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 2
Module Id	legy_11002
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

Role	Name	Affiliation
National MOOC Coordinator	Prof. Amarendra P. Behera	CIET, NCERT, New Delhi
(NMC)		
Program Coordinator	Dr. Mohd. Mamur Ali	CIET, NCERT, New Delhi
Course Coordinator (CC) / PI	Dr. Tannu Malik	DESS, NCERT, New Delhi
Course Co-Coordinator / Co-PI	Dr. Archana	CIET, NCERT, New Delhi
Subject Matter Expert (SME)	Mr. Avdesh Kumar	PGT KV JNU New Delhi
	Dr. Archana	CIET, NCERT, New Delhi
Review Team	Dr Swagata Basu	SSV(PG) College,Hapur

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An **urban area** is a human settlement with high population density and infrastructure of built environment.



Fig 01: Urban Settlement

Source: https://pixabay.com/p-984013/?no redirect

Urban areas are created through the process of urbanization and are categorized on the basis of its morphology as cities, towns, conurbations or suburbs. The term contrasts to rural areas such as villages and hamlets and in urban sociology or urban anthropology it contrasts with natural environment. The creation of early predecessors of urban areas during the urban revolution led to the creation of human civilization with modern urban planning, which along with other human activities such as exploitation of natural resources leads to alteration of the natural environment through human impact.

The world's urban population in 1950 of just 746 million has increased to 3.9 billion in the decades since. In 2009, the number of people living in urban areas (3.42 billion) surpassed the number living in rural areas (3.41 billion) and since then the world has become more urban than rural. This was the first time that the majority of the world's population lived in a city. In 2014 there were 7.25 billion people living on the planet, of which the global urban population comprised 3.9 billion. The Population Division of the United Nations Department

of Economic and Social Affairs at that time predicted the urban population would grow to 6.4 billion by 2050, with 37% of that growth to come from three countries: China, India and Nigeria.

Urban areas are created and further developed by the process of urbanization. Urban areas are measured for various purposes, including analyzing population density and urban sprawl. Unlike an urban area, a metropolitan area includes not only the urban area, but also satellite cities plus intervening rural land that is socio-economically connected to the urban core city, typically by employment ties through commuting, with the urban core city which happens to be the primary labor market.

Rapid urban growth is a recent phenomenon. Until recent times, few settlements reached the population size of more than a few thousand inhabitants. The first urban settlement to reach a population of one million was the city of London by around. A.D. 1810 By 1982 approximately 175 cities in the world had crossed the one million population mark. Presently 48 per cent of the world's population lives in urban settlements compared to only 3 per cent in the year 1800.

Classification of Urban Settlements

The definition of urban areas varies from one country to another. Some of the common criteria 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. Apart from the size of population, density of 400 persons per sq km and share of non-agricultural workers are taken into consideration in India. Countries with low density of population may choose a lower number as the cut-off figure compared to densely populated countries.



Fig 02: Urban Population Source: <u>https://static.pexels.com/photos/106052/pexels-photo-106052.jpeg</u>

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 some countries, such as 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. Similarly, in Italy, a settlement is called urban, if more than 50 percent of its economically productive population is engaged in non-agricultural pursuits.



Fig 03: Service Sector

Source: https://www.jisc.ac.uk/sites/default/files/library-computers.jpg

In India settlements with more than 75 per cent of the working population engaged in nonprimary activities is termed as Urban Settlements.

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.



Fig 04: Municipality

Source:<u>https://upload.wikimedia.org/wikipedia/commons/4/46/Kalyani Municipality office.</u> jpg

Similarly, in Latin American countries, such as Brazil and Bolivia, any administrative centre is considered urban irrespective of its population size.

Location

Location of urban centres is studied with reference to their function. For example, the sitting requirements of a holiday resort are quite different from that of an industrial town, a military centre or a seaport. 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 properties or historical relics, ports require a harbour etc.

Locations of the earliest urban settlements were based on the availability of water, building materials and fertile land. Today, while these considerations still remain valid, modern technology plays a significant role in locating urban settlements far away from the source of these materials. Piped water can be supplied to a distant settlement; building material can be transported from long distances. 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

The earliest towns were centres of administration, trade, industry, defence and religious importance. The significance of defence and religion as differentiating functions has declined in general, but other functions have entered the list. Today, several new functions, such as, recreational, residential, transport, mining, manufacturing and most recently activities related to information technology are carried out in specialised towns. Some of these functions do not necessarily require the urban centre to have any symbiotic relationship with their neighbouring rural areas.

What would be the effects of Information and Communication Technology (ICT) as a function on the development of existing and new settlements?

Prepare a list of cities where earlier functions have been replaced by newer ones. In spite of towns performing multiple functions we refer to their dominant function. For example, we think of Sheffield as an industrial city, London as a port city, Chandigarh as an administrative city and so on. Large cities have a rather greater diversity of functions. Besides, all cities are dynamic and over a period of time may develop new functions. Most of the early nineteenth-century fishing ports in England have now developed tourism. Many of the old market towns are now known for manufacturing activities. Towns and cities are classified into the following categories.

Administrative Towns

National capitals, where the key administrative offices of central governments, such as New Delhi, Canberra, Beijing, Addis Ababa, Washington D.C., and London etc. are called administrative towns.



Fig 05: Administrative Town New Delhi Source: <u>https://c1.staticflickr.com/9/8337/29473879660_60148e20e8_b.jpg</u>

Provincial (sub-national) towns can also have administrative functions, for example, Victoria (British Columbia), Albany (New York), Chennai (Tamil Nadu).

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.



Fig 06: Trading Town Agra

Source: https://upload.wikimedia.org/wikipedia/en/a/a9/Agra Cant railway station.jpg

Cultural Towns

Places of pilgrimage, such as Jerusalem, Mecca, Jagannath Puri and Varanasi among others are considered cultural towns.



Fig 07: Cultural Town Varanasi

Source:<u>https://upload.wikimedia.org/wikipedia/commons/6/6b/Varanasi 2010 Ahilyabai G</u> hat.jpg

These urban centres are of great religious importance. Additional functions which the cities perform are health and recreation (Miami and Panaji), industrial (Pittsburgh and Jamshedpur), mining and quarrying (Broken Hill and Dhanbad) and transport (Singapore and Mughal Sarai).

The city developed around the rivers Varuna and Assi (Source: Wikimedia Commons)

Urbanisation means the increase in the proportion population of a country who live in urban areas. The most important cause of urbanisation is rural-urban migration. During the late 1990s some 20 to 30 million people were leaving the countryside every year and moving into towns and cities. Developed countries experienced rapid urbanization during the nineteenth century while the developing counties experienced rapid urbanization during the second half of the twentieth century.

Classification of Towns on the Basis of Forms

An urban settlement may be linear, square, star or crescent shaped. In fact, the form of the settlement, architecture and style of buildings and other structures are an outcome of its historical and cultural traditions existing in the town. Towns and cities of developed and developing countries reflect marked differences in planning and development. While most cities in developed countries are planned, urban settlements of developing countries have evolved historically with irregular shapes. For example, Chandigarh and Canberra are planned cities, while smaller town in India have evolved historically from walled cities to large urban sprawls.

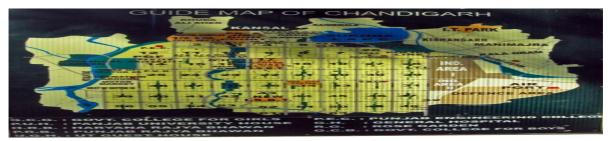


Fig 08: Map of the Panned City Chandigarh. Source: <u>https://upload.wikimedia.org/wikipedia/commons/8/8d/Le_Corbusier_Map.jpg</u>

Addis Ababa (The New Flower)

Ethiopian capital Addis Ababa, meaning 'new flower' (*Addis*-New, *Ababa*-Flower) is a 'new' city which was established in 1878. The whole city is situated on a hill-valley topography. The road pattern bears the influence of the local topography. The roads radiate from the Government headquarters Piazza, Arat and Amist Kilo roundabouts. Mercato has markets which grew with time and is supposed to be 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 multifunctional nature and being a large nodal centre located in the centre of Ethiopia.



Fig 09: Addis Ababa

Source:<u>https://upload.wikimedia.org/wikipedia/commons/8/80/Aerials_Ethiopia_2009-08-</u> 27_15-26-13.JPG

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. The city's design was influenced by the garden city movement and incorporates significant areas of natural vegetation that have earned Canberra the title of the "bush capital". Five main centres were planned within the city, each with separate functions. During the last few decades, 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.



Fig 10: Planned Canberra

Source: https://upload.wikimedia.org/wikipedia/commons/7/7d/Inner-canberra_01MJC.png

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.

Town

Though traditionally, the concept of 'town' was referred to as a settlement which is larger than a 'village'. Population size is not the only criterion for categorisation of a town. Functional contrasts between towns and villages may not always be clear cut, but specific functions such as manufacturing, retail and wholesale trade, and professional services exist in towns.



Fig 11: Image of a town

source:<u>https://upload.wikimedia.org/wikipedia/commons/c/c1/Teni_Town_Tamilnadu</u> %2C_India.JPG

A **town** is a human settlement larger than a village but smaller than a city. The size definition for what constitutes a "town" varies considerably in different parts of the world. Towns often exist as distinct governmental units, with legally defined borders and some or all of the apparatuses of local government (e.g., a police force). In the United States these settlements are referred to as "incorporated towns". In other cases the town lacks its own governance and is said to be "unincorporated". Note that the existence of an unincorporated town may be legally set forth through other means, as through zoning districts. In the case of some planned communities, the town exists legally in the form of covenants on the properties within the town. The United States Census identifies many census-designated places (CDPs) by the names of unincorporated towns which lie within them; however, those CDPs typically include rural and suburban areas and even surrounding villages and other towns.

City

A city may be regarded as a leading town, which has outstripped its local or regional rivals. In the words of Lewis Mumford, "the city is in fact the physical form of the highest and most complex type of associative life".



Fig 12: Image of a city in india

Source:<u>http://maxpixel.freegreatpicture.com/Road-India-Street-Traffic-Jam-Traffic-City-</u> 388924

Cities are much larger than towns and have a greater number of economic functions. They tend to have transport terminals, major financial institutions and regional administrative offices. When the population crosses the one million mark the city is termed as a million city.

Conurbation

The term conurbation was coined by Patrick Geddes in 1915 and applied to a large area of urban development that resulted from the merging of originally separate towns or cities. Greater London, Manchester, Chicago and Tokyo are examples. Can you find out an example from India?

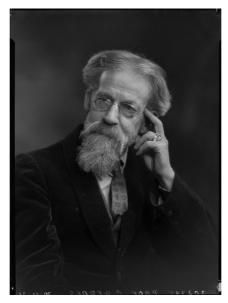


Fig 13: Patrick Geddes

Source: https://upload.wikimedia.org/wikipedia/commons/3/3b/Patrick_Geddes.jpg



Fig 14: Tokyo

Source:<u>https://upload.wikimedia.org/wikipedia/commons/5/56/Tokyo Tower and surroundi</u>ng_area.jpg

Megalopolis

This Greek word meaning "great city", was popularized by Jean Gottman (1957) and signifies 'super- metropolitan' region extending as union of conurbations. 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.

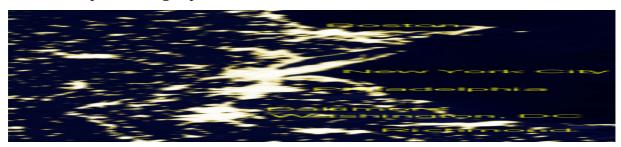


Fig 15: Boston megalopolis

Source: https://upload.wikimedia.org/wikipedia/commons/e/ea/BosWash-Night-Labeled.png

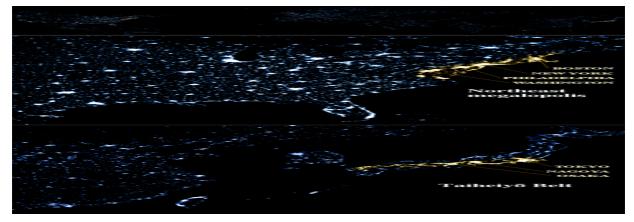


Fig 16: Image of Boston and Tokyo Source:<u>https://upload.wikimedia.org/wikipedia/commons/9/95/Megalopolis.png</u>

Million City

The number of million cities in the world has been increasing as never before. 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. 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.

The table below shows the increase in the number of Million Cities in various continents of the World:

Continent	Early 1950	Mid 1970s	Mid 2000
Europe	23	30	58
Asia	32	69	206
North and Central America	16	36	79
Africa	03	08	46
South America	08	17	43
Australia	02	02	06
World Total	84	162	438



Fig 16: Shanghai

Source:https://pixabay.com/p-1484515/?no_redirect



Fig 17: Beijing

Source:https://upload.wikimedia.org/wikipedia/commons/5/5f/Beijing Financial Street %28overlook%29.jpg



Fig 18: New Delhi

Source:<u>https://upload.wikimedia.org/wikipedia/commons/2/2c/Connaught_Place_New_Delh</u> i.jpg

Distribution of Mega Cities

A mega city or megalopolis is a general term for 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.



Fig 19: New York Mega City

Source:<u>http://maxpixel.freegreatpicture.com/Buildings-New-York-Skyscraper-City-United-</u> <u>States-1745089</u>

The number of mega cities is now 25. The number of mega cities has increased in the developing countries during the last 50 years vis-à-vis the developed countries.

Problems of Human Settlements in Developing Countries

Settlements in developing countries, suffer from various problems, such as unsustainable concentration of population, congested housing and streets, lack of drinking water facilities. These settlements also lack infrastructure such as electricity shortage, inadequate facilities for sewage disposal, and availability of health and education facilities.



Fig 20: Congestion problem in cities

Source: <u>https://c1.staticflickr.com/3/2145/2402764792_4b034c119f.jpg</u>



Fig 21: Problem of waste disposal in cities

Source: <u>https://upload.wikimedia.org/wikipedia/commons/2/28/Landfill.jpg</u>

Rural/Urban Problems

Can you identify the problems faced by your city/town/village in terms of any one of the following?

- Availability of potable water.
- Electricity supply.
- Sewerage system.
- Transportation and communication facilities.
- Health and educational infrastructure.
- Water and air pollution.

Can you think of solutions to these problems?

S. No.	Name of Mega City	Country	Population	Population in millions
1.	Tokyo	Japan	34,500,000	34.5
2.	Canton	China	25,800,000	25.8
<u>2.</u> 3	Jakarta	Indonesia	25,300,000	25.3
4.	Seoul	Korea (South)	25,300,000	25.3
5.	Shanghai	China	25,300,000	25.3
6.	Mexico City	Mexico	23,200,000	23.2
7.	Delhi	India	23,000,000	23.0

Table 10.3: Mega Cities of the World (as on 01. 04. 2012)

8.	New York	United States of America	21,500,000	21.5
9.	Sao Paulo	Brazil	21,100,000	21.1
10.	Bombay	India	20,800,000	20.8
11.	Manila	Philippines	20,700,000	20.7
12.	Karachi	Pakistan	17,400,000	17.4
13.	Los Angeles	United States of America	17,000,000	17.0
14.	Osaka	Japan	16,800,000	16.8
15.	Beijing	China	16,400,000	16.4
16.	Moscow	Russia	16,200,000	16.2
17.	Cairo	Egypt	15,700,000	15.7
18.	Calcutta	India	15,700,000	15.7
19.	Buenos Aires	Argentina	14,300,000	14.3
20.	Dacca	Bangladesh	14,000,000	14.0
21.	Bangkok	Thailand	13,800,000	13.8
22.	Tehran	Iran	13,500,000	13.5
23.	Istanbul	Turkey	13,400,000	13.4
24.	Lagos	Nigeria	12,700,000	12.7
25.	Rio de Janeiro	Brazil	12,700,000	12.7
26.	London	Great Britain	12,600,000	12.6
27.	Paris	France	10,600,000	10.6

Problems of Urban Settlements

Rural population flock to cities with the hope to avail employment opportunities and civic amenities which are poorly developed in the villages. Since most cities in developing countries are unplanned, it creates severe congestion in living space as well as traffic conditions. Shortage of housing, vertical expansion and growth of slums are characteristic features of modern cities of developing countries. In many cities an increasing proportion of the population lives in substandard housing, e.g. slums and squatter settlements. In most million plus cities in India, one in four inhabitants' live in illegal settlements. These illegal/ unauthorized residential zones are growing at a pace twice as fast as the rest of the city. Even in the Asia Pacific countries, around 60 per cent of the urban population lives in squatter settlements.

A Slum, for the purpose of Census, has been defined as residential areas where dwellings are unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and design of such buildings, narrowness or faulty arrangement of street, lack of ventilation, light, or sanitation facilities or any combination of these factors which are detrimental to the safety and health.



Fig 22: Dharavi – A large scale slum zone in Mumbai, India. Source:<u>https://upload.wikimedia.org/wikipedia/commons/thumb/4/44/Dharavi_India.jpg/128</u>

<u> 0px-Dharavi India.jpg</u>

Economic Problems

The decreasing employment opportunities in the rural as well as smaller urban areas of the developing countries consistently push the population of the villages to the urban areas.



Fig 23: Unemployment

Source: https://c1.staticflickr.com/9/8473/8125991446_041f1c865d_b.jpg

The enormous migrant population generates a pool of unskilled and semi-skilled labour force, creating problems associated with unemployment.

Socio-cultural Problems

Cities in the developing countries suffer from several social ills. Insufficient financial resources fail to create adequate social infrastructure catering to the basic needs of the huge population. The available educational and health facilities remain beyond the reach of the urban poor. Health indices too, present a gloomy picture in cities of developing countries. Lack of employment and education tends to aggravate the crime rates.



Fig 23: crime spot

Source: <u>https://pixabay.com/p-2108808/?no_redirect</u>

Male selective migration to the urban areas distorts the sex ratio in these cities.

Environmental Problems

The large urban population in developing countries not only uses but also disposes off a huge quantity of water and all types of waste materials. Many cities of the developing countries even find it extremely difficult to provide the minimum required quantity of potable water for domestic and industrial uses. An improper sewerage system creates unhealthy living conditions.



Fig 24: contamination of water bodies

Massive use of traditional fuel in the domestic as well as the industrial sector leads to air pollution. 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 create heat islands.

Urban Strategy

The United Nations Development Programme (UNDP) has outlined these priorities as part of its 'Urban Strategy'.



Fig 25: United Nations Development Programme

Source:<u>https://upload.wikimedia.org/wikipedia/commons/a/a6/UN_HQ_157652121_5b5979</u> <u>da9e2.jpg</u>

What is a Healthy City?

World Health Organisation (WHO)



Fig 26: WHO Headquater

Source:<u>https://upload.wikimedia.org/wikipedia/commons/2/2e/WHO HQ main building</u> %2C Geneva%2C from North.JPG

Suggests that, among other things, a 'healthy city' must have:

- A 'Clean' and 'Safe' environment.
- Meets the 'Basic Needs' of 'All' its inhabitants.
- Involves the 'Community' in local government.
- Provides easily accessible 'Health' service.
- Increasing 'Shelter' for the urban poor.
- Provision of basic urban services such as 'Education', 'Primary Health care', 'Clean Wate and Sanitation'.
- Improving women's access to 'Basic Services' and government facilities.
- Upgrading 'Energy' use and alternative 'Transport' systems.
- Reducing 'Air Pollution'.

Cities, towns and rural settlements are linked through the movements of goods, resources and people. Urban-rural linkages are of crucial importance for the sustainability of human settlements. As the growth of rural population has outpaces the generation of employment and economic opportunities, rural-to-urban migration puts an enormous pressure on urban infrastructure and services that are already under serious stress. It is necessary to eradicate rural poverty and to improve the quality of living conditions, as well as to create employment and educational opportunities in rural settlements. Full advantage must be taken of the complementary contributions and linkages of rural and urban areas by balancing their different economic, social and environmental requirements.