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**NCERT CONDENSED / SUMMARISED
CLASS 8**

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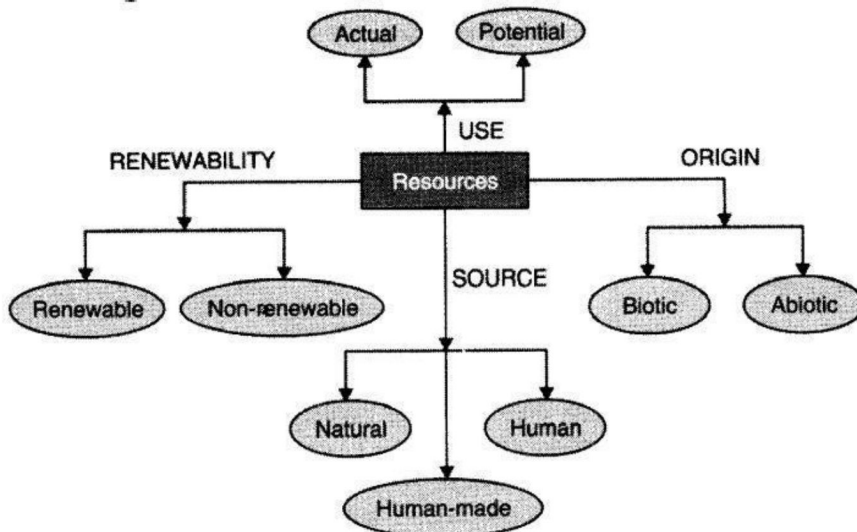
(Chapter 1) Resources

- **Resources:** Anything that has some utility to satisfy our needs is known as a resource. Human beings are important resources because their ideas, knowledge and skills lead to the creation of new resources.
- **Types of Resources:** There are three types of resources—Natural resources, Man-made resources and Human resources.
- **Natural Resources:** The resources which are drawn from nature and used without much modification are known as natural resources.
- **Human-made Resources:** When the original form of natural resources is changed by human beings to make it more useful, then it is called man-made resources or human-made resources.
- **Human Resources:** People are human resources. Education and health help to make people a valuable resource.
 - Based on their development, resources are classified as Actual resources and Potential resources.
 - Based on their origin, resources are classified as Abiotic resources and Biotic resources.
 - Based on their distribution, resources are classified as Ubiquitous resources and Localised resources.
 - Based on their stock, resources are classified as Renewable resources and Non-renewable resources.
- **Actual Resources:** Actual resources are those resources whose quantity is known. Rich deposits of coal in Ruhr region of Germany, dark soils of Deccan Plateau in Maharashtra.
- **Potential Resources:** Those resources whose entire quantity may not be known and which are not being used at present time are known as potential resources, e.g. Uranium found in Ladakh may be used as a potential resource.
- **Abiotic and Biotic Resources:** Abiotic resources are non-living while biotic resources are living. Soils, rocks and minerals are abiotic, while plants and animals are biotic resources.
- **Ubiquitous and Localised Resources:** Resources that are found everywhere, like the air we breathe, are ubiquitous resources. But those, which are found only in certain places, are localized resources, like copper and iron ore.



- **Renewable Resources:** Renewable resources are those which get renewed or replenished quickly, e.g. solar and wind energy.
- **Non-renewable Resources:** Those resources which are present in limited stock and once exhausted may take thousands of years to renew, e.g. Coal and Petrol.

Important Terms:



- **Utility:** A substance has utility if it can be used in any possible way to satisfy our needs.
- **Value:** Worth of a substance assessed on the basis of utility.
- **Patent:** It applies to the exclusive right over an idea or invention.
- **Resource:** Any substance having utility in any way is a resource.
- **Technology:** The application of the latest knowledge and skills in doing or making things is called technology.
- **Natural Resource:** Natural resources are those that are taken from nature.
- **Actual Resource:** An actual resource is one which is used currently and whose quantity is known.
- **Potential Resource:** A potential resource is one whose utility is not known at present or is not used despite having
- **Utility:** instead, it may be useful at some time in the future.
- **Abiotic Resource:** An abiotic resource is a non-living resource.
- **Biotic Resource:** Abiotic resource is a living resource.



- **Renewable Resource:** A renewable resource can be used without any risk of its ending up because they exist in unlimited quantity.
- **Non-renewable Resource:** A non-renewable resource is one which is present in limited quantity.
- **Ubiquitous Resource:** A ubiquitous resource is one that is found everywhere.
- **Localized Resource:** A resource that is found only in certain parts of the world and not everywhere.
- **Human-made Resource:** Resources invented by human beings by using their intelligence are called human-made resources.
- **Human Resources:** A human being who can contribute to his family, society, or economy is called a human resource.
Human Resource Development: Human resource development refers to the improvement of people's skills so that they become more useful than before and are a better resource.
- **The stock of Resource:** The amount of resource, available for use is called its stock.
- **Resource Conservation:** Resource conservation is the concept of using resources carefully so that they do not end up quickly.
- **Sustainable Development:** It is the concept of using resources in a balanced way so that our purpose is solved, as well as they are also conserved for the future.

Land, Soil, Water, Natural Vegetation and Wildlife Resources (Chapter 2)

Land:

- The land is an important natural resource which covers only 30 per cent of the earth's surface.
- Land provides most of human needs. Its use depends on physical factors such as topography, soil, climate, mineral and availability of water and human factors.
- Due to the excessive use of land for agricultural and constructional activities, the major problem of land degradation, landslides, soil erosion, etc. arises.
- To conserve the land, we must promote afforestation, check to overgraze and regulate the use of chemical pesticides and fertilizers.



Soil:

- The upper layer of the land's surface is called soil.
- Soil formation depends on the nature of parent rock, climate, relief features, flora, fauna, microorganisms and time.
- Deforestation, overgrazing, overuse of chemical fertilisers and pesticides, rain wash, landslides and floods leads to soil degradation.
- Conservation of soil can be done by mulching, contour barriers, constructing rock dam, terrace farming, intercropping, contour ploughing and making shelterbelts.

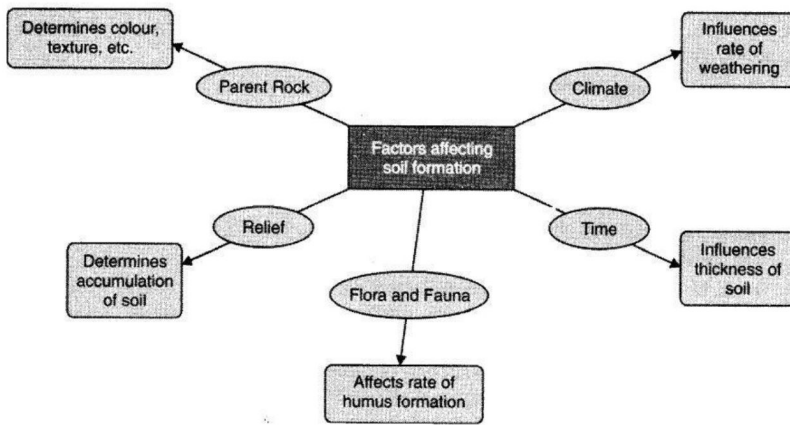
Water:

- Three-fourth of the earth surface is covered with water, out of which only 2.7 per cent water is fresh water, but only 1% of fresh water is available for human use.
- The excessive use of water leads to a shortage in supply of fresh water either due to drying up of water sources or due to water pollution.
- Discharge of untreated sewage, agricultural chemicals and industrial effluents in water bodies causes water pollution.
- Water conservation can be done by afforestation, adopting effective techniques for irrigation and promoting rainwater harvesting.

Natural Vegetation and Wildlife:

- Natural vegetation and wildlife exist only in the biosphere and they are interrelated and interdependent on each other for their survival. This system is called an ecosystem.
- Natural vegetation and wildlife both are valuable resources. They are not only useful for us, but they also help in maintaining balance in nature.
- Major vegetations of the ecosystems are forests, grasslands, scrubs and Tundra.
- Due to deforestation, soil erosion, constructional activities, forest fires, tsunami Tundra, landslides and poaching, many species of vegetation and wildlife have become extinct and many others are on the verge of extinction.
- We can conserve natural vegetation and wildlife by making national parks, wildlife sanctuaries and biosphere reserves.





- **Land:** The surface of the earth which is solid and covers about 30% of the total surface of the earth is called land.
- **Land Use:** The way in which a particular section of land is being used is called land use. .
- **Private Land:** A part of land owned by a particular individual or group of individuals is called private land.
- **Community Land:** A part of land not owned by anyone but meant for use by a large group of people living in a society, is called community land.
- **Deforestation:** The action of cutting down trees is called deforestation.
- **Afforestation:** The action of planting trees is called afforestation.
- **Soil:** The thin layer of grainy substance covering the surface of the earth is called soil.
- **Weathering:** Weathering refers to the breaking up and decay of exposed rocks. This breaking up and decay is caused by temperature fluctuations, frost action, plants, animals and even human activity.
- **Parent Rock:** The original rock from which soil has been formed is called its parent rock.
- **Mulching:** Mulching is the process of covering the bare ground between plants with a layer of organic matter like straw.
- **Terrace Farming:** Terrace farming is the method of farming in which broad flat steps or terraces are made on the steep slopes so that flat surfaces are available to grow crops.
- **Intercropping:** In intercropping, different crops are grown in alternate rows and are sown at different times to protect the soil from being washed away by rain.



- **Contour Ploughing:** Ploughing parallel to the contours of a hill slope to form a natural barrier for water to flow down a slope is called contour ploughing.
- **Shelter Belts:** Rows of trees that are planted in certain areas to check wind movement are called shelterbelts.
- **Fresh Water:** Water fit for human consumption is called fresh water.
- **Water Cycle:** The natural process of the constant motion of water through evaporation, condensation and rainfall is called the water cycle.
- **Rain Water Harvesting:** The process of conserving water in which rainwater is collected so that it can come of use in times of water scarcity is called rainwater harvesting.
- **Biosphere:** The narrow zone of contact between the lithosphere, hydrosphere and atmosphere are called the biosphere.
- **Ecosystem:** The supporting and interdependent life-system that exists in the biosphere is called an ecosystem.
- **Natural Vegetation:** Plants and trees constitute natural vegetation.
- **Wildlife:** The animal kingdom, which consists of animals, birds, aquatic creatures and insects, is called a wildlife.
- **Scavenger:** A bird or animal which feeds on dead livestock is called a scavenger.
- **Tundra:** The type of vegetation found in very cold regions like the Arctic is called Tundra vegetation.
- **Evergreen Forests:** The forests which never shed their leaves are called evergreen forests.
- **Deciduous Forests:** The forests which shed their leaves once at a particular time of the year are called deciduous forests.
- **Vanamahotsava:** The social programme of planting trees, organised at community level is called vanamahotsava.
- **National Parks:** A national park is a natural area supposed to be used to protect the ecological integrity of one or more ecosystems for the present and future generations.
- **Wildlife Sanctuaries:** A wildlife sanctuary is like a national park, but it is supposed to protect a particular animal, in some cases, or wildlife in general, in other cases.
- **Biosphere Reserves:** These are a series of protected areas linked through a global network, intended to demonstrate the relationship between conservation and development.



Mineral and Power Resources (Chapter 3)

A mineral is a naturally occurring substance that has a definite chemical composition. Minerals are created by natural processes such as rock formation and are concentrated in a particular area.

Minerals are identified on the basis of their physical properties. They are extracted by the process of mining. There are two types of minerals:

- **Metallic**
- **Non-metallic.**

Metallic minerals such as iron ore, nickel, copper, etc., are found in igneous and metamorphic rocks.

Non-metallic minerals such as limestone and mineral fuels are found in sedimentary rock formation of plains and young fold mountains.

Minerals are essential for the economic development of any country. Being non-renewable resources, minerals should be used moderately. They can be conserved by reducing the wastage during mining, recycling and using substitutes. Power or energy plays a vital role in our lives. We depend on power to make our life more comfortable. Power is needed not only in a home, but also for running the activities of industry, agriculture, transport, communication and defence. Power sources can be broadly categorized into

- **Conventional Sources**
- **Non-Conventional Sources.**

The power sources which have been in common use for a long time are known as **Conventional Sources**. For example, firewood, fossil fuels like coal, petroleum, natural gas, and hydropower.

Some new sources of energy which have been discovered in the recent past are called non-conventional sources of energy. Important sources of non-conventional energy are—Solar energy, wind energy, biomass energy, geothermal energy, through tides and waves, etc.

Non-conventional sources of energy are non-polluting, inexhaustible, safe and clean. Most of these are only in the

experimentation stage and are being used as a different source of commercial energy to a very little extent. We must conserve the conventional power sources as they are limited in nature. So, we must promote the use of alternative sources of power.

A naturally occurring substance having a definite chemical composition is called a mineral. Minerals are found in certain

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areas only and not everywhere. Minerals are formed in different conditions and human activities do not play any role in their formation. Instead, only natural processes are involved.

Minerals can be identified based on their physical properties like color, density, hardness and chemical properties like solubility.

Based on composition, we classify minerals as metallic and non-metallic.

Metallic minerals contain metal. The metal is present in raw form, that is, it contains impurities and it needs to be processed in order to yield the pure metal. **Ferrous minerals** and **non-ferrous minerals** are a classification of metallic minerals. Ferrous minerals contain iron. **Examples** are iron ore, manganese ore and chromites. Non-ferrous minerals do not contain iron as a constituent. **Examples** include gold, silver, copper, lead.

- **Non-metallic minerals** do not contain metals. Instead they contain impure compounds or mineral fuels. **Examples:** limestone, mica, coal and petroleum.
- **Extraction** is the process of taking out minerals from under the earth's surface so that useful materials can be derived from them.
- **Mining** is a process of extraction or taking out minerals from rocks under the earth's surface. In open-cast mining, minerals lying at shallow depths are taken out by removing the surface layer. In shaft mining, deep bores (called shafts) are made to reach mineral deposits lying at large depths.
- **Drilling** is another method of extraction in which deep wells are bored to take out minerals. **Quarrying** refers to the process of extraction in which minerals lying very close to the surface are extracted just by digging them out.
- **Metallic minerals** are generally found in igneous rocks and metamorphic rocks in plateaus. Non-metallic minerals are usually found in a sedimentary rock formation in plains and young-fold mountains. Major regions having large iron deposits are China and India in Asia; Russia, Ukraine, Sweden and France in Europe; the Canadian Shield region in North America; and Brazil in South America. Brazil is the largest producer of high-grade iron ore.
- Asia produces over half the total in production in the world. China leads in the production of lead, antimony, tin and tungsten.
- North America is divided into three zones to describe the presence of mineral deposits. These are Canadian region north of the Great Lakes, the Appalachian region and the mountain ranges in the western part of the continent.



- Chile and Peru in South America are leading producers of copper. Brazil and Bolivia are important producers of tin. Africa is the continent richest in mineral resources. South America, Zimbabwe and Zaire are the world's most important producers of gold.
- Australia produces the largest quantity of bauxite. It also produces gold, diamond, iron, tin and nickel. The areas called Kalgoorlie and Coolgardie have large deposits of gold.
- In India, high-grade iron ore is produced in Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh, Goa, Maharashtra and Karnataka. Bauxite is produced in Jharkhand, Orisha, Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra and Tamil Nadu. Mica deposits are found in Jharkhand, Bihar, Andhra Pradesh and Rajasthan. India is the largest producer and exporter of mica in the world.
- Kolar in Karnataka has large deposits of gold. India is a leading producer and exporter of salt. Minerals are used for a lot of purposes. Copper is a metal used in nearly everything. Silicon is obtained from quartz. It is a basic tool of the computer industry.
- Minerals are non-renewable since their formation is a long process. Recycling of metals and reducing wastage are ways to conserve them.
- Power means energy. We require power for everything. Power resources are of two types: conventional and non-conventional.
- Conventional power sources are those that have been in use for a long time. Fossil fuels and firewood are Examples. Non-conventional power sources are those power sources that have come into use recently due to the depleting conventional resources and growing awareness.
- Firewood is widely used in India for cooking and heating. Fossil fuels are what the remains of plants and animals converted into after they remained buried under the earth for millions of years.
- Coal, petroleum and natural gas are important fossil fuels. **Electricity** from coal is called thermal power. Petroleum and its derivatives are called black gold because of their importance. Natural gas is found with petroleum deposits.

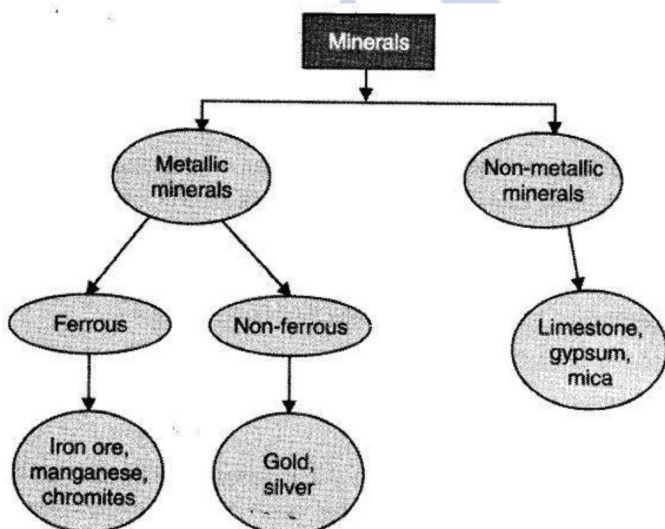
Important Terms:

- **Hydel power** is the energy possessed by river water (stored in dams) or rainwater falling from great heights. One-fourth of the world's electricity is produced from hydel power.



- Solar energy, wind energy, geothermal energy, nuclear power, and tidal energy are examples of non-conventional power sources.
- **Solar energy** is the heat and light energy captured from the sun. Solar cells help to convert this energy to electricity. Solar energy is used in solar heaters, solar cookers, solar dryers, etc.
- **Wind energy** is the energy possessed by moving air (wind). **Windmills** are used to convert wind energy to electricity.
- **Wind farms** having clusters of windmills are located in coastal regions and mountain passes.
- **Nuclear power** is energy possessed by the nuclei of atoms of naturally occurring radioactive elements like uranium, thorium, etc.
- **Geothermal energy** is the heat energy obtained from the inside of the earth. The temperature inside the earth increases as we go deeper. This heat is used to produce electricity. It is accessed in the form of hot springs.
- **Tidal energy** is the energy generated from tides. It is harnessed by building dams at narrow openings of the sea.
- **Biogas** is a gaseous fuel obtained from the decomposition of organic waste like dead plant and animal material or animal dung and kitchen waste. It is an excellent fuel for cooking and lighting and is environment friendly.

Important Terms:



- **Mineral:** A naturally occurring substance having a definite chemical composition is called a mineral.
- **Rock:** A rock is an aggregate of one or more minerals, without definite composition of the constituent of minerals.
- **Ore:** An ore is a rock from which minerals are mined.



- **Metallic Minerals:** Metallic minerals are those containing metal. The metal is present in raw form, that is, it contains impurities and it needs to be processed to yield the pure metal.
- **Ferrous Minerals:** Ferrous minerals are the ones containing iron as a constituent.
- **Non-ferrous Minerals:** Non-ferrous minerals are the ones that do not contain iron as a constituent.
- **Non-metallic Minerals:** Non-metallic minerals are the ones that do not contain metals. Instead, they contain impure compounds or mineral fuels.
- **Extraction:** Extraction is the process of taking out minerals from under the earth's surface so that useful materials can be derived from them.
- **Mining:** Mining is a process of extraction or taking out minerals from rocks under the earth's surface.
- **Open-cast Mining:** Open-cast mining is a method of extraction in which minerals lying at shallow depths are taken out by removing the surface layer.
- **Shaft Mining:** Shaft mining is a method of extraction in which deep bores (called shafts) are made to reach mineral deposits lying at large depths.
- **Drilling:** Drilling is another method of extraction in which deep wells are bored to take out minerals.
- **Quarrying:** Quarrying refers to the process of extraction in which minerals lying very close to the surface are extracted just by digging them out.
- **Conventional Sources of Energy:** Conventional power sources are those that have been in use for a long time.
- **Non-conventional Power Sources:** Non-conventional power sources are those power sources that have come into use recently due to the depleting conventional resources and growing awareness.
- **Fossil Fuels:** Fossil fuels are what the remains of plants and animals converted into after they remained buried under the earth for millions of years.
- **Thermal Power:** The electricity obtained from coal is called thermal power.
- **Coal:** Coal is a fossil fuel that was formed millions of years ago when giant ferns and swamps got buried under the layers of the earth.



- **Petroleum:** Petroleum is a thick black liquid fossil fuel found between layers of rocks and drilled from oil fields.
- **Hydel Power:** Hydel power is the energy possessed by river water (stored in dams) or rainwater falling from great heights.
- **Solar Energy:** Solar energy is the heat and light energy captured from the sun.
- **Solar Cell:** Solar cells are devices to convert solar energy into electricity.
- **Wind Energy:** Wind energy is the energy possessed by moving air (wind).
- **Nuclear Power:** Nuclear power is energy possessed by the nuclei of atoms of naturally occurring radioactive elements like uranium, thorium, etc.
- **Geothermal Energy:** Geothermal energy is the heat energy obtained from the inside of the earth.
- **Tidal Energy:** Tidal energy is the energy generated from tides.
- **Biogas:** Biogas is a gaseous fuel obtained from the decomposition of organic waste like dead plant and animal material or animal dung and kitchen waste.

Agriculture Class 8 Notes Social Science Geography Chapter 4

Activities which are related to earning livelihood are called economic activities. There are three types of economic activities:

- Primary Activities
- Secondary Activities
- Tertiary Activities.

Agriculture is a primary activity. Nearly 2/3rd of India's population is engaged in agricultural activities. Growing of crops, raising livestock, forestry and fishing all come under agricultural activities.

There are mainly two types of farming techniques:

- Subsistence Farming
- Commercial Farming.

When a farmer tills the land till the soil loses its fertility and then shifts to another fertile land, then this type of farming is known as shifting cultivation.

- Efforts made to increase farm production to meet the growing demands of the increasing population is known as agricultural development. It varies in developed and developing countries.



- We divide economic activities into three categories: primary, secondary and tertiary. Agriculture, an activity that is related directly to the extraction and production of natural resources, is a primary activity. Manufacturing of steel and baking of bread are secondary activities since they are not directly related to the extraction or production of natural resources, but their utilisation. Transport and trade are tertiary activities since they do not come in either category. Two-thirds of India's population depends on agriculture. Some of the important inputs required in agriculture are seeds, fertilisers, machinery and labour. Operations involved are ploughing, sowing, irrigation, weeding and harvesting. Outputs include crops, wool, dairy and poultry products.
- **Two main types of farming practised are subsistence farming and commercial farming.** Subsistence farming is practised solely to meet the needs of the farmer's family. Therefore, the practices involved are usually old-fashioned. Use of modern technology is minimum and most work is done by household labour.
- In Intensive subsistence agriculture, simple tools and huge labour are used by a farmer to cultivate a small plot of land.
- More than one crop is grown annually in favourable conditions. Rice is the major crop. This form of agriculture is seen in
- the thickly populated areas of the monsoon regions of south, south-east and east Asia.
- **Shifting cultivation** is a class of primitive subsistence agriculture. In this, a plot of land is cleared by felling the trees and burning them. The ashes are then mixed with soil and crops are grown. After some time, the land is abandoned and the farmers move to a different place. This type of farming is common in the thickly forested areas of the Amazon basin, tropical Africa, parts of South-east Asia and north-east India. It is also called "slash and burn" agriculture.
- **Nomadic herding** refers to the practice in which herdsmen move from place to place with their animals for fodder and water. Animals usually reared are the yak, sheep, camel and goats.
- **Commercial farming** is the practice in which crops are grown exclusively for commercial purpose, i.e. for sale in the market. A large area is cultivated and huge capital is involved unlike subsistence farming. Machines are largely used.
- **Commercial grain farming** is a class of commercial farming. Crops like wheat and maize are grown for commercial purpose. The temperate grasslands of North America, Europe and Asia are some common areas where it is seen.



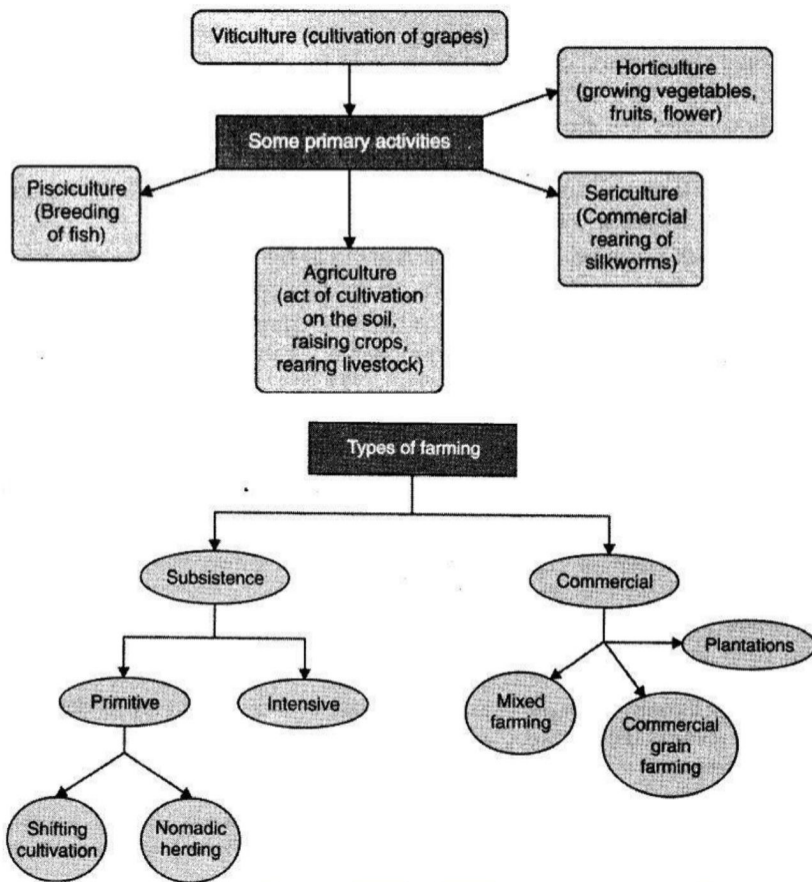
- **Mixed farming** is another type of commercial farming. The land is used for growing food and fodder crops and rearing livestock. Some areas where it is followed are Europe, eastern USA, Argentina, south-east Australia, New Zealand and South Africa.
- **Plantations** are a type of commercial farming where only a single crop (like tea, coffee, sugarcane, cashew, rubber, banana or cotton) is grown. Large amount of labour and capital are required. The produce is processed in the farm itself or nearby factories.
- Rice is the major food crop of the world. It is the staple diet in tropical and sub-tropical parts. Its cultivation needs high temperature, humidity and rainfall. China and India are the largest producers of rice in the world.

Important Terms:

- **Wheat** thrives best in well-drained loamy soil. In addition, it needs moderate temperature and rainfall during growing season and bright sunshine at harvesting. USA is a major producer.
- **Millets** are coarse grains. Jowar, bajra and ragi are major millets grown in India.
- **Maize** requires moderate temperature, rainfall, good sunshine and well-drained fertile soils.
- **Cotton** grows best on black and alluvial soils. It needs high temperature, light rainfall, 210 frost free days and bright sunshine.
- **Jute** (called the Golden Fibre) is grown in tropical areas. India and **Bangladesh are leading producers.**
- **Coffee** grows well on hill slopes. Brazil is the leading producer.
- **Tea** is a beverage crop grow on plantations. It needs well-drained **loamy soils** ad gentle slopes. Large labour is required.
- **Agricultural** development refers to the effort to increase farm production so as to meet growing demand of increasing population. **Mechanisation**, a part of agricultural development, means using more machines than human labour.
- A typical Indian farm is about 1.5 hectares in area, whereas a typical USA farm is about 250 hectares. In the USA, farmers use very modern methods for agriculture. In India, however, obsolete methods are used in most parts. Mechanisation is not seen much in India as compared to USA.



- A farmer in India generally works as a “peasant” whereas in the USA, he works as a complete businessman.



- Primary Activities:** Activities which involve direct extraction and production of natural resources are called primary activities: **For example** agricultural farming, sericulture, pisciculture, etc.
- Secondary Activities:** Activities which are concerned with the processing of natural resources are called secondary activities.
- Tertiary Activities:** Activities which fall neither in the primary category nor the secondary category are called tertiary activities. They do not use natural resources directly.
- Agriculture:** Agriculture is the primary activity that involves cultivation of crops, fruits, vegetables, flowers and rearing of livestock.
- Subsistence Farming:** Subsistence farming is the form of agriculture practised solely to meet the needs of the farmer's family: The practices involved are usually old- fashioned. **Intensive Subsistence Agriculture:** In intensive, subsistence agriculture, simple tools and huge labour are used by a farmer to cultivate a small plot of land.
- Shifting Cultivation:** Shifting cultivation is the form of agriculture in which a plot of land is cleared by felling the



trees and burning them. The ashes are then mixed with soil and crops are grown. After some time, the land is abandoned and the farmers move to a different place.

- **Nomadic Herding:** Nomadic herding refers to the practice in which herdsmen move from place to place with their animals for fodder and water.
- **Commercial Farming:** Commercial farming is the practice in which crops are grown exclusively for commercial purpose, i.e. for sale in the market.
- **Commercial Grain Farming:** It is a class of commercial farming in which crops like wheat and maize are grown for commercial purpose.
- **Mixed Farming:** It is a type of commercial farming in which land is used for growing food and fodder crops and rearing livestock.
- **Plantations:** These are a type of commercial farming where only a **single crop** (like tea, coffee, sugarcane, cashew, rubber, banana or cotton) is grown.
- **Food Crops:** Crops like rice, wheat, maize, millets are called food crops.
- **Fiber Crops:** Crops like jute and cotton are called fibre crops. Their usage is not as food.
- **Beverage Crops:** Tea and coffee are called beverage crops.
- **Agricultural Development:** Agricultural development refers to the effort to increase farm production so as to meet the growing demand of the increasing population.
- **Mechanization:** This refers to the process of using machines more than human labour.

Industries (Chapter 5)

The industry refers to that economic activity which is concerned with converting the raw material or semifinished goods into finished goods. Industries are classified:

- On the basis of raw material: Agro-based industries, Mineral-based industries, Marine-based industries, Forest based industries.
- On the basis of size: Small scale industries and Large scale industries.



- On the basis of ownership: Private sector industries, public sector industries and joint sector industries.

Availability of raw material, land, water, labour, power, capital, transport, market and government policies are the important factors that affect the location of industries.

- Iron & Steel Industries, Textile Industries and Information Technology Industry are the world's major industries. The product of Iron & Steel Industry is the raw material for the other industries. So, it is also called the feeder industry.
- Steel is often called as the backbone of modern industry. The Information Technology Industry deals in the storage, processing and distribution of information.
- Secondary activities are those that involve processing of natural resources. Manufacturing is a secondary activity. Manufacturing refers to changing raw materials to a product, i.e. to a usable form, which can be more valuable to people. Industry refers to an economic activity that is concerned with production of goods, extraction of minerals or provision of services. We classify industries on the basis of raw materials, size and ownership.
- On basis of raw materials, industries are agro-based, mineral-based, marine-based or forest-based. The raw material of agro-based industries consists of plant and animal-based products. Some examples are food processing, cotton textile industry and leather industry. The raw material used in mineral-based industries consists of mineral ores. The products of mineral-based industries are
 - used in other industries as well. We can understand it better with an example: heavy machinery made of iron, which is used in most industries, actually comes after processing of iron ore in a mineral-based industry.
- Marine-based industries use products obtained from the sea and oceans as raw materials. The seafood industry is one such industry.
- A forest-based industry uses forest produce as raw material. Examples are paper industry and furniture.
- Based on size, industries can be classified into small-scale and large-scale industries. Cottage or household industries are examples of small-scale industries. The products here are manufactured by hands, with less use of capital and technology. Investment of capital and use of technology is huge in large-scale industries.
- On the basis of ownership, industries are classified into the private sector, state-owned (public sector), joint sector and



cooperative sector. Private sector industries are owned by individuals or a group of individuals. Public sector industries are owned by the government. Joint sector industries are owned and operated by the state and individuals. Maruti Udyog is an example of such an industry. Cooperative sector industries are owned and operated by the producers or suppliers of raw materials, workers or both. AMUL is one such industry.

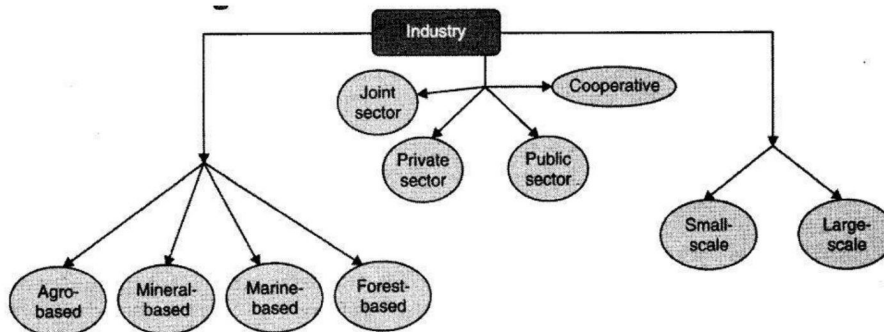
- The location of industries is affected by the availability of raw material, land, water, labour, power, capital, transport and market.
- An industrial system, like farming process, consists of inputs, processes and outputs. Raw materials, labour and cost of land, transport, power and other infrastructure constitute the inputs. Processes include all activities involved in converting the raw material to finished products. The finish products along with the income earned by its trade are outputs. .
- Major industrial regions of the world are eastern North America, western and central Europe, eastern Europe and eastern Asia. Such areas are usually located in temperate areas, near seaports and coal fields.
- The iron and steel industry is a mineral-based industry whose products are used as raw material for other industries. Inputs in iron and steel industry: iron ore, coal, limestone, human labour, capital, and infrastructure. Processes involved: smelting, refining. Outputs obtained: steel. Steel is called the backbone of modern industry. Most common objects are made of steel. In India, most important steel producing centres are spread over the states of West Bengal, Jharkhand, Orissa and Chhattisgarh.
- Tata Iron and Steel Company Limited (TISCO) was the only one iron and steel plant in India till independence. It is located in Jamshedpur. Several iron and steel industries were set up after independence. This led to rapid industrial development in India.
- Pittsburgh is an important steel city of USA.
- The cotton textile industry is one of the oldest industries in the world. India is renowned for producing excellent quality cotton. The first mechanised textile mill in India was established in Mumbai in 1854. Rapid expansion of the industry took place owing to the warm, moist climate, the presence of a port nearby, and availability of raw material and labour at cheap cost.



Ahmedabad is the second largest textile city in India after Mumbai. It is referred to as the "Manchester of India". In recent years textile mills here have started getting closed down due to several problems.

Osaka is the "Manchester of Japan".

The Information Technology (IT) sector deals in the storage, processing and distribution of information. The major hubs of IT industry are Silicon Valley in USA and Bangalore in India.



Manufacturing: Manufacturing refers to changing raw materials to a usable form, which can be more valuable to people.

Important Terms:

- **Product:** A product is something obtained from raw materials by certain processes so that it is something usable and of importance.
- **Industry:** Industry refers to economic activity that is concerned with the production of goods, extraction of minerals or provision of services.
- **Agro-based Industries:** These are industries that use plant and animal-based products as raw material.
- **Mineral-based Industries:** These are industries that use mineral ores as their raw material.
- **Marine-based Industries:** These are industries that use sea and ocean products as their raw material.
- **Forest-based Industries:** These are industries that use forest produce as raw material.
- **Small-Scale Industries:** These are industries that run on little capital and infrastructure.
- **Large-Scale industries:** These are industries that run on a large amount of capital and have a big infrastructure.
- **Private-Sector Industries:** These are industries owned and run by an individual or group of individuals.
- **Public-Sector Industries:** These are industries owned and run by the government.



- **Joint-Sector Industries:** These are industries owned and run by the state as well as individuals.
- **Cooperative Sector Industries:** These are industries owned and operated by producers or suppliers of raw materials.
- **Smelting:** Smelting is the process of extracting the minerals from their ores by heating beyond their melting point.
- **Refining:** Refining is the process of yielding the highest possible purity of metal obtained from mineral.
- **Steel:** Steel is an alloy of iron obtained from the iron ore.
- **Information Technology Industry:** The IT industry deals in the storage, processing and distribution of information.

Human Resource (Chapter 6)

People are a nation's greatest resource. It is their ability and knowledge which turns them into the resource.

- The way in which people are spread across the earth's surface is known as a pattern of population distribution. Nearly 90 percent of the world's population lives in about 10% of the land surface. High altitude areas, tropical deserts, high mountains and areas of equatorial forests are sparsely populated. Whereas South and Southeast Asia, Europe and northeastern North America are densely populated.
- The number of people living in a unit area of the earth's surface is called density of population. Topography, climate, soil, water, minerals, social, cultural and economic conditions are the important factors that affect the distribution of the population.
- Change in the number of people during a specific time is known as population change. The important causes of population change are birth rate, death rate, and migration.
- The difference between the birth rate and death rate is known as the growth rate of the population. Rate of population growth varies across the world.
- Population composition refers to the structure of the population. From population composition, we mean the number of males and females, age group they belong to, education level, occupational distribution, income level, social status, etc. A population pyramid, also called the age and sex pyramid, helps us to understand the composition of population in any country.
- Human beings are the most important resource of a nation. They are significant because had they not utilised their brains,

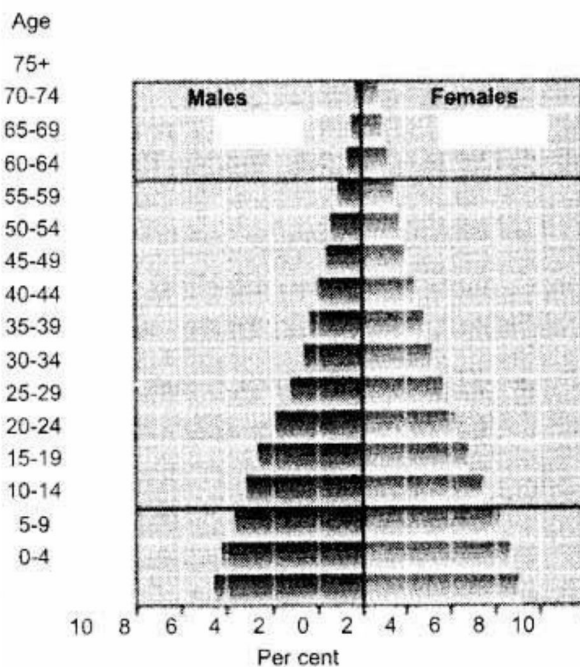


the other resources of nature would not have found any utility. In other words, human resource is the ultimate resource.

- The way in which people are spread across the earth's surface is known as the pattern of population distribution. Some areas are very crowded (high density) while some are less crowded (low density). Population density depends on the climate conditions and topography of the place, like few people live in high latitude areas, tropical deserts, mountainous terrains, and forest areas, whereas many people reside in plains.
- The density of population is defined as the average number of people living in a unit area of the earth's surface. The density of a particular region is calculated by dividing the population of the region by its area.
- Topography, favourable climate, fertility of soils, availability of fresh water, minerals are major geographical factors affecting population density of a region. People prefer to live on plains more than mountains or plateaus and they live more in moderate climates than extreme hot or cold. From the agriculture point of view, fertile lands are preferred.
- Areas with mineral deposits are more populated. Some social factors that boost the density of population in a region are better housing, education and health facilities.
- Places with cultural or historical significance are usually populated.
- Employment opportunities are another attraction for large chunks of population.
- The term population change refers to change in the population with respect to time. The population of the world is never stable; the number of births and deaths affect its change.
- With better health facilities due to development in medical science, now the number of deaths is lower than before. Birth rate is a statistic that measures the number of live births per 1000 people. Death rate is a statistic that measures the number of deaths per 1000 people.
- When we talk of the population of a particular region, country or continent, and not the whole world, then along with birth and death rate, another factor affecting population change is migration. Migration refers to the movement of people from one area to another. Since births and deaths are natural causes of population change, the difference between the birth and death rate is called the natural death rate.



- People leaving a country are called emigrants and the phenomenon is called emigration. People arriving in a country are called immigrants and the phenomenon is called immigration. People usually migrate from less developed areas to more developed ones, in search for better employment opportunities, among other facilities.
- The pattern of population change is different for different parts of the world. The structure of the population with various respects Age like age, sex, literacy, occupations, health facilities, 75+ economic condition, etc is called population composition.
- A population pyramid is a pictorial way to describe the population composition. An age-sex pyramid of India is shown in the figure.



Population Pyramid of India

The shape of population pyramid of a country is indicative of a lot of information about the country.

The size towards the bottom may be used to estimate the birth rate, while the size towards the top to estimate the death rate.

The youngsters (ages 0-15) and senior citizens (aged 65 above) are said to fall under the "dependent" group.

They are considered to be economically inactive; they depend on the working class for their living. The middle age group constitutes the working class.

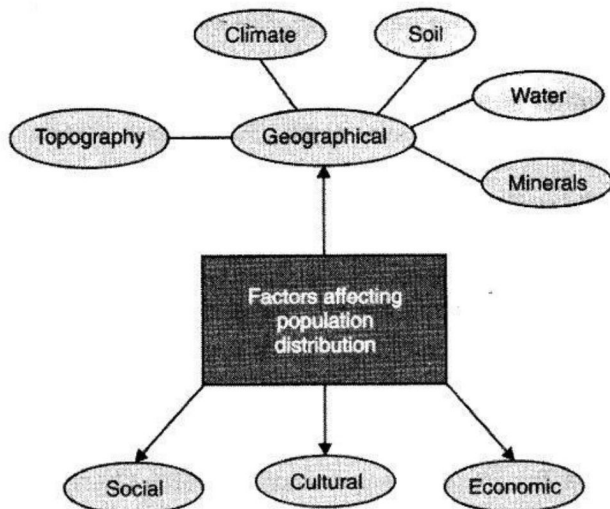
A population pyramid in which the base is broad and the top part is narrow means that although a large amount of births take place, not all grow up to be adults and old; it means many die before reaching



these ages. This indicates a large death rate and Kenya shows such a pyramid. This means a high population growth rate.

In countries like India, the death rate is decreasing, so the pyramid is broad in the younger age groups, and the size of the pyramid decreases steadily.

Important Terms:



- **Human Resources:** Human beings who are healthy, educated, and mentally strong can prove to be useful for a country or community and are treated as resources themselves, called human resources.
- **Population:** The total number of people living in a particular region is said to be the population of that particular region.
- **The pattern of Population Distribution:** The way in which people are spread across the earth's surface is known as the pattern of population distribution.
- **Population Density:** The average number of people living in a unit area of a particular region, calculated by dividing the total population of the region by the total area of that region, is called the population density of that region.
- **Population Change:** The change in the population, when described over a certain length of time, is called population change.
- **Birth Rate:** Birth rate is a statistic that measures the number of live births per 1000 people.
- **Death Rate:** Death rate is a statistic that measures the number of deaths per 1000 people.
- **Life Expectancy:** Life expectancy is the number of years that an average person can expect to live, calculated according to existing data for the particular region.



Notes

- **Migration:** Migration refers to the movement of people from one area to another.
- **Natural Death Rate:** The difference between the birth and death rate is called a natural death rate.
- **Emigrants/Emigration:** People leaving a country are called emigrants and the phenomenon is called emigration.
- **Immigrants/Immigration:** People arriving in a country are called immigrants and the phenomenon is called immigration.
- **Population Composition:** The structure of the population with various respects like age, sex, literacy, occupations, health facilities, economic condition, etc is called population composition.
- **Population Pyramid:** A population pyramid is a pictorial way to describe the population composition.

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