

TOPIC 2**Chapter 2: Soil Degradation - A Growing Challenge for Agriculture**

Soil is one of the most valuable natural resources for agriculture. It supports plant growth, stores water, and provides essential nutrients. However, in many regions, soil is gradually losing its quality due to human activities and environmental pressures.

One common form of soil degradation is erosion. When vegetation cover is removed, wind and rain can easily carry away the topsoil. This upper layer is particularly rich in organic matter and microorganisms that play a key role in soil fertility. Once lost, it may take many years to rebuild naturally.

Salinization is another serious problem, especially in irrigated areas located in dry climates. When irrigation water is not properly drained, salts accumulate in the soil. As salt concentration increases, plants find it more difficult to absorb water, which results in reduced growth and lower yields.

In some semi-arid regions, overgrazing and deforestation weaken soil structure and reduce its capacity to retain moisture. Over time, the land becomes less productive and may eventually turn into desert-like conditions. This process is known as desertification.

Soil degradation not only decreases agricultural productivity but also threatens food security and farmers' livelihoods. For this reason, sustainable practices such as crop rotation, conservation tillage, reforestation, and efficient water management are essential to preserve soil health for future generations.

Questions**I. Vocabulary**

- a) Find in the text words that correspond to the following definitions:
 - a) Removal of soil by wind or water
 - b) A dry region with little rainfall
1. Give the opposite or synonym of:
 2. a) Fertile:
 - b) Reduced:
 - c) Productive:
 - d) Carry away:
 - e) Fertility:
 - f) Semi-arid (region):
 - g) Reforestation:
 - h) Efficient:

II. True or False

1. Soil degradation improves agricultural productivity.
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2. Topsoil contains organic matter.
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3. Salinization mainly occurs in humid climates.
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4. Desertification is linked to overgrazing and deforestation.
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5. Reforestation can help prevent soil degradation.
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III. Fill in the Blanks

1. The upper fertile layer of soil is called
2. When salts accumulate in soil, the process is called
3. Continuous overgrazing can lead to
4. Crop rotation and conservation tillage are examples ofpractices.

IV. Short Answer

1. Why is topsoil essential for plant growth?
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2. How can irrigation contribute to soil salinity?
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3. Mention two human activities that accelerate desertification.
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4. How does erosion reduce soil fertility?
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V. Discussion

1. Explain the relationship between soil degradation and food security.

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2. Do you think soil degradation is a serious problem in Algeria? Give examples - explain your opinion.

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3. Suggest two strategies to restore degraded land in dry areas.

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