Implementation of digital technologies in agriculture on the example of the Republic of Sakha (Yakutia)

D V Andreev
Federal State Autonomous Educational Institution of Higher Education "M. K. Ammosov North-Eastern Federal University"
Introduction

The article is devoted to issues related to the development of the agricultural economy, as well as one urgent and, in part, a priority area as the digitalization of agriculture through the use of innovative technologies. The author examines why it is necessary to introduce digital technologies into the agriculture of Yakutia, as well as what has already been introduced and where it will lead. In addition, the author draws conclusions about the effectiveness of the introduction of digital technologies into the agriculture of Yakutia.
Problem statement

At present, the following main trends can be distinguished in the agriculture of Yakutia:

- There is no doubt that today we can observe a significant decline in the prestige of agricultural professions in the labor market. This is due to the fact that young people consider these professions to be low-paid, and accordingly, the demand for them is falling.

- The desire of the rural population to live in cities, and not in small villages.

- A significant increase in interest in the consumption of local products. People today tend to eat natural foods, rather than stuffed with unknown chemistry. And this is, of course, correct.

- Reducing the area of farmland.

- In order to legitimize their activities, people today formalize self-employment. In this regard, there is an increase in the number of self-employed in the agricultural sector.

- The growth of enterprises that are engaged in the processing of biological resources, in particular, wild plants.

- Wide dissemination of experience in the use of year-round farms for progressive crop production.

- Growth in the use of IT technologies and digitalization in the world.

- Development of innovative directions in the field of agriculture in the world.
Findings

The widespread introduction of digital technologies in the agriculture of Yakutia will help reduce risks, the ability to track changes in the climate, increase the level of crop yields, as well as animal productivity. In addition, innovations in agriculture will make it possible to plan in advance the course of possible field work, reduce production costs based on efficient use of resources and science-based approaches, and reduce transaction costs for buying and selling. All this will lead to a simplification of the supply chain of products from the field to the consumer, a reduction in the shortage of skilled labor, and timely provision of critical information to rural producers.
The direction associated with the digitalization of agriculture today serves as the main trend that our country has to go through as part of Russia's general immersion in the fourth industrial revolution. The introduction of innovative technologies in agriculture helps to reduce the level of production costs, increase the level of labor productivity, increase the competitiveness of any individual companies and, of course, improve the quality of life of the population as a whole. That is why agriculture is the basis for the independence of the state!