



## Urban Land Use : Ara

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**Abstract:** *Urban land use is an important area of research in geography. It is the external shape and internal structure of the city. The main internal structures of the city includes the characteristic.*

*A knowledge of the arrangement of land use in the town and of the relative proportions of land devoted to several uses is basic need of urban analysis.1 Land use and associated landscapes possess a systematic pattern but the culture of the society and age of the city are important in creating the specific patterns of housing, offices, industry, open spaces etc. Urban land uses vary in their functions.*

**Key Words:** Tourism, Country, Fosters, Mutual Sympathy, Numerous, Exchequer, Modernity.

Functions defines what an area is used for. Land uses also vary as to the intensity with which the land is used for a particular purpose. For example, an area in the city may be completely residential or it may have in it patches of industry or open space or other uses. Intensity defines how concentrated a particular function is in an area. There is a third feature of urban land use and this is form. Forms defines what structures comprise the land use of a particular function. For example, in an area of intensive residential function the buildings may be multi-storyis block of flats or they may be individual houses each in their own plot of land, or they may be squatter slums.

These three examples are present in a quite different cultures in western countries as well as in India. The culture of the city is an important factor in understanding urban form similarly the age of the city is important. Thus every city is characterised by different land uses. Residential, commercial, industrial, recreational and other localized activities are each confined to separate zone within the city. At first glance, the land use map of a city seems complex and confusing. However, when we know what to look for some definite patterns of land use emerges. The same patterns are repeated within many Indian towns. These patterns are the result of the operation of forces which sort out activities into typical locations.

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For example, all Indian cities have a distinctive main bazar area (also known as C.B.D.) where certain kinds of financial and retail activities are concentrated. Industrial zones, transport, wholesale and administrative activities are found close to the main bazar along the water-fronts or railways. Most of the remaining urban area is given to residential land use. Dotted over the residential areas are commercial land use, and several other service centers serving the surrounding residential population. Roads and streets link these activities and areas, and are themselves an important land use in the city. Open space for recreation and leisure is also found in same parts of the city. Various institutional land uses like hospitals, educational institution, cantonment and others are dispread throughout the town.

**FORCES INFLUENCING URBAN LAND USE:** Urban land use pattern follows certain systems and patterns. Land is not used in an accidental fashion. An important factor in their location is economic competition.2 This is the contest for the sites by different kinds of land uses that best suit their own needs. When different land uses desire the same site, it usually goes to the user who can earn most form it, and thus afford to pay more for it as rent. In this way, the most desirable sites in the city are captured by the high earning commercial functions.



Industries bid against other users for highway side and river side sites. It is because of the fact that every industry wants easy access to labor, transport and markets. The factories are usually not located in the central area because they are not prepared to pay higher rent for the use of the land in the central area. This process of land utilization normally works in the life of every town or city. The detailed topography of the site usually influences the location of commercial Centre and then main roads, public transport routed and railway lines. Major institutional land uses are usually located next.

**CHARACTERISTICS AND MODELS OF LAND USE:** It is a somewhat difficult to distinguish any area as unifunctional one in Ara due to the complex nature of its land use. The residential area, for example, has different enclaves like shops, offices, schools and household industries. Often the same buildings is used for different functions. "It is not uncommon to find a shop or workshop on the ground floor, flat on the second and cubicles on the third floor".<sup>3</sup> There are many business, industrial and administrative areas where people reside voluntarily as well as involuntarily. Multipurpose uses of building is the rule rather than an exception. Frequency of occurrences of such structures is rated to be quite high in case of Ara. Structures facing the main streets are invariably used for commercial purposes wherever locational factors are conducive while the back portions are utilized by the owners for residential purposes so that the members of the family can have an effective control over their small family enterprises. Even small boys and women fold take charge of the shop in the absence of the head of the family or otherwise.

The urban land of Ara has been put to various uses like agricultural, residential, roads, educational, recreational and health purposes, which are arranged in order of their importance. Ara is quite peculiar in many respects as out of a total of 3136.32 hect. of urban land only 9.47 percent is residential. Agriculture, which is non-urban in character, occupies 1537.42 hect. Or 49.01 percent

of the total urban land.

Land use pattern is a dynamic phenomenon. It makes horizontal as well as vertical growth on the time and space scale. However, the expansion of land use follows some principles and models of urban land use growth. Urban land use growth models are also applicable to the evolution of a townscape.

Most of urban land use theories and models have developed some common understandings. For example:

- i) Every urban Centre possesses a nucleus where commercial, administrative and banking services are done.
- ii) The commercial area is surrounded by low to middle income group people where some pockets develop as slums.
- iii) Intermediate area is mainly given to residential uses.
- iv) The outer area is usually a developing zone where new building are gradually developing.
- v) Urban sprawl is a continuous phenomenon.
- vi) Land value, rent value and production density are highest in the central area.

The above inferences are based on the findings of some models. The concentric zone theory of burgess say that urban land use pattern develops in concentric zones where inner most zone is given to the commercial work and the outer most zone has the mixture of rural and urban land use. In his search for a greater understanding of a complex urban system, burgess adopted some of the fundamental concepts used by the plants ecologist in their study of plant associations.<sup>4</sup> He envisaged that within the city, people competed for limited space. Those who were best able to pay for them achieved the most desirable locations for their houses and businesses. Those individuals and functions with the lowest level of economic competence had the least choice and were, therefore, left with the poorest location. Burgess suggested that this process led to functional zoning and residential segregation within cities. In other words, within



different areas of the city different single function formed the dominant element. The sector model of Homer Hoyt should be seen as an extension of the Burgess concentric zone model. Hoyt concluded that there is a general pattern of rent that applies to all cities ... rent areas in American cities tend to conform to a pattern of sectors rather than of concentric circles.<sup>5</sup> In other words, residential areas of a particular class develop outwards from the city-Centre in the form of wedges or sectors.

Both the concentric and sector models envisage zones developing outwards from a single Centre. Harris and Ullman challenged this idea, abandoning the C.B.D. as the sole focal point, and suggesting alternatively that the zones will develop around a number of quite separate discrete nuclei in addition to the C.B.D.<sup>6</sup> The number of nuclei will depend on the size of the city, and the larger the city, the more numerous and specialized are nuclei. The multiple nuclei model envisages that the city will neither develop along zonal nor sectoral lines but will take on a cellular structure in which distinctive forms of land use have developed around certain nuclei within the urban areas.<sup>7</sup>

It is the commercial use around which the urban land use pattern develops. Most of the Indian cities have planned earlier growth due to which no one of the above mentioned models can perfectly be used. The land use pattern of Indian cities is the function of various functional compression and tension forces. Besides commercial use, residential use is the most important use. Urban land is also adequately given to transport, industrial, recreational, administrative and several uses. Although their growth is not well conceived in India urban Centres, they are certainly approximate and near to the systems postulated in various theories.

#### **CLASSIFICATION OF LAND USE:**

The classification of land use is of primary importance for the understanding of changing land use patterns. Classification is the grouping of objects into classes on the basis of properties or relationships they have in common. In the urban land use

mapping, planners and geographer use similar classification, but the fact is that there is no universally accepted classification scheme. An interesting classification scheme is the standard industrial classification, in which emphasis is greatly given on the manufacturing industries and the residential function is not at all represented. Thus, such classification scheme is of little value in making and understanding a land use map. Another scheme is suggested by a planner Bartholomew. He gives an alphabetical index of urban land use indicating the main class to which each belongs.<sup>8</sup> The classes suggested by Bartholomew are R-1 and R-2 for single family and two families' residence, M for multifamily dwellings, C for commercial areas, P for parks and playground, SP for public and semi-public, LI for light industry, HI for heavy industry and RR for rail road property. But generally geographers don't use the alphabetical notion. They prefix the choropleth maps. Moreover, geographers use their own land use classes. They are commercial, residential, industrial, public and semipublic and vacant (including agricultural land). The exact wording may differ from one study to another, but the major classes are the same. Sometimes rail road and rail-road property may be included under industrial land uses. It depends on the type of the city and the objective of a particular study. For example, commercial land may be subdivided into retail and financial and administrative. Residential land use may be further subdivided into single family, wholesale and two family and multi-family. Industrial land use may be subdivided into light and heavy manufacturing. But it is impossible to show the detail for all classes on a single map.

#### **(1) RESIDENTIAL AREAS: -**

Residential segmentation is a familiar feature of urban space and it makes its appearance as a town grows. The residential areas are the third most important land consuming 9.47 percent of the total area of Ara. The location and character of residential segments are determined by the behavior and





decision-making processes of urban residents. These decisions depend upon various factors. They involve deciding where to live, work and shop and by what means to communicate. Therefore, some areas within the town gain prestige as living areas and others decline. The inhabitants of the city, thus, are faced with a fundamental decision: where to live? The principal causes of their choice of housing are three in number price of houses, types of residence and its location. From a glance over the map one thing becomes clear that in 1998 the residential areas were scattered forming two big compact areas. These residential areas were found in the east and west of the station road to river Gangi. One big compact area is situated between station road, Ara-Buxar road and north of railway line. The second big compact area is situated between station road to Ara-canal and south of river Gangi. In the central part of the town, residential areas along the main roads have also developed. But in the outer-side of the main town, residential areas are well developed properly developed. This area is flood-affected and belongs to agricultural land use

**(02) COMMERCIAL AREA: -**

Commercial area is economically the most active and sensitive zone of the city which is located in the heart of the city along both sides of the principal roads. Apart from being inadequate in area, the commercial pockets suffer from problems of narrow and kutchra approaches, poor sanitation, lack of parking facilities and encroachment of streets. The eastward and northward extensions of this use are physically not possible because of the large area covered with agricultural functions. Ara chowk area is biggest commercial Centre of the city. It is a wholesale as well as retail market. Jail road, shish Mahal road and chitter toli road are also important commercial Centre's of the city. Shops are lined along both sides of the road. A new market has been developed in the eastern portion of Ramna Maidan. Again are considerable number of shops are found near the Ara railway station. The development of market at the intersection point of two roads in

the south-eastern part of the city is an emerging feature. The lower floor is used for commercial purpose and upper floors are generally used for residential purposes.

**(3) INDUSTRIAL AREA: -** The intra-urban location of industry is an outstanding field because industry continues to be the most important single factor in the urban economy. The distribution of different land uses in the city is dependent to a large extent on the pattern of industrial land utilization. The placement of industry influences the distribution of residence, the network of road and the location of service activities. In Ara city industrial development was a recent addition. Industrial use cover 0.51 percent area of the city which show low degree of industrialization. Industrially main units belong to small and household categories. Important industries are flour, fine flour, oil pressing, metal work, weaving work, loaf, soap making work etc. Main areas of concentration are located in the south-western part, north and northeastern parts and western part of the city.

**(3) Educational Area:** Educational function occupies 1.05 per cent of the city area but it consists of small pockets in different parts of the city as there is no concentration of educational function in a particular area. H.D. Jain College and Maharaja College are two main higher educational centers of the city. The office and post-graduate departments of V.K.S. University form an educational zone.

**(4) Medical Area :** It covers 0.22 per cent area of the city. Medical area is located in ward no. 19 where Sadar Hospital is located. At present Sadar Hospital consists of medical wards surgical ward etc. Adjacent to Sadar Hospital, family welfare center, T.B. Centre, maternity and child welfare centers are located. Sadar Hospital is a nodal medical Centre of the city and its surrounded areas.

**(5) Administrative Area:-** The administrative zone of the city covers 2.06 per cent area. Except the district administrative headquarters



which is located in the Centre of the city, others are situated in a scattered way all over the city and even many of them has not buildings of their own. The city performs administrative function at different levels. There are offices even of the State Government and the Central Government.

**(7) Recreational Area:-** It is an important function of the city. It occupies only 0.20 per cent area of the city. It includes playgrounds; parks, cinema and clubs. There is one stadium in the city.

**(8) Transport Zone:** It principally includes railway station and bus stand areas cover 0.47 area. Both are located in ward no. 14. Such areas cover 0.47 per cent area of the city. The importance of such zone is enhanced if the city is a linkage point in a wider regional setting. Railway yards retain their critical importance for the receipt of moving goods and dispatch for the exports.

The existing bus stand of Ara is situated at a short distance from the Railway station. It is inadequate both in area and also from location point of view.

**(9) Religious Area:** Religious places are spread all over the city of Ara. Only 0.60 per cent area is given to religious use. There are 11 main Temples, 5 Mosques, only one Gurudwara and one Church in the city. In the central part of the city, religious use has occupied come highly valuable land which may provide high return if that land is given to commercial and some other productive uses.

**(10) Graveyards and Burning Ghats:-** here are 21 graveyards and 4 burning Ghats in the city. The graveyards are located mostly between Ara canal and Ara railway station to Gangi-bridge and burning Ghats are located on the bank of river Ganga.

**(11) Water Bodies:-** Water Bodies cover 6.92 per cent area. It includes those areas where water remains permanently. There are 20 tanks within the city which form the permanent water bodies. Some of them are artificially made, while

some others are dueto depression in landscape. In the geological past, changes of the course of the Ganga and the Son have also contributed towards the origin of some water bodies. Water bodies have been found mainly near the Centre of the city and in the eastern part of the city.

**(12) Agricultural Area:** It occupies 49.01 percent area of the city. Agricultural use occupies the largest area of the city. It is mainly found in southern, eastern and northern part of the city. Agriculture is not the basic occupation but it certainly influences the economy of a large number of people. Where agriculture is intensive and modernized. Agricultural area gradually decreases as the built-up area increases. Such area usually produces vegetables and grains. More land value is relatively low in comparison to the internal part of the

City: but it is high when we compare it with the fringe zone land value.

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