

**THE ROLE OF RESOURCE -EFFICIENT IRRIGATION NETWORKS IN INCREASING
THE COEFFICIENT OF IRRIGATION NETWORKS.**

Qodirov Zayniddin Zaripovich

Teacher of Bukhara branch of the Tashkent Institute of Irrigation and Agricultural Mechanization
Engineers, Uzbekistan

Teshayev Ulugbek Utkir ugli, Nassulayev Zavqiddin Ibrokhim ugli, Ibragimova Aziza Utkir kizi

Students of the Department of Water Management and Melioration,
Bukhara Branch of the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers,
Uzbekistan

Annotation. Rational use of water resources is very important. Especially in the Republic of Uzbekistan, which pays special attention to the agricultural sector. This article describes the current state of existing irrigation networks in the irrigated areas of Bukhara region and the causes of water wastage and ways to eliminate it in detail.

Keywords: irrigation, drainage, trough, waste, technical, leakage, evaporation, hydraulic module, water consumption.

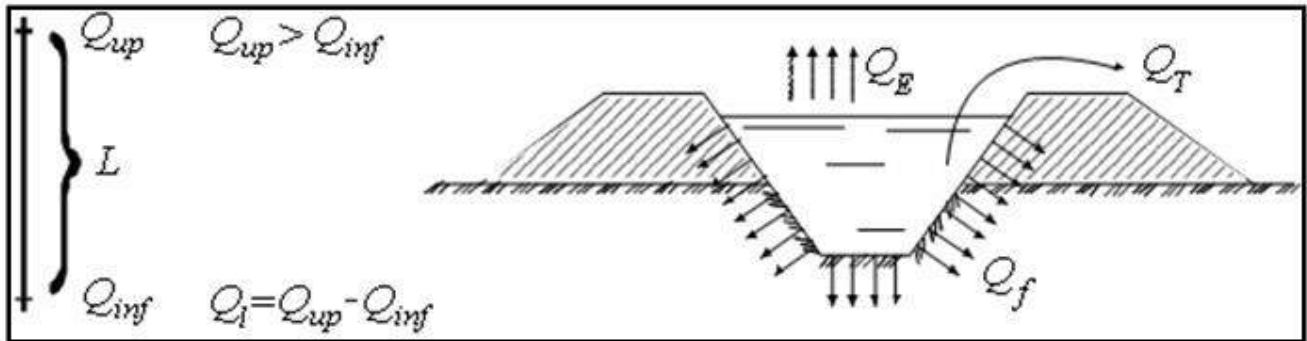
Irrigated areas provide over 90% agricultural products produced in Uzbekistan. Analysis of the reclamation state of the country's irrigated lands over a long-term period, discussion of the problems of rational use, protection and management of water and land resources made it possible to identify the reasons leading to the degradation of the latter and outline practical steps to reduce salinity.

Over the past 4 years, great changes have taken place in our country in all areas thanks to our esteemed President Sh. Mirziyoyev.

December 11, 2020 Resolution PQ-4919 "On measures to accelerate the introduction of water-saving technologies in agriculture" to some extent serves the implementation of the tasks set out in other regulations related to this activity.

The main water resources of the republic flow from the borders of foreign countries. 180,000 km of irrigation canals serve 4.3 million hectares of irrigated land. It is known that irrigation networks are divided into permanent and temporary irrigation networks depending on their function. Water from these networks is divided into 3 types according to the type of waste.

The channel is a waste of water



here:

$$Q_l = Q_f + Q_E + Q_T,$$

The amount of water lost to the bottom of the river (90-95%) is m³ / s

the amount of water evaporated from the surface to the air (2-4%) m³ / s

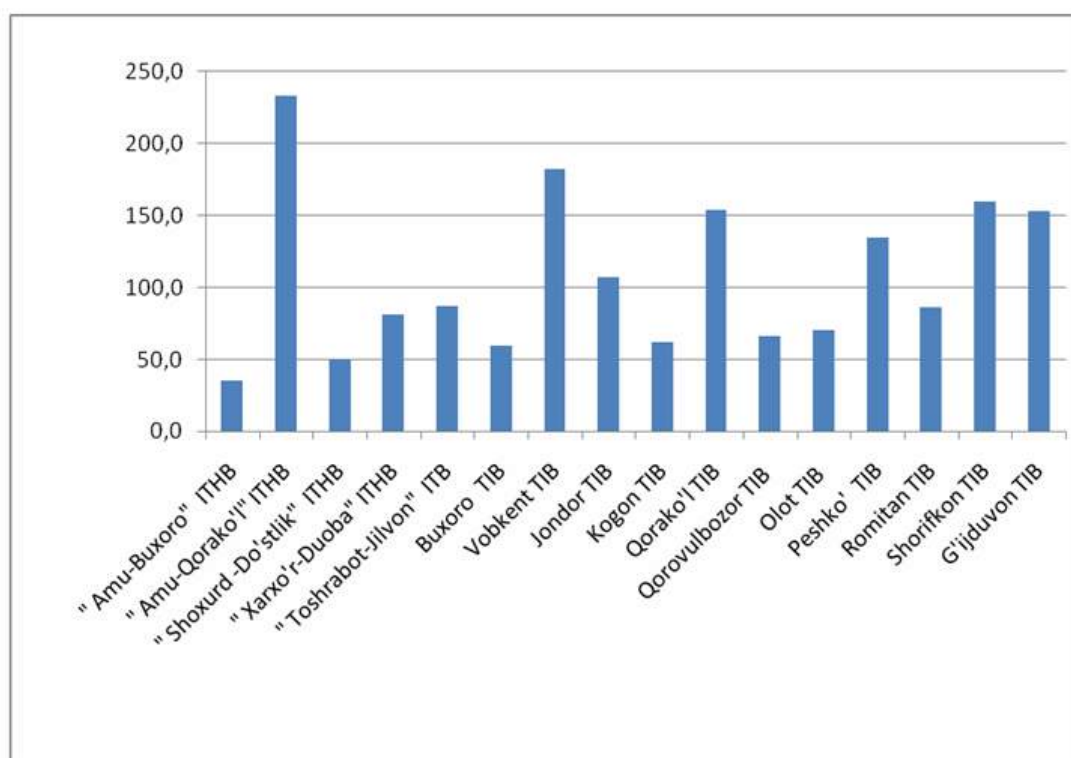
the amount of water lost for technical reasons (2-4%) m³ / s

Significant water losses are due to low efficiency irrigation techniques (0.6-0.7%) and irrigation systems (0.75-0.86%), poor layout irrigated areas and over-watering. On irrigation systems with low technical the level of losses in the network is even more significant.

Water wastage in irrigation networks is inextricably linked to the length of irrigation networks. The tendency of irrigated lands of Bukhara region to become saline leads to the constant supply of reclamation networks.

Irrigated land in Bukhara region are fully supplied with water of the Amudarya. The main source of water is II Amubukhara machine station and Amukarakul canal, additional reservoirs Kuyimazar, Tudakul and Shurkul. In the spring for flushing the irrigated lands of the region, the waters of the river are used. Zarafshan. The hydrographic network of the region is represented by a large number of irrigation facilities and drainage networks. Main drainage discharges - Central, Northern, Parallel, Tashkuduk, Parsankul and Ogirma.

Irrigation networks in Bukhara region at the expense of water management organizations as of November 1, 2020 (total canals)



The total length of canals in Bukhara region is 1721.1 km, of which the length of canals is 981.6 km, concrete canals are 728.6 km, gutters are 10.8 km. In percentage terms, most irrigation networks are groundwater canals. In turn, this will lead to an increase in waste in the irrigation system.

In conclusion, Aggravated poor technical condition of the conductive network of canals and drainage systems, irrigation violations and obsolete irrigation technique, worsens the reclamation the state of a significant part of the irrigated lands of the Bukhara region.

It is important to increase the efficiency of irrigation networks in the efficient use of water resources in times of water scarcity. This is one of the most important tasks facing the farm, dehqan farm and cluster leaders and all employees working in the field.

References.

1. Decree of the President of the Republic of Uzbekistan dated December 11, 2020 Resolution PQ-4919 "On measures to accelerate the introduction of water-saving technologies in agriculture"
2. Technical report of Amu-Bukhara ITHB organization 2020.
3. Internet information.