

Chapter- 10

Soils of India

STUDY NOTES

- The plants grow in soil.
- Animals depend on the plants for their food.
- All living things depend on soil for their food.
- We also depend on the soil for many other things.
- In villages, many people use mud to make the walls of their houses.
- We make cloth from plants like cotton and jute, which in turn need soil to plants like cotton and jute, which in turn need soil to live.
- Most people in India depend on agriculture for their livelihood. So, soil is very important to us. It is one of our most important natural resources.

Formation of Soil

- Rocks on the Earth are broken down into small pebbles by rain, flowing water and the roots of plants.
- These pebbles break down further to form tiny bits of soil.
- Wind, rain and rivers carry the soil to different places.
- Remains of dead plants and animals mix with the soil to make it fertile.
- It takes more than a hundred years for nature to make just one centimetre of soil.

Types of Soil

- There are six main types of soils found in India.
- These different types of soils are suitable for growing different types of crops.
- That is why such a wide variety of crops are grown in India.

Alluvial soil:

- You have already read that the rivers of the Northern Plains bring with them large quantities of silt or alluvium.
- This gets deposited on the land around the rivers.
- This soil is very fertile, and is called alluvial soil.
- It makes the Northern Plains one of the most fertile regions of the world.
- Alluvial soil is also found in the deltas formed by the rivers of the Deccan Plateau.
- Alluvial soil is especially good for the cultivation of rice, wheat, sugarcane, pulses, oilseeds and jute.

Black soil

- This type of soil is found in the central and north-western parts of the Southern Plateau. Most of Maharashtra and Madhya Pradesh, and parts of Telangana, Andhra Pradesh,
- Gujarat, Karnataka and Rajasthan have this soil.
- Black soil is formed from the lava that comes out of volcanoes. As you have already seen, it is very good for growing cotton and sugarcane.

Red soil

- The rest of the Southern Plateau contains soil that is red in colour.
- It is not as fertile as black soil, but can be made fertile by adding manure. It is
- good for crops such as jowar, bajra and groundnut.

Laterite soil

- This type of soil is found in the Western Ghats and parts of Tamil Nadu.
- It is rich in iron and aluminium. Laterite soil, Kerala and is red in colour. It is good for crops such as tea, Coffee, spices, coconut and rubber.

Desert soil

- Desert soil contains mostly sand. It is found mainly in Rajasthan and Gujarat. Sandy soil cannot hold much water. It is, therefore, not fertile.

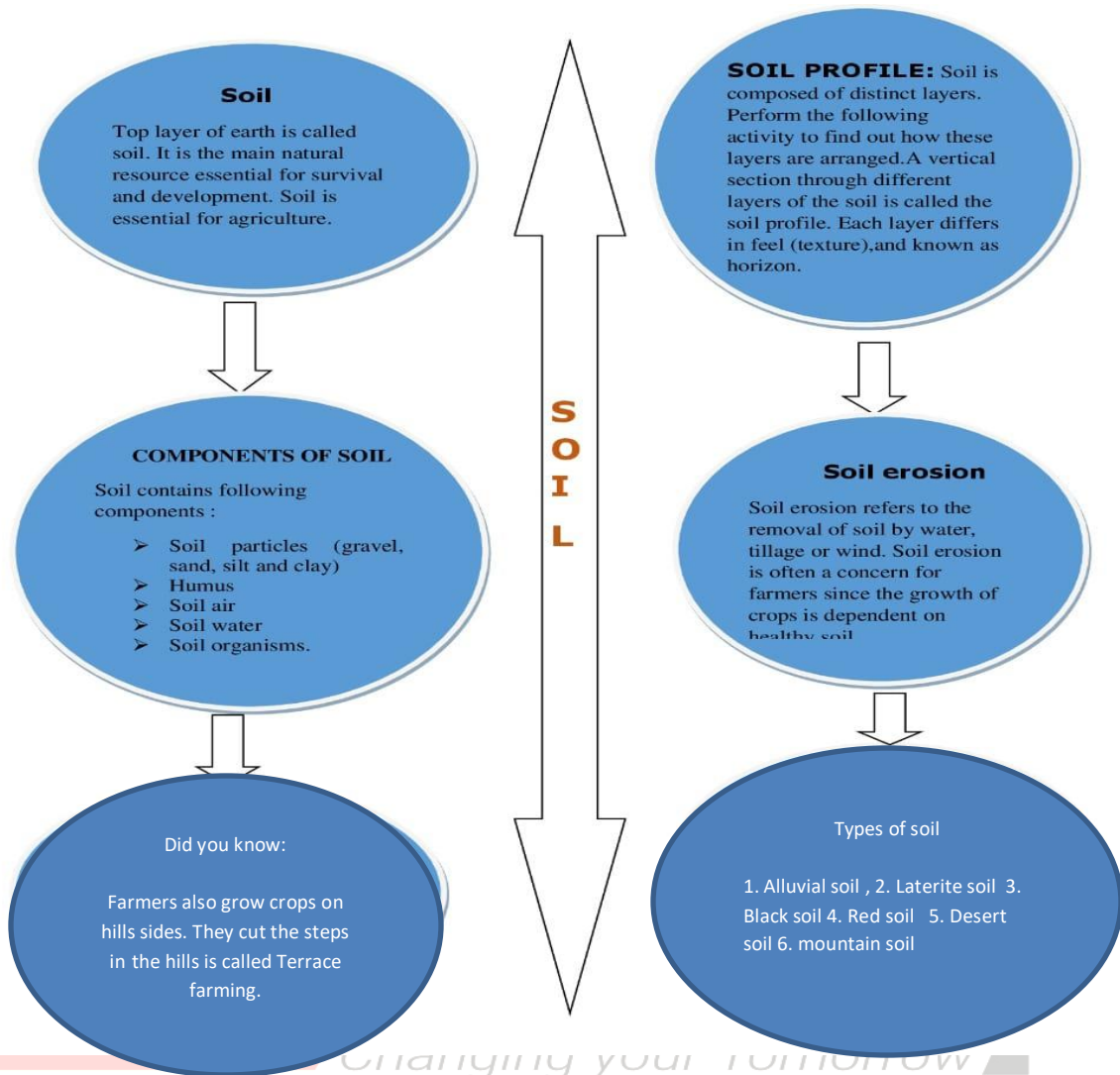
Mountain soil

- Mountain soil is very rich in humus.
- Humus is the remains of dead plants and animals.
- The minerals present in the humus make the soil very fertile.
- Mountain soil is found in the Himalayan region, and in the north-eastern parts of India.
- The soil is very good for growing fruits such as apple, pear, peach and plum.

Soil Erosion

- Sometimes, the fertile top layer of the soil is carried away by wind and water to a different place. This is called soil erosion.
- It makes the land infertile.
- Roots of plants hold the soil together and prevent erosion.
- We cut trees for fuel, and to build farms, cities and roads.
- This is called deforestation.
- Deforestation causes an increase in soil erosion.
- Planting trees, or afforestation, is the most important method of preventing soil erosion. Covering bare farmland with grass or dried vegetation, terrace farming in hills and building embankments along river banks are some other methods of preventing soil erosion.

MEMORY MAP

**Let's Know More****I. Fill in the blanks.**

1. Granite is the example of _____ type of rock.
2. _____ colour system is used to determine the soil colour.

Let's Do**A. Fill in the blanks.**

1. Soil is an important _____ resource.
2. The _____ soil of the Northern Plains is very fertile.

3. Cotton grows best in _____ soil.
4. Desert soil contains mainly _____ and is not fertile.

B. Write T for true and F for false sentences.

1. Soil is made by breaking up of rocks.
2. Black soil is more fertile than red soil.
3. Mountain soil is very fertile.
4. Soil erosion can be controlled by planting trees.

C. Match the columns.

- | | |
|------------------|-----------------|
| 1. Desert soil | a. Rice |
| 2. Laterite soil | b. Cotton |
| 3. Black soil | c. Rajasthan |
| 4. Red soil | d. Coffee |
| 5. Alluvial soil | e. Jowar, bajra |

D. Understand and Answer:

1. Why is soil considered to be an important natural resource?
2. How is soil made?
3. Why is alluvial soil found in plains around rivers?
4. How does the presence of humus affect soil?
5. What makes desert soil infertile?
6. How is black soil formed? In which parts of India do we find it?
7. What is soil erosion? How does it harm us? How can it be prevented?

E. Multiple choice questions.

1. Which of these soils is best for growing rice
a. alluvial soil b. red soil c. laterite soil d. black soil
2. Which of these encourages soil erosion?
a. terrace farming b. afforestation c. Cutting down trees
d. building embankments along river banks

C. Match the columns.

- | | |
|------------------|-----------------|
| 1. Desert soil | c. Rajasthan |
| 2. Laterite soil | d. Coffee |
| 3. Black soil | b. Cotton |
| 4. Red soil | e. Jowar, bajra |
| 5. Alluvial soil | a. Rice |

D. Understand and Answer

1. We also depend on the soil for many other things:

- The plants grow in soil.
- Animals depend on the plants for their food.
- In villages, many people use mud to make the walls of their houses.
- We make cloth from plants like cotton and jute.
- Most people in India depend on agriculture for their livelihood.

2.

- Rocks on the Earth are broken down into small pebbles by rain, flowing water and the roots of plants.
- These pebbles break down further to form tiny bits of soil.

3.

- The Northern Plains bring with them large quantities of silt or alluvium.
- This gets deposited on the land around the rivers.
- This soil is very fertile, and is called alluvial soil.

4.

- Humus is the remains of dead plants and animals.
- The minerals present in the humus make the soil very fertile.

5.

- Desert soil contains sand whose particles cannot hold much water and makes the soil infertile.
- Therefore, many types of plants cannot grow here.

6.

- Black soil is formed from the lava that comes out of volcanoes.
- Parts of Maharashtra, parts of Telangana, Gujarat, Karnataka and Rajasthan has the black soil.

7.

- The fertile top layer of the soil is carried away by wind and water to a different place. This is called soil erosion.
- It makes the land infertile.

Soil erosion is prevented by many ways:

- Planting trees, or afforestation, is the most important method of preventing soil erosion.
- Covering bare farmland with grass or dried vegetation
- Terrace farming in hills
- building embankments along river banks are some other methods of preventing soil erosion.

D. Multiple choice questions.

1. a. alluvial

2. c. cutting down of trees

3. d. in deltas formed by the rivers *Changing your Tomorrow* ▲

4. c. tea and coffee

5. b. mountain soil