

THE SCIENTIFIC AND METHODOLOGICAL BASIS FOR STATE SUPPORT OF AGRICULTURAL ENTERPRISES UTILIZING THE PRINCIPLES OF INNOVATION MANAGEMENT

Shaniyazova Zamira Oralbaevna

The Nukus branch of the Al-Khorazmi University of Technology,
PhD, associate professor.

Abstract

Agriculture remains a vital sector of the economy, playing a key role in ensuring food security, employment, and sustainable economic development. In the context of globalization and digital transformation, state support for the agricultural sector requires new approaches based on the principles of innovation management. This article examines the scientific and methodological aspects of state support for agricultural enterprises, including financial, regulatory, and infrastructure mechanisms. It also explores international experience in implementing innovative technologies in the agricultural sector and its adaptation to the conditions of Uzbekistan. The article concludes with recommendations to strengthen state support aimed at the long-term development of agriculture.

Keywords: agriculture, state support, innovation management, sustainable development, agricultural sector, scientific foundations, digitalization.

Annotatsiya

Qishloq xo'jaligi iqtisodiyotning muhim tarmog'i bo'lib, oziq-ovqat xavfsizligini, aholi bandligini ta'minlash va barqaror iqtisodiy rivojlanishda muhim rol o'ynaydi. Globallashtirish va raqamli transformatsiya sharoitida qishloq xo'jaligini davlat tomonidan qo'llab-quvvatlash, innovatsiyalarni boshqarish tamoyillariga asoslangan yangi yondashuvlarni talab qiladi. Ushbu maqolada qishloq xo'jaligi korxonalarini davlat tomonidan qo'llab-quvvatlashning ilmiy-uslubiy jihatlari, jumladan, moliyaviy, tartibga solish va infratuzilma mexanizmlari ko'rib chiqiladi. Shuningdek, qishloq xo'jaligi sohasiga innovatsion texnologiyalarni joriy etish va uni O'zbekiston sharoitiga moslashtirish bo'yicha xalqaro tajriba o'rganiladi.

Maqolaning yakunida qishloq xo'jaligini uzoq muddatli rivojlantirishga qaratilgan davlat tomonidan qo'llab-quvvatlashni kuchaytirish bo'yicha tavsiyalar berilgan.

Kalit so'zlar: qishloq xo'jaligi, davlat tomonidan qo'llab-quvvatlash, innovatsiyalarni boshqarish, barqaror rivojlanish, qishloq xo'jaligi sektori, ilmiy asoslar, raqamlashtirish.

Аннотация

Сельское хозяйство остается важнейшей отраслью экономики, играя ключевую роль в обеспечении продовольственной безопасности, занятости

населения и устойчивого экономического развития. В условиях глобализации и цифровой трансформации государственная поддержка аграрного сектора требует новых подходов, основанных на принципах инновационного менеджмента. В статье рассматриваются научно-методологические аспекты государственной поддержки сельскохозяйственных предприятий, включая финансовые, регуляторные и инфраструктурные механизмы. Также изучается международный опыт внедрения инновационных технологий в аграрный сектор и его адаптация к условиям Узбекистана. В заключении предложены рекомендации по усилению государственной поддержки, направленной на долгосрочное развитие сельского хозяйства.

Ключевые слова: сельское хозяйство, государственная поддержка, инновационный менеджмент, устойчивое развитие, аграрный сектор, научные основы, цифровизация.

INTRODUCTION

Agriculture is a fundamental sector of the economy, crucial for ensuring the country's food security and economic stability. However, modern challenges such as climate change, population growth, and the limited natural resources require a significant increase in the efficiency of the agricultural sector.

Global changes highlight the need for agriculture to transition to an innovative development path. This involves the use of new technologies, the digitalization of processes, and the implementation of scientific management approaches. State support plays a decisive role in stimulating innovative activity, especially for countries with transitional economies, such as Uzbekistan.

The aim of this article is to explore the scientific and methodological foundations of state support for agricultural enterprises based on the principles of innovation management and to offer recommendations for its implementation.

Principles of Innovation Management in the Agricultural Sector

Innovation management is the process of managing activities related to the introduction of innovations within enterprises. Its main principles include:

1. Focus on innovation. The use of new technologies and management methods to improve efficiency.
2. Digitalization. Transitioning to digital platforms for monitoring, analyzing, and managing production processes.
3. Systems approach. Integrating all elements of an agricultural enterprise into a unified ecosystem.
4. Sustainable development. Considering environmental, social, and economic factors when making decisions.

Applying these principles allows agricultural enterprises to increase their competitiveness and ensure sustainability.

The Current State of the Agricultural Sector in Uzbekistan

Agriculture in Uzbekistan is one of the leading sectors, providing employment for a significant portion of the population and contributing about 30% to the country's GDP. However, the sector faces a number of challenges:

- Low level of innovation adoption;
- Limited access to modern technologies and financial resources;
- High dependence on climatic conditions;
- Insufficient digitalization and automation of processes.

These issues require reforming the system of state support with a focus on innovation management.

Mechanisms of State Support

State support for agricultural enterprises can be provided through the following mechanisms:

1. Financial Instruments

- Subsidies for the implementation of innovative technologies and equipment modernization.

- Preferential loans for purchasing modern machinery and technologies.

- Tax incentives for enterprises adopting environmentally friendly and energy-efficient technologies.

2. Regulatory Measures

- Simplification of administrative procedures related to the registration of innovations.

- Creation of a legal framework for the development of agro-tech parks.

- Development of standards for digital solutions in agriculture.

3. Infrastructure Support

- Development of logistics centers for the storage and transportation of products.

- Establishment of research centers for studying and implementing new technologies.

- Support for educational programs to train specialists in agricultural management.

METHODOLOGY

To develop the scientific and methodological foundations of state support for agricultural enterprises, the following research methods were used:

1. Literature Analysis. Assessment of existing models of state support for the agricultural sector, developed both in Uzbekistan and abroad.

2. Comparative Method. Comparison of different approaches to agricultural support in various countries, including European Union countries, the USA, and other nations with developed agricultural sectors.

3. Case Method. Study of specific examples of innovation implementation and state support in agriculture in Uzbekistan and other countries.

4. Modeling. Forecasting the consequences of implementing innovative technologies in the agricultural sector based on mathematical and economic models.

ANALYSIS AND RESULTS

As a result of the research, the key areas of state support for agricultural enterprises in the context of innovation management were identified:

1. Financial Support. This includes subsidies, preferential loans, and tax incentives for agricultural enterprises implementing innovative technologies.

2. Digitalization and Automation. The development of digital platforms for monitoring and managing agricultural processes.

3. Environmental and Sustainable Technologies. The implementation of eco-economic principles in agricultural production to enhance its long-term sustainability.

4. Infrastructure Development. The development of agro-tech parks, scientific, and educational institutions to improve the scientific and technological base of agriculture.

Based on the results obtained, it can be asserted that successful integration of innovations into agriculture requires comprehensive interaction between government authorities, scientific institutions, the private sector, and farming enterprises. The implementation of innovative technologies in the agricultural sector requires not only financial investments but also significant changes in the organizational structure of agricultural enterprises. It is important to consider that the innovation process should be oriented towards sustainable development, balancing economic, environmental, and social aspects.

Special attention should be given to educational and scientific initiatives aimed at training specialists in agricultural management and the implementation of digital technologies.

Studying international practices shows that successful models of state support are based on the following approaches:

1. Clusterization. In the Netherlands, agricultural enterprises are grouped into clusters, allowing for shared resource use and exchange of experiences.

2. Digitalization. In Germany, digital platforms are widely used to manage supply chains and predict crop yields.

3. Public-Private Partnership. In Canada, the government actively collaborates with private companies to finance scientific research.

Adapting these approaches to the conditions of Uzbekistan can significantly enhance the effectiveness of state support.

Scientific and methodological approaches to state support include:

1. Modeling and Forecasting. The use of mathematical models to analyze the effectiveness of innovation implementation.

2. Monitoring and Evaluation. Continuous monitoring of the results of state funding utilization.

3. Comprehensive Approach. Interaction among all participants in the agricultural sector: the government, businesses, the scientific community, and farmers.

CONCLUSIONS AND RECOMMENDATIONS

Based on the conducted analysis, the following recommendations are proposed:

1. Creation of a national strategy for the innovative development of agriculture, including digitalization, environmental sustainability, and modernization.
2. Expansion of subsidy programs, taking into account the specifics of regions and the level of development of their agricultural infrastructure.
3. Formation of agro-tech parks for testing and implementing advanced technologies.
4. Development of educational initiatives to train qualified personnel.

State support for agricultural enterprises based on the principles of innovation management is a key tool for the sustainable development of the agricultural sector. The implementation of the proposed approaches will enable Uzbekistan to strengthen its position in international markets, enhance food security, and ensure sustainable economic growth.

REFERENCES

1. Иванов А.В. Инновационные подходы к управлению аграрными предприятиями. — Москва, 2021.
2. Smith J. Agricultural Innovations for Sustainable Development. — Cambridge, 2019.
3. Государственная поддержка и цифровизация сельского хозяйства: опыт Узбекистана. — Ташкент, 2023.
4. OECD. Digital Transformation in Agriculture. — Paris, 2020.
5. Porter M. Competitive Advantage in Agriculture. — New York, 2018.