



## SOIL EROSION

Musurmonova Mukambbar Pazitdinovna

TSAU teacher docent

Xojimurotov Sunnatilla Boymurod o'g'li

TSAU student

Tastemirova Jasmin Rustam qizi

TSAU student

Xolmirzayev Azizbek Akmaljon o'g'li

TSAU student

Mahmudjonova Muxlisa G'ulom qizi

TSAU student

[xojimurotovsunnat@gmail.com](mailto:xojimurotovsunnat@gmail.com)

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**Abstract:** This article is written about soil erosion, its spread, damage to agriculture. In addition, information about water erosion, the origin of soil erosion, has been provided

**Key words:** soil erosion, water erosion, gully erosion, irrigation erosion, soil, arid lands, nutrients, strong and weak erosions.

**Enter.** Erosion is divided into two types: geological and soil erosion. The first type, that is, geological erosion, as a result of changes in the temperature of glaciers, melting, water flow, and air temperature, rocks are eroded and crushed, forming slopes, river beds, ridges, and valleys. Soil erosion develops as a result of human cutting down of forests, plowing of natural and dry lands, use of grasslands for cattle breeding, irrigation. 430 mln. as a result of 31% of the terrestrial land in the world is affected by water erosion and 34% by wind erosion. 60 billion ha of land. tons of products are removed from the soil. It has been determined that two billion hectares of the land used for agriculture until the end of 2000 and another billion hectares of land will be damaged due to erosion. Soil erosion under the influence of water and wind is called erosion. In areas where erosion has occurred, water and wind erode the fertile layer of soil and carry it from one place to another. As a result, the fertility of the soil decreases, and the yield of the crops planted here decreases dramatically. The process of erosion is widespread all over the world and covers a large area in the territory of the former Soviet Union. That is why this process causes great damage to the national economy, including agriculture.

**Spread.** The right bank of Russia's Dnieper, Volga, Don, Desna, and Dniester rivers and the areas where their branches flow Middle Russia, Volyn - Podolsk, Donetsk, Volga, Klinsko, Dimitrov, Stavropol high plains, Zavolzhye the upper parts, Siberian rivers - Ob, Irtysh regions, Crimea, Carpathians, Caucasus, Urals, Central Asian highlands and foothills are subject to water erosion. The irrigated fields and the soil around them have been subjected to water erosion in the form of gully erosion.

**Types of water erosion.** There are two types of erosion of soil under the influence of water - horizontal and longitudinal. Soil erosion is the most widespread, and on sloping lands, rain and snow water bring nutrients from the fertile layer of the soil, along with the soil particles of each layer, to low and flat areas. Due to lack of nutrients in such eroded part of the soil, plants become stunted, grow unevenly, and productivity decreases sharply. In strongly eroded areas, sometimes the plant does not grow at all. In low-slope areas and as a result of

erosion, due to excessive accumulation of nutrients, the plant grows stunted and yields less or does not reach maturity. Irrigation erosion occurs as a result of insufficient compliance with crop irrigation techniques in irrigated and cultivated uplands. Due to such erosion, water washes the furrows and discharges a large amount of small particles from the field H.K. Tursunov. Soil science 151 goes, as a result, the soil fertility decreases and the plant cannot grow well in such lands, and its yield decreases. Water erosion is caused by external and internal factors. External factors include the amount of precipitation, its rapid or slow fall, its distribution in the seasons, depending on the climatic conditions, the rate of melting of snow and glaciers, the slope of the land, and the degree of vegetation coverage of the soil surface. Soil erosion depends on the presence of forests and tree stands, their density, use of pastures, tillage and many other factors. Stronger or weaker erosion of the soil depends on heavy and heavy rainfall, slope of the land, level of good coverage with grass and trees, improper use of pastures, and insufficient adherence to agrotechnics of land cultivation. Internal factors include soil properties, including structure, mechanical composition, water permeability, moisture level, chemical composition, especially the amount of humus, etc. If the soil is structured, loose and has good water permeability, the less water-soluble salts are on the ground, the less erosion develops. Therefore, serhumus and well-structured black and meadow soils are more resistant to erosion than chestnut and gray soils. Wind erosion. Due to this erosion, the fertile layer of the soil is often blown away by the wind. Especially in sparsely vegetated arid deserts, especially when pastures are not used properly, wind erosion is strong, blowing sand and often carrying it to irrigated lands and populated areas. As a result, irrigation ditches and fertile lands are buried with sand. Due to wind erosion, the part of the soil consisting of small particles, as well as the humus and nutrients in it, is lost, as a result, the soil fertility is greatly reduced, and the yield of crops is greatly reduced. It will take several decades to restore the fertility of such soils. Fertilizers are less effective on wind-eroded soils than on non-eroded soils.

### 1-PICTURE. PLACES SUBJECT TO SOIL EROSION

**A cliff erosion.** This type of erosion is widespread on the territory of Russia, including in Central





Asia, and has caused a decrease in the fund of land suitable for agriculture and has caused great damage. In addition, the hydrological condition of the soil deteriorates and its productivity decreases, as a result, the yield of crops decreases sharply in the areas near the ravines in the irrigated regions. According to the information given by H. Maksudov, T. Khoshimov, A. Nigmatov, the increase of cotton yield is noted in the areas where the influence of the ravines is weak or low, and the yield decreases in the lands near the ravine.

## **2-RASM. JARLIK EROZIYASIGA UCHRAGAN YERLAR**

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