

## **Unit 26**

# **Urban Planning**

---

### **Contents**

- 26.1 Introduction
- 26.2 Urban Planning: Nature and Scope
- 26.3 Historical Evolution of Urban Planning
- 26.4 Main Concerns of Urban Planning
- 26.5 New Approach to Urban Planning
- 26.6 Main Objectives of the National Urbanization Policy
- 26.7 Conclusion
- 26.8 Further Reading

### **Learning Objectives**

After studying this unit, you will be able to:

- explain the nature and scope of urban planning
- describe the historical evolution of urban planning
- discuss the main concerns of urban planning and
- outline the main objectives of the National Urbanization Policy

### **26.1 Introduction**

The phenomena of urban growth has resulted in an unplanned, haphazard and ugly urban settlements. Planning is therefore necessary to combat the menace of urbanisation and its resultant problems. An important function of planning in purely physical terms is the judicious use of land- a scarce commodity in most urban areas, and its rational and timely reservation for future use. Land planning is thus a very essential need. The state governments have therefore to legalise upon planning and to ensure its implementation which is ultimately the responsibility of the urban governments. The state governments have set-up departments of town and country planning for this purpose. In this unit you will learn all about the process of planning for a better future; especially in the urban areas.

## **26.2 Urban Planning: Nature and Scope**

Planning is a preparation for future action. It is a conscious process of selecting and developing the best course of action to accomplish a definite objective. Urban planning is a process by which the use of land is controlled and its development is regulated in public interest. It involves both engineering and architectural problems. The urban planning is a technique and method of development that contribute to the organisation, development and evolution of urban areas. It contributes to their urbanizing environs, based on economic, legal and aesthetic concepts and conditions in order to promote the welfare of the public and the quality of the environment. It deals with the spatial incidence of socio-economic development over an urban space. As Lewis Mumford defines:

“City planning involves the consideration of human activities in time and space, on the basis of the known facts about place, work and people. It involves the modification and relocation of various elements of the total environment for the purpose of increasing their services to the community, and it calls for the building of appropriate structure, dwellings, industrial plants, markets, water works, dams, bridges, villages, cities to house the activities of a community, to assist the performance of all its needful functions in a timely and orderly fashion.”

Planning has both social and economic aims; socially successful planning tends to make people's life happier, facilitates social intercourse, and has visual attractiveness. A proper spatial relationship between the communities in a region and the constituent parts of a town, compactness of development and an efficient arrangement of communication routes-all results in human activities being carried out on more efficiently and less wastefully and thus create wealth.

In a town or city there are large numbers of activities going on whether somebody directs them or not. Houses are constructed, shops are opened, markets flourish, schools and hospitals are built, and roads are widened or new roads opened. All these activities will go on whether we have town planning or not. If there is no planning what may happen is that before roads are built houses may be constructed and houses may be occupied before water supply and drainage facilities are provided. Urban planning and town planning

considers each one of these improvements and relates them to the community and the city as a whole, to see what is likely to happen not only in the immediate future but over a reasonably long period of time.

Actually the urban planning is concerned with the wide range of issues and problems such as the problem of providing the adequate housing facilities, employment, schools, parks and playgrounds, good transportation facilities and utilities and services for the increasing urban population in the large number of towns and cities which exists today and are likely to come up in the future. These problems require constant and continuous planning instead of piecemeal planning at different level.

The urban planning cannot be seen in isolation, rather the problem of urban planning is related with the entire region, and thus there is a need for a regional approach to urban planning. It is equally important to coordinate the growth of rural areas with the future development of towns and cities to form an integral part of a balanced region. Regional approach should attempt to reduce the socio-economic imbalance between the urban and the rural areas and between different parts of the country. This requires taking up of regional development plans along with the preparation of the master plans for towns and cities. Regional and urban planning therefore is closely related with each other. Regional planning basically deals with the physical planning of towns and cities and the countryside. It may be used with reference to an extension of town planning. It may include the general planning of resources.

Patrick Geddes and Lewis Mumford have written about regional planning and development as a prerequisite to any social planning or town planning. The term region applies to an area with certain characteristics, often mere size, by virtue of which it is adopted as a suitable unit for some particular purpose of business and administration. It is also an area which is homogenous with respect to some particular set of associated conditions, whether of the land or of the people such as industry, farming, distribution of population, commerce or the general sphere of influence of a city. A region in general

terms is envisaged as a natural unit in contrast to the artificial unit created for administrative purposes.

A town planner should be an expert in the area of land use planning. He should utilise the minimum extent of land required for expansion of towns and thus preserve valuable land for some other purposes. Here again, a regional study would help the planner regarding his limitations in planning for the development of any town or city in the region. The present day town planner, faced with the problem of expanding our cities for locating additional houses, industries, public buildings and recreational facilities, is at the same time facing problems like shortage of farm land, ill effects of deforestations, ribbon development along highways, imbalance in rural and urban life and so on. He has to approach the problem at the regional basis before going to the expansion of any existing town or city, or building any town in that particular region. Urban planning thus is a very broad concept and includes not only planning of streets, houses and a few civic buildings but if town planning to be effective and creative, has to start from the village and cover the entire country. At the city level the town planner seeks to serve the interest of not only one community or one town but several communities, individually as well as in relation to one another, and utilises the resources of the city to the best advantage of land optimum utilisation by all the communities of that area.

Urban planning takes place within a national framework. Planning gains its power through its embodiment in the legislation and regulations which forms part of the legal apparatus which can vary from country to country. Secondly, the implementation of planning occurs through the administrative system which again varies considerably across different different countries of the world. Urban planning should be not only politically and socio-culturally feasible but it should be environmentally, economically, technologically, physically, fiscally and infrastructure-wise also feasible. Since the city and its environs cannot grow as fast as the growth of the urban population and human activity, urban planning is a must. Congestion and overcrowding of homes, the poverty and unemployment, the high incidence of deviant social behaviour, the growth of sub-

standard settlements and squatter colonies, the shortage of housing, lack of community facilities and public utilities are some of the symptoms of faulty planning in urban areas.

### **26.3 Historical Evolution of Urban Planning**

Human beings have been living on this earth for more than a million years but we trace the history of the cities only since the 5000 or 6000 years ago in the great river valleys of Euphrates, the Indus and the Nile. From the historical facts it is a well known truth that the cities were always planned with a definite purpose in mind. It may be due to self glorification, protection, trade etc, and the development of the city was always done as a separate agency.

In ancient India particularly during the Mauryas and Gupta periods separate urban planning and development agencies existed. The work of urban planning was performed by city council and town council along with the other functions of the state. The city council was modelled upon that of a village panchayat and it may be assumed that it was an elected body, though certain works were reserved for the control of the imperial officers. During the Gupta period, we have found evidence of the existence of town councils and the public was also very vigilant about proper development of the city.

There are quite a number of books written by the ancient authors about town planning in India. They are known as '*Vastu Sastra*.' Earliest examples of Vedic town planning available are Madurai, Srirangam and Kanchipuram, build with the temple as the focal point and concentric square streets all around at some length. One who refers to Manasara Silpa Sastra (Architecture by Manasara) and Kautilya Artha Shastra (Economics by Kautilya) can appreciate the scientific approach to town and village planning in ancient India.

*Manasara Shilpa Shastra* is a treatise on town planning and architecture and consists of seventy-five *adhyayas* or chapters. Apart from dealing with details of Vastu-shilpa, many of the chapters describe particulars such as design of various parts of the buildings, towers, pillars, chariots triumphal arches, jewellery, idols of gods and ceremonies connected with the commissioning of the finished structures.

The fourth chapter describes the investigation of the nature of different types of soils by means of several tastes, such as their colour, form, smell, and touch. The seventh chapter deals with the planning of the village according to their suitability for the location of temples, palaces, houses, roads and other depending upon the location of the presiding deity within the village. The ninth chapter describes in detail the different types of village plans according to their parts of the village for temples, schools, public halls and residential houses for different classes of people. The eleventh chapter deals with the formation of the cities, town and fortresses. The characteristics of the cities fit for the habitation of kings, merchants, Brahmins and other classes of people. The following are the different types of town plans evolved and practised according to Manasara.

1. Dandaka
2. Sarvathobhadra
3. Nandyavarta
4. Padmaka
5. Swastika
6. Prastara
7. Karmuka
8. Chaturmukha

Dandaka type of town plan provides for two main entrance gates and is generally adopted for the formation of small towns and villages. The village offices were generally located in the east. The female deity of the village or the *Gandevata* will generally be located outside the village and the male deities in the northern portion. In the second type of town plan the whole town should be fully occupied by houses of various descriptions and inhabited by all classes of people. The temple dominates the village. In the third type of town planning i.e. *Nandyavarta* the planning was meant for the construction of towns and not for the villages. It is generally adopted for the sites either circular or square in shape, with not less than thousand houses but not more than four thousand. The streets run parallel to the central adjoining streets with the temple of the presiding deity in the centre of the town. *Nandyavarta* is the name of a flower.

Padmaka type of plan was practised for building of the towns with fortress all round. The pattern of the plan resembles the petals of lotus radiating outwards from the centre. The city used to be practically an island surrounded by water, having no scope for expansion. Swastika type of plan contemplates some diagonal streets dividing the site into certain triangular plots. The site need not be marked out into a square or rectangle and it may be of any shape. The town is surrounded by a rampart wall, with most of its foot filled with water. Two main streets cross each other at the centre, running south to north and west to east. The characteristic feature of Prastara plan is that the site may be either square or rectangular but not triangular or circular. The sites are set apart for the poor, the middle class, the rich and the very rich. The size of the sites increases according to the capacity of each to purchase or build upon. The main roads are much wider compared to those of other patterns. The town may or may not be surrounded by a fort.

Karmuka plan is suitable for the place where the sites of the town is in the form of a bow or semi-circular or parabolic and mostly applied for towns located on the sea shore or the river banks. The main streets of the town runs from north to south or east to west and cross streets run at right angles to them, dividing the whole area into blocks. The presiding deity, commonly a female deity, is installed in the temple built, in any convenient place.

*Chaturmukha* type of plan is applicable to all towns starting from the largest towns to the smallest village. The site may be either square or rectangular having four faces. The town is laid out east to west lengthwise, with four main streets. The temple of the presiding deity will be always at the centre of the town.

The urban planning during the Moughal period flourished in leaps and bounds. Many cities like Fatehpur Sikri, Ajmer, Ujjain, Bharatpur, Benaras, Delhi, Agra etc. clearly bears the influence of Muslim architecture and culture. However, as you know, Ujjain is a city of Ancient India dating back to the 6<sup>th</sup> century B.C. It also evident from the history that a separate department existed for the construction and development works. This

department was headed by the emperor himself, but it had many eminent architects, engineers and ministers as its members. In the regime of Akbar, a public works department was established for the planning and development of construction work. All the Muslim rulers had a separate department of urban planning and development. Like Romans the Moughals too wanted to show their power and pomp by constructing monumental structures for the use of the royal families at the cost of other citizens. The city of Jaipur built by Maharaja Sawai Jai Singh II during 1720s is one of the best examples of the revival of the Vedic principles of settlement planning on a grid pattern with strict architectural and land use controls on the main streets, residential areas planned with spatial hierarchy of chowks (public squares) being an interjection of main roads through a gateway leading to the main markets of the city.

During the British phase the main emphasis of urban planning was based on their strategic linkages to port towns for the purposes of trade and commerce including defence. Besides these other economic and climatic factors were also taken into account. The evolution of urban planning techniques and solutions initiated at the beginning of the 20<sup>th</sup> century to tackle the problems of urbanisation, were aimed towards town improvement. Functionally they did not visualize the problem of urban planning beyond the municipal approach to development. In modern India the first urban improvement authority was constituted as far back as 175 years ago in Calcutta under the statute of 1794 with only limited powers. In the light of the experiences of the working of this improvement authority, in 1803 a town improvement committee consisting of 30 nominated leading citizens of Calcutta was constituted. In 1857, this committee was reorganized in the form of a board. This board had 7 commissioners, 3 nominated by the government and 4 selected by the tax payers. In 1864, on the example of Calcutta, and on the advice and insistence of the Royal sanitary commission, the sanitary commissions were set up in Bombay and Madras presidencies to give advice and assistance in all matters relating to public health, sanitation etc.

In the year of 1915, the famous town planner and administrator visited Madras presidency and he advised the government of India on this front. As a consequence, Bombay and Madras states enacted Town Planning acts on the line of the British Housing



and Town planning Acts, 1909 and Mr. H. V. Lanchester was appointed as town planning advisor to the imperial government of India. Although a large number of town planning acts were enacted in different parts of the country since then, the progress made under these enactments were very tardy.

### **Reflection and Action 26.1**

Study the plan of your city/town/village. Prepare a map of all the basic organizations and official buildings related with planning and development of infrastructure of that area.

Compare your map of facilities with those of others at your study center.

After the independence a fresh impetus on the front of urban planning and development took place. The model act prepared by the Town and Country planning organization got the approval of the minister of the local self government in charge of town planning in 1962. The model act has been supplemented further by two legislations providing for the:

- i) land acquisition for development and planning
- ii) For the creation of development authorities to undertake large scale development of the city and the works relating to the provisions of the life-support system of amenities and services for a more humane urban environment.

The town planning legislations in the stream of directional planning made the provisions for the preparation of the master plans for cities in terms of physical development of urban space for the provisions of infrastructural services. These legislations did not anticipate planning for supra-urban space extending the boundaries of the city to the peripheral areas and their elevation to the regional constellation of the city and its sub-systems.

The existing urban planning legislation in force in India suffers from many deficiencies. A study undertaken by Balachandran and R.N.Haldipur on this subject indicates the following shortcomings:

- i) multiplicity of legal and juridical structures and organisations exist without establishing proper linkages among them,

- ii) overlapping of functions and jurisdictions in the absence of suitable provisions for the coordination of their activities,
- iii) emphasis on plan preparation and not implementation and execution,
- iv) inadequacy of effective land acquisition provisions under the Land Acquisition act of 1894 which has become outdated,
- v) legal inadequacy for checking haphazard development, peripheral growth and ribbon development control,
- vi) lack of provisions for organizational set-up for plan implementation and ,
- vii) lack of public participation in real sense of their involvement.

## **26.4 Main Concerns of Urban Planning**

Some of the main concerns of urban planning are:

- i) to rationalise the distribution of goods and services including economic activities compatible with population redistribution which functions both as an agent of production as well as consumption to minimise the friction of space.
- ii) To improve the level of living and condition of human environment in view of the low level of per-capita income.
- iii) To absorb urban labour supply with increased income of the urban poor in the wake of stagnant economy suffering from unemployment/underemployment.
- iv) The issues of what are the sizes of the towns and cities which would be most advantageous from economic and social viewpoint.
- v) What should be the ratio of rural to urban population to release the pressure on rural land and maintain economic and social balance over the space?
- vi) To suggest the most rational pattern of land use for economic base of the city.
- vii) To achieve an optimum and functionally integrated spatial structure of human settlement pattern to realise the overall goal of the society.

The national plans since their first inception i.e. the first plan (1951-56) laid emphasis on rehabilitation of refugees by augmenting the stock of housing supply and linking housing problems on the sound footings of town and country planning. In the second plan (1956-61) although the task of rehabilitation was considered merely as a problem in itself, but as a part of a wider spectrum of planning of urban areas and the regions

of their location. The second plan recommended that the following three problems should be studied:

- i) Methods of securing planned development in urban areas.
- ii) Expansion of housing facilities.
- iii) Development of civic administration.

The third plan (1961-66) specifically provided for undertaking the preparation of 72 master plans for practically all the major cities, and their surrounding areas including industrial areas and also some of the rapidly growing regions. The central government in this plan period suggested minimum directions for action which were as follows:

- i) Control of urban land values through public acquisition of land and appropriate fiscal policies.
- ii) Physical planning of the use of land.
- iii) Defining tolerable minimum and maximum standard for housing and other services.
- iv) Strengthening of municipal administration for undertaking the development responsibilities.

The fourth plan gave more emphasis to the need for a national urban land policy. It laid emphasis on the following points:

- i) Urban water supply and the sanitation.
- ii) Land acquisition and development.
- iii) Preparation of master plans for the selected towns and regions.

The fifth plan (1974-79) gave the slogan of removal of poverty and on the attainment of self reliance. The following were the major points of urban planning and urban development in this plan.

- i) To augment civic services in urban centres as far as possible and to make them fit for a reasonable level of living.
- ii) To make efforts to tackle the problems of metropolitan cities on a more comprehensive and regional basis.
- iii) To promote the development of smaller towns and new urban centres to ease the pressure of increasing urbanisation.

- iv) To assist in the implementation of projects of national importance such as those related to metropolitan cities or inter-state projects.
- v) To provide necessary support for the enlargement of the scope and functions of the industrial townships undertaken by the central government undertaken so as to make them self-contained.

The draft sixth five year plan (1978-83) gave more emphasis on the infrastructural problems and the plight of the urban poor in the urban areas. The document also recognizes the problem of water and air pollution and the serious threats being imposed by urban dairy to the degradation of human environment.

The new urban planning policy aims at three major objectives:

- i) Revising the growth pattern so that the smallest towns grow fastest, and the largest ones either grow at the slowest or at a slow pace.
- ii) Decongesting the overpopulated areas of large cities so as to create a more balanced and rational relationship between residential and work place like shops, schools etc.
- iii) To see that small and medium towns and new cities develop in a way that the problems of the past are not repeated.

But all these enactments were in the nature of the directional planning aimed at preparing improvement schemes for specific areas. The improvement trusts besides preparing and implementing individual schemes of city improvement or its expansions incorporated the provision of land acquisition and its development and disposal. Although their functions were limited compared to municipal authorities, their jurisdiction was not confined to municipal boundaries alone but was extended to include the peripheral areas also without any comprehensive development plan or perspective of growth and its extension to the regional context. Most of the town planning activities were performed by the improvement trusts but some of the trusts faced difficulties due to their merger either with the corporations or with the newly created authorities like development boards or development authorities.

Gradually with the emergence of new developmental agencies like housing boards, cooperative housing societies, the functioning of improvement trusts was discouraged. Moreover the similarity of functions of both the Development Boards/Authorities and the improvement trusts also created conflict between the two, as the latter took the schemes of more remunerative nature, such as, the development of new areas but neglecting the improvement and redevelopment of older areas of the city. The unplanned consequence of such an urban growth of slums and squatters, misuse of land, and mushrooming colonies in the periphery of the city adding to more burden to the maintenance cost of municipal administration.

In an urbanising society, the urbanisation of people is meaningless without urbanisation of space. The lack of urbanisation policy under the plans and its comprehension by the master plan bears no relation to the social and economic development plan. Under the traditional approach of urban planning there was the concept of master plan. Since the master plans are basically land use plans, their subject and object of interest being the development and use of the space. They are mainly concerned with the programming of intra-urban space. The gradual emergence of this technique of master planning as a control over land use of cities to ensure adequate standard of housing and its transition from housing to neighborhood, to city and its further prolongation to region is not adequately represented by the traditional approach of master planning which is restricted to land use planning alone. The master plans developed to comprehend the process of urbanisation have generally failed to take account of quick changes in population and its related social and economic trends. They are neither comprehensive nor rigid frameworks for the execution of works but signify only broad outlines of a future development plan. As a spectrum of various coordinated land use patterns, master plan is generally undertaken when the actual development has proceeded much ahead of the operational planning. The master plans approach to development as they exist today is designed to accentuate the tide of urbanisation rather than comprehending the social and economic forces of urbanisation.

## **26.5 New Approach to Urban Planning**

The traditional approaches to master plans have many limitations which can be overcome and can be geared for development only if

- i) its scope is wider than the city region.
- ii) the elaboration of master plans for land use is to be effected within the context of regional development plan
- iii) its focus is on policy statements rather than on mapped relationships in terms of a full scale urban and regional development policy.
- iv) its process provides for different mixes of regulations (local, regional and national) and public investments in areas at different stages of urbanisation.
- v) its operational content is a changing sequence of different sectors over functional and geographical units of space.
- vi) its coverage is wider enough to comprehend the development sequences of a system of geographical and spatial units (of villages, of towns, of cities, of regions, and of the nation as a whole).

## **26.6 Main Objectives of the National Urbanisation Policy**

To promote the welfare of the society in general and of urban areas in particular, there is a dire need of designing a national urbanisation policy to serve as a guide for making specific decisions affecting the pattern of urban growth. An urban policy demands enactment of an Act by parliament on national urbanisation policy and planning Act for a more comprehension of social and economic forces for a wider spread of the benefits of urbanisation over the space, which should have among others the following objectives:

- i) Convergence of inter-regional income and growth differentials i.e. controlling city growth in rich regions and expanding urban centres in lagging ones;
- ii) Achieving national economic growth which has its implications in terms of structure and spacing of a hierarchy as a whole to the importance of leading cities as generic forces of economic growth and diffusion of innovation;

- iii) Gradual elimination of differential in life style in terms of productivity and welfare both in urban and rural areas providing the minimum levels of services for improving the quality of life.
- iv) Favour a pattern of urbanisation and economic development which offers wide range of alternative locations and encourages a balanced use of natural and human resources.
- v) Equating the private and social cost of urban development since divergence between social and private costs leads to excessive growth of cities.

### **Reflection and Action 26.2**

Visit your local library and read a book on urban planning in India. Write an essay on “Urban Planning in India” in about two pages on the basis of the account given in your book.

Discuss your essay with other learners at your study center and your Academic counselor.

## **26.7 Conclusion**

The increasing growth pressure on the cities and towns and lots of problems out of it poses new challenges to the urban planners and administrators in present time. Urban planning should be politically and socio-culturally acceptable as well as environmentally, economically, technologically, physically, fiscally and infrastructure-wise feasible. The increasing pressure of population growth on urban land, its use and reuse, the amenities and services and the large number of low income groups in urban areas are some of the important factors contributing to the problems of the urban health hazards, law and order cannot be managed within traditional role performance of the government. For this the role of the urban community is of utmost importance. The entire urban community should take part in urban planning. In other words the planning system should be as democratic as possible in the present time. The basic weaknesses in the urban planning has been that it did not foresee the problems of the informal sector growth within the urban economy, and the locational focus did not spell out the implications of the sectoral

programmes in relation to population distribution catering to the needs of both urban and rural settlements.

## **26.8 Further Reading**

Lewis, Mumford: The culture of cities, 1938.

R.K.Viswakarma: Urban and Regional Planning in India.

## **Reference**

Benjamin Rowland: The Art and Architecture of India. Penguin books, Great Britain, 1954.

Town Planning in India. Town and Country Planning Organisation, New Delhi, 1962.

Lewis, Mumford: The culture of cities, 1938.

Hooja, Rakesh: Planning, interlocked markets and Rural Development, Rawat Publications, Jaipur, 1990.

Pardeep Sachdeva: Urban Local Government and Administration in India, Kitab Mahal, Allahabad, 1993.

R.K.Viswakarma: Urban and Regional Planning in India.

Lloyd Rodwin: Urban Planning in Developing Countries, Washington, D.C., 1975.

Mishra, R.P. Million Cities in India, Vikas Publishing House, New Delhi, 1978.

Bhardwaj, R.K. The Problems of Urban Development in India in S.K.Sharma(eds) Dynamics of Development, Concept Publications, 1978.