

Main ways of attracting investments into agriculture and agro-industrial complex of Russia

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Abstract: In the article the issues of agricultural development in Russia and improvement of its investment attractiveness are observed. Having analyzed perspective trends in development of agricultural production and AIC (agro-industrial complex) the authors formulate basic ways of attracting investments into agriculture of Russia. Institutional element of the process of encouragement of investment activity in Russian agriculture is emphasized, as the most important one. Such main forms of modern development of AIC as agro-industrial associations and clusters are analyzed. Necessity of establishing of biotechnological and agro-industrial (food) clusters on the base of main industries of agriculture is shown. Complex investment and innovative projects in agriculture and agro sector must be of utter importance - in this way industries which are included in it, as well as Russian economy in general, will develop fast. The investments must be attracted on every stage of production process, beginning with selection work and ending with deep processing of agricultural raw materials. Having investigated the experience of establishing and functioning of agro-industrial clusters of different types in different regions of Russia authors demonstrate main problems and bottle-necks in their development. The problem of import of dangerous production from other countries which does not correspond to phytosanitary and veterinarian norms is demonstrated.

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1. Introduction

Development of agricultural production in modern way, changing of its processes is one of the main policies of structural modernization of Russian economy, it is a key condition of providing economic and food safety of our country [1, 2]. Contribution of agriculture into GDP of Russia is about 3,5%, Russia is the biggest producer and exporter of cereals, it is on the 4th place in the world after China, India and USA in production of wheat (42 million tons annually), one of the biggest producers of potatoes (3rd place in the world - about 33 million tons a year) and so on [3].

But agriculture is still high-risk activity with clear dependence on climate conditions [4]. Drought and floods taking place more and more often damage the harvest greatly. Different pests threaten to destroy huge sowing areas of cereal and vegetables cultures. Badly equipped with machinery peasant farms give little harvest and has poor productivity, when a part of harvest is lost and other part sometimes is not gathered at all and remains on the field. Storage facilities, also very poor, lead to losses of already gathered harvest.

High risks of agricultural production has already resulted in giving to agriculture a "stain" of non-attractiveness for investments. It hinders its technical renewal, prevents from implementation of modern innovative technologies, and does not provide conditions for future development.

All said above leads to conclusion that we have to find ways and methods of improvement of investment attractiveness of agricultural production in Russia.

2. Current state of agriculture in Russia.

Comparative analysis of basic indicators of development agriculture in Russia and the world shows that in quality Russia greatly lags behind not only economically developed countries but many BRICS countries.

For example, rating of Russia in "nomination" "agriculture, hunt and fishing" is many times lower than with leading countries including our northern neighbors which have the same extreme weather conditions. Labor productivity in Russian agriculture is 3,7 times lower than in Northway, 3,2 times lower than in Finland, 2,9 times lower than in Sweden, 1,8 times lower than in Germany. Much more worse is the situation with crop capacity of main agro cultures: crop capacity of wheat in Russia is on 51st place in the world (see table 1)

In the same time dynamics of basic indicators of development of agriculture is very low too, as observations for ten years demonstrate: since 2000 to 2010 the rate of wheat crop capacity in Russia increased only for 40%. For the same period increase in gross collection of cereals was 20% (19th place in the world).

Table 1. Comparative data on wheat production in Russia and in the world.

Country	Crop-capacity of wheat		Growth rate of crop-capacity		Gross collection of wheat		Growth rate of gross collection	
	Centnes r/ha	place	2010 % to 2000	place	Million tons	place	2010 % to 2000	Place
Australia	16.4	57	-9.89	53	22.1	9	0.00	33
Austria	50.1	14	12.08	32	1.5	36	15.38	21
Azerbaijan	19.4	50	-16.38	57	1.3	39	8.33	27
Albania	39.9	19	30.82	13	0.3	53	0.00	34
Algeria	16.3	58	77.17	5	3.1	28	287.50	1
Argentina	34.1	26	36.95	9	14.9	14	-7.45	45
Armenia	21.2	49	26.95	17	0.2	57	0.00	35
Bangladesh	24	45	8.60	37	0.9	42	-50.00	58
Belarus	28.9	33	33.80	12	1.7	33	70.00	11
Belgium	88.3	2	11.49	33	1.9	31	11.76	22
Bulgaria	36	23	26.76	18	4	25	-42.86	13
Bolivia	15.7	59	84.71	3	0.3	55	200.00	4
Brazil	27.7	36	77.56	4	6	19	252.94	2
Hungary	37.2	21	3.33	39	3.7	27	0.00	36
Germany	73.1	6	0.41	43	24.1	6	11.57	24
Greece	31.4	29	15.87	27	1.6	34	-30.43	55
Denmark	66.3	8	-11.36	54	5	22	6.38	28
Egypt	55.7	11	-12.15	56	7.2	17	9.09	26
Israel	17.5	55	19.05	21	0.1	60	0.00	37
India	28.3	34	1.80	41	80.7	2	5.63	30
Ireland	86	3	-8.99	52	0.7	45	0.00	38
Iran	21.4	48	34.59	11	15	12	85.19	10
Spain	29.4	32	-5.16	48	5.6	21	-23.29	54
Italy	37	22	15.26	28	6.9	18	-8.00	47
Kazakhstan	7.3	60	-18.89	58	9.6	15	5.49	31
Canada	28	35	14.75	29	23.2	8	-12.45	49
Kirgizstan	21.7	47	-7.26	50	0.8	44	-20.00	53
China	47.5	17	27.01	16	115.2	1	15.66	20
Latvia	31.6	28	17.04	25	1	41	150.00	6
Lithuania	32.5	27	-2.69	45	1.7	32	41.67	14
Morocco	17.1	56	256.25	1	4.9	23	250.00	3
Mexico	54.2	12	9.72	35	3.7	26	5.71	29
Holland	89.1	1	6.58	38	1.4	38	27.27	18
New Zealand	81.2	4	30.76	14	0.4	50	33.33	16
Northway	40.6	18	-11.74	55	0.3	52	0.00	39
Pakistan	25.5	42	2.41	40	23.3	7	10.43	25
Poland	39.4	20	21.98	20	9.5	16	11.76	23
Portugal	18.5	52	17.83	23	0.1	59	-75.00	60
Moldova	22.9	46	17.44	24	0.7	47	0.00	40
Macedonia	30.4	31	23.08	19	0.2	56	-33.33	56
Russia	19.1	51	40.37	8	41.5	4	20.29	19
Romania	27	39	16.88	26	5.8	20	28.89	17
Slovakia	35.1	24	13.23	30	1.2	40	-7.69	46
Slovenia	48	16	12.94	31	0.1	58	-50.00	59
United Kingdom	76.8	5	-4.12	46	14.9	13	-10.78	48
Sudan	17.9	53	-23.18	59	0.4	51	100.00	8
USA	31.2	30	10.64	34	60.1	3	-0.83	43
Tajikistan	25.2	43	101.60	2	0.8	43	100.00	9
Turkey	24.4	44	8.93	36	19.7	10	-6.19	44
Ukraine	26.8	40	35.35	10	16.9	11	65.69	12
Finland	34.3	25	-4.72	47	0.7	46	40.00	15
France	78.4	7	-1.12	44	38.2	5	2.14	32
Czech republic	49.9	15	18.53	22	4.1	24	0.00	41
Chili	57.7	9	51.44	7	1.5	35	0.00	42
Switzerland	57.4	10	-6.36	49	0.5	49	-16.67	52
Sweden	54	13	-8.63	51	2.1	30	-12.50	50
Estonia	27.1	38	27.23	15	0.3	54	200.00	5
Ethiopia	17.8	54	53.45	6	3	29	150.00	7
South African Republic	26.3	41	1.15	42	1.5	37	-37.50	57
Japan	27.6	37	-26.60	60	0.6	48	-14.29	51

[5, pp 217-220]

The same picture can be observed with other agricultural crops: 59th place in crop capacity of cereals and beans, 51st place in crop capacity of potatoes, corn - 40th place, sugar beetroot - 29th place [6, c.215-216, 224, 226, 231-232]. A bit better situation is with rice - 16th place but it is too little to talk about use of modern technologies in rice production [7].

As we see national agriculture seriously lags behind many countries in quality of production. To overcome this technical and technological

backwardness it is necessary to modernize production in innovative way and improve all stages of process of production, beginning with selection work on seeds and ending by full final processing of agro materials.

To achieve this investments are needed - both into agriculture and processing complex.

Forming of single whole economic space and joining of Russia to WTO have added more problems in development of agro industry in Russia. In particular they observed increasing number of violations of sanitary-hygienic and phytosanitary norms established by Russian laws in regard to agricultural production and food products, and this is a serious problem.

For example since 2010 in Russia there were 100 occurrences of import into the country of phytodangerous potatoes (including those used for seeds) and seed material from Belgium, Great Britain, Germany, Spain, Holland, France, Czech Republic, Finland and other countries of WTO, which contains eelworm, and moth. It led to the prohibition of import of potatoes from EU since 1st of July, 2013, laid upon by Rosselkhoznadzor (initially they planned to prohibit import of potatoes since 1st of June but delayed it at the request of EU [8]).

Besides that Rosselkhoznadzor of RF has found many cases of supplies to Russia of cooled meat, dairy products, fruits and vegetables from agricultural farms of European countries which were not certified in accordance with norms of the countries-members of customs union. As a result of such supplies Russia receives products which are dangerous in respect of their phyto-sanitary and veterinarian state including those which are meant for direct use. Such products threaten to form increased volumes of toxic substances in food and seeds, which results in getting of such elements into human and animal organisms. Consumption of such products damages both the state of agriculture of our country and people.

All this demands serious attention to the state of agriculture in Russia and search for ways to attract investments for its development.

3. Main ways of attracting investments into Russian agriculture.

Analyzing main trends of development of this industry in the world [9,10] and home research works on development of demand for investments in AIC [11, 12] we have defined several key areas of focus of attracting investments, including foreign ones, into agriculture and AIC of Russia.

Firstly it is necessary to increase volume of investments attracted into creation of AICs with completed process chain meant for processing

agriculture products, first of all, made by plant-growing industry.

This process has already started in a number of regions of Russia. First results are observed but the volume is not sufficient yet. Besides that it is necessary to attract investments for implementation of bio-technologies in the framework of clusters. It will enable to broaden the area of use of modern bio-technologies, from veterinary area to the production of balanced fodder for cattle. Modern bio-technological products can improve quality characteristics of fodder additives, they will enable to reduce risks of cattle deceases and increase their reproductive function.

Secondly, it is necessary to attract investments for forming of bio-technological clusters on the base of agriculture production.

Main purpose of existence of such clusters is deep processing of agricultural raw materials and production from it the materials for chemical, pharmaceutical, medicine industries, fuel and energy sector (production of bio-fuel) etc. [13].

Thirdly, it must be attracting investments into development of modern efficient agriculture machinery and implementation of modern technologies for organization of agriculture production, including implementation of intensive technologies of melioration of land; improved ways of processing crops and soils; widening of area of use of mineral fertilizers and bio-fertilizers, development of effective means of plant protection, use of resource-saving technologies in agriculture (technologies of zero, surface and stripe ploughing) etc.

Investments in new ways of land cultivation accordingly to Mineconomrazvitiya's forecasts will allow to put into use by 2020 additional 270 thousand hectares of meliorated land, provide protection of more than 247,2 hectares from water-erosion, flood and partial flood as well as saving from wind erosion and turning into deserts of agricultural land with area of 958,2 thousand hectares [14].

Special area of focus for attracting of foreign investments into agriculture is implementation of advanced technologies in the sphere of crop-capacity improvement by means of bio-technologies.

Fourthly, big investments are demanded into development of national seed-growing, into creation of more productive kinds of plants resistible to drought, plants which are less liable to deceases etc. This area requires special attention. Importance of development of selective work, especially in plant-growing, support of elite seed-growing was discussed on the federal level. Nowadays only 20% of home seeds of vegetables are used in our agriculture.

Others are of foreign selection which grow badly in Russian climate conditions. Therefore development of national selective science is necessary, including seed-growing. This task is clearly formulated in Federal program of development of agriculture till 2020. [15].

In accordance with Mineconomrazvitiya's forecasts, successful realization of the program of development of national seed-growing, creation of high-yielding and resistible to deceases and pests agro cultures will allow to have proportion of high-yielding sorts in general amount of agro cultures up to 40% of sowing areas by 2030, which will provide great increase of crop capability in general [16].

Then successful realization of projects in mentioned above areas of investment is only possible if particular rules and conditions are followed. Among them we should name the following:

- increase of interest of strategic investors – both Russian and foreign - towards development of business in agricultural complex of Russia by forming favourable conditions for business;
- providing legal and economic opportunities for accumulating big amounts of capital in separate investment projects, including complex financing by private investors, by federal grants, by means of food aid;
- designing of the package of perspective highly profitable strategic innovative-investment projects of integral type in the key agriculture regions of Russia and attracting of institutional investors (including foreign investors) for their financing, on privileged conditions;
- uniting of enterprises of different types: big-, middle-, small-, micro-, into single whole structure of Russian agro business and their cooperation with scientific and educational institutions with the purpose to use perspective technologies, selective work etc. – in the same way as in many countries of the world which have developed agrarian sector [17];
- development of mechanisms of private-state partnership, first of all in the sphere of solving infrastructural issues at realization of big investment projects in agriculture and AIC [18];
- implementation of state support of agriculture which must be aimed to both increasing of competitiveness of agriculture products on internal and external markets and providing food independence of our country [19];
- implementation of new forms of grants for agricultural producers - in particular, up to 2020 they plan to give grants on the base of “for 1 liter of milk in cattle-breeding”, “for 1 hectare

in plant-breeding” to the producers who comply with a number of conditions, among them are the use of resource-saving technologies and saving fruitfulness of lands etc.);

- active participation of producing and processing enterprises of agricultural industry in Russia in realization of complex Program of development of bio-technologies in Russian Federation up to 2020 (Bio 2020), in innovative renewal of production in the framework of realization of technological platforms "Technologies of food and processing industries of AIC - products for healthy catering", "Bio-industry and bio-resources - Biotech-2030", "Bio-energy" and a number of others.

Only on this base it is possible to successfully implement the projects of forming agro-clusters and bio-technological clusters of both profiles - agricultural and industrial - in the Russian regions. And this is an area of focus which is the most promising one as it was shown by investigations of already realized big investment projects in agriculture and AIC in Russia.

4. History of attracting investments into agriculture and AIC of Russia.

For the last years development of cluster forms of organization of agriculture production is actively taking place in main agrarian regions of Russia.

Cluster form of business organization is attractive for many national investors. Its attractiveness is that the framework of cluster enables to organize complete process chain: production - processing - sales of ready products, made from agro raw materials, which are in high demand with consumer. In particular we are talking about bio-technology clusters, forming of which in agriculture of Russia is very promising and has already started in a number of regions.

Analysis of practice of development of agriculture and agro-industrial sector in Southern regions of Russia (Krasnodar and Stavropol Territories, Rostov Region, Volgograd region and a number of other regions of Russia) shows that the authorities of these adopt in a very regular pattern the measures for attracting national and foreign investors into realization of big investment projects. Main national investors of the most significant investment projects are the enterprises which are part of big industrial holdings specializing on deep processing of agriculture raw materials and food industries companies. Also the ones which are ready to invest into big projects are the enterprises of processing food industries, including the companies of fuel-

energy complex. This allowed to implement a number of big investment projects of forming agro-industrial and bio-technology clusters in Russian regions with the volume of the investments up to 20 billion of roubles (on separate projects) [20].

It resulted in growing of number of investments platforms in southern agrarian regions of Russia, the number and investment capacity of projects has increased, more and more “valuable” investors are participating in their financing, and amounts of investments into them has already reached billions of roubles. Active encouragement of investment policies in the mentioned above areas of focus will increase inflow of capital investments up to 2030, in accordance with forecasts, by 2,1 times in agriculture and by 1,7 times - in food industry of Russia [21].

As to legal aspects of encouraging investment activity in agriculture, AIC and adjacent industries (agriculture machine-building, technical service) we must say that investment laws should be developed and improved here both on federal and regional level. Main emphasis must be put on creation of a number of privileges and preferences for investors including state guarantees for foreign investors. State support of investment projects is necessary in the area if development of production infrastructure, federal guarantees for protection of foreign investments must be provided etc. Appropriate legislative support of investments into forming agro-clusters and bio-technology clusters may be provided by implementation of legal status of accelerated development zone. For that the schemes of interaction between different enterprises within one cluster and their rights and duties must be clearly defined.

One more important issue connected with attracting investments into agriculture of Russia is correct organization of processes of interaction of Russia and foreign investors in the sphere of agriculture and AIC. In this area the main stake must be placed on attracting foreign investments on the base of co-investing on main big projects. Also advanced technological foreign experience in melioration, chemical protection of plants, technologies of processing of agriculture products must be used. In the same time harmful practice of purchasing seeds from abroad must be restricted to the minimum. It is connected, as we have already mentioned above, with low quality of phytosanitary and veterinarian control over imported into Russia agricultural products and their illegal certification.

5. Inference.

1. In present time there exist many problems in agriculture and AIC of Russia connected with technological backwardness of this industry and low level of investments.
2. To solve the problem of attracting investments (including foreign ones) into agriculture and AIC of Russia the following spheres must be taken into consideration: development of engineering and technical infrastructure (agriculture machine-building, technical service); development of production of modern means of plant protection and veterinarian preparations; development of selection farms (seed-growing, pedigree stock-breeding); encouraging of internal demand for agrarian products and development of infrastructure of agrarian markets; implementation of cluster organization of business; improvement of investment legislature and others.
3. One of the most perspective tools of development of agriculture and AIC and attracting investors in Russia is the use of cluster organization of business, in particular - forming of agro-clusters and bio-technology clusters.
4. Legislative support of investments into agriculture, AIC and adjacent branches of economy of Russia must be provided by means of introduction of legal status of accelerated development zone in regard to agrarian clusters and bio-technology clusters.
5. State policy of Russia and the regions in respect to investments into agriculture and AIC must be developed on the base of food safety, activation of internal demand for the products of national agriculture and AIC, priority of investment projects of innovative kind, compliance with balance and proportionality requirements to the development of the whole complex of production, processing and sales of agricultural products.
6. Implementation of modern innovative agro-industrial technologies, including use of modern and efficient machinery, investments into selection of high-yielding kinds of cereal and vegetable cultures, increasing of volume of mineral and bio fertilizers used, advanced forms of protection of plants from pests will allow to raise average crop-capacity of agro cultures twofold in comparison with current level. Technical and technological modernization will make preconditions for increase in labour productivity in agriculture of Russia by 1,6 times by 2030.

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