1. Details of Module and its structure

| Module Detail | | |
|-------------------|--|--|
| Subject Name | Geography | |
| Course Name | Geography 03 (Class XII, Semester - 1) | |
| Module Name/Title | Rural Settlement – Part 1 | |
| Module Id | legy_11001 | |
| Pre-requisites | Basic Knowledge about Settlement | |
| Objectives | After going through this lesson, the learners will be able to understand the following: • Explain the settlement • Explain the type of settlement • Describe the Rural Settlement • Explain the type of Rural settlement | |
| Keywords | Settlement, Compact Settlements, Dispersed Settlements, | |

2. Development Team

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One of the basic human needs is shelter. It may be in the form of a hut, a house, an apartment or a big mansion. *Settlement* refers to an organised colony of human beings together with the buildings in which they live or use and the paths and streets over which they travel. It includes the temporary camp of the hunters and herders; the permanent settlements called villages; and large urban agglomerations. Human settlements may consist of only a few dwelling units (hamlets), or they may be as large as megalopolis with a big cluster of buildings accommodating millions of people.

Settlements can be studied in terms of their site, situation, size buildings, form, function, internal structure, external linkage, and roles in the national and global economy. *Site* refers to the actual piece of ground on which the settlement is built. *Situation or Position* refers to the location of the village or town in relation to surrounding areas. The site and situation of the settlements and the type of building may be studied in relation to the physical environment and cultural heritage.

For example, a village may be sited on a hill or a river bank. Such a site will determine its access to water and the likely inundation in rainy season. The form of settlement in any particular region also reflects human perception of the natural environment.

The functions, linkages and roles reveal the nature of hinterland from which the settlement gets sustenance and the level of overall development. Settlements have evolved to the present form over a long period of time. Throughout history, each new innovation in agricultural and industrial techniques has had its effect on settlement structure and patterns in all parts of the world developed or developing. In the agricultural era rural settlements predominated. The Industrial Revolution gave rise to urban settlements both small and big.

Changing cultural and social nodes are clearly reflected in the structure and functions of settlements.



Fig. No.01 Settlement

https://pixabay.com/p-2911212/?no_redirect

Classification of Settlements

It is widely accepted that settlements can be classified into two major groups- rural settlement and urban settlement. There is no fixed factor that defines a village or a town. Although population size is an important criterion, but it is not a universal criterion, because many villages in densely populated countries of India and China have population exceeding that of some towns of Western Europe and United States.

Another criterion that differentiates rural and urban settlements from each other is occupation of the people.

The people living in villages are engaged in primary activities such as agriculture, fishing, lumbering, mining, animal husbandry, gathering forest products etc. while the people living in urban areas are engaged in the activities related to secondary and tertiary sectors, but in developed countries large sections of urban population prefer to live in villages even though they work in city and commute to their workplaces.

Differentiations between rural and urban on the basis of functions are more meaningful even though there is no uniformity in the hierarchy of the functions provided by rural and urban settlements world over. For example, Petrol pumps are considered as a lower order function in the United States while it is an urban function in India. Even within a country, rating of functions may vary according to the regional economy. Facilities available in the villages of

developed countries may be considered rare in villages of developing and less developed countries.

In India, as per the census 2011, a settlement is defined as an urban settlements only if it has municipality, corporation, cantonment board or notified town area committee and has a minimum population of 5000 persons, with at least 75 per cent of male workers are engaged in non-agricultural pursuits and a density of population of at least 400 persons per square kilometers.

Types and Patterns of Settlements

On the basis of the shape, settlements may be classified as (i) compact or nucleated settlements and (ii) dispersed or scattered settlements.

(i) Compact or Nucleated settlements

Settlements have closely built up area are termed as Compact or Nucleated Settlements. Large numbers of houses are built very close to each other. In such settlements all the dwellings are concentrated in one central site. These type of settlements develop along river valleys and in fertile plains. Communities are closely knit and share common occupations.



Fig. No.02 nucleated settlement

Source: https://goo.gl/7mfmbX

(ii) Dispersed Settlements

In Dispersed Settlements dwelling units are not close to each other. They are spaced far apart and often interspersed with fields. This settlement is also known as isolated settlements. Most of the houses are small in size, and the settlement consists of a single house to a small group of houses. These settlements are scattered over a vast area and does not have any

specific pattern. A cultural feature such as a place of worship or a market, binds the settlement together.



Fig:03 Dispersed Settlement

Source: https://upload.wikimedia.org/wikipedia/commons/6/6a/Frutighaeuser.jpg

Rural Settlements

Settlements whose inhabitants are engaged in primary activities are called rural settlements. These settlements are most closely and directly related to land and are dominated by primary activities such as agriculture, animal husbandry, fishing etc. The settlements size is relatively small. These settlements have small populations and are located in the rural areas.

There are temporary rural settlements established for limited periods of time. For example, lumber workers in the forests, nomadic settlements and the dwellings of reindeer herders.



Fig. No.04 dwellings of reindeer herders

Source: https://upload.wikimedia.org/wikipedia/commons/8/87/Saami_Family_1900.jpg

Some rural settlements are seasonally inhabited settlements such as the winter and summer settlements of livestock herders and farm workers. It is impossible to determine the total number of rural settlements throughout the world because the concept of an individual populated area is defined differently in each country of the world.

The number of rural settlements throughout the world especially in economically developed countries has declined as a result of urbanizations and the movement of the population from the countryside to the cities.

Factors affecting the location of Rural Settlements

There are many factors which influence the location of rural settlements. Some of these factors are given below:

Water supply

Water is the most essential need of all living beings. The supply of water has been a strong factor that determines the location of settlements.

Water is required not only for drinking, cooking, washing but also for economically important activities such as irrigation, transport, house construction etc. Water bodies also act as a kind of natural defence to these settlements. That is why usually rural settlements are located near water bodies such as rivers, lakes, and springs where water can be easily obtained.



Fig. No.05: rural settlements located near rivers

Source: https://goo.gl/5q57H7

Sometimes the need for water drives people to settle in otherwise disadvantaged sites such as islands surrounded by swamps or low lying river banks. Most water based 'wet point' settlements have many advantages due to availability of water for various uses.

Land

The main occupation of inhabitants of rural settlements is agriculture, which is why, people choose to settle near fertile lands suitable for agriculture.

In Europe, villages grew up near rolling country avoiding swampy, low lying land while people in south east Asia prefer to live near low lying river valleys and coastal plains suited for wet rice cultivation. Early settlers chose plain areas with fertile soils.

Situation

Situation of settlements refers to the landscapes and the environment around it. Apart from the landscape water, land hazards, social relations and the like are parts of the situation. As the European countries are located in the higher latitude temperate lands, the people of these countries need to protect themselves from severe temperatures. So they mostly build their houses facing east to take advantage of sunshine. Care is taken to build the dwellings in a fashion to prevent heavy winds, unhealthy mist, forest waves and tides.



Fig. No.06 east facing houses

Source: https://upload.wikimedia.org/wikipedia/commons/4/44/Ambalavao house.jpg

Upland(dry land)

Land which is not threatened by floods is usually chosen as a site for settlements to protect against loss of life and damage to houses. Thus, high lying areas which are known as dry points are preferred for settlement.



Fig. No.07 settlements at high lying areas

Source: http://s0.geograph.org.uk/geophotos/04/43/83/4438352 5b0130fc.jpg

In low lying river basins people choose to settle on terraces and levees. For example, in tropical countries like Malaysia and Indonesia, houses are built on stilts to stay protected from flood and also from animals and insects. In equatorial countries such houses offer cooling effect.



Fig. No.08 houses built on stilts

Source: https://c1.staticflickr.com/1/449/18404445838 9a694b9285 b.jpg

Building Material

Building material is an important factor which influences the setting of rural settlements. The availability of building material such as wood, stone near settlements is an added advantage. Due to the availability of wood, early villages were built in forests where wood was available in abundance. In regions of loess deposits of China, cave dwelling were important and in African Savanna building material were mud, bricks and the Eskimos in polar region use ice block to build Igloos.



Fig. No.09 igloos

Source: https://upload.wikimedia.org/wikipedia/commons/b/b2/Igloo_construction.jpg

These variations in house type dwellings are mainly based on the building material available in the region.

On the basis of the building materials used for the construction of buildings, dwellings can be grouped under two categories:

- i. **Building Material Used for Walls:** In India, mud, stone, tin, stone, brick, timber and wattle are used for making walls.
- ii. **Building Material Used for Roofs:** Material used for making roofs includes tiles, thatch, mud, tin, stone slab, wood and brick etc.

But now, the use of traditional building material is being discouraged and it is being replaced by materials like iron, tin sheets, concrete, cement etc.



Fig. No.10: Rural Dwelling in Sudan made of Mud and Thatch

Source: https://en.wikipedia.org/wiki/Earth_structure

Defence

Defence or security is an important factor for establishment of settlements. During the times of political instability, war, hostility of neighbouring groups, villages were built on defensive hills and islands. For example, in Nigeria, upstanding inselbergs formed good defensive sites. In India most of the forts are located on higher ground or hills. In the past, border areas of north-western plains were conquered or attacked frequently by invaders. For a long time, apart from attack from outsiders, there had been continuous fight between princely states and

kingdoms within the country. Hence, most of the forts in India are located on higher grounds or hills.



Fig. No.11: fort located at high ground

Source: https://upload.wikimedia.org/wikipedia/commons/5/5b/Mehrangarh_Fort.jpg

Ethnic and cultural factors

Ethnic and cultural factors include aspects like caste, community, ethnicity and religion of the inhabitants of the settlement. In India it is common that main land owing caste resides at the centre of the village and the other service-providing castes on the periphery. Due to this reason social segregation and fragmentation may be seen in the morphology of the settlements.

Planned Settlements

Planned settlements need infrastructural facilities like water supply, shelter, drainage, roads, sanitation etc. as pre-conditions. These are the sites that are not spontaneously chosen by villagers themselves, planned settlements are constructed by governments by providing shelter, water and other infrastructures on acquired land. The scheme of village formation in Ethiopia and these are some good examples. Such settlements are seen in Canada and United States of America too.



Fig. No:12: planned settlement

Source: https://upload.wikimedia.org/wikipedia/commons/f/fa/Partizanske4.jpg

Types of Rural Settlement Patterns

The pattern of rural settlements is influenced by the physical environment and socio-cultural factors like caste, religion and functional need of people. The pattern of a rural settlements reflects the way the houses are sited in relation to each other. The site of a village the surrounding topography and terrain influence the shape and size of a village.

Criterion to classify the pattern of rural settlements

There are many criterions to classify the pattern of rural settlements:

On the basis of setting

On the basis of settings, the main types are plain village, plateau village, coastal village, forest village and desert village.



Fig. No.13 : plain village Source: http://s0.geograph.org.uk/geophotos/01/58/25/1582523 f67ee51d.jpg



Fig. No.14: coastal village

Source: https://pixabay.com/p-1756640/?no redirect

Setting means the surroundings of a village over which the settlement is spread. If the village is spread in a plain it is plain village, if it spread in a desert it is a desert village and so on.

On the basis of functions

Function refers to the main occupation of the inhabitants of a settlement. On the basis of functions, there may be villages such as farming villages, fishermen's villages, lumberjack's villages, pastoral villages etc.

On the basis of forms or shapes

There may be settlements of different geometrical shapes and forms. Some important patterns of settlements have been listed below:

a) **Rectangular Pattern:** This is the most common pattern found in rural settlement.

These settlements developed over flat, fertile alluvial and wide inter-montane valleys. The streets in rectangular settlements are straight and at right angles to each other. Here roads are cut each other at right angle. Villages in Sutlej-Ganga Plain in India, planned settlements of Germany, Malaysia, Israel, and France etc. are the examples of rectangular pattern.



Fig. No.15: rectangular pattern settlement

Source: https://s.iha.com/288600019396/Short-term-rentals-Mouries-La-Saugelia 19.jpeg

b) Linear Pattern: In villages with linear pattern, houses are developed along the sides of road, railway line, river, canal or valley. The restrictions associated with physical expansion of these sites give rise to the linear pattern. Settlements along the roads of Ganga-Yamuna plain and in valleys in Alps and Rocky Mountains are the examples of linear pattern.



Fig. No.16: Linear Pattern of Rural Settlement

Source: https://goo.gl/7mfmbX

c) Circular and Semi-Circular Pattern: These type of settlements develop along a sea coast or around lakes, tanks, over mountain top and along meandering rivers and sometimes villages are planned in such a way that the central place of village is used as a shelter to keep the domestic animals safe from wild animals.



Fig. No.17: circular pattern settlement

Source: https://upload.wikimedia.org/wikipedia/commons/c/ca/Aerial view of Boudhanath after Earthquake.jpg

d) Star-shaped Pattern: A place where several roads converge radial or star-shaped settlements develop. The houses are built along the roads in all directions. The examples of these patterns can be found in the plains of Yangtzekiang in China, Punjab in India etc.



Fig. No.18 star shaped settlement

Source:https://upload.wikimedia.org/wikipedia/commons/a/af/Kwame Nkrumah Interchang e.jpg

e) Triangular Pattern: Points such as meeting place of rivers give rise to a triangular pattern of settlements.



Fig. No.19: triangular pattern settlement

Source:https://upload.wikimedia.org/wikipedia/commons/6/6e/Aerial View - Bollschweil und Kalkwerk.jpg

f) T-Shaped, Y-Shaped, Cross shaped or cruciform Settlements: When houses are developed at tri-junctions of the roads, T-Shaped pattern of houses form, while Y-shaped settlements emerge as a places where two roads meet on the third one and houses are built along these roads. Cruciform settlements develop on the cross-roads and they extend in all four directions.



Fig. No.20 Y Shaped Village

Source: http://www.geograph.org.uk

g) Double Village: In this type of settlement houses are built on both sides of a river where there is a bridge or a ferry.

Size of rural settlements based on the population: based on the size of population, different types of rural settlements have been observed and documented:

i) Isolated settlements: In rural areas some settlements might have only a few isolated buildings or group of buildings belonging to one family. These settlements are developed on extensive farms owned by a single owner. These farms are scattered and farmers build their

houses their private farms. Vast ranches in the United States of America, Canada or Australia are the examples of isolated settlements.



Fig. No. 21: isolated settlement

Source:https://upload.wikimedia.org/wikipedia/commons/6/6c/Abandoned_log_cabins %2C_Independence%2C_CO.jpg

ii) Hamlets: These are the small groups of dwellings. These houses or dwellings may be in the form of farm houses or building. These settlements are seen in sparsely populated areas. A hamlet normally consists of few houses with a Post Office or a place of worship. Hamlet is slightly larger than the isolated settlements and covers a larger area.



Fig. No. 22: hamlet

Source: https://s.iha.com/3207700006864/bb-Aviados-Fuente-del-Oso 6.jpeg

iii) Village: This is the most common type of rural settlement. A village consists of houses, farms, public buildings like hall, Panchayat Ghar, temple, church, marriage house, few shops etc. Thus, a village is bigger in size compared to a hamlet, has more population than the other kinds of rural settlements. The size of village may vary depending on other factors. For example, some villages in Kerala and Maharashtra have 17000 persons while on the other

hand only 250 persons are resided in some villages of Jammu and Kashmir, in North-East of India.

When the population size becomes more than the capacity of land, a new village is formed. For example, planned village of fixed size with fixed population are found in Malaysian oil and rubber plantations.

Pattern of rural settlements in India maybe classified into four types. They are:

- Clustered settlements
- Semi-clustered or fragmented settlements
- Hamlet
- Dispersed settlements

The Village Settlement Pattern according to Santibhushan and D.S.Tyagi: These scholars have classified village settlement patterns into the four categories:

- **i) Shapeless Cluster:** Some villages develop in an irregular manner which is not a part of original design but emerges as a process of local requirement of villagers. In this type of settlements shapeless clusters are enclosed with each other for the purpose of defence. Parallel streets and roads set at right angles may be added to the existing streets that may finally form a square which may appear from a distance as a shapeless cluster.
- **ii) Linear Cluster:** This type of settlement consists of open space or straight streets provided between the parallel rows of houses. This type of clusters can be seen in coastal districts of Odisha and Andhra Pradesh etc.
- **iii) Square or Rectangular Clusters:** These clusters are formed with straight streets running parallel or at right angle to one another. Such square cluster also result in the development of linear cluster.
- **iv) Isolated Homestead:** In this type of settlement villages formed of isolated homesteads a number of which are treated as a mauza. These isolated homesteads may also found unoccupied due to frequent floods in eastern Uttar Pradesh and Bihar districts. Thus, these homesteads developed according to local circumstances.

Other Forms of Rural Settlements Patterns: Other than Geographers, social scientists like the Sociologists' too have also classified the settlement patterns into the following types:

- i. **Migratory Agricultural villages:** In these types of settlements, people live in a particular dwelling only for a few months of a year.
- ii. **Semi-Permanent Agricultural village:** In Semi Permanent Villages people reside in that settlement for a few years and then migrate to other areas due to loss of fertility of soil or soil erosion.
- iii. **Permanent Agricultural villages:** In Permanent Agricultural village people reside permanently in the same village for generations and even for many centuries.

Problems of Rural Settlements:

In developing countries rural settlements have lot of problems. Some of them have been discussed below:

Lack of infrastructure

Rural settlements in the developing countries are large in number and poorly equipped with infrastructure. They represent a great challenge and opportunity for planners. 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. Water borne diseases such as cholera and jaundice tend to be a common problem. The countries of South Asia face conditions of drought and flood very often. Crop cultivation sequences, in the absence of irrigation, also suffer. The general absence of toilet and garbage disposal facilities cause health problems. The design and use of building materials of houses vary from one ecological region to another. The houses made up of mud, wood and thatch, remain susceptible to damage during heavy rains and floods, and require proper maintenance every year. Most house designs are typically deficient in proper ventilation. Besides, the design of a house includes the animal shed along with its fodder store within it. This is done to keep the domestic animals and their food properly protected from wild animals. 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. It is also difficult to provide adequate health and educational infrastructure for their large rural population. The problem is particularly serious where proper clustering of the village has occurred and houses are scattered over a large area.

Insufficient access to market

Due to poor infrastructure, productivity or lack of education, the accessibility to market is very poor. Employment opportunities in agriculture are also very limited. Rural workers are largely concentrated in jobs like those of owners-cultivators, tenant farmers, share croppers, informal care workers, agriculture day worker and livestock herders. With access to other places rural workers continue to work in villages in agriculture for very low wages. This leads to poverty. Besides this the rural poor often lack access to capital markets and financial institutions. They hardly think to establish savings and obtain credit cards and other subsidy and benefits provided by the government.

Education and social services inadequacies

The lack of facilities of education and limited opportunities to increase and improve one's skills are the main problems of rural societies. Most of the poor villagers remain confined to subsistence farming. They remain untouched with latest technology in agriculture and other fields of progress. Inadequate education regarding health and nutritional needs often result in under nutrition or malnutrition among the rural poor, resulting in worse health and higher rates of infant mortality. A lot of disparities in both of Asia and Africa between rural and urban areas in terms of the allocation of public education and health services.

Disparities in agricultural productivity

A remarkable disparities in agricultural yields have been observed in developed and developing countries. After green revolution, India has witnessed a remarkable progress in agricultural production. It occupies the first or second position in the world in several crops in terms of area and production. Even then the productivity of some crops is not only low but also remained stagnant over the years. In rain fed areas the productivity is very low.

Causes for backwardness of Rural Settlements

There were several causes responsible for the backwardness of the rural settlements in India which have historical roots. Some of them have been listed below:

i) Zamindari System: India was under the colonial rule for more than 200 years. The colonial policies aimed at revenue collection and not rural development. The British introduced Zamindari system in India wherein zamindars were the owners of the land. They collected more revenue from the peasants than prescribed by the rulers. This system caused

the peasants to become poorer. However, after Independence this system was abolished by the government, but still the condition of the Indian peasants has not improved much.

- **ii) The Bonded Labour System:** This system is similar to slavery. A bonded labour is an indebted agricultural worker who had borrowed money at a very high rate of interest from the money lender and had to work at his farm for very low wages throughout his life as a slave. He could set himself free only by giving his son in bondage as a substitute. However, the then Prime Minister Mrs. Indira Gandhi abolished this system as the peasants suffered a lot from this practice. Socially a bonded labourer was treated just like a slave and economically he was impoverished and had no access to property rights.
- **iii)** Exploitation by Colonial Powers/Rulers: During the colonial period in India and other countries, the Europeans exploited the colonial people. For example, in India, the thriving cottage industries suffered a setback in competition with the advent of machine made cheaper goods introduced by the British. They exploited the resources found in India and transported the raw materials to their countries. After processing the raw materials, they sold these finished articles at very high rates to the Indians.

Measures for development of rural settlements in India after independence

In the Post-colonial era, after the colonized countries became independent, most of the countries made progress in all sectors of the economy. The Indian government also took steps and adopted planned measures for the development of rural settlements. Some of them are as follows:

- Abolition of Zamindari system
- Implementation of Green Revolution
- Rural credit system
- Opening of banks and cooperatives, primary health centres, schools in the rural areas
- Development of dams and canals for better irrigation facilities
- Implementation of Integrated Rural Development Programmes.
- Providing basic infrastructure such as drinking water facility, link roads, electricity etc. in
- rural settlements throughout India