

THE IMPORTANCE OF WATER-SAVING TECHNOLOGIES AT A TIME WHEN WATER SCARCITY IS GROWING

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Abstract: Today, efforts are being made to understand water and its problems, the growing demand for water and the underlying causes of water resource depletion. The main issue is the rational and efficient use of water, aimed at improving the reclamation of irrigated lands. Basically, the reforms carried out in our country in the last 5-6 years have shown their positive effect in the water sector, the use of water-saving technologies, and the tasks being solved in this regard will expand the scope of application of water-saving technologies. will be introduced in the future, will allow for a significant increase. Uzbekistan is also implementing important measures related to the rational use of water resources.

Key words: Water-saving technologies, irrigation, land reclamation, water consumption, water resources, irrigated agriculture.

Water is the source of life. Its value is becoming more and more obvious in the process of world globalization. After all, without water there is no life. Water is life, which has had an incomparable impact on the evolution of life, the environment and climate change over millions of years. Therefore, humanity must cherish it like the

apple of its eye. It should be noted that the demand and need for water is growing more than ever. As a result, there is water shortage all over the world. This pressing issue has not escaped the Central Asian region either. According to expert calculations, by 2050, water resources are expected to decrease by 5% in the Syrdarya basin and by 15% in the Amu Darya basin. On the other hand, due to population growth, the demand for water in Uzbekistan will increase to 7 billion by 2030. cubic meter, and by 2050 this figure could double.

Taking this into account, in recent years the use of water resources has been radically reformed in our country. The main issue is the rational and efficient use of water, aimed at improving the reclamation of irrigated lands. Therefore, in the President's election program, special attention was paid to saving water resources, and by 2030, all irrigated crop areas in our republic must be transferred to water-saving technologies and it is determined that the measures will be implemented. adopted to further strengthen incentive mechanisms for farmers.

Today, countries make the most of almost all the resources they have. Looking back, the demand for water has doubled since the 1960s. This was influenced by population growth, the development of agriculture and industry. In the future, the Middle East and North Africa will be the first to face shortages of this vital resource, which could ultimately lead to conflict and negatively impact the industry. For now, the water problem in North America and Europe is relatively stable. But this does not mean that these territories are safe. For example, 6 US states experience very high water shortages. Rising demand and rapid climate change could also reduce the GDP of India and China. Global food security is also threatened by water resource depletion. Currently, 60% of the world's irrigated areas are drying up. Especially farms that grow sugar cane, wheat, rice and corn. Experts offer a number of solutions to this problem. These include conserving wetlands and forests, farmers adopting more efficient irrigation methods, and using renewable energy sources. Singapore and the American city of Las Vegas have already managed to prove that it is possible to thrive in

conditions of water shortage. This was achieved by treating and reusing wastewater. However, not all countries can do this.

It should be said that the reforms carried out in our country over the past 5-6 years have also had a positive impact on the water sector. The use of water-saving technologies and the problems solved in connection with this will significantly expand the scope of application of water-saving technologies, and serious attention will be paid to this in the future. For this purpose, 5,479 Smart Water devices were installed, 1,446 online monitoring devices at pumping stations, as well as 5,055 Diver devices, which online monitor the level of mineralization at reclamation monitoring wells, as well as the management process of 45 large water facilities . was automated.

As a result of the implemented measures, 3 billion rubles. cubic meters of water were saved and water supply was improved for another 400,000 hectares. By automating the water management process, losses were reduced by up to 10 percent.

In addition, today in our republic the number of enterprises producing equipment and components for water-saving irrigation technologies is more than 50, and the localization of these technologies has reached 80%. It should be said that due to the localization of production of parts for these technologies, the cost of the product has decreased. At the same time, it was possible to export equipment to neighboring republics.

Another important recognition is that Uzbekistan ranks first in Central Asia, second among the CIS countries, fourth in Asia and 13th in the world in the implementation of water-saving technologies. We can say that this is the result of the effective implementation of measures aimed at further reforming the system. Currently, in order to further accelerate reforms in this direction, the Ministry of Water Resources has been assigned important tasks. One of them is the complete coverage of irrigated arable land with water-saving technologies by 2030. It must be said that the economy of our country is based on agriculture, and a significant part of the population of our region is engaged in this. Thus, reducing water consumption in agriculture by one

percent makes it possible to save millions of tons of water and direct it to the needs of the population.

Generally speaking, water shortage is a global problem. In such conditions, in Uzbekistan, as in many countries of the world, important measures related to the rational use of water resources are being implemented. After all, the widespread introduction of water-saving technologies not only reduces water consumption, but also becomes an important element of the transition to a green economy. This, in turn, guarantees the stable development of Uzbekistan.

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