

Competitive, Sustainable and Secure Development of the Regional Economy: "Response to Global Challenges" (CSSDRE 2018)

Import substitution as a factor of increasing the competitiveness of regional agrarian systems

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Abstract - The article examines the impact of the policy of import substitution on increasing the competitiveness of regional agrarian systems. The Stavropol Territory was chosen as an object of research, as one of the typically agrarian regions of Russia with a high level of agricultural development. The features of the development of agriculture in the region, its place on the national market are analyzed. The level of development of agriculture and its influence on the growth of the competitiveness of the industry under the influence of measures of import substitution are characterized. It is proved that import substitution within the framework of separate regions contributes to the formation of new, promising areas of agrarian activity aimed at activating production and expanding specialization, increasing the efficiency of agriculture and entering producers into new markets.

Keywords - import substitution, agriculture, regional agrarian system, competitiveness, Stavropol region

I. INTRODUCTION

Agriculture in the Russian Federation in recent years has become one of the priority sectors of the economy. This is due not only to the important function that it performs in providing the national economy with agricultural products, and the population with food, but also with the development trends of the national economy under the influence of external factors and sanctions pressure.

Since 2014, the development of Russia's agriculture has been carried out in the context of applying sanctions policies on the part of Western countries, which has put forward the main task of ensuring national food security: to form a competitive agricultural producer and to activate agrarian production to saturate the national market with agricultural products and oust foreign suppliers and imports from it food [1]. It is this task that is the strategic priority of the national economy as a whole and of individual regions with developed

agriculture. In the face of unprecedented external pressure from the leading economies of the world, the Russian Federation was forced to respond by counter-sentences that affected the agrarian sector and expressed itself in the imposition of a food embargo on certain countries. Reducing the import of food from abroad, a set of measures for import substitution in agriculture was developed. The main instruments of the policy of import substitution were providing financial support to farmers in the form of grants and subsidies, establishing insurance and credit system in agriculture, and technical modernization of the industry.

Based on the specifics of local conditions and factors of agricultural development, the policy of import substitution has regional features of its implementation. Therefore, the purpose of the study is to identify the impact of import substitution, as a complex of management measures for the development of national agriculture, on the degree of development of agricultural production in the region. At the same time, the authors suggest that the result of the policy of import substitution in certain regions should be to increase the competitiveness of local producers by absorbing new directions of agricultural production and introducing effective technological and management practices. The available data allow us to consider this hypothesis on the example of one of the regions where agriculture is the main and dominant and income-generating sector in the structure of the national economy of the territory - the Stavropol Territory.

II. MATERIALS AND METHODS (MODEL)

The work on researching the development of agriculture in the context of the implementation of the policy of import substitution has been actively pursued by domestic scientists in recent years. However, most of them (AI Altukhov, AV Golubev, IN Gravshina, SV Koteev, VN, AN Semin, AS Kucherov) [2, 3, 4, 5] address this issue at the national level



of the study. Other authors (DE Gradinova, IP Dovbiy, IV Mitrofanova, EG Russkova, EA Shkarupa, etc.) [6, 7] investigated the development of measures to support agriculture in modern conditions. The specifics of regional agrarian systems and the change in their competitiveness under the influence of the policy of import substitution, in our opinion, have received insufficient attention. This necessitated the conduct of this study, which is based on theories of the regional economy, such as the concepts of the spatial division of labor, the allocation of productive forces, the spatial organization of agriculture, factors of production, regionalism.

The study was conducted on the basis of data characterizing the features and problems of the agrarian sector of the economy of the Stavropol Territory. The research used a system of methods of theoretical and empirical analysis statistical, graphical, comparisons, descriptions, documentary analysis of the problems covered. During the analysis, materials were used to identify the dynamics and structure of agricultural development in the region, its prospects, based on the policy of import substitution, data on the evaluation of the results of measures for import substitution in the agrarian sphere.

III. RESULTS AND DISCUSSION

The need to implement the policy of import substitution undoubtedly gives a significant impetus to the development of national agriculture and the branches of the processing industry. At the same time, the process of import substitution in the agrarian sphere can not be launched "automatically", political and economic will is required to realize the set goals. This is determined by a number of reasons, among the most important of which we should note the following:

- 1. Raw material vulnerability of Russian agriculture (dependence on imported raw materials). It is known that during the last 15 years the import of seeds to Russia is constantly growing. In terms of price, the import of seeds exceeded their exports by almost 40 times. Obviously, when solving the tasks set for the formation of the national food market, attention should be paid to supporting all the links in the production and technological chains of agricultural production. And here you can not do without targeted public investment
- 2. Technological dependence of food production. It manifests itself at all stages both in the production of agricultural raw materials, in its processing, and in the production of finished food products. On average, the statistical labor productivity in agriculture is 4.1 times lower than in Finland and 5.2 times that of Canada. It is probable that the development and implementation of a special target program, with the leading role of the state government bodies, the large domestic agro-industrial and machine-building business and other stakeholders, is necessary to solve the problems of technological development with self-reliance.
- 3. Lack of financial resources from specialized industry companies. Sanctions led to restrictions in the financing of Russian projects from abroad, which was the basis for

increasing the cost of loans. This resulted in losses of agricultural enterprises and worsening of their financial situation. In this regard, state assistance becomes especially necessary and the formation of an effective institution for lending to agricultural producers through, for example, the purchase of products at guaranteed prices in government funds, or subsidies and concessional lending to sectoral organizations becomes particularly important.

Today, the agriculture of the Stavropol Territory is developing dynamically (Figure 1) and specializes mainly in crop production (69% of the total value of agricultural products produced on average in 2010-16); livestock account for only 31% of the industry's output [8, p. 201].

The agrarian sector of the Stavropol Territory occupies an important place both in the structure of the national economy (about 10% of the Russian grain, 5% of sugar beet, 5% of sunflower) and the North Caucasus Federal District are produced here - 45% of the entire agricultural production of the district Table 1) [9]. At the cost of agricultural products (207 billion rubles in 2016), the region ranks fifth in the country, and the eighth place in the cost of agricultural production per capita (73,800 rubles in 2016) [9]. The agriculture of the Stavropol Territory is distinguished by a high level of marketability and a significant degree of intensity of production. On the territory of the region there are about 5.5 thousand agricultural organizations, more than 900 small agricultural enterprises, 15.5 thousand peasant (farmer) farms and more than 400 thousand personal subsidiary plots; more than 210 thousand people are employed in the industry [10, 11]

TABLE I. PLACE OF STAVROPOL EDGE IN NATIONAL AGRICULTURAL PRODUCTION 2016 Y. $^{\rm a}$

Indicator	Value	Share in national production,	Place in RF
The cost of agricultural products - total, million rubles	207082	3,8	5
including:			
crop production, mln. rub.	148836	4,9	3
livestock products, mln. rub.	58246	2,4	10
Grain harvest, thousand tons	10249,9	8,5	3
Gross harvest of sugar beet, thousand tons	2618,0	5,1	7
Gross harvest of sunflower seeds, thousand tons	536,9	4,9	9
Gross harvest of potatoes, thousand tons	441,1	1,4	26
Gross harvest of vegetables, thousand tons	419,7	2,6	9
Gross harvest of fruits and berries, thousand tons	68,5	2,1	14
Number of cattle, thousand head	376,7	2,0	16
Number of pigs, thousand head	394,5	1,8	16
Head of sheep and goats, thousand head	2190,0	8,8	3
Production of livestock and poultry for slaughter, thousand tons	343,4	3,5	5
Milk production, thousand tons	681,5	2,2	12
Egg production, million pieces	654,7	1,5	27
Wool production, tons	7239	12,8	2

Compiled and calculated from the data of [9, 11]



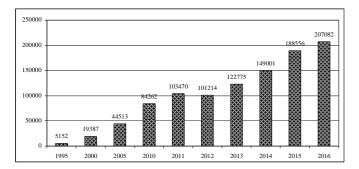


Fig. 1. Dynamics of agricultural production in the Stavropol Territory, 1995-2016, million rubles. $^{\rm b}$

Compiled according to the data of [11, c. 201]

Notable results were also brought about by the policy of import substitution, connected with the support of local agrarians in the production of the most important types of food. The Stavropol region maintains the position of one of the largest grain-producing regions in Russia and a supplier of high-quality grain. Traditionally, wheat occupies more than half of the area under cultivation (Figure 2). In the last five years, grain production has been growing every year, and in 2016 and 2017 the region has harvested record grain yields over 10 million tons [11, 12]. The sunflower (8.7%), barley (7.4%), corn (6.6%), grain legumes (4.7%) also occupy a significant share in the sown areas of the Stavropol Territory (Fig. 2) [10]. The region is among the leaders in the country for collecting peas, corn, sorghum, millet, sugar beet, rapeseed, vegetables. Thus, it is the plant growing that is the leading direction of the province's agriculture, determining the profile of its agrarian production.

The livestock industry also maintains positive dynamics in the region. The region is the third largest sheep and goat in the country, producing mutton and goat meat, fifth in the country for the production of poultry meat (Table 1) [10, 11]. Relatively high positions of the region and for the production of milk and beef (Table 1) [9].

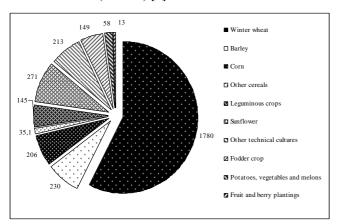


Fig. 2. The structure of agricultural land in the Stavropol Territory, 2016, thousand hectares $^{\rm c}$

Compiled according to the data of [11, p. 203-204]

The intensification of agrarian production in the Stavropol Territory is based on the policy of import-substitution and presupposes the use of measures of state support for agricultural producers. Regional measures of import substitution are manifested in the active distribution and redistribution of money incomes of agriculture, raising the level of financing priority industries by investors, encouraging insurance against the risks of loss or loss of crops and animals, and developing leasing operations for equipping agricultural enterprises with new types of machinery and equipment. The support system implemented in the course of the import substitution policy should take into account the strategic directions of the industry development that contribute to increasing the efficiency of agricultural production and its access to the national and foreign markets. At the same time, it is necessary to identify and develop priority areas of regional agriculture that can not only intensify output, but also strengthen the competitiveness of local agricultural producers, make their business more profitable.

IV. CONCLUSION

Being a special type of economic strategy for the development of the economy, import substitution contributes to the development of not only traditional production for the region, but also creates prerequisites for the emergence of new, previously unreached lines of agriculture. In our opinion, the following priority directions for the development of the agro-industrial complex of the Stavropol Territory can be defined:

- 1. Rationalization of the structure and level of development of the grain economy. The grain edge of the province is 34 of all arable land and covers an area of 2.3 million hectares. It has been steadily expanding in recent years, based on low labor costs for grain production, the demand for products on the market due to its high quality and the desire to increase gross fees to ensure food security. As a result, there was a threat of overproduction of wheat, which inevitably affected the decline in prices for it, as a result of which the agrarians of the region may be at a loss. Taking into account the given complexity in the grain market, agrarians of the region need to revise the structure of sown areas, reduce the grain wedge, replenishing crop rotations with liquid highly profitable crops of technical and oil crops, corn. At the same time, one should not forget about the quality of the results of agrarian activity - it is necessary to produce commodity, export-oriented products in order to react painlessly and quickly to changes in the world market situation.
- 2. Increase in the depth of processing of local agricultural products on the basis of modern advanced technologies. Occupying an appreciable share in the domestic grain market, the region does not yet have a high level of development of processed grain production, obtaining useful, useful consumer products amino acids, starch, lysine, bioethanol. Such production is urgently needed not only for the Stavropol Territory, but for the entire North Caucasus. The first similar



plant is being built in the Levokumsky district of the region with support to the local raw materials base.

- 3. Activating the development of horticulture and vegetable growing and processing their products in the region. By releasing valuable, but perishable produce, agrarians of the province are forced to send it to other entities in an unprocessed form, retaining only a small part of their own stores and bases. Agrarians are experiencing an acute shortage in modernly equipped warehouse and refrigeration facilities, as well as mini-canning plants on their own farms, which would allow not only to promptly process the grown products, but also to increase the efficiency of their activities through the production of goods with higher added value.
- 4. Revival of viticulture as a raw material base for local winemaking. In the province there are many wineries, whose trade brands are known far beyond the borders of the Stavropol Territory (St. George's, Praskoveisky, Budyonovsky wine and cognac factories). However, they are provided with local raw materials only for a quarter - annually from 182 thousand tons of technical grades of grapes, which are necessary for the production of almost 6 thousand deciliters of wine and cognac products, only 40-42 thousand tons are grown in the region. The shortage is replenished by the import of raw materials from the Krasnodar Territory, Dagestan and abroad [11]. Therefore, the missing volume of grapes (140 thousand tons) is a huge potential of the market that the wine growers of the region can expand to expand their local production, and high-quality brands of alcoholic products can confidently compete with foreign producers.
- 5. An important priority in the province's agriculture remains the provision of livestock feed. The Stavropol region is an area of arid agriculture, and therefore the actual use of pastures for grazing is relevant. After a sharp decline in the number of livestock in the crisis of the industry in the 1990s, sowing areas of fodder crops also declined. The dominance of cereals has violated the balance of plant growing in the region, reducing the fodder base of livestock, which became one of the reasons for the loss of livestock. The revival of the industry, observed in recent years, especially in personal subsidiary plots, the growth of profitability of milk and meat production, contribute to the expansion and development of its own food base in the vast pastures of the region.

Thus, based on the analysis, it can be stated that import substitution at the regional level directly affects the growth of the level of agricultural production, the expansion of specialization and the increase in the efficiency of agricultural producers. As a result of the development of measures for import substitution, priority development in the region can and should receive new strategically important, promising areas of agricultural production, allowing producers to find a profitable niche in the agricultural and food market, to increase production and expand its range, which will strengthen their competitive positions and provide opportunities to sell out of the region.

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