

"Is it possible that there will be a water shortage in Uzbekistan by 2030?"

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Abstract: In this article, MHTI experts studied how the water shortage in Uzbekistan affects the agricultural sector of arid regions. By 2030, there may be a shortage of 7 billion cubic meters of water in the country. As a result, there is a possibility that Uzbekistan will fall into the ranks of 33 countries with water shortages. The experts of the Institute of Macroeconomic and Territorial Research (MHTI) have analyzed the impact of water shortage in Uzbekistan on the agricultural sector of arid regions. have been studied and given data.

Key words: Uzbekistan, water, agriculture, drinking water, Amu Darya, arid regions, desertification.

This was reported by the information service of the institute. It is noted that about 1.1 billion people on Earth are currently suffering from various levels of water shortage. "In the next decade, climate change and the increase in water consumption in neighboring countries will reduce water withdrawal from rivers such as Amudarya and Syrdarya in Uzbekistan. As a result, the process of drought and desertification may intensify and seriously affect the standard of living of the population," the organization said. There is a possibility that Uzbekistan will become one of the 33 countries with water shortages in the world. said. Therefore, in the Republic of Karakalpakstan and Jizzakh, Syrdarya and Khorezm regions, it is appropriate to develop measures to gradually replace water-intensive crops with crops that require less water," the press service of the institute said. The level of water consumption of drought-resistant crops was also studied in order to mitigate the problem.

"Including, 500 cubic meters for the cultivation of 1 ton of capers, which require little water, 700 cubic meters for the cultivation of desert oats (*Helictotrichon desertorum*, fodder), 1 ton of sheep and goat meat and up to 1500 cubic meters of water is used for extraction. Therefore, they consume 10 times less water compared to the aforementioned water-intensive crops. It is also advisable to plant drought-resistant leguminous crops such as mung beans, beans, peas and red beans. There are opportunities to grow drought-resistant and marketable capers in the non-irrigated desert regions of Uzbekistan and increase their export dramatically," the institute said capers, nutritive and pharmaceutical uses), sedge (*Festuca valesiaca*, forage), sorghum (forage), desert sorghum (*Helictotrichon desertorum*, forage) It has been determined that there are possibilities for planting and harvesting crops such as field solyanka (*Salsola collina*, used in pharmaceuticals), and asparagus (*Fucchu*, a nutritious crop).

In the next 10 years, the water level in Amudarya and Syrdarya will decrease by 10-15%. Bori Alikhanov, chairman of the Oliy Majlis Senate's committee on the development and ecology of the Aral Bay region, announced this at the international forum "Sustainable Development of Mountainous Regions" held in St. Petersburg.

"In the last 20-25 years, precipitation in summer has decreased significantly. According to available data, every minute nine square meters of the fertile region is turning into a desert," says Alikhanov.

According to him, one of the global and dangerous consequences of such processes is the intensive melting of long-term glaciers - 30 percent of the glacier mass in the last 40 years. This leads to a decrease in water in Amudarya and Syrdarya.

According to studies conducted by experts, by 2030, there will be a shortage of 7 billion cubic meters of water in Uzbekistan. This causes the country to fall into the ranks of 33 water-scarce regions.

One of the reasons for the water problem in the region is the construction of the Koshtepa canal by the Taliban. President Shavkat Mirziyoyev expressed his concerns regarding the construction of the Koshtepa canal. The president said that its launch could radically change the water balance in Central Asia. In this regard, we offer to consider the issue of involving the representatives of Afghanistan in the regional dialogue on the joint use of water resources", said Shavkat Mirziyoyev. Expressing his reaction to the words of the President of Uzbekistan, the "Taliban" Abdul Latif Mansour, Acting Minister of Energy and Water,

announced that Afghanistan is ready to discuss the issue of Amudarya water use with neighboring countries. Earlier, the German politician, Member of the European Parliament, Viola von Kramon-Taubadel, speaking about the ecology of Uzbekistan at the meeting of the Foreign Affairs Committee of the European Parliament, emphasized that the country is turning into a desert.

Earlier, in an interview the head of the AEC program of the European Union, Adrian Neal, said that by 2059, tributaries can be expected to decrease or disappear in Uzbekistan. "According to the general conclusion, the impact of climate change on water is more alarming than on crops. Because there is no crop or harvest due to lack of water. Many or some people may not be worried or believe in the results of this research. But it is important to remember that this research is based on evidence and is a forecast for the future," said Adrian Neal. Azimjon Nazarov, Deputy Minister of Water Management, said that 80 percent of water resources in Uzbekistan come from other countries, and 20 percent are produced in the country. According to the analysis, by 2030, Uzbekistan will lack 7 billion cubic meters of water. The Ministry said that it is necessary to use water wisely. On April 28, a panel discussion was held on the topic "Integrated management of water resources: sustainable development of agriculture, ensuring food security in Central Asia" as part of the second Tashkent International Investment Forum held in Tashkent. This is reported by the information service of the Ministry of Investments, Industry and Trade. It is noted that the event was moderated by Matilda Dimovska, the permanent representative of the United Nations Development Program in Uzbekistan. The session was also attended by the Deputy Head of Mission of the Swiss Embassy, Head of the Cooperation Department, Reichel Besh, First Deputy Minister of Water Management of Uzbekistan Azimjon Nazarov, Boston Consulting Group Managing Director and Partner Igor Aleksev, Synergy Consulting Partner Chetan Kapur, ACIR Vice-President for Southern Europe Egor Junyayev and others participated as speakers. According to the report of the World Meteorological Organization, by 2050, more than 5 billion people on Earth will experience water shortage to one degree or another. The participants of the panel session noted that the water shortage can become a serious problem for the development of agriculture and the economy in general," the information says. It is noted that the experts emphasized the importance of comprehensive management of water resources for the sustainable development of agriculture and food security in Central Asia. In addition, the agenda of the session included the issue of measures to be taken on the effective introduction of mechanisms of integrated management of water resources.

According to Azimjon Nazarov, Deputy Minister of Water Management, 80% of water resources flow to Uzbekistan from other countries, and only 20% is generated in the country. "The infrastructure created 30-40 years ago needs serious modernization requires. The supply of water resources is decreasing, and the number of new facilities and population is increasing. This requires a new quantity and quality of water resources. According to our calculations, by 2030 we will lack 7 billion cubic meters of water. It is necessary to use water wisely," says the official information of the ministry. Igor Aleksev, managing director and partner of the Boston Consulting Group, while presenting his proposal, noted that approximately 19 billion dollars of investment will be required to implement all water saving initiatives in Uzbekistan. "Of this, \$4 billion will go to pumping stations and about \$6 billion will go to subsidies for introducing water-saving technologies to economic entities. Together with the Ministries of Finance and Water Management, we developed a model of the canal system, evaluating the function of these canals. The most important thing is to develop a system of economic provision of water in a certain area," said Igor Aleksev.

Conclusion:

According to information, priority should be given to measures aimed at increasing the additional volumes of water resources in the republic's territories. This means new dams and new water reservoirs. The participants of the panel session emphasized the importance of creating the right legal and institutional conditions for the implementation of such mechanisms. Measures to ensure sustainable development of agriculture were also discussed at the event. Experts emphasized the need to improve the use of water resources, to improve the technologies and methods of water use in agriculture," the ministry said.

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