

EFFECTIVE USE OF IRRIGATED ARABLE LANDS

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Abstract. The article discusses the long-term planning and placement of perennial plantations in areas with a strong tendency to wind erosion and the risk of erosion during the implementation of land management projects in agriculture. In this regard, the world experience and analysis of the literature of scientists were considered of our country. The advantages of creating protective plantings in agriculture, construction, geology, communications were announced energy and other related fields.

Key words: irrigated land area, water-saving technologies, irrigation systems, efficiency.

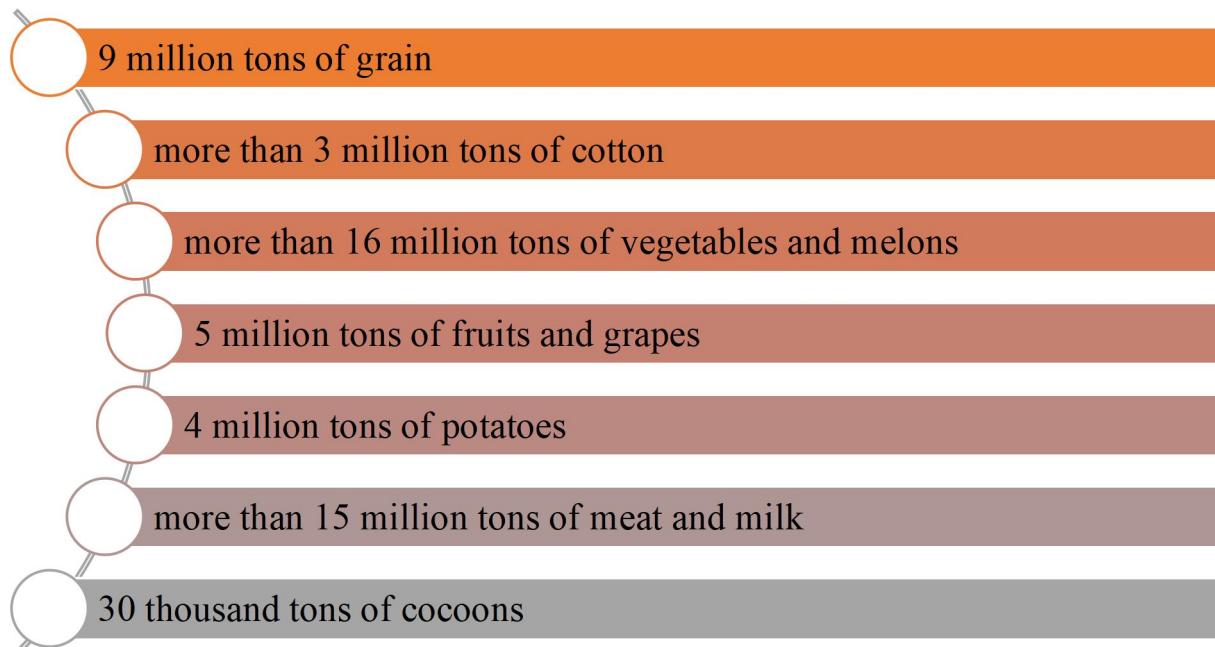
Аннотация. В статье целесообразно орошать обрабатываемую землю. Приведен зарубежный и зарубежный опыт по совершенствованию системы эффективного использования, реализации аналитических и комплексных агротехнических мероприятий посредством технологий ГАТ, внедрению очистки сточных вод для эффективного использования орошаемых посевных земель путем сбора информации о дождевой воде, а также важные пути повышения эффективности орошаемых пахотных земель. Выделены на основе теоретико-методологических принципов.

Ключевые слова: площадь орошаемых земель, водосберегающие технологии, системы орошения, эффективность.

Annotatsiya. Maqlada sug'oriladigan ekin yer maydonlaridan oqilona va samarali foydalanish tizimini takomillashtirish bo'yicha xorijiy tajribalar, GAT texnologiyalari orqali tahliliy va kompleks agrotexnik tadbirlarni amalga oshirish, yomg'ir suvlarini yig'ish orqali sug'oriladigan ekin yer maydonlaridan samarali foydalanish uchun oqava suvlarini qayta ishlashni amalga oshirish to'g'risida ma'lumotlar keltirilgan bo'lib, nazariy va uslubiy tamoyillar asosida sug'oriladigan ekin yer maydonlarining samaradorligini oshirishning muhim yo'llari yoritib berilgan.

Kalit so'zlar: sug'oriladigan yer maydoni, suvtejamkor texnologiyalar, irrigatsiya tizimlari, samaradorlik.

According to the World Resources Institute, by twenty years later Uzbekistan will become one of the 33 countries with the highest water shortage. The decrease in productivity will have serious negative consequences for food security and the balance of payments, which will create the need for sustainable management of water resources and the use of resource-saving technologies in the cultivation of agricultural crops [2]. The land resources of our republic amount to 49.9 million hectares. Of these, 59.6% are allocated for agriculture. Since the land resources of our republic are located in arid climatic conditions, agriculture can only develop on the basis of irrigated agriculture [2]. Irrigated arable land should be specially protected and their transfer to non-irrigated land is not allowed. The allocation of irrigated agricultural land for the construction of enterprises, buildings and structures is allowed by resolution of the President of the Republic of Uzbekistan. Irrigated arable land is used to grow crops of strategic importance, such as cotton and wheat, as well as vegetables, melons, potatoes and horticultural and viticultural products necessary for the population, fodder and feed for livestock, etc. [3]. In 2024, the total agricultural output in the country will be [1]:



1-rasm. In 2024, the total agricultural output in the country

According to the analysis, the use of irrigated arable land and their condition are affected by the following indicators: availability, quality and quantity of unused and irrationally used land.

Economic factors include the provision of fixed and working capital in the regions, agricultural enterprises established on irrigated arable land, investment efficiency of agricultural production, level of production intensity, etc., while social factors include: the standard of living of the local population, employment of the able-bodied population, provision of settlements with modern engineering infrastructure, etc.

In sum, currently, more than 20 million hectares of agricultural land, including 3.2 million hectares of irrigated arable land, are used to produce food for the needs of the population and raw materials for the economy [1]. In order to increase the productivity of irrigated areas, improve the land reclamation status and water supply, large-scale irrigation and land reclamation measures are being implemented within the framework of state programs. Despite the work carried out by the state in recent years to improve the land reclamation status of lands, clean and repair existing collector-drainage networks, build new collector-drainage networks, and improve water use in irrigation, the salinity of arable land has a negative impact on agriculture [5, 4]. In particular, according to a number of scientists, weak salinity of irrigated soils leads to an 8-10% decrease in cotton and wheat yields, moderate salinity leads to a 20-25% decrease, and strong salinity leads to a 45-50% decrease.

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