

GEOGRAPHY – VIII

Chapter 12 : Resources : Types and Development

- I.
1. Any material that constitutes part of the earth and which humans need and value is called a resource. The category of resources include not only inanimate substances, vegetation or other animals but the human beings also.
 2. Resources being used for production have economic value. Material–scenic beauty of forests, mountains, lakes, rivers, wildlife is an example of the aesthetic value.
 3. Resources are generally classified into three types—natural, human and human-made resources.
 4. In developed countries like USA processed products like tinned fruits, frozen vegetables and animal products are important part of their daily needs.
 5. Machines and houses or buildings are the examples of man-made resources.
 6. By sustainable development, we mean that resources are to be utilised carefully so that besides meeting the present requirements, interests of future generations should be taken care of.
 7. Sedentary agriculture means farming of land at a fixed location instead of moving from one site to another.
- II.
1. The resources may be classified on the basis of their continued availability to serve the need of man. These two classes are non-renewable and renewable.
Non-renewable are the resources that may get exhausted after some years. Oil wells and coal-fields are the examples of non-renewable resources.
The resources like that obtained from agriculture may be obtained year after year. These are called renewable resources.
 2. Resources we obtain from the living organisms such as plants and animals are known as biotic resources. The agriculture crops, forests, fish and animals belong to biotic group.
All such resources which are obtained from non-living things are called the abiotic resources. They are generally found within the earth's crust.
 3. Sunshine, forests, minerals etc. are useful to human beings. These gifts of nature satisfy human wants. They are known as natural resources.
Human beings harness these resources by their skill and hard work. They form the human resources. In economic terms, people are considered valuable assets of a country.
- III.
1. Man 2. Value 3. resource 4. Needs 5. natural
 6. non-replenishable resources 7. biotic resources 8. reserve

- IV. 1. The resources that may get exhausted after some years are called non-replenishable resources. Oil wells and coal fields are abandoned after a few years. There is a limit to the availability of such resources in the earth.
2. Potential resources means abundance of resources. For example, Africa has vast potential resources of water power but out of which only a small percentage is developed at present.
3. With the development of technology to being it out and refine, the potential resources turned into economic resources.
4. All such resources which are obtained from living things such as plants and animals are known as biotic resources.
5. The method of doing or making things is called technology. It is a human-made resource and an important contributor to productivity growth.
6. The responsibility to preserve our nature and wildlife for our future generations reflects the ethical value attached to these resources.
- V. 1. true 2. true 3. true 4. true 5. true

Chapter 13 : Natural Resources : Land, Soil and Water

- I. 1. Water is available on the earth in three forms. Ice, water and water vapour.
2. Economic factors are significant in deciding the pattern of land-use in an area. Primitive people who depend on food gathering and hunting prefer to live in the forests.
- Today growing population in many parts of the world has converted parts of forests into crop lands, or and also agricultural lands into non-agricultural uses such as building, roads and airports.
- Accessibility is an important factor affecting the land-use. Inaccessible land are not well-developed. Lands near the village site or settlement are generally more intensely used than the lands of the margins on the villages.
- Land-use in an area also depends on the state of human development. In backward areas, land is utilised for purposes like animal grazing and procurement of forest produce etc.
3. The formation of soil in a region is controlled by the following factors :
- Nature of parent rock
 - The topography
 - The organism in the soil.
4. Recycling of water is a method of water conservation. In this method the water which has been used once, such as from sewers or factories, is purified in water treatment plants and re-used for certain other purpose.
5. Bhakra-Nangal and Damodar Valley Projects are two very important projects of India.
6. Water influences our life in various ways. Many economic activities namely cultivation, pastoral industry, manufacturing industries such as

steel and paper need large supply of water. Water in dams is used to generate electricity.

7. Land is an important resource as it is put to diverse uses by man. Land is used for the construction of buildings, roads, railways etc. It is also used for cultivation, grazing of animals, mining, industries etc.
- II.
 1. 95, housing, 2. arable 3. Soil 4. very slow 5. colour, texture 6. Hill 7. winds 8. 36 9. shelter belts 10. fresh
- III.
 1. Multipurpose projects are built over the rivers to prevent soil erosion and floods. In India, multipurpose project, such as Bhakra-Nangal and Damodar Valley Projects are some examples of an integrated approach to the problem of better utilisation of water.
 2. Bacteria and parasites cause many diseases such as amoebic dysentery. Complete disaffection of drinking water is possible only through chlorination. Boiling water is the most common method which kills all bacteria and parasites.
 3. Economic factors are significant in deciding the pattern of land-use in an area. Land use in an area also depends on the mode of life of the people living in the area.
- IV.
 1. Organic matter 2. baldlands 3. follow 4. afforestation
 5. Lowlands 6. Conservation 7. Soil 8. Habitation
 9. underground water 10. Dam
- V.
 - 1-(iii), 2-(i), 3-(iii), 4-(iv), 5-(iii)
- VI.
 1. Water is an essential resource to satisfy the needs of man.
 2. The terracing of hill slopes prevent soil erosion.
 3. Soil erosion occurs in desert regions due to wind actions.
 4. A region with a large number of deep gulies or ravines is called baldlands.
 5. Water gets contaminated with hydrocarbons by oil spills and petrol.
 6. Water is responsible for the weathering of rocks, the quantity of moisture in soil layers, the nature of vegetation and biochemical process which take place in an area.
 7. Sprinklers are very effective and efficient tools of irrigation.

Chapter 14 : Natural Resources : Minerals, Energy, Plants and Wildlife

- I.
 1. Four important natural resources are minerals, plants, energy and wildlife.
 2. Recycling of water is another method of water conservation. In this method the water which has been used once, such as from sewage treatment plants or factories, is purified and reused for certain other purposes.
 3. Geothermal energy is the energy derived from the use of the heat in the interior of the earth. In the volcanic regions, springs and fountains of hot water, called geysers, are found. These eruptions, of lot steaming water

may be used for power development. Water gets heated and converted into steam and rushes out to the surface to be harnessed. Geothermal power has been developed in the United State, Italy, New Zealand and other countries.

4. Coal, mineral oil and natural gas are of organic origin. They are called fossil fuels. They are produced from plant and animal materials and are forms of stored solar energy.
 5. The three basic ways through which energy is obtained are as follows :
 - (a) Direct heating such as by fire, the sun and natural hot springs.
 - (b) Electricity that produces by burning fossil fuels.
 - (c) Stored energy in the form of a battery.
 6. Moisture and temperature are two limited factors of plant growth. In the areas of heavy rainfall, huge trees may thrive. As the rainfall decreases the size of the trees and their density gets reduced.
 7. Minerals are the natural substances having definite chemical composition and physical properties.
 8. One of the most important measures of forest conservation is to plant trees afforestation. Such afforestation will not only help in increasing the forest wealth but also in reducing soil erosion and run off and increasing the supplies of ground water.
- II.
1. Ductility is ability of a metal to be drawn into thin wire without breaking.
 2. Minerals, in their raw or natural state as extracted from the deep level of the earth are known as mineral ores.
 3. Extracting commercially valuable minerals from the earth is called mining.
 4. Very often minerals, such as tin, gold and diamonds are found in the alluvial deposits in the beds of rivers where in fact, they are brought from elsewhere by the agents of gradation through the natural process of transportation. They are called place deposits.
 5. The extraction of mineral resources from the earth is called the robber industry as the planet is getting robbed of its resources.
 6. Energy is the capacity to do work.
 7. Electricity produced is transmitted through network of power lines, called a grid to far off places and reaches houses, shops and factories.
 8. Because of their organic origin, petrol, diesel and gas are called fossil fuels.
 9. Peat is the lowest quality of coal.
 10. Non-metallic minerals such as phosphate, potash, salts, silica, diamonds etc. are called reservoir rocks.
- III.
1. Metallic minerals are those from which metals such as iron, copper, silver and gold are derived. These metals are strong, ductile, good

conductors of heat and electricity, opaque to visible light and reflective after polishing.

2. Electricity generated by using the energy of the falling water to rotate the turbines is called Hydel electricity.

Electricity generated by using fossil fuels like coal or oil or radioactive minerals like uranium. These minerals provide heat energy which is converted into electricity. It is called thermal electricity.

3. Bituminous coal is the most common variety and it contains 70 per cent carbon. It is hard coal. It is also used for manufacturing of coke.

Anthracite has the highest carbon content, almost 90 to 95 per cent and it is formed when the beds of coal are subjected to extreme pressure due to the earth movements.

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|-----|---------------------------------------|---------------------------------|-----------------|
| IV. | 1. Lignite | 2. hydro electricity | 3. Solar energy |
| | 4. geothermal energy | 5. Solar energy | 6. vegetation |
| | 7. The equatorial region | 8. Ductility | 9. smelting |
| | 10. mining | | |
| V. | 1. Metals | 2. wires | 3. Iron |
| | 4. bauxite | 5. 5%, 26% | 6. Electricity |
| | 7. Sea | 8. Peat | 9. Persian Gulf |
| | 10. U.S.A hydro electric | | |
| VI. | 1. India, U.S.A | 2. South Africa, Russia, Canada | |
| | 3. Canada, Zaire, Zambia | 4. Australia, Brazil, America | |
| | 5. Brazil, India, China | 6. Saudi Arabia, Iran, Iraq | |
| | 7. Zaire Basin, Indonesia, New Guinea | 8. China, Brazil, Australia | |
| | 9. Europe Asia, America | 10. France, Greece, Portugal | |

Chapter 15 : Agriculture

- I. 1. The word agriculture is derived from the Latin words 'argi' meaning soil and 'culture' meaning cultivation or tilling of soil. Agriculture thus refers to the cultivation of soil for growing crops and rearing of livestock.
2. Rice is mostly grown in river valleys and delta areas in sub-tropical and temperate zones. It requires temperature over 22°C during the growing season and over 26°C at the time of ripening. Rainfall between 150-200 cm is necessary.
3. Subsistence farming is a form of primitive agriculture. It represents the first human attempt to grow food for their subsistence. This type of agriculture is practiced mainly to meet the requirements of the local community. It is found in some parts of the equatorial and tropical forests where people use simple tools or implements and produce food for their own immediate needs. In this type of agriculture farmers select only those crops which they have to use and generally include cereals, pulses, oil seeds etc.

Subsistence agriculture includes mainly three types of traditional agricultural practices :

- (a) Nomadic tending
- (b) Shifting cultivation
- (c) Intensive agriculture

4. The large producers of wheat are Russia, Ukraine, the USA, Canada, China, Argentina, India and most of the European countries. Most of the wheat produced in the European countries is consumed within the region.

In India wheat is grown as a rabi crop. It is sown in October-November and harvested in March-April. In India, it is grown in Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, Maharashtra and Bihar.

5. In the USA there are distinct wheat, corn and cotton belts. In these areas, population density is low. As a result, per person availability of land is very high. Most of the work on the farms is done by machines—tractors, ploughs, seed drills and combined harvesters. The amount of capital and labour applied per unit area is relatively small here. It is therefore called extensive agriculture. Extensive agriculture is mainly practised in countries with developed economy like United States of America, Russia, Australia etc.
6. In 1960-61, under Intensive Agriculture District Programme, a tremendous increase in the production of crops especially food grains was brought out. This increase in the production of cereals as a result of high yielding varieties of seeds, fertilisers and irrigation is known as Green Revolution.
7. The machines that are used in agricultural work are—tractors, ploughs, seeds, drills and combined harvesters.

- II. 1. When the man learnt to maintain the fertility of soil, he settled down at one place. He adopted various methods like rotation of crops to conserve the fertility of the soil. He developed simple agricultural tools and also started his income as a settled farmer. It was called sedentary Agriculture.

Some people in tropical forests clear patches of ground by cutting and burning bushes and trees. They cultivate this piece of land with primitive tools and methods for two or three years. The soil gets leached and become unproductive. Weeds and unwanted vegetation rapidly encroach on such lands. Thus the farmers keep on shifting from one part of the forest to another, where they clear new patches of land. It is called Shifting cultivation.

2. In this method of farming, even from a small piece of land, farmers get a very high per hectare yield by using good quality seeds, ample fertilisers, ensuring regular water supply and applying more labourers. The farmers in this type of agriculture work on their small size holdings

with the help of their families. They use insecticides and pesticides and there are arrangements for irrigation water.

Extensive agriculture is prevalent where the population density is low. As a result, per person availability of land is very high. Most of the work on the farms is done by machines—tractors, levelers, seed drills and combined harvesters. Compared to intensive agriculture, the amount of capital and labour applied per unit area is relatively small here. It is called extensive agriculture.

3. Vegetable fibres are obtained from seeds, stems, leaves and fruit cases. Fibre is a material with hair like structure produced from vegetables etc. Cotton and jute crops are fibre crops.
Tea and coffee are the beverage crops.
4. Mineral fibre such as glass, is made from silica sand. Synthetic fibres are derived from chemical treatment of natural cellulose which is made from wood pulp.

III.

Crops	Temperature	Rainfall	Soil
Jute	over 27°C	170 cm	sand loam
Rice	over 26°C	150-200cm	alluvial soil
Wheat	15°C	75 cm	loamy soil
Tea	about 25°C	200 cm	slopes of the hills
Coffee	15°C–25°C	100-150	slopes of well-drained hills.

- IV.
 1. Rice is grown in deltas because it needs 150-200 rainfall and high temperature.
 2. Because it grows well in moderately high temperature.
 3. Because it needs high temperature with a minimum of 27°C and rainfall 170 to 200 cm. The jute plant originated in the Indian subcontinent.
 4. Tea is grown in slopes of hills. Because tea plants require moderate temperature of about 25°C and a rainfall of about 200 cm per year.
 5. Because of in agriculture, skilled labour is employed and various machines like tractors, combines, harvesters, threshers and fruit pickers are used.
- VI.
 1. Brazil, Thailand 2. China, Russia 3. USA has abundant land but sparsely populated. That is why the farms in the USA are big.
 4. Indonesia, India
 5. Agriculture in India is based on the uncertainty of the climate. Indian farmers, sometimes, feel unable to cope with the uncertainty of the adverse climatic conditions thus they depend on money landers.
 6. Cotton, Jute

Chapter 16 : Manufacturing Industries

- I.
 1. An industry is an organised human effort and skill to produce something useful from the gifts of nature or from primary products. In industry, raw materials are converted into useful goods by different means.
 2. Industries could be classified based on certain criteria. Based on sources of raw materials, industries are classified into :
 - (a) Agro-based industries
 - (b) Animal-based industries
 - (c) Marine-based industries
 - (d) Forest-based industries
 - (e) Mineral-based industries
 3. Cooperative sector industries are owned and managed by the producers or suppliers of raw materials, workers or both. In India, most of the sugar mills are running under cooperative sector. The dairy industry is another example of this type of industry.
 4. Industries having an investment of more than rupees one crore, are called medium or large scale industries. Large-scale industries employ thousands of labourers. They use power driven heavy machineries.
 5. Iron and steel industry is called basic industry because it serves as a base for development of other industries. Its products are mainly used as raw materials for other industries. Evidently, this industry provides a strong base for other industries and hence it is known as a basic industry.
 6. In India, iron industry is concentrated near the source of raw material. The main steel producing centres are Jamshedpur, Durgapur, Bhilai, Burnpur, Rourkela, Bokaro etc. They are situated in a region that spreads over four states— West Bengal, Jharkhand, Orissa and Chhatisgarh. In South India, Bhadravati and Vijay Nagar in Karnataka, Vishakhapatnam in Andhra Pradesh, Salem in Tamil Nadu are other important steel centres. Tata Iron and Steel Company Limited was the first iron and steel plant. But after independence government took up this project and set up a number of such plants in India.
 7. The factors that affect the location of Industries are as follows :
 - (a) Supply of raw materials
 - (b) Availability of power and water
 - (c) Skilled labour
 - (d) Quick means of transport
 8. In the United States of America, Silicon Valley is situated in California State. It gave birth to and nurtured the semi-conductor industry in United State. This town is considered to be its heart. This town is famous for electricity, electronics, missiles and manufacture of other substances. Silicon Valley Stretching over 25 miles and including 13 cities, lies to the south of San Francisco. Here the electronics industry developed during

the Second World War period. Today it is a highly industrially developed region in the western USA.

The foundation of Silicon Valley was laid at Stanford University. Stanford Industrial park was set up near the Stanford University which is a high technology centre. Electronic industries were invited to set up their firms in the park. IBM, NASA, XEROX etc. also started their research departments in the Silicon Valley.

- II. 1. The industry that serves as a base for development of other industries is called basic industry. Its products are mainly used as raw materials for other industries and hence it is known as a basic industry.

Consumer industry is the industry whose products reach the consumers and become available for the use of common man. Industries such as bicycle industry, paper industry and sugar industry are some examples of consumer industries.

2. Cottage industries form the base of the manufacturing industries. The craftsmen, with the help of their families make goods in their homes. They make goods for their own consumption and sell the surplus only locally.

Small scale industries refer to those units where investment in terms of fixed assets in plant and machinery is below rupees one crore. A number of concessions are available to units registered as small scale industry.

3. All the industries which derive their raw materials from forests plant like are called forest based industries. Some examples of forest based industries are furniture industry, sport goods industry, paper industry etc.

Mineral based industries are those industries which derive their raw materials through mining. Examples of this type industries are iron and steel industry, aluminium industry, automobile industry etc.

4. Joint sector industries are those which are jointly managed by the government agencies and the private firms. Oil India is the example of this type of industry.

Cooperative sector industries are owned and managed by the producers or suppliers of raw materials, workers or both. In India, most of the sugar mills are running under cooperative sector. The dairy industry is another example of this type of industry.

- III. 1. industry 2. government 3. household
4. Cooperative 5. eight 6. Iron , steel
7. Russia 8. carbon 9. Jamshedpur
10. Mumbai

- IV. 1. Crafts industry, pottery
2. Cotton, sugarcane
3. Aluminium industry, Automobile industry

4. Furniture industry, Paper industry
 5. Bangalore, Hyderabad
 6. Cotton Textile Industry, Silk textile Industry
 7. Tata Iron and Steel Company, Bhilai Steel Plant
 8. Leather goods industry, Dairy industry
 9. Eastern part of North America, Eastern Europe
 10. Bicycle Industry, Paper industry
- V.
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|--|----------------------------|
| 1. Eight | 2. Iron and Steel Industry |
| 3. Tata Iron and Steel Company Limited | 4. Cotton industry |
| 5. Ahmedabad | 6. Internet |
| 7. Bangalore | 8. Iron and Steel Industry |
| 9. Large Scale Industries | 10. Russia |
- VI. 1. F 2. T 3. T 4. F 5. T

Chapter 17 : Human Resources

- I.
1. Density is normally expressed as per square kilometre. The average density of population in the whole world is 45 persons per sq km.
 2. Sex Composition Stands for the proportion of male to female in the total population. It is expressed with the help of ratio which is known as sex ratio. The ratio is defined as number of females per thousand males in a population.
For example in 2001 the sex ratio of India was 939 females per 1000 males. It shows that the females are less in India.
 3. Dependent population is that part of the population which is not engaged in any productive activity to earn living. This part of the population is dependent on others.
 4. Literacy means the ability to read, write and understand a simple message in any language. Literacy is essential for our life. Low income countries have more number of illiterates than the middle and high income countries. Literate people understand the importance of small family and growing life standards. Illiterate people often have by family. They don't bother about the standard of life. So we can say that literacy plays an important role in the growth of population.
 5. A. Geographical factors :

(a) Topography	(b) Climate
(c) Soil	(d) Existence of mineral deposits
 - B. Social and economic factors :

(a) Economic policies of countries
(b) Migration of cultural or social groups
(c) Industrial facilities
(d) Commercial centres
(e) Development of industries

6. Density of population shows the average number of inhabitants living within a specified unit of area such as a square kilometre. For example, the average density of population in the whole world is 45 persons per sq km.
7. Changes in the population occur due to changes in birth rate (BR), death rate (DR) and natural growth rate (NGR). BR is defined as the total number of birth per 1000 population. The difference between birth rate and death rate is called natural growth rate of population.
8. People always prefer plains because activities such as farming, manufacturing and service activities can easily be developed on plain regions. 90% of the world population is living in plains. Very hot or very cold regions are usually avoided by the people.

Soil and rainfall of a place also decide the density of the population. Regions having temperate climate with moderate rainfall are densely populated. Soil helps us in obtaining food, clothing and shelter. Thus fertile plains are also densely populated. The discoveries of minerals in different parts of the world have also attracted people.

- II. 1. Human 2. developing 3. females, males 4. India
5. 34 6. Literacy 7. unevenly 8. Equatorial, polar
9. density 10. stable
- III. 1. Birth rate is defined as the total number of births per 1000 population
2. The difference between birth rate and death rate is called natural growth rate of population.
3. Death rate is defined as the total number of deaths per 1000 population.
4. The average number of inhabitants living within a specified unit of area, such as a square kilometre, is called density.
5. Sex proportion means the proportion of male and female in the total population.
6. A person who cannot read or write is called illiterate. If a person is able to read but cannot write, he or she is considered as illiterate.
7. Human resources refer to the population. Energy human being is a potential resources for the society.
- IV. 1. Bihar, Jharkhand, Jammu and Kashmir, Uttar Pradesh
2. Bihar, Jharkhand, Jammu and Kashmir, Uttar Pradesh
3. Topography, Climate, Soil, Existence of mineral deposits
4. Varanasi in UP, Puri in Orissa, Tirupati in Andhra Pradesh, Jerusalem city.
5. Bangalore, Mumbai, Kolkata, Delhi
6. China, Japan, Korea, India
7. China, India, Bangladesh, Pakistan
- V. 1. false 2. true 3. false 4. false 5. false 6. false
7. true 8. true 9. false