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The problem of state support and increasing the investment attractiveness of agriculture

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Abstract. Investing in the agricultural sector of the economy largely depends on how quickly the investments made will pay off. Private business, first of all, will invest in the agricultural business in the presence of a low cost and high quality of products. The longer the payback period of the investment, the less likely it is that it will be implemented in practice. Investments are an important source of expanding agricultural production. They enable the agricultural enterprise to carry out technical re-equipment and implement effective environmental and resource-saving technologies. State support for agriculture can consist in the development of transport infrastructure in rural areas, improving the quality of life in rural areas and increasing the labor potential of rural residents. One of the main goals of state support for agriculture is to create favorable conditions for attracting private investors to this industry. Investment activities in agriculture can be focused on improving the fertility of land resources used in agricultural production. The authors consider it expedient to provide the Central Bank with preferential conditions for commercial banks to reduce the cost of loans issued to agricultural enterprises.

1. Introduction

In agricultural production, the main tool of labor is the land. It is not subject to depreciation, but it can affect the cost of production if it is not owned by the agricultural producer, but is leased by him. The level of land productivity is heterogeneous and depends on many natural and climatic factors. Part of the products produced by animal husbandry is sold, and the other remains in the agricultural enterprise for subsequent participation in the production process. The production of agricultural products is seasonal, and production costs are phased. The time interval between the production of products and their sale to the consumer can reach several months. The need to attract external financial resources from agricultural enterprises is due to the need to purchase new agricultural machinery and replenish working capital during the period of growing agricultural products.

In addition, the need to attract external financing for an agricultural enterprise arises in the event of natural disasters, crop failures, and mass destruction of agricultural crops by pests. The final results of the financial and economic activities of an agricultural enterprise can be determined only by the results of the year. The evaluation of the results of the financial and economic activities of an agricultural



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enterprise can be characterized by production and economic parameters in monetary and physical terms. A feature of many types of agricultural machinery is their specialization to work only with certain agricultural crops. This often makes it necessary to have a large number of various agricultural machinery at the agricultural enterprise. Agricultural production, as a rule, is represented by large agricultural holdings and a large number of small agricultural producers-farmers.

According to [1], the need for agricultural enterprises to invest is due to three main reasons: the need to update the material and technical base, the development of new types of products and the replenishment of working capital.

According to [2], investment is one of the most important tools used in expanded reproduction, and is able to create conditions for effective economic growth in the medium and long term.

According to [3], investments determine the growth rate of agricultural production, its modernization and technical re-equipment, the use of environmentally friendly and high-performance technologies

According to [4], the main goal of innovation and investment activities in the agricultural sector of the economy should be the formation of the necessary conditions for the use of the innovative potential of the enterprise.

According to [5], investment activity in agriculture is of great importance for ensuring the conditions of food security of the state and the stable functioning of agricultural production.

According to [6], the main principles of innovation and investment activity in the agricultural sector of the economy are adaptability, purposefulness, complexity, consistency, the presence of social and environmental security, and multivariance.

According to [7], innovation and investment activity in agricultural production is a consistent, systematic process associated with the implementation of investment and innovation projects, promoting the investment activities of enterprises in order to strengthen their position in the market.

According to [8], investments in agricultural production should be directed (figure 1):

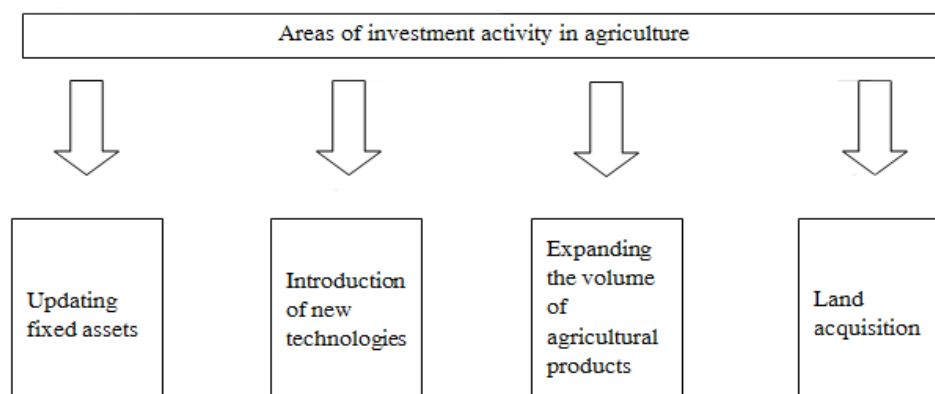


Figure 1. Areas of investment activity in agriculture.

According to [9], investment activities in agriculture can be aimed at improving the fertility of agricultural land. However, not all projects can be profit-oriented. Unprofitable projects are appropriate if they are focused on solving problems in the environmental or social sphere.

The authors believe that a targeted state innovation policy can help improve the investment attractiveness of agriculture. The task of this innovation policy, in our opinion, should be the creation of an economic and organizational mechanism to stimulate innovation in agriculture (figure 2):

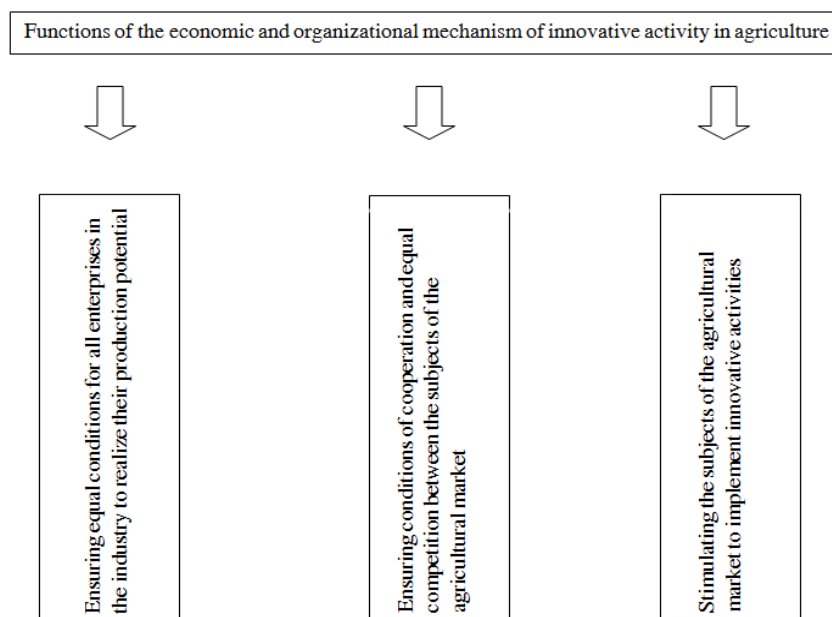


Figure 2. Functions of the economic and organizational mechanism of innovative activity in agriculture.

2. Methods

During the implementation of this scientific research, we used an analytical method, which allowed us to study the problems considered in the scientific work in their unity and development. Taking into account the goals and objectives of the research, we used the structural and functional method of scientific cognition.

As a result, we were able to study a number of issues related to the use of state support to increase the investment attractiveness of agriculture.

3. Results

To increase the production volume of agricultural production. In our opinion, innovative development of the material and technical base of the agricultural sector of the economy is required. Attracting additional financial and material resources to agricultural enterprises contributes to increasing their production potential.

Labor productivity in agriculture in many CIS countries is 5-10 times lower than in many developed countries [6]. Low productivity of animal husbandry and crop production does not allow to increase the production of agricultural products.

Investing in the creation of innovative ecological and productive agricultural technologies. In our opinion, it is able to ensure the growth of the production potential of enterprises in the agricultural sector of the economy.

Improving the efficiency of agriculture is possible if there is constant state support for it. The profitable agricultural sector may become more attractive for private investors.

In our opinion, the rate of return on investment has a significant impact on attracting investment in the agricultural sector of the economy. This requires the production of high-quality products that would be competitive in the agricultural market and reduce the cost of its production.

We believe that in order to improve the efficiency of the agricultural sector of the economy, the state should:

1. Introduce tax incentives for agricultural producers. And first of all for enterprises that produce products that ensure the food security of the state.
2. Legally protect the rights of creditors and investors.
3. If necessary, introduce quotas and customs duties for the import of certain items of agricultural products in order to stimulate the growth of its production in the country.
4. Establish export barriers and duties, if necessary, in order to control food prices within the country.
5. Make partial compensation for the cost of agricultural machinery, mineral fertilizers, fuel and seeds purchased by agricultural enterprises.
6. Actively develop transport infrastructure and social services in rural areas.

In our opinion, the main investors in agriculture are commercial banks, they provide agricultural enterprises with credit resources for the implementation of specific projects. One of the main disadvantages of bank lending to the agricultural sector of the economy is the high interest rate on the issued credit resources. This, in turn, to a certain extent hinders the development of agriculture and requires additional state subsidies.

One of the main reasons for the high interest rates on bank loans is the high level of the discount rate set by the Central Bank. In international banking practice, only a single discount rate set by the Central Bank is used, but in a number of countries, the amount of this discount rate can take a zero or negative value.

The authors of this study suggest using several different Central Bank interest rates at the same time. In our opinion, for the purposes of lending to agricultural enterprises, commercial banks should be able to receive funds from the Central Bank at a discount rate close to or equal to zero. This, in our opinion, will enable commercial banks to reduce the interest rate when providing loans to agricultural enterprises.

The authors believe that the use of special discount rates of the Central Bank will allow achieving a greater degree of efficiency relative to the usual state subsidization of agricultural business.

In our opinion, commercial banks are interested in making a profit and therefore will strive to prevent the misuse of borrowed funds. At the same time, government subsidies may not encourage enterprises to improve the efficiency of their production, and these enterprises will seek to receive even more new subsidies.

4. Discussion

Investing in agriculture depends on the rate of return on investment, so private investors will usually invest in the agricultural business, provided that the cost of production is low and its quality is high. The shorter the payback period, the more likely it is to be realized.

The main problems that hinder the attraction of investment in the agricultural sector of the economy in many CIS countries are:

1. The lack of an effective mechanism to protect the interests of creditors and investors.
2. Inappropriate use of depreciation charges by agricultural enterprises.
3. Poor development of market and transport infrastructure in rural areas
4. Instability of tax legislation
5. The lack of an effective market for investment risk insurance.
6. Insufficient state support for the agricultural sector of the economy.

5. Conclusions

Investment is an important component of expanding agricultural production. They make it possible to ensure structural changes in the agricultural sector, promote the introduction of resource-saving and high-performance technologies into production, and modernize and re-equip production facilities.

The implementation by the state of measures aimed at the development of rural transport infrastructure and increasing the labor potential of residents living in rural areas can have a great impact on attracting investment in the agricultural sector of the economy.

References

- [1] Samygin D Yu and Keleinikova S V 2018 Modeling the efficiency of investment in agricultural business *Digest Finance* **23** 319-26 DOI: 10.24891/df.23.3.319
- [2] Loftas T & FAO, Rome & DDC 2021 Investing in agricultural development XF2006140724
- [3] Chen S, Wilson W, Larsen R and Dahl B 2014 Investing in agriculture as an asset class *Agribusiness* **31** DOI: 10.1002/agr.21411
- [4] Swinnen J 2018 *Public investments in agricultural and food research* DOI: 10.1057/978-1-137-50102-8_11
- [5] Stukan T 2020 Features of use of informal forms of investment by agricultural enterprises in digital agriculture **1** 97-101 DOI: 10.25264/2311-5149-2020-16(44)-97-101
- [6] Yusupjonovich D 2019 Effective use of investment in agriculture of the republic of Uzbekistan *Asian Journal of Multidimensional Research (AJMR)* **8** 6 DOI: 10.5958/2278-4853.2019.00252.0
- [7] Bastiaens I 2016 Investing in agriculture: a preference for democracy or dictatorship? *The British Journal of Politics and International Relations* **18** DOI: 10.1177/1369148116656984.
- [8] Ievchuk L 2015 Investment of agricultural sector of economy in crisis *International Journal of New Economics and Social Sciences* **2** 41-8 DOI: 10.5604/01.3001.0010.4723
- [9] Serhieieva N 2020 Improvement of accounting and analytical providing of capital investments in agricultural enterprises *Ekonomika APK* **308** 122-30 DOI: 10.32317/2221-1055.202006122