



8. Natural Resources

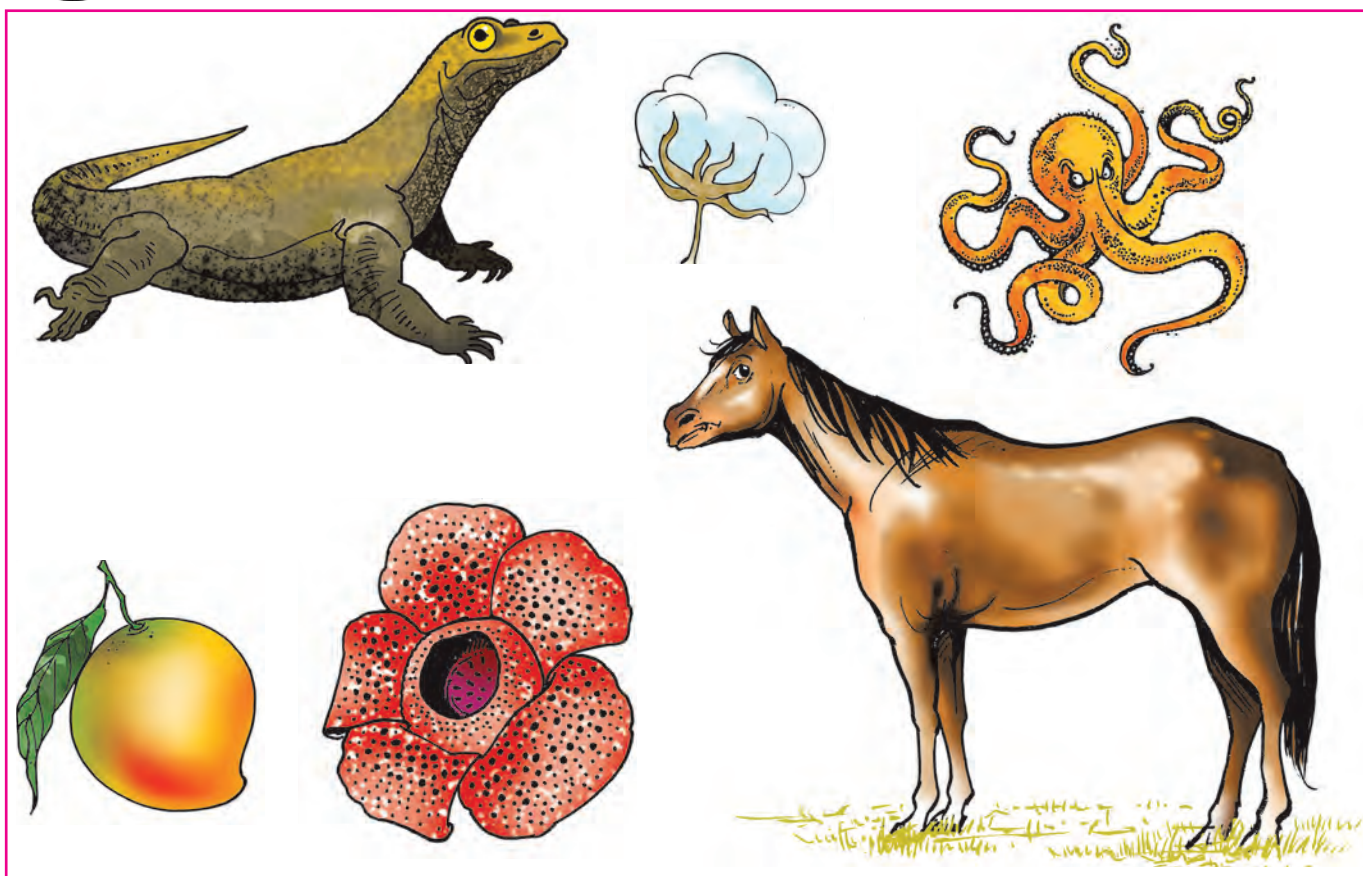


Figure 8.1

Observe and think about the pictures given in figure 8.1 and answer the following questions:

- What do you see in the pictures?
- How many of these animals or plants do you know?
- Which of these things have you seen in reality?
- Have you ever used these things or seen them being used ?
- Which of our needs do some of these fulfil?
- What probable use of the unused things can you think of?

Find more information about the things you could not identify.

Explanation

We see many things on the earth. Some of

these are quite familiar to us. However, we do not necessarily use all of them. We have learnt to use some of the things that are available in nature, for example, water. The natural things that man uses are called **natural resources**. Man fulfils his needs using these natural resources. Air, water, soils, land, minerals, plants and animals are all natural resources. Most of the natural resources are limited in nature. Therefore they are invaluable.

Of these, 'air' is such a resource that it is available in plenty. This resource never depletes. However, its quality can change. We need air for various purposes right from breathing to burning.

Figures 8.2 to 8.13 give us an idea about how we use some of the natural resources.



Figure 8.2: Agriculture

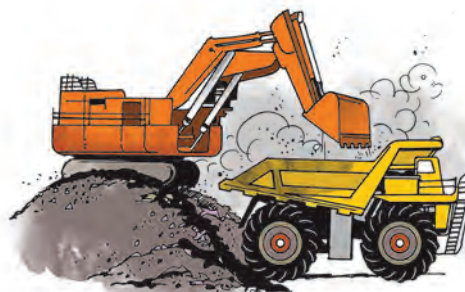


Figure 8.7 : Mining



Figure 8.3: Fishing



Figure 8.8 : A Mason at Work



Figure 8.4: Collection of Honey



Figure 8.9 : Extraction of Salt



Figure 8.5 : Drawing Water



Figure 8.12 : Windmill



Figure 8.10 : Collection of Rubber Latex



Figure 8.6 : Gathering Wood



Figure 8.11 : Gathering of Resin from Trees

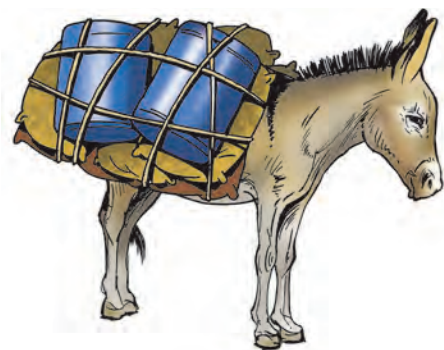


Figure 8.13 : Transportation by a Pack Animal



Can you tell?

Observe all the figures from 8.2 to 8.13 and discuss them in the class. It is necessary that each of the things shown is considered. For this, use the following points.

- What different activities are the individuals in the pictures engaged in?
- What things will they obtain through these activities?
- What are the animals in the pictures doing?
- What is the use of the tall device in figure 8.12 raised on the ground?
- What is being loaded in the truck? What are we going to get from it?
- Where are all these human activities being performed other than fishing?

Explanation

In some of the figures man is shown doing different tasks. Each of the tasks is related to some resource. Let us consider each of these resources.

- In figure 8.2, man is seen ploughing the land. The farmer ploughs the soil layer and makes the land cultivable. In this cultivable land, he grows various crops and fulfils his own and others' need for food. For this purpose, he uses the 'soil' that is naturally available on land as a resource. Soil is

used all over the world and therefore, soil is a very important resource for agriculture.

Soil formation mainly depends on the original rock, climate, organic components, slope of the land and time. According to the types of rocks and climates in different regions, different types of soil are formed. A long period is required for the formation of mature soil, as it is a very slow process. A period of about a thousand years may be required for development of a 2.5 cm thick layer of soil.

- Figures 8.3 and 8.5 show a man catching fish and another drawing water from a well. In these pictures, man is seen using the natural resource water for fulfilling his needs. Right from the time we get up in the morning, we keep on using water till we go to bed at night. This shows how important water is as a natural resource. The entire living world depends on this resource. See figure 8.9. It shows how we obtain salt from sea water. We make use of salt in our day-to-day life.

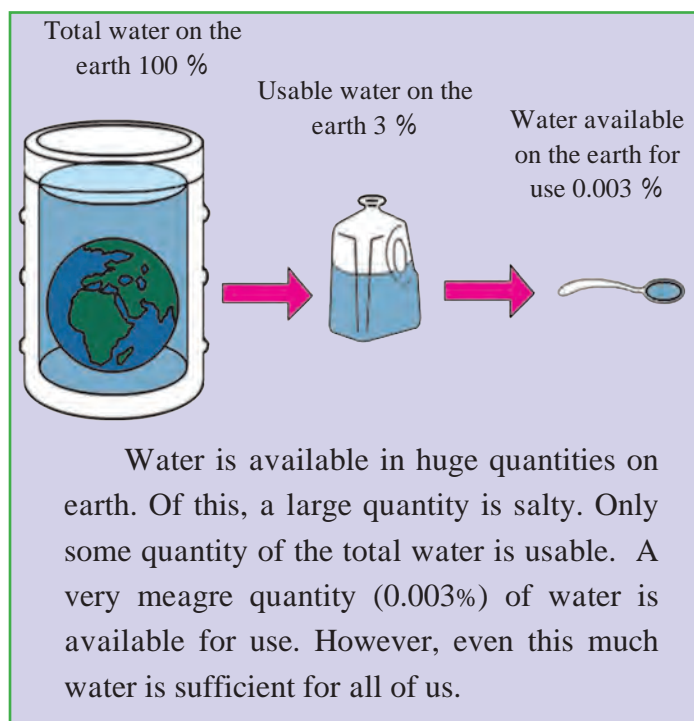


Figure 8.14 : Global Water Reserve and Availability

● Figure 8.6 shows some individuals collecting wood from the forest. Similarly, some people are shown collecting different items in the forest like honey (figure 8.4), resin (figure 8.10), rubber latex (figure 8.11), etc. In order to fulfil our needs, we collect

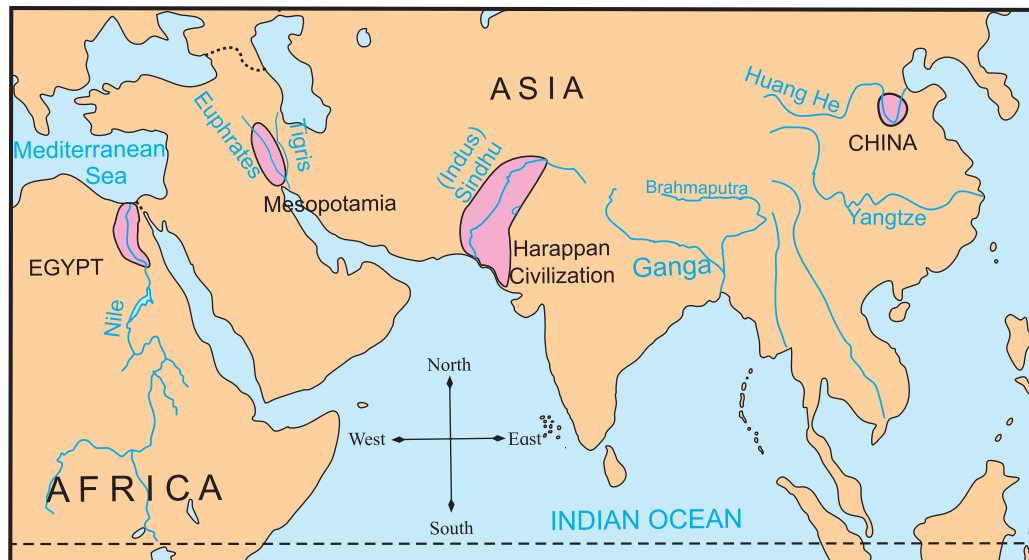


Figure 8.15 : Ancient Civilizations in River Valleys

various products from plants in nature. There are various plants on land surface. Plants are broadly classified as grass, herbs, shrubs, and trees. Man has successfully experimented with some grasses to obtain food grains. This helped him to avoid painful wandering for gathering food. He began to live a settled life. The basins of the Huang He, Sindhu (Indus), Nile and Euphrates are some of the areas where such settlements flourished in the past. You have studied this in Standard V. See figure 8.15.

We obtain products like wood, rubber, resin, fruits, medicinal plants, etc. from forests. If we consider the region from the equator to the Poles, as per the



Figure 8.16 : Latitudinal Distribution of Natural Vegetation

temperature zones, we find the following types of natural vegetation – equatorial evergreen, deciduous, tropical grasslands, thorny scrubs, temperate grasslands, mixed forests, broadleaved, coniferous, and Tundra. (See figure 8.16).

Many animals make these forests their habitat. Animals who prey on the plant-eating animals also live in the forests. Thus, many food chains develop in the forests. Forests or grasslands are the habitats for many animals. It is basically due to plants that we have got animals as a natural resource. Plants also grow in water. It is very likely that in future we



Think a little!

List the various things for which we use water. Identify the things that lead to wastage of water.



shall have to depend on aquatic plants for fulfilling the needs of the growing human population. (See figure 8.17).



Figure 8.17 : Marine Vegetation

- Figure 8.13 shows an ass carrying a load. Man makes use of animals for a variety of reasons. Horse, oxen, camel, asses, etc. are the animals employed for ploughing, riding, transporting goods etc. Goats, cows, buffalos are used as milk animals. Meat, eggs, bone powder, hide, etc. are other products we get from animals.

- Figure 8.7 shows that rock is being loaded into a truck from the mining area. We have seen earlier that rock is a mixture of minerals. Minerals are inorganic substances that form in naturally occurring chemical processes.

We get different metals and chemicals from the minerals. Some chemicals are used in preparing different medicines. Minerals are generally classified as metallic and non-metallic minerals. Metallic minerals are used for obtaining different



Think a little!

- (1) Name the different metals from which the things in your house are made. Make a chart of things and metals.
- (2) List the occupations carried out on land.

metals such as iron, bauxite, etc. and non-metallic minerals are used in obtaining various chemicals like gypsum, rock salt, calcite, etc.

- In all the figures except for fishing, all the activities of obtaining natural resources are being carried out on land.

This means that land is also a natural resource. Living things that are born on land grow, live and die on land itself. Land is an invaluable resource. That is why it is sold or bought. Obtaining land at strategic locations, using it for construction as well as trade are some other uses of this resource.

Depending on the characteristics like physiography, soil, climate, minerals, and availability of water in different regions of the world, land is used for various purposes. The proportion of land on earth is 29.20%. Depending on the characteristics of land and climate, various living things are found on the land in different proportions. The distribution of these living organisms, including humans, is not uniform. All living things try to adapt to the various geographical conditions like a rocky terrain, steep slopes, flat plains, mountainous regions, forest covered areas, river basins etc. Man alone attempts to make changes in the prevailing conditions to suit his needs.

Every living thing makes use of natural resources according to its need. However, man started using many of these resources for himself alone with the help of his intellectual power. Later, the increase in population and the greed of humans led to exploitative use of resources. This began to upset the balance in nature. This means that it is necessary that man also must use the natural resources only according to his needs and in a judicious manner.





What will you do?

Consider that you have gone for a stay at Manglu's hamlet. You observe that the conditions of people who live there is not good. Many people take food only once in a day. Most of the people in the hamlet are engaged in the work of dressing stones. There is a vast forest around Manglu's hamlet. A number of streams, brooks, waterfalls, hills, etc. have made the region beautiful. There is good potential for tourism. What can you do to change the conditions of the people in Manglu's hamlet?



Always remember.

Man has to depend on nature for many things, whatever the extent of his progress. Nature is not for man alone. It belongs to other living things too. Therefore we should always use natural resources, judiciously.



I can do this!

- Identify the natural resources.
- Remember that the natural resources have to be used in a judicious manner.
- Tell the use of different natural resources.



Exercises



(A) What is the use of the following resources?

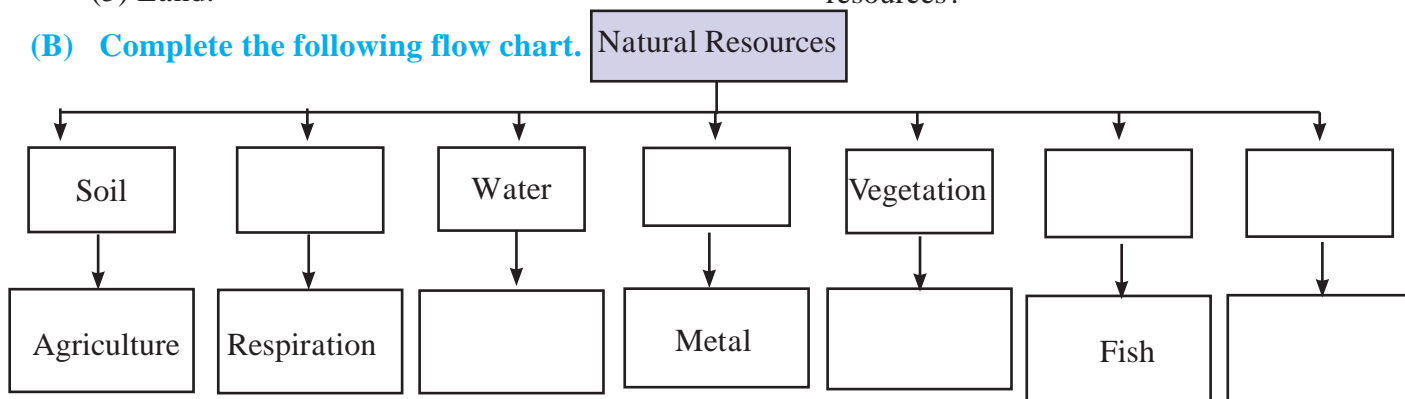
- (1) Water
- (2) Forests
- (3) Animals
- (4) Minerals
- (5) Land.



(C) Answer the following questions.

- (1) What factors influence the formation of soil?
- (2) Which products are obtained from forests?
- (3) What are the uses of minerals?
- (4) What are the purposes for which land is used?
- (5) Why is it necessary to conserve the natural resources?

(B) Complete the following flow chart.



* Activity

Collect the pictures and write information about the sources of fresh water.



Websites for reference

- <http://kids.mongaby.com>
- <http://www.nakedeyeplanets.com>

