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Annotation: *This article will focus on drip irrigation and its importance, analyzing drip irrigation hose laying machines and the use of this type of machine depending on the site conditions.*

In our country - the Republic of Uzbekistan from year to year population growth and rapid development of economic sectors require that their needs in the amount of water resources increase from year to year.

Under these conditions, in recent years, specific purposeful works on effective use of land and water resources, improvement of water management system, modernization and development of water management facilities have been carried out in our country [1].

At the same time, due to global climate change, population and water demand are increasing every year, the resource deficit in our country is increasing every year.

The annual volume of water resources utilized on the scale of our country averages 51-53 km over the last decades. These figures are 20% less than the limit to be allocated to Uzbekistan according to international agreements.

In our country in 2020-2030 it is necessary to provide the population and all sectors of the economy with water, improve reclamation of irrigated lands, widely implement the principles and mechanisms of water management and digital technologies, ensure reliable operation of water management facilities, lands and in order to improve the efficiency of water resources use by the Decree of the President of the Republic of Uzbekistan № PF-6024 dated July 10, 2020 "On approval of the concept of water sector development in the Republic of Uzbekistan for 2020-2030". Accordingly, the goal is to get the land planning work right while improving existing methods and creating resource-efficient methods.

The demand for water resources is increasing every year due to factors such as population growth, increasing demand for food, expanding industrial production and climate change in countries around the world. As a result, there is a trend of water scarcity in many regions of the world. It is known that the agricultural sector is the largest water consumer worldwide. Therefore, the whole scientific community emphasizes efficient

water use in agriculture, especially in irrigated fields, including wide introduction of water-saving technologies, as the most priority way of solving the water deficit problem.

80% of consumed water resources are formed on the territory of neighboring countries. The efficient use of water resources in Uzbekistan, especially to mitigate the water deficit that has been increasing in recent years, is the widespread introduction of water conservation systems. Irrigation of crops and expanding opportunities for the use of modern technologies in water management, it can be recognized that it is taking the lead among the countries of the region [2].

Over the past five years, respected President Sh. Mirziyoyev has adopted a number of decrees and resolutions on water sector development, introduction of water-saving technologies, as a result of which, in order to stimulate agricultural producers. Introducing new irrigation technology, establishment of the state mechanism for allocation of subsidies, creation of a number of benefits for agricultural producers have made a fundamental turn in the development of irrigated agriculture. As a result of attention of the state leadership, improvement of necessary legal norms and consistent application in practice, the scale of implementation of water-saving irrigation systems has increased dramatically in our country in recent years. Only in 2021 the area of water saving technologies implementation will increase 5 times and make up 22% of the total irrigated area, and in the next five-seven years this indicator is planned to reach 50%. The Parliament of our country is also carrying out extensive work to improve legislation in the field of water management.

In our republic many opportunities are being created for implementation of water saving technologies. The drip irrigation method is realized on large plots of land. Of course, it requires correct and accurate laying of drip irrigation hoses. If it is done manually, it is shoddy and time-consuming. This, in turn, is one of the current problems.

Today, techniques for laying and collecting drip irrigation pipes have been established around the world. (Figure 1).



Figure 1. General view of the drip irrigation tape laying device installed additionally to the KPG-4 unit

KGP-4 This device, designed for row widths of 90 and 70 cm, is characterized by the ability to perform several tasks simultaneously. That is why these machines are widely used.

Another feature of the device is a design feature of the cultivator - Kolnag ridges from the manufacturer allow you to lay the belt at different depths. Quick-release tape spool holders - work without wasting time replacing the spool. It guarantees optimal tensioning of the drip irrigation tape and prevents unnecessary loosening when the cultivator speed changes (stopping, unevenness of the field). The device is attached behind the tractor using a three-point linkage. Performs both installation and dismantling of drip lines in one device.



Figure 2. General view of the machine laying drip irrigation hoses between rows of cotton.

This machine, which simultaneously places drip irrigation hoses between 6 rows of cotton, is one of the widely used machines today. Machines of this type are characterized by reduction of working time and labor costs. It is recommended to use such machines in our republic.

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