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SAVINGS AND INNOVATIVE TECHNOLOGIES IN IMPROVING AGRICULTURE AND WATER ECONOMY

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Abstract:
This article presents ideas and comments on specific solutions to the issues of saving and using innovative technologies in improving agriculture and water economy. The article also addresses issues such as water resource control, management technology, non-returnable waters. Various management methods are also recommended for achieving achievements in agriculture through saving water resources

Keywords: Information and communication technologies, digitalization, agricultural sector, "rubicon" management system, "marketplace" trade portal, "E- ijara" information system, drip irrigation.

In today's era of modernized and digitized information technologies, one of the most pressing issues is the issue of increasing the economy of agriculture, as well as the use of innovative technologies and savings in this area, which is directly determined by water conservation and agricultural technologies. In this regard, issues such as the scientific and technical elimination of problems such as water scarcity and the analysis of economic indicators are also of great importance. In general, the formation of a material and technical base for digitization among the principles of using agricultural resources in agrotechnical issues will create good indicators. In this regard, the essence of the proposed ideas and considerations on the approval of the "Digital Uzbekistan" 2030 strategy is reflected in the following. They are: - Allocating new lands for agriculture, strictly controlling the provision of sufficient water to existing ones; - Specific features of the development of the conceptual principle of the formation of electronic work in agrotechnics, agro-industry, etc.; - Active use of information and communication technologies in social projects; - Monitoring and implementation of scientific and technological projects on issues such as full control of water and water resources; - Conducting research on the electronic development of scientific technologies in the irrigation system, as well as the importance of directly establishing work with innovations, startup projects, etc. "Experts and scientists have expressed their opinions on the essence and importance of digitalization in agriculture. In particular, according to V.I. Belsky, the introduction of digital technologies into agricultural production is one of the most important elements of the strategic development of this sector. The use of bio and nanotechnologies, genetic engineering, the ability to adapt agricultural products to specific categories of buyers is an important factor in increasing the competitiveness of the sector, but without the active use of digital innovative technologies, it is impossible to quickly transform the domestic agricultural industry into a high-tech sector."[1] Indeed, the beneficial aspects of using agricultural technologies are gaining wide importance, and inter-sectoral digitalization, digitalization at the enterprise level, etc. are of great importance. In this regard, the primary issues are achieving annual and monthly savings in material resources such as land and water, monitoring them, and creating systematic information. In accordance with this information, the implementation of the principles of economy in agriculture, as well as the implementation of issues such as saving the economy, gives good results. The resolution of these issues, such as the formalization of land, territorial boundaries, legal and regulatory documents, based on the principles of commonality and consensus, creates a unique system. Today, the issue of water and water resource management is causing great discussions in the world community. For this reason, the Rubicon management system, the Marketplace electronic agro-industrial trade portal, the unified information system for the management of water systems, the E-IJARA information system, and the geo-information system for agricultural land are also gaining importance. There are opinions and comments that the additionally presented "Smart campus", "ASM single integration platform" will also serve as the main tool for the agricultural system to be among the most advanced sectors. "As in the whole world, in Uzbekistan, the active development of the digital economy, as well as the use of modern information and communication technologies in agriculture, Comprehensive measures are being implemented for its widespread introduction. In

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particular, in December 2020, the "Strategy for the Development of "Smart Agriculture" Technologies" and "Measures for the Implementation of the Strategy for the Development of "Smart Agriculture" Technologies for 2021-2023" were approved, which envisage four main areas: - digitalization of agriculture; - automation of management processes, monitoring; - support for business startup projects in the agricultural sector; - taking into account water resources".[2] Indeed, the importance of techniques and technologies in the implementation of "Smart Agriculture" technologies in agriculture is great. In this, it is observed that issues such as saving water supply and ensuring economic stability are mainly solved using drip irrigation technology. As in all areas, there are good and bad aspects, one of the main issues is the high cost of drip irrigation technologies, and the negative aspects are also caused by the fact that the conditions for using the drip irrigation system have certain limitations. Among irrigation technologies, drip irrigation technology is also explained by the fact that it is related to the level of water absorption. Regarding drip irrigation, it can be said that this method allows you to avoid weeds, apply mineral fertilizers to the components of dripping water, and so on. "Constructing a drip irrigation system costs a lot of money He/She will play. Therefore, this method is recommended for irrigation of highly profitable agricultural crops, as well as in areas where it is not possible to use other irrigation methods and on slopes with a large slope (greater than 0.03), water resources are scarce, difficult terrain, soils with light mechanical composition and prone to water erosion, and areas with clean water sources with a small debit. [3] It can be said that in agriculture, as a result of the fact that many lands become non-returnable water when irrigated, water consumption increases as a result of increased water consumption and increased salinity levels.

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