

Fundamentals of Human Geography

Chapter-10 Human Settlements

A human settlement is defined as a place inhabited more or less permanently

CLASSIFICATION OF SETTLEMENTS

RURAL URBAN DICHOTOMY

- The basic difference between towns and villages is that in towns the main occupation of the people is related to secondary and tertiary sector
- While in the villages most of the people are engaged in primary occupations such as agriculture, fishing, lumbering, mining, animal husbandry etc

TYPES AND PATTERNS OF SETTLEMENTS

Settlements may also be classified by their shape, patterns types. The major types classified by shape are:

- Compact or Nucleated settlements:** These settlements are those in which large number of houses are built very close to each other. Such settlements develop along river valleys and in fertile plains. Communities are closely knit and share common occupations.
- Dispersed Settlements:** In these, houses are spaced far apart and interspersed with fields. A cultural feature such as a place of worship or a market, binds the settlement together.

Rural Settlements

- Rural settlements are most closely and directly related to land
- They are dominated by primary activities such as agriculture, animal husbandary, fishing etc. .The settlements size is relatively small

Some **factors affecting the location of rural settlements** are :

- Water Supply-** Rural settlements are located near water bodies such as rivers, lakes, and

springs where water can be easily obtained. Most water based 'wet point' settlements have many advantages such as water for drinking, cooking and washing. Rivers and lakes can be used to irrigate farm land. Water bodies also have fish which can be caught for diet and navigable rivers and lakes can be used for transportation.

- ii. **Land-** People choose to settle near fertile lands suitable for agriculture. For eg in Europe villages grew up near rolling country avoiding swampy, low lying land while people in south east Asia chose to live near low lying river valleys and coastal plains suited for wet rice cultivation.
- iii. **Upland-** In low lying river basins people chose to settle on terraces and levees which are "dry points". In tropical countries people build their houses on stilts near marshy lands to protect themselves from flood, insects and animal pests.
- iv. **Building Material-** The availability of building materials- wood, stone near settlements is another advantage. For eg. in loess areas of China, cave dwellings were important and African Savanna's building materials were mud bricks and the Eskimos, in polar regions, use ice blocks to construct igloos.
- v. **Defence-** During the times of political instability, war, hostility of neighbouring groups villages were built on defensive hills and islands. For eg. in Nigeria, upstanding inselbergs formed good defensive sites. In India most of the forts are located on higher grounds or hills.
- vi. **Planned Settlements-** Planned settlements are constructed by governments by providing shelter, water and other infrastructures on acquired lands. For eg. the scheme of villagisation in Ethiopia and the canal colonies in Indira Gandhi canal command area in India

Rural Settlement Patterns

The site of the village, the surrounding topography and terrain influence the shape and size of a village. Rural settlements may be classified on the basis of a number of criteria:

- i. On the basis of setting: The main types are plain villages, plateau villages, coastal villages, forest villages and desert villages.
- ii. On the basis of functions: There may be farming villages, fishermen's villages, lumberjack villages, pastoral villages etc.
- iii. On the basis of forms or shapes of the settlements: These may be a number of geometrical forms and shapes such as Linear, rectangular, circular star like, T-shaped village, double

village, cross-shaped village etc.

- a. **Linear pattern:** In such settlements houses are located along a road, railway line, river, canal edge of a valley or along a levee.
- b. **Rectangular pattern:** Such patterns of rural settlements are found in plain areas or wide inter montane valleys. The roads are rectangular and cut each other at right angles.
- c. **Circular pattern:** Circular villages develop around lakes, tanks and sometimes the village is planned in such a way that the central part remains open and is used for keeping the animals to protect them from wild animals.
- d. **Star like pattern:** Where several roads converge, star shaped settlements develop by the houses built along the roads.
- e. **T-shaped, Y-shaped, Cross-shaped or cruciform settlements:** T-shaped settlements develop at tri-junctions of the roads while Y-shaped settlements emerge as the places where two roads converge on the third one and houses are built along these roads. Cruciform settlements develop on the cross-roads and houses extend in all the four direction.
- f. **Double village:** These settlements extend on both sides of a river where there is a bridge or a ferry.

Problems of Rural Settlements

- i. Rural settlements in the developing countries are large in number and poorly equipped with infrastructure.
- ii. Supply of water to rural settlements in developing countries is not adequate. People in villages, particularly in mountainous and arid areas have to walk long distances to fetch drinking water.
- iii. Water borne diseases such as cholera and jaundice tend to be a common problem.
- iv. The countries of South Asia face conditions of drought and flood very often. Crop cultivation sequences, in the absence of irrigation, also suffer.
- v. Absence of toilet and garbage disposal facilities cause health related problems.
- vi. Unmetalled roads and lack of modern communication network creates a unique problem. During rainy season, the settlements remain cut off and pose serious difficulties in providing emergency services.

Urban Settlements

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- In 1810 A.D London was the first urban settlement to reach a population of 1million
 - By 1982 approximately 175 cities in the world had crossed the 1 million population mark
 - Presently 48% of the world's population lives in urban settlements compared to only 3% in the year 1800

Classification of Urban Settlements

Some of the common basis of classification are size of population, occupational structure and administrative setup.

- **Population Size-** It is an important criteria used by most countries to define urban areas. The lower limit of the population size for a settlement to be designated as urban is 1,500 in Colombia, 2,000 in Argentina and Portugal, 2,500 in U.S.A. and Thailand, 5,000 in India and 30,000 in Japan
Density of population is also an important factor For eg. in India density of 400 persons per sq km and share of non-agricultural workers are taken into consideration. In Denmark, Sweden and Finland, all places with a population size of 250 persons are called urban. The minimum population for a city is 300 in Iceland, whereas in Canada and Venezuela, it is 1,000 persons.
- **Occupational Structure-** In India, the major economic activities in addition to the size of the population in designating a settlement as urban are also taken as a criterion. In Italy, a settlement is called urban, if more than 50% of its economically productive population is engaged in non-agricultural pursuits.
- **Administration-** The administrative setup is a criterion for classifying a settlement as urban in some countries. For example, in India, a settlement of any size is classified as urban, if it has a municipality, Cantonment Board or Notified Area Council.
- **Location-** Location of urban centres is examined with reference to their function. For eg.Strategic towns require sites offering natural defence; mining towns require the presence of economically valuable minerals; industrial towns generally need local energy supplies or raw materials; tourist centres require attractive scenery, or a marine beach, a spring with medicinal water or historical relics, ports require a harbour etc.
- Apart from site, the situation plays an important role in the expansion of towns. The urban centres which are located close to an important trade route have experienced

rapid development.

Functions of Urban Centres

Towns and cities are classified into the following categories.

- a. **Administrative Towns**- National capitals, which house the administrative offices of central governments, such as New Delhi, Canberra, Beijing, Addis Ababa, Washington D.C., and London etc. are called administrative towns. Provincial (sub-national) towns can also have administrative functions, for example, Victoria (British Columbia), Albany (New York), Chennai (Tamil Nadu).
- b. **Trading and Commercial Towns**- Agricultural market towns, such as, Winnipeg and Kansas city; banking and financial centres like Frankfurt and Amsterdam; large inland centres like Manchester and St Louis; and transport nodes such as, Lahore, Baghdad and Agra have been important trading centres.
- c. **Cultural Towns**- Places of pilgrimage, such as Jerusalem, Mecca, Jagannath Puri and Varanasi etc. are considered cultural towns. These urban centres are of great religious importance. Health and recreation (Miami and Panaji), industrial (Pittsburgh and Jamshedpur), mining and quarrying (Broken Hill and Dhanbad) and transport (Singapore and Mughal Sarai).

CLASSIFICATION OF TOWNS ON THE BASIS OF FORMS

- An urban settlement may be linear, square, star or crescent shaped
- The form of the settlement, architecture and style of buildings and other structures are an outcome of its historical and cultural traditions
- For example, Chandigarh and Canberra are planned cities, while smaller town in India have evolved historically from walled cities to large urban sprawls

Addis Ababa (The New Flower)

- The name of Ethiopian capital Addis Ababa, as the name indicates (Addis-New, Ababa-Flower) is a 'new' city
- It was established in 1878
- The whole city is located on a hill-valley topography
- The roads radiate from the govt headquarters Piazza, Arat and Amist Kilo roundabouts

- Mercato is the largest market between Cairo and Johannesburg
- A multi-faculty university, a medical college, a number of good schools make Addis Ababa an educational centre
- It is also the terminal station for the Djibouti-Addis Ababa rail route
- Bole airport is a relatively new airport
- The city has witnessed rapid growth because of its multi- functional nature and being a large nodal centre located in the centre of Ethiopia

Canberra

- Canberra was planned as the capital of Australia in 1912 by American landscape architect, Walter Burley Griffin
- He had envisaged a garden city for about 25,000 people taking into account the natural features of the landscape
- There were to be five main centres, each with separate city functions
- The city has expanded to accommodate several satellite towns, which have their own centres
- The city has wide-open spaces and many parks and gardens

Types of Urban Settlements

Depending on the size and the services available and functions rendered, urban centres are designated as town, city, million city, conurbation, megalopolis

1. **Towns**- A town is a human settlement larger than village but smaller than a city. Specific functions such as, manufacturing, retail and wholesale trade, and professional services exist in towns.
2. **City**- A city is a large settlement. Cities generally have extensive systems for housing, transportation, sanitation, utilities, land use and communication. Cities are much larger than towns and have a greater of economic functions. They tend to have transport terminals, major financial institutions and regional administrative offices
3. **Conurbation**- A conurbation is a region comprising a number of cities, large towns, and other urban areas that, through population growth and physical expansion, have merged to form one continuous urban or industrially developed area. The term conurbation was coined by Patrick Geddes in 1915
4. **Megalopolis**-A megalopolis, also known as a mega region, is a clustered network of cities.

This Greek word meaning “great city”, was popularised by Jean Gottman (1957) and signifies ‘super- metropolitan’ region. The urban landscape stretching from Boston in the north to south of Washington in U.S.A. is the best known example of a megalopolis.

5. **Million City**- When the population crosses the one million mark it is designated as a million city. The rate of increase in the number of million cities has been three-fold in every three decades – around 160 in 1975 to around 438 in 2005. London reached the million mark in 1800, followed by Paris in 1850, New York in 1860, and by 1950 there were around 80 such cities.

Distribution of Mega Cities

- A mega city or megalopolis is a cities together with their suburbs with a population of more than 10 million people
- New York was the first to attain the status of a mega city by 1950 with a total population of about 12.5 million
- The number of mega cities is now 25

Problems of Human Settlement in Developing Countries

- i. unsustainable concentration of population
- ii. congested housing and streets
- iii. lack of drinking water facilities.
- iv. lack infrastructure such as, electricity, sewage disposal, health and education facilities

Problems of Urban Settlements

In the Asia Pacific countries, around 60% of the urban population lives in squatter settlements

- i. **Economic Problems**- The decreasing employment opportunities in the rural as well as smaller urban areas of the developing countries push the population to the urban areas. The enormous migrant population generates a pool of un-skilled and semi-skilled labour force
- ii. **Socio-cultural Problems**- Insufficient financial resources fail to create adequate social infrastructure. Lack of employment and education tends to aggravate the crime rates. Male selective migration to the urban areas distorts the sex ratio in these cities.
- iii. **Environmental Problems**- Many cities of the developing countries find it extremely

difficult to provide the minimum required quantity of potable water and water for domestic and industrial uses. An improper sewerage system creates unhealthy conditions. Massive use of traditional fuel in the domestic as well as the industrial sector severely pollutes the air. The domestic and industrial wastes are either let into the general sewerages or dumped without treatment at unspecified locations. Huge concrete structures erected to accommodate the population and economic play a very conducive role to create heat islands.