

ISSN: 2776-1010 Volume 2, Issue 6, June, 2021

THE IMPORTANCE OF CROP LAND LEVELING

Kuchkarov Jurat Jalilovich Teacher of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Bukhara branch

Najimov Dilshod Quvonch ugli Student of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Bukhara branch

Ibodov Islom Nizomiy ugli-Student of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Bukhara branch Najmiddinov Manguberdi Ma'rufjon ugli-

Annotation

The article presents a research analysis directed to the development of new scientific and technical bases of resurstejamkor technologies and technical means of their implementation in the improvement of melioration of irrigated crop areas and the effect of leveling on fertility and the organization of the leveling process.

Keywords: Leveling, technological process, unevenness, current leveling, basic leveling, machine, productivity, soil, productivity.

Quality leveling of irrigated lands in all the agricultural products growing districts of the Republic is of primary and urgent importance. In the leveled land, agricultural machines work with high yields, the land is used efficiently, the quality of agricultural work is improved, during irrigation, the soil is moistened evenly, as a result of the improvement of the working conditions of irrigation workers and mexanizators, labor productivity is increased; all this contributes to the increase in the efficiency of agricultural products growing districts of the Republic is of primary and urgent importance. In the leveled land, agricultural machines work with high yields, the land is used efficiently, the quality of agricultural work is improved, during irrigation, the soil is moistened evenly, as a result of the improvement of the working conditions of irrigation workers and mexanizators, labor productivity is increased; all this contributes to the increase in the efficiency of agricultural production and the high yield.

Irrigated crop fields are mainly three of the following unevenness. We can say that the low-elevations formed from the soil Chuk, the washing of the Earth's Shur, the ungulates formed as a result of irrigation during the period of growth of plants, the hares and lowlands arising from the overthrowing of the earth, as well as the low-elevations, dongles formed during the plowing of the turning areas of the field and the In the current conditions, it has been achieved to increase the yield of agricultural crops by leveling the uneven part of the irrigated lands. In order to enrich the humus layer at the soil



ISSN: 2776-1010 Volume 2, Issue 6, June, 2021

level, to save water spent during irrigation, to wash the saline lands qualitatively, to increase labor productivity in irrigation, to reduce the cost of products, to solve the problem of preventing water and irrigation erosion processes in the soil, our mature scientists conducted their scientific research work. If the irrigated lands are leveled at the required level, the water given to the soil is moistened evenly, the irrigation norm changes to the positive side. The volume of work associated with the construction of irrigation facilities is reduced, agricultural work is allowed to be improved, less labor is spent on irrigation, productivity is increased.

Leveling of the Earth's surface is also important in the field of combating soil salinity, since the more flat the field is, the better the soil's gravel is washed, the water consumption is reduced by 2-2, 5 times compared to uneven terrain. Leveling the field prevents the surface of the groundwater from rising and salinity of the soil, and finally allows the aggregates to work qualitatively, with high yields, the working yield of the watering can also increase.

It should be noted that the surface (relief) of the dive is considered to be an important economic asset, since it affects the speed of walking of agricultural machines, aggregates, and, consequently, the effect of their use. Uneven swings in the field cause the tractor to shake out of place, rapid absorption of walking parts, excessive consumption of engine power, in addition, the working conditions of the tractor deteriorate and the quality of work decreases, which leads to an increase in the cost of use.

Based on the research work carried out by mature scientists and scientific results, that is, it was noted that the following requirements for irrigated areas would lead to an improvement in the land reclamation situation:

- 1. 36-45 prosentini physical soil forming process, in terms of mechanical composition of the average and heavy slope of the soil in the direction of the longitudinal slope 0,002-0,007 divide, irrigation ditches in the direction of the kundalang slope not more than 0,003-0,004;
- 2. The surface leveling accuracy of irrigated areas should not be more than \pm 5 cm;
- 3. When leveling the field, do not allow the soil to become denser by pressing, starting the leveling work after the soil moisture has fallen to 15-16 prosent and leveling the field in one pass, in some cases (where there is a complex relief) leveling in two passes;
- 4. Depending on the type of Lowlands during the field leveling, the machine must first be walked in the direction of the slope or crossing each other, and the second time walking in the direction of the irrigation; in the event that the slope is less than 100 meters, the machine must be walked in the direction of the height of the;
- 5. Soil at the turning places of the dive, not allowing dust to fall out.

The result of the research analysis showed that the yield of agricultural crops on the land with clippings in the form of a layer of soil thicker than 10 cm is reduced. But the reduction in the yield of crops is even greater, as a result of the fact that the soil is not evenly moistened on uneven lands.

Timely and qualitative implementation of the following measures to improve the efficiency of irrigated lands creates the opportunity to obtain a high yield from agricultural crops:

- full provision of irrigated land with trench networks;
- increase the efficiency of using trenches;



ISSN: 2776-1010 Volume 2, Issue 6, June, 2021

- repair of open and closed trenches, timely Organization of cleaning work;
- application of modern irrigation technologies;
- timely, qualitative conduct of salt washing works;
- strict irrigation standard;
- perform land leveling works qualitatively;
- consistent implementation of measures against wind and water erosion.

Conclusion

It can be said that in order to reduce the cost of using techniques in the cultivation of technical crops and agricultural products grown in the Republic, it is recommended to widely use the above information in the process of qualitative leveling of lands.

Used Literature:

- 1) I.Hasanov., J.Ram., O.Hasanov's recommendations" on the effective use of techniques for preparing land for planting". Buxoro-2013y.
- 2) I.S.Khasanov, J.C.Ram, He Said.I.Hasanov. FAP 01235. Patent for a utility model with a long straightener name. Tashkent, 2017.
- 3) Letoshnev M. I. Agricultural machinery, Selkhozgiz, 1995 year.
- 4) Issues of agriculture management and electrification. Viison. Publishing house "Fan Tashkent 1970.
- 5) I Khasanov 1, J Kuchkarov and H Diva. Efficiency of irrigated land reclamation through the usage of fixing software disk device to base leveler. IOP Conf. Series: Materials Science and Engineering 883 (2020) 012174.
- 6) Kuchkorov J J, Musurmanov R K, Hasanov I S. The research results of fixing disc device in base land straightener scoop. International Journal of AdvancedResearch in Science Engineering and Technology Vol. and Athers 2019.
- 7) Kuchkarov Jurat Jalilovich, Nuriddinov Xurram, Ibodov Islom Nizomiy. Theoretical Approach To Determining The Demand For Land Leveling In The Bukhara Region. International Journal of Engineering and Information Systems (IJEAIS). Vol. 5 Issue 2, February 2021, Pages: 162-164.