Agricultural consumer cooperatives in Russia: state and prospects for development

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Abstract. In the Russian Federation, small business cooperation in rural areas plays an important social role, and the state provides great support to the development of cooperation. The paper provides an analysis of the state and areas of development of agricultural consumer cooperatives at the federal and regional levels. The analysis has showed that, against the background of a decrease in the number of agricultural consumer cooperatives, their consolidation and an increase in fixed assets are taking place. The main reasons for the slow development of cooperation in the countryside have been established. The Saratov region is one of the regions that has accumulated many years of successful experience in the agricultural consumer cooperatives activities. The experience of the Soyuz export-oriented supply and sales cooperative of the Saratov region is described. Proposals are given for the development of agricultural cooperatives, including that through the introduction of innovations and state-of-the-art digital resources and advanced training of personnel.

1. Introduction

In 2015, the member states of the United Nations adopted the 2030 Agenda for Sustainable Development, which sets a course to eradicate poverty, protect the planet and ensure prosperity for all by 2030. Cooperatives are recognized as essential to achieving the Sustainable Development Goals (SDGs), since they solve a number of global problems: they contribute to an increase in employment and welfare, the development of rural areas, and are characterized by more environmentally friendly production, which contributes to the preservation of the environment and its biodiversity. There is the International Cooperative Alliance (ICA), which plays a leading role in promoting the role of cooperatives in the implementation of the SDGs. The International Co-operative Alliance (ICA) is playing a lead role in promoting the role of cooperatives in the implementation of the SDGs [1].

Cooperatives are the most common social economy business model [2]. In China, for example, the agriculture cooperatives achieved large performance in controlling and safeguarding food safety, raising farmers income and promoting market competition power [3].

In the Russian Federation, the small business cooperation in rural areas provide an increase in the employment of the rural population, assist in the development of rural areas and the social arrangement
of settlements and in the preservation of national traditions and the rural way of life. In recent years, small business produced more than 40% of the gross output of the industry [4].

The Decree of the President of the Russian Federation titled ‘On national goals and strategic objectives of the development of the Russian Federation until 2024’ assigned the status of tasks of a state scale to cooperation, the development of farming and the increase in exports. To ensure employment and income growth of the rural population, to enter the small business market, targeted measures are taken to develop cooperation in the areas of procurement, storage, processing of agricultural products, services and other areas. [5, 6]. The federal project titled ‘Creation of a support system for farmers and the development of rural cooperation’ is being implemented since 2019, and 5.4 billion rubles were allocated for the support of this project. In the regions, programs to support cooperation have been developed, 595.6 million rubles have been allocated from regional budgets in 83 constituent entities of the Russian Federation. [7]. Despite the measures taken, the development of cooperation has slowed down in recent years [8], and the number of agricultural consumer cooperatives (ACC) and consumer societies of Centrosoyuz of the Russian Federation is decreasing (table 1).

| Types of cooperatives | 2017       | 2018       | 2019       | 2018 to 2016 ratio (%) |
|-----------------------|------------|------------|------------|------------------------|
|                       | Amount     | Percent to the total | Amount     | Percent to the total | Amount     | Percent to the total |               |
| Total                 | 6,293      | 100        | 5,839      | 100        | 5,608      | 100        | 89               |
| processing            | 1,013      | 16         | 1,032      | 18         | 1,111      | 20         | 110              |
| servicing             | 709        | 11         | 813        | 14         | 807        | 14         | 114              |
| sales                 | 1,058      | 17         | 985        | 17         | 926        | 16         | 88               |
| procurement           | 416        | 7          | 425        | 7          | 405        | 7          | 97               |
| credit                | 1,578      | 24         | 1,381      | 24         | 1,176      | 21         | 74               |
| others                | 1,519      | 24         | 1,203      | 21         | 1,183      | 22         | 78               |

Source: https://www.fedstat.ru/indicator/34060.

The development of the ACC export potential is of particular relevance, since the main amount of organic and most demanded products on the world markets is produced in the small business sector. The domestic experience confirms the effectiveness of export-oriented ACC, one of which is the Soyuz supply and sales agricultural consumer cooperative (SSACC) of the Saratov region created in 1999. In this regard, the analysis of ACC activities, areas of their development and generalization of best practices are relevant.

2. Research objective
The purpose of the research is to analyze and summarize the areas for the ACC development, the experience of organizing the export of small business products through cooperatives and the development of proposals for improving their activities.

3. Research materials and methods
The research subject was ACC. The informational basis of the study was the official data from the Federal State Statistics Service, the Ministry of Agriculture of Russia, regional governing bodies of the agricultural sector, the Association of Peasant Farms and Agricultural Cooperatives of Russia, proceedings of scientific and practical conferences and research institutions, and papers of leading scientists on the problems of rural cooperation.

During the research, the regulatory and legislative acts regulating the ACC activities, as well as the papers of domestic and foreign scientists to stimulate the development of rural cooperation were used.

The research was based on a general scientific methodology using methods of comparative, factorial and logical analysis, as well as an expert-analytical method of processing initial information.
Based on the monographic research method, the analysis of the economic activity of the export-oriented Soyuz SSACC of the Saratov region was carried out.

4. Research results and discussion

Foreign and domestic experience has shown that the participation in ACC is one of the main factors for small business in the introduction of innovative technologies and income growth. With the national average poverty rate of 12.4% in rural areas, every fourth resident is below the poverty line (25% versus 8% in the city) [9]. The level of rural unemployment was 6.5% as of 2019, which is significantly higher than urban unemployment (3.8%). The share of rural residents in the structure of unemployed ones reaches 33.4%, while that in the structure of the population of Russia is only 25.4% [10].

In the Russian Federation, the number of ACC was 5,600 in 2019. This is 11% less as compared to 2017. According to the 2016 All-Russian Agricultural Census, the share of agricultural organizations (AO) that were ACC members had also decreased from 3.7% in 2006 to 3.1% in 2016. The share of peasant (farmer) economy involved in cooperatives increased slightly from 2.1% to 2.7% over the same period and remained at an extremely low level [11, 12]. The scale of activity of consumer societies of the system of Centrosoyuz of the Russian Federation is also decreasing. Thus, the amount of purchases of milk and meat by procurement organizations decreased by 10-50% in individual federal districts in 2017 in comparison with 2013 [8, 13].

It has been established that the main reasons for the slow development of cooperation are the monopolization of agricultural food and resource markets; supporting individual cooperatives rather than the cooperative system and cooperative infrastructure; poor consideration of the specifics of cooperation in legislation; insufficient level of development of local self-government; budget deficit of rural municipalities, etc. [14].

At the same time, the study of the development of the Russian ACC production potential for 2013-2017 shows that the ACC equity capital has increased from 5,063 to 7,381 million rubles or 1.5 times. Other indicators have also improved significantly. However, cooperatives operate at a loss without government subsidies [8].

For small business, sales and supply without intermediaries are relevant; therefore, the share of supply and sales agricultural consumer cooperatives (SSACC) in the Russian Federation is 23% that is the largest in 2019. They are being consolidated and the size of the membership base is increasing. However, the growth rate of the SSACC membership base is lower than for the ACC as a whole (table 2). In 2019, 53,300 small and medium agribusiness facilities were members of the SSACC with an increase of 15% over the past 4 years. On average, the SSACC membership base included 40 small and medium agribusiness enterprises. SSACC are widely spread in the Central, Siberian, Volga and Ural federal districts. Agricultural products worth about 11 billion rubles were sold through the SSACC in the Russian Federation in 2019. The results of the analysis (table 2) indicate an increase in the fixed assets of cooperatives by 41%, an increase by 10% in the mutual fund and by 67% in reserve funds from 2016 to 2019.

Table 2. Dynamics of the SSACC share, reserve and fixed asset size in the Russian Federation.

| Indicator                        | 2016      | 2017    | 2018     | 2019     | 2019 to 2016 ratio (%) |
|----------------------------------|-----------|---------|----------|----------|------------------------|
| Fixed assets (million rubles)    | 2,421     | 3,322   | 2,917    | 3,407    | 141                    |
| Unit fund (million rubles)       | 404.5     | 405.7   | 380.9    | 446.6    | 110                    |
| Reserve fund (million rubles)    | 158.9     | 184.1   | 199.1    | 266.0    | 167                    |
| Reserve fund (% of the mutual fund) | 39        | 45      | 52       | 59       | 151                    |

SSACC are most widespread in the dairy and meat sub-sector [15]. Sales of small business products annually increase by 10%, which indicates the demand for ACC. However, the ACC closure continues: 614 of the 1,210 ACC that entered the membership base from 2013 to 2015 worked, i.e. only half of them [16, 17].
The regions that have accumulated many years of successful experience in the ACC activities include the Saratov region [18], where 114 ACC operated in 2019, of which 48 were SSACC. Their members were 233 small business enterprises (tables 3, 4).

**Table 3. Dynamics of the number of ACC in the Saratov region by type of activity.**

| Types of agricultural consumer cooperatives | 2016 | 2017 | 2018 | 2019 | 2019 to 2016 ratio (%) |
|---------------------------------------------|------|------|------|------|------------------------|
| Total:                                       | 139  | 121  | 109  | 114  | 82                     |
| including:                                  |      |      |      |      |                        |
| - supply and sale                           | 57   | 47   | 43   | 48   | 84                     |
| - processing                                | 20   | 19   | 18   | 17   | 85                     |
| - servicing                                 | 38   | 43   | 40   | 41   | 108                    |
| - others                                    | 24   | 8    | 8    | 8    | 33                     |

Source: authors’ data.

According to table 3, it can be seen that the total number of ACC decreased by 18%, and the number of supply and sales agricultural consumer cooperatives decreased by 16% from 2016 to 2019. With a decrease in the size of the SSACC membership base by 13%, the value of fixed assets increased by 6%, and with a decrease of 15% in the share fund, the reserve fund increased by 3.5 times, and the share of the reserve fund in the share fund increased by 3.75 times (table 4). The share of the reserve fund in the mutual fund increased to 15% and reached the values recommended by the Law of the Russian Federation titled ‘On Agricultural Cooperation’, i.e. at least 10% of the mutual fund.

**Table 4. Main indicators of the development of SSACC in the Saratov region.**

| Indicators                          | 2016     | 2017     | 2018     | 2019     | 2019 to 2016 ratio (%) |
|-------------------------------------|----------|----------|----------|----------|------------------------|
| Number of SSACC                     | 57       | 47       | 43       | 48       | 84                     |
| Unit fund (‘000 rubles)              | 31.302   | 23.326   | 21.422   | 26.669   | 85                     |
| Reserve fund (‘000 rubles)          | 1.134    | 3.818    | 3.088    | 3.991    | 352                    |
| Reserve fund (% of the unit fund)   | 4        | 16       | 14       | 15       | 375                    |
| SSACC membership base size          | 268      | 574      | 195      | 233      | 87                     |
| Fixed assets (‘000 rubles)          | 79.000   | 62.286   | 80.439   | 83.683   | 106                    |

Source: authors’ data.

Region SSACC specialize in the production of grain and sunflower, since about 50% of their production is concentrated in peasant (farmer) economy. The first place is taken by the Soyuz SSACC formed under the EU TACIS project in 1999. In the last five years, the cooperative has become export-oriented while supplying products to Turkey, Iran, Egypt, Greece, the Czech Republic, and other countries. More than 50,000 metric tons of grain for a total amount of more than 390 million rubles were sold through the Soyuz SSACC in 2018 (table 5).

**Table 5. Main indicators of development of Soyuz SSACC.**

| Indicators                          | 2016     | 2017     | 2018     | 2016 to 2018 ratio (%) |
|-------------------------------------|----------|----------|----------|------------------------|
| Revenue, million rubles             | 394.5    | 401.4    | 391.0    | 99                     |
| Fixed asset value (‘000 rubles)     | 5.512    | 5.043    | 4.586    | 83                     |
| Number of employees (people)        | 27       | 27       | 27       | 100                    |
| Average monthly salary (rubles)     | 21.631.1 | 23.717.5 | 26.829.9 | 124                    |
| Return on assets (rubles)           | 71.5     | 79.6     | 85.3     | 119                    |
| Labor productivity (‘000 rubles)    | 14.611   | 14.867   | 14.481   | 99                     |
Costs per 1 ruble of proceeds (rubles) 0.98 0.99 0.93 95
Total liquidity ratio 1.3 1.4 1.9 146
Profit / loss (‘000 rubles) 7.032 5.581 4.952 70
Return on sales (%) 1.8 1.4 1.3 72
Source: authors’ data.

The cooperative unites 41 peasant (farmer) economies of Krasnokutsk and Piterka districts. The average monthly wage was 26,830 rubles in 2018 (above the regional average). The return on assets increased by 19% in comparison with 2016, the general liquidity ratio increased by 46%, and the costs per 1 ruble of services rendered decreased by 5%. However, the size of profit and profitability decreased to 1.5% (table 6).

Table 6. Formation of financial results of the Soyuz SSACC activity (‘000 rubles).

| Indicators                  | 2016            | 2017            | 2018            | 2018 to 2016 ratio (%) |
|-----------------------------|------------------|------------------|------------------|------------------------|
| Revenue                     | 394,429          | 401,441          | 391,035          | 99                     |
| Cost price                  | 367,445          | 395,614          | 364,495          | 99                     |
| Gross profit                | 2,698.4          | 5,827            | 2,654            | 98                     |
| Business expenses           | 1,995.2          | 246              | 588              | 2                      |
| Revenue from sales          | 7,032            | 5,581            | 4,952            | 70                     |
| Percentage to be paid       | 805              | -                | -                | -                      |
| Other income                | -                | -                | 92               | -                      |
| Other expenses              | 360              | -                | 347              | 96                     |
| Profit before tax           | 5,867            | 5,581            | 4,697            | 80                     |
| Net profit                  | 4,379            | 4,665            | 3,843            | 87                     |

Source: authors’ data.

The net profit of the SSACC is formed mainly due to the proceeds from the sale of grain, laboratory analyzes, weighing cars, as well as handling. The supreme governing body in the Soyuz SSACC is the general meeting of the members of the cooperative. The Management Board is elected comprised of five persons, and the Supervisory Board consists of three persons. A member of the board, in addition to the chairperson, heads the territorial sector, which includes from seven to twelve SSACC members. Each member undertakes to supply to the cooperative at least 50% of the manufactured marketable products.

The proceeds of the Soyuz SSACC are 99% formed by the services for the sale of grain, the quality of which is determined in a laboratory using state-of-the-art equipment. Commercial grain consignments are formed in accordance with the requirements of foreign buyers. Sales size by month are shown in figure 1. In January-March, the grain of the last year was sold, which was stored in the warehouses of peasant (farmer) economies in anticipation of higher prices for products. Delayed delivery agreements were concluded with the cooperative. Agreements between the SSACC directorate and peasant (farmer) economies are concluded annually until June 15. Peasant (farmer) economies open an account for the supply of products. There are surcharges and discounts depending on the quality of the grain. A system for receiving products is used, which is placed for safekeeping at warehouses of peasant (farmer) economies.
Figure 1. Seasonal fluctuations in grain sales in the Soyuz SSACC in 2018 by month.

The establishment of new SSACC and the expansion of their membership base in the region are hindered by the lack of initial capital to form the material and technical base, increased global competition, and consumer reorientation towards the quality and traceability of goods movement, which sometimes become more important than the price level established [19]. The factors of success are knowledge, manufacturability, quick adaptability to changing external conditions, the level of qualifications of management and members of cooperatives, the development of information and consulting services, the introduction of digitalization of the main processes and Internet resources, and the development of electronic trading in agricultural products. In this regard, state support for the development of SSACC should be allocated taking into account the orientation of existing or newly established cooperatives to the introduction of innovations, the use of information technologies, and the efficiency and quality of work.

5. Conclusions
The analysis showed that despite the decrease in the number of ACC, there is their consolidation by 11%, an increase in fixed assets, an increase in revenue, as well as in profits due to state support in 2019 compared to 2017. The growth in the number of cooperatives is constrained by shortcomings in the organizational, informational and methodological support of the cooperative movement, low profitability, the unstable financial situation of small farms, and the constant outflow of the rural population. SSACC members were 53,300 small and medium business enterprises in 2019. On average, 40 small and medium business enterprises were members of a single cooperative.

The basis of the successful activity of the export-oriented Soyuz cooperative of the Saratov region has laid and strictly observed the principles of cooperation and the organizational and economic mechanism, which ensures the sale of grain without intermediaries to 41 peasant (farmer) economy SSACC members at favorable prices, including for export.

The main areas of development of cooperatives should be the introduction of innovations into the main processes of both agricultural producers and cooperative formations, advanced training of personnel for cooperative activities, widespread use of Internet resources, and the development of electronic trading in agricultural products.

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