
IMPROVING INSTITUTIONAL FORMS OF STATE SUPPORT FOR SMALL AGRICULTURAL BUSINESSES

Vladimir Gayduk

Kuban State Agrarian University, Krasnodar, Russia

E-mail: vi_gayduk@mail.ru

Orcid: <https://orcid.org/0000-0001-9992-7647>

Maksim Kovalchuk

Kuban State Agrarian University, Krasnodar, Russia

E-mail: maksim.koval4uk@yandex.ru

Orcid: <https://orcid.org/0000-0001-9098-7483>

Aleksei Khaliapin

Kuban State Agrarian University, Krasnodar, Russia

E-mail: wamp_1@rambler.ru

Orcid: <https://orcid.org/0000-0001-6110-9091>

Nina Goridko

Moscow Polytechnic University, Moscow, Russia

E-mail: bell44@rambler.ru

Orcid: <https://orcid.org/0000-0001-8961-0232>

Valeriia Semenova

Moscow Polytechnic University, Moscow, Russia

E-mail: alisavalera@rambler.ru

Orcid: <https://orcid.org/0000-0001-7625-9033>

ABSTRACT

Objective: This study considers the improvement of institutional forms of state support for small agricultural businesses, particularly within the context of economic sanctions. The objective is to investigate and evaluate the existing institutional forms of state support for small agricultural businesses.

Methods: The research uses a comprehensive approach to analyze small agricultural businesses, incorporating a SWOT analysis to identify their strengths, weaknesses, opportunities, and threats.

Results: The study establishes that key production forces are concentrated in the hands of large- and medium-sized private enterprises manufacturing agricultural products. The authors analyze the forms of state support for small agricultural businesses. They also consider the functioning of small business entities in the agro-industrial complex. An original interpretation of the model of state regulation of agriculture is presented, including its goals, methods, and tools.

Conclusion: Based on the analysis of existing institutional mechanisms of state support for small forms of agricultural businesses, the feasibility of using additional forms is substantiated, which, in the context of growing economic sanctions, will allow small agricultural businesses to overcome the shortage of financial resources and quickly respond to force majeure. To increase general sustainability and the sustainability of small agricultural enterprises, this study recommends introducing additional forms of government support.

Keywords: small agricultural business, state support, institutional forms, grant support, small forms of farming.



INTRODUCTION

During the market transformation of the Russian economy, more attention is paid to its diversity. Changes in the development of economic relations have also affected the activity of agricultural entities. Transformations in the industry are characterized by slow and fragmented implementation, which is the reason for difficulties in the formation of sustainable, effectively developing institutions governing the activities of agricultural entities.

The institutional transformations in the agricultural sector based on the formation of a developed system of property relations condition the relevance of this research topic. As a result of transforming forms of ownership, a new system of conducting agricultural activities has been created, which is divided into agricultural entities of various organizational and legal forms, peasant (farm) enterprises, and private farm households.

In modern economic conditions, small agricultural businesses actively use different forms of government support to increase their sustainability and efficiency in the market. The priority directions of regional policy involve creating conditions for the development of small forms of farming in the agricultural sector.

Conditions for conducting economic activities were created for agricultural entities of all organizational and legal forms, but the key productive forces were concentrated in the hands of large agricultural producers.

This fact gives relevance to the topic under study, which indicates the need to introduce effective mechanisms for improving institutional forms of state support for small businesses in the agro-industrial complex of the Krasnodar Territory, Russia.

METHODS

The methodology employed in this study involves a multifaceted approach to analyze and evaluate state support mechanisms for small agricultural businesses. This comprehensive method aims to ensure a thorough understanding of the challenges and opportunities faced by these enterprises. The research encompasses a SWOT analysis to assess their strengths, weaknesses, opportunities, and threats within the agricultural market. It also examines the effectiveness of current state support programs, such as concessional lending and subsidies, in aiding small agricultural



businesses. The study also considers the impact of economic sanctions on these enterprises. The methodology combines qualitative and quantitative data analysis, drawing from various sources, including financial data, government reports, and industry-specific literature. This research approach aims to provide a holistic perspective on the state of small agricultural businesses and the role of state support mechanisms in their sustainability and growth.

RESULTS AND DISCUSSION

The task of developing small agricultural businesses is to increase the well-being of the rural population, preserve the rural way of life, harmonize the interests and goals of society, business, and the state, and build competitive agricultural and processing industries. A key form of government influence on the level and pace of economic development of the country and its regions, the well-being of the population, and the distribution of resources and incomes is state support for agricultural production (Ermakov, 2020).

There are several disadvantages when using state support tools for small agricultural businesses in modern transformational conditions: a systematic approach that enhances the economic effect is not considered; due to the seasonality of production, the food market is less elastic and more flexible, but government regulatory measures are often taken late by authorities (Gaiduk et al., 2020; Trubilin et al., 2018).

The search for the optimal combination of market freedoms and mechanisms for regulating reproduction processes should be considered the most important function of state support in the economic mechanism of the agricultural sector. The complexity of management decision-making by government agencies on the use of state support measures for small businesses plays a significant role in affecting the living standards of the population and rising food prices and the level of inflation. Therefore, it is necessary to clarify methods for supporting decision-making management in the context of a highly dynamic external environment and determine the priority areas of state support for small agricultural businesses based on the goals of harmonizing the interests of the economy and society.

Research into the essence, role, and principles of state regulation of the national economy, including branches of the agricultural sector, was carried out by J.M. Keynes (1937), A.B. Laffer (2004), A.C. Pigou (1943), J.A. Schumpeter (2011), P.A.



Samuelson (1992), R.M. Solow (1956), M. Friedman (1953), etc.

Our research (Dvoryadkin et al., 1998; Gaiduk & Gaiduk, 2007; Gaiduk et al., 2010; Gaiduk et al., 2019) interprets the model of state regulation of agriculture reflected in Figure 1.

The basis of productive forces in the Krasnodar Territory is the agro-industrial, industrial, construction, fuel, and energy complexes. Being one of the most developed agro-industrial regions of the Russian Federation, the Krasnodar Territory plays a major role in ensuring the country's food security. Due to favorable climatic conditions and fertile soils, the region is among the economically developed regions of the Russian Federation.

Small forms in the agricultural sector are represented by personal subsidiary plots, individual entrepreneurs, small and micro agricultural enterprises, and peasant farms. Small forms of the agricultural sector produce a large volume of agricultural products, contribute to the development of agricultural areas, and create additional jobs.



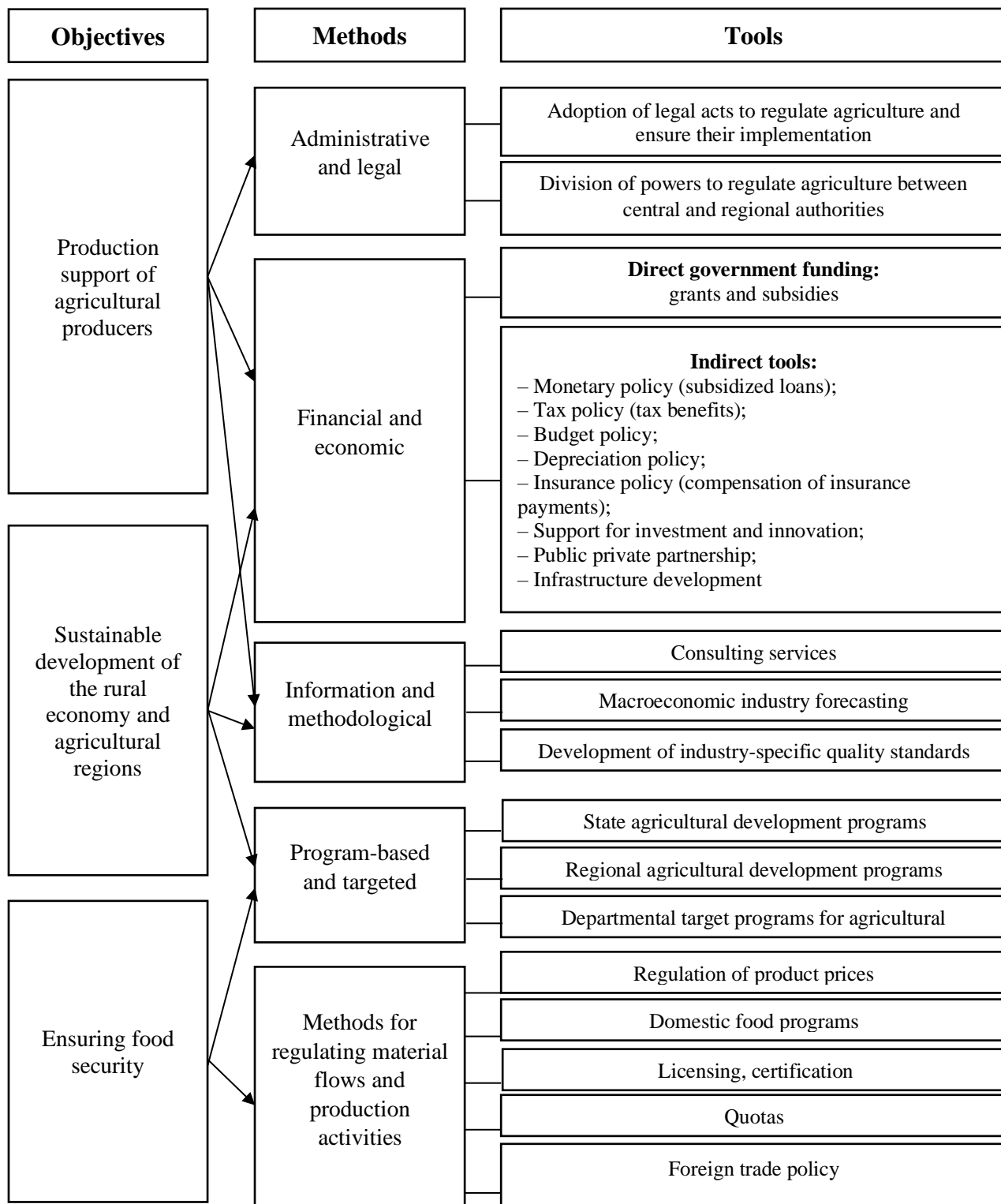


Figure 1 – Interpreted model of government regulation of agriculture

From 2010 to 2021, the share of peasant (farm) enterprises in grain production in the Krasnodar Territory increased from 24.4 to 34.7%, sugar beets from 9.1 to 13%, sunflower from 32 to 44.5%, livestock and poultry from 1.6 to 4%, and milk from 4.3 to 6.5% (Figure 2).



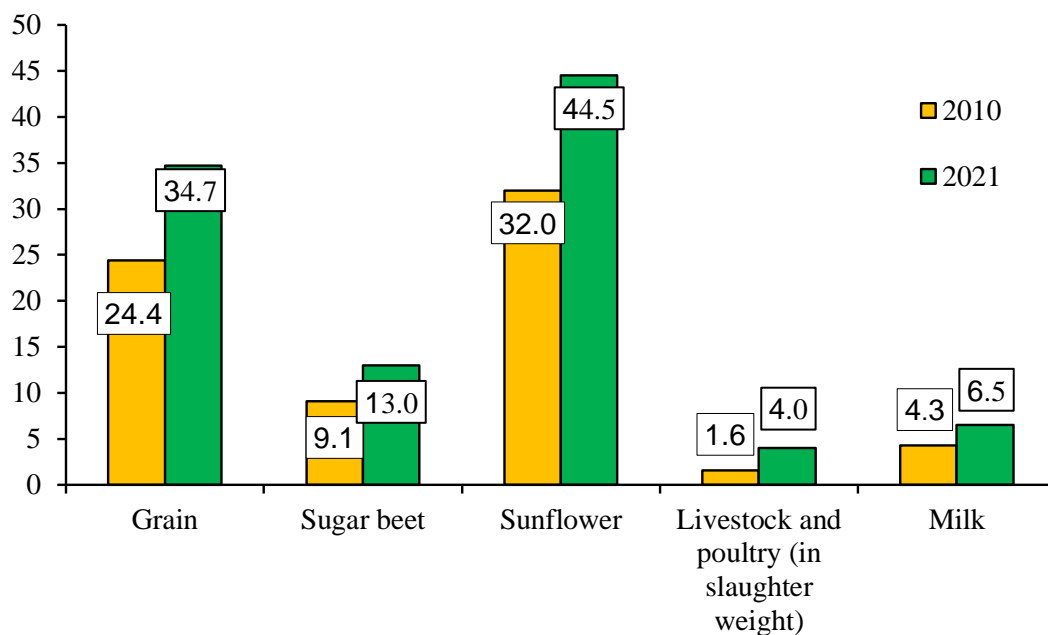


Figure 2 – Share of peasant (farm) households in agricultural production in the Krasnodar Territory

Source: *Upravlenie Federalnoi sluzhby gosudarstvennoi statistiki, n.d.*

Let us consider how the strengths and weaknesses of small agricultural businesses relate to the threats and opportunities in the agricultural market in a SWOT analysis matrix (Table 1).

When studying performance efficiency and state support for small businesses, one cannot overlook the COVID-19 pandemic which had a serious impact on the global and Russian economy in the form of the so-called black swan effect, as well as economic sanctions.

The reasons for the unsustainable development of small enterprises are as follows:

- The low level of resource availability (for example, an acute shortage of financial and management resources);
- The lack of ability to quickly respond to crises or force majeure.

Many small farm enterprises faced problems in the supply of spare parts, which led to failures in the prompt replacement of equipment and machinery. Preferential lending did not help such enterprises since banks issued loans for minimum amounts and terms of up to six months, and the production cycle in agriculture does not allow them to repay the loan during this time.

The problems of small business development in the agricultural sector and the development of agricultural territories are interconnected. Therefore, various support programs are used to solve the problems of rural development. Forms of state support for small businesses in the Krasnodar Territory include:

- Grant support for beginning farmers;
- Grant support for family livestock farms;
- Provision of subventions to the budgets of municipalities of the Krasnodar Territory for the implementation of certain state powers to support agricultural production.

Table 1 – Matrix of a SWOT analysis of the functioning of small agricultural businesses in the Krasnodar Territory

Strengths	Weaknesses
<ul style="list-style-type: none"> – Favorable climatic conditions for agricultural production; – Advantageous geographical location of the region; – Developed network of roads and railways; – Scientific base represented by research centers and educational institutions; – Favorable conditions for foreign economic activity; – Support measures from the state. 	<ul style="list-style-type: none"> – A risk factor for natural disasters; – Decrease in the fertility of cultivated soils; – Disruption of the technological cycle and agricultural technology; – Low motivation of employees; – Low investment attractiveness of agricultural sectors; – Depreciation of fixed assets at all stages of agricultural production; – Use of outdated technologies and equipment; – Volatility of production volumes and product quality due to reasons beyond the control of the manufacturer.
Opportunities	Threats
<ul style="list-style-type: none"> – Receiving subsidies from the state; – Increase in the volume of purchasing and collateral grain interventions; – Increase in the capacity of the logistics chain of the agri-food market; – Transition to the annual rhythm of sales of agricultural products; – Growth in the volume of investment subsidies; – Simplification of access to the exchange and transparency of exchange operations; – Use of economies of scale in agricultural production; – Re-equipment and renewal of fixed production assets using government support tools; – Increase in the motivation of market participants. 	<ul style="list-style-type: none"> – Volatility of prices for agricultural products; – Lack of financial resources for the purchase of fixed and working capital; – Disparity of market relations between its participants; – Decrease in financial indicators; – Decrease in the attractiveness of labor in the industry, which leads to a shortage of qualified personnel.



Grants for beginning farmers are provided on a competitive basis and in conformity with the requirements of the Federal Law “On the Development of Small- and Medium-Sized Entrepreneurship in the Russian Federation”. According to the provisions of the law, micro-enterprises registered in the rural areas of the Krasnodar Territory and whose activity does not exceed 24 months can apply for a grant.

When breeding cattle (both dairy and beef), the law provides a maximum grant amount. Firstly, the size of the grant should not exceed 3 million rubles. Secondly, grant funds can offset costs, but not more than 90%.

For other types of activities, there are also funding restrictions of up to 1.5 million rubles, but not more than 90% of costs. When providing grants, there are time restrictions. Thus, the grant funds shall be spent within a period of no more than 18 months, starting from the date the resources are received in the personal account of the beginning farmer.

The main goals of grant support for beginning farmers and family livestock farms in the Krasnodar Territory are shown in Figure 3.



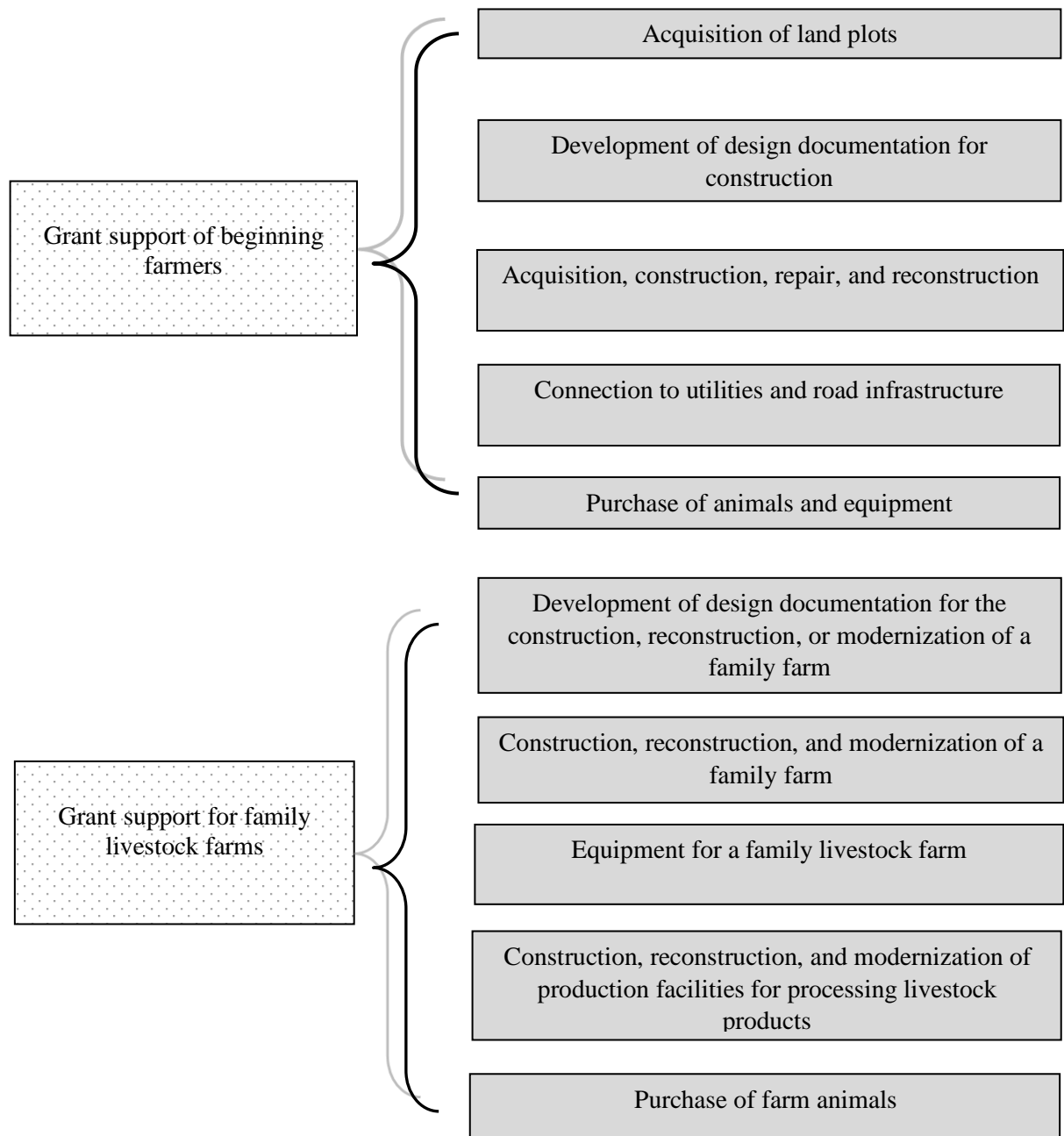


Figure 3 – Goals of grant support for beginning farmers and family livestock farms

To receive a grant for the acquisition of land plots, one should purchase a plot of agricultural land in the Krasnodar Territory. The development of design documentation for the construction or reconstruction of warehouses and production facilities should be related to the production, processing, and storage of agricultural products in the Krasnodar Territory. The objectives of the construction and acquisition of production and storage facilities should be connected to the production, processing, and storage of agricultural products. In addition, grant funds can be spent on the purchase of farm animals and agricultural machinery, equipment, and transport.



To receive grant support for family livestock farms, the grant should cover no more than 60% of the costs and be spent only on the purposes prescribed in the program. For example, the purchase of farm animals (except pigs) and poultry. The planned breeding stock of cattle should not exceed 300 heads and 500 conventional heads of sheep (goats). If a family livestock farm carries out other types of activities related to the manufacturing of agricultural products, the amount of the grant cannot exceed 21.6 million rubles (no more than 60% of costs).

Subventions to the budgets of municipalities of the Krasnodar Territory for the implementation of certain state powers to support agricultural production are provided to citizens living in the Krasnodar Territory and running personal subsidiary plots, peasant (farm) households, and individual entrepreneurs. According to the law, after submitting and registering an application with local authorities, the period for providing public services should be no more than 25 working days.

In Table 2, we consider the amount of government funding for the above-mentioned programs.

Table 2 – Amount of state financing of small (private) forms of business in the agricultural sector of the Krasnodar Territory, million rubles

Program name	2017	2018	2019	2020	Absolute deviation 2020 vs 2017, +/-	Relative deviation 2020 vs 2017, %
Grant support to beginning farmers	63.7	92	110.0	39.5	-24.2	62.0
Grant support for family livestock farms	155.5	197.4	212.4	92.1	-63.4	59.2
Providing subventions to the budgets of municipalities of the Krasnodar Territory for the implementation of certain state powers to support agricultural production	360.2	300	487.5	582.9	222.7	161.2

Sources: *Upravlenie Federalnoi sluzhby gosudarstvennoi statistiki, n.d.*

According to the calculations, we conclude that state financial support for small (private) forms of business in the agricultural sector of the Krasnodar Territory decreased significantly in 2020 compared to 2017 under the following programs:



– Grant support for beginning farmers amounted to 39.5 million rubles in 2020, which is 38% less than in 2017;

– Grant support for family livestock farms amounted to 92.1 million rubles in 2020, which is 40.8% less than in 2017.

As a result of the calculations given in Table 2, an increase in the subventions provided to the budgets of municipalities of the Krasnodar Territory for the implementation of certain state powers to support agricultural production was revealed. For example, it amounted to 582.9 million rubles in 2020, which is 61.8% higher compared to 2017.

To provide grants to peasant (farm) households, including individual entrepreneurs, 92.1 million rubles were provided for the development of family farms, i.e., 92.1 million rubles were disbursed, which is equivalent to 100% of the planned amount of funds.

As part of the state program of the Krasnodar Territory “Development of Agriculture and Regulation of Markets for Agricultural Products, Raw Materials, and Food”, the subprogram “Creation of a Support System for Farmers and Development of Rural Cooperation” is implemented.

This subprogram is designed for 2020-2024 and is implemented without division into stages.

The objective of the subprogram is to develop small- and medium-sized enterprises in the region’s agricultural sector.

The tasks of the subprogram are to improve mechanisms to support farmers and develop rural cooperation.

Here is a list of target indicators of the subprogram:

– The number of people involved in small- and medium-sized businesses operating in the field of agriculture, including through state support, within the framework of the regional project of the Krasnodar Territory “Creation of a Support System for Farmers and Development of Rural Cooperation”;

– The number of workers registered with the Pension Fund of the Russian Federation and the Social Insurance Fund of the Russian Federation and employed by peasant farms in the year they received their agrostartup grant;



– The number of accepted members of agricultural consumer cooperatives (except credit) from small- and medium-sized businesses, including personal subsidiary plots and peasant farms, in the year of provision of state support;

– The number of new small- and medium-sized businesses in agriculture, including peasant (farm) enterprises and agricultural consumer cooperatives.

The subprogram is financed from both the regional and federal budgets.

The resource support for the subprogram is substantiated in Table 3.

Table 3 – Justification of resource support for the subprogram “Creation of a Support System for Farmers and Development of Rural Cooperation”, thousand rubles

Sources of financing	2020	2021	2022	2023	2024
Federal budget	65,279.9	118,350	39,132.8	39,132.8	39,132.8
Regional budget	2,720.1	4,931.4	1,630.7	1,630.7	1,630.7
Total	68,000	123,281.4	40,763.5	40,763.5	40,763.5

Source: *Upravlenie Federalnoi sluzhby gosudarstvennoi statistiki, n.d.*

Within the framework of the subprogram, subsidies are provided at the expense of the regional budget, except for subsidies from the federal budget, to legal entities (except for subsidies to state (municipal) institutions) and individual entrepreneurs and individual producers of goods, works, or services for the purpose of financial support (reimbursement) of costs in connection with the production of goods, performance of work, or provision of services. The provision of these subsidies is approved by orders of the Ministry of Agriculture and Food Processing Industry of the Krasnodar Territory after agreement with the Ministry of Finance of the Krasnodar Territory unless otherwise established by the federal legislation.

In Table 4, we present the features of financing the subprogram “Creation of a Support System for Farmers and Development of Rural Cooperation” in the context of planned activities.



Table 4 – Features of financing the subprogram “Creation of a Support System for Farmers and Development of Rural Cooperation” in the context of planned activities, thousand rubles

Enterprise name	Year	Federal budget	Regional budget
Providing grants to peasant (farm) enterprises for the implementation of agrostartups	2020	63,020.1	2,625.9
	2021	105,041.4	4,376.8
	2022	34,577.4	1,440.8
	2023	34,577.4	1,440.8
	2024	34,577.4	1,440.8
	Total: 283,118.8		
Providing subsidies to agricultural consumer cooperatives to reimburse some costs of developing the material and technical base	2020	2,259.8	94.2
	2021	10,308.6	429.6
	2022	1,555.4	64.9
	2023	1,555.4	64.9
	2024	1,555.4	64.9
	Total: 17,953.1		
Providing subsidies to the state budgetary institution of the Krasnodar Territory performing the functions of a center of competence in the Krasnodar Territory to reimburse some costs of information support for agricultural cooperation	2020	0	0
	2021	3,000.0	125.0
	2022	3,000.0	125.0
	2023	3,000.0	125.0
	2024	3,000.0	125.0
	Total: 12,500.0		

Source: *Upravlenie Federalnoi sluzhby gosudarstvennoi statistiki, n.d.*

Activities within the regional project of the Krasnodar Territory “Creation of a Support System for Farmers and Development of Rural Cooperation” include:

- The provision of grants to peasant farms for the implementation of the Agrostartup project within the framework of the regional project of the Krasnodar Territory “Creation of a Support System for Farmers and Development of Rural Cooperation”, i.e., 65.6 million rubles were provided for the current year, with 65.6 million rubles (100%) disbursed.

581 people were involved in small- and medium-sized agricultural businesses, including at the expense of state support, within the framework of the regional project of the Krasnodar Territory “Creation of a Support System for Farmers and Development of Rural Cooperation”.

113 workers were registered with the Pension Fund of the Russian Federation and the Social Insurance Fund of the Russian Federation and employed by peasant farms in the year of receiving the Agrostartup grants.

104 new small- and medium-sized businesses in agriculture, including peasant (farm) enterprises and agricultural consumer cooperatives, were established as of the reporting date.



As part of state support, a preferential lending program is being implemented in the Krasnodar Territory. This program applies to any agricultural production entities, including small forms of business in this industry.

Preferential loans for small businesses in the agricultural sector can be obtained for:

- The acquisition of new agricultural machinery (regardless of the country of origin).

Currently, preferential lending under the above-mentioned program is provided by four Russian banks: PAO “Sberbank”, AO “Rosselkhozbank”, PAO “Bank FK Otkritie”, and AO “Gazprombank”. AO “Alfa Bank”, AO “Raiffeisenbank”, PAO “VTB Bank”, and PAO “Rosbank” can be also included in this program. The bank’s interest rate is 10%, where the key rate (subsidy) is 5.4% and the loan rate for small businesses in the agricultural sector is 4.6%.

To receive a preferential short-term loan (up to one year) in the last three years of continuous activity of small (private) agricultural businesses, the amount of revenue must have a cumulative total of 3%. To receive a preferential long-term investment loan (2-15 years), the value of the efficiency coefficient of small agricultural businesses must be at least 0.05 at the time of submitting a loan application.

In Figure 4, we present some elements of the mechanism of state support for the development of small agricultural businesses.

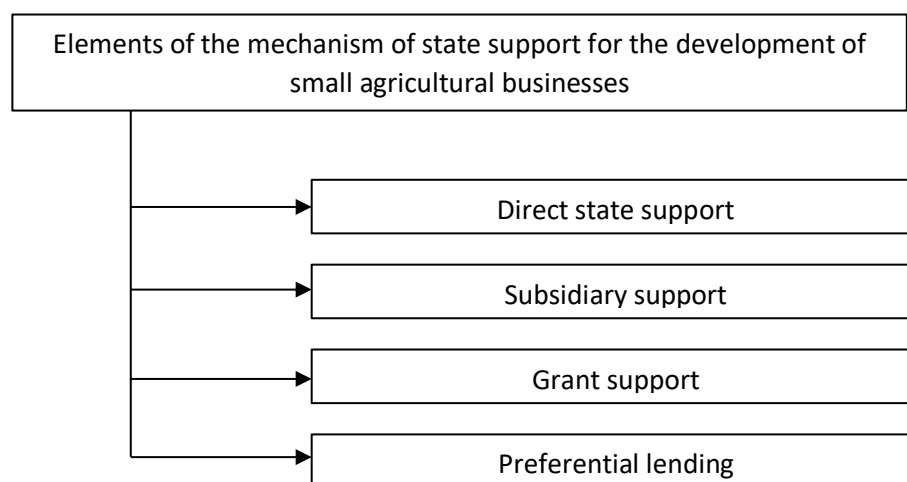


Figure 4 – Elements of the mechanism of state support for the development of small agricultural businesses

In the course of the research, we showed that 51% of peasant (farm) households received no subsidies in 2019-2020. The existing volume of support does



not have a significant impact on efficiency indicators, except for 120 farms with support volumes exceeding 25% of production costs. Even for this group of farms, the level of profitability does not exceed 8%, which does not allow for expanded reproduction.

Based on the identified problems in the functioning of small agricultural businesses under the conditions of sanctions, we deem it necessary to include the elements presented in Figure 5 in the mechanism of state support for these production entities.

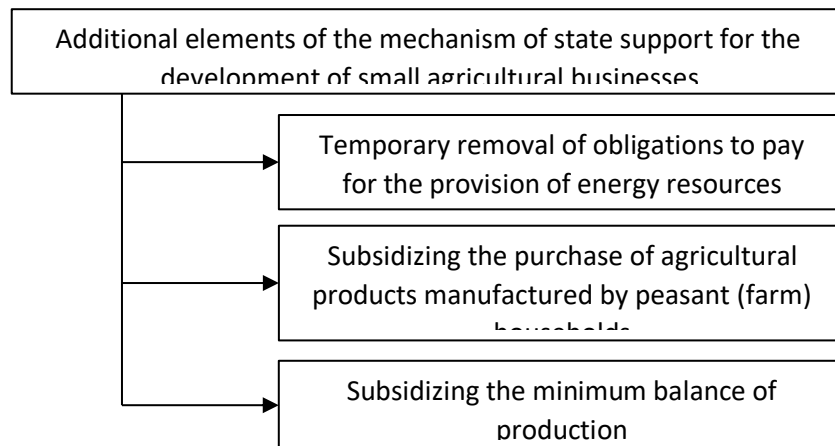


Figure 5 – Additional elements of the mechanism of state support for the development of small agricultural businesses

As a result of the temporary removal of obligations to pay, for example, electricity or rent, peasant farms with up to 100 employees will get an opportunity to develop a system of subsidies and grants.

Subsidizing the purchase of agricultural products manufactured by peasant (farm) households will allow them to use the proceeds for the development of small forms of farming in the agricultural sector within the country and maintain the competitiveness of the market.

Subsidizing the minimum balance of manufactured products will allow procuring products with a small reserve, which, in the event of unforeseen situations, will not disrupt the supply of products to the market.

CONCLUSIONS

Small forms of agricultural business are represented by personal subsidiary plots, individual entrepreneurs, small and micro agricultural enterprises, and peasant farms.



Small agricultural businesses are characterized by high labor motivation, market adaptability, and sustainability. Based on the traditional institution of the family, they involve a large number of the rural population in agricultural production, while not only increasing the level of their own incomes but also having a beneficial effect on the sustainability of rural areas and the growth of the country's food potential.

The results of the analysis prove that small forms of entrepreneurship increase the volume of agricultural production and create additional jobs.

To solve the problems of rural development, there are various programs to support small businesses:

- Grant support for beginning farmers;
- Grant support for family livestock farms;
- Provision of subventions to the budgets of municipalities of the Krasnodar Territory for the implementation of certain state powers to support agricultural production.

As part of the state support, a program of preferential lending is implemented in the Krasnodar Territory, including for small businesses.

Based on the analysis of existing institutional mechanisms of state support for small farms in the agricultural sector, the feasibility of using its additional forms is substantiated: temporarily removing obligations to pay for the provision of energy resources, subsidizing the purchase of agricultural products produced by domestic peasant farms, and subsidizing the minimum balance of manufactured products, which in the context of growing economic sanctions will allow small agricultural businesses to reduce the shortage of financial resources and quickly respond to force majeure.

REFERENCES

Dvoryadkin, N., Kozachenko, V., & Gaiduk, V. I. (1998). Gosudarstvennoe regulirovanie selskokhozyaistvennogo proizvodstva za rubezhom i v Rossii [State regulation of agricultural production abroad and in Russia]. *Mezhdunarodnyi selskokhozyaistvennyi zhurnal*, 4, 10-15.

Ermakov, A. A. (2020). *Gosudarstvennaya podderzhka razvitiya malogo i srednego biznesa v APK* [State support for the development of small- and medium-sized businesses in the agro-industrial complex]: Monograph. Krasnodar: KubGAU, 131 p.

Friedman, M. (1953). The effects of full employment policy on economic stability: A formal analysis. In M. Friedman (Ed.), *Essays in positive economics* (pp. 117-132). Chicago: University of Chicago Press.



- Gaiduk, V. I., & Gaiduk, N. V. (2007). Gosudarstvennaya podderzhka razvitiya APK v Krasnodarskom krae [State support for the development of the agro-industrial complex in the Krasnodar Territory]. *Mezhdunarodnyi selskokhozyaistvennyi zhurnal*, 1, 57-59.
- Gaiduk, V. I., Khalyapin, A. A., Zadneprovskii, I. V., & Gaiduk, N. V. (2010). Sovershenstvovanie instrumentov gosudarstvennogo ekonomicheskogo regulirovaniya APK Krasnodarskogo kraia [Improving the instruments of state economic regulation of the agro-industrial complex of the Krasnodar Territory]. *Trudy Kubanskogo gosudarstvennogo agrarnogo universiteta*, 25, 19-26.
- Gaiduk, V. I., Kovalchuk, M. D., Ermakov, A. A., & Kamysheva, S. Yu. (2020). Risks of interaction between government bodies and business structures in the Russian agricultural sector. *Revista Inclusiones*, 7(S2-3), 188-205.
- Gaiduk, V. I., Nikiforova, Yu. A., & Gladkii, S. V. (2019). Opyt gosudarstvennogo regulirovaniya selskokhozyaistvennogo proizvodstva v Evrosoyuze [Experience of state regulation of agricultural production in the European Union]. *Mezhdunarodnyi selskokhozyaistvennyi zhurnal*, 1(367), 63-66.
- Keynes, J. M. (1937). The general theory of employment. *The Quarterly Journal of Economics*, 51(2), 209-223.
- Laffer, A. B. (2004). *Victims of the Chilean miracle: Workers and neoliberalism in the Pinochet era, 1973-2002*. Durham; London: Duke University Press Books, 448 p.
- Pigou, A. C. (1943). The classical stationary state. *Economic Journal*, 53(212), 343-351.
- Samuelson, P. (1992). *Ekonomika [Economics]*. Vol. 1. Moscow: MGP "Algon".
- Schumpeter, J. A. (2011). *Ten great economists: From Marx to Keynes*. Tokyo: McGraw-Hill, 400 p.
- Solow, R. M. (1956). Contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70(1), 65-94.
- Trubilin, A. I., Gayduk, V. I., Belkina, E. N., Kalitko, S. A., & Gorokhova, A. E. (2017). Infrastructure of the regional agri-food market: Peculiarities of functioning and methods of improvement. *Espacios*, 38(33), 41.
- Upravlenie Federalnoi sluzhby gosudarstvennoi statistiki po Krasnodarskomu kraiu i Respublike Adygeya [Department of the Federal State Statistics Service for the Krasnodar Territory and the Republic of Adygea]. (n.d.). <https://krsdstat.gks.ru>

