Chapter I

Settlement Development: Basic Issues

Any settlement is a collection of shelters where people live. Settlement is man’s first step towards adaptation to his environment.

One of the three basic necessities of a human being is the shelter. In the pre-historic period there was little difference between man and animal. In the midst of the extremes and vagaries of climate he was forced to think of a shelter. He used caves, trees and bushes and any material available for this. He built small shelters using woods and leaves when he was shifting from a place to the other one. These cave sites were the first forms of settlement units. Presently settlement designates an organized colony of human beings, together with their residence and other buildings as shops, hotels and other establishments, the roads, streets which are used for travel.

There are two terms: ‘human settlement’ and ‘habitat’. Both are difficult for the public to understand and accept. Perhaps the first thing that hinders the concept itself is its generality. ‘City’, ‘town’ and ‘village’ – like ‘region’ or country- belong to our thinking and our
language. The term 'urbanism' has only been accepted with difficulty, however, by most people, even though its actual subject, the city is familiar enough in most people's mind. When the concept is used to embrace simultaneously a big city, a village hamlet or a regional settlement, it becomes very difficult to grasp.

The English expression 'settlement' (which could be linked to 'colony') carries several main ideas: a colony in a new territory is a group of people occupying a particular geographical area, 'settled' there and looked upon as a unity with the environment it inhabits: a natural site (modified by people) plus the things and people within it. A small society, whose unity results from its isolation, which is relatively complete in itself: somewhere for living, procreation, production, exchange and relaxation. In these circumstances it is easy to understand the importance of the social and physical framework to the quality of the human lives that enclosed, for the most part, within it.

Human settlement is the most important approach to human needs. The social group and its 'habitat' constitute a human settlement.

**Right to Dwelling**

The right to a dwelling ought to be a firm right that should both confer security and liberate human potential, freed of the limitations of income. A new division of rights
should be incorporated in the statutes to ensure it. The right to live where you choose to raise a family, to own a home - in dignity and without fear of discrimination - should be a fundamental right guaranteed to all.

Settlements are situated as advantageously as possible with respect to natural features such as water, fuel, food, protection and drainage as well as access to transportation and communication.

Every settlement is unique and has a personality of its own. Each village and farm is a distinctive item in the landscape and has no precise duplicate even among its neighbours. Nevertheless all large cities have certain common attributes. Villages often not always occupy similar sites, share the same form and perform similar functions. It is possible to adopt a comparative treatment and to attempt same classification based on size, site, situation, function, age, building materials, cultural characteristics or the layout of streets and buildings.

Settlements may be temporary or permanent, rural or urban. Temporary ones are often those of migratory hunters, collectors and nomadic tribes. They are occupied seasonally and then left unoccupied or they may be so transient that these are at a particular site only for a short time and are then abandoned or shifted elsewhere due to
one or other reasons. Cities, towns and most villages are relatively permanent elements of the cultural landscape.

Areas of primary production from agriculture, forestry, fishing, quarrying and mining are considered rural. Urban settlements have association with human activities other than primary activities namely secondary (industries), tertiary (services) and quaternary (others like education, tourism and commerce).

In fact the almost endless variety of settlements can be classified in several different ways. The most obvious division is into towns and villages. This is not merely a matter of size. In some areas of dense population villages may be very large, e.g. in China and in India also villages may house several thousand people. On the other hand, towns may be very small, smaller than many villages. Thus for instance in Germany some small towns may only have a population of several hundred. The basic difference between towns and villages is that in towns the chief occupation of the people is trade or industry of one kind or another while in villages most of the people are engaged in agricultural activities. Some other occupations are found in villages such as fishing, lumbering or mining, but such villages can be distinguished from towns with similar occupations by the smaller scale of their operations, the lack of a commercial or shopping centre and by their lack of industries.
The distinction between rural and urban areas has become so vague that many geographers now believe that no effort at all should be made to differentiate between the two. The dividing line between rural and urban has become blurred and in future perhaps it will not be seen altogether. There will only be settlements – human settlements and without any designation of either rural or urban. The United Nations itself has even suggested that settlements should be graded only according to size and thereby as a continuum ranging from isolated dwellings in remote countryside to overcrowded inner city districts.

The division of settlements into rural and urban is primary and traditional. About two-third of the world population lives in rural areas accounting further for about 98% of the total number of human settlements. But strangely academically these are less preferred than the urban ones.

Nevertheless, it remains true that urban areas possess many characteristics that distinguish them from rural areas. These characteristics are physical, economic and social. Most towns, for instance can be identified by their closely packed buildings and streets, high population densities and non-agricultural functions. They are also distinctive in terms of their human aspects: numerous and diverse groups of people living in close proximity, sharing the same social facilities yet lacking strong social contacts.
Individual anonymity is often a feature of such areas together with human mobility (occupational and geographical), social instability, complex class structures, wide variation in human wealth and heterogeneous way of life.

There are different types of both rural and urban settlement. Rural settlements can be subdivided into farmhouses, hamlets and villages: urban settlements may be grouped into towns, cities and conurbations. Both categories can be classified according to size, function and form: both can be defined by subjective and objective analysis.

**Pattern of Settlements**

Settlements can also be classified by their pattern or shape. For instance, in some areas large numbers of scattered farms or homes may be spread over an area to produce a dispersed pattern of settlement. Elsewhere, the people may prefer to live close together in compact or nucleated settlements. In turn such nucleated settlements may be classified according to their shape. There may be compact or star-shaped with houses spreading out in several directions. This pattern is common to both villages and towns and is caused by new development spreading out along the major roads. Another very common form of settlement is linear settlement, where houses are arranged
along either side of a road, along a river bank or levee, along the edge of a valley above flood level or along the coast.

According to Brock and Webb settlement pattern denotes the shape or arrangement of settlements in relation to natural or man-made features or design such as streams, ridges, canals and roads (Brock, O.M.J and Webb, 1967). The pattern of settlement is determined on the basis of location of houses and the highways. The pattern of settlement exhibits the relationship between one dwelling and the other. Similarly the site may have no bearing on pattern in some cases (Emrys, J. 1965).

The pattern of settlement is determined on the basis of the location of houses and the highways. It denotes the shape of the settlement. The villages represent a sort of growth within the physical and cultural setting of the region. The pattern of settlement exhibits the interrelationship between human shelters.

While studying the pattern of settlement many things have to be borne in mind. First the pattern should be abstracted from the habitat. Secondly, the pattern should depend on the kind of houses one has in mind. The house may consist of cattle sheds, granary and outhouses. Sometimes a store, garage, post-office or school may determine the pattern of settlement (Dube, S.C, 1965).
From time immemorial the village has been a basic and important unit in the organization of Indian social polity (Dube, S.C, 1965).

The villages differ greatly from one another in shape and pattern by reason of contrast in the arrangement of streets and houses. As a matter of fact the street system within the settlement is the most essential element in determining the pattern when houses are built in groups the street often plays the decisive role and the houses usually faces not the east or the west but the highway or the main street or the main road. Besides the street system, other cultural elements such as temples and mosques render a peculiar character to the dwelling site.

Thus the grouping of houses due to certain reasons takes some different forms as a result of which many distinct patterns of settlements are developed. Yet there may be settlements where no pattern may be recognizable in definite terms. As such patternlessness becomes a pattern in itself and it is usually achieved by criss-cross working of various causes and functions of settlements (Anas, 1954).

Originally the formation of an Aryan village used to follow the plan of a ‘Swastika’. The crossroads of an Aryan village ran north and south and east and west and were terminated by the four principal gates dedicated to the four
positions of sun (Singh, R.L 1955). This had become a pattern in itself in those times and was throughout with similarities striking enough to recognize.

Another way of classifying settlements is by their site and by their position or situation. Few settlements have grown up at random and the site on which people choose to build their town or village always has some peculiar advantages.

Site refers to the actual piece of ground on which the settlement is built. Situation or position refers to the location of the villages or town in relation to surrounding areas. Thus a village may be sited on a river bank after and above flood level. Such a site will be convenient because although water is always available the village will not be subject to inundation. This site may also have a favourable situation if the river is navigable and can be used for transport to neighbouring towns. On a larger scale, a town may be sited at a particular point on a river where it is easy to build a bridge. This bridging point site will have a favourable position or situation if it is a place where a number of routes converge or where it can draw supplies of a variety of materials from the surrounding area and thus establish industries. Settlements situated in the centre of fertile agricultural areas may grow into market towns. Towns situated at the borders of two contrasting areas such
as mountain and plain may draw different resources from each region and thus be a centre of trade.

The size and pattern of settlements are often related to their sites and situations. Thus island settlements are often compact because the room for expansion is limited, while riverside settlements and settlements along the highways such as Grand Trunk Road are often linear because this enables everyone’s house to front the water in river’s case and to road in highway’s case.

In turn the site and situation of settlements are often determined by their functions. It is obvious that villages, whose function is to house and serve agricultural workers, will grow up in fertile agricultural areas but will not be built in areas with little farming potential. Towns may grow up for different functions some of which are closely related to factors of site while others are related to factors of situation. The major functions of towns are trade, transport, resource extraction, industrial production, defence, administration, culture and recreation. In many cases a town may have more than one major function and it is then said to be diversified in function.

Towns and villages may change their functions in course of time. In this case often the site is unrelated to the new function and may be a positive disadvantage, hindering communications and causing traffic congestion.
Rural and urban settlements differ in function for rural settlements are concerned mainly with one activity, usually agriculture, while towns have number of occupations, usually including trade. Because of their different purposes they also differ in their relationship with the environment, and the most important factors of site and situation are rather different for villages and towns. It is therefore often convenient to treat rural and urban settlements separately.

**Settlement Development and Environment**

A settlement is not an isolated entity in itself. It does affect and in turn gets affected from its environment. In fact, it exists in an environment of its own and needs one to exist. Environment is its *raison d’être*. Both the settlement and its environment are subsets of a larger system. These subsets or subsystems interact with each other. All types of environments as social, physical and economic have their effect on a particular settlement.

The form of settlement in any particular region reflects man’s relationship with the environment. Settlements have gradually grown up and evolved over a long period of time and by studying the site, pattern and arrangement of settlements one can see something of the history of man’s exploitation of the surrounding land. This is true both in Europe, where, throughout history, each new
innovation in agricultural techniques has had its effect on settlement patterns, and also in underdeveloped countries, where more recent changes have modified long established settlement patterns. In some areas settlement patterns have been changed by an influx of immigrants who established distinctive towns and villages. European colonists often greatly modified traditional settlement patterns by bringing in styles with which they were familiar. Similarly the introduction of new corps and new ways of life can change settlement patterns. In Malaysia, where the traditional Kampong settlement was a rather loose group of buildings, new, more compact villages were built by miners in the tin areas and on newly established rubber estates.

Settlement reflects not only man’s response to his environment but also the religious and social customs of his society. Some buildings in a town or village are always reserved for public use, such as a mosque, a temple, administrative building or a panchayat bhavan (building housing office of local governing body in India). The type and number of such buildings help to give settlements their distinctiveness. Similarly in settlements where several different groups of people are thrown together, the town or village may be divided into separate ‘quarters’ each distinguished by particular building style or house arrangement or by different religious or other communal buildings. There is often a ‘European quarter’ in the towns
of former colonies; African towns may have distinctive Indian sections; and many south-east Asian towns have large Chinese sections.

Economic environment, like physical and geographical or social environment also has its share of effect on the way the man lives on the surface of this planet. There is a strong link between settlement pattern and economic activity. If an area undergoes economic development, the settlement pattern of that particular area will be liable to structural adjustment. Thus in this increasingly complex web of human settlements and economic activities, a number of problems has been created on the habitat space which needs solution. To clearly understand and analyse methodologically these are often classified further. Not going deeper it is emphasized that economic and other environments have a profound impact on a settlement. Not only settlement even house types are affected.

**House Types: Impact of Environment and Implications**

Human dwellings are governed by traditional and cultural elements of the time and form an important cultural landscape. As such ‘House’ as a geographical element includes not only the dwelling house, ranging from the small thatched hut to the most elaborate massive
mansions, but all other human structures, where people agglomerate, where their belongings and material goods are stored, where their social and cultural needs are satisfied, all such places are included in the definition of house.

Rural dwellings form one of the most basic elements in the cultural landscape and hold a significant place in the geographical analysis of settlements. They provide the evidence of complex relation between man and his environment. The rural dwellings are adapted to the environment of the region which determines the nature of building material, form of root and layout of house. Man has always tended to build his house with the nearest material at hand.

Physiographic features, drainage, soil types and climate are the important factors, which determine the nature and types of rural dwellings. Climate has a dominating effect upon the type of house and its building material. Amount of rainfall, direction of wind, sunny sides of the region are the important factors, which control the architecture and plans of rural dwelling. The amount of rainfall has considerable impact on the type of houses and building material.

The socio-economic characteristics of the region determine the regional pattern of house types. They
influence the shape, size, plan, and style of construction and architecture of houses. The cultural factor includes the economic conditions of the people, traditional and social customs. Besides these the availability of building materials also plays an important role in shaping house type. The house of one community differs widely from those of the other, the reason being the difference in their cultural outlook. The houses also represent the cultural heritage of the past and the survival of the tradition may be seen not only in the general aspect of the house but in the style of construction and architectural features.

**Settlement Patterns in Ancient India**

Though sometimes a settlement grows like the Aladdin’s castle of the Arabian Nights – like Chandigarh, the capital of Punjab and Haryana, a planned city meant for the function of capital city, but all cannot be attributed to this type of origin. And it takes time, rather periods of historic duration to develop a settlement into an urban centre. This time factor is especially important in an agricultural country like India.

In Bhadohi district, it appears that there has been hardly any proper planning of the settlements. Some of the plans of settlements in ancient India have been discussed in the ancient texts like ‘Manasara Shilpashastra’. Shilpashastras are old Sanskrit texts which were possibly
compiled about the fifth or sixth century B.C. but the traditions which they indicate are of greater antiquity. Vide Havels wrote about them in "Ancient and Medieval Architecture of India" in 1915. P.K. Acharya translated them into English with his comments entitled 'Indian Architecture' in five volumes in 1927.

In these writings most of the plans are rectangular or square and do not appear to differ in essentials. Each village is surrounded by a wall and ditch for defence purposes. There are generally four gates in the middle of the four quarters. The centre of the village is generally occupied by a temple, a tank or a public hall. The four squares are further subdivided by straight streets. Each block is inhabited on the basis of caste or profession, the best of quarters being generally given to Brahmans and the high castes.

The easterly axis of the general plan and the intersection of the urban street by north south running streets bear relationship with climatic conditions. Such an arrangement ensured the advantage of sun light and the proper circulation of fresh air.

The plan of settlements discussed above does not seem to have survived in the true form. However, the study of the present day village plan is of vital interest. When one speaks of the village plan often he or she refers to layout of
the Basti (inhabited site) resulting from the arrangement of houses and village streets or lanes. In this sense a definite pattern has emerged only in the case of compact or linear settlements that are very limited in number. At times the settlements are so irregularly hurdled together that it becomes very difficult to recognize the definite pattern. Such lack of pattern is a peculiar one and often one is tempted to call it a pattern.