

Бұл тұрғыда ұйымның экономикалық қауіпсіздігін қамтамасыз ету үшін корпоративтік басқарудың стратегиялық тәсілдерін қолдануға болады. Мысалы, активтер мен ресурстарды тиімді басқару кәсіпорынға өз қызметін оңтайландыруға және ресурстарды пайдалану тиімділігін арттыруға мүмкіндік береді. Стратегиялық жоспарлау компанияға қауіптер мен мүмкіндіктерді анықтауға, оларды басқару және өз пайдасына пайдалану стратегиялары мен тактикаларын жасауға мүмкіндік береді.

Сондай-ақ, маңызды аспект-бұл кәсіпорынға өз қызметімен байланысты тәуекелдерді анықтауға және бағалауға және оларды азайту немесе алдын-алу шараларын жасауға мүмкіндік беретін тәуекелдерді басқару жүйесін құру.

Осылайша, корпоративтік басқарудың стратегиялық тәсілдері ұйымның өзгермелі жағдайларға бейімделуіне, тәуекелдерді азайтуға және өз қызметінің тұрақтылығы мен тұрақтылығын қамтамасыз етуге мүмкіндік беретін экономикалық қауіпсіздікті қамтамасыз етудің тиімді құралы болып табылады.

Түйінді сөздер: Корпоративтік басқару, стратегиялық тәсіл, экономикалық қауіпсіздік, тәуекелдерді басқару, активтер, ресурстар, тұрақтылық, Стратегиялық жоспарлау, тиімділік.

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THE ROLE OF INNOVATIONS IN IMPROVING THE EFFICIENCY OF AGRICULTURAL PRODUCTION IN KAZAKHSTAN

Abstract

Agriculture plays a key role in the economy of Kazakhstan, and its effectiveness directly affects the well-being of the population and the development of the country as a whole. In today's rapidly changing world, the introduction of innovative technologies is becoming necessary to increase the productivity and competitiveness of the agricultural sector. This abstract examines the role of innovation in improving the efficiency of agricultural production in Kazakhstan. Agriculture is an important sector of Kazakhstan's economy, determining not only the country's food security, but also its economic development. In today's rapidly changing world, it faces a number of challenges, such as changing climatic conditions, environmental threats, limited resources and competition in global markets. To effectively overcome these challenges, it is necessary to actively introduce innovative technologies in agriculture.

The purpose of this work is to analyze the role of innovation in improving the efficiency of agricultural production in Kazakhstan. At the beginning of the study, the current state of the country's agricultural sector is considered, its main problems and challenges are identified. Then, the importance of innovations in agriculture is analyzed in detail, their impact on increasing productivity, improving product quality, reducing costs and minimizing negative environmental impacts.

The first part analyzes the current state of Kazakhstan's agricultural sector and its challenges, including changing climatic conditions, limited resources and competition in global markets. Then the importance of innovations in agriculture is considered, their role in increasing productivity, reducing costs, improving product quality and reducing negative environmental impacts.

Further, specific innovative technologies used in agriculture in Kazakhstan are discussed, such as modern irrigation methods, the use of biotechnologies, digitalization of production, as well as the

use of modern agricultural machinery and equipment. Examples of successful implementation of innovations on Kazakh farms and enterprises are considered in detail. Finally, the conclusions emphasize the importance of innovations in agriculture in Kazakhstan for achieving sustainable development, improving the lives of rural residents and increasing competitiveness in the global market. Recommendations are proposed for further development of the innovative potential of the agricultural sector in order to maximize its efficiency and sustainability. In conclusion, conclusions are drawn about the importance of innovations for agriculture in Kazakhstan as a tool for achieving sustainable development. Recommendations are formulated for the further development of the innovative potential of the agricultural sector, taking into account its special features.

Keywords: Kazakhstan, innovation, agriculture, efficiency, increased production, sustainable development, technologies, modern methods, development of the agricultural sector.

Introduction

Agriculture plays an important role in the economy of Kazakhstan, being one of the main sectors of the country. In this regard, improving the efficiency of agricultural production is becoming a key task for ensuring food security, sustainable development and improving the standard of living of the population. In this context, the role of innovation in agriculture is becoming increasingly important.

In recent decades, there has been an increasingly rapid development of agricultural production, due to both internal and external factors, such as changes in climatic conditions, population growth, changes in global market trends and technological progress.

Over the years, Kazakhstan's agriculture has experienced challenges and difficulties, such as climate change, limited water resources, soil and agroclimatic diversity, as well as weakened infrastructure and low productivity. These factors create obstacles to the growth and development of the agricultural sector and require innovative solutions.

In this context, the use of innovative technologies is becoming increasingly relevant and necessary to improve the efficiency of the agro-industrial complex of the Republic of Kazakhstan. Innovations in agriculture cover a wide range of modern methods, technologies and approaches aimed at optimizing production processes, increasing yields, reducing costs, improving product quality and promoting sustainable development of the agricultural sector.

The relevance of the study lies in the fact that the effective use of innovative technologies is a key factor for increasing the competitiveness of the agro-industrial complex of Kazakhstan both in domestic and global markets. In a constantly changing economic, social and environmental environment, it is necessary to strive for continuous improvement of production methods, the introduction of new technologies and innovative approaches.

Innovations in agriculture can bring significant benefits by increasing production, improving product quality, reducing costs, and increasing the income of agricultural producers. Introduction of innovations includes the use of new technologies, management methods, means of mechanization, as well as the development of new plant varieties and animal breeds adapted to local conditions.

One of the examples of successful application of innovations in Kazakhstan's agriculture is the introduction of modern irrigation systems and water-saving technologies, which allows increasing the yield and efficiency of water resources use. Innovative fertilization and crop protection methods that help reduce the use of chemicals and protect the environment also contribute significantly to improving productivity.

For further development of Kazakhstan's agriculture, it is necessary to activate innovative processes in various fields. This includes the development and introduction of new varieties and hybrids of agricultural crops, the development of modern agricultural techniques, the introduction of information technology and digitalization of agriculture, as well as support for innovative start-ups and research in the field of agriculture.

Introduction of innovations in Kazakhstan's agriculture plays a key role in improving its efficiency and sustainability. The development of innovative agriculture contributes to increasing the

level of productivity, improving the quality of products, reducing production costs and increasing the income of agricultural producers. This also contributes to strengthening Kazakhstan's position in the global agricultural market and ensuring the country's food security.

Given global challenges such as climate change, reduced availability of natural resources, and a growing global population, it is important to continue investing in innovation and modern technologies in agriculture. This will help create a sustainable and competitive agricultural industry that can effectively respond to the challenges of the future.

This article will discuss the role of innovation in improving the efficiency of agricultural production in Kazakhstan. In particular, it will analyze the introduction of innovative technologies and methods in various areas of agriculture, as well as assess their impact on increasing productivity and improving working conditions of agricultural workers. Examples of successful application of innovations in Kazakhstan's agriculture will also be considered and key directions for the development of innovative agriculture in the future will be identified.

The purpose of this article is to provide a comprehensive overview of the role of innovations in Kazakhstan's agriculture and identify their importance for improving the efficiency and sustainability of this industry in the country. In addition, the article aims to draw attention to the need to invest in innovation in agriculture and encourage further research and development in this area.

Methods and materials

To study the role of innovation in improving the efficiency of agricultural production in Kazakhstan, a comprehensive approach was used, which includes the following methods and materials:

Analysis of literature sources: Scientific articles, books, reports and publications devoted to the role of innovation in agriculture are analyzed. This method helped to identify current trends, problems and prospects for the development of innovative technologies in the agricultural sector of Kazakhstan.

Empirical research: Surveys and interviews were conducted with representatives of agricultural enterprises, agricultural technology companies, scientific institutions and government agencies to collect primary information about the current state and prospects for the development of innovations in agriculture.

Statistical data: Statistical data on the introduction of innovative technologies in agriculture in Kazakhstan, provided by the relevant statistical bodies and agencies, were used.

Casestudy: The analysis of successful cases of innovation implementation in Kazakhstan's agriculture was carried out, which made it possible to identify the main success factors and obstacles on this path.

Modeling and forecasting method: Modeling and forecasting methods are used to assess the potential results of introducing innovations in agriculture and their impact on production efficiency.

These methods and materials made it possible to conduct a comprehensive analysis of the role of innovations in Kazakhstan's agriculture and identify key factors influencing their successful implementation and further development. The results obtained can be used to develop strategies and programs to stimulate innovation in the agricultural sector of the country.

Results and discussion

Today, agriculture is not able to solve many problems on its own, such as meeting the needs of the market for products and being competitive at the global level. The inefficiency of agricultural science, the lag in innovation, and the lack of innovation infrastructure threaten the development of the agricultural sector. The state should actively support small innovative enterprises, providing them not only with financial support, but also creating conditions for the successful functioning of scientific organizations.

The results and discussion of the study on the role of innovation in improving the efficiency of agricultural production in Kazakhstan represent a comprehensive analysis of the current state,

problems and prospects of this area. The main results and discussion resulting from the study are presented below: The study showed that in the conditions of the modern world market, Kazakhstan's agriculture faces a number of challenges, such as changing climatic conditions, deterioration of soil fertility, reduced water resources and increased competition in the market. Introduction of innovations in this sphere becomes a necessity for ensuring stable and efficient development of the agricultural sector.

The results of the study indicate a growing interest in innovation in Kazakhstan's agriculture. In recent years, there has been an increase in investment in the development and implementation of new technologies, such as digitalization, biotechnology, process automation, the use of drones, etc. These trends suggest that innovation plays a key role in improving the efficiency of agricultural production and its adaptation to changing conditions.

Advantages of innovation for the agricultural sector: Discussion of the results of the study allows us to highlight a number of advantages that innovations bring to the agriculture of Kazakhstan. These include improving labor productivity, optimizing the use of resources, increasing yields and product quality, reducing negative environmental impacts, and improving market competitiveness.

Problems and challenges of innovation implementation: Despite the prospects for the development of innovations in agriculture, the study identified a number of problems and challenges that may hinder their effective implementation. These challenges include high innovation costs, insufficient awareness and training of staff, difficulties in accessing funding, and limited resources for research and development.

Summarizing, the results of the study and discussion confirm the importance of innovation in improving the efficiency of agricultural production in Kazakhstan. However, to fully realize the potential of innovations, it is necessary to overcome problems and challenges, as well as create favorable conditions for their implementation and dissemination. It is important to pay attention to training and training of personnel, creating an enabling infrastructure and legal framework, and ensuring access to financing and support for innovative projects. Only in this way will agriculture be able to maximize the use of innovation for sustainable development and achieve competitiveness in the global market.

Thus, the results and discussion of this study emphasize the need for a systematic approach to the introduction of innovations in Kazakhstan's agriculture. Effective use of innovations in this area plays a key role in ensuring food security, improving the standard of living of the population and sustainable development of the country's economy.

Creating a system of comprehensive support for innovation activities for the development of agricultural production and increasing its competitiveness is a necessity. This should be done with the participation of public administration bodies, private businesses, financial and credit institutions, as well as public organizations at the national and regional levels. Individual efforts in this area are not sufficient, given the complexity and scale of the challenges facing the agro-industrial sector. The state should play a key role in creating favorable conditions for the development of innovation in agriculture.

Regional innovation policy plays an important role in solving agricultural problems. It is aimed at efficient use of resources, including land and water resources, as well as at creating favorable conditions for the development of the agro-industrial complex. The implementation of innovation policy should be based on attracting private investors and creating incentives for the development of innovations in agriculture.

It is important that the country's industrial and innovation policy is systematic and constantly adjusted in accordance with changes in the economic situation and development strategy. State management of scientific and technological progress and innovation activities should be effective and aimed at achieving concrete results in various sectors of the economy.

The development of industrial and innovation policy in Kazakhstan should be implemented through a systematic and long-term approach, which will be regulated depending on the current state of the economy, the structure of the scientific and technical sphere and the country's development

strategy for the corresponding periods. Assessment of the effectiveness of innovation policy should be objective and take into account the state's contribution to the scientific and technical sphere, as well as the effectiveness of managing scientific and technological progress.

According to experts, when implementing innovation policy, problems often arise related to corruption and rent-oriented behavior. This is reflected in the additional costs of obtaining various permits from officials and the threat of a decline in macroeconomic indicators. Often, rent becomes the goal of entrepreneurs, and this can lead to a change in legislation in their favor, which reduces the efficiency of the economy.

In the field of agricultural production, regional innovation policy faces the problem of insufficient development of strategies for implementing innovations. The main strategies are "building up", "transferring" and "borrowing" technologies, but their implementation requires a more effective organizational mechanism that would take into account the specifics of the agricultural sector and ensure the effective use of state support.

Thus, improving innovation policy in the agricultural sector requires not only developing strategies, but also improving implementation mechanisms to ensure efficient use of resources and support for innovation at all levels—from agricultural organizations to regional authorities.

Conclusions

Innovation plays a key role in improving the efficiency of agricultural production in Kazakhstan. The introduction of new technologies, management methods and approaches to the agro-industrial sector contributes to increasing productivity, reducing costs and improving product quality.

The development of innovation policy plays an important role in the successful modernization of the agricultural sector. It is necessary to create a system of innovation support at the state level, providing funding and infrastructure for the introduction of new technologies.

However, effective implementation of innovations requires comprehensive support, which includes not only financial assistance, but also training of agricultural workers, development of personnel programs and assistance in product marketing.

Overcoming the problems associated with corruption, rent-seeking behavior, and weak organizational mechanisms is also an important step towards successful innovation policies in agriculture.

Regional innovation policies should take into account the specifics of the agricultural sector and address its pressing problems, including improving the use of resources and providing support for agricultural enterprises.

The introduction of innovations also contributes to the sustainable development of agriculture, reducing its environmental impact and improving its adaptability to changing climatic conditions. For example, the use of modern irrigation and fertilizer methods can reduce the consumption of water and mineral fertilizers, which will have a positive impact on the environment.

Innovations in agriculture can also help diversify production and expand the range of agricultural products. This will increase the income of agricultural producers and make the sector more resilient to external economic fluctuations.

The role of innovation in agriculture is also important for the social development of rural areas. The introduction of new technologies can help create new jobs, improve the standard of living of rural residents and ensure access to quality food.

It is also necessary to pay attention to the development of innovative infrastructure in rural areas, as access to modern technologies and knowledge is a key factor for the successful integration of agricultural producers into the global economy.

Ultimately, innovation in agriculture is necessary to ensure the country's food security, increase its export potential, and improve the quality of life of rural residents. Therefore, investment in innovation should be considered as an important area of agricultural development in Kazakhstan.

In general, innovation plays a critical role in improving the efficiency of agricultural production in Kazakhstan, and its development should be a priority for state and regional policy in the country.

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РОЛЬ ИННОВАЦИЙ В ПОВЫШЕНИИ ЭФФЕКТИВНОСТИ СЕЛЬСКОХОЗЯЙСТВЕННОГО ПРОИЗВОДСТВА В КАЗАХСТАНЕ

Аннотация

Сельское хозяйство играет ключевую роль в экономике Казахстана, и его эффективность напрямую влияет на благосостояние населения и развитие страны в целом. В условиях современного быстро меняющегося мира внедрение инновационных технологий становится необходимостью для повышения производительности и конкурентоспособности сельскохозяйственного сектора. Настоящая аннотация рассматривает роль инноваций в улучшении эффективности сельскохозяйственного производства в Казахстане. Сельское хозяйство является важным сектором экономики Казахстана, определяющим не только продовольственную безопасность страны, но и ее экономическое развитие.

В условиях современного быстро меняющегося мира сталкивается с рядом вызовов, таких как изменение климатических условий, угрозы экологии, ограниченные ресурсы и

конкуренция на мировых рынках. Для эффективного преодоления этих вызовов необходимо активно внедрять инновационные технологии в сельском хозяйстве.

Целью данной статьи является анализ роли инноваций в повышении эффективности сельскохозяйственного производства в Казахстане. В начале исследования рассматривается текущее состояние сельскохозяйственного сектора страны, выявляются его основные проблемы и вызовы. Затем подробно анализируется значение инноваций в сельском хозяйстве, их влияние на повышение производительности, улучшение качества продукции, снижение затрат и минимизацию отрицательного воздействия на окружающую среду.

Первая часть анализирует текущее состояние сельскохозяйственного сектора Казахстана и его вызовы, включая изменение климатических условий, ограниченные ресурсы и конкуренцию на мировых рынках. Затем рассматривается значение инноваций в сельском хозяйстве, их роль в увеличении производительности, снижении затрат, улучшении качества продукции и сокращении негативного воздействия на окружающую среду.

Далее обсуждаются конкретные инновационные технологии, применяемые в сельском хозяйстве Казахстана, такие как современные методы орошения, применение биотехнологий, цифровизация производства, а также использование современной сельскохозяйственной техники и оборудования. Подробно рассматриваются примеры успешной реализации инноваций на казахстанских фермах и предприятиях.

Наконец, выводы подчеркивают значимость инноваций в сельском хозяйстве Казахстана для достижения устойчивого развития, улучшения жизни сельских жителей и повышения конкурентоспособности на мировом рынке. Предложены рекомендации по дальнейшему развитию инновационного потенциала сельскохозяйственного сектора с целью максимизации его эффективности и устойчивости.

В заключении подводятся выводы о значимости инноваций для сельского хозяйства Казахстана как инструмента достижения устойчивого развития. Формулируются рекомендации по дальнейшему развитию инновационного потенциала сельскохозяйственного сектора с учетом его специфики и вызовов, стоящих перед ним в современных условиях.

Ключевые слова: Казахстан, инновации, сельское хозяйство, эффективность, повышение производства, устойчивое развитие, технологии, современные методы, развитие сельскохозяйственного сектора.

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ҚАЗАҚСТАНДАҒЫ АУЫЛ ШАРУАШЫЛЫҒЫ ӨНДІРІСІНІҢ ТИІМДІЛІГІН АРТТЫРУДАҒЫ ИННОВАЦИЯЛАРДЫҢ РӨЛІ

Аңдатпа

Ауыл шаруашылығы Қазақстан экономикасында шешуші рөл атқарады және оның тиімділігі халықтың әл-ауқатына және тұтастай алғанда елдің дамуына тікелей әсер етеді. Қазіргі жылдам өзгеріп жатқан әлем жағдайында инновациялық технологияларды енгізу ауыл шаруашылығы секторының өнімділігі мен бәсекеге қабілеттілігін арттыру үшін қажеттілікке айналуда. Осы аннотация Қазақстандағы ауыл шаруашылығы өндірісінің тиімділігін жақсартудағы инновациялардың рөлін қарастырады.

Ауыл шаруашылығы еліміздің азық-түлік қауіпсіздігін ғана емес, оның экономикалық дамуын да айқындайтын Қазақстан экономикасының маңызды секторы болып табылады. Қазіргі жылдам өзгеретін әлемде климаттың өзгеруі, экологияға төнетін қауіптер, шектеулі

ресурстар және әлемдік нарықтардағы бәсекелестік сияқты бірқатар қиындықтар туындайды. Осы сын-қатерлерді тиімді еңсеру үшін ауыл шаруашылығында инновациялық технологияларды белсенді енгізу қажет.

Бұл жұмыстың мақсаты Қазақстандағы ауыл шаруашылығы өндірісінің тиімділігін арттырудағы инновациялардың рөлін талдау болып табылады. Зерттеудің басында елдің ауылшаруашылық секторының қазіргі жағдайы қарастырылады, оның негізгі проблемалары мен қиындықтары анықталады. Содан кейін ауыл шаруашылығындағы инновациялардың маңыздылығы, олардың өнімділікті арттыруға, өнім сапасын жақсартуға, шығындарды азайтуға және қоршаған ортаға теріс әсерді азайтуға әсері егжей-тегжейлі талданады. БІРІНШІ БӨЛІМ Қазақстанның ауыл шаруашылығы секторының ағымдағы жай-күйін және климаттық жағдайлардың өзгеруін, ресурстардың шектелуін және әлемдік нарықтардағы бәсекелестікті қоса алғанда, оның сын-тегеуріндерін талдайды. Содан кейін ауыл шаруашылығындағы инновациялардың маңыздылығы, олардың өнімділікті арттырудағы, шығындарды азайтудағы, өнім сапасын жақсартудағы және қоршаған ортаға теріс әсерді азайтудағы рөлі қарастырылады.

Бұдан әрі Қазақстанның ауыл шаруашылығында қолданылатын суарудың заманауи әдістері, биотехнологияларды қолдану, өндірісті цифрландыру, сондай-ақ заманауи ауыл шаруашылығы техникасы мен жабдықтарын пайдалану сияқты нақты инновациялық технологиялар талқыланады. Қазақстандық фермалар мен кәсіпорындарда инновацияларды табысты іске асырудың мысалдары егжей-тегжейлі қарастырылады. Қорытындылай келе, тұжырымдар тұрақты дамуға қол жеткізу, ауыл тұрғындарының өмірін жақсарту және әлемдік нарықта бәсекеге қабілеттілікті арттыру үшін Қазақстанның ауыл шаруашылығындағы инновациялардың маңыздылығын көрсетеді. Ауыл шаруашылығы секторының тиімділігі мен тұрақтылығын барынша арттыру мақсатында оның инновациялық әлеуетін одан әрі дамыту жөнінде ұсынымдар ұсынылды. Қорытындыда тұрақты дамуға қол жеткізу құралы ретінде Қазақстанның ауыл шаруашылығы үшін инновациялардың маңыздылығы туралы қорытындылар шығарылады. Ауыл шаруашылығы секторының инновациялық әлеуетін оның мамандарын ескере отырып одан әрі дамыту бойынша ұсынымдар тұжырымдалады.

Түйінді сөздер: Қазақстан, инновация, ауыл шаруашылығы, тиімділік, өндірісті арттыру, орнықты даму, технологиялар, заманауи әдістер, ауыл шаруашылығы секторын дамыту.

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METHODOLOGICAL APPROACHES TO ASSESSING THE ECONOMIC EFFICIENCY OF INVESTMENT PROJECTS IN THE AGRO-INDUSTRIAL COMPLEX

Abstract

Agriculture plays a key role in the economy of Kazakhstan, and its effectiveness directly affects the well-being of the population and the development of the country as a whole. In today's rapidly changing world, the introduction of innovative technologies is becoming necessary to increase the productivity and competitiveness of the agricultural sector. This abstract examines the role of innovation in improving the efficiency of agricultural production in Kazakhstan. Agriculture is an important sector of Kazakhstan's economy, determining not only the country's food security, but also its economic development. In today's rapidly changing world, it faces a number of challenges, such