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Some Problems in Providing Drinking Water to the Population

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Abstract: The article describes some issues of providing the population with drinking water. Also, the article describes the feasibility of creating wastewater treatment biotechnology in the city of Termiz, purifying polluted waters under the influence of aquatic plants, using mechanical, physical, chemical and biological methods in wastewater treatment.

Key words and phrases: population, drinking water, city of Termiz, waste water, treatment, biotechnology, polluted water, aquatic plant, mechanical, physical, chemical and biological method.

INTRODUCTION

To date, the problem of environmental and biological security has gone beyond the national and regional framework and has become a common problem of all mankind for more than half a century. While nature and man interact in accordance with certain laws, it is no longer a secret that violating these laws can lead to irreparable catastrophes. No matter where you look in the world, it is becoming natural for you to face a variety of environmental challenges. The Central Asian region is not without its environmental problems. One such environmental problem is the freshwater problem. Freshwater in the biosphere accounts for only 2% of all water resources, of which 99% is glaciers. The freshwater reserves of rivers and lakes are 90,000 km3, of which 4,000 km3 are used annually by humans. Of this, 70% is used in agriculture and the remaining 30% in industry and households. It is estimated that freshwater reserves will last for decades to come. Contamination of fresh water with heavy metals, phenols, pesticides, petroleum products, active substances is increasing year by year and now stands at 15 billion tons per year. tons.

THE MAIN PART. Protecting the environment, including water and water bodies, from various pollutants is currently one of the most important issues in the world. Environmental issues and environmental protection have recently become a global issue in the Republic of Uzbekistan. Most industrial, communal, and agricultural effluents are discharged into untreated or partially treated open ponds. In order to solve water problems, our government has implemented many decisions and decrees, on the basis of which useful and effective reforms are being implemented.

In particular, in the Resolution of the President of the Republic of Uzbekistan dated April 20, 2017 No PP-2910 "On the program of integrated development and modernization of drinking water supply and sewerage systems in 2017-2021": During the years of independence, Uzbekistan has done a lot to improve the supply of quality drinking water. Consistent implementation of critical programs and projects for the development of drinking water supply systems has significantly improved the state of water supply in cities and districts, including rural areas.

In the last six years alone, about 13,000 kilometers of water pipes and water mains, more than 1,600 water wells, as well as 1,400 water pressure towers and reservoirs have been built and reconstructed. As a result, many settlements that are not supplied with drinking water have been provided with water that meets modern requirements for quality and safety, including through grants and loans from international financial institutions. The Republic of Karakalpakstan, Bukhara, Jizzakh,

Kashkadarya, Surkhandarya, Syrdarya and Khorezm regions still have a number of unresolved problems in providing quality drinking water.

As in all regions of the country, it would be expedient to create a biotechnology for wastewater treatment in Termez. In this regard, it is necessary to study the biotechnology of treatment of polluted water in Termez under the influence of higher aquatic plants. The Republic of Uzbekistan uses a lot of water in the fields of oil refining, animal husbandry and poultry, and as a result, wastewater is formed. The composition of wastewater consists of various organic and chemical elements. Scientists have conducted a number of scientific studies on the treatment of industrial effluents. Based on the scientific work, wastewater is carried out in an industrial device (aerotank), by methods such as ozonation, liquefaction.

CLEAR CONCLUSIONS AND PRACTICAL SUGGESTIONS. Wastewater treatment is carried out by mechanical, physical, chemical and biological methods. Biotechnological methods play an important role in the treatment of wastewater from various contaminants. High aquatic plants are one of the main sources of wastewater treatment from organo-mineral and bacteriological pollution, and the mineral salts and carbon dioxide in the water are assimilated by aquatic algae. They actively develop in wastewater, forming large amounts of biomass, as well as purifying water from various foreign substances to 95-98%. The resulting biomass and water are used in a variety of sectors of the economy, including fisheries, livestock, poultry, irrigation, and more. It is advisable to use this method in the treatment of wastewater from industrial plants.

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