CHAPTER-1 RESOURCES

CLASS-VIII

GEOGRAPHY

- Water, electricity, rickshaw, vegetable and textbook have something in common. They have all been used by you, so they have **utility**. Utility or usability is what makes an object or substance a resource.

- **Value** means worth. Some resources have economic value, some do not. For example, metals may have an economic value, a beautiful landscape may not. But both are important and satisfy human needs.

- Time and technology are two important factors that can change substances into resources. Both are related to the needs of the people. People themselves are the most important resource. It is their ideas, knowledge, inventions and discoveries that lead to the creation of more resources. Each discovery or invention leads to many others.
- **TYPES OF RESOURCES**
- Resources are generally classified into natural, human made and human.
  Natural Resources
- Resources that are drawn from Nature and used without much modification is called **natural resources**. Natural resources are classified into different groups depending upon their **level of development** and **use**; **origin**; **stock** and **distribution**.

- **Human Made Resources**
  Sometimes, natural substances become resources only when their original form has been changed. Iron ore was not a resource until people learnt to extract iron from it. People use natural resources to make buildings, bridges, roads, machinery and vehicles, which are known as **human made resources**. Technology is also a human made resource.

- **Human Resources**
  People can make the best use of nature to create more resources when they have the knowledge, skill and the technology to do so. That is why human beings are a special resource. **People are human resources**. Education and health help in making people a valuable resource.

- Using resources carefully and giving them time to get renewed is called **resource conservation**.
- Balancing the need to use resources and also conserve them for the future is called **sustainable development**.
- Key Points

II. 1. An object in the environment, which is useful to man and has value is termed a resource.

2. Man-made resources are those resources which have been created by man using his skill and knowledge like buildings, bridges etc.

3. (i) minerals

(ii) mountains

4. Resource conservation is essential because: • Most of our resources are exhaustible. • We have been using them carelessly.

5. Development of the resources without damaging the environment and keeping in mind the needs of the future generation is called sustainable development.

III. 1. Classification of resources on the basis of availability.

(i) Inexhaustible Resources: They are unlimited and can be used without the fear of being exhausted. For example: (a) wind energy (b) solar energy. These are also called renewable resources.

(ii) Exhaustible Resources: Once utilized these resources cannot be regenerated. They are non-renewable in nature. For example: (a) Coal (b) Petroleum.

2. Potential Resources & Developed Resources

(i) These resources are available but not fully developed. (i) These resources are fully developed.

(ii) Their utilization depends on technology. (ii) Technology is also available to extract the resources.

(iii) These can be utilized in future, e.g. Rajasthan has potential for the development of solar energy.

(iii) These are presently being used, e.g. Damodar coal fields in India.

3. On the basis of distribution, we can classify resources in two categories: (i) Local resources (ii) Ubiquitous resources Local resources are those resources

which are confined to certain parts, for example: coal, petroleum. Ubiquitous resources are widespread all over the world. For example: air, water, land.

4. Biotic Resources Abiotic Resources • These are obtained from the biosphere, e.g. plants, animals, human beings. • These are obtained from non-living things, e.g. rocks, mountains, minerals.

5. It is true that some countries in the world have natural resources but they cannot utilise them due to the absence of skilled human resources. They do not have the required technology to utilize these natural resources.

IV. 1. We can conserve our forests and wildlife in the following ways: Forests

(i) by planting more trees.

ii) by controlling deforestation.

(iii) by using alternative fuels.

Wildlife (i) by stopping the killing of animals for their fur, skin and bones.

(ii) by protecting and providing a natural habitat conducive to the animals.

2. The conservation of resources is essential for the following reasons: (i) our resources are limited.

ii) we have been using our resources carelessly.

(iii) the demand of our resources has increased because of the growth in population.

The following steps can help in the conservation of resources: (i) we must use them wisely.

ii) wastage should be avoided.

(iii) alternative means should be searched and developed.

3. Four principles of sustainable development are: (i) improve one’s quality of life.

(ii) conserve the earth’s diverse resources.

CHAPTER-2 LAND SOIL WATER NATURAL VEGETATIONAND WILDLIFE RESOURCES

CLASS-VIII

GEOGRAPHY

- *In a small village in Tanzania, Africa, Mamba gets up very early in the morning to fetch water. She has to walk a long way and returns after a few hours. She then helps her mother in the house and joins her brothers in taking care of their goats. All her family owns is a piece of rocky land around their small hut. Mamba's father can barely grow some maize and beans on it after toiling hard. This is not enough to feed their family for the whole year.*
- *Peter lives in the heart of the sheep rearing region in New Zealand where his family runs a wool processing factory. Every day when he returns from school, Peter watches his uncle taking care of their sheep. Their sheep yard is situated on a wide grassy plain with hills in the far distance. It is managed in a scientific way using the latest technology. Peter's family also grows vegetables through organic farming.*
- **LAND**

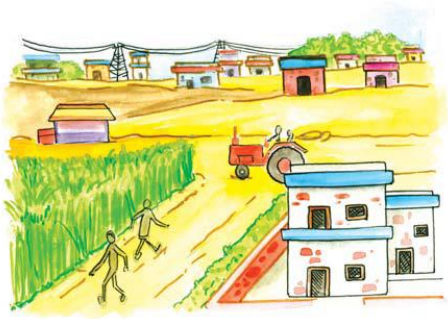
  Land is among the most important natural resources. It covers only about thirty per cent of the total area of the earth's surface and all parts of this small percentage are not habitable.
- **LAND USE**

  Land is used for different purposes such as agriculture, forestry, mining, building houses, roads and setting up of industries. This is commonly termed as **Land use**.

- The use of land is determined by physical factors such as topography, soil, climate, minerals and availability of water. Human factors such as population and technology are also important determinants of land use pattern.

- community land is owned by the community for common uses like collection of fodder, fruits, nuts or medicinal herbs. These community lands are also called **common property resources**.

STAGE-1



STAGE-2

STAGE-3

STAGE-4

- Landslides

  Landslides are simply defined as the mass movement of rock, debris or earth down a slope. They often take place in conjunction with earthquakes, floods and volcanoes. A prolonged spell of rainfall can cause heavy landslide that can block the flow of river for quite some time. The formation of river blocks can cause havoc to the settlements downstream on its bursting. In the hilly terrain landslides have been a major and widely spread natural disaster that often strike life and property and occupy a position of major concern.

- Mitigation Mechanism

  Advancement in scientific techniques has empowered us to understand what factors cause landslides and how to manage them. Some broad mitigation techniques of landslide are as follows:

  • Hazard mapping locate areas prone to landslides. Hence, such areas can be avoided for building settlements.

  • Construction of retention wall to stop land from slipping.

  • Increase in the vegetation cover is an effective way to arrest landslide.

  • The surface drainage control works are implemented to control the movement of landslide along with rain water and spring flows.

- **SOIL**

  The thin layer of grainy substance covering the surface of the earth is called soil. It is closely linked to land. Landforms determine the type of soil. Soil is made up of organic matter, minerals and weathered rocks found on the earth.

This happens through the process of weathering. The right mix of minerals and organic matter make the soil fertile.

- **DEGRADATION OF SOIL AND CONSERVATION MEASURES**
  Soil erosion and depletion are the major threats to soil as a resource. Both human and natural factors can lead to degradation of soils. Factors which lead to soil degradation are deforestation, overgrazing, overuse of chemical feritilisers or pesticides, rain wash, landslides and floods.
- Some methods of soil conservation are
  Mulching: The bare ground between plants is covered with a layer of organic matter like straw. It helps to retain soil moisture.
  Contour barriers: Stones, grass, soil are used to build barriers along contours. Trenches are made in front of the barriers to collect water.
  Rock dam: Rocks are piled up to slow down the flow of water. This prevents gullies and further soil loss.
- **WATER**
  Water is a vital renewable natural resource. Three fourths of the earth's surface is covered with water. It is therefore appropriately called the 'water planet'. It was in the primitive oceans that life began almost 3.5 billion years back. Even today, the oceans cover two-thirds of the earth's surface and support a rich variety of plant and animal life.
- Humans use huge amounts of water not only for drinking and washing but also in the process of production. Water for agriculture, industries, generating electricity through reservoirs of dams are the other usages. Increasing population, rising demands for food and cash crops, increasing urbanization and rising standards of living are the major factors leading to shortages in supply of fresh water either due to drying up of water sources or water pollution.
- **CONSERVATION OF WATER RESOURCES**
  Access to clean and adequate water sources is a major problem facing the world today. Steps have to be taken to conserve this dwindling resource. Even though water is a renewable resource, its overuse and pollution make it unfit for use. Discharge of untreated or partially treated sewage, agricultural chemicals and industrial effluents in water bodies are major contaminants.
- **NATURAL VEGETATION AND WILDLIFE**
  Natural vegetation and wildlife exist only in the narrow zone of contact between the lithosphere, hydrosphere and atmosphere that we call **biosphere**. In the biosphere living beings are inter-related and interdependent on each other for survival. This life supporting system is known as the **ecosystem**. Vegetation and wildlife are valuable resources.

- Wildlife includes animals, birds, insects as well as the aquatic life forms. They provide us milk, meat, hides and wool. Insects like bees provide us honey, help in pollination of flowers and have an important role to play as decomposers in the ecosystem. The birds feed on insects and act as decomposers as well.
- **CONSERVATION OF NATURAL VEGETATION AND WILDLIFE**
  National parks, wildlife sanctuaries, biosphere reserves are made to protect our natural vegetation and wildlife. Conservation of creeks, lakes, and wetlands is necessary to save the precious resource from depletion Awareness programmes like social forestry and *Vanamohatasava* should be encouraged at the regional and community level. School children should be encouraged for bird watching and visiting nature camps so that they appreciate the habitat of varied species.