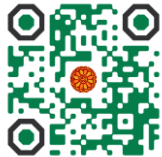




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A FOCUS ON FORMATION OF FINANCIAL RESOURCES OF AGRICULTURAL ORGANIZATIONS, RUSSIA

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ABSTRACT

Financial resources always occupy an important place in the economic mechanism of enterprises, while being a source of coverage, both current costs and purchased fixed assets. At the same time, for a more dynamic development of agriculture, there are not enough financial resources. There are several reasons for that. On the one hand, the growth of own sources is limited by the disparity of prices for the products sold, on the other hand, the availability and low cost of credit resources have not been ensured yet. State support, as an attracted source of financing, occupies a small share in the structure of financing sources of agricultural organizations. The current system of withdrawal of part of the profits due to the disparity of prices for products sold and purchased means of production limit significantly the reproductive potential of agricultural organizations. Despite the positive changes the current system of lending also does not contribute to the development of the reproductive function of agricultural organizations, not to mention the creation of new industries. In the developed countries of the world, credit issues contribute to both the availability of credit resources and the cheapening of the cost of finished products. It is obvious that in this regard, it is necessary to compensate fully the cost of credit resources by the state, increase support amount and availability.

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1. INTRODUCTION

Reforms in the agroindustrial complex of the Russian Federation are in accordance with the adopted federal legal documents and regional programs of agricultural development. The result of an active agrifood policy was an increase in the value and amount of gross agricultural output, an increase in the export potential of the industry. At the same time, the products produced could be cheaper and the products would be more competitive if the state took a more active part in the

formation of the cost of financing sources of investments in agricultural production. In modern conditions, such participation is limited by compensatory measures on attracted credit resources. Despite the implemented measures, the cost of credit resources affects largely the increase in creditor debt of agricultural producers [3–10].

Financial resources always occupy an important place in the organizational and economic mechanism of management, and the efficiency of agricultural production depended on their structure and cost. In the developed countries of the world, considerable attention is paid to this issue, while focusing significant efforts on the availability and cost of credit resources, conditions for refinancing profits, creating other conditions for the successful functioning of agricultural production.

In Russia, a multi-layered agrarian economy is still being formed, while the state has practically no influence on the structure of financial resources and their cost. In fact, their cost is formed spontaneously under the influence of price and organizational factors. This situation does not contribute to more dynamic and systematic development of agricultural production, the creation of new workers, whom the agricultural economy need now. And in general, in modern conditions, the state is not focused on reducing the cost of financial resources of agricultural organizations, which ultimately has a negative impact on the purchasing power of the population.

2. METHODS AND MATERIALS

The paper used the system, comparative, economic-mathematical, economic-statistical and other research methods. Federal laws, decrees of the President of the Russian Federation, resolutions of the Government of the Russian Federation, published works of research institutions of the Russian Academy of Sciences, statistical materials at the federal and regional levels were used as materials.

3. RESEARCH RESULTS

In 2010, agriculture produced a gross output of 2.6 trillion rubles, in 2017 – 5.1 trillion already. This was largely due to the creation of conditions for the effective functioning of agriculture, including a favorable investment climate and an increasing level of state support. The volume of investments in agriculture over the past 7 years has increased by 36%. One ruble of investments in agriculture brings from 8 to 12 rubles of the gross output value, and from 11 to 60 kopecks of profit. In modern conditions, agriculture is a beneficial highly profitable business. It should be noted that the inflow of investments in different years varies, which is largely due to foreign policy factors, such as world crises, sanctions policy, etc. During the analyzed period, the yield of grain crops increased by 1.6 times, sugar beet by 1.8 times, sunflower by 1.5 times, milk yield per feed cow increased by 35.1%, and this is not the limit. There is a need for new investments and innovations. The net financial result of agricultural organizations increased by 4.1 times, and the level of profitability and return on assets – by 1.8 times. The profitability of agricultural production in 2017 was 16%, and the return on assets was 5.4%. At the same time, if we compare the profit amount with the amount of state support, it turns out that the level of profitability is comparable to zero. Nevertheless, in this regard, there is a positive, but not a turning point trend yet. In 2010, the amount of state support was 107.3 billion rubles, profit – 61 billion rubles, in 2014 the amount of state support was 186.6 billion rubles, profit – 160.9 billion rubles, in 2016 the amount of state support was 218.1 billion rubles, profit –

246.8 billion rubles, in 2017 the amount of state support was 233.8 billion rubles, profit – 246.9 billion rubles. Over the past two years, the profit of agricultural producers is greater than the amount of state support, and this despite the fact that in agriculture there is a disparity in prices for products sold. A significant part of the profits is still received by processing enterprises and trade.

Table 1: The main production and economic indicators of agricultural organizations in Russia [1]

Indicators	Years						2017 to 2010 i %
	2010	2013	2014	2015	2016	2017	
Gross output, billion rubles	2587.8	3687.1	4319.1	5164.9	5119.2	5119.9	by 2 times
The arable land area, million ha	75.2	74.9	78.5	79.3	79.3	80.0	106.7
Investments in fixed capital - total, billion rubles	303.6	487.7	510.3	505.8	611.2	412.5	135.9
State support from the federal budget, billion rubles	107.3		186.6	222.3	218.1	233.8	by 2.2 times
Investments per 1 ha of arable land, RUB	1427	6511	6499	6378	77.9	5156	by 3.6 times
Gross output per 1 ha of arable land, thousand rubles	34412	49227	55020	65131	64555	63999	by 1.9 times
Received gross output for 1 investment ruble, RUB	8.52	7.56	8.46	10.21	8.37	12.41	145.7
State support from the federal budget for 1 ha of arable land, RUB	1427		2377	2803	2750	2923	by 2 times
The profits on 1 investment ruble, RUB	0.20	0.11	0.32	0.51	0.40	0.60	by 3 times
Yield c/ha: grain and bean	18.3	22	24.1	23.7	26.2	29.5	by 1.6 times
sugar beet	241	442.1	370.1	387.8	470.4	442.1	by 1.8 times
sunflower seed	9.6	14.5	13.1	14.2	15.1	14.5	151.0
Milk yield per 1 feed cow, kg	4189	4519	4841	5140	5370	5660	135.1
Net financial result, billion rubles	61.0	51.6	160.9	256.8	246.8	246.9	by 4.1 times
The level of profitability taking into account state support, %	9.1	5.2	17.4	20.7	15.7	16.0	by 1.8 times
Return on assets, %	2.9	1.7	4.9	6.9	6.0	5.4	by 1.8 times

In modern conditions processing enterprises use the following advantages:

1. Monopoly position in the market of purchase of agricultural products and raw materials. Despite the presence of Antimonopoly legislation, the financial condition of agricultural organizations depends on the price set by processing organizations. In this case, it seems to us that direct state regulation of pricing for purchased agricultural raw materials and products is necessary.

2. The effect of the maximum number of consumers. The essence of the effect of the maximum number of consumers is the mandatory daily satisfaction of needs for finished food products from wholesale and retail consumers, which is explained by the physiological needs of the person. In the modern agricultural economy, this effect is inherent in trade and processing organizations, as they offer consumers a ready-made product, while the agricultural producer sells raw materials to a limited number of processing enterprises that have the ability to collude about the price.

The implementation of the above advantages determines a stable part of the profitable food industry enterprises with a high share of profits and the disparity of relations in agriculture (Table 2). The price disparity is also due to the increase in the cost of energy, fertilizers, works, services, etc.,

from the enterprises of the first sphere of agriculture. Profit from the activities of the food industry exceeds the same figure in agricultural organizations in different years from 2 to 5 times! In 2017 one profitable agricultural organization had 87.7 million rubles of profit, while on processing one – 161.1 million rubles. The positive trend here is an increase in the share of profitable agricultural organizations and an increase in the profit amount attributable to one agricultural organization. At the same time, as practice shows, agricultural organizations do not have enough net profit to carry out the process of reproduction.

Table 2: Profit from the results of agricultural and processing organizations activities [2]

Year	Agriculture	Food and beverage production	Among them, products of the milling industry, starches, and starch products
Share of profitable organizations, %			
2006	67.7	65.2	57.6
2007	74.4	69.8	69.1
2008	81.6	74.9	73.9
2015	77.9	75.2	76.7
2016	78.8	78.1	79.0
2017	82.3	81.9	79.8
Account for profits per 1 enterprise, thousand rubles			
2006	6645	33156	13260
2007	9842	36733	20765
2008	16273	49303	29670
2015	87720	123595	78990
2016	83571	148080	156910
2017	87666	161157	108710

As a result, the current economic conditions are pushing agricultural producers to use loans actively and use them to purchase new equipment and technologies, while intensifying production. In this regard, labor costs for the production of 1 c of products are reduced; the financial condition of agricultural organizations from the implementation of such measures is not improved. The purchasing power of the population and the competitiveness of agricultural products also suffer. This is due to the unprocessed approaches and constant reform of agricultural production, which led to the loss of priorities of state regulation in the first and third spheres of agriculture, the rupture of industrial relations, reducing the share of agricultural production produced by large-scale agricultural organizations, the bankruptcy of a significant number of agricultural organizations, deformation of intersectional proportions, the formation of the institute of intermediary organizations. Moreover, as foreign practice shows, constant organizational changes in any of the spheres of the economy have only a negative impact on its effectiveness.

Every year the share of agricultural organizations with overdue payables decreases slowly (Table 3).

Table 3, over the past three years, the share of agricultural organizations that had overdue credit indebtedness decreased by two times and amounted to 12.3% of the total number of agricultural organizations. At the same time, a significant part of the debt falls on payments to suppliers. 20% of agricultural organizations have overdue debtor indebtedness. A significant share of debtor indebtedness accounts for the debt of buyers 17.4-18.9%. It should be noted that in the food industry the situation with credit and debtor indebtedness is much worse than in agricultural organizations.

Table 3: The share of organizations with overdue credit and debtor indebtedness, % [2]

The share of organizations with	Agriculture			Food and beverage production			Among them, products of the milling industry, Starches, and starch products		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
overdue credit indebtedness	17.2	13.8	12.3	9.9	9.5	9.2	16.0	11.9	12.6
overdue indebtedness to suppliers	14.3	11.8	10.8	9.1	8.9	8.5	14.0	10.4	11.8
overdue indebtedness to the budget	8.1	5.4	4.1	2.7	2.4	2.4	2.7	1.5	1.7
overdue indebtedness on loans and borrowings	4.0	3.0	2.5	1.7	1.5	2.1	1.3	1.5	3.4
overdue debtor indebtedness	20.0	18.4	19.1	20.0	20.5	19.8	26.7	27.6	24.4
overdue buyers' indebtedness	18.9	17.4	17.9	19.3	19.5	18.8	26.7	25.4	23.5

Thus, the state economic policy of restructuring the debt of agricultural organizations is actively carried out at the present time. Conditions were created, relevant regulations were adopted, procedures were carried out and as a result, up to 20% of agricultural organizations have overdue credit indebtedness, although 10 years ago this figure was three times more.

On the other hand, good solvency helps to attract a larger amount of bank loans, and as a result, an increase in overdue debts. Approximately 75% of the total debt of agricultural organizations accounts for loans received from banks. In 2017, the total debt of agricultural organizations was 2.2 trillion rubles or 43.1% of gross agricultural output. Among them, 1.6 trillion rubles is the debt on bank loans and borrowings or 29.4% of gross agricultural output. If you think about it, these are catastrophic figures, at least for the reason that the service of overdue debts sometimes exceeds the increase in the wage fund for agriculture for the year. Thus, the money of the rural workers flows to service the debt on bank loans.

Table 4: Total debt of agricultural organizations [2]

	Total	including loans to banks on received borrowings	Overdue indebtedness to banks on received borrowings
2014, million rubles	1811699	1351021	20671
%	100.0	74.6	1.1
2015, million rubles	2114475	1541890	18428
%	100.0	72.9	0.9
2016, million rubles	2150513	1578459	19197
%	100.0	73.4	0.9
2017, million rubles	2205799	1611055	15806
%	100.0	73.0	0.7

This situation is also due to the high-interest rate on loans. Excluding subsidies, the average interest rate on loans in Russia in 2017 amounted to 10,57%, while in China 4.35%, and has not changed in the last 3 years, and in the US – 3.9%. Of course, the low-interest rate on loans in the US and China does not contribute to the growth of the cost of products, including agriculture.

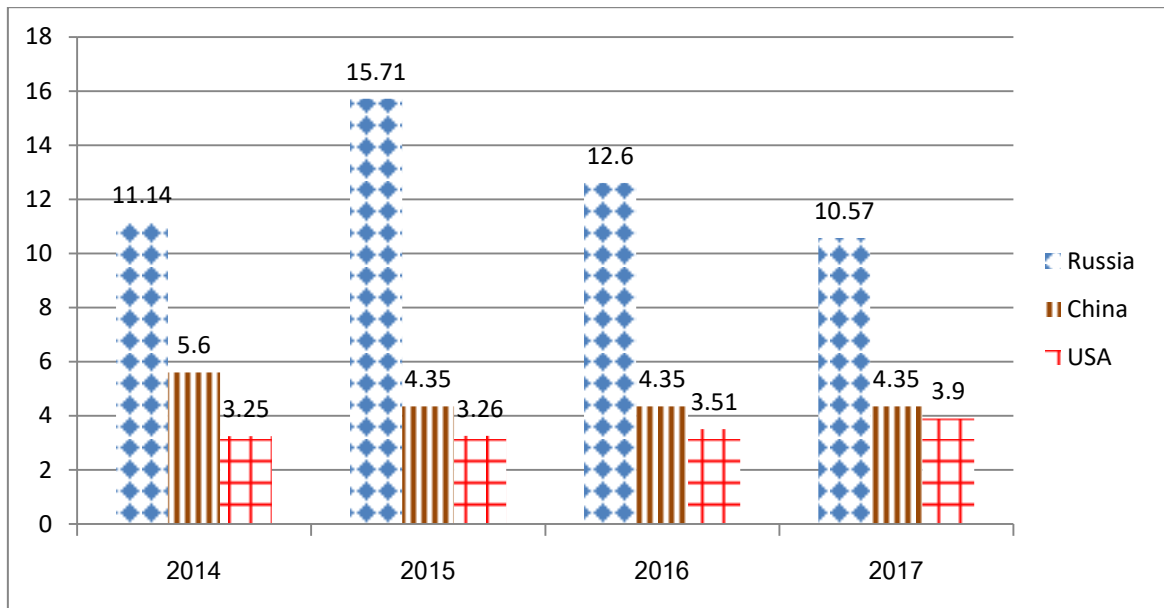


Figure 1: Interest rates on loans in Russia, China, and the USA in 2014-2017 [2].

The system of lending to agricultural organizations also cannot be called effective. It still does not provide access to cheap credit for agricultural producers. This is evidenced by the growing amount of accounts payable on loans received in the national currency. Debt on loans exceeds the amount of loans granted and has a clear growth trend. Here the state needs to work out the issue of reducing the cost of loans for agricultural producers. Attracting credit resources, agricultural organizations, as a rule, create new jobs, increase the amount of taxes and fees paid, solve a number of social issues, and the bank provides a loan at 5-7% per annum! Subsidized credit resources are clearly insufficient for agricultural organizations. This factor is a constraint for the development of the entire agro-industrial complex. This is evidenced by the growing amount of loans granted to agricultural organizations, which has increased almost by 3 times over the past 7 years, while gross output by 2 times. With such growth rates of gross output at the agricultural organizations, the overdue accounts payable on the credits will always be formed. Therefore, it is necessary to introduce compensatory measures to subsidize the 100% interest rate on loans for agricultural organizations. The dynamics of the demand for credit resources from the part of agricultural producers is increasing. Thus, in 2010 agricultural producers were granted 435.1 billion rubles, in 2016 – already 639.8 billion, in 2018 – 1174.9 billion. Of course, in recent years, the subsidy mechanism of credit resources has undergone major changes. The system of reporting and documentation on the requested credit resources has changed radically. The scientists-economists of RAAS repeatedly, even during the implementation of the PNP “Development of agriculture”, made proposals to change the scheme of subsidizing loans for agricultural producers. And only a few years ago their proposals were implemented in practice.

Table 5: The loans amount and debt on loans of agricultural organizations of Russia [2], (Billion rubles)

	As of 1.01.2010	As of 1.01.2013	As of 1.01.2016	As of 1.01.2017	As of 1.01.2018	As of 1.01.2019
Amount of granted loans	435.2	532.0	639.8	809.0	950.4	1174.9
Debt on loans	849.2	1203.1	1431.6	1538.8	1644.5	1881.4

All of the above has a fundamental impact on the structure of investments in fixed

capital of agricultural organizations, which has no clear trends. From the above data, it can be seen that the share of the state in the structure of investments in fixed capital decreases. In some years, the share of subjects of the Russian Federation exceeds the share of the federal budget in the financing of agriculture, which, in our opinion, is unacceptable and limits the budgetary opportunities of subjects of the Russian Federation, including in the field of social and engineering infrastructure in rural areas. For 2010-2017, the participation of the state in investments in fixed capital is not more than 3%.

Table 6: Structure of investments in fixed capital aimed at the development of agriculture, classified by sources of financing [2]

Indicators	Years							
	2004	2009	2010	2013	2014	2015	2016	2017
Investments in fixed capital - total	100	100	100	100	100	100	100	100
own assets	63.1	44.5	49.3	44.8	52.8	59.2	58.5	61.1
borrowed funds	36.9	55.5	50.7	55.2	47.2	40.8	41.5	38.9
among them budgetary funds	8.9	3.6	2.3	2.3	3.3	1.8	2.5	...

This is clearly not enough to implement a fully-fledged agrifood policy. State participation in the formation of fixed capital should be increased at least by 30% in the structure of sources of financing. Only in this case, a fully-fledged agrifood policy will be clearly presented, and the effect of updating fixed assets and attracting modern technologies will not long in coming. Up to 53% of investments in fixed assets are borrowed funds. As mentioned above, in real conditions it is necessary to reduce their cost, to ensure price and organizational accessibility.

Table 7: Investments in fixed capital aimed at the development of agriculture and commissioning of production facilities [1]

Indicators	Years				
	2005	2010	2014	2015	2016
Investments in fixed capital for the development of agriculture (in actual prices): million rubles	79089	201846	313516	304670	364685
percentage of total investment in fixed assets	2.7	3.0	3.0	2.9	3.3
percentage to the previous year (constant prices)	no	97.8	97.5	87.3	110.4
Commissioning of production facilities through construction and reconstruction: livestock facilities. thousand places:	27.5	111.1	104.1	102.6	120.7
for cattle					
for pigs	60.7	603.3	1322.4	877.3	775.7
for sheep	6.2	6.3	11.9	9.8	14.2
poultry farms: egg direction, thousand laying hens	1150.0	702.7	222.4	248.0	1420.2
meat production, mln heads of poultry meat per year	8.9	122.5	11.1	11.0	35.5
elevators. thousand tons of one-time storage	2.4	56.0	147.7	301.0	224.5
high-quality grinding mills. thousand tons of grain processing per day	1.2	0.2	1.4	0.5	0.06
feed mills, thousand tons of feed per day	0.2	0.8	2.3	3.1	2.5
warehouses mechanized for storage of mineral fertilizers. pesticides. microbiological agents and lime materials, thousand tons of one-time storage	2.4	-	2.0	-	11.5
storage for potatoes. vegetables and fruits in agriculture, thousand tons of one-time storage	13.3	138.1	116.5	182.5	112.7

In dynamics, the amount of investments in fixed capital of agricultural organizations is increasing. Over the past 9 years, the amount of investments in fixed assets has increased by 9 times! This increase was due to the introduction of new production capacities in animal husbandry, mainly at the expense of own funds and credit resources. Since 2010, at least 100 thousand places for cattle and up to 1300 thousand places for pigs have been implemented annually. But this is not enough. In 1990, the number of cattle was 57 million heads, in 1995 – 39.7 million heads, and in 2016 – slightly more than 18 million heads. In order to resume the production of milk and breeding in dairy cattle, the number of livestock facilities must be introduced in millions, and for this, it is necessary to ensure the profitability of production of dairy cattle at least at 25% and the availability of credit and other tools for the development of livestock. As for pig breeding, in modern conditions, it is necessary to continue the aggressive expansion of conquest of own market of meat, reduction of its cost price for receiving availability of broad masses of the population to this product.

The commissioning of elevators, mills, feed mills, warehouses for storage of mineral fertilizers and pesticides, warehouses for storage of potatoes and vegetables and fruits are proceeding slowly. The conditions for the work of the livestock and crop sub-sectors are not fully created, which in turn does not ensure the implementation of a competent agrifood policy.

4. CONCLUSION

Despite the implementation of the measures of the state program, it has not been possible to achieve the availability of credit resources for agricultural organizations yet. Demand for them is growing; new production requires significant investment at a low-interest rate. In modern conditions, the state is not ready to ensure the deficit-free credit resources at a low-interest rate for the dynamic development of agriculture. In this regard, it is necessary to revise the measures to subsidize the interest rate on loans to agricultural organizations, increase the amount of lending and a significant reduction in the cost of credit resources.

5. AVAILABILITY OF DATA AND MATERIAL

Data used or generated from this study can be requested to the corresponding author.

6. REFERENCES

- [1] Russia in figures. 2018: Brief statistical book / FSSS. - M., 2018 - 522 p.
- [2] Finance of Russia. 2018: Statistical book / FSSS. - M., 2018. - 439 p.
- [3] Abuzjarova M.I. Tendencies, the law of development and economic content of innovative entrepreneurship // Modern Economy Success. 2018. No. 1. Pp. 43-50.
- [4] Borovikova T.V. Methodological bases of formation of the intellectual potential of territories in the conditions of innovative economy // Modern Economy Success. 2017. No. 6. Pp. 46-49.
- [5] Gadzaov A.F., Dzerzhinskaya M.R. Mathematical methods of analysis of the periodic components of economic processes // Modern Economy Success. 2018. No. 1. Pp. 14-18.
- [6] Makeeva A.A., Chubarova E.A., Mishanova V.G. Risk management as an element of enterprise management // Success of Modern Science and Education. 2018. No. 2. Pp. 10-14.

- [7] Kupryushin P.A., Chernyatina G.N. Economic and environmental aspects of rational nature management and optimization of the process of import substitution in the agro-industrial complex // *Modern Economy Success*. 2017. No. 3. Pp. 44-48.
- [8] Perepelkin I.G. Assessment of the effectiveness of state support for agricultural organizations in kursk region: key problems and solutions // *Modern Scientist*. 2017. No. 4. Pp. 371-376.
- [9] Kuznetsov A.A., Ignatyeva T.A., Kuznetsov A.O. Strategy and key elements of competitiveness // *Modern Economy Success*. 2018. No. 1. Pp. 25-29.
- [10] Minakova I.V. Social and economic condition of Russia and the possibility of its transition to innovative hi-tech model // *Modern Economy Success*. 2017. No. 6. Pp. 24-27.



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