

## SCIENTIFIC WORKS

In 2021-2022, according to the plan of research work of the Department of Soil Science and Agriculture, he conducts research on the analysis of soils and the 2nd State Budget on an area of 50 hectares of the experimental farm of the TIIMSH. It is planned to conduct research work "Comparative characteristics of the impact of erosion on mountain and foothill soils", approved by the Scientific Council of the Institute.

### **Research goals and objectives:**

Soil resources are limited in area and quality. Their current state is troubling because over the past 30-50 years the soil has been rich in humus and nutrients, contaminated with salinization, water and wind erosion, heavy metals and agro chemicals. Excessive salinization occurs, soil properties deteriorate, its biological activity decreases, soil fertility in the private sector decreases. Protecting soils from erosion and increasing their fertility is one of the global challenges. The problem of protecting soil from erosion is relevant for many countries in the world's arid zone, including Uzbekistan. Currently, the total area of the republic is 44896.9 thousand hectares, agricultural land - 20388.8 thousand hectares, of which more than 4700 thousand hectares are located in the foothills. Land at risk of erosion is found in dry land or grassland. Water erosion develops in these areas as a result of high and low relief, high slopes, deforestation of trees and forests, and irregular grazing. Irrigated lands of the republic amount to 4,312.4 thousand hectares, of which 682 thousand hectares or 20% of irrigated lands are attributed to irrigated erosion