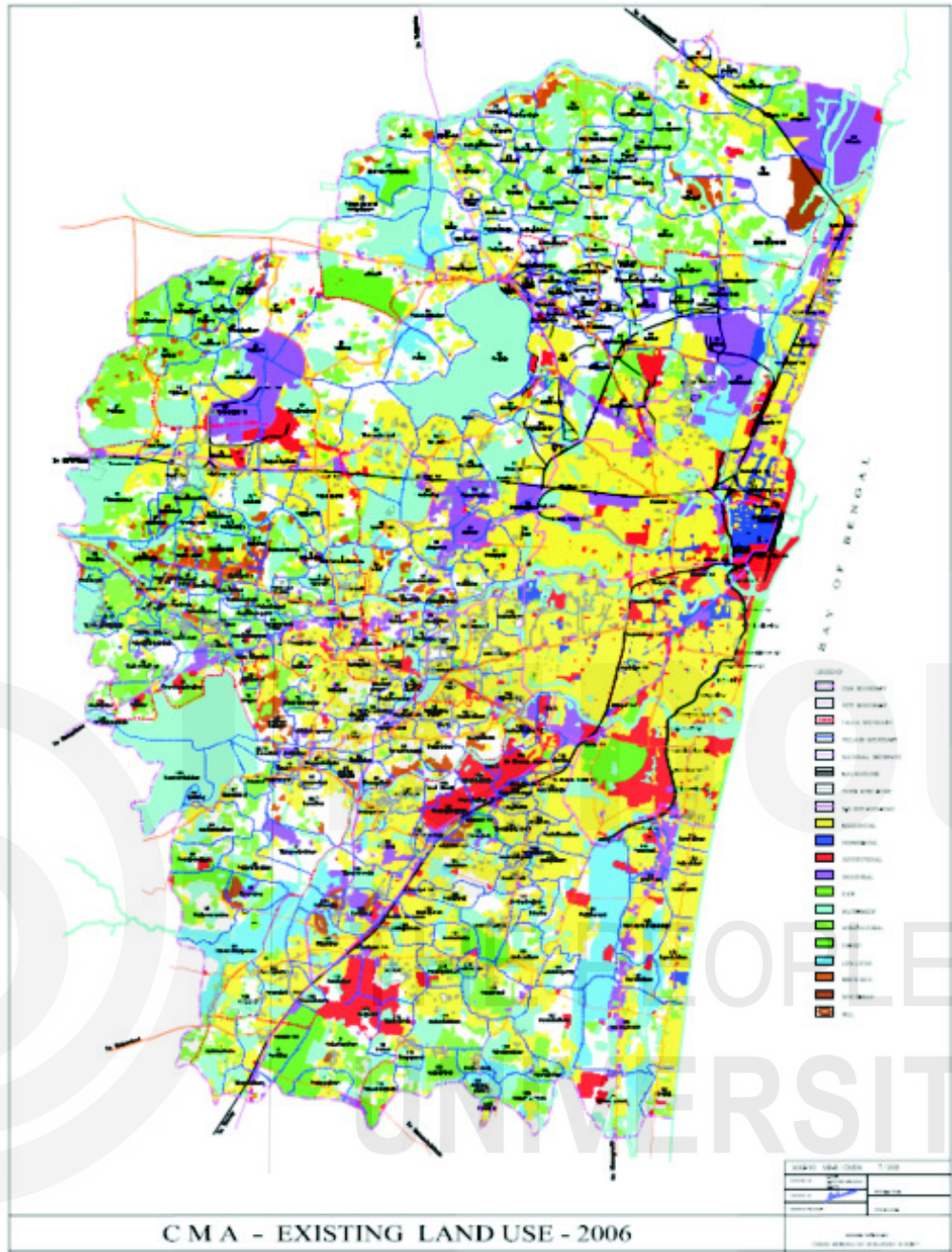


In one code. Red is used for commercial use, whereas; in the other colour code, red is used to represent institutional use. Yellow is used for residential use for both sets of colour codes. Blue colour is used for institutional use/public and semi public use in one set of colour code, whereas in the other code, blue colour is used for commercial use. The land use maps of three cities namely Delhi, Bangalore, and Chennai are given and the changes in the legends used can be distinctly seen.

Master Plan of Bangalore (Land Use Map 2003)



- | | |
|---|---|
|  Historical centre |  BDA |
|  Political centre |  Main road |
|  Commercial centre |  Railway |
|  Highly mixed zone |  Railway station |
|  Medium mixed zone |  Airport |
|  Predominantly residential | |
|  New layout | |
|  Area not urbanised | |
|  Industrial area | |
|  IT dominant zone | |
|  Mutation axis | |
|  Commercial axis | |
|  Logistic zone | |
|  Main civic amenities | |
|  Defence | |
|  Public industrial complex | |



- CMA boundary
- City boundary
- Taluk boundary
- Village boundary
- National highways
- Railway line
- Inner ring road
- NH bye pass road
- Residential
- Commercial
- Institutional
- Industrial
- OSR
- Water body
- Agricultural
- Forest
- Low lying
- Brick kiln
- non urban
- Hill

After reading this section, you would have gained some idea about land use planning. Now you should be able to answer the questions given in *Check Your Progress 2*.

Check Your Progress 2

Note: a) Write your answer in the space given below.

b) Compare your answer with those given at the end of the unit.

1) Land Use Planning should be implementation oriented. Explain.

.....

2) What are the steps for land use planning?

.....

3.7 LET US SUM UP

Urban land use planning is an important component of urban planning. Land, one of the important physical resources of a state, must be properly utilized in order to check wastage.

In this unit you read about the need and importance of land use planning, its processes and principles and also about various legends used in land use planning of a few major cities in India. You must now be sure how important land use planning is for urban development.

3.8 REFERENCES AND SELECTED READINGS

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3.9 CHECK YOUR PROGRESS-POSSIBLE ANSWERS

Check Your Progress 1

- 1) Land uses can be categorized as follows:
 - i) Residential use
 - ii) Commercial use
 - iii) Industrial use
 - iv) Recreational use.
 - v) Public and Semi public use.
- 2) Land use planning at community level has the following objectives:
 - Conciliation of interests
 - Offering solutions to problems
 - Establishing institutions dealing with land use planning issues
 - Decisions on implementation of land use planning
 - Including farms, households in land use planning process
 - Articulating the need of action for superior levels.

Check Your Progress 2

- 1) Land use planning has to consider how the negotiated decisions and the solutions identified are to be implemented. LUP does not end with the land use plan. The implementation of limited measures (e.g., the development of cultivation techniques which conserve land resources) right at the outset, or parallel to the LUP process, plays an important role in increasing the trust of the people in the village as far as the planning process is concerned.
- 2) The following steps are needed to be followed during land using planning
 - Step-1: Establishment of goals and terms of reference
 - Step-2: Organization of work
 - Step-3: Analyse the problems
 - Step-4: Identify opportunity for change
 - Step-5: Evaluate land suitability
 - Step-6: Appraise the alternatives: environmental, economic and social analysis
 - Step-7: Choose the best option
 - Step-8: Prepare the land use plan
 - Step-9: Implement the plan
 - Step-10: Monitor and revise the plan