DEVELOPMENT OF RURAL TERRITORIES OF THE AGRO-ORIENTED REGION IN THE CONDITIONS OF SELF-SUFFICIENT FOOD SUPPLY

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Abstract. The agro-industrial complex (AIC) is a strategic backbone industry at the regional level. Issues of food security and functional availability of food are still of particular relevance. At the same time, the issues of self-sufficient development of regions, including in the branches of the agro-industrial complex, are of strategic importance. Acceptable levels of ensuring food independence and physical availability of food with agricultural products are noted in the directions of the Doctrine of Food Security of the Russian Federation. Nevertheless, a number of unresolved problems remain in terms of the level of affordability and rational norms of food consumption: there may be an abundance of products, but at a very expensive price. Given the limited purchasing power of the population, burdened by the pandemic, it is important for consumers to be able to purchase quality products in sufficient volume to ensure an active and healthy lifestyle. In the sectoral context, there are still unresolved issues of low profitability of production, preservation of the gene pool of farm animals, reduction in the number of cattle, insufficient level of technical and technological equipment, low level of average monthly wages in agriculture. The guarantee of the economic availability of food is possible with the stabilization of the general economic situation in the country and, accordingly, the growth of real incomes of the population, which, in turn, will give positive dynamics to new points of growth in the agro-industrial complex. The main measures to increase the economic affordability of food can be implemented through regional programs to support the poorer groups of the population, for example, the provision of subsidies for catering.

Keywords: territories, rural, food, region, self-sufficiency, development.

1. Introduction. According to Rosstat, the share of food expenditures in 2018 averaged 30%. At the same time, the gap in the level of consumption by groups with different incomes could differ several times: the population with the lowest incomes spent an average of 47.3% of their income on food, and the richest population - 17.3% [1]. ".. Public authorities should be able to quickly and promptly identify and neutralize possible threats to the economic development of the region." [2] Stimulating investments in the development of promising areas of the agro-industrial complex will satisfy the demand for agricultural products at affordable prices, increase the demand for skilled labor, thereby to interest agricultural producers in educating the population. State investments in the modernization of transport infrastructure and increasing the degree of its accessibility for all producers of the agro-industrial complex will also help reduce the level of poverty, and, accordingly, increase the physical and economic accessibility of food.

2. Materials and Methods. The main analytical base of the study was the information resources of statistical data from Rosstat, news agencies, line ministries and departments. To assess the current state of development of rural areas, monographic, graphic, computational and constructive methods, as well as marketing research techniques, were used.
3. Results and discussion. The development of rural areas as a priority task is inextricably linked with the branches of agriculture, designed to provide raw materials for the processing industry, and, ultimately, high-quality food for the population.

Among the regions of the Siberian Federal District (SFD), the Altai Territory is the leader in the production of agricultural products (Tabl. 1) [3,4,5].

Table 1 - Agricultural products of the Siberian Federal District, 2020, million rubles

| Region                           | Agriculture | Including | 2020 κ 2019 , % |
|----------------------------------|-------------|-----------|-----------------|
|                                  |             |           | Plantindustries | Animal-industries | Agriculture | Plantindustries | Animal-industries |
| Siberian federal district, total | 622608,8    | 301327,1  | 321282,7       | 101,7            | 103,6       | 100,0           |
| Altaic edge, share in the SFD    | 143304,8    | 82291,9   | 61013,0        | 96,3             | 92,8        | 100,8           |
|                                   | 23,0 %      | 27,3 %    | 19,0 %         | 100,8            |             |                 |
| Irkutsk region, share in the SFD | 66050,5     | 24483,8   | 41566,6        | 103,1            | 106,0       | 101,5           |
|                                   | 10,6 %      | 8,1 %     | 12,9 %         | 101,5            |             |                 |
| Krasnoyarsk region, share in the SFD | 97584,1    | 45894,7   | 51689,4        | 108,7            | 115,4       | 103,5           |
|                                   | 15,7 %      | 15,2 %    | 16,1 %         | 103,5            |             |                 |
| Novosibirsk region, share in the SFD | 99076,5    | 45037,1   | 54039,3        | 102,5            | 103,0       | 102,2           |
|                                   | 15,9 %      | 14,9 %    | 16,8 %         | 102,2            |             |                 |
| Omsk region, share in the SFD    | 100506,7    | 56215,6   | 44291,1        | 99,8             | 103,1       | 96,0            |
|                                   | 16,1 %      | 18,7 %    | 13,8 %         | 103,1            |             |                 |

As evidenced by the data in Table 1, in the gross agricultural product of the Siberian Federal District, a quarter is accounted for by the products of the Altai Territory. The share of the Omsk and Novosibirsk regions, as well as the Krasnoyarsk Territory, is practically equal and amounts to approximately 16%. The rest of the subjects of the Siberian Federal District do not participate in the analytical review, because their contribution to the formation of the total gross product of the Siberian Federal District is less than 10% and ranges from 8 to 1%. [6]

According to the preliminary results of 2019, the Altai Territory produced agricultural products worth about 147.0 billion rubles, the agricultural production index was 99.6% (in the Russian Federation - 104.0%), Including crop production - 97.0% (106.1%), livestock - 103.0% (101.6%).
Table 2-The main indicators of agricultural development, defined in the state program of the Altai Territory "Development of Agriculture in the Altai Territory", 2019 [7,8]

| indicators                                                                 | Plan | Fact  | Level (+,-), % |
|----------------------------------------------------------------------------|------|-------|----------------|
| Agricultural production index in farms of all categories (in comparable prices) to the previous year, % | 91,2 | 99,6  | +8,4           |
| Index of crop production in farms of all categories (in comparable prices) to the previous year, % | 84,9 | 97,0  | +12,1          |
| Livestock production index in farms of all categories (in comparable prices) to the previous year, % | 100,7| 103,0 | +2,3           |
| Food production index (in comparable prices) to the previous year, % | 102,0| 98,9  | -3,1           |
| Index of physical volume of investments in fixed assets of agriculture, % | 101,0| 103,9 | +2,9           |
| Profitability of agricultural organizations (including subsidies), % | 19,0 | 21,7  | +2,7           |
| Average monthly wages of agricultural workers (excluding small businesses), rubles | 22100,0 | 25264,3 | 114,3 % |
| Labor productivity index compared to the previous year, % | 91,2 | 96,2  | +5             |
| The number of highly productive jobs, thousand units | 8,574 | 19,352 | 225,7 % |
| Disposable resources of households (on average per 1 household member per month) in rural areas, rub. | 17300 | 18110,5 | 104,7 % |
| Share of costs for the purchase of energy resources in the structure of costs for the main production of agricultural products, % | 13,21 | 12,41 | -0,8 % |

The total amount of state support aimed at the development of agriculture and rural areas of the region in 2019 is more than 4.6 billion rubles, incl. from the regional budget - about 1.6 billion rubles. For the period 2006 - 2019, the volume of state support amounted to more than 66 billion rubles, including from the regional budget - more than 19 billion rubles (Table 1). During the first stage of the implementation of the state program for the development of agriculture (2013 - 2019) 37.4 billion rubles, including 9.7 billion rubles from the regional budget. The obligations stipulated in the Agreements with the Ministry of Agriculture of the Russian Federation on co-financing the activities of the State Program for the Development of Agriculture have been fully fulfilled.

Таблица 2 Финансирование сельского хозяйства и сельских территорий Алтайского края, млн рублей [7,8]
In 2019, about 3.2 billion rubles, including more than 2 billion rubles from the federal budget and 1.15 billion rubles from the regional budget. The main volume of budget allocations was provided in the following areas:

- to provide unrelated support to agricultural producers in the field of crop production - 892.6 million rubles;
- for the provision of subsidies aimed at increasing productivity in dairy cattle breeding - 287.5 million rubles;
- to help achieve the target indicators of regional programs for the development of the agro-industrial complex - about 1.2 billion rubles, including to support the development of livestock breeding - 394.2 million rubles.

The production of agricultural products, including those replacing imported ones, is considered as a strategically important sphere of the economy of the Altai Territory. To implement the decisions made by the Government of the Russian Federation in the field of ensuring food security at the regional level, active work is underway to implement measures of state support for the agro-industrial complex, stimulate investment processes, improve the quality and availability of food for the population, and develop interregional ties. The program documents retain the previous measures of state support for agriculture, and introduce new mechanisms.

In 2019, the volume of vegetable imports to the Altai Territory amounted to 22.7 thousand tons, which is at the level of 2018. The main importers for the region were the neighboring countries: Kazakhstan (63%), Uzbekistan (16.3%) and Kyrgyzstan (6.5%). About 12% of vegetables were imported from China. According to the Federal Customs Service, fruit imports in the region increased by 5% last year and amounted to 39.4 thousand tons. The structure of imports was dominated by bananas (42%), melons and watermelons (7%) and citrus fruits (4.6%). The main importers were Ecuador (42%), Kazakhstan (19%), Uzbekistan (13.7%) and China (13.5%).

In 2019, according to preliminary data, the level of self-sufficiency of the region with grain (based on the ratio of production volumes and the needs of the population, taking into account rational consumption norms) amounted to 196.1% (the threshold value established in the Food Security Doctrine is at least 95%), milk and dairy products - 158% (90%), meat and meat products - 113.4% (85%), potatoes - 219.9% (95%) (Table 3).

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|                | Threshold ** | 2013   | 2017    | 2018    | 2019    |
|----------------|--------------|--------|---------|---------|---------|
| Corn           | 95.0         | 205.7  | 211.0   | 214.0   | 196.1   |
| Potatoes       | 95.0         | 288.4  | 246.5   | 244.7   | 219.9   |
| Vegetables and food crops | 90.0       | 55.4   | 50.6    | 45.8    | 47.3    |
| Milk and dairy products | 90.0       | 156.6  | 155.8   | 154.9   | 158.2   |
| Meat and meat products | 85.0       | 123.2  | 107.7   | 112.6   | 113.4   |
| Eggs           | -            | 148.6  | 157.1   | 160.4   | 163.2   |

- taking into account the provision of rational norms of consumption of the population;
- the threshold value established in the Food Security Doctrine of the Russian Federation

The existing production capacities of the food and processing industry of the region allow to process practically all agricultural products produced in the region.
Solving the problem of food security, Altai annually supplies to foreign markets more than 90% of produced cereals and dry dairy products, more than 80% of flour, vegetable oil, pasta, cheese and cheese products, 60% of butter, more than 50% of meat and meat products, ...

Grain export volumes are largely determined by the balance of supply and demand in the grain market. (Table 4).[3,7,8]

Table 4 Dynamics of import and export of grain from the territory of Altai Territory, thousand tons

| Indicators                        | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Import, including import          | 63.5  | 139.4 | 143.7 | 496.1 | 203.9 | 226.4 | 191.9 | 121.3 | 129.0 | 210.5 |
| Removal, including export         | 681.8 | 387.9 | 234.6 | 303.8 | 265.3 | 157.4 | 195.1 | 336.8 | 1324.0| 1470.9|
| Balance of import and export      | -618.3| -248.5| -94.1 | 192.3 | -61.4 | 69.0  | -3.2  | 195.5 | -1195.0| -1260.4|

The measures being implemented in the Altai Territory aimed at supporting the agro-industrial complex and controlling the price situation, in general, ensure stability in the markets of agricultural products and food. According to the monitoring data, agricultural and food products are presented in the retail network of the region in a wide range, the situation with the availability of commodity stocks is stable, there is no shortage of food products. The level of consumer prices for food products in the region remains one of the lowest among Russian regions. According to preliminary data of the Federal Customs Service of Russia for 2019, 308.7 thousand tons of grain were exported from the territory of the Altai Territory, which is 2.5 times more than the level of 2018, in value terms - 56.7 million dollars (an increase of 2.5 times) with the planned indicator of 43.0 million dollars (the target indicator was exceeded by 29.5%). At the same time, wheat exported 194.3 thousand tons (2.8 times more), buckwheat - 25.7 thousand tons (24.9% less), oats - 14.1 thousand tons (1.7 times more), barley - 57.0 thousand tons (10.1 times more) [7].

The volume of oilseed exports in 2019 amounted to 224.4 thousand tons (1.8 times more than in 2018), in value terms - 84.6 million dollars (an increase of 1.7 times). At the same time, 89.1 thousand tons of sunflower were exported (3 times more), soybeans - 26.3 thousand tons (2 times), rapeseed - 51.2 thousand tons (at the level of 2018), oil flax - 56.2 thousand tons (1.8 times more). In 2019, farm animals in the amount of USD 1.82 million were exported from the Altai Territory to Kazakhstan, which amounted to 95% of the level of 2018. More than 93% of the volume of supplies of farm animals fell on cattle (1,167 heads worth $ 1.7 million). In addition, 164 horse heads were sold ($ 0.11 million).

Altai Krai is the largest Russian region-exporter of grain processing products. In the rating of regions-exporters of milling products, the Altai Territory takes 3rd place (share in Russian exports - 11.0%, in Siberian - 54.7%) .The share of exports of cereal products accounted for 69%, in kind - 65.6 thousand tons , for a total cost of US $ 24.7 million. Flour exports amounted to 32.3 thousand tons - 11.2 million US dollars, which exceeds the level of 2018 by 37% and is the highest result since 2013.

In the structure of the region's subsidized products for export, the products of the grain processing industry accounted for 56.3% (138.6 million rubles), flax seeds - 16.3% (40.3 million rubles), beet pulp - 9.2% (22.7 million rubles), vegetable oils - 7.6% (18.9 million rubles), other agricultural products - 10.6% (25.3 million rubles).

Table 5 Fulfillment of target indicators for sustainable development of rural areas in the Altai Territory[8]

| Indicators                                             | 2014 – 2018 | 2019 plan | 2019 fact | %    |
|--------------------------------------------------------|-------------|-----------|-----------|------|
| Commissioning (acquisition) of housing for citizens    | 72.2        | 30        | 38.4      | 128  |
| Indicators                                                                 | 2014–2018 | 2019 plan | 2019 fact | %  |
|----------------------------------------------------------------------------|-----------|-----------|-----------|----|
| living in rural areas - total, thousand m2 of total area                    |           |           |           |    |
| including for young families and young professionals, thousand m2 of total area | 45.3      | 21        | 21.3      | 101|
| Commissioning of general educational organizations, student places         | 448       | -         | -         | -  |
| Commissioning of feldsher-obstetric points and (or) offices of general practitioners, ed. | 34        | 8         | 8         | 100|
| Commissioning of flat sports facilities, m2                                | 22111     | 2614      | 4065      | 155|
| Commissioning of gas distribution networks, km                            | 370.8     | 48.1      | 26.8      | 55 |
| Commissioning of local water pipelines, km                                 | 244.5     | 19.9      | 31.1      | 156|
| The number of settlements located in rural areas in which projects for the complex arrangement of sites for compact housing development have been implemented, units | 1         | 1         | 1         | 100|
| Number of implemented projects of local initiatives of citizens living in rural areas that received grant support, units. | 131       | 15        | 22        | 146|
| Commissioning of public roads with hard surface, leading from the network of public roads to the nearest socially significant objects of rural settlements, as well as to objects of production and processing of agricultural products, km | 111.9     | 13.392    | 13.392    | 100|

The state program of the Altai Territory "Sustainable Development of Rural Areas of the Altai Territory" in 2019 ceased to operate. Starting from 2020, the implementation of measures for the social and engineering development of rural areas in the region is carried out within the framework of the activities of the state program of the Altai Territory “Comprehensive development of rural areas of the Altai Territory.”

4. Conclusion. To solve the problem of sustainable development of rural areas, effective sectoral development is necessary. The priority is the development of grain farming as a basic element on which both the consumption of the population, and the production of livestock products, and exports are built. Among industrial crops, a promising direction will be, including an increase in the production of sugar beet along with an increase in processing capacity, where the Altai Territory has already achieved significant results.

Taking into account the forecast of macroeconomic indicators of the development of the regional economy and the existing problems in the field of pricing, moderate rates of renewal of fixed assets in the industry are planned. The investment index this year is estimated at 98.4%. Maintenance of investment activity of agricultural producers will be ensured through the provision of state support for technical re-equipment, as well as within the framework of concessional lending and the expansion of leasing instruments.

The emerging economic conditions for the development of the industry were taken into account when forming a strategy and tactics for carrying out a complex of agricultural work and building priorities for state support. Particular attention is paid to improving the efficiency of land use, stimulating technological development and the introduction of digital technologies, increasing exports, developing rural entrepreneurship and cooperation, improving the quality of life in rural areas.

In the context of solving the tasks set in the Food Security Doctrine and national projects, the mechanism of state support for agricultural producers has been significantly changed since 2020. Two directions are highlighted: compensatory and stimulating subsidies. These subsidies replaced the previous three types of subsidies: milk, per hectare and single subsidy.
Work on the digitalization of agricultural sectors is carried out in four main areas:
1. Introduction of technologies of "precision farming" in the pilot farms of the region.
2. Development of the Altai Territory Geoportal based on the Rostelecom platform, which will improve the efficiency of the use and management of land resources at the municipal and regional levels.
3. Development of a regional information system of digital interaction with agricultural producers in the provision of state support in electronic form (AIS RESPAK).

Thus, the development of rural areas of the Altai Territory can be effectively carried out in conditions of self-sufficient food supply.

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