

## IMPROVING THE PROCESS OF REPRODUCTION ON THE BASIS OF INVESTMENT ACTIVITIES IN AGRICULTURE

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<b>Article History</b> Received: 08July2023 Revised: 29 Sept 2023 Accepted: 25 Oct 2023  CCLicense CC-BY-NC-SA 4.0	<b>Annotation:</b> In this article, the study and analysis of various aspects of investment activity in agriculture in order to identify ways to detect reproduction processes in this industry. The focus is on the effectiveness of investments, their financing, the effectiveness of investment projects, as well as the development of investment policy and intensive development of agriculture. As a result of the study, optimal approaches and recommendations were identified to identify the efficiency of reproduction in agriculture through investment activities. <b>Keywords:</b> Reproduction in agriculture, food security, financial and material resources, investment activities in agriculture, crowdfunding, agricultural enterprises
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### Introduction:

This article provides some arguments that can be used to justify the relevance and significance of research on improving the reproduction process in agriculture based on investment activities:

- Contribution to economic growth. Agriculture is an important economic sector in many countries, contributing to food supply and job creation. Improving the reproduction process based on effective investment activities can significantly increase the productivity of agricultural enterprises and contribute to economic growth.
- Global food security. With a growing world population and climate change, ensuring food security is becoming increasingly important. Investing in and improving agriculture can help increase food production and ensure sustainable rural development.
- Reducing inequality and poverty. Agriculture is the main source of income for many poor and rural people. Investing in agriculture can help create new jobs, improve living standards and reduce inequality and poverty in rural communities.
- Sustainable development. Agriculture affects the environment, including the use of land, water resources and biodiversity. Investments in agriculture that focus on the sustainable use of

natural resources, efficient use of energy and innovative practices can contribute to sustainable development and reduce negative environmental impacts.

- Innovation and technological progress. Investments in agriculture can contribute to the development of new technologies, methods of growing and processing agricultural products. This can lead to improved reproduction processes, increased productivity and improved quality of agricultural products.

## MAIN PART

Investment activity in agriculture refers to the investment of financial and material resources in order to develop and improve the agricultural industry. It plays a key role in improving production efficiency, improving technology, improving infrastructure, providing access to international markets, developing human capital and other aspects that ensure the development of agriculture.

The concept of investment in agriculture includes various types of investments, including:

- Capital investments. These are investments in the construction, modernization and expansion of agricultural infrastructure such as buildings, farms, warehouses, irrigation systems, storage and processing systems and other facilities necessary for agricultural production.

- Investment in technology. Investments in the acquisition and application of modern technologies, equipment, agricultural machinery and machinery, as well as automation and digitalization systems, which allow increasing productivity, efficiency and quality of production.

- Investment in research and development. These are investments in scientific research, the development of new varieties of crops, animal breeding, the development of new methods of cultivation and animal husbandry. Such investments contribute to improving the sustainability, productivity and quality of agricultural products.

- Investment in education and training: This is investment in the skills and education of agricultural workers, farmers and entrepreneurs. Education and training of specialists increase the level of knowledge, skills and competencies in agriculture, which contributes to the development of innovation and increased productivity.

Investment activity in agriculture is important, as it contributes to the improvement of reproduction processes, the development of agricultural infrastructure, ensuring food security and environmental conservation, improving the lives of the rural population through: developing rural infrastructure, creating new jobs, increasing the income of agricultural workers and improving accessibility of education and health care in rural areas. As well as investment activities contribute to the sustainable development of rural areas, promote economic growth and reduce inequality, as well as the introduction of new technologies, increase productivity, improve product quality and reduce costs. The following are some of the main roles of investment in improving the process of reproduction:

- Modernization of equipment and infrastructure. Investments make it possible to replace obsolete equipment with new, more efficient and modern equipment. For example, investments in the purchase of agricultural machinery and machinery help to automate processes and increase labor productivity. Investments in infrastructure development such as irrigation systems, roads, power grids, and storage and processing systems lead to more efficient and safe farming operations.

- Introduction of new technologies. Investments allow the introduction of new technologies and innovations in agriculture. For example, the use of modern plant varieties and hybrids, the use of irrigation and fertilizer systems based on precise agricultural practices, the use of sensors and monitoring systems can improve the quality and yield of crops. Also, investment in agricultural research and development contributes to the development of new methods and technologies to improve the efficiency and sustainability of the reproduction process.

- **Development of human capital.** Investment in the education and training of agricultural workers is essential to improve the reproduction process. Professional development and training of specialists allow improving knowledge and skills, adapting to new technologies and modern methods of farming. This improves process efficiency, optimizes resource use and improves product quality.

- **Diversification and expansion.** Investments make it possible to expand the range of agricultural products and introduce new directions in the reproduction process. For example, investing in breeding new animal species or developing new types of crops can expand markets and increase profitability. Diversification also contributes to the sustainable development of agriculture by reducing the risks associated with one type of product.

Investments in improving the process of reproduction in agriculture are an integral part of the development of the industry and contribute to improving the efficiency, competitiveness and sustainability of agriculture.

One of the important aspects of investment projects in agriculture is the modernization and renewal of agricultural machinery and equipment. The introduction of modern agricultural machines and mechanisms, automation of processes, the use of new technologies in the field of sowing, harvesting, fertilizing and irrigation can improve labor efficiency and increase product yield. For example, the use of modern tractors, combines and other equipment with improved performance can significantly reduce the time and cost of agricultural work.

An important component of investment projects in agriculture is the introduction of innovative technologies. This may include the use of sensors and monitoring systems to monitor soil parameters, moisture, fertilizer and pesticide levels, as well as the use of automatic irrigation systems, intelligent weather and resource management systems. Innovative approaches can improve the accuracy and efficiency of agricultural operations, optimize the use of resources, and improve the sustainability of production.

The next important aspect of investment projects is the development of infrastructure in agriculture. This may include the construction and modernization of storage facilities for agricultural products, water and electricity supply systems, the development of transport infrastructure and supply chains to bring products to market. Improving infrastructure helps to reduce product losses, facilitates access to markets and improves production efficiency.

However, the implementation of investment projects in agriculture may face financial constraints and risks. A variety of sources can be used to secure funding for projects, including government subsidies, loans, private company investment, and other forms of support. It is important to analyze the financial and economic efficiency of projects, assess risks and develop a risk management plan.

Financing investments in agriculture is an important aspect, as it requires significant resources for the implementation of development projects. There are various sources of funding that can be used to support investment in agriculture. Such as:

- **Government funding.** Governments can allocate budgetary funds to finance investment in agriculture. This may include support programs, subsidies, grants, soft loans or tax incentives. Public funding is often aimed at developing key agricultural sectors, increasing productivity and improving infrastructure. For example, in the US, there is the Farm Service Agency program, which provides loans and grants to agricultural enterprises.

- **Bank financing.** Agricultural enterprises can apply to banks and financial institutions for loans and loans to finance investments. Banks provide loans subject to a variety of conditions, including interest rates, repayment periods, and collateral requirements. Bank financing can be the main source of capital for the implementation of investment projects. For example, in Germany,

agricultural enterprises can turn to commercial banks such as Deutsche Bank or Landwirtschaftliche Rentenbank to obtain loans to develop their business or invest in new technologies.

- **Private investment.** Private investors, including individuals, companies and investment funds, can invest in agriculture. They may acquire shares or shares in agricultural enterprises, finance investment projects or enter into joint ventures with agricultural producers. Private investment can be especially helpful in attracting additional capital and expertise. For example, in Brazil there are numerous private foundations that specialize in financing agricultural projects. In Kenya, private investors can support small farms by providing them with financial assistance to purchase the necessary equipment and develop agricultural activities.

- **International funding.** International organizations and various foundations can provide financial support to agriculture in the form of grants, loans or technical assistance. For example, the World Bank, the International Monetary Fund (IMF), and other international financial institutions can provide funds and facilitate investment projects in agriculture. Another example is that Chinese companies are investing in agriculture in Africa, acquiring land and developing agricultural production projects.

- **Funding through cooperatives.** Cooperative organizations of agricultural producers may provide financial support to their members. Cooperatives may provide access to credit, finance common projects, or act as intermediaries between financial institutions and their members. For example, agricultural cooperatives in India such as Amul and IFFCO provide financial support to their members to develop and expand their agricultural businesses.

- **Self-financing.** Agricultural enterprises can use their own funds, obtained from the sale of agricultural products or previous investments, to finance new investments. Self-financing is one way to ensure long-term sustainability and independence from external funding sources. For example, in Australia, many agricultural enterprises use their own funds to finance the expansion of production, the purchase of new equipment or the development of new crops. In India, some farmers keep a portion of their profits and invest it in improvements to their farms, such as building a more efficient irrigation system or introducing modern tillage practices.

- **Grants and subsidies.** Agricultural enterprises and organizations can receive grants and subsidies from governmental and non-governmental organizations, funds and programs aimed at the development of agriculture. These grants and subsidies can be awarded based on specific criteria such as innovation, sustainable agriculture, small and family farming, and other priority areas. For example, in Japan, agricultural producers can receive government subsidies to promote green practices and reduce environmental impact. In Sweden, agricultural enterprises can receive grants to develop organic farming or to introduce innovative technologies into the production process.

- **Crowdfunding.** Agricultural entrepreneurs can turn to crowdfunding platforms where people can make financial contributions to support investment projects in agriculture. Crowdfunding provides an opportunity to receive funding from the general public interested in the development of agriculture and sustainable food production. For example, in the UK, the Crowdfunder platform supports projects related to agriculture and rural development. Here, farmers and rural entrepreneurs can raise funds to implement their ideas and receive financial support from the community. With the help of Crowdfunder, funds were successfully raised for the development of farmers' markets, the creation of organic farms and the development of rural tourism projects. In India, the Rang De platform provides an opportunity to finance agricultural projects and micro-loans for small and medium-sized farmers. People interested in the development of agriculture and rural communities can invest in these projects and help improve the living conditions of rural residents and the development of agriculture in the country.

The above sources of financing can be combined in various combinations depending on the specific situation and the needs of agricultural enterprises.

It is important to note that investments in agricultural projects play a key role in improving the reproduction process in agriculture, as well as in developing and improving the efficiency of the agricultural sector. They include various activities and investments aimed at optimizing production processes, upgrading equipment and introducing new technologies in order to increase productivity, reduce costs, improve product quality and increase the competitiveness of agricultural enterprises.

Investment projects have the potential to improve the efficiency, competitiveness and sustainability of the agricultural sector. They play an important role in ensuring food security, developing rural areas and improving the living standards of the rural population. Evaluation of the effectiveness of investment projects in agriculture plays an important role in making decisions on financing and implementation of specific projects.

Below are the factors that affect the effectiveness of investment projects in agriculture:

- **Productivity increase.** Investments in agriculture aimed at improving technologies, introducing automation, using modern equipment and mechanizing processes, contribute to increasing labor productivity and increasing output. This can lead to increased income and profitability of agricultural enterprises.

- **Cost reduction.** Investments in agriculture can be aimed at optimizing the use of resources, reducing the cost of energy, water, fertilizers and other resources. Reducing costs contributes to increasing the profitability of production and reducing the cost of production, which can improve the competitiveness of agricultural enterprises.

- **Expansion of sales markets.** Investments in the development of agricultural infrastructure, transport networks and logistics systems can contribute to the expansion of markets and access to new consumers. The development of marketing and sales strategies can also increase the demand for agricultural products and increase the revenue from their sale.

- **Improving product quality.** Investments in agriculture can be aimed at improving the quality of agricultural products through the introduction of modern processing methods, improved animal welfare, the use of environmentally friendly technologies and the implementation of quality standards. This can lead to an increase in the value and competitiveness of products in the market.

- **Diversification and innovation.** Investments can contribute to the diversification of agricultural enterprises, including the development of new types of products, the introduction of new technologies and the creation of innovative processes. Diversification can help reduce risk and dependency on a single market or product, while innovation improves the efficiency and competitiveness of enterprises.

- **Improving stability and resilience.** Investments in agriculture can be aimed at reducing the vulnerability of enterprises to climate change, natural disasters and other risks. This may include the introduction of sustainable farming practices, water management, energy efficiency and climate change adaptation. Improving resilience helps businesses overcome challenges and remain sustainable in the long term.

- **Development of human capital.** Investments in education, training and skills development of agricultural workers contribute to improving the quality and efficiency of production. Trained and qualified personnel are able to effectively apply new technologies, improve work processes and achieve better results. Investments in human capital are an important factor in the success of investment projects in agriculture.

- **Social and economic development.** Investments in agriculture can have a positive social and economic impact on the local population and society as a whole. Agricultural development helps create jobs, reduce poverty, improve living standards and strengthen social stability. Investments in agriculture can contribute to the development of infrastructure, education, health and other areas of life in rural areas.

When evaluating the effectiveness of investment projects in agriculture, it is important to take into account not only financial indicators, but also their socio-economic context. Investments should help improve the lives of rural communities, support environmental sustainability and ensure the long-term development of agriculture.

Evaluation of the effectiveness of investment projects in agriculture is based on various methods, including financial analysis, assessment of socio-economic efficiency, income and expenditure forecasting, risk analysis, etc. Each project requires an individual approach and taking into account the characteristics of the agricultural enterprise, the regional context and market conditions.

In order to increase the efficiency of projects in the agricultural sector, it is important to pay special attention to the investment policy of the state, as well as the development strategy.

Investment policy and development strategy play an important role in creating a favorable investment environment, attracting the necessary resources and contribute to the sustainable development of the agricultural sector. They determine the priorities and directions of investments, as well as the mechanisms and tools for their implementation.

- Setting priorities. The investment policy determines the priority directions for the development of agriculture and the optimal use of resources. This may include the development of certain sectors of agriculture (eg crop production, livestock, poultry, etc.), the promotion of certain types of products, or the strengthening of the competitiveness of small and medium-sized agricultural enterprises.

- Formation of investment mechanisms. Investment policy develops mechanisms for attracting investment in agriculture. This may include the creation of financial instruments such as government lending programs, grant schemes, tax breaks or attracting foreign investment.

- Support for innovation and research. Investment policy should encourage innovation and research in agriculture. This may include funding research, developing new technologies, improving production methods, and supporting start-ups in the agricultural sector.

- Elimination of barriers. Investment policy should seek to remove barriers that may hinder investment in agriculture. This may include improving the legal and regulatory environment, reducing red tape, providing access to land, water and other resources, and developing infrastructure in rural areas.

- Support for sustainable development. Investment policy should pay attention to the sustainable development of agriculture. This may include financing projects aimed at protecting the environment, improving energy efficiency, developing organic and environmentally friendly agriculture, as well as developing rural communities and improving the living standards of the rural population.

- Development of rural entrepreneurship. Investment policy should contribute to the development of rural entrepreneurship and the creation of a favorable environment for investment. This may include support for small and medium-sized enterprises, providing affordable credit conditions, training and consulting for entrepreneurs, stimulating innovation and the development of new business models in agriculture.

- Assistance to regional development. Investment policy can be aimed at promoting uniform regional development of agriculture. This may include the creation of special economic zones, investment privileges for remote and underdeveloped areas, the development of agricultural tourism and other forms of economic diversification in rural areas.

- Partnership and cooperation. Investment policy may include mechanisms for partnership and cooperation between the state, the private sector, scientific institutions and public organizations. Such partnerships can contribute to the exchange of knowledge, experience and resources, improve coordination of actions and create synergies in investment activities.

- **Monitoring and evaluation of results.** The investment policy should provide for a system for monitoring and evaluating the results of investments in agriculture. This allows you to monitor the efficiency of resource use, evaluate the impact of investments on the economy, social sphere and the environment, as well as adjust development strategies depending on the results obtained.

Investment policy and strategies for the development of agriculture should be targeted, long-term and based on an analysis of the potential and needs of the agricultural sector. They should help increase production, improve product quality, improve access to markets, create jobs, reduce dependence on food imports and ensure food security.

Investment policy should also take into account the social and environmental aspects of agricultural development. This includes creating jobs, improving the living conditions of the rural population, developing social infrastructure in rural areas, conserving natural resources, protecting the environment and biodiversity.

Agricultural development strategies must be flexible and adaptive to changing conditions, including climate change, demographic trends, changing consumer preferences and technological innovation. They must also take into account the interdisciplinary nature of agriculture and the relationship with other sectors of the economy such as industry, transport and tourism.

In general, the investment policy and strategies for the development of agriculture are aimed at creating a favorable investment environment, stimulating economic growth and sustainable development of the agricultural sector. They contribute to increased productivity, competitiveness and sustainability of agriculture, which in turn affects the overall development of the country and the well-being of the population.

## RESEARCH METHODOLOGY

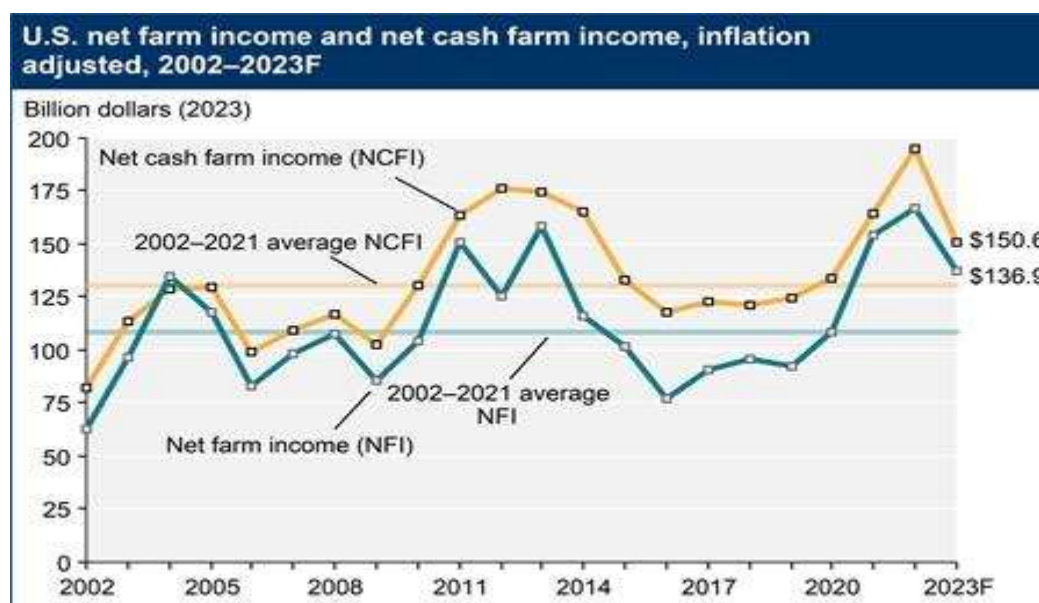


Table 1.1 U.S. Net Farm Income and Inflation-Adjusted Net Farm Cash Income, 2002-2023 F  
\$billion (2023)

As shown in Table 1.1, US agricultural income declined despite strong growth in 2020-2022, according to economists, the net income of farmers by the end of 2023 will decrease by \$ 44.7 billion, 22.9% compared to 2022, with the case realizing this forecast, the net income of farmers will be higher than in 2020, and also higher than income from 2001-2022.

It is also worth considering that direct federal payments to farms in 2023 decreased by \$5.4 billion, and amounted to \$10.4 billion, which is 33% less than in 2022. Direct federal payments provided by the government of the country to farmers and agricultural enterprises. These payments

may be made in a variety of ways, including subsidies, grants, soft loans, or other forms of financial assistance. This decrease in payments is largely due to a decrease in additional and special disaster assistance provided to farmers and ranches compared to last year in 2022

By the end of 2023, share prices in the agricultural sector are expected to rise by 5.0% to reach \$3.5 trillion. Farm sector assets are also projected to increase by 5.2% to reach \$4.0 trillion, especially due to the growth in the value of assets related to agriculture. The debt in the agricultural sector is expected to increase by 6.2% and reach \$535.1 billion. The debt level in the sector is forecast to worsen from 13.09% in 2022 to 13.22% in 2023. Working capital in 2023, compared to 2022, is expected to grow by 11.2% after previous growth in 2021 and 2022.

What contributed to the growth of income and investment in agriculture from 2020-2022?

- Promoting innovation. The US is actively investing in agricultural research and development, as well as the introduction of new technologies. For example, research into genetic modification of plants, the creation of high-yielding hybrids and the development of precision farming techniques are boosting productivity and attracting investment.

- Development of the agrotechnological sector. The USA is the world leader in the development and implementation of agricultural technologies. Companies such as Monsanto, John Deere, Climate Corporation and others are developing innovative solutions to improve the efficiency and sustainability of agriculture, attracting significant investment.

- Growth of organic agriculture. There is a growing demand for organic products in the US. Organic farmers are attracting investment to expand their operations and meet the demands of this growing market segment.

- State support. The US government provides financial support to agricultural enterprises, for example, through subsidies, grants, and crop insurance programs. This reduces financial risks and provides an incentive to invest in agricultural development.

- Trade agreements. The signing of trade agreements, such as the North American Free Trade Agreement (USMCA) and other bilateral and multilateral agreements, expands access to international markets for US agricultural products. This creates favorable conditions for investment and expansion of the agricultural sector.

Overall, the positive inflow of investment in agriculture has helped improve reproduction by improving infrastructure, introducing new technologies, promoting research and education, and ensuring financial sustainability. This can lead to increased productivity, improved product quality and sustainable development of the agricultural sector.

It is also worth paying attention to the SWOT analysis when distributing investments.

The interpretation of the SWOT analysis allows you to highlight the key strengths and opportunities that can be used to develop the industry. At the same time, it is necessary to actively work to eliminate weaknesses and cope with threats that may have a negative impact on agricultural production. This may include attracting investment, developing innovation, improving resource management, and developing strategies to meet industry challenges.

SWOT analysis allows you to systematically evaluate all these aspects and determine development strategies based on maximizing strengths, overcoming weaknesses, seizing opportunities and reducing threats. This helps in developing effective investment decisions and improving the reproduction process in agriculture.

Consider the SWOT Analysis of US Agriculture

Strengths (Strengths):

- High productivity and intensive agriculture: US agriculture is characterized by high productivity due to the use of modern methods and technologies. For example, the use of genetically modified seeds and intensive breeding allows high yields. Large agricultural enterprises



such as Archer Daniels Midland Company and Cargill provide a strong manufacturing base and high competitiveness.

- **Variety of crops:** A wide variety of crops are bred and grown in the United States, including grains, vegetables, fruits, meats, and dairy products. This allows diversifying production and meeting domestic demand, as well as exporting agricultural products to the international market.

- **Strong Support and Funding System:** US agriculture receives significant support from the government, including subsidy, insurance, and credit programs. For example, the Federal Emergency Management Agency (FEMA) provides disaster relief, and the Federal Agriculture Agency (USDA) offers various programs to support farmers and agriculture.

Weaknesses:

- **Weather exposure:** US agriculture is at risk from weather disasters such as droughts, floods, and frosts. These unfavorable weather conditions can negatively impact crops and production, impacting farmers' incomes.

- **Unequal distribution of resources:** In the US, agricultural resources and access to them are not uniform across regions. Some areas have limited water resources, limited access to land, or lack of infrastructure, which creates disparities in agricultural development opportunities.

- **High Competition and International Trade Disputes:** The US agricultural sector faces competition both domestically and internationally. Trade disputes and the imposition of tariffs can also have a negative impact on US agricultural exports.

Opportunities:

- **Increasing demand for organic and sustainable products:** In recent years, consumers have become increasingly interested in organic and sustainable products. This creates opportunities for the development and expansion of the production of such products in the United States.

- **Development of new markets and trade partnerships:** The US has the potential to develop new markets and trade partnerships in the agricultural sector. For example, increasing the export of agricultural goods to developing countries or establishing trade agreements with other countries can contribute to the growth of agriculture.

- **Innovation in sustainable agriculture:** The introduction of new technologies and practices in the field of sustainable agriculture can create opportunities to reduce the negative impact on the environment, increase the efficiency and sustainability of production.

Threats:

- **Climate change:** Changing climatic conditions, including more extreme weather events and changing seasonality, can pose challenges to agriculture. Floods, droughts and increased frequency of extreme temperatures can negatively impact crops and production

- **Rising input costs and prices:** Rising costs of energy, fertilizers and other agricultural inputs can increase production costs and reduce the profitability of agricultural enterprises.

- **Legislative and regulatory restrictions:** The introduction of new laws and regulations in agriculture, such as restrictions on the use of pesticides or changes in trade policies, can have a negative impact on agricultural operations and exports.

SWOT analysis is a strategic planning tool that helps to understand the current situation and assess the prospects for the development of agriculture. It helps farmers and investors determine the optimal allocation of resources and make decisions based on informed analysis.

conclusions

Based on the study "Improving the reproduction process based on investment activities in agriculture", the following main conclusions were obtained:

1. Investment activity is an important factor for improving the efficiency of the reproduction process in agriculture. Investments in infrastructure development, the purchase of modern

equipment and technological solutions, personnel training and improvement of the organizational structure of enterprises can increase labor productivity, reduce costs and improve product quality.

2. The development and implementation of investment projects requires a systematic approach and risk analysis. The optimal choice of projects is carried out on the basis of an analysis of market conditions, the competitive environment, the needs of the region and agricultural enterprises. At the same time, it is necessary to take into account the financial sustainability of the project, its efficiency, payback period and potential for development.

3. Investment policy and strategies for the development of agriculture should be aimed at creating a favorable investment environment. This includes developing transparent and stable rules to attract investors, supporting small and medium-sized enterprises, creating financial instruments to finance investment, and ensuring access to land and resources.

4. Training and development of personnel in agriculture play an important role in the successful implementation of investment projects. Improving the skills of agricultural specialists in the field of finance, management, marketing and technology allows you to effectively manage investments, make informed decisions and introduce innovations.

5. In order to achieve positive results in improving the reproduction process based on investment activities, it is necessary to strengthen intersectoral interaction and cooperation between government agencies, agricultural enterprises, research institutions and financial institutions. This will help to exchange experience, transfer knowledge and create a favorable environment for innovation and development of agriculture.

Based on the above conclusions, it is recommended to intensify investment activities in agriculture, focusing on the development and implementation of investment projects, improving investment policy and development strategies, supporting training and development of personnel, as well as strengthening inter-sectoral cooperation. This approach contributes to increasing the efficiency of agricultural production, improving the lives of rural residents and the sustainable development of rural areas.

### **Recommendations**

1. Increasing the level of investment in agriculture: It is recommended to develop and implement measures to attract investors to agriculture. This may include the creation of special investment programs, the promotion of credit and loans for agricultural enterprises, and the attraction of investment from government and international sources. In addition, it is necessary to create favorable conditions for investment, such as reducing bureaucratic obstacles, improving the legal and financial infrastructure.

2. Development of innovative technologies and management methods: It is important to continue research and development in the field of agriculture in order to create and implement innovative technologies. This may be due to the development of new varieties of agricultural crops, the use of modern methods of tillage, the use of automation and robotization in production processes, as well as the introduction of information technologies for the management and monitoring of production. The development of such innovations will increase the efficiency of resource use, reduce costs and improve product quality.

3. Financial support and risk insurance: Agriculture is associated with certain risks, such as changing weather conditions, plant and animal diseases, fluctuations in prices for agricultural products. It is recommended that financial support and insurance mechanisms be developed to help agricultural enterprises cope with risks and mitigate potential financial losses. This may include the creation of public insurance programs, the development of financial instruments for risk management, and the provision of financial grants and subsidies for agricultural enterprises.

4. Development of international cooperation: It is important to develop cooperation and partnership with other countries in the field of agriculture. This may include the exchange of experience, technology and knowledge, the organization of joint projects and programs, as well as the establishment of trade and economic ties. International cooperation will help improve access to new markets, attract foreign investment and technology, and increase the competitiveness of the industry.

5. Increasing the level of professional training and qualifications: For the successful implementation of investment projects in agriculture, highly qualified specialists are needed. It is recommended to improve the system of education and training of personnel in the field of agriculture, provide access to educational programs and trainings, as well as create conditions for advanced training and professional development of agricultural workers. This contributes to the effective implementation of innovations and modern technologies, as well as increasing productivity and quality of work.

6. Support and advisory assistance to agricultural enterprises: For the successful implementation of investment projects, it is necessary to provide support and advisory assistance to agricultural enterprises. It is recommended to develop programs and advisory support mechanisms that will help enterprises in the development and implementation of investment projects. This may include advice on the selection of optimal investment strategies, the development of business plans, and the provision of information on available funding sources and investment opportunities.

7. Monitoring and evaluation of results: It is recommended to establish a system for monitoring and evaluation of the results of investment projects in agriculture. This will allow you to monitor the achievement of your goals, measure the effectiveness of the implemented investments and make adjustments if necessary. Regular monitoring and evaluation will improve planning and decision-making in the field of investment activities, as well as identify successful practices and experience for subsequent use.

8. Development of financial instruments: To ensure the financing of investment projects in agriculture, it is necessary to develop a variety of financial instruments. This may include the creation of state funds to support agriculture, the development of a credit and leasing system, the promotion of private investment through tax incentives, and other measures. A variety of financial instruments will allow enterprises to choose the best sources of financing and reduce the risks of investment projects.

9. Investment regulation and support: Government regulation and support for investment in agriculture is essential to stimulate the development of the industry. It is recommended to develop a transparent and predictable investment policy, provide legislative protection for the rights of investors, and provide financial and tax preferences for investment projects in agriculture. This will create a favorable investment environment and help attract both domestic and foreign investors.

10. Interaction with society and stakeholders: It is important to take into account the interests and needs of various stakeholders, including agricultural enterprises, farmers, the public, environmental organizations and other members of society. Joint participation and interaction between stakeholders contributes to the effective implementation of investments and the development of sustainable agriculture. It is necessary to ensure transparency, openness and dialogue in the development and implementation of investment projects, as well as to take into account socio-economic and environmental aspects.

11. Training and development of personnel: It is recommended to pay special attention to the training and development of personnel in agriculture, especially in the field of investment project management. It is necessary to conduct specialized trainings and seminars, train specialists in methods and tools for effective planning, implementation and control of investment projects.

Competent personnel are able to ensure the successful implementation of investment policy and increase the efficiency of the reproduction process in agriculture.

12. International cooperation: The development and improvement of the process of reproduction in agriculture requires active international cooperation. Mutual exchange of experience, transfer of technology and knowledge between countries can improve agricultural practices and bring innovation to the industry. It is recommended to participate in international projects, programs and initiatives, as well as establish partnerships with other countries, to ensure the exchange of experience and access to advanced solutions in the field of investment and agriculture.

13. Removal of obstacles and risks: For the successful implementation of investment projects, it is necessary to remove the obstacles and reduce the risks faced by agricultural enterprises. This may include simplifying procedures for obtaining loans and permits, improving legal protection and reducing the administrative burden. In addition, it is important to develop insurance mechanisms against risks associated with weather conditions, changes in agricultural prices and other factors in order to ensure the financial sustainability and reliability of investments.

14. Cluster development: It is recommended to develop cluster and network structures in agriculture, bringing together various enterprises and organizations in supply and production chains. This allows you to create synergies and share resources, improve coordination and efficiency of work, as well as ensure the integration of investment projects into the overall strategy for agricultural development. The cluster approach helps to create a favorable investment environment and increase the competitiveness of agricultural enterprises.

15. Monitoring and evaluation: It is recommended to carry out systematic monitoring and evaluation of the implementation of investment projects in agriculture. This allows you to monitor progress, identify problems and take timely action to solve them. Robust metrics and mechanisms for evaluating investment performance need to be developed to ensure informed and informed decisions. The results of monitoring and evaluation can serve as a basis for adjusting investment policy and agricultural development strategies.

In general, the implementation of the recommendations will improve the efficiency of the reproduction process in agriculture on the basis of investment activities. This contributes to the development of agriculture, ensuring food security, improving the living standards of the rural population and the sustainable development of the agro-industrial complex.

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