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**Conference on Land Economy and Rural Studies Essentials****STATE SUPPORT FOR THE INNOVATIVE DEVELOPMENT OF  
AGRICULTURAL PRODUCTION IN THE REGION**

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**Abstract**

This article considers the relevance, necessity and main directions of state support for innovative development of regional agricultural production, identifies the drivers of innovative development of agriculture, specifies the level of innovative activity, gives the characteristics of the result of innovative activity. It revealed the most important problem preventing agricultural producers from accumulating the money needed to innovate and invest in fixed capital. The problem is unstable interest rates affected by crisis phenomena: the foreign policy environment, the imposition of economic sanctions, inflation and currency volatility, epidemiological restrictions, etc. The authors analysed the actual structure of financing sources for innovations in agriculture in the Tambov region, which showed a stronger role for the federal budget. The main role is not that banks support innovation by granting loans, but that the state supports it by allocating funds from budgets at different levels. They considered the problem of state regulation of agriculture related to the seasonality of farming, as small and medium-sized enterprises are unable to generate sufficient profits to cover the cost of growing next year's crops. This confirms the urgent need to improve the areas of state support for business. To conclude, the state is interested in increasing budget allocations for the innovative development of agricultural production.

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*Keywords:* Agricultural production, innovative development, region, state support



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## 1. Introduction

The introduction of innovations in regional agriculture involves combining the efforts of education, science and industry, modernizing production processes through modern technology. The solution to this problem requires the creation of a whole set of conditions: a well-developed infrastructure for effective innovation activities, a set of technical and material resources, legislation that will provide personnel, information, marketing, economic, expert services and support for innovation activities. Developed countries, using various financial and economic techniques, realize stable and continuous support for the agricultural sector of the economy, which is weakly monopolized, through the method of redistributing income from the industrial, comparatively more monopolized sector.

## 2. Problem Statement

The support measures implemented in Russian agriculture within the framework of state programmes form favourable conditions for the development of the agro-industrial complex. However, at present, the level of state support is not sufficient to introduce the latest technologies and modern science and technology into agricultural production. On the other hand, the socio-economic effect obtained from the use of state support funds for relevant purposes is often low and does not correspond to the amount of budgetary resources spent. Improving the efficiency of implemented state support measures requires proper financial control.

Over the analysed period, the Tambov region showed positive growth rates of agricultural production in agricultural organizations and peasant (private) farms (Dibrova et al., 2018). This indicates their better adaptation to the negative natural-climatic and economic conditions, which is largely due to the large amounts of investment in these agrarian formations in the region (Shchutskaya, 2021). Economic growth in the sector reflects trends and prospects for the agricultural market (Minakov & Nikitin, 2019). In the current context, state support measures for innovation in agricultural production need improvement, given the dynamically changing external environment.

## 3. Research Questions

The aspects addressed in this paper reflect the need and the main directions of state support for the innovative development of regional agricultural production.

Accordingly, the paper addresses the following questions:

- ways to achieve sustainable and innovative development in agricultural production;
- problem of the effectiveness of applied measures to provide state support to the agrarian sector of the economy;
- priority areas for introducing the results of agricultural science research into the production process;
- problem of increasing the efficiency in implementing state support measures to ensure favourable conditions for the introduction of innovations in agricultural production.

#### **4. Purpose of the Study**

The purpose of the study is to examine in some detail at least one of the main agricultural industries, the structure of state support for agriculture and to draw conclusions about the advisability of increasing budget allocations for the innovative development of agricultural industries.

#### **5. Research Methods**

This article is based on materials from Russian periodicals. The research used the following methods of investigation: statistical-economic, computational-constructive, monographic, abstract-logical.

#### **6. Findings**

Sustainable modern innovative development of agricultural production is possible to achieve through the following aspects: land reclamation and improvement of soil fertility, use of high-quality and high-yield crop varieties, optimization of labour costs for production, application of modern resource-saving technologies, rationalization of production processes, efficient distribution of technical, material and labour resources, improving the living standards of local people, creating comfortable working and living conditions for workers, increasing their professional, moral and cultural level (Antsiferova et al., 2020).

In science and human resources, the formation of innovative agricultural development is one of the priority areas of the "State Programme for Agricultural Development and Regulation of Agricultural Products, Raw Materials and Food Markets for 2013-2020".

In practice, innovation in agriculture refers to the use of new plant varieties, animal breeds, production technologies in the crop, livestock and processing sectors. The result of innovation activities can be a new or improved product, as well as a technological process used in the production and processing of agricultural products (Letyagina et al., 2021).

According to research, the efficiency of budget expenditures on agriculture is often low, and the socio-economic effect obtained from their application for the relevant purposes does not correspond to the amount of public funds spent (Ivanova & Nikitin, 2018). Therefore, the problem of increasing the efficiency of applied state support measures for the agrarian sector of the economy is an urgent one. Since the implementation of state support measures is one of the instruments of the national budget policy, it is necessary to exercise proper financial control for its effective implementation.

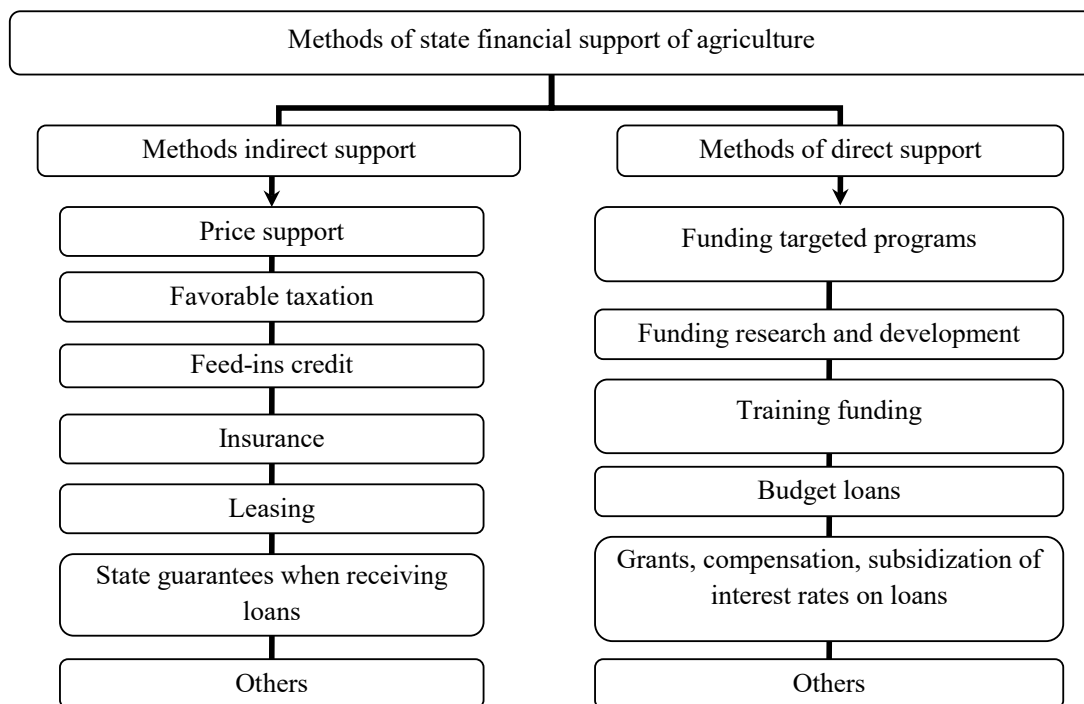
Implementation of federal target programmes became the main impetus for the growth of investment attractiveness of the agro-industrial complex. Under current conditions, there is a positive change in the state's attitude towards agriculture, as evidenced by a significant increase in crop production and stabilization in livestock farming.

The system of measures, which is implemented within the framework of state programmes, creates favourable conditions for ensuring the development of the agro-industrial complex. The main measures are aimed at supporting the agricultural sector, improving infrastructure in rural areas, creating new jobs,

improving living standards in rural areas, introducing innovations, technological and technical modernization of production, increasing the prestige of agricultural professions and the competitiveness of products in the agricultural and food market, supporting small farms and implementing measures for land improvement and fertilization to improve soil fertility.

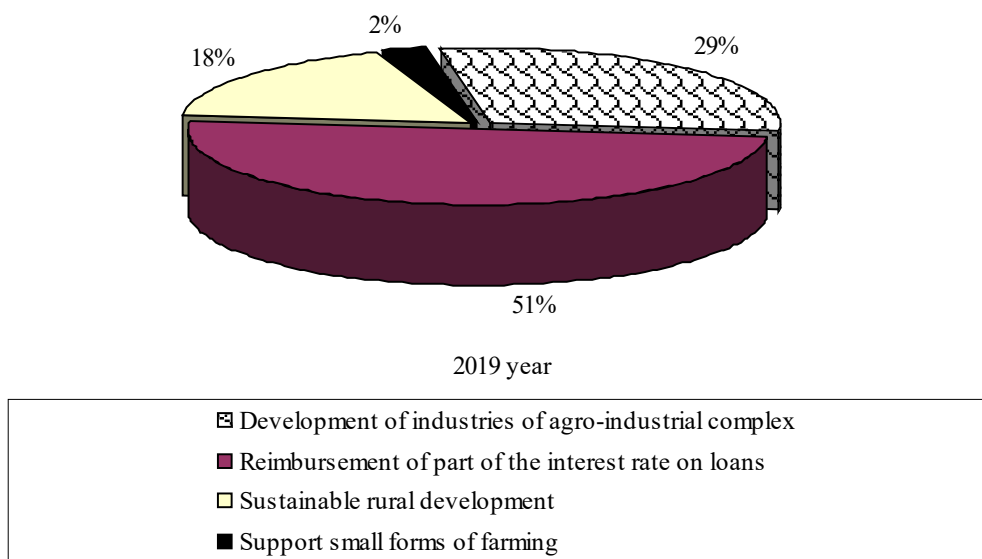
Subsidies are the main form of state support for the AIC. However, WTO requirements call for restrictions on direct subsidies. WTO state support measures are divided into three "baskets": green, yellow and blue. The first involves measures that are not limited to a support agreement and do not directly affect the growth of output and the principles of modern market trade. The Yellow Basket support items directly stimulate agricultural production and distort the principles of free trade; for each WTO member country, the amounts are individually set and reduced each year according to the established rules of the agreement. Blue Basket measures seek to limit, restrict production. There is no practice of such measures in the Russian economy. Subsidies are mainly allocated to agricultural organizations, but not to agricultural processors (Kuznetsova et al., 2021).

It is possible to characterize the level of innovation activity by the intensity of innovation activity of an agricultural organization in a dynamically developing external environment. The state uses different methods of influencing the economy to influence the activities of individual organizations and regions: methods of direct influence and methods of indirect influence (Figure 01).



**Figure 1.** Methods of state financial support for agriculture

Figure 02 shows the structure of state support for agriculture in the region as a whole in 2019.



**Figure 2.** Structure of state support for agriculture in the Tambov region (Nikitin & Antsiferova, 2020)

According to the State Programme for the Tambov region for 2014-2019, the structure of state support from the federal budget was 37.0%, from the Tambov regional budget - 48.2%, and from non-budgetary sources - 14.8% (Gusev, 2021).

According to statistical information, the land fund of the Tambov Region is 3.4 million hectares, which accounts for 5.3% of the CFD's land fund. Agricultural land covers 2.7 million hectares (78.9%). Arable land accounts for 2.1 million ha (80.7%). Hay and pastures cover 0.5 million ha (18.2%), perennial crops cover 1.1%.

The Tambov region pays a great deal of attention to subsidizing agriculture. In 2019, the largest share of subsidies was allocated to reimbursement of part of the interest rate on loans and credits (51%), while 29% of the total financial support was allocated directly to support programmes and activities for the development of core production. The share of subsidies for technical and technological modernization and innovative development was only 1.6%, indicating insufficient support for these areas.

## 7. Conclusion

The analysis of the information outlined above leads to the conclusion that the state is interested in increasing budget allocations for the innovative development of agricultural production, which includes incentives:

- acquiring modern agricultural machinery and equipment;
- conducting regular further training for managers and specialists in agricultural production;
- implementing the results of research achievements of agricultural sciences in priority areas;
- using innovative development of agricultural production.

In our opinion, along with increasing production volumes in the region, it is necessary to focus efforts on increasing the share of environmentally friendly agricultural products and improving their

quality. The Tambov region has competitive advantages, including natural, human, land, technical resources and modern technologies, which can be used to further develop this area. To increase the efficiency of the use of subsidies received from the budgets of different levels and to improve the effectiveness of the ongoing agricultural policy, we propose the implementation of the following measures:

- to increase the efficiency of the mechanism of implementing state support measures, using a differentiated approach to ensure equal conditions, and to create a healthy competitive environment for producers, increase employment and timely tax deductions, and raise the salaries of employees;
- to activate productive involvement in the directions of modern state programmes and ensure lobbying of the region's initiatives at the federal level;
- to form unified support and merit assessment system for skilled workers in the agro-industrial sector;
- to ensure the introduction of modern technologies and the use of new high-performance machinery, which can increase the production of products with certain quality characteristics, as well as increase the depth of processing of raw materials;
- to activate the improvement of human resources, professional development and the formation of a new system of continuous agrarian education based on a modern technological platform;
- to ensure the accessibility and efficiency of public services in the agro-industrial complex, and to improve their quality through the use of modern computer and information technology;
- for agricultural producers cooperating with local authorities, to continue active work on creating and updating a modern database of an automated geo-information system for monitoring and recording agricultural land;
- to ensure cooperation with the Ministry of Agriculture of the Russian Federation on the problem of improving the areas of state support for producers in the agro-industrial complex.

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