The Issue of Water Management in Our Republic is an Important Problem to Study

T. Q. Naurizov
Tiyraqalpagistan Institute of Agriculture and Agrotechnologies, associate professor
Ashirbaev Bayram, Saribaev Ruslan, Saparniyazov Imuhammed
2nd year students of the Department of Agrobusiness and Investment Services, Faculty of Zooengineering, Tiyraqalpagistan Institute of Agriculture and Agro-Technology

According to experts, in the next 20 years, due to a sharp decrease in water resources, the water shortage in our country will increase fivefold. According to the shortage of water from Uzbeks, it is included in the ranks of red regions. Fruit production will be limited in the coming years due to water scarcity.

According to the Ministry of Water Management, by 2030, there will be a shortage of 7 billion cubic meters of water in Uzbekistan, and as a result, the country will fall into the ranks of 33 countries with water shortages in the world. In such conditions, the agricultural sector, which consumes the most water in the areas located in the lower reaches of the Amudarya and Syrdarya basins, will suffer greatly. For this reason, in the Republic of Karakalpakstan, Jizzakh, Syrdarya and Khorezm regions, it is appropriate to develop measures to gradually replace crops that require a lot of water with crops that require less water.

Water scarcity is increasing not only in our country, but also in the world. Central Asia will also face the problem of water scarcity for the next ten years. Due to climate change, incessant use of water resources, expansion of agricultural land and other factors, the struggle for water resources can cause various conflicts between the countries of Central Asia.

Therefore, if the region, in general, the countries of the world do not take measures to correct the situation, that is, to reduce the damage to the atmosphere, to achieve ecological stability, and to use water sparingly, these forecasts will justify themselves in a certain way. it is logically correct.

In order to prevent such problems, it is necessary to urgently change and modernize the irrigation system. It is necessary to abandon drip irrigation and switch to drip and sprinkler irrigation systems. The banks of these methods achieve several times less consumption of water, and increase productivity. This is proven in practice and developed countries are using these methods.

Today, the problem of water shortage in agriculture of many foreign countries has been solved by water-saving technologies. In particular, Israel is a leader in the field of drip irrigation. 75-80 percent of cultivated land in this country is drip-irrigated. Accordingly, water-saving technologies have been installed on more than 5 million hectares in China and 2 million hectares in India. In the countries of America and Europe, the amount of cultivated land based on economical irrigation method is increasing.
This system is also widespread in Uzbekistan. Today, in our country, the rational use of water, the successive introduction of water resources based on economical technologies into the industry has become a priority issue.

On April 18, President Shavkat Mirziyoyev discussed the issues of water shortage at a meeting where the achievements and future tasks were discussed in the water management and pharmaceutical industry. In a situation where water is scarce in our region, 1 billion cubic meters of flood water per year is wasted.

The head of our country emphasized that it is possible to collect flood water in small sources, and it is necessary to support the authorities in this regard. 100 million dollars have been raised for such places. The areas where the water came out at their expense will be given to the entrepreneurs themselves for long-term free use.

Today, 450,000 hectares or 15 percent of irrigated areas are leveled with laser technology. If such lands are doubled, another 900 million cubic meters of water will be irrigated, and water supply will be improved in an additional 200,000 hectares. For this reason, it was decided to bring a thousand laser levelers this year, to start laser leveling services for farmers by clusters. Drip and sprinkler irrigation technologies have been introduced on 400,000 hectares in recent years. This year, work has begun on another 80,000 hectares. In order to further encourage such technologies, in accordance with the decision approved on April 1 of last year, the amount of subsidy for each hectare of water saving system for grain crops and vegetables was increased from the current 1 million soums to 8 million soums. The bank credit rate for farmers is set at 17 percent.

The use of water-saving technologies in the agricultural sector of our country is becoming important as it not only significantly saves water, but also increases productivity and sharply reduces costs. Below, we will dwell on the effective aspects of irrigation with the help of modern approaches - drip, rain, and in general, water-saving technologies.

Based on the President's decision of March 1, 2022, "On measures to further accelerate the introduction of water-saving technologies in agriculture", in 2022, 89.8 thousand hectares will be drip-fed, 16.2 thousand hectares will be sprinkled, 5.7 thousand hectares will be discrete, on the area of 72, 9 thousand hectares, banks of flexible pipes and on the area of 36 thousand hectares, film tosep irrigation systems were introduced. Almost 243 thousand hectares of land were leveled with the help of laser equipment. In this way, irrigated areas exceeded 1 million hectares, and 25% of the total agricultural land was covered.

The system of providing subsidies to agricultural producers who have introduced water-saving technologies was developed, the single information system "Agro-subsidy" was launched, and today, subsidies to clusters and farms are allocated online.

At the same time, water-saving technologies such as drip irrigation, sprinkler irrigation, discrete irrigation, and irrigation of leveled lands with the help of laser equipment are widely used in our country.

The main reason for watering in this way is that the water goes only to the root of the plant. Controlling the water and fertilizer regime allows you to speed up or slow down the growth of plants. A lot of water is wasted due to infiltration and evaporation in the process of drip irrigation. Drip irrigation is an improved irrigation technique, when it is used, the necessary
fertilizers are transferred to the part of the crop being irrigated with the help of water. The productivity of fruit trees and vegetable crops increases up to 50%.

References used

4. National database of the Foundation's documents, 11. 07. 2020, No. 06/20/6024/1063; National database of savings information, 08. 07. 2022, No. 06/22/167/0619
5. Sultanov A. S., Khudoyberganov Z. Ya., Kóchkarova S. A. Economics of water management