Forecast and assessment of the role of small agribusiness in the development of the agricultural sector of the Russian economy in the post-pandemic reality

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Abstract. The article presents the role of small agribusiness in the development of the agricultural sector of the Russian economy in the post-pandemic reality, on the basis of forecast calculations and assessment of current trends in the development of the domestic agricultural sector, the effectiveness of which depends on ensuring sustainable rural development, preserving the historical appearance and territorial integrity of the country. The article examines the impact factors of Covid 19 that determine the development of Russian agriculture in the medium term and proves the need for the development of a large-scale agricultural sector of the economy. The calculation and analytical tools of the study are based on the methods of economic statistics, which allowed us to analyze the structural dynamics of the country's agricultural sector and determine the forecast parameters for the development of small agribusiness. The main forecast volumes of production by small agribusiness in rural areas of such types of food as grain, sunflower, meat and milk for the period up to 2025 are determined. Examples of adaptation of the agricultural sector to the conditions of post-pandemic reality abroad are given.

1 Introduction

The strengthening of rapid trends of geopolitical and geo-economic changes in the socio-economic picture of the world, caused by deep shocks characterized by such phenomena and processes of economic systems, including digital transformation, globalization, against the background of the spread of the Covid 19 coronavirus infection, was supplemented by an unprecedented structural, global economic crisis, what led to the formation of other ideas about the development of the world and national economy defined by a number of scientists (domestic and foreign economists) as a tandem reality[1-4] . Currently, it is very difficult to determine the impact of the pandemic syndrome on the

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development of the modern national economy and its agri-food sector. Discussing the impact of the coronavirus pandemic on the Russian economy against the background of the global crisis, experts point to the impact of various economic shocks that will determine the development of the national economy over the coming period, including:
- falling oil prices;
- regulatory decisions of authorities at all levels aimed at slowing the spread of coronavirus infection, which resulted in the loss of individual economic entities from the chain of production and economic relations, including in the agro-industrial complex, which may lead to a break in the existing ties, as in the situation in early 1990;
- decrease in foreign demand for a wide range of domestic goods, due to the slowdown in the global economy [2- 4].

Based on the current trends, there is a need to determine the forecast estimates of the role of small agribusiness in the development of the agricultural sector in the conditions of various shocks in order to justify the directions of its sustainable development.

2 Materials and methods

The methodological apparatus of research on the stated problem is based on monographic, abstract-logical methods, methods of economic statistics and economic and mathematical modeling.

3 Research result

Small agribusiness in rural areas is represented by a harmonious symbiosis of the development of peasant (farm) farms, including family farms, the effectiveness of which depends on ensuring sustainable rural development, preserving the historical appearance and territorial integrity of the country, and demonstrates a stable dynamics of economic growth that exceeds the results of large and medium-sized agricultural organizations (fig. 1). A significant breakthrough in the development of small agribusiness in rural areas is due to both radical structural shifts in its development within the framework of national priorities, and the processes of globalization and integration of economic activities, which cause an increase in the intensity of their manifestations [5-6].

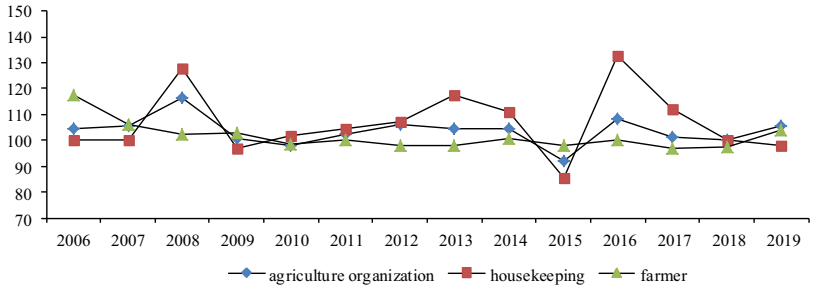

Fig. 1. Dynamics of the growth rate of agricultural production in Russia by category of farms for 2006-2019. (in % to the corresponding period of the previous year, in comparable prices) [7]

The parameters of the observed shifts in the agricultural structural dynamics of Russia due to the evolutionary and revolutionary nature indicate that the market structural transformation of the national economy in the period since 2006 was purposeful, aimed at developing market infrastructure in rural areas (consumer cooperation), the result of which was to mitigate the social risks of the upcoming accession to the WTO (stimulating the

development of small forms of management»)
Thus, the index and the mass of structural shifts in agriculture in the context of individual categories of farms in a static database (fig. 2, fig. 3) during the period of strengthening state regulation of socio-economic processes in the industry in 2006-2019 and the implementation of import substitution policy showed positive results caused by effective measures of institutional influences [6].

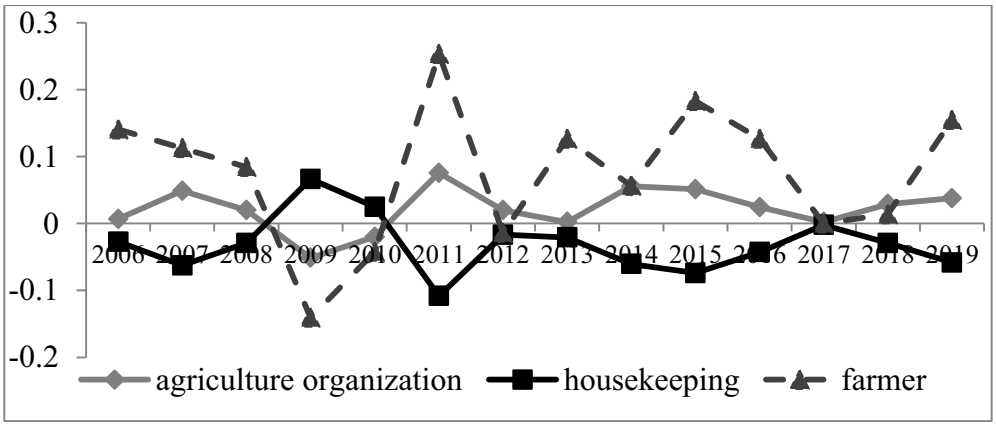

Fig. 2. Index of structural shift in the Russian agricultural sector by individual categories of farms for 2006-2019, %

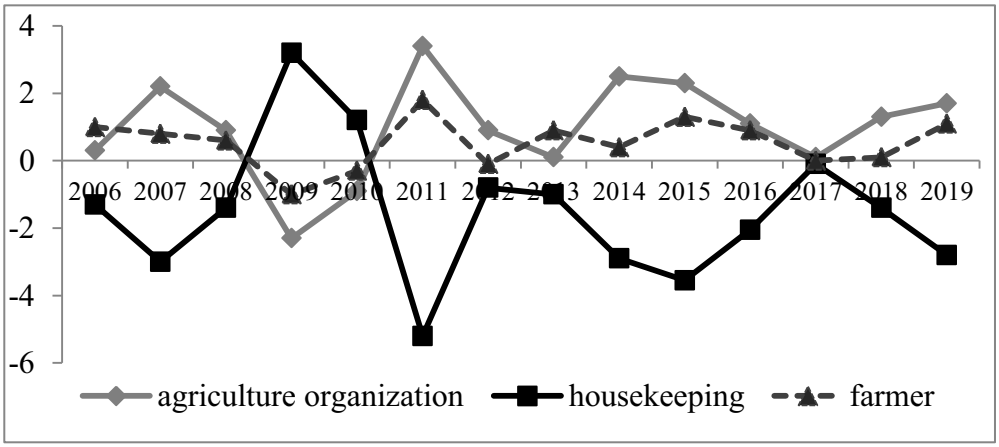

Fig. 3. Mass of structural shifts in the agricultural sector Russia by category of farms for 2006-2019, %

Thus, the acceleration of economic growth in peasant (farm) farms (fig. 1) indicates that the institutional changes adopted at the Federal level (the national project "development of the agro-industrial complex", State programs, and others) promote the replication of new points of growth in the national economy, in which structural factors-positive economic dynamics associated with the search for the optimal organizational-economic structure of agriculture, in order to form a competitive production.

Occurring structural changes in the development of the agricultural sector of the Russian economy in the last fifteen years connected with the transformation processes of

institutional, organizational and technological changes in the national and world economy, stimulating sandblast-tion of certain qualitative and quantitative proportions of the agrarian structure: the development of different forms of management, the formation of new local and global food markets.

Since 2006, structural changes in the development of the agar economy of Russia have been characterized by specific features, which is associated with the trends of strengthening state regulation of socio-economic processes, including in agriculture. Thus, Federal law No. 264-FZ "on agricultural development", adopted in 2006, defined the main goals of agricultural policy at the present stage, principles, priority directions and tools for their implementation. The agriculture Ministry in the framework of the law, we developed and implemented a national project "Development of agriculture" were transformed into the State program of development of agriculture and regulation of markets of agricultural products, raw materials and food for 2008-2012" which has been created the preconditions for the sustainable development of small forms of managing on village.

A retrospective analysis of the development of agricultural production in the period of structural transformations in rural areas proves that small-scale economic forms, as a complex socio-economic system, have undergone significant organizational and economic changes in their evolution and have occupied their "niche" in ensuring the conditions for the effective functioning of agricultural production (fig. 4).

Thus, there is a tendency to increase the role of farmer in the production of agricultural products among small businesses. Thus, the share of farmer in 2019 was 13.6 %, which is 1.9 times higher than in 2006.

Vector development of production and economic and social sphere of the village, consisting of high-quality large-scale modernization of the rural economy, the formation of high-level competitive potential of small agribusiness entities by the active support of the state in the context of macroeconomic instability in the country that allows a small sector to quickly and effectively adapt to the current economic conditions.

At the present stage of development of the Russian agricultural economy, characterized by the sanctions regime, trends in the manifestation of a new economic reality against the background of a pandemic syndrome, and affecting the functioning of agricultural production, there is a vector of structural changes aimed at strengthening the position of the small-format sector and on the basis of agricultural consumer cooperation, the most important task of which is not only to improve the efficiency of farmers, but also in expanding the participation of small agribusiness entities in providing the population with food of their own production within each region [8-10].

Studies have shown that peasant (farm) farms are characterized by a great interest in the results of their activities. So, the comparative characteristics of organization options, large-scale agricultural production of major Agroholding structures of Russia (agricultural holding "Miratorg") and Brazil (agricultural holding JBS) (table 1), based on entirely different approaches in the development of production-economic relations in the framework of the business indicates that the Association of farmers through agricultural cooperation contributes to the achievement of more effective results of production and economic activities [3,11-12].

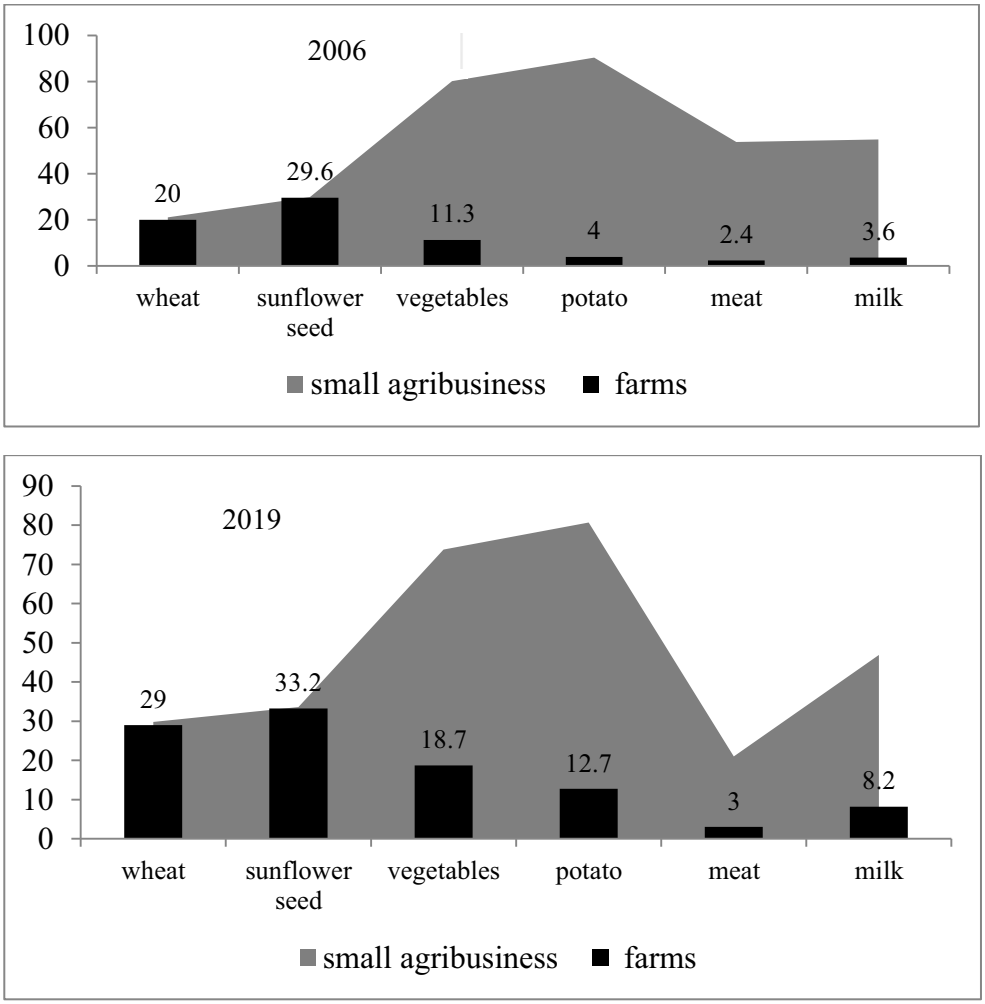

Fig. 4. Contribution of small agribusiness in Russia to the production of major agricultural products in 2006 and 2019, %

Table 1. Comparative characteristics of options for organizing large-scale agro-industrial production Russia and Brazil, 2019

Indicator	**Agroholding Miratorg, Russia**	**Agroholding JBS, Brazil**
Direction of specialization of production	beef, pork, poultry	beef, pork, poultry
Features of business organization	it unites 24 own agricultural organizations	the development of agricultural cooperation involves the conclusion of contracts with 115 thousand farmers
Land ownership	about 1 million ha of own farmland	the land is owned by farmers

Composition and structure of the number of employees	more than 20 thousand employees	members of farming families, a small number of employees employed by farmers
Scale of production (revenue from sales of the holding's products)	2 milliard dollar	47 milliard dollar
Impact on rural development	growth points, areas of desolation	equal development of rural areas

It should be noted that full automation and mechanization of production processes in large agricultural holdings, including Miratorg, provokes the development of social tension in rural areas, associated with both reduced employment and uneven development of rural infrastructure.

According to experts, in the conditions of post-pandemic syndrome, the role and importance of small and medium-sized businesses and agricultural cooperation in rural areas will increase. Thus, the coronavirus pandemic in the West gives priority to the development of the small-scale sector of the agricultural economy, since outbreaks in large agricultural holding structures can lead to serious financial damage.

Russian agriculture, which is at risk of spreading Covid 19, is no exception. Therefore, in the conditions of post-pandemic reality, the consequences of which, due to the inertial nature of the development of agricultural production, should be expected in the medium and long term, the priority direction of development is the small-format sector of the economy.

Research has shown that in the medium term, the role of small agribusiness in ensuring the implementation of export-oriented strategy in the agro-industrial complex will increase. For example, calculations based on the use of trend modeling elements showed that farms will account for 32.5 % of grain produced in the country and 38.4 % of sunflower produced (fig. 5).

The mechanism of state support aimed at simulating small-scale farming within the framework of the National project "Creating a system of support for farmers and development of rural cooperation", and providing financial assistance for the creation and development of family livestock farms in the post-pandemic reality will help strengthen the role of farms in the structure of meat and milk production. According to forecast calculations, the share of farmers in the structure of milk production will increase from 8.2% in 2018 to 11.3% in 2025, amounting to 3314.5 thousand tons (against 2511 thousand tons). in 2018) (fig. 6) at the same time, the production of milk from farmers in absolute terms may increase by 32.0%., meat – by 29.0 %, respectively, amounting to 415.1 thousand tons.

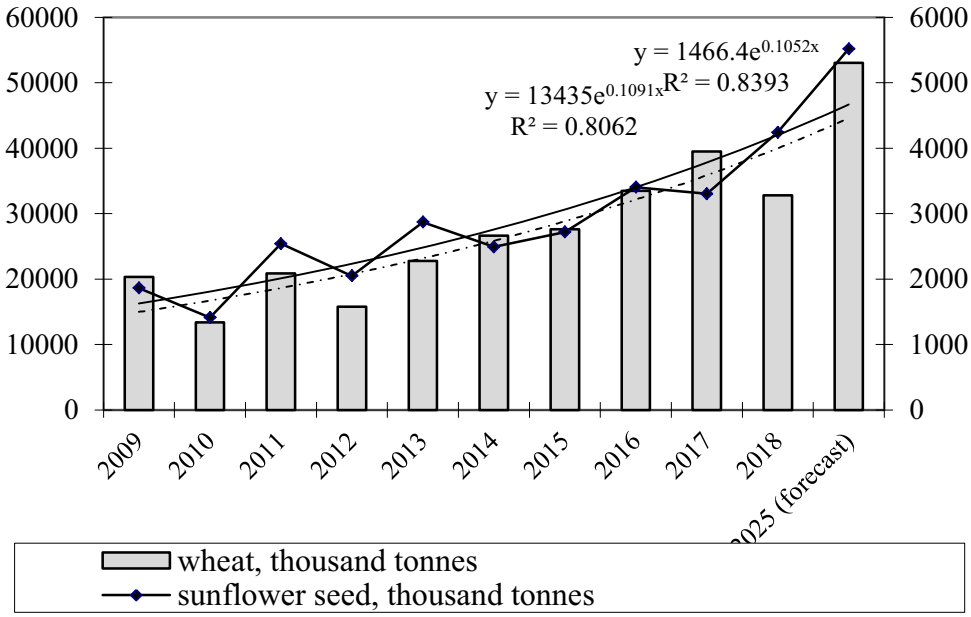

Fig.5. Forecast of production of the main types of export-oriented crops by small agribusiness in the Russian Federation in 2025.

In the post-pandemic reality, a significant share of cattle, sheep, and goats will fall on small-scale farms (fig. 7). Their share by 2025 is expected to be 57.5 % for cattle and 86.1 % for sheep and goats. The specialization of small agribusiness in the development of the sheep and cattle breeding industry is due to insignificant capital investments due to the lack of the need for complex technical equipment and the use of cheap and affordable feed. In the whole country, the number of cattle will decrease from 18151.7 thousand in 2018 to 16719. 5 thousand in 2025. (or 7.9 %).

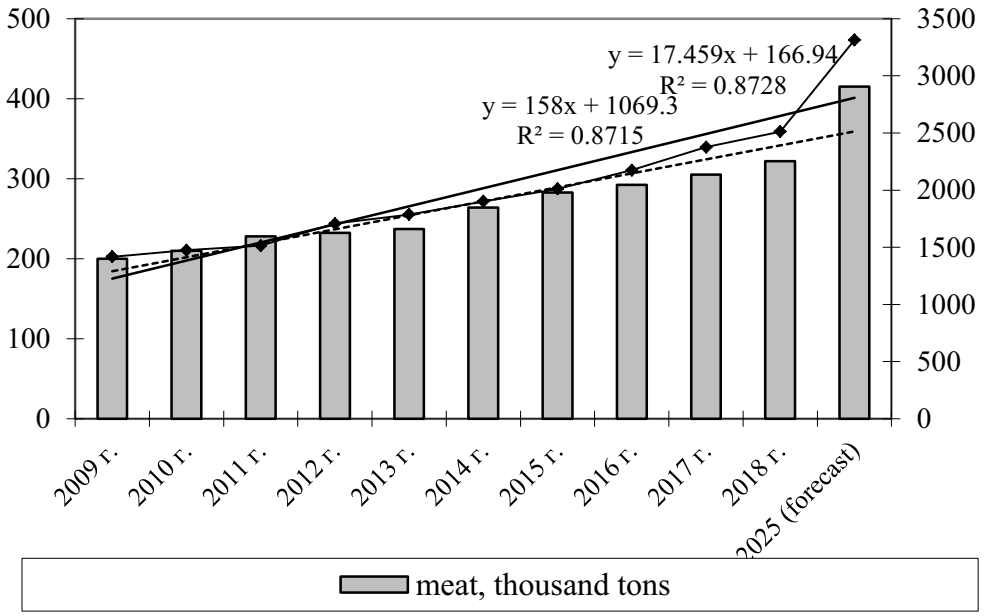

Fig. 6. Forecast of small agribusiness production of meat and milk in the Russian Federation for the period 2025

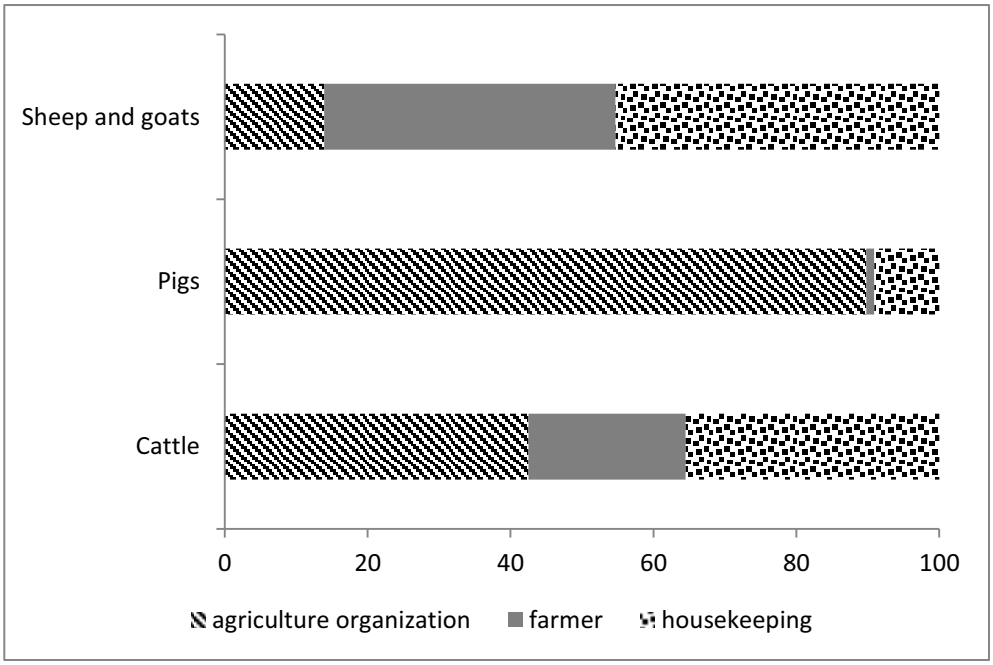

Fig. 7. Forecast of livestock structure by farm category in the Russian Federation for 2025, %

3 Conclusion

Conclusions. It is already clear that the development of small agribusiness in the country contributes not only to ensuring food security of the country, but also the development of mixed forms of farming in rural areas, self-employment of the rural population, improve rural infrastructure, dynamic growth of real monetary incomes of the population and middle class formation in remote rural areas, the preservation of historical heritage.

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