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Boosting the Investment Attractiveness of Agricultural Production

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Abstract: The primary deterrent factor in the development of Russia's agriculture is its low investment attractiveness, which reduces the pace of technical-technological re-equipment and prevents the industry from moving on to a new technological set-up. This article examines the present-day state of agricultural production and its role in the development of the Russian economy. The author assesses the effectiveness of attracting borrowed funds for purchasing agricultural machinery and proposes a mechanism for attracting private investment, which can help reduce the amount of risk and ensure a fixed profit for investors. Its practical implementation will help to synergically complement the existing mechanisms for stimulating the development of the industry on an innovation basis.

Key words: Agriculture · Government support · Investment attractiveness · Technical re-equipment

INTRODUCTION

The Russian economy is currently characterized by low growth rates. This is mainly due to the lagging behind of its primary sectors to the exclusion of those engaged in extracting and distributing natural resources. Russia's agricultural sector is practically unable to compete on the global market due to its considerable lagging behind, being poorly equipped with major agricultural machinery and a shortage of qualified human resources [1]. Note that the volume of the industry's output amounted to 3.34 trillion rubles in 2012. Over the last 5 years, the level of profitability of agricultural production has grown 9.4%, although accompanied by an annual average inflation rate of 7.6% over the same period. The lack of a major boost in government support makes the transition to a new technological set-up virtually impossible [2, 3].

Russia's joining the WTO and the mitigation of restrictive customs barriers for major food importers is substantially undermining the competitiveness of Russian producers of agricultural commodities. Obligations taken on are expected to not only actualize the opening of the market but bring about a decrease in the volume of government support for the industry from 9 billion dollars to 4.4 billion by 2018 [4]. In our view, shifting large agricultural organizations to a new technological level will help create growing points in the industry and expedite the flow of scientific/technical achievements and best practices towards production. To achieve this, it is expedient to develop a mechanism for attracting large private investors, the implementation of which will ensure the development of the industry on an innovation basis without violating WTO rules.

Main Part: Currently, Russia's agriculture employs 5.2 million people, this type of activity still remaining the lowest-paying in the country. The average monthly salary was pegged at 14.13 thousand rubles in 2012, with agriculture accounting for 5.3% of GDP exclusive of processing enterprises, while productivity growth rates exceed average values for the economy (Table 1) [5].

A positive trend in resolving the issue of improving the efficiency and competitiveness of national producers of agricultural commodities in the global market has been observed since the commencement of the implementation of the Federal Law "On the Development of Agriculture and the Agro-Food Market in the Russian Federation" in 2006. In 2008, the government brought into force the State Program for the Development of Agriculture and Regulation of the Agricultural Commodities, Raw Materials and Food Markets for 2008-2012, which triggered a substantial boost in government support for agriculture both at the federal and regional levels. This helped stop the degradation of agriculture in most

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Table 1: Labor productivity in Russia's agriculture

Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2012 to 2005. %
Gross Domestic Product, trillion rubles	21.61	26.92	33.25	41.28	38.81	46.31	55.80	62.60	2.9 times
Including:									
Agricultural output	1.38	1.57	1.93	2.46	2.52	2.59	3.26	3.34	2.4 times
Share of agriculture in GDP, %	6.4	5.8	5.8	6.0	6.5	5.6	5.8	5.3	-
Number of people employed in all sectors of economy, million people	68.3	69.2	70.8	71	69.4	69.9	70.9	71.6	104.8
Number of people employed in agriculture, million people	6.9	6.9	6.3	6	5.8	5.4	5.5	5.2	75.4
Average salary of agricultural, thousand rubles	3.65	4.57	6.14	8.48	9.62	10.67	12.46	14.13	3.9 times
Overall average labor productivity in economy, thousand rubles	316.4	389.0	469.6	581.4	559.2	662.5	787.0	874.3	2.8
Labor productivity in agriculture, thousand rubles	200.1	227.6	306.6	410.2	433.8	479.2	593.0	642.4	3.2

* Based on data from the Russian Federal State Statistics Service: www.gks.ru

Table 2: The efficacy of the use of government support for agriculture

Indicator	2005	2006	2007	2008	2009	2010	2011	2012
Total consolidated budget expenditure on agriculture and fisheries, billion rubles	78.6	110.8	146.4	238.3	279.1	262.3	268.7	276.5
Planted acreage, million hectares	75.84	75.28	74.76	76.92	77.81	75.19	76.66	76.33
including: grain crops and grain legume crops	43.59	43.18	44.27	46.74	47.55	43.19	43.57	44.44
Livestock inventory, million beef cattle units	21.63	21.56	21.55	21.04	20.67	19.97	20.13	19.98
Out of it: cows	9.52	9.36	9.32	9.13	9.03	8.84	8.99	8.89
Pigs	13.81	16.19	16.34	16.16	17.23	17.22	17.26	18.82
Sheep and goats	18.58	20.2	21.5	21.77	21.99	21.82	22.86	24.18
Poultry	357.47	374.69	388.96	404.55	433.7	449.3	473.39	495.85
Agricultural commodity production index (in comparable prices; percentage to previous year)	101.6	103	103.3	110.8	101.4	88.7	123	95.2

* Based on data from the Russian Federal State Statistics Service: www.gks.ru

Table 3: Refreshment of fixed assets in RF agriculture

Indicator	2005	2006	2007	2008	2009	2010	2011	2012
Fixed assets in RF agriculture, billion rubles	1440.1	1574.7	1963.3	2259.6	2566.9	2859.9	3127.2	3332.1
Investment in fixed capital, billion rubles	142.3	224.2	338.5	399.7	325.2	303.8	446.9	473.4
Dynamics of change in availability of fixed assets in agriculture at end of year (in comparable prices), %	98.2	99.6	101.3	101.1	100.8	101.5	101.9	101.7

* Based on data from the Russian Federal State Statistics Service: www.gks.ru

constituents of the Russian Federation, while in such sectors as pig farming and poultry farming there emerged a positive trend in terms of production volume and efficiency (Table 2) [6-8].

The adoption in a number of regions of legislative acts aimed at the development of specific sectors of agriculture and its comprehensive technical re-equipment brought about positive results. Over the last 7 years, the industry has undertaken a major upgrade of its machinery and tractor fleet and has been setting the scene for growth in beef cattle inventory. Over this period, the cost of fixed assets in agriculture has grown 2.3 times (Table 3). For instance, in Novosibirsk Oblast, the implementation of state and departmental programs helped to start implementing large projects on building livestock breeding and vegetable farming complexes and substantially upgrade the machinery and tractor fleet with state-of-the-art resource-saving and high performance technology. In 2012 alone, the region's producers of agricultural commodities purchased 1300 units of equipment and agricultural machinery [1, 9].

However, changes in the dynamics of development in particular areas does not let us alter the situation in the industry substantially. Growth in investment in fixed capital just made it possible to stop the shrinking of the material base of agriculture. The cost of fixed assets taken in comparable prices, there has been an increase over the last 5 years, an average increase of 1% (Table 3), which is clearly insufficient to overcome the industry's technical-technological lag, which has formed after 15 years of economic reform.

An efficient mechanism for enlivening investment processes is subsidizing interest rates for loans for producers of agricultural commodities. In a number of constituents of the Russian Federation, the volume of funding in this area amounts to as much as 60-70% of the

total volume of funds allocated from the federal budget. In 2012, Novosibirsk Oblast received for these purposes 927.07 million rubles out of 1490.29 million allocated in federal funding [5, 10].

The low level of profitability and high dependence of financial results of agricultural producers on natural-climatic factors lead to year-on-year growth in the debt burden. The amount of total loan debt in 2012 was over 1.4 trillion rubles, including 1.1 trillion worth of bank loans. Note that the volume of revenue generated in 2012 amounts to just 130.4 billion rubles, which makes it extremely hard to repay the loans [5, 11].

The positive experience of Novosibirsk Oblast in terms of the material-technical refreshment of the industry through subsidizing up to 50% of the cost of new machinery from the regional budget comes with a number of substantial restrictions. Support is available only to organizations with no arrears of wages and taxes and duties to non-budgetary funds. Over the period of implementing the departmental program, just 30-50% entities were able to use it [10].

Note that the funds are reimbursed progressively as the bank loan is being repaid in proportional parts. For instance, in purchasing machinery, when an organization uses 3 million rubles of its own and 7 million worth of loan money, the Ministry of Agriculture of Novosibirsk Oblast can reimburse it just 1.5 million rubles (50% of the 3 million) and the rest of the funds will be reimbursed progressively as loans taken out by the company are being repaid, which can drag on for a long time. Thus, the greatest stimulating effect is attained only in purchasing state-of-the-art machinery using one's own funds and funds from private investors. Amid the existing economic conditions surrounding agricultural production, one has a limited amount of one's own monetary funds available, while private investors refuse to invest on account of low profitability and high risks.

Changes in the conditions of government regulation of the food market and government support for agriculture in accordance with WTO rules require a decrease in the existing level of government funding from 9 billion dollars in 2013 to 4.4 billion in 2018. This decrease coupled with year-on-year growth in price disparity, the actual funding of the agricultural sector will amount to no more than 1/3 of the current level [12-14].

Considering that agricultural production accounts for an average of 5.9% of GDP and employs 5.2 million people, an increase in government and private investment in the technical-technological modernization and refreshment of the material base of the industry will within a short period of time help to enhance the well-being of rural inhabitants, create new jobs and ensure the country's food security. However, there is still no mechanism to encourage private investors to invest.

The industry's low investment attractiveness is associated with high risk levels and virtually zero investment profitability. Most projects pay off only after 5-10 years with a profitability level of 7-15%, which makes them not cost-effective given the level of risk [15, 16].

In our view, the government's providing for guaranteed recovery of private investment and a rate of return on capital at a level of 10% per year will help to substantially raise the interest of large industrial organizations and private investors, including foreign ones, towards agriculture.

The authors' methodology for attracting private investment towards implementing major investment projects in agriculture is illustrated below in Figure 1 and comprises several stages.

In the initial stage, agricultural organizations draw up investment project plans and forward them to regional ministries of agriculture, where the projects undergo expert evaluation across the following criteria:

- The degree of bankruptcy risk for the enterprise during the implementation of the project;
- The expected economic effect;
- The payback period;
- Investment recovery guarantees;
- The volume of one's own investment;
- The project's social significance (employee income growth, creation of new jobs, development of rural infrastructure, etc.);
- The volume of tax proceeds into the budgets at all levels;
- The assessment of the enterprise's current financial state.

Once promising projected have been selected, they are forwarded to the Ministry of Agriculture of the RF for approval.

Next, amortized bonds are placed on the equity market under each of the approved business plans – similar to placing RF constituent loans. It is expedient to establish for this category a coupon level of profitability of no less than 10% per year. Considering the characteristics of

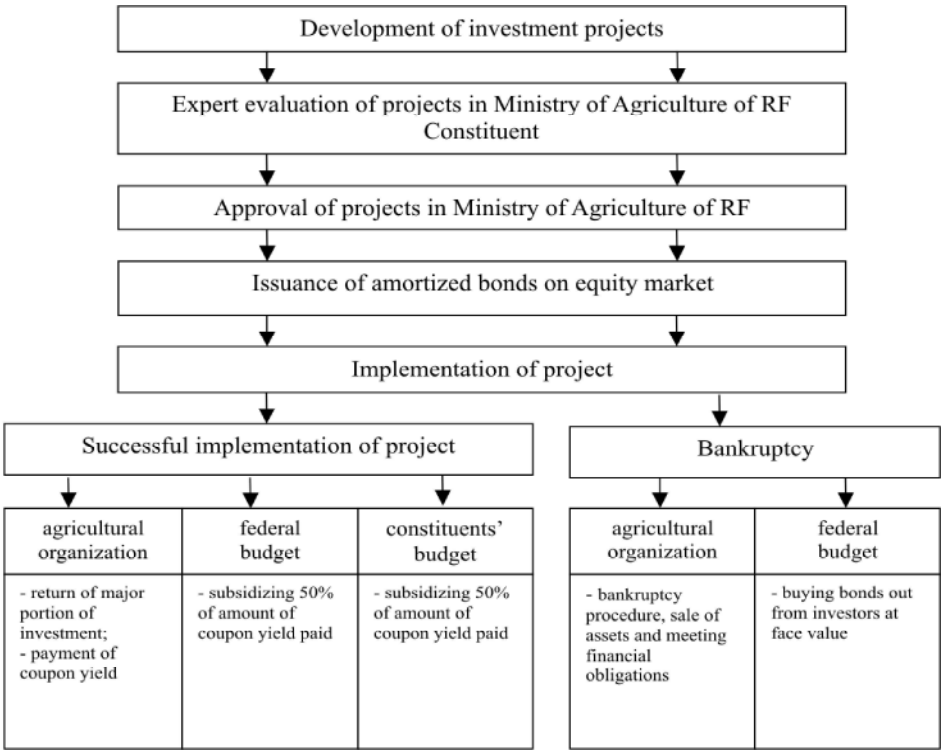

Fig. 1: A methodology for attracting private investment towards implementing major investment projects in agriculture

Table 4: Recovery of private investment during the implementation of an investment project

Date	Coupon rate	Face value of bond	Redemption of face value	Size of coupon
01-15.01.2015	Размемение на фондовом рЫнке			
31.12.2015	10%	1000	200	100
31.12.2016	10%	800	200	80
31.12.2017	10%	600	200	60
31.12.2018	10%	400	200	40
31.12.2019	10%	200	200	20
Total			1000	300

agricultural production, the major part of the debt should be repaid in equal installments throughout the period of circulation of the security papers on the market.

Due to the low efficiency of production, investor income, at the recommended level, should be provided for through the federal budget and that of RF constituents, similar to subsidizing a part of the interest rate on bank loans. Budget expenditure should be distributed in a solidary manner: 50% – the federal budget, 50% – the budget of the RF constituent.

In the event the enterprise goes bankrupt, the bonds are bought out from the investors at face value, through the federal budget.

The implementation of the proposed methodology will help to substantially increase the volume of investment in agriculture and the number of investment projects, whose value exceeds 100 million rubles, aimed at organizing production and processing agricultural commodities.

The calculations reveal that under the proposed methodology attracting 100 million rubles worth of private investment with a payback period of 5 years will cost the government 30 million rubles (Table 4), which amid an annual average inflation rate of 7.6% becomes acceptable.

CONCLUSION

The proposed methodology makes it possible to take advantage of government support for the re-equipment of agriculture and obtain a subsidy to the tune of 50% of one's total expenditure, which is impossible in using bank loans. This enables one to form a reserve of financial

resources in the first year of the project implementation, which is sufficient to repay the major part of the debt (the bond's face value payoff) over the period of 2.5 years. Within this period, agricultural organizations will be able to implement their innovation technical-technological re-equipment projects to the fullest and reach their planned production volume performance.

Inferences. Boosting the investment attractiveness of Russia's agriculture will help provide an impetus for enlivening the industry's innovation development and expedite the transition to a new technological set-up. This will substantially improve its efficiency and competitiveness, providing for the country's GDP growth and helping enhance the well-being of a substantial number of rural inhabitants. The proposed methodology for attracting additional investment is a synergic complement to existing legislation on supporting agricultural producers, which can help ensure economic stability within the industry.

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