Problems and Main Mechanisms to Increase Investment Attractiveness of Agricultural Production

Alexander Semin¹, Alikhan Kibirov², Usman Rassukhanov³

Abstract:

The main idea of this article is the justification of the necessity and the creation of conditions for attracting investments in economic entities of agrarian and agro-industrial production.

The authors consider topical issues of increasing the investment attractiveness of industries and businesses in agro-industrial production of the subsidized region at the federal and regional levels. The authors note that ensuring the food security of the administrative district, the region and the country as a whole largely depends on the solution of this large-scale task. The forms, methods and mechanisms affecting the activation and inflow of investment and financial resources into agro-industrial production are exemplified by the subjects of the North Caucasus Federal District (in particular, the Chechen Republic).

The subject of the study is the organizational-economic relations connected with increasing the investment attractiveness of the agrarian sector and agro-industrial production. The article gives authors’ definition of the economic category of the “investment attractiveness”.

The results can be used by the government of agro-industrial production of subsidized subjects of Russia in the development and implementation of regional agricultural development programs and regulation of markets for agricultural products, raw materials and food, as well as social development of rural areas.

Keywords: Investment environment, investment attractiveness, investment project, agriculture, agrarian policy, agro-industrial complex, agro-industrial production, subsidy, subject of the Russian Federation, subsidized region, food security

JEL Code: Q10, Q12, Q14, Q18, Q19.

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1. Introduction

The solution to the problem of increasing the investment attractiveness of agro-industrial production is the most important stimulating tool for attracting investment and financial resources to economic entities for increasing the volume of agricultural products, raw materials and food, which ensures food security for the administrative region, the region and the country as a whole.

The importance of the problem is illustrated by the adoption and implementation of the main provisions of the Food Security Doctrine of the Russian Federation, which, inter alia, stipulates that “the food security of the Russian Federation is one of the main directions for ensuring national security in the medium term, a factor in preserving its statehood and sovereignty, the most important component of the demographic policy, a necessary condition for the implementation of the strategic national priority - improving the quality of life of Russian citizens by guaranteeing high standards of life support” (Decree No. 120, 2010).

In order to have this large-scale task fulfilled, it is necessary to have a stable functioning domestic agro-industrial production in Russia, its federal districts, individual subjects, including subsidized regions that have favorable natural and climatic conditions, land and labor resources for the production of the most important agricultural products of crop production and livestock. The object of the study is agro-industrial production of agricultural commodity producers of various forms of ownership and management of subsidized subjects of the Russian Federation. The subject of the study is economic relations associated with increasing the investment attractiveness of the agricultural sector and agro-industrial production. The purpose of the study is development of models and mechanisms for increasing the investment attractiveness of agro-industrial production, covering the capabilities of the federal center and subsidized regions of the country. The objectives of the study are as follows:

- Clarification and addition of the essential content of the economic category - “investment attractiveness”;

- Analysis of the investment and financial resources attracting process to agro-industrial production from various sources and their systematization;

- Development of forms, methods and mechanisms that increase the investment attractiveness of agro-industrial production and, in particular, its leading link - agriculture, operating under international economic sanctions and import substitution.

The conceptual provisions of the mechanism for increasing the investment attractiveness of agricultural production are substantiated, and a system of measures and instruments that activate the inflow of investment and financial resources into
the agro-industrial production of the subsidized regions of Russia is developed. The research used the methods of analysis and synthesis, logical evaluation, monographic, economic-statistical, abstract-logical methods and observations as general scientific methods, and also it considered the regularity in the unity of qualitative and quantitative criteria by which it is possible to most fully assess the economic phenomenon, an event and an object, and studies were carried out, conditioned by the tasks of this manuscript.

The necessity and expediency of creation of conditions for attracting investments in economic entities of agrarian and agro-industrial production ensuring the solution of the problems of the state food security are justified. The conceptual framework has been clarified and developed in the part of substantiating the essential content of such a category as the investment attractiveness of agricultural production. As applied to agro-industrial production, the economic category of “investment attractiveness” is the creation of necessary effective business conditions that reduce the risks of the investor and induce (motivate) him to invest material and technical and financial resources in the regions, industry, business entities for profit or any social effect.

This manuscript offers specific forms, methods and mechanisms that influence the activation and inflow of investment and financial resources into agro-industrial production. The authors consider organizational and economic mechanism of combining traditional small forms of management in the countryside with mastering of large highly effective technologies and projects in agro-industrial production. The example of the Chechen Republic is used to show attractive conditions for the external investor.

The manuscript gives theoretical substantiation and experimental confirmation of effective forms, methods and mechanisms affecting the activation and inflow of investment and financial resources into agro-industrial production of subsidized subjects of the Russian Federation. The results of the research can be used by regional governments in developing and implementing targeted and strategic programs for agricultural development and regulation of markets for agricultural products, raw materials and food, as well as social development of rural areas. The material of the manuscript can be useful for managers and specialists of the state administration bodies of the agro-industrial complex, scientists, post-graduate students and students engaged in the issues of attracting investments in economic objects of agro-industrial production.

2. Review of Literature and Current State of the Studies

Many researchers of the agricultural sphere of economy concentrated their efforts on solving problems of financial recovery and state support of domestic agro-production, among them: Altukhov A.I., Miloserdov V.V., Ushachev I.G., Petrikov A.V., Paptsov A.G., Maslova V.V., Krylatykh E.N., Serkov A.F., Kulov A.R.,
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Sandu I.S., Shutkov A.A., Sharipov S.A., Sharapova V.M., Rodionova O.A., Truba A.S. and other scientists and practitioners of this unique sector. It is no coincidence that this direction has the priority, since the agro-industrial complex of Russia has not so well-organized financial block of the organizational and economic mechanism.

Some researchers consider the mechanism of land mortgage lending (Shkarupa, 2011) among the measures related to increasing the investment attractiveness of agricultural production. Simultaneously, this mechanism is based on government support measures that provide subsidizing of interest rates on loans, as well as tax incentives for creditors and investors. Lack of the necessary legislative base significantly reduces the effectiveness of obtaining and selling land-mortgage loans by agricultural producers, badly in need of borrowed sources of investment activity (Shkarupa, 2011).

Studying the investment processes in the agrarian sphere of the economy, Chalova (2009) and Mekonnen et al. (2015) gave emphasis in their studies and observations on attracting and using investments to strengthen and update the fleet of agricultural machinery, the use of innovative systems to improve the technical efficiency of agro-industrial production. The main condition for the organization of agriculture is the optimal formation and effective use of the material and technical base of the agricultural sector (Chalova, 2008; Chalova, 2009; Mekonnen et al., 2015).

Zolotareva et al. (2012) focused on the evaluation of factors and conditions for the reproduction of investment activities of agricultural organizations. They manage to disclose a number of features of attracting investments in agriculture; outline a range of factors that negatively affect individual stages of the reproductive process (Zolotareva, 2012; 2015). Despite the difficult financial situation of many agricultural producers and their credits the view that state support for agrarians through centralized investments should be made on a returnable and paid basis (Zolotareva et al., 2010).

As for foreign investments in the agrarian sphere of the Russian economy, their inflow in international sanctions has decreased noticeably. Specialists of the Institute for Agricultural Market Studies (IKAR) note that their volume has decreased by almost 30% (Foreign Investment). But it should be emphasized, including from the experience of developed countries, that foreign investments in the agriculture of a given territory have never played a key role (Rylko, 2017). Gubernatorova (2009) examines the causes and possible mechanisms to increase the investment attractiveness of agriculture, tools for regulating investment activities. She also offers a number of measures that contribute to increasing the flow of investment in agriculture.

Some Russian and many foreign researchers (Attfield, 2014; Crosson and Brubaker, 2016; Thompson, 2017), touching on environmental issues related to agro-industrial
production, consider the strategic paradigm of realizing the ideas of the “green economy” (Afinogentova et al., 2017; Dudin, n.d.; Atfield; 2014; Thompson, 2017; Vertakova and Plotnikov, 2017). In modern economic conditions, the EU and USA consider it necessary to increase the level of environmental responsibility (Webber and Smith, 2014; Gorb et al., 2017). This applies not only to large entities of agro-industrial production, but also to Russian farms and personal farms of citizens engaged in agricultural production. It should be especially emphasized that small forms of management in developed foreign countries have state support for adaptation to exogenous factors (Vasylieva, 2016). Studies show that in our country there is still insufficient attention to the different views of foreign scientists regarding the environmental and social responsibility of the development of agro-industrial production, both at the national level and in the scale of the world economy (Thompson, 2017; Crosson and Brubaker, 2016).

In the modern economy, when Russian scientists propose measures aimed at ensuring food independence, foreign researchers (Mathe et al., 2013) it is necessary to consider agro-industrial production not only from the standpoint of economic efficiency, but also through social responsibility, which involves the use of business entities business models, characterized by low man-caused environmental impact (Afinogentova et al., 2017; Prado et al., 2014; Mathe, 2013; Sekhampu, 2013; Arachiy et al., 2017). At the same time, most of the research conducted in the agro-industrial complex does not fully consider the specific features of agricultural production. Due to the specific nature of the investment of capital not only in objects created by human labor, but also in the objects of nature, which is naturally associated with greater risks and a longer payback period of the invested funds. The agrarian sphere has working time not coinciding with the working period, a person has to interact with biological creatures, take into account the seasonal nature of work, consider in all respects the main means of production - earth, work in “open-air shops”.

There are no studies related to investment processes taking place in agriculture in the subsidized territories of the Russian Federation, and their potential is considered. It is, first of all, the subsidized subjects of the North Caucasus Federal District. This is why the authors focused more on these issues in this article.

3. The Proposed Methods and Approaches to Solving the Tasks

In the process of identifying factors that impede the development of forms, methods and mechanisms that increase the investment attractiveness of agro-industrial production and, in particular, its leading link - agriculture, operating under international economic sanctions and import substitution, the following research methods are applicable: monographic (with specifying and adding to the essential content of the economic category - “investment attractiveness,” the identification of the specifics of the development of agriculture in depressed areas), economic and statistical (in analyzing the demographic situation in the depressed region,
improving the housing stock in rural areas, the financial condition of agricultural producers, payment of agricultural labor and other characteristics of the social and labor sphere of rural areas); sociological (in questioning of heads of the agricultural organizations attracting investments); and economic-mathematical modeling (when analyzing the process of attracting investment and financial resources in agro-industrial production from various sources and their systematization).

4. Results

The active involvement of the state in increasing the investment attractiveness of agriculture and agro-industrial production as a whole is the most important direction to accelerate the modernization of agro-industrial production in the current economic conditions (Semin and Kibirov, 2013). As applied to agro-industrial production, the economic category “investment attractiveness”, in authors' opinion, is the creation of the necessary effective business conditions (organizational, regulatory, financial, economic, social and other) that reduce the investor's risks and motivate him to invest material-technical and financial resources in the regions, industry, business entities for profit or any social effect. Proceeding from this definition, the research subject is economic relations connected with increasing the investment attractiveness of the agrarian sector and agro-industrial production.

The term “agro-industrial complex (AIC)” is used in economic literature, regulatory, legal and other documents. The agro-industrial complex is “a set of branches of the national economy engaged in the production of food products (and other agricultural products) and supplying them to the population; production of means of production for agriculture and maintenance of agriculture. These branches are interconnected by specific forms of economic relations” (Rumyantsev, 1982). The economic agrarian literature usually presents the agro-industrial complex in the form of three spheres (I, II, III).

The first sphere is represented by enterprises of agricultural machine building and other entities that produce means of production for the agricultural sector, as well as for food and processing industry enterprises, procurement organizations and others.

The second sphere includes the agricultural sector, regardless of the type, specialization, and ownership of agricultural producers and the volume of agricultural products produced.

The third sphere absorbs the enterprises of the food and processing industry, procuring organizations, the wholesale link and others in one way or another connected with the distribution and delivery of food products to direct consumers.

Agro-industrial production is a part of the agro-industrial complex and includes enterprises, organizations or their associations of the second and third spheres. Apparently, agro-industrial production is much smaller in comparison with the agro-
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industrial complex. With regard to the level of the region, it is more legitimate, as the authors believe, to use the term of “agro-industrial production”. Moreover, the enterprises of the first sphere of the agro-industrial complex are dispersed throughout the country, and sometimes agricultural commodity producers purchase machinery and equipment through export from other countries. Based on this, the agro-industrial complex should be used with reference to the country as a whole. In the emerging conditions of the management system of Russia’s economy, it is important to use various models and mechanisms to increase the investment attractiveness of agro-industrial production, covering the capabilities of the federal center and regions.

Studying of literary sources, own research and generalization of the best domestic experience eloquently testify that economic subjects of agro-industrial production in the conditions of a planned economy had very attractive business conditions comparable with other branches and spheres of the national economic complex. While in Russia, the attitude towards the domestic agrarian sector of the economy and agro-industrial production radically changed at the beginning of market reforms after the adoption of two major government decisions in December 1991 (Decree No. 86, 1991).

As a result of the implementation of these resolutions, serious mistakes were made in the system of reforming the country's agro-industrial complex. First of all, it affected the state regulation of agricultural enterprises and other enterprises and agro-industrial groups, where the consolidated value of budget subsidies and compensations was minimized. In other words, the operative measures taken by the country's leadership to reorganize the former main agricultural producers-collective farms and state farms, privatize food and processing industry enterprises, procuring organizations and other servicing entities of the agro-industrial complex, soon destroyed the single organizational and economic mechanism of the agro-industrial and agro-food sectors of Russia. As a result, in a very short period the country began to lose its food security, and the market began to be saturated with food products of predominantly imported origin.

Thus, in order to secure the Russia's population with agricultural products and foodstuffs in accordance with medical norms (mainly at the expense of domestic economic entities), it is necessary to search for forms, methods and mechanisms that increase the investment attractiveness of agro-industrial production and, in particular, its leading link - agriculture.

It is noteworthy that in the middle of the 2000s, the new leadership of the country adopted the most important socio-political decision on the formation of a new agro-food policy and increasing the role of the state in supporting the agrarian sector of the economy as the basic sphere of the agro-industrial complex. First of all, the new Federal Law “On the Development of Agriculture” (FL No. 264-FZ, 2006) was adopted, which laid the legal basis for the implementation of the state socio-
economic policy in the field of agricultural development and agro-industrial production in order to maximize the market for food products predominantly of domestic origin. In order to implement the main provisions of this Federal Law, the Priority National Project “Development of the Agro-Industrial Complex” (2006-2007) (Barsukova, n.d.) was adopted, which was then transformed into the State Programs for Agricultural Development and Regulation of Agricultural, Raw Materials and Food Markets for 2008-2012 (Decree No. 446, 2007) and for 2013-2020 (Decree No. 717, 2017). With the beginning of implementation of these major policy documents, the process of attracting investment and financial resources to agro-industrial production from sources such as:

- Own sources of financing of investments of managing subjects of the village;
- Attracted investment and financial resources and, above all, long-term bank loans;
- State - budget sources of financing of investments of federal, regional levels.

In addition, the development of high-tech and efficient projects in agro-industrial production (for example, in the production of crop production: grain, sunflower seeds, sugar beet, vegetables of protected soil, fruits; in livestock - poultry, pigs, etc.) is carried out with the involvement of financial resources of an external investor, including foreign investment.

Table 1. Specific weight of agricultural products, raw materials and food products of domestic production in the total volume of domestic market resources (considering the structure of carry-over stocks), %

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016 Planned</th>
<th>2016 Actual</th>
<th>Threshold values Food Security Doctrine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>98.4</td>
<td>98.9</td>
<td>99.2</td>
<td>99.6</td>
<td>99.2</td>
<td>95</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>81.4</td>
<td>85.0</td>
<td>82.5</td>
<td>84.6</td>
<td>83.6</td>
<td>80</td>
</tr>
<tr>
<td>Sugar (made of sugar beet)</td>
<td>84.3</td>
<td>81.9</td>
<td>83.3</td>
<td>82.0</td>
<td>88.7</td>
<td>80</td>
</tr>
<tr>
<td>Potatoes</td>
<td>97.6</td>
<td>97.1</td>
<td>97.1</td>
<td>98.6</td>
<td>97.7</td>
<td>95</td>
</tr>
<tr>
<td>Milk and milk products (equivalent to milk)</td>
<td>76.5</td>
<td>77.0</td>
<td>79.4</td>
<td>83.0</td>
<td>81.5</td>
<td>90</td>
</tr>
<tr>
<td>Meat and meat products (equivalent to meat)</td>
<td>77.3</td>
<td>81.9</td>
<td>87.2</td>
<td>84.3</td>
<td>89.7</td>
<td>85</td>
</tr>
<tr>
<td>Food salt</td>
<td>55.8</td>
<td>55.2</td>
<td>66.9</td>
<td>57.7</td>
<td>64.2</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: National report “On the progress and results of the implementation in 2016 of the
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As a result of the measures taken on a number of important food commodities, the threshold values of the Doctrine of Food Security of the Russian Federation were reached (Table 1). Along with this, the export potential of agro-food has increased in recent years: grain, poultry and pigs, sunflower seeds, etc. (Benesova et.al., 2017; Gorb et.al., 2016). Particularly acute was the problem of exports in 2017 after a record grain harvest in Russia - 135.4 million tons. At present, after 17 years of economic growth in agriculture (since 1999, with the exception of 3 droughty years), solving the main tasks of food independence, there is an additional opportunity to develop exports. It is planned to increase the volume of agricultural exports by 2025 to USD 30 billion (Petrikov, 2017).

However, some experts do not perceive the growth of agro-food exports, or rather agricultural raw materials, as a success of our country’s agriculture. In particular, the famous economist-agrarian, academician of the Russian Academy of Sciences Buzdalov I.N. notes that “as for some export volumes, mainly grains, this is not an achievement advertised by the authorities, but a consequence of deformations and distortions in the agrarian structure, artificial grain “flux”, the undermining of the animal feed base, as it was in the ruinous for the village in the 30th years of the XX century. But only the structural balance in the production and export of agrarian products of livestock products can testify to the status of the country as a real exporter of food” (Buzdalov, 2017).

The analysis of the literature sources and the generalization of practice give a good basis for concluding that the main sources of investment are directed to the most profitable sectors and sub-sectors of agro-industrial production, while in low-profit activities, for example, in the production of milk and cattle meat, they are not enough.

Moreover, the statistics shows a low volume of investment in Russia's agriculture as a whole compared to their needs in practice, and in comparison with the huge amount of state investment support for agricultural producers in the countries of the European Union (EU) and other countries.

Due to the specific nature of agro-industrial production, which largely depends on natural factors, most of the developed countries of the world make direct investments in the development and support of this type of activity through state and targeted programs.

The countries of the Organization for Economic Cooperation and Development (OECD), unlike Russia have market prices support (MPS) occupying a significant share in the producer support estimate (PSE). Such support is divided into internal (application of minimum or administrative support prices) and external (related to tariff protection, non-tariff regulation of export-import transactions, etc.) (OECD, 2013).
MPS instruments dominate other types of support in China and South Africa (OECD, 2013). While in USA, there is a whole series of mechanisms aimed at price regulation. The so-called “marketing loan” mechanism is also known, which a farmer can obtain on the security of agricultural products in the Commodity and Credit Corporation, and as regards the regulation of the prices of producers of livestock products, there is a law on obligatory information about prices in the meat industry (the US Department of Agriculture publishes reports on a daily basis about the prices in the market). Another mechanism that functions in USA, and which one would like to have in Russia, is a mechanism that operates within the framework of the program for the protection of agricultural producers in the event of changes in prices or revenues (Danylenko et.al., 2017).

According to Rosstat, the investment in the fixed capital of the agrarian sector of the economy (excluding small businesses) ranged from 305.4 billion Russian rubles in 2013 to 387.6 billion Russian rubles in 2016 at current prices. In fact, in a comparable assessment, there is no particular increase in these investments. Whereas, according to the author's calculated data, the annual demand of agriculture for investments in fixed assets is 2.5-3.0 times higher, which in absolute terms are more than 1.0 trillion Russian rubles (Kibirov et.al., 2004). Approximately such amounts of investment are required for working capital (creating the necessary reserves of fuel and lubricants, mineral and organic fertilizers, seeds and planting stock, feed, building materials, etc.).

In addition, the practice of agro-industrial production has an uneven distribution of state investment support between regions of the Russian Federation on the one hand and various categories of agricultural producers on the other. As a result of a lack of investment and financial resources in most regions of the Russian Federation, the production of agricultural products is extremely uneven. So, for example, in the reporting year of 2016 “the main producers of pigs for slaughter in live weight were located in the Central, Volga and Siberian Federal Districts” (National Report, 2017) (Fig. 1).

The figure shows that the share of the Central Federal District accounts for more than half (54.2%) of the total production of pigs for slaughter, farmed in agricultural organizations and agro-industrial groups in Russia. Along with this, according to Rosstat, out of the total number of pigs in the District (10,256.6 thousand heads) in 2016, the bulk amount of them - 6609.0 thousand heads, or 64.4% - concentrated in three areas (Belgorod - 4,137.4 ths. heads, Kursk - 1,480.4 ths. heads and Tambov - 991,2 ths. heads) (Indicators, 2017).

**Figure 1. Production of pigs for slaughter (live weight) in agricultural organizations by Federal Districts, k/t**
Due to the lack of investment and financial resources of agricultural producers and the limited financial capacity of the regions, and in particular of the subsidized subjects of the Russian Federation, huge areas of agricultural land are not used in the country. Thus, according to the agricultural census, in 2006, in fact, 125,480.3 thousand hectares, or 75.6%, were actually used out of the total area of agricultural land of 165,985.1 thousand hectares. In 2016, the total area of agricultural land in comparison with 2006 decreased by 23,778.3 thousand hectares and amounted to 142,206.8 thousand hectares, or 87.8% (All-Russian Agricultural Census, 2017).

Thus, it follows from the above analysis that Russia has great potential to increase agro-food production, if we proceed from such a resource component as land as the main means of agricultural production. However, in order to introduce the currently unused agricultural lands, their rational and reasonable use in agrarian production, it is required to increase the amount of invested funds at times, in comparison with their actual size at present. Many leaders and specialists of the management bodies of the agro-industrial complex of the federal and regional levels, specialists and economists of the agrarian profile, publicists and other categories of citizens share this point of view. All of them claim that it is necessary to make maximum use of available resources, including state support funds and extra-budgetary sources of investment financing. Particularly, the famous economist-agrarian, Academician of the Russian Academy of Sciences, Miloserdov V.V. notes: “Today, however, as always, the economic well-being of the people is determined by the level of development of agriculture and the agro-industrial complex, because food is an indispensable commodity of everyday demand necessary for the life and work of millions of Russians. And the state shall create conditions for the growth of agro-industrial production in any economic crises and cataclysms. There is no other
option” (Miloserdov, 2009).

Further the regional aspects that affect the development of agrarian production and agribusiness are considered, using the example of individual subsidized entities of the North Caucasus Federal District (NCFD). It is well known that in addition to the Stavropol Territory in the densely populated republics of the county, 1,000 people have less agricultural land than other federal districts and Russia as a whole. Therefore, it is extremely important to rationally and reasonably use the main means of agricultural production - land (Table 2).

The data of Table 2 clearly shows the level of land use and the uneven load of livestock per 100 hectares of agricultural land. Particularly, of the available area of agricultural land, 434.0 thousand hectares in the Chechen Republic, in fact, in 2016, was used only at about its half (51.9%), which indicates that there are great opportunities for the development of crop and livestock sectors in this region.

One of the indicators characterizing the intensity of agricultural land use is the number of cattle per 100 hectares of land. This indicator varies greatly among the NCFD subjects. For example, if the Republic of Dagestan has 45 heads of cattle and 232 heads of sheep and goats per 100 hectares of used agricultural land, the Republic of North Ossetia-Alania has 47.9 head of cattle are used per 100 hectares of used cropland and 32 heads of sheep and goats. For comparison, the authors cite similar data for the Stavropol Territory, where there are 7 cattle and 46 sheep and goat heads per 100 hectares of agricultural land. Based on this brief analysis, it can be seen that the production of livestock products is not an attractive activity for economic entities in the village of the Republic of North Ossetia-Alania and the Stavropol Territory. At the same time, a different situation exists in the Republic of Dagestan.

However, an apparent prosperous state with a significant livestock population in Dagestan entails great problems. The Republic is experiencing considerable difficulties due to a lack of feed and insufficient land for a large number of cattle, sheep and goats. Dagestan has almost the highest density of livestock not only in the region, but also in the Russian Federation. In addition, a small area of arable land does not allow the republic to increase the production of feed, and especially of cereals, which is very important for the production of feed compounds. So, for example, the gross grain harvest in the republic amounted to 312.0 thousand tons in 2014, and 375.9 thousand tons in 2016, according to Rosstat. Moreover, the main grain producers are collective agricultural commodity producers and farms, whereas the overwhelming majority of cattle and sheep are concentrated in small forms of agricultural production, including peasant (farm) farms, individual entrepreneurs and the economy of the population.

**Table 2. Indicators of land use and livestock in the subjects of the NCFD, 1/6/2016***

<table>
<thead>
<tr>
<th>The Land use, ths. hectares</th>
<th>Cattle number at farms of all</th>
</tr>
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<tbody>
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<td></td>
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</tbody>
</table>

*Note: Data is hypothetical for illustration purposes.*
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<table>
<thead>
<tr>
<th>subjects of the District</th>
<th>Total area of greenery</th>
<th>Amon g it, agricultural land uses</th>
<th>Including</th>
<th>From the total area of agricultural land uses</th>
<th>Usage level of agricultural land uses, %</th>
<th>cattl e, total</th>
<th>dairy cattle livest ock</th>
<th>meat cattle livest ock</th>
<th>Small cattle livestock of sheep</th>
<th>of goats</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Republic of Dagestan</td>
<td>3158 .7</td>
<td>2914.4</td>
<td>472 .8</td>
<td>2129 .9</td>
<td>2456.0</td>
<td>84.3</td>
<td>110.7</td>
<td>100.5</td>
<td>102.3</td>
<td>555.5</td>
</tr>
<tr>
<td>The Republic of Ingushet ia</td>
<td>117.8</td>
<td>113.5</td>
<td>68.8</td>
<td>36.3</td>
<td>97.9</td>
<td>86.3</td>
<td>61.-</td>
<td>42.1</td>
<td>18.6</td>
<td>144.7</td>
</tr>
<tr>
<td>The Kabardino-Balkar ian Republic</td>
<td>386.0</td>
<td>371.3</td>
<td>289 .1</td>
<td>44.6</td>
<td>361.4</td>
<td>97.3</td>
<td>281.8</td>
<td>192.3</td>
<td>88.9</td>
<td>381.7</td>
</tr>
<tr>
<td>The Karachay-Cherkes sian Republic</td>
<td>405.9</td>
<td>381.2</td>
<td>150 .8</td>
<td>129.3</td>
<td>354.7</td>
<td>93.0</td>
<td>161.1</td>
<td>110.4</td>
<td>50.7</td>
<td>118.4</td>
</tr>
<tr>
<td>The Republic of North Ossetia-Alania</td>
<td>228.1</td>
<td>217.7</td>
<td>186 .2</td>
<td>11.1</td>
<td>186.0</td>
<td>85.4</td>
<td>89.1</td>
<td>61.8</td>
<td>27.4</td>
<td>54.3</td>
</tr>
<tr>
<td>The Chechen Republic</td>
<td>1057 .1</td>
<td>836.9</td>
<td>313 .4</td>
<td>448.0</td>
<td>434.0</td>
<td>51.9</td>
<td>247 .7</td>
<td>233.3</td>
<td>13.2</td>
<td>244.9</td>
</tr>
<tr>
<td>The Stavropol Territory</td>
<td>5183 .6</td>
<td>5006.4</td>
<td>376 .8</td>
<td>1086 .1</td>
<td>4849.1</td>
<td>96.9</td>
<td>349 .6</td>
<td>213.9</td>
<td>135.7</td>
<td>217.29</td>
</tr>
<tr>
<td>Total for the district</td>
<td>1053 .7</td>
<td>9841.4</td>
<td>524 .9</td>
<td>3885 .3</td>
<td>8739.1</td>
<td>88.8</td>
<td>229.8</td>
<td>1854.3</td>
<td>436.8</td>
<td>974.26</td>
</tr>
</tbody>
</table>
Based on the above, it follows that in these categories of farms in the Republic of Dagestan, sheep breeding is a prerequisite for survival. Especially since the inhabitants of mountain and foothill settlements are in particularly difficult natural and climatic conditions, and the production of sheep products in livestock production is almost the only activity. The authors believe, that it is necessary to develop and create special economic conditions for agricultural producers located on unfavorable for the development of agriculture. It is pertinent to note here that such experience of stimulation of rural residents and workers of mountain territories took place in the conditions of the planned economy of Russia. The EU countries demonstrate that special support measures are still in place (Mindrin et.al., 2015).

The situation is quite different in another subsidized entity of the North Caucasus Federal District - the Republic of North Ossetia-Alania. The entrepreneurs of the new formation in the republic have already mastered highly efficient technologies for the production of corn grain, which led to an increase in gross grain collections in the region. In particular, according to Rosstat, the average annual gross grain harvest in weight after completion in farms of all categories in 2014-2016 ranges from 552.0 thousand tons to 650.4 thousand tons, which is almost twice as much as in the Republic of Dagestan.

The Kabardino-Balkaria Republic shows the gross grain harvest increase from 938.2 thousand tons in 2014 to 1,150.3 thousand tons in 2016. This indicator is the highest in comparison with other republics of the North Caucasus. It would seem that in certain republics there are necessary conditions for increasing the production of livestock products. However, the real reality shows the opposite picture. Those agricultural producers who grow crops, are inactively engaged in livestock or are not at all interested in the production of meat, milk, wool and eggs because of low investment attractiveness and profitability.

As the practice of the last two decades shows, grown grain in the Republics of North Ossetia-Alania and Kabardino-Balkaria is used for the production of alcohol and vodka or is exported. The pursuit for profit in the production of corn for grain leads to great problems in the region as a whole. The fact is that in real life there are monocultures, that is, crop rotations are not observed. As a result, soil fertility deteriorates. And this extremely negative practice has been repeated for many years. In addition to the above, it should be added that under different pretexts the best lands capable of yielding high yields of corn for grain were not to the villagers, but to other participants (the private investor) who have the material and technical resources to conduct the agrarian business. These lands were transferred to them on a lease or sublease basis. The authors believe that “deprivation of direct rural residents” from agrarian production is an extremely undesirable economic phenomenon, as social tensions in the region increase and silencing this problem is unacceptable.

The authors believe that with the increase in gross grain harvest in general and corn
in particular through various measures and instruments, it is necessary to increase the investment attractiveness of livestock products. The data in Table 3 show how slowly and weakly the production of livestock and poultry increases, and in some subjects they even decline.

**Table 3. Production of certain types of agricultural products in the subjects of the NCFD (in farms of all categories), k/t**

<table>
<thead>
<tr>
<th>Subjects of the District</th>
<th>Gross grain harvest (in weight after completion)</th>
<th>Production of cattle and poultry for slaughter (live weight)</th>
<th>Share of production in households in the total production volume in 2016, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Republic of Dagestan</td>
<td>311.7</td>
<td>341.9</td>
<td>375.9</td>
</tr>
<tr>
<td>The Republic of Ingushetia</td>
<td>97.7</td>
<td>71.0</td>
<td>110.7</td>
</tr>
<tr>
<td>The Kabardino-Balkarian Republic</td>
<td>938.2</td>
<td>947.5</td>
<td>1150.3</td>
</tr>
<tr>
<td>The Republic of North Ossetia-Alania</td>
<td>650.4</td>
<td>552.0</td>
<td>607.5</td>
</tr>
<tr>
<td>The Chechen Republic</td>
<td>159.5</td>
<td>217.8</td>
<td>306.5</td>
</tr>
<tr>
<td>The Stavropol Territory</td>
<td>8555.8</td>
<td>8928.5</td>
<td>10249.9</td>
</tr>
<tr>
<td>Total for the district</td>
<td>11012.3</td>
<td>11448.4</td>
<td>13272.2</td>
</tr>
</tbody>
</table>

*Source: The table was compiled according to the data byRosstat “The main indicators of agriculture in Russia in 2016”. Moscow, 2017. 67 p.*

The proportional and balanced interrelation of the branches and sub-sectors of plant growing and animal husbandry objectively follows from the specifics and peculiarities of agriculture and the need for the development of agro-industrial production as the most important condition for a closed reproduction process (raw material production, processing, storage and sale of finished food products). Thus, the main function of agriculture and agro-industrial production is not only to
increase grain production and increase its export potential, but also to produce the most important types of food products that ensure the normal life activity of Russians.

Moreover, the generalization of the best practices of the USA, Brazil, Argentina, and the EU countries shows that where grain production, and in particular corn for grain, is developed, the production of meat of livestock and poultry, milk and dairy products and other animal products origin, both for domestic consumption and for export. And this is quite understandable, since corn is the most valuable energy raw material for the production of various types of combined feed.

In the conditions of a lack of own and state sources of financing of investments of enterprises and organizations of the agrarian sector and agro-industrial production, it is extremely important to attract private investor resources on the principles of public-private partnership. This is especially relevant for such a subsidized entity of the North Caucasian Federal District as the Chechen Republic, where, as noted, about half of the agricultural land is not yet used. Substantiation of conceptual provisions and development of a system of measures and instruments that activate the influx of investment and financial resources into agro-industrial production is acute in a special subsidized entity of the North Caucasian Federal District - the Chechen Republic, which is due to a number of objective reasons.

First, the main directions of the Concept of the Development of the North Caucasus Federal District until 2025 and in all other program documents define that agro-industrial production is a priority sector of the economy of the subsidized republic. On the one hand, about 60% of the population lives in rural areas and the main contingent of unemployed is located here. On the other hand, there are unused agricultural lands that have favorable natural and climatic conditions for the production of the most important agricultural products of plant growing and animal husbandry (and in particular viticulture, horticulture, and greenhouse vegetable production).

Table 4. Some indicators of the socio-economic development of the Chechen Republic for 2013-2016

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Unit of measure</th>
<th>Years</th>
<th>2016 as comp. in % to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, total</td>
<td>ths. of ppl.</td>
<td>1346.43</td>
<td>1370.26</td>
</tr>
<tr>
<td>Including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- urban</td>
<td></td>
<td>468.139</td>
<td>476.003</td>
</tr>
<tr>
<td>- rural</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Problems and Main Mechanisms to Increase Investment Attractiveness of Agricultural Production

<table>
<thead>
<tr>
<th>Gross regional product</th>
<th>RUR mln</th>
<th>122402.8</th>
<th>141294.8</th>
<th>143429.4</th>
<th>166306.1</th>
<th>135.9</th>
<th>117.7</th>
<th>115.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>The volume of shipped goods of own production, performed work and services</td>
<td>--</td>
<td>--</td>
<td>47775.8</td>
<td>54390.9</td>
<td>64798.8</td>
<td>73005.6</td>
<td>152.8</td>
<td>134.2</td>
</tr>
<tr>
<td>The volume of industrial production (works, services)</td>
<td>--</td>
<td>--</td>
<td>19147.8</td>
<td>23778.1</td>
<td>25064.4</td>
<td>25439.6</td>
<td>132.9</td>
<td>107.0</td>
</tr>
<tr>
<td>The volume of agricultural products</td>
<td>--</td>
<td>--</td>
<td>14706.4</td>
<td>15249.6</td>
<td>17704.3</td>
<td>20120.6</td>
<td>136.8</td>
<td>131.9</td>
</tr>
<tr>
<td>Investments in the fixed capital</td>
<td>--</td>
<td>--</td>
<td>44622.8</td>
<td>57448.0</td>
<td>58844.0</td>
<td>61979.8</td>
<td>138.9</td>
<td>107.9</td>
</tr>
<tr>
<td>Finances:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidated budget revenues</td>
<td>RUR mln</td>
<td>65736.4</td>
<td>69688.8</td>
<td>73682.1</td>
<td>72071.7</td>
<td>109.6</td>
<td>103.4</td>
<td>97.8</td>
</tr>
<tr>
<td>including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- gratuitous transfers</td>
<td>--</td>
<td>--</td>
<td>53485.8</td>
<td>56848.5</td>
<td>61396.0</td>
<td>56570.2</td>
<td>105.8</td>
<td>99.5</td>
</tr>
<tr>
<td>- tax and non-tax revenues</td>
<td>--</td>
<td>--</td>
<td>12250.2</td>
<td>12840.3</td>
<td>12286.1</td>
<td>15501.5</td>
<td>126.5</td>
<td>120.7</td>
</tr>
</tbody>
</table>

**Source:** The table is compiled based on the data of the Ministry of Economic Development and the materials of the collections of the territorial body of the Federal Service of State Statistics of the Chechen Republic.

Secondly, the Republic is subsidized, as shown in Table 4, and its agrarian sector has been in a state of stagnation for a long time and needs a substantial inflow of investment and financial resources from the budgets of the Federation and the region, as well as from extra-budgetary sources. Moreover, after the well-known (military) events of the 1990s, the transition to market relations took place in especially difficult socio-economic conditions. Earlier, the main agricultural commodity producers (collective and state farms) came to a complete decay. Almost all of their property - agricultural machinery, machinery and equipment, vehicles, productive and working cattle - was lost, destroyed, and plundered.

Thirdly, investing in the restoration and development of the agro-industrial
production of the Chechen Republic will allow increasing the volume of agricultural products and raw materials at the expense of local producers and thereby maximally provide the population of the region with own high-quality food.

Fourthly, increasing the investment attractiveness of agro-industrial production, attracting investment and financial resources to the development of economic entities of the subsidized region is caused by the need to create additional jobs not only in the agricultural sector, but also in food and processing enterprises. This is the most important stabilizing tool for the social and economic situation, not only in the Chechen Republic, but throughout the North Caucasus region.

The analysis shows that the agriculture of the Chechen Republic has been developing at considerable rates in recent years (Table 5). From the data in Table 5, the reader may see how fast the production of grain crops is developing, which, in fact, is the necessary base for increasing the production of the most important livestock products. In particular, egg production in the region has doubled in a very short period, which is a consequence of the implementation of large high-tech investment projects.

<table>
<thead>
<tr>
<th>Products</th>
<th>Units of meas.</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2016 as comp. in % to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain (in weight after processing)</td>
<td>ths ton</td>
<td>193.9</td>
<td>159.5</td>
<td>217.8</td>
<td>306.0</td>
<td>157.8</td>
</tr>
<tr>
<td>Cattle and poultry for slaughter (live weight)</td>
<td>ths ton</td>
<td>44.1</td>
<td>45.0</td>
<td>46.2</td>
<td>48.0</td>
<td>108.8</td>
</tr>
<tr>
<td>Milk</td>
<td>ths ton</td>
<td>261.2</td>
<td>262.8</td>
<td>266.0</td>
<td>266.8</td>
<td>102.1</td>
</tr>
<tr>
<td>Eggs</td>
<td>mln pcs.</td>
<td>67.5</td>
<td>97.5</td>
<td>112.5</td>
<td>136.1</td>
<td>201.6</td>
</tr>
</tbody>
</table>

*Source: The data by the Ministry of Economic Development*

The authors believe that the heads and specialists of the Ministry of Economic Development and the Ministry of Agriculture and Food of the Republic quite rightly took on the skillful combination of traditional small forms of management in the countryside with the mastery of large, highly efficient technologies and projects in agro-industrial production. For example, as per the Ministry of Economic Development, in 2016 the amount of financing of the State Program for the Development of Agriculture of the Republic amounted to 6,400 million Russian rubles, including 1,426 million Russian rubles from the federal budget, 1,015 million Russian rubles from the republican budget, 4.3 million Russian rubles from the funds of municipalities, while extra-budgetary funds amounted to 3,954.8 million Russian rubles. A large proportion (61.8%) in the total amount of financing for the
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agro-industrial production of the region falls to extra-budgetary sources, of which the overwhelming part is bank loans attracted by private investors.

Thus, the example of the Chechen Republic shows attractive conditions for an external investor. Here, with the participation of foreign capital, a large high-tech project was mastered - “Construction of a dairy complex for 1,200 milk cows in the Gudermes district”, the total value of which amounted to 1,294.6 million rubles. Also, with the participation of an outside investor, a poultry farm of the egg direction was developed, which enabled in 2016 to increase the production of eggs by half compared to 2013. In addition, large investment projects have been implemented in horticulture, hothouse vegetable growing and in other branches of agro-industrial production in the region. It is noteworthy that these examples are not exclusive - pilot projects.

The leadership of the region has adopted a large-scale modernization of agricultural and agro-industrial enterprises with the aim of maximally filling the territory with agro-food products mainly of own production.

5. Discussion

Discussions on the problems of attracting investments in Russian agriculture both among scientists, specialists in the agrarian sphere of the economy, and members of the deputy corps continue. The views on this issue are diametrically divided, some participants in the process are supporters of increasing the budget allocated to the development of the agricultural sector of the economy to the level of support in the EU countries, and others consider it necessary to support the agricultural producers through centralized investments only on a return basis.

There is another point of view, e.g. a well-known Russian scientist, the Academician of the Russian Academy of Sciences, V.V. Miloserdov advocates for the development of multi-channel sources of attracting financial resources for agricultural organizations, he notes that “... different forms of associations, as well as different integrators (either public, private or mixed), all are needed and important, if only they work to modernize agriculture, to implement an innovative program for the development of the agro-industrial complex. Without this, Russia will not get out of the economic crisis, will not solve the import substitution problem, will not saturate the domestic market with domestic food products, will not create conditions for the country's food security” (Miloserdov, 2009).

The conducted researches testify that in sub-sectors of agriculture there are appreciable distortions in attraction of investments. Funds are directed to more profitable branches and sub-sectors of agro-industrial production, while they are not enough in meat and dairy cattle branches.

The authors stand on the positions of creating an effective multi-element and multi-level investment mechanism that ensures an increase in the investment attractiveness
of the main link of the state food security system - the agrarian sector of the economy. Such a mechanism will facilitate the restoration of equivalent relations between the agro-industrial complexes, weaken the influence and control of monopoly structures - resource-producing enterprises and wholesale and trade links of the agro-industrial complex. It is susceptible to all the most profitable instruments of investment policy (improvement of leasing transactions, development of rural credit cooperation, financial support for highly effective investment projects, financing of federal and regional programs for the development of agro-industrial production).

6. Conclusion

Modern agricultural production is becoming an increasingly capital-intensive process, requiring investment activity. Agro-industrial production of the subsidized regions of Russia especially needs the creating effective mechanisms to increase investment attractiveness.

The subsidized subjects of agro-industrial production of the Russian Federation can be conditionally divided into two groups. The first group is the rural areas of the North Caucasus Federal District that are more attractive for the private investor, in which the public-private partnership mechanism is applicable, the second group of territories is less attractive, in which a special investment mode shall be introduced from centralized sources.

The attraction of investment and financial resources to the agro-industrial production of subsidized regions is conditioned by the need to create additional jobs not only in the agricultural sector, but also in the food and processing industry, which certainly becomes an important tool for their further socio-economic development.

The most valuable investors are not only external, but, first of all, “local” ones, who are ready to connect not only agribusiness, but also own life with the village. The authors believe that “exclusion of direct rural residents” from agrarian production is an extremely undesirable economic phenomenon that can cause social tension in the region. Concealment of this problem, untimely solution of it can lead to extremely destructive consequences in the near future in the North Caucasus Federal District.

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References:

Barsukova, S.Yu. Informal ways of implementing formal intentions, or the way the National Project “AIC Development” is being implemented. Available at: https://www.hse.ru/data/686/313/1234/barsukova_pnp.pdf
Buzdalov, I.N. 2017. The main way to overcome the systemic agrarian crisis and gaining Russia's status as a world food power. Export potential of the agro-industrial complex of Russia: state and perspectives. Moscow: Nikonov Russian institute of agricultural issues and informatics (VIAPI n.a. A.A. Nikonov).

Gubernatorova, L.V. 2009. To increase the investment attractiveness of agriculture. Economics of agricultural and processing enterprises, 10, 52-57.

Dmitrichenko, N. 2010. To increase the investment attractiveness of agriculture. Economics of agriculture in Russia, 2, 69-74.


Kibirov, A.Ya., Goncharova, O.A., Sergatskova, E.V. 2004.. The method for calculating the need for investment and financial resources and the rationale for their sources / Stimulating investments in the agro-industrial complex. Moscow: Sirius Company LLC.

Miloserdov, V.V. 2009. From the round-table discussion at the international scientific and practical conference on “Integration and disintegration in the agro-industrial sector of the economy: traditional and innovative approaches”. Economics of agricultural and processing enterprises, 6,1-6.


The main indicators of agriculture in Russia in 2016. 2017. Moscow.


The Decree of the Government of the Russian Federation No. 86 as of December 29, 1991


The Decree of the President of the Russian Federation as of January 30, 2010 No. 120 “On Approving the Doctrine of Food Security of the Russian Federation” / Rossiyskaya Gazeta - Federal Issue No. 5100 (21). Available at: https://rg.ru/2010/02/03/prod-dok.html


Agricultural Policy Monitoring and Evaluation 2013: OECD Countries and Emerging Economies. OECD.


Problems and Main Mechanisms to Increase Investment Attractiveness of Agricultural Production


Aranchiy, V., Makhmudov, H., Yasnolob, I., Radionova, Ya. 2017. The developing of conceptual foundation of the process of organizing innovation activities at agro-industrial enterprise based on outsourcing and the program business process model and notation. Economic Annals-XXI, 165(5-6), 84-89.


