Interaction and influence of investment process stimulating factors in agriculture on the main trends in the development of the agricultural sector in Russia

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1. Introduction

Despite the fact that world agriculture is at the stage of introduction of innovative agro-technologies Russia’s agro-industrial complex does not actively use new technologies. Last year, Russian agriculture showed a very low level of production and profitability of sales compared to other branches of the economy. The peculiarity of several branches of Russia’s agro-industrial complex is the long investment cycle. Access to credit resources is complicated for many market participants. Nowadays, Russia’s agro-industrial complex survives only on the state support and subsidies. However, it needs investments to develop efficiently. Agriculture, as the most vulnerable sphere compared to the industrial or service sectors, urgently needs regulation and support from the state’s part. In modern conditions of Russia’s economic development, the role of state regulation and support of the industry aiming at economic growth and raising social stability in the country thanks to reforms, along with the investment attractiveness of the agro-industrial complex, grows.

To justify this, we find it important to mention the example of the adoption and realisation of the State Program for Development of Agricultural Commodities Markets in 2013-2020, which envisages USD 26.58 billion investment, or an average of USD 3.3 billion a year (according to the estimates for the period of 2015-2016). Such significant state support will lead to the inflow of private capital and undoubtedly stimulate the investment process in the agro-industrial complex. In 2015, new directions and crediting rules of state support for the agro-industrial complex were introduced. The given rules and directions were suggested according to the selection criteria of investment projects, realisation of which promotes import substitutions [1].

All this will make it possible to provide food security inside the country and develop Russia’s agro-industrial complex potential. Nowadays, the share of agricultural production comprises about 2.4% of gross domestic product and 2.67% of fixed production asset. More than 6.5 million people (9.5% of the total number of the employed) are occupied in agriculture. 10% of the world arable land is on the territory of the Russian Federation [2]. Russia is the first in the world in the production of sugar beet, the third in the production of potatoes, the fourth in the grains and legumes production and the fifth in the realisation of domestic market on the state and poor development of the land market;

2) the price disparity between agricultural production and material resources, insufficient state support for the majority of enterprises of the agro-industrial complex who have lost their own working capital;

3) the problem of access to capital sources regarding the short-term credits with subsidising of interest rates;

4) failing investments in infrastructure improvement, development of new lands, etc.

In connection with the analysis of historical prerequisites and dynamics of the main trends in the agricultural development of the Russian Federation, it is possible to note two major factors influencing its state and functioning which all other factors and elements depend on. Firstly, it is timeliness, sufficiency and efficiency of the state support for the branches of the agro-industrial complex. Secondly, it is an optimum investment policy and access to sources of the capital of subjects of the agricultural sector, which is differentiated for large, medium-sized and small enterprises.

The solutions to these problems lie within the improvement of foreign and agrarian policies with regard to the growth of the volumes of state support for agriculture, the development of agricultural markets and their infrastructure in the regions of Russia, neighbouring countries concerning the existing international agreements. Besides, the development of public-private partnership, growth of direct and portfolio foreign and domestic investments, the establishment of joint ventures and the promotion of their activities, along with the improvement of the relevant infrastructure inside the Russian Federation, in our opinion, will lead to strengthening of the competitiveness in the field of agricultural production and will reduce the monopoly of distribution networks.

2. Brief Literature Review

the conditions of the crisis was mentioned by S. Glazyev (2013), while the issues of state promotion of economic growth through the investments in infrastructure were developed by A. Nekipelov (2014).

3. Purpose

The main task of the research is to study the impact of foreign and domestic policies on the main trends in Russia's agricultural development, to identify the consequences relevant to the impact of the state and private investments on the development of the agrarian market, to forecast and analyse the growth rates of investment volumes of the agro-industrial complex, to study the influence of the investment process on agricultural production and imports of agricultural products, as well as on the increase of competitiveness of the agro-industrial complex in the Russian Federation.

Methodology. The authors used monographic, descriptive, statistical methods, as well as the method of grouping to conduct this research. While using the descriptive and monographic methods, the authors considered and carried out forecasting of trends in the development of the agricultural sector and the main investment strategies for farms. The method of statistical grouping was used by the authors to conduct an analysis of the types and volumes of the attracted investments in Russia's agriculture and their main directions in the agricultural sector. The authors have constructed an analytical function and conducted modelling of trends in the field of investments in agriculture, analysed the growth rates of investments in Russia's agriculture and the growth rates of volumes of agricultural production import regarding market demand.

4. Results

The main initiatives of the State in the assistance to the creation of favourable conditions via increasing the investment attractiveness of the agricultural sector in Russia are as follows.

1. Russia's land market has been developing since 2005. The main problem here is the imperfection of the land legislation, as well as its opacity, which negatively affects the investment attractiveness of land. In 2014, the area of agricultural lands was 386.5 million hectares, of which the area of farmlands owned by legal entities was 15.2 million hectares, or 0.5% [3]. It will be possible to consider the full-fledged land market when at least 50% of lands are involved in market turnover.

2. Tax privileges have been applied to agricultural enterprises since 2005, and today they already have a set of the elements favouring the development of production and investment. Since 2012, the permanent zero rate of income tax for all farm enterprises, as well as privileges on value added tax of 10% and other privileges, has been applied since 2012 [4].

3. The improvement of credit policy. In 2014, the subsidising of rates on credits for agricultural enterprises was equal to 5.7%; it has been 14.7% since 2015; another 2-3% of compensations is to be added from the budgets of regions, which will finally lower the rate to 5-7%. [5] In this regard, 0.6 billion dollars on compensation of expenses on the short-term credits to improve the investment process in the branches were transferred to the country's regions at the beginning of 2015 [6].

4. Protectionism in the regulation of import of agricultural products. Since August 2014, the ban on import of Russian agricultural products to the countries which imposed sanctions on the Russian Federation, which forces Russia to look for and develop communications in the Customs union, the CIS countries, and with the neutral and friendly countries. For example, there is cooperation between Russia and China related to the delivery of agricultural products from the People's Republic of China to the Russian market and the trade of Russian lands by Chinese companies, which is planned for 2016 [7].

5. The Ministry of Agriculture has created a special fund to overcome the barriers, to intensify the country's agricultural development, to promote the development of farms and the implementation of the agricultural industry in the Russian Federation, which will help to strengthen food security and stability of the prices in the domestic market. The fund will be used for the purchase of inputs to the state and the state purchase of agricultural products, as well as for the payment of various expenses. The fund will be used for the purpose of adapting to the world market, as well as for the purchase of agricultural products from the countries which imposed sanctions against the Russian Federation. The fund will be used for the purchase of agricultural products, as well as for the payment of various expenses [8]. Since 1 February 2015, the export duty on wheat has been introduced in the Russian Federation, which will help to strengthen food security and stability of the prices in the domestic market.

6. Compensation costs for fertilisers, seeds, fuels and lubricants compensation. Agricultural producers can count on partial (not exceeding 50%) covering of these expenses. However, different mechanisms of compensation are used in different regions of Russia [9].

7. For the past 10 years, the agricultural policy of the State has been aimed at stimulating investments in agriculture. The total volume of credit resources attracted in 2014 by different organisations related to the agro-industrial complex was more than 20.4 billion US dollars. Besides, a credit of 7.2 billion US dollars was issued in 2015 to perform seasonal field works in agriculture [10].

As this will allow to reorient the domestic agrarian market and to open new prospects for its development and investment attractiveness of agricultural production. In the conditions of the quickly changing world environment agrarian production promptly evolves towards a rise in profitability, resource-saving and environmental friendliness. These processes are characteristic of Russia's agro-industrial complex. However, they are slowed down by the financial and economic crisis which started in 2014. The main problem lies in the inaccessibility of credit resources to the majority of the enterprises of the agricultural sector as banks don't reduce their requirements to the borrower, in particular, to the cost of pledge and the balance sheet which, in connection with the devaluation of the Russian rouble, decreased at many enterprises by 20% and more [5].

Firstly, the dynamics and volumes of investment in the branches of agriculture are generally influenced by some paramount factors, among which are the price environment in the internal and external markets and the existing disparity of the prices in the market, under which, in connection with the devaluation of the Russian rouble and increasing prices for agricultural products, the low solvency of consumers increase. Secondly, an inefficient credit policy and the crisis in the banking sector, under which large and financially steady agro-holdings, whose production is large-scale and diversified, have the priority in receiving the state help and credit resources. Nevertheless, such entities too complain of delays in delivery of credit resources and bureaucracy of financial institutions. Thirdly, there exist high risks connected with the lack of effective and modern financial management, which creates problems in the agrarian and industrial complex.

Along with the paramount tasks and priority investment strategy for agricultural enterprises, it is possible to note the following [9; 11]:

1) an increase in the volumes of investments into production and market infrastructure leads to the growth of demand for different services (consulting, engineering, factoring, etc.), storage, refrigerator and storage equipment, the development of small businesses in the regions, specialised trading grounds, commodity exchanges and so on;

2) investments in agricultural production provide the enterprises with state support and subsidies, and ensure a favourable regime of taxation;

3) investments in land result in buying farmlands which are becoming more expensive assets capable of generating increasing money flows in future.

All the above is especially important for big companies in attracting investments.

In August 2014, the President of the Russian Federation signed a decree banning the imports of agricultural products, raw materials and food products from the countries which had imposed sanctions against the Russian Federation. According to experts, in 2015 the volume of imports of agricultural products decreased by 40% due to the imposed sanctions. In general, the Russian agro-industrial complex shows positive dynamics: the volumes of production in its branches increased almost by 2% within a period of 8 months in 2015 [6].

However, the process of substitution of imported products is slow. There are two main reasons for this. On the one hand, the demand for imported products has fallen in connection
with the fall of the income of Russia’s population. On the other hand, domestic producers can’t replace large volumes of import production in one or two years.

Agricultural enterprises’ own means which are formed at the expense of profit and depreciation charges have been and remain the main source of investments in fixed capital. However, financial constraints of the agricultural enterprises, the lack of profit, the dissolution of depreciation charges in proceeds from sales of production make this source of investments insignificant. An increase in production, the creation of new enterprises and implementation of various investment projects is only possible by attracting external sources of financing [12].

According to the Central Bank of Russia, direct foreign investments in the agriculture of Russia equalled 598 million US dollars in 2014 (Figure 1) [13].

The greatest volume of investments in agriculture was in 2013 (Figure 1). By 2015, the volume of foreign investments into agriculture had increased by 70% compared to 2010 and equalled 934 million US dollars. To conduct a quantitative measurement of the trend, it is possible to apply analytical levelling of the row using the equation characterising the dynamics of the process best of all.

The assessment of parameters of the regression equations was carried out by means of MS Excel «Analysis of Data». As a result of the solution, we have received the following estimates of the parameters of the equations and the coefficient of determination of R²:

\[
\begin{align*}
\text{R}^2 &= 0.15, \\
y &= 36.63x + 570.56, \\
\text{R}^2 &= 0.46, \\
y &= -4.38x^2 + 302.91x + 259.9, \\
\text{R}^2 &= 0.72, \\
y &= -0.39x^3 + 519.13x^2 - 650.29x + 938.45
\end{align*}
\]

(Figure 2).

The internal investments in fixed capital of agriculture of the Russian Federation reached the maximum value in 2013. By 2014, the volume of investment into agriculture of the Russian Federation had decreased by 20%, if compared to the level of 2013, and approached the level of investments of 2010 (Figure 2).

A linear regression reflects a change in investments. The polynomial of the third degree has the greatest coefficient of determination, but its value slightly differs from the polynomial of the second degree. Under a small number of supervisions of a simpler type of function, the polynomial of the second degree was chosen. As for the second model (2), we have calculated an average error of the forecast. In 2015, the volume of internal investments in agriculture was up to the standard of 2010 in the range of 9.32-11.7 million US dollars, whereas the level of investments is supposed to be between 3.92 and 6.74 million US dollars in 2016.

The country’s place and role in the globalised world depends on the segment of the world market it controls. It is characterised by a significant level of oligopolisation. Under these conditions, the optimal variant of the entrance to international markets is to form a market of effective competition or innovative monopoly [14]. Foreign capital penetrates into the national economy through the introduction of new production technologies and know-how which promote effective integration into the international division of labour and become part of state policy aimed at increasing the competitiveness of the national economy [15]. This, however, requires an efficient investment policy.

5. Conclusions

In the present economic conditions, the majority of agricultural producers cannot use their own funds to promote development and reinvestment, which is related to the problem of budget deficit. The state continues to appeal to the agricultural sector, realizing that without additional private investments it is impossible to reach a desirable effect in the branches of the agro-industrial complex.

Expansion of the directions of the state support is offered among the main prospects within the development of the agro-industrial complex in 2016. Besides the traditional directions of investment, an increase in production of meat, milk and grain, the share of investments into infrastructure and processing of agricultural raw materials will rise soon, along with the influence of the policy of import substitution. The creation and development of market of innovations aimed at the solution of the problem of self-financing and increase in the competitiveness of the domestic agricultural sector can be considered the priority task. Political stability and competent legal regulation are essential when forming a favourable investment climate in the agro-industrial complex.

In 2016, the volume of foreign investments in agriculture will decrease by the average 4%, and, according to our forecasts, the internal investments will decrease by 41%. Considering the absolute volumes of the internal and external investments one can say that the decrease is proportional.
To provide the sustainable development and functioning of the agro-industrial complex in modern conditions of financial and economic crisis, it is necessary to promote the policy of import substitution along with the state support for the investments in different branches of agriculture, especially it concerns more unprotected branches with a long investment cycle, high seasonality and resource intensity, such as production of beef, vegetable growing, etc.

To attract investments into the agro-industrial complex, it is necessary to create favourable conditions for crediting of enterprises of different levels and to improve regional support and the policy of import substitution according to the peculiarities of regions, applying an optimum strategy for development and investment. It is also necessary to consider the main trends in the development of branches of the agro-industrial complex in the regions and the major factors influencing the increase in the investment attractiveness of agriculture.

Finally, it is necessary to understand that payback and efficiency of investments, as well as realisation and management of investment projects, including the policy of import substitution, directly depend on the application of new technologies, which is impossible without qualified personnel. The sanctions imposed on Russia, the lack of the competitive environment will contradict the growth in the agro-industrial complex of the Russian Federation.

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