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METHODS AND IMPORTANCE OF LEVELING IRRIGATED LAND

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Abstract: this article summarizes the results of a study on the rational use of land levelers to improve land reclamation conditions in the Bukhara region.

Key words: level, sink, speed, resistance to gravity, soil size, fraction, smoothing quality.

Face leveling of irrigated land in all irrigated lands and cotton-growing regions of the Republic is one of the pressing problems. On leveled land, agricultural machines work with high Unum, the land is effectively used, the quality of agricultural work is improved, the soil is evenly moistened during irrigation, labor productivity increases as a result of improved working conditions of irrigators and mechanizers; all this helps to increase the efficiency of agricultural production and produce higher yields from crops [1].

The following irregularities are mainly found on irrigated plots. It is necessary to mention the low-elevations formed by soil chukish, the Shur of the Earth, the squalls created by irrigation during the growing season of vegetation, the dung and lowlands caused by the overthrow of the earth, as well as the low-elevations, dungliks, uydum-deep areas formed at the time of plowing the turning points of the field and burying the rest of the temporary ditches.

In the current conditions, by leveling the uneven part of the irrigated land, they increased the yield of their crops grown in agriculture. To enrich the humus layer at the soil level is to save the water spent during irrigation, to wash the saline lands qualitatively, to increase labor productivity in irrigation, to reduce the cost of products, to prevent the processes of erosion of water and irrigation in the soil, etc. Irrigation farming requires the leveling of the surface of all irrigated land and areas. When irrigated land is leveled at the required level, the water supplied to the soil is evenly moistened, the norm of watering is reduced. The volume of work associated with the construction of irrigation stations is reduced, it is possible to mechanize agricultural work, less labor is spent on irrigation, productivity increases.

The work of leveling the surface of the Earth is part of the structure of irrigation construction. In general, in irrigation areas, not only the relief should be leveled so that

water flows smoothly, but also the microrelief. Therefore, in irrigated regions, it is necessary that the current and operational leveling work is carried out on time.

Leveling the surface of the Earth is also important in the area of combating soil salinity, since the flatter the field, the better the soil surface is washed, the water consumption is reduced by 2-2.5 times compared to that of uneven land. Leveling the field will prevent the surface of the groundwater from waiting and salinity of the soil, and finally make it possible for the aggregates to work with a high level, with good quality, the working performance of the irrigator will also increase.

It should be noted that the surface (relief) of the field is considered an important economic factor, since it affects the walking speed of agricultural machines, aggregates, consequently, the effect of their use. Squeaks in the field, irregularities cause inappropriate shaking of the tractor, rapid suction of The Walking parts, excessive engine power consumption, in addition, the working conditions of the tractor deteriorate and the quality of work decreases.

One of the main reasons for the decrease in the yield of agricultural crops and the decrease in the productivity of tractor units is the poor-quality leveling of irrigated land.

The leveling of irrigated arable land has a huge economic effect. Therefore, it is necessary to necessarily qualitatively level the lands before planting seeds. The material costs for which this work will be spent and the depreciation costs of technical means will be quickly covered.

Based on scientific research and analysis of the literature, it is noted that the following requirements should be imposed on irrigated areas:

1. 36-45 percent is made up of physical soil, medium in terms of mechanical composition, and the slope of fields with heavy soil in the longitudinal yunalish is 0.002-0.007, the slope of irrigation ditches in the Daily yunalish is not more than 0.003-0.004;

2. The leveling accuracy of the surface of irrigated areas should not exceed ± 5 cm;

3. When leveling the field, it is important not to pour the road to the pressing compaction of the soil, start leveling work after the moisture of the soil has fallen to 15-16 percent, and align the field in one pass, in some cases (on complex terrain) leveling in two passes;

4. Depending on the type of high-lowlands at the time of leveling the field, the machine must first be driven in an Angular or intersecting yunalish, and the second time in an irrigated yunalish; in the case of a field less than 100 meters wide, the machines must be driven in the height of the field;

5. Soil at the turning points of the field, not allowing it to accumulate.

At the time of leveling the fields, the surface layer of the soil is redistributed: the

soil of the dunghills is sheared and weathered into deep areas, as a result, in some places the lower layers of the soil are exposed, and in other places the thickness of the upper layers increases [2].

The result of the inspections determined that the yield of agricultural crops will decrease on land where the soil is cut in the form of a layer thicker than 10 cm. But it has been shown that the decrease in crop yields is even greater as a result of uneven soil moistening in uneven land [3].

The deadlines for the current leveling work have a huge impact on the growth rate of crops. For example, leveling and EGAT levelling, which is formed on land driven topsoil, is carried out in spring, when the soil is spent in sown time, the development of crops is delayed, as a result of which the yield decreases. Thus, the leveling of the soil in the cultivated areas only after the moisture has fallen to 15-16 percent was determined on the basis of research conducted on the fact that this work should be carried out after plowing the ground in the fall. Studies and analyzes carried out show that the work of leveling the soil layer to the cover during the spring, the work of leveling the land with basal land rectifiers during the cultivation of agricultural crops before planting improves the reclamation status of the land [10].

To improve the efficiency of irrigated land, it is good to carry out the following measures:

- application of modern irrigation technologies;
- timely, high-quality transfer of salt washing work;
- strict watering norm;
- full introduction of crop rotation;
- quality execution of ground leveling work;
- consistent implementation of measures against wind and water erosion.

When performing irrigation-melioration measures on irrigated land, it is of great importance to be carried out taking into account the natural climatic conditions of each region.

Thus, the timely and high-quality implementation of measures to improve the reclamation and efficiency of land is compensated for by an increase in productivity in a short period of time.

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