PROVIDING VILLAGES WITH CLEAN WATER

Abduganiyev Madiyorjon Maxsudali ogli
Engineer"TOSHKENT SHAHAR SUV TA`MINOTI" LLC
Abdukodirova M.N.
Scientific supervisor: dosent National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers".
https://doi.org/10.5281/zenodo.10016023

Abstract: Clean water, Water access, Water sources, Boreholes In order to provide the villages with clean drinking water, in order to reduce the amount of excess bacteria and salts in the water, I recommend IBK-1-2 devices for disinfecting and disinfecting the microbes in the process of preparing domestic drinking water from artesian, surface and plaster water. Water delivery through this device will be much cheaper than water supplied from public water supply networks.

Key words: Clean water, Villages, Economic development, Sustainability

After the Republic of Uzbekistan gained independence, extensive reforms were implemented in all areas of our country. In our country, great attention is currently being paid to the issue of providing clean water to the population and production, as well as the rational use of available water resources. At the moment, providing the rural population with clean drinking water remains one of the most important problems. Due to the disruption of the ecological balance in the areas with natural water supply, the quality of these waters is changing and they are becoming unfit for drinking. Because more than 80% of diseases are spread in connection with water. All the countries of the world are struggling with this problem. The announcement of March 22 as the International Water Day by the United Nations clearly shows this. Currently, a strategy for improving this situation for 2012-2020 has been developed in the Republic of Uzbekistan. According to this, it is planned to increase the level of provision of drinking water to urban and rural residents by 2020 to 100 and 85%, respectively. Providing the population and production with water at the level of demand in a timely manner is of particular importance in achieving the economic development of the country. Recently, our government has been doing a lot of work to get out of this difficult situation. We can mention the decision of our president on June 28, 1990 to "Improve the provision of drinking water and natural gas to rural residents." The amount of water consumption in the world is growing more and more. For example, from 1950 to 1990, water consumption increased by 2-2.5 times and amounted to 300 km3, while at present, the amount of water consumed for drinking purposes in the world has approached 500 km3. The population has increased from 7 billion (about 1.5 billion of them are not provided with clean drinking water), the water consumption per minute is 5 thousand m3. Rural water supply facilities include settlements, fortresses and villages located in different levels of agricultural conditions, tractor and automobile enterprises, livestock farms, construction sites, processing of agricultural products, etc.

The tasks of water supply include the implementation of all activities from finding the source of water to delivering it to consumers in the required quality and order.

Fresh water resources can be found in villages. But it may not be suitable for drinking. To make water suitable for drinking, it is necessary to reduce the amount of salt in its content, to clean it from bacteria. The use of public water supply facilities, which are currently widely

used, is for rural conditions. causes some discomfort. Considering the large capacity pumping station, large structures, layout systems design, large amount of waste of cast iron and steel pipes, increased possibility of freezing of water in the pipe in adverse weather conditions and large amount of operating costs in this way, providing villages with clean drinking water is very expensive. In order to prevent this problem, UV disinfection agents have been developed. IBK-1-2 devices are recommended for disinfection and disinfection of domestic drinking water from artesan and surface water. The productivity level of the device can be 4 m3/hour or less according to the customer's request. The design of the device uses ultra-violet lamps developed in Russia with a high light output and a long service life. Without requiring chemical reagents in the process of washing the device, it ensures complete disinfection of water volumes according to the requirements of the "Drinking water" section of "Sanepidem control". The device consists of a case made of steel and coated with a nutritionally neutral polymer and a special electronic unit. It has certificates issued by the Ministry of Health of the Republic of Uzbekistan and the State Standard. There are also other types of water purifiers and their functions are also different.

Basic parameters of the device

Parameters	Value
Maximum pressure in the hydraulic system, atm	4
Type of lamps	Philips TUV-30
General composition of lamps	1-5
Voltage, volts	~220 V
Power, volts	60 w

Supplying villages with clean drinking water in this way is easy, cheap and reliable. Currently, at a time when science is progressing, in order to provide the population with drinking water and to efficiently use our existing water resources, we need to provide clean drinking water in this way in all regions of our country.

Conclusion: Providing villages with clean water is a critical initiative that has significant positive impacts on the health, well-being, and overall quality of life for the residents. providing villages with clean water is a multifaceted effort with profound and lasting benefits for public health, economic development, education, and overall community well-being. It is a critical step towards improving the living conditions and prospects of rural populations, and it requires a holistic approach that considers sustainability, cultural sensitivity, and ongoing maintenance.

References:

1. Махмудова И.М., Ахмедова Т.А. “Табиий ва оқава сувлар сифатини баҳолаш ва тозалаш асослари” Т. 2008 й 160 б.
2. O’z Dst 950:2011 Ichimlik suv. Gigienik talablar va nazorat qilish.
3. Abduqodirova, M., & Ismoilkhodjayev, B. (2021). Treatment of polluted municipal wastewater in Tashkent. In *E3S Web of Conferences* (Vol. 264, p. 01052). EDP Sciences.

4. Abdukadirova, M. N., & Sh, I. B. (2023). Evaluation of the effectiveness of the technology of biological treatment of wastewater at the Salar aeration station. *Texas Journal of Agriculture and Biological Sciences*, *15*, 121-126.
5. Abdukadirova, M. N. (2022). DEVELOP STUDENTS'PRONUNCIATION SKILLS FOR HEARING IMPAIRED. *Экономика и социум*, (3-1 (94)), 7-9.
6. Sh, I. B., & Abdukadirova, M. N. (2019). Assessment of the effectiveness of biological treatment of wastewater at the" Binokor" aeration station located in Orta Chirchik district of Tashkent region. *Journal of Irrigation and Reclamation*, (1), 15.
7. Sh, I. B., & Nasibov, B. R. (2022). Influence of algae on fur growth, development, physiological condition and fur quality. *Texas Journal of Agriculture and Biological Sciences*, *5*, 67-70.
8. Ismailhodjaev, B., Kuatbekova, K., Kholmirzaeva, B., Boburbek, N., Mirzaqubulov, J., Eskaraev, N., & Abduraimova, N. (2022). Activity, patterns, and localization of carbonic acid enzymes in algae used in wastewater treatment. *Texas Journal of Engineering and Technology*, *14*, 11-17.
9. Internet sayti www.green.uz