Investments and investment activity as drivers of regional vegetable growing development

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Abstract. The article presents proposals for the development of investment activity in agriculture in relation to its most vulnerable sectors. It is scientifically proven that investment activities should be carried out continuously, that is, permanently reproduced. In turn, the permanent process of reproduction of forms of capital, the transformation of investments into capital gains and their full recovery have their own specifics in agriculture. The authors investigated the approaches to the organization of investment activity in the works of Russian and foreign economists, identified its regional characteristics for the Voronezh region. It is proposed to consider the vegetable growing industry as the driver of agricultural development of the region on the basis of the organization of investment activity. A brief description of the vegetable industry of the Voronezh region, identified and systematized general, sectoral and organizational and economic features of the functioning of vegetable enterprises, which have a direct impact on the reproduction of investment activity. The investment climate of the region, potential sources and programs of financing are studied and the possibility of development of regional vegetable growing is concluded.

1. Introduction
The urgent need for large-scale investment in fixed assets of the agrarian sector is caused by the need to solve various state problems: from the development of rural territories, maintaining the territorial integrity of the country and ensuring equal constitutional rights of the urban and rural population to solving demographic problems and ensuring food security of states. In this regard, a set of measures is needed to organize investment activity in agriculture, especially in its most vulnerable sectors.

Investment activity of I A Blank [1] is interpreted as "purposefully realized process of formation of the necessary investment capital, the choice of the most effective objects (tools) of implementation of investments, drawing up the investment program balanced on the chosen parameters (investment portfolio) and control of its realization". Investment activity of the enterprise is a dynamic process of unity of investment and operation of investments. Investment activities should be carried out continuously, that is, permanently reproduced.

Reproduction investment activities from the position of G T Alibaeva and A M Kildibekova [2] are a "set of processes of formation of investment resources, their investments in investment property, income resulting from the use of the investment and reinvestment of the resulting income, ensuring the reproduction of the economic industry system".
The permanent process of reproduction of forms of capital, the transformation of investments into capital gains and their full compensation has its own specifics in agriculture due to exposure to specific factors:

- investment policy (political, economic and legal stability, formation of a favourable investment climate, expansion of state participation in investment, improvement of investment market conditions, infrastructure support of investment processes, information and consulting support for investors);
- economic (scale of cooperation and integration, financial stability and solvency of enterprises, labour productivity, tax and credit policy, price parity, creation of wholesale and distribution centres);
- technical and technological (the level of technical equipment of farms, the degree of updating of agricultural machinery, application of energy and resource saving equipment, improvement of intensive technologies, renovation of technologies in animal husbandry, the development of technologies for adaptive-landscape basis);
- innovative (biological characteristics of plants, the genetic potential of animals, the breeding of new animal breeds, expansion of livestock breeding, the formation of agrotechnological, business incubators, the creation of a network of transfer investment in the agricultural sector) [2].

In order for the above set of factors to contribute to the development of agricultural enterprises, it is necessary to organize investment activities. With regard to the investment activity of agricultural organizations, the term "organization" by К S Ternovikh, D V Chernov [3] is proposed to be interpreted as "a set of measures aimed at the creation, adoption and implementation of investment projects in a timely manner at the highest possible level of efficiency with the minimum acceptable level of investment risk".

The works of many foreign economists are devoted to the study of the organization of investment activity. Among them, D Haendel [4], H Hrytsaienko[5], А Sakhno [6], Y Yin, Y Li [7], who believes that the growth of production and improving the quality of agricultural products, strengthening the country's food security are based on the implementation of the most advanced technologies in agribusiness. For their successful functioning, it is necessary to solve a number of complex problems, one of which is the development of an effective mechanism for investing in agriculture. However, they are proposed to take into account the peculiarities of the organization of investment activity in particular.

2. Materials and methods

We have identified regional features of the organization of investment activity in the Voronezh region based on a study of the functioning of the Regional State Budgetary Institution «Investment and Strategic Projects Agency». So, the implementation of investment projects in our region boils down to several steps:

- conclusion of a cooperation agreement between the Government of the Voronezh region and the investor;
- the decision of the interdepartmental commission on the deployment of productive forces on preliminary coordination of the location of the enterprise;
- consideration by the Expert Council of the issue of assigning the status of “Particularly Significant” to an investment project, which means receiving state (regional) state support;
- inclusion in the List of particularly significant investment projects of the Voronezh region;
- conclusion of an agreement on the implementation of investment activities [8].

The driver of agricultural development in the Voronezh region based on the organization of investment activity can become the vegetable growing industry.

Vegetable growing in the Voronezh region today is represented mainly by enterprises of the greenhouse economy: "Voronezh greenhouse complex" APC, TC "Voronezh" LLC Boborovsky district, and "Rodina" LLC Semiluksky district. The volume of sales of vegetables in closed ground is
88% of the industry revenue. The largest producer of vegetables of the closed ground is the "Voronezh greenhouse complex" APC.

"Mays" LLC Kalacheevsky district produces vegetables, both open and closed ground. Among the regional producers of open-ground vegetables ("Gera i Poryss" LLC Kalacheevsky district, "Osen" LLC Kashirsky district, "Liskinsky" APC Liskinsky district, "Logus-Agro" LLC Novousmansky district, "Ostrogozhskadpitomnik" CJ-SC Ostrogozhsky district, "Blizhnepolubyanyskoye" LLC Ostrogozhsky district, APK "Aleksandrovskoe" LLC Paninsky district) the largest organization is "Logus-Agro" LLC, the proceeds from the sale of vegetables of which in 2018 amounted to 61 million rubles.

The data in table 1 indicate the low efficiency of the vegetable growing industry in the Voronezh region.

**Table 1. Efficiency of selling vegetables by agricultural enterprises of the Voronezh region in 2018**

| Company names                     | Profit from sales, thousand rubles | Return on sales, % |
|-----------------------------------|-----------------------------------|--------------------|
| **Greenhouse vegetables**         |                                   |                    |
| "Voronezh greenhouse complex" APC | 77 985                            | 10.5               |
| TC "Voronezh" LLC Boborovsky district | 143                          | 5.4                |
| "Rodina" LLC Semiluksky district  | -32 678                           | -39.2              |
| "Mays" LLC Kalacheevsky district  | 23                                | 4.0                |
| **Open field vegetables**         |                                   |                    |
| "Mays" LLC Kalacheevsky district  | -164                              | -4.2               |
| "Gera i Poryss" LLC Kalacheevsky district | 356                          | 33.0               |
| "Osen" LLC Kashirsky district    | -2 743                            | -7.9               |
| "Liskinsky" APC Liskinsky district | -256                          | -393.8             |
| "Logus-Agro" LLC Novousmansky district | -4 197                       | -6.9               |
| "Ostrogozhskadpitomnik" CJ-SC Ostrogozhsky district | -1 340                   | -46.4             |
| "Blizhnepolubyanyskoye" LLC Ostrogozhsky district | -1 978                    | -271.7            |
| APK "Aleksandrovskoe" LLC Paninsky district | 3 559                     | 38.4              |
| **Total industry**                | 38 710                            | 4.11               |

Among the eight agricultural organizations producing open-ground vegetables, only two are profitable (APK "Aleksandrovskoe" LLC Paninsky district and "Gera i Poryss" LLC Kalacheevsky district). Organizations involved in the production of vegetables of closed soil operate more efficiently - the profitability of the "Voronezh greenhouse complex" APC 10.5%, TC "Voronezh" LLC Boborovsky district 5.4% and "Mays" LLC Kalacheevsky district 4.0%. The "Rodina" LLC Semiluksky district is inefficiently functioning - the loss-making ratio of vegetables sold by this enterprise is 39.2%. In this match, we believe that only the "Voronezh greenhouse complex" APC in 2018 has its own sources for expanded reproduction of fixed assets.

In this case, we see the need to differentiate state support for agriculture, aimed at maximizing production growth through the most efficient use of budgetary funds with the aim of expanded reproduction of investment activity and continuous reimbursement of consumed resources in an increasing volume. That is, from our position, the conditions for the provision of state support provided to vegetable organizations should be linked to the effectiveness of their activities.
In our judgments, we refer to the research of the 2014 Nobel Prize winner in economics, J Tyrol [9], which focused on the incentives and goals of the organization, adhering to the maximum profit hypothesis (the main goal of the organization is to obtain the maximum possible profit; if there are alternatives, choose a project that will bring big profits). However, the incentives of the organization may be different and may conflict with full insurance. J Tyrol considers in more detail a two-sided model in the presence of risk and income.

In addition to incentives, J Tyrol examined in detail competition in the market, including grocery, and the adoption of ineffective decisions. He proved that competing firms must make new effective decisions in order to grow. In the case of unreasonable choice of ineffective solutions by competing firms, according to J Tyrol, it is necessary to solve the problem of delegation and control.

In this regard, we will study the legislative initiative for the development of investment activity in vegetable growing in the Voronezh region and the existing directions of state support for the development of this industry.

In the framework of the state program of the Voronezh region “Development of agriculture, food production and the infrastructure of the agro-food market”, a subprogram “Development of vegetable growing of open and protected soil and seed potato growing” [10] includes the following main activities:

- support for the income of agricultural producers in the field of development of the production of seed potatoes and open ground vegetables;
- creation and modernization of potato storage facilities (vegetable stores) and greenhouses.

The following is the target indicators for the development of vegetable growing in the region: ensuring growth in the volume of production of vegetables in open and protected soil; increase in capacities for storing potatoes and vegetables in open ground; an increase in the area of greenhouses, etc.

From our point of view, the implementation of the state program for the development of vegetable growing is connected with investment activity in this industry, taking into account the advantages of the Voronezh region in terms of the convenience of its geographical location; high personnel and scientific potential; a wide range of regional investment support; the presence of industrial parks with developed infrastructure; as well as experience in implementing large-scale investment projects.

The investment strategy of the Voronezh region for the period until 2020 and the main directions until 2030 [11] provides:

- the construction of the greenhouse complex APC "Bobrovsky greenhouses" LLC in the Bobrovsky municipal district;
- the creation of the greenhouse complex "Tomat" LLC in the Bogucharsky municipal district through the construction and subsequent operation of the greenhouse complex for growing vegetables in the Voronezh Region according to proven Dutch technology with high productivity;
- construction of a complex for the production and processing of fruit and vegetable products of "Razdolie" CJ-SC Semiluksky municipal district with the aim of organizing production of fruit and vegetable products with a capacity of more than 15,000 tons per year using new food technologies.

The largest investment project currently being implemented on the territory of the Voronezh region in the vegetable growing industry is the "Construction of a greenhouse complex for growing vegetable crops" in the Bobrovsky district. It carries out investment activities of "APH Eco-Cultura" LLC at the expense of its own borrowed (bank loan) funds in the amount of 16.4 billion rubles on a 110 acres’ land plot. Status: “especially significant” was assigned to the investment project by the expert commission on May 6, 2019. The commissioning of the first phase of the greenhouses of "APH Eco-Cultura" LLC is planned by 2020.
3. Results and discussions

| Municipality          | Priority directions for the development of vegetable growing | Key projects                                                                 |
|-----------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------|
| Bobrovsky district    | The development of greenhouse complex                       | Construction of a greenhouse complex in Bobrov                                |
| Bogucharsky district  | Stimulation of production and processing of vegetable products | Project "Construction of a greenhouse complex for the production of fruits and vegetables in closed ground" Tomat "LLC |
| Buturlinovsky district| The development of high-tech industries                     | Construction of greenhouse complex                                             |
| Verkhnemamonsky district| Development in the district of agriculture                 | Project "Construction of a greenhouse complex in v. V. Mamon" (investor - "Krasny Yar" LLC). |
| Liskinsky district    | Creation of new productions and modernization of existing in rural areas of the district | Project "Construction of a greenhouse complex (Nizhneikoretskoye village) |
| Nizhnedevitsky district| Agricultural development                                    | Project "Construction of a greenhouse complex                                 |
| Novoussmansky district| Formation of competitive agro-industrial production         | Construction of a plant for the processing of agricultural raw materials (including vegetables) "NaDO" LLC |
| Ol'khovatskiy district| Support entrepreneurial initiative                          | Project "Development of greenhouses on the basis of peasant and farmer estates of the district " |
| Paninsky district     | Integrated development of production and processing of vegetable products | Project "Construction of a greenhouse complex for growing vegetables" (Paninskoe urban settlement) |
| Povorinsky district   | Integrated development of production and processing of vegetable products | Construction of a plant for the processing of vegetable products               |
| Podgorensky district  | Diversified sustainable economy (development of production and processing of agricultural products) | (v. Baychurovo)                                                              |
| Semiluksky district   | The development of the agro-industrial complex of the district | Project "Construction of a greenhouse complex for growing vegetables" urban village Podgorensky |
| Ternovsky district    | Integrated development of production and processing of agricultural products | Project "Construction of a greenhouse complex of the 5th generation" ("Rodina" LLC) |
It should be noted that since 2019, closed-field vegetable growing has received only soft loans as state support. The CAPEX reimbursement remained only for those areas in which investors are reluctant or they are sufficiently specific, for example, the creation of selection-genetic and hybrid centres. At the same time, regional support for the development of the vegetable growing industry consists in providing benefits for corporate income tax and property tax for a period of 5 years, compensating for part of the costs of constructing engineering and transport infrastructure facilities, including paying for services related to the implementation of technological connection to electric networks. At the same time, back in 2016, by the decision of the local self-government body, a preferential rental rate for land was established.

In the framework of the message of the Governor of the Voronezh Region A V Gusev of the Voronezh region and the executive body of state power of the Voronezh region dated 05/28/2019 [12] emphasized the development of the investment climate and investment activities in the Voronezh region, including in the vegetable growing industry.

The strategy of socio-economic development of the Voronezh region for the period until 2035 [13] also provides for investment projects and priority areas of municipal entities for the development of vegetable growing (table 2), mainly related to the construction of greenhouses and greenhouse complexes for year-round cultivation of greenhouse vegetables.

It was established that the external environment is favourable for the start of projects, that is, investment activities in the vegetable growing of the Voronezh region, associated with the construction of greenhouses, will be effective and will provide expanded reproduction of fixed assets, increase the volume of vegetable production. As a result, the region will fully meet the population’s need for fresh vegetables and herbs, and excesses will be exported. All of the above allows us to argue about the possibility of forming an export-oriented economy of the vegetable growing industry.

4. Conclusion
So, a feature of the development of vegetable growing in the Voronezh region is the investment climate created in the study area, the state (regional) support system and the clear need to saturate the son of a product with year-round fresh vegetables. for the construction of greenhouses.

In addition, in our opinion, we should differentiate state support for vegetable growing aimed at maximizing production growth through the most efficient use of budgetary funds with the aim of expanded reproduction of investment activities and continuous reimbursement of consumed resources in an increasing volume.

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