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## INFLUENCE OF AGROTECHNICAL MEASURES ON RECLAMATION STATE OF SOIL

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**Abstract.** Among all agrotechnical measures aimed at soil fertility and high yields of agricultural crops, agrotechnical cultivation of lands is of particular importance. This is due to the fact that agrotechnical cultivation of the land improves the physical, chemical and biological properties of the soil and increases the efficiency of all agrotechnical measures. It is impossible to grow crops without cultivating the land. When the soil is soft enough for the root of the plant, its water-physical properties and microbial activity are good.

**Key words:** Agricultural engineering, soil, water, fertility, land, irrigation, tillage, leveling, layering, reclamation machines.

Land is the main means of farming. In this sense, the achievement of efficiency in the agricultural sector is directly related to the improvement of land reclamation and soil fertility. This is a very important task given the decline in the amount of usable and fertile land in the world in recent years. There are currently 13.5 billion hectares of usable land in the world. Of these, 1.4 billion hectares are arable land. At the same time, 1.1 billion hectares of land fell into disrepair, and 4.4 hectares - deserts and semi-deserts. The proverb of our people: "If you feed the earth, it will feed you," has a deep meaning. Because good and fertile land is important for agriculture.

Currently, the irrigated area of the republic is 4.3 million hectares, or 9.7% of the total area. They grow 90% of their agricultural products. To restore and maintain the groundwater level, a collector-drainage network with a length of 141 km, 3,475 vertical drainage wells and 123 reclamation pumping stations have been built.

For these purposes, 227.5 billion soums have been allocated at the expense of the Irrigated Land Reclamation Fund. The system was repaired and restored in 237 projects. As a result, it is possible to improve the reclamation of more than 260,000 hectares of irrigated land. Thus, in accordance with the contract with the state leasing company "Uzmeleomashlizing" last year, specialized enterprises and farms were provided with 189 services of reclamation equipment and machinery, which makes it possible to accelerate work in this direction. adopted to improve land reclamation are important not only for their rational use, but also for achieving high productivity in agriculture, while at the same time contributing to a better life.

Today, the importance of the earth is growing day by day. In our villages, that is, in yards and personal plots, it is planned to plant melons and take care of them. It should be noted that the amount of land remaining on large arable land is increasing from year to year.

Among all agrotechnical measures aimed at soil fertility and high yields of agricultural crops, agrotechnical cultivation of lands is of particular importance. This is due to the fact that agricultural cultivation of the land improves the physical, chemical and biological properties of the soil and increases the efficiency of all agricultural activities. It is impossible to grow crops without cultivating the land. When the soil is soft enough for the root of the plant, its water-physical properties and microbial activity are good. Land cultivation is plowing, leveling, basic tillage, tillage, chiselling and plowing.

Various mechanical actions on the soil, carried out in conjunction with each other, are called tillage systems.

When processing the soil, the following technological processes are carried out: the soil layer is turned over, mixed, softened; weed roots are trimmed, the soil is compacted, leveled, furrows and furrows are removed.

Depending on the needs of the soil at the depth of penetration, the surface softens. As a result of mixing the topsoil, organic and mineral fertilizers in the soil, microorganisms are evenly distributed in the topsoil, increasing soil fertility. Capillary porosity increases with soil compaction. It is better to provide the seeds with moisture in the lower layer.

In irrigated agriculture, the leveling of land for planting and caring for crops is very important, which creates conditions for high-quality planting, irrigation and care.

When plowing the land, inverted layers are considered completely inverted if they lie side by side on slopes from 1350 to 1450, the layer is incomplete, and the layer is inverted by 1800.

The quality of plowing depends on the shape of the plowshares.

Autumn plowing is one of the main activities and plays an important role in the growth and development of plants.

Post-plant soil cultivation usually begins with loosening and weeding. After sowing, tillage is carried out during the entire growing season in the aisles. Intermediate crops include corn, white corn, hemp, potatoes and others. Sowing of these crops is carried out by cultivators.

Incorrect or unplanned implementation of agrotechnical measures.

For example, plowing the soil to avoid moisture or moisture ingress, plowing plowed land, plowing unripe land, tillage or not, and so on. Especially in this case, a violation of the plowing technique on sloping lands leads not only to the destruction of the existing structure, but also to the complete loss of fertile parts of the soil. It is known that the slope is not plowed, but transversely. Driving on large slopes is generally prohibited. Such areas should be planted with natural vegetation or lawns.

Currently, the following agrotechnical methods of soil cultivation are available:

- 1) Tillage
- 2) Enrich the soil with humic and malic acids.
- 3) Liming of acidic soils, compaction of alkaline soils.
- 4) Correct introduction of crop rotation.

Cultivation is an important agricultural activity that is repeated every year.

**Conclusion:** When soil moisture is 40-60% of the maximum moisture capacity of the field, the soil is plowed. When plowing dry or wet soil, lumps and lumps form. Digging at different depths is necessary to reduce the number of alien pests, diseases and ensure the complete decomposition of organic waste. If the soil is plowed to a depth of 30-32 cm in the first year, 22-24 cm in the second year, and 26-28 cm in the third year, pests and organic debris will not be thrown onto the soil surface for a long period of time. three years.

### List of used literature

1. Methodology for conducting field experiments, Uzbek Research Institute of Cotton-2007, Methodological manual.
2. Mirzazhonov K.M. "Reclamation of soils in the regions of the republic and factors for their improvement" Cotton growing and grain growing Tashkent - 1999.
3. "Recommendations for a high grain harvest." Tashkent 1996.
4. Baraev F.A., Serikbaev B.S. The use of hydro-reclamation systems, Tashkent, TIMI, 2008
5. Kh.A. Aksmedov. Main issues of growth and development of water management, Tashkent, Mekhnat, 1981
6. Information from the Internet. WWW / Search / bz, <http://iruzmax/freenet/uz>.