Factors increasing the effectiveness of state support in agriculture

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Abstract. In the context of limited budgetary funds to support agriculture, the scientific substantiation of the volume of state support for agriculture, the development of recommendations for the adaptation of areas and mechanisms for providing subsidies to the modern conditions of the economic mechanism of the industry are necessary. It has been established that the choice of directions and mechanisms of state support, as well as the rationale for the amount of benefits that should be provided to economic entities both in the form of direct budget support and other benefits in the framework of indirect support in the form of benefits and other preferences are the main factors determining the effectiveness of budgetary support of agriculture. The main shortcomings of the existing directions and mechanisms of state support for agriculture are revealed: insufficient budget allocations allocated to support agriculture, annual changes in the conditions for providing state support, the use of inefficient mechanisms for distributing subsidies from the federal budget to budgets of constituent entities of the Russian Federation. Proposals are formulated to substantiate the amount of budget allocations allocated for the implementation of program activities, based on ensuring guaranteed profitability of producers. Using the example of dairy cattle breeding, the volume is calculated for the budget financing of the industry in 2019. The need is justified by the structural modernization of the industry, the expansion of measures to stimulate demand for food products.

In most countries, government support has a crucial role in the implementation of the state agri-food policy. According to the West European economist E. S. Rainert, the most efficient in the world American and Western European agriculture will not survive without subsidies and protectionism [1, p. 180]. Academician Paptsov A. G. notes that due to socio-economic conditions, agriculture should remain the object of state protectionist policies, while government support is the inevitable compensation for objective losses of the agrarian economy [2].

In modern conditions, despite the large number of scientific publications on state support of the agro-industrial complex and the implementation of the program principle of management of the industry, a number of aspects of state support for the industry are debatable, have an insufficient level of scientific and methodological elaboration and require in-depth theoretical and practical research. The budget deficit requires scientific substantiation of the volume of state support, adaptation of areas...
and mechanisms for providing subsidies to the modern conditions of the economic mechanism of the industry, if necessary, to achieve indicators of the state program.

In our opinion, the main factors determining the attainability of the stated goals of the state program and the effectiveness of budget expenditures on state support for agriculture are the choice of directions and mechanisms of state support, as well as the rationale for the amount of benefits that should be provided to economic entities in the form of direct budget support, and other benefits in the framework of indirect support in the form of benefits and other preferences (Figure 1).

**Figure 1.** Factors determining the effectiveness of state support.

Direct support for agricultural producers, realized in the form of grants for reimbursement of costs incurred or financial security costs continues to be the most common practice in the state regulation of
agriculture in the Russian Federation. At the same time, the directions and mechanisms of state support for agriculture, implemented as part of the State Program for the Development of Agriculture and Regulation of Agricultural Products, Raw Materials and Food Markets for 2013-2020 (further - the State Program) continue to be ineffective and do not ensure the sustainable development of the industry.

The main disadvantages of the existing mechanisms of budget support for agriculture include:

1. **Insufficient budget allocations to support agriculture.** In the expenditures of the federal budget of the Russian Federation, support for agriculture in 2017 was 1.3%, while in 1990 it was 15.0% [3]. At the same time, in the Republic of Belarus the share of expenditures on agriculture in the total expenditures of the consolidated budget amounts to 7.5%, in Kazakhstan - 4.6% [4, p. 115]. Despite this, the federal budget expenditures on the implementation of the State Program measures (as amended on March 31, 2017) were reduced compared with the 2014 edition of the program for 2017-2020, by 510.3 billion rubles, or 38.9%. In the edited program of December 13, 2017, the federal budget expenditures for the implementation of program activities were increased, but remained below the original version of the program by 369.8 billion rubles or 28.2% [5].

In order to halt the processes of degradation in agriculture and form a vector of sustainable development of the industry, according to estimates of authoritative experts, it is necessary to allocate at least 1 trillion rubles from the federal budget and bring state support to 10-15% of the budget expenditure. This corresponds to the level of support for agriculture in countries such as Sweden (allocates $ 6 billion with a significantly smaller cultivated area), Japan (allocates $ 64 billion), China and the European Union (with a comparable cultivated area allocating 147 and 108 billion dollars, respectively) [3].

Implemented government support measures are not always supported by sufficient resource provision. In particular, from January 1, 2017, the mechanism of concessional lending began to operate, in accordance with which loans to agricultural producers are provided at an interest rate not exceeding 5% per annum. In 2017, 25.375 billion rubles were provided to support concessional lending under the State Program for 2013-2020 (federal law of July 1, 2017 No. 157-FZ increased funding by 4.080 billion rubles). At the same time, the stated need for concessional loans repeatedly exceeded the allocated subsidy limit from the federal budget for their provision; therefore, concessional loans were available only for a small part of producers, while large organizations attracting significant amounts of loans and having a good credit history turned out to be favorable terms. The high demand for concessional lending requires an increase in the amount of subsidies allocated from the federal budget to a level that ensures the complete satisfaction of the soft loans.

2. **The annual change of directions and mechanisms of state support for agriculture makes government support unpredictable, increases the risks of implementing investment projects in the field of agriculture.** The most serious changes in the state support system under the State Program took place on January 1, 2017 and are associated with the consolidation of subsidies, as a result of which the number of intergovernmental transfers was reduced from 54 to 7. At the same time, the practice of implementing new directions and mechanisms of state support, along with indisputable advantages associated with a significant expansion of the powers of the constituent entities of the Russian Federation in determining directions, conditions and procedures for granting subsidies, revealed a number of serious flaws. In particular:

- due to the fact that a constituent entity of the Russian Federation independently establishes and changes directions, mechanisms and subsidy rates, the predictability of state support decreases, as a result, access to government support may be artificially limited for a certain part of agricultural producers;
- at the federal level, the ability to identify priority areas of funding that are of general federal importance in ensuring the country's food security, solving import substitution tasks has significantly decreased;
the establishment of regional subsidy rates can lead to a strong interregional differentiation of the amount of support, which will make it difficult to form a single agri-food market;

these or other areas of state support can be reduced to a minimum. In particular, in 2017 this happened with the support of insurance.

3. The use of inefficient mechanisms for the distribution of subsidies from the federal budget to the budgets of the constituent entities of the Russian Federation, which do not take into account the level of implementation of indicators of the State Program and the dynamics of agricultural production in the region, leads to differentiation of the constituent entities of the Russian Federation and increasing polarity in the technological level of production and competitiveness of agricultural producers. In particular, with the reduction in 2018 of the allocations from the federal budget for the provision of subsidies for increasing productivity in dairy cattle breeding by 1.3% compared with 2017 to certain subjects of the Russian Federation that did not fulfill the indicators of the State Milk Production Program and reduced production volumes milk in 2017 compared to 2016, budget allocations in 2018 increased compared to 2017. Thus, the amount of subsidies for increasing productivity in the dairy cattle breeding in the Republic of Crimea in 2018 increased by 94.9% compared to 2017, while the indicator of the State Milk Production Program in farms of all categories was implemented by 99.5%. Milk production in farms of all categories in 2017 decreased by 0.4% compared to 2016. At the same time, the Leningrad Region, which exceeded the indicator of the State Milk Production Program in farms of all categories by 6.9% and increased milk production in 2017 by 2.8% compared with 2016, the limit of increasing productivity in dairy cattle breeding in 2018 decreased by 17.5% (if compared to 2017).

The mechanisms of indirect support are not widely used in the practice of state regulation of agriculture in the Russian Federation.

To increase the profitability of agricultural producers in the Russian Federation, a preferential tax regime for agricultural production is provided, which includes a special tax regime, including an unified agricultural tax, a preferential rate for corporate income tax (agricultural producers who are not payers of the unified agricultural tax at the rate of 0%), a preferential tax rate on value added in the sale of agricultural products (rate of 10%), incomes of individuals received in the form of grants for the creation and development of a peasant farm, for the development of a family livestock farm, as well as subsidies received by heads of peasant (farmer) farms are exempted from taxation.

At the same time, despite the preferential tax treatment of agricultural producers, the lowest tax burden on agricultural organizations among the countries belonging to the EAEU: in Kyrgyzstan and Armenia is from 1 to 1.6%, in Kazakhstan, in Belarus - 10.3%, in Russia, 12% [4, p. 166].

In this regard, in order to increase the investment attractiveness of the industry, we consider it appropriate, within the framework of the agrarian policy being implemented, to continue the consistent work on simplifying taxation and reducing the tax burden on agricultural producers, including through the provision of “point-like” tax benefits, differentiation of tax rates by type of activity, the introduction of tax holidays for producers implementing new investment projects.

Significant prospects for stimulating the development of agriculture have other indirect support mechanisms. In particular, in the area of improving agricultural insurance, it is necessary to reduce the amount of insurance premiums by reducing the size of insurance tariffs, expanding the line of insurance products, including income insurance, introducing state regulation of insurance payments.

The main strategic task of the economic mechanism of agricultural development is the improvement of price relations, which are currently characterized by a deepening disparity in prices for agricultural products and goods and services purchased by agricultural producers, reducing the share of agricultural producers in the retail price of food products. Thus, in accordance with the data of Rosstat in the Russian Federation, the price of milk sold by agricultural organizations in 2017 increased 6.7 times compared with 2000, at the same time, in the analyzed period, prices for universal general purpose tractors increased by 18.1 times, electric power – by 15.5 times, machines for preparing feed – by 14.0 times, brick – by 12.5 times, natural gas – 14.9 times, cement – 7.7 times,
diesel fuel – 7.1 times, and motor gasoline – 6.9 times. Operational efficiency of agricultural production as a result of price disparity decreases leads to investments increases. In addition, the in-product disparity in prices for milk and dairy products continues to deepen, as a result of which the share of milk producers in the retail price is reduced.

In the conditions of unfavorable market conditions, price disparity, the state support system should ensure guaranteed profitability for agricultural producers. Many foreign countries adhere to this principle, including the United States and the European Union countries, which use various mechanisms for regulating the income of producers. In particular, in the USA, minimum prices for milk are set by a special service of the Federal Milk Marketing Order (FMMO), which was established in 1937 under the USDA to regulate pricing in the milk market. Pricing for milk in the United States is formed by 11 zones, and the participants in the milk market of a particular state decide on participation in the pricing regulation system (minimum price calculation). Depending on the direction of further use, milk in the USA is divided into 4 classes: class I – for the production of drinking milk; class II – for the production of ice cream, desserts; class III – for the production of cheese; class IV – for the production of butter and milk powder [6]. The minimum price is set only for milk class I, and it is usually higher than for other classes. The FMMO calculates the minimum price for class I milk every month in the opposite direction, from the retail price of dairy products. Then the weighted average price is calculated for all classes of milk.

Due to the imbalance of the economic mechanism of the industry, the disparity in prices for agricultural products and goods and services purchased by agricultural producers, the lack of state regulation of prices for agricultural products, government support partially compensates for the leaching of working capital from agricultural producers. In order to increase the profitability of agricultural producers, the strategic objectives of improving price relations in the agro-industrial complex are: an increase in the share of agricultural producers in the consumer price of food products; the introduction of minimum guaranteed prices for agricultural products; the establishment of maximum permissible trade margins on food products; the introduction of an income support mechanism for agricultural producers.

Issues of substantiation of resource support of program activities remain insufficiently developed in the framework of the program-target management method of the agro-industrial complex. The budget allocations allocated to support agriculture and individual activities do not have a scientific and methodological justification from the point of view of ensuring the achievement of the goals and objectives of the state program, and are determined only on the basis of budget possibilities. As a result, the insignificant amount of the subsidy, which does not motivate the agricultural producer to achieve the performance indicators for the provision of subsidies, leads to inefficient use of budget funds. The subsidy for increasing productivity in dairy cattle breeding is a convincing confirmation of this thesis. So, the amount of allocations from the federal budget for the provision of subsidies for increasing productivity in dairy cattle breeding in the Russian Federation in 2017 was reduced (if compared to 2016) by 37% and amounted to 8.1 billion rubles. Thus, based on 1 kg of milk sold by agricultural organizations and peasant farms, the subsidy for increasing the productivity in dairy cattle breeding in 2017 was 50 kopecks, which is only 2.0% of the average selling price of milk [5]. A small subsidy per 1 kg of milk does not have a tangible impact on the efficiency of its production; therefore, it does not contribute to increasing the investment attractiveness of the industry and does not motivate business entities to increase the number of cows and milk production.

In our opinion, the main criteria for justifying the amount of budget allocations allocated for the implementation of program activities should be the rate of return on invested capital, providing an economically reasonable payback period for investments, and the level of profitability of sales of products necessary for expanded reproduction in the industry. At the same time, the amount of direct support at the expense of budget funds should be calculated taking into account the estimated volume of benefits received by agricultural producers as a result of the provision of benefits and other preferences to producers as part of indirect state support.
So, the current price of selling milk of 25 rubles per 1 kg and the total cost price of 1 kg of milk is 22.5 rubles. The level of profitability of selling milk is 11.0%. To ensure reproduction in the industry, it is necessary to increase the level of profitability of selling milk to 25%, which at the current level of selling prices for milk can be achieved by paying a subsidy of 3.10 rubles per 1 kg of milk. Thus, based on the planned production in the Russian Federation of 31,561 thousand tons of milk in 2019, the required amount of state support for dairy cattle breeding should reach 97.8 billion rubles in 2019. If we conditionally accept the size of the benefits received by milk producers as a result of the provision of privileges and other preferences within the framework of indirect state support, in the amount of 24 billion rubles, in 2019 the budget financing of the industry should be 73.8 billion rubles (97.8 billion rubles – 24 billion rubles), while the allocations from the federal budget for the provision of subsidies for increasing productivity in dairy cattle breeding amounted to 7.9 billion rubles in 2018.

Improving the effectiveness of state support for agriculture is inextricably linked with the need for structural modernization of the industry. In particular, even an increase in the volume of state support for dairy cattle breeding within the framework of the existing structure of the dairy-food subcomplex, including many production units that are separated organizationally, technically and technologically, may not produce a synergistic effect. The experience of a number of countries confirms the effectiveness of the organization of the dairy business on a cooperative basis. The United States has 9.3 million cows and produces almost 100 million tons of milk, while the number of cows is contained on more than 40 thousand dairy farms ranging in size from 2 cows to tens of thousands. The processing industry is represented by more than 2 thousand dairies. Cooperatives are the basis of the US dairy subcomplex, outside of which it is quite difficult for independent milk producers and processors to do business and compete with large cooperatives. A total of 132 cooperatives operate in the United States and produce about 84% of all milk. For example, the Dairy Farmers of America, Inc. (DFA) united 7,711 members producing 17.9 million tons of milk. There are 4,662 members producing 5.0 million tons of milk in the Farm First Dairy Cooperative [7].

In terms of milk consumption, the Russian Federation lags far behind European countries and does not provide a rational rate of consumption of milk and dairy products: in 2017, the consumption of milk and dairy products per capita was 231 kg with a rational consumption rate of 325 kg. Thus, to ensure a rational rate of consumption of milk and dairy products at the expense of its own production, the volume of milk production in the Russian Federation should be 47.7 million tons per year, which is 16.5 million tons higher than the actual milk production in 2017.

At the same time, the task of increasing the volume of milk production is aggravated by a decrease in consumer demand for food products as a result of a reduction in real disposable incomes of the population, which decreased by almost 12% in 2015-2017, while the demand for food products decreased by 13% [8, p. 13].

In conditions of low solvency of the population, the task of increasing milk production may not be achieved if the tools of state support are aimed only at increasing production in the absence of measures to stimulate demand for milk and dairy products and expand markets for products. In this regard, demand stimulation programs are widely used abroad. In particular, more than half of the agrarian budget in the USA goes to food assistance to low-income groups (Supplemental Nutrition Assistance Program), free school meals (The National School Lunch Program), and nutrition for women, babies and children (The Special Supplemental Nutrition Program for Women, Infants and Children). Good nutrition education and research on healthy nutrition is also funded from the budget [9].

International experience in promoting the consumption of milk and dairy products should be more widely used in the Russian Federation, including through the implementation of domestic food assistance programs, the development of a social nutrition system, and programs promoting the consumption of milk and dairy products (by analogy with the programs “Three dairy products per day”, “Milk for harm”, “School milk”). The relevance of this direction of state support to the industry is increasing due to its inclusion in the measures of the “green basket”.
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