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The Impact of the Use of Digital Technologies in Agriculture on the Economy

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ABSTRACT

This article refers to the effective use of land resources, the use of new innovative techniques and technologies in agriculture.

Keywords:

land resources, water networks, digital technology, agrotourism, technology

Today, our independent Uzbekistan is taking bold steps in every field. We are reaching great heights in every field. The development of the economy, education, technology, medicine, tourism, agriculture and many other areas, additional measures and decrees are being adopted in order to achieve higher achievements in these areas. is a big step.

An example of this is the work carried out under the leadership of the President of our country, Shavkat Miromonovich Mirziyoyev. In particular, the fact that 2020 has been declared the year of the development of science and digital economy shows how urgent the education system is and how to further develop and improve techniques and technologies based on the needs of the times, to further increase the potential of young personnel based on the age of technology, and creating favorable opportunities for achieving new achievements in the future is the need of the hour.

It is one of the primary issues in the modern world to study the experience of developed countries, their knowledge potential,

develop new ideas and implement them in the hands of the country's youth on this basis.

One of the developing areas is the introduction of digital technologies in land resources, agriculture and water management. Many decisions and projects are being considered in this area. According to the President's Decree "On the approval of the strategy of Digital Uzbekistan - 2030 and measures for its effective implementation", the implementation of several dozen projects aimed at the development of agro-industry is defined. On this basis, the best technical solutions are used to study the leading foreign experience, including the advice and financial support of the European Union and the World Bank, to carry out the digitalization tasks and assignments in a rapid manner. Today, digital technologies are helping farmers and agronomists in agriculture. Big data (Big data) and their analysis help to determine a favorable time for harvesting, calculate the fertilization scheme, monitor, and forecast the harvest.

Digital technologies make it possible to manage the entire cycle of plant science. Smart devices measure soil, plant parameters, microclimate and transmit data. Data from sensors, images taken from space, drones, meteorological stations and other equipment form Big data, are analyzed with special applications and placed on a geoportal. Over the past 15 years, the population of Uzbekistan has increased from 27 million to 35 million, and the land area per person has decreased from 23 to 16 hectares. Therefore, improving the meliorative condition of lands and their cultivation remains the main issue.

As in the whole world, complex measures are being implemented in Uzbekistan to actively develop the digital economy, as well as to widely introduce modern information and communication technologies in agriculture.

In particular, in December 2020, the "Smart Agriculture Technology Development Strategy" and "Measures for 2021-2023 Implementation of the Smart Agriculture Technology Development Strategy" were approved. It includes four main directions:

digitization of agriculture; automation of management processes, monitoring; support of business start-up projects in the agricultural sector; accounting for water resources. At the same time, within the central apparatus of the Ministry of Agriculture, the Department for the Development of Digital Technologies in the Agrarian Sector and the State Institution "Center for Digitization of the Agro-Industrial Complex" were established, which are responsible for the intensive program for the development of digitalization in the sector, control of food safety in the agricultural sector. It is responsible for implementing digital solutions that help to make and support, water management, state support and subsidies, modern information technologies and preferential financing of software products.

In front of the Ministry of Agriculture of the Republic of Uzbekistan, digital transformation of the country's agricultural sector by accelerating technological development in the agro-industrial complex, ensuring food safety, effective management of water resources and increasing productivity in

agricultural enterprises there is a question of doing.

1. "E-IJARA" information system

Land is a key asset for anyone engaged in agriculture. According to the President's Decree No. PF-6243 dated 08.06.2021 "On measures to ensure equality and transparency in land relations, reliable protection of land rights and their transformation into a market asset", agriculture A new mechanism for leasing land intended for agriculture was introduced.

2. Geoinformation system of the Ministry of Agriculture.

The Ministry of Agriculture's own geoinformation system based on the ArcGIS software product has been launched in test mode since November 2021. Today, this system is integrated with the information systems of 4 ministries and departments of our republic, as well as with the information systems of subordinate organizations of the Ministry of Agriculture.

3. "Unit agro-platform in the agro-industrial complex" system

The system is the main information tool for the implementation of agrarian policy and is effective in the single chain of processes from the preparation and processing of the land to the cultivation of crops and the final settlement of farmers and agroclusters, suppliers and service organizations, state bodies. designed to organize digital interaction.

Agroplatforma is a modern digital platform with more than 75,000 farmers and more than 600 agroclusters. Also, more than 20 commercial banks and more than 150 state bodies will be system users.

4. Unified information system "Subsidization of producers of agricultural products".

This project is aimed at creating a unified information system for allocating subsidies for producers of agricultural products. During the step-by-step launch of the system modules, farmers will be able to receive 19 types of 35 types of trials in several directions, as well as to monitor their targeted use. Subsidies are allocated by the state for the purchase of agricultural machinery, the use of water-saving technologies, the creation of grape plantations and the creation of intensive orchards, and the

development of animal husbandry for the improvement of breeding. The unified information system "Subsidizing agricultural producers" allows farmers to send remote applications for subsidies and to monitor the granting and coordination of subsidies.

5. Accounting system of imported agricultural machinery

A special information system is being developed to account for imported agricultural technology, which will allow importers and manufacturers of agricultural machinery to submit online applications for testing or certification of imported or manufactured products.

The human factor is minimized in the application review process and the maximum level of transparency is ensured.

After the system is launched, the period for reviewing applications and concluding a contract will be reduced by 50%, the exchange of paper documents will be replaced by the exchange of electronic documents.

6. Marketplace» electronic agro-industry trade portal.

In 2022, the electronic agro-industry trade portal - "Marketplace" will be launched. Farmers, producers of agricultural products, large clusters, agrologistics centers, processors, small and large trade networks become users of the trade portal. "Marketplace" will be especially relevant for people living in settlements with few financial services and less mobile categories of producers of agricultural products. In the future, it will be possible to conclude export contracts and develop the export of agricultural products through this platform.

7. "Rubicon" water resource management system.

In early 2022, together with Australian partners, an automated system of water resources will be launched on the example of the Mirishkor Qamashi canal in the Kashkadarya region. Within the framework of the project, 26 gateways with the possibility of remote control using wireless technologies will be installed.

8. ASM is a single integration platform

The next main project of the center is ASM (digitalization platform of agro-industry), a single integration platform that integrates business processes of more than 40 ministries and agencies. ASM provides services on the principle of "single window" in the field, that is, farmers have the opportunity to get services or information needed for their activities online. At the moment, the development of the "ASM unified integration platform" is ongoing, and the start of trial work is planned for the end of 2023.

9. "Smart Campus" at TDAU

The project "Smart Campus" aims to improve the quality of education with the help of new modern methods of education using modern digital technologies.

This project will help to create useful information, create databases of students' knowledge based on the student's rating and portfolio, the system will also introduce a number of changes to the educational process of the university. "Smart

"Campus" project provides an opportunity to quickly use information (knowledge), leads to the development of agriculture.

The goals of the "Smart Campus" project are as follows: ease of studying in an interactive environment, individual approach and conditions for each student of the university, easy access to the resources of other foreign universities, etc.

10. New classification of the official website of QXV

This website is approved by the Cabinet of Ministers of the Republic of Uzbekistan dated 15.06.2021

It was developed in accordance with the requirements of the decision "On measures to further improve the rating system of the state of development of the digital economy and electronic government".

This website includes a fast and lightweight chatbot for agro-advice. Also, there is information on Agroconsultations, Agroclinic, Legal framework and benefits and subsidies for farmers.

The website provides extensive information on all areas of agriculture, such as plant science, seed production, horticulture, greenhouses, and

animal husbandry. Anyone can find useful information on the site. Farmers who are interested in developing their business can get information about loans, international grants, as well as information about individuals who want to invest in the field of ASM, investment projects and benefits for investors.

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References

1. Makhmudova, A. (2018). Ensuring the competitiveness of the scientific approaches of eco-tourism a case of Uzbekistan. *South Asian Journal of Marketing & Management Research*, 8(11), 33-41.
2. Makhmudova, A. (2020). Organizational and economic reasons preventing the development of ecological tourism in Uzbekistan. *Journal of Advanced Research in Dynamical and Control Systems*, 12(6), 1217-1220.
3. Махмудова, А. П. (2017). ФАКТОРЫ ПОВЫШЕНИЯ
4. КОНКУРЕНТОСПОСОБНОСТИ АГРОПРОМЫШЛЕННОЙ ПРОДУКЦИИ. In *Инновационное развитие современной науки: проблемы, закономерности, перспективы* (pp. 123-125).
5. Набиев, Г. А., & Бакирова, О. (2022). ФОРМИРОВАНИЕ
6. ПРЕДПРИНИМАТЕЛЬСКИХ КОМПЕТЕНЦИЙ У ШКОЛЬНИКОВ. *Scientific progress*, 3(2), 952-958.
7. Набиев, Г. А., & Бакирова, О. (2022). РАЗВИТИЕ
8. ПРЕДПРИНИМАТЕЛЬСКИХ КОМПЕТЕНЦИЙ У ОБУЧАЮЩИХСЯ
9. ОБЩЕОБРАЗОВАТЕЛЬНОЙ ОРГАНИЗАЦИИ. *Scientific progress*, 3(2), 944-951.
10. Nabiyev, G. A., & Isroilova, D. D. (2022). PROBLEMS OF FORMATION AND DEVELOPMENT OF SMALL BUSINESS AND PRIVATE
11. ENTREPRENEURSHIP. *Scientific progress*, 3(3), 46-51.
12. Цифровые технологии в сельском хозяйстве