

WELCOME TO THE ONLINE CLASS

SESSION NO.: 13

CLASS: 5

SUBJECT: SCIENCE

CHAPTER NUMBER: 6

CHAPTER NAME: SOIL EROSION AND CONSERVATION

SUB TOPIC: AGENTS OF SOIL EROSION: WATER, WIND

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

To enable the learner to:

- understand how natural agents cause soil erosion.

WARM UP

- **Name them:**
 - **The uppermost layer of the earth.**
 - **The process of breaking down of rocks into smaller pieces by the action of wind and rain.**
 - **The agents of soil formation.**
 - **The removal of top fertile layer of soil.**
- **State the importance of soil.**

SOIL EROSION

- The process of removal of top layer of soil by the action of wind or running water is called soil erosion.
- Wind and running water are the agents of soil erosion.



AGENTS/ FACTORS THAT CAUSE SOIL EROSION

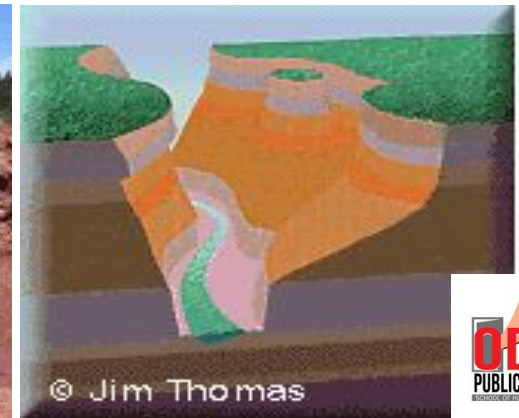
- Running water
- Moving air or wind
- Human activities like cutting down of trees, overgrazing, etc.



RUNNING WATER CAUSES SOIL EROSION

- Heavy rain causes flood. Flooded rivers and running water remove the topsoil.
- Running water washes the soil off the hill slopes. This makes the slopes unfit for cultivation.

For e.g.: The Chambal Valley of Madhya Pradesh



RUNNING WATER CAUSES SOIL EROSION

- A river carries a lot of mud while coming down the hills and leaves the soil on its way.
- Over a period of time soil accumulates and makes the river change its course.



RUNNING WATER CAUSES SOIL EROSION

- The Yellow River in China called Hwang Ho. It is also known as 'The Sorrow of China' because it changes its course very often and results in loss of life and property.



RUNNING WATER CAUSES SOIL EROSION

- In Bihar, River Kosi changes its course frequently caused great havoc in 2008 when lakhs of people were affected.



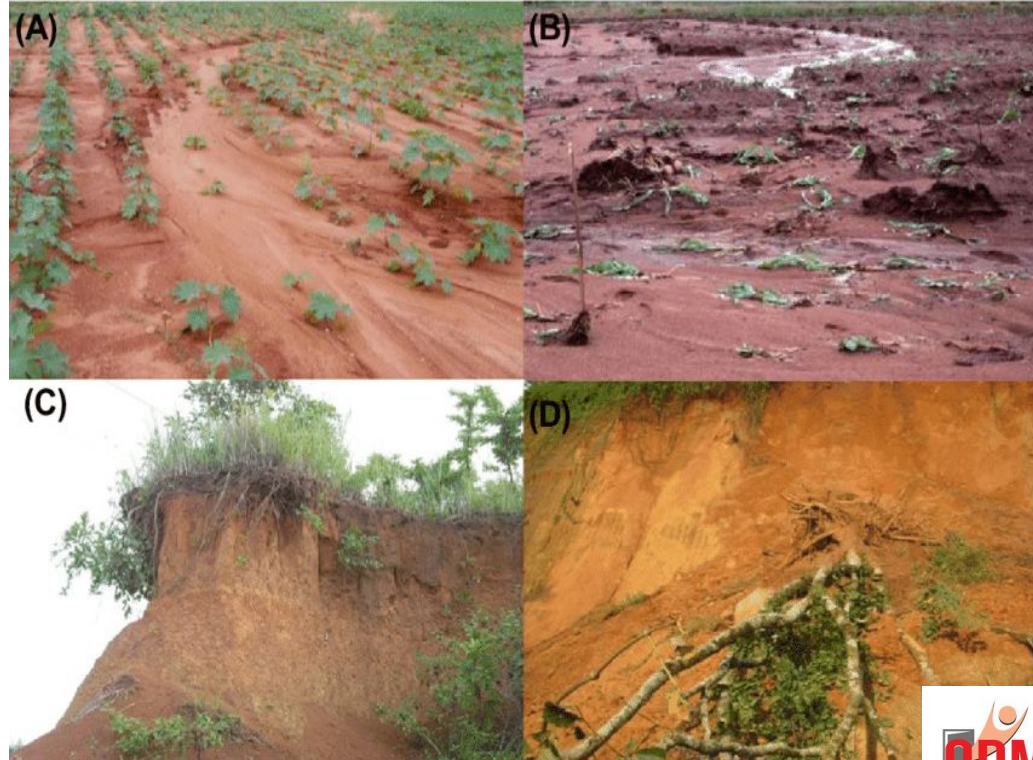
WIND CAUSES SOIL EROSION

- In deserts and semi-desert regions where strong winds blow, a lot of topsoil is carried away.
- This affects the farmers because manure is also blown away.
- Many a times the roots of the plants lose their soil cover and the plant dies.



EFFECTS OF SOIL EROSION

- Loss of topsoil
- Loss of soil fertility
- Reduce crop yield
- Water pollution



SUMMARY

- **The process of removal of top layer of soil by the action of wind or running water is called soil erosion.**
- **Running water, moving air or wind, human activities are the agents of soil erosion.**
- **Hwang Ho or Sorrow of China causes a loss of life and property.**
- **In deserts and semi-desert regions where strong winds blow, a lot of topsoil is carried away causing soil erosion.**

READY FOR A
QUIZ ?

1. Why is Hwang Ho known as 'Sorrow of China'?

Ans: Because it changes its course very often and results in loss of life and property.

2. How strong wind affects farmers?

Ans: Strong wind causes loss of top fertile soil and crop yield decreases.

3. What makes the slopes unfit for cultivation?

Ans: Running water takes away the fertile soil and makes the slopes unfit for cultivation.

HOMework

- **Do the short Q & A in your notebook.**

E. Answer these questions.

1. Why do we say that soil is the foundation of life?

Ans: Soil supports plants which provide food to all living things on this planet. Thus, soil is the foundation of all life on earth.

2. How was soil formed from rocks?

Ans: The sun heated the rocks. The rain made them cold, and wind blew them over. These continued for thousands of years. As a result, the rocks broke into pieces. These pieces broke into still smaller pieces. They were carried around by wind and water. They rubbed against each other till they become tiny particles. It took millions of years for these tiny particles to change into loose material which we call soil. Thus soil formed from rock-

LEARNING OUTCOME

The learner will be able to:

- **understand how natural agents cause soil erosion.**

THANKING YOU
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