DEVELOPMENT OF AGRICULTURAL PRODUCTION COOPERATION IN RUSSIA: ISSUES AND PROSPECTS

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Abstract

Achieving a successful resolution to a nation's food problem is largely dependent on the development of cooperation. As an organizational-legal form of business in the agro-industrial complex, cooperation is represented by agricultural production cooperatives. Most of the world is currently dominated by consumer cooperatives, while Russia – by production ones. Over the last ten years, the number of production cooperatives in Russia has declined. The primary reason behind this is their low investment attractiveness. The paper examines the role of cooperation in driving sustainable development in rural areas, makes a case for the efficiency of production cooperatives as opposed to other forms of business, and reiterates the need for further development of cooperation in the country. A cooperative is not just a for-profit organization but a socio-labor form of business as well. The current level of profitability of agricultural production in cooperatives does not allow them to implement reproduction on an enlarged scale at this time. The authors explore a set of primary areas for the development of agricultural production cooperation in the country and examine a set of key measures of government support for it.

Key words: agricultural cooperation, production and consumer cooperatives, economic efficiency, intensification, government support, Russia

INTRODUCTION

A crucial area for driving growth in the agricultural sector and resolving the social problem in rural areas is the development of cooperation. It not only helps improve the competitiveness of agricultural producers but facilitates boosts in the income and well-being of participants in cooperation and helps drive sustainable development in rural areas. In addition, it plays an important role in preserving the rural population and preventing the desolation of particular regions. Domestic and foreign best practices attest to cooperation being one of the more efficient mechanisms for adapting agriculture to the new economic conditions associated with Russia's entry into the WTO and the imposition of international sanctions on it.

As an organizational-legal form of business, cooperation is represented by a system of various cooperatives and unions thereof. In rural areas, there operate agricultural cooperatives, the activity of which is

regulated by the federal law 'On Agricultural Cooperation'.

An agricultural cooperative is one of the organizational-legal existing forms business. It is an organization that is set up by agricultural producers and citizens with a private subsidiary plot on a voluntary membership basis with a view to engaging in joint production (or some other type of) business activity, with a focus on pooling pecuniary equity contributions with each other for the purpose of meeting the material and other needs of members of a cooperative [2]. Agricultural cooperatives are divided into production and consumer ones. The key differences between the two are the following: (a) a production cooperative is a for-profit organization, while a consumer cooperative is a not-for-profit one;

(b) a production cooperative can be set up by natural persons — legal persons may only be associate members in it. By contrast, both natural and legal persons may be members in a consumer cooperative;

(c) in a production cooperative, the members personally do the work, while there is no such requirement in a consumer cooperative – the work is done by wage workers, i.e. a line has been drawn between membership and labor activity in a consumer cooperative.

MATERIALS AND METHODS

The statistical-economic method makes it possible to comprehensively characterize the phenomenon under study by way of mass digital data, so the authors employed it to analyze the current condition and trends in the development of the agricultural production cooperatives sector and assess the efficiency of its operation. The monographic method helps gain insight into particular units within the general aggregate which are typical enough to characterize the phenomenon under study. This method was employed to explore the activity of agricultural organizations that are distinguished by high business results. The economic-mathematical method makes it possible to solve multifactor economic problems using computers. To address issues of optimizing production in agricultural artels, economic-mathematical modeling employed. The computational-constructive method helps determine a set of ways to resolve the issue in the long run. It was used to lay the foundation for the development of agricultural cooperation in the long run with a view to resolving the issue of achieving sustainable development in rural areas.

RESULTS AND DISCUSSIONS

Most of the world is currently dominated by consumer cooperatives, i.e. agricultural cooperatives that seek to fulfill the needs and aspirations of their members. By contrast, Russia is dominated by agricultural production cooperatives. Many researchers view production cooperatives as the more acceptable form of business in rural areas. The following factors speak in favor of agricultural production cooperatives:

(i)members of a cooperative must personally work in it, with making a mandatory equity contribution guaranteeing them a job in the cooperative. In making the decision about the choice of organizational-legal form as a production cooperative, the team simultaneously takes on the obligation to provide employment to all of its members. This, in a sense, helps stabilize the social situation in rural areas, especially in the nation's rural hinterland;

(ii)those in charge of a cooperative (its Board, Chairman, etc.) are elected quite democratically, and, if need be, they can be easily replaced; it is a lot harder to do this in business partnerships and societies;

(iii) in the event of exiting the cooperative, each member can get their equity contribution back:

(iv)revenue in a cooperative is mainly distributed based on work and only partially (under 30%) based on additional stakes in it; (v)the number of members in a cooperative is unlimited.

Agricultural production cooperatives are a social and labor form of business aimed at meeting the needs of its members. This is where a significant portion of the rural population is employed. Cooperatives have relevant public amenities in place in the countryside and provide their members, who are running a private subsidiary plot, with fodder, transportation, fuel, and other resources [6, 7].

Russia's agro-industrial complex currently numbers 4,195 production cooperatives, which accounts for 21.1% of the total number agricultural organizations organizational-legal forms in the country. Subsequent to the passage of the federal law 'On Agricultural Cooperation', the number of production cooperatives rose from thousand in 1996 to 14.4 thousand in 2003 or increased 6 times. However, starting in 2004 their number has been declining sharply. This has affected the overall structure of the nation's existing organizational-legal forms of agricultural business. The relative share of production cooperatives in the total number of agricultural organizations has declined in virtually all federal districts, except North Caucasian Federal District. Over there, it has risen from 38.8% to 44.2%. The relative share of cooperatives has been dropping the fastest in Volga Federal District and Central Federal District. In those regions, it has dropped by 39.6 and 32.8 percentage points, respectively. The structure of agricultural organizations is currently dominated by limited liability companies. These account for 57.5%, with their share growing from year to year. However, in certain regions cooperatives remain the main form of business. For instance, in the Republic of Dagestan, they account for 66.1%, in the Republic of North Ossetia-Alania _ 64.1%, in Nenets Autonomous Okrug – 58.1%, in the Sakha (Yakutia) Republic – 57.0%, in Zabaykalsky Krai -51.8%, in Vologda Oblast -43.0%, in Smolensk Oblast – 41.7%, and in Kostroma Oblast – 40.8%.

One of the main causes behind the nation's sharp decline in the number of agricultural production cooperatives is their investment attractiveness. Investors are not interested in investing in this form of business, while rural residents can hardly come up with sufficient funds on their own. The democratic principle of governance (each cooperative member entitled to one vote) does not let the investor determine the production, or any other, activity of the organization. Therefore, many cooperatives have changed their organizational-legal form of business from a limited liability company to a stock company. The social orientation of activity by agricultural cooperatives also does not let them attract investment. Most are operating on rented, not owned, land, which diminishes their investment attractiveness as well.

In Russia, the most popular types of cooperation today are crop cooperatives, as produce turned out by this sector (grain, sugar beet, sunflower seeds, etc.) is most profitable, and integrated ones, where the risk of losses from natural disasters and market fluctuations is much lower. In addition, multi-sector cooperatives make a more complete and even use of labor resources. Another type of cooperatives that is developing successfully at the moment is cooperatives with a closed production cycle, which are engaged in both the production and processing of output.

During the pre-reform period (prior to 1990), agriculture in Russia developed successfully

based on cooperation. By 1985, the nation's agriculture was dominated by production cooperatives in the form of kolkhozes and interfarm enterprises. These entities had in their use 53 million ha of agricultural land, or 44.3% of total land area, 24.2 million heads of beef cattle (40% of all cattle in the country). 14 million heads of pigs (35%), and 22.5 million heads of sheep and goats (35%). They produced 49% of all grain, 83% of all sugar beet, 71% of all sunflower seeds, 35% of all milk and wool, and 32% of all meat in the country. The shift to a market economy resulted in the dismantlement of most of the entrenched forms of cooperation in the nation [9].

Agricultural production cooperatives would normally be set up via the reorganization of agricultural organizations of various forms of business organized in the basis of former kolkhozes and sovkhoz (state-owned farms). Each enterprise participant would decide for themselves whether or not to join a cooperative and transfer the land and property share they were entitled to into the cooperative's mutual fund as an equity contribution. The reorganization of an enterprise would result in the formation of one or several cooperatives.

Among the nation's agricultural production cooperatives, the most popular form of agricultural business was agricultural artels (kolkhozes, i.e. collective farms). These accounted for 89.6% of all production cooperatives in the country. By contrast, cooperative farms (coopkhozes) were not very popular. The distinctive characteristics of a coopkhoz include the following: (1) the mutual fund does not incorporate land plots that remain in the ownership (owned or rented) of peasant (private) farms or private subsidiary plots, except for lands that are intended for common cooperative needs; (2) a coopkhoz's members include not just civilians (who are not entrepreneurs but are just running a private subsidiary plot) but individual entrepreneurs (farmers) as well [8]. Currently, production cooperatives are losing out in size of production and resource security to other organizational-legal forms of business in the country (Table 1). In 2017, the value of

PRINT ISSN 2284-7995, E-ISSN 2285-3952

gross agricultural output on average per 1 cooperative in Tambov Oblast was 63.4 million rubles, which was 4.4 times less than across agricultural organizations on the whole and 7.4 times less than in stock companies. The number of workers was less 1.6 times and respectively. The times. agricultural area was registered cooperatives – 3,165 ha, and the largest – in limited liability companies – 6,036 ha. The number of workers per 100 ha of agricultural land in cooperatives was 1.5 people, and in stock companies – 2.3 people. Cooperatives are in charge of 6.6% of total agricultural land and 8.0% of the total number of workers at agricultural organizations. This is testimony to that cooperatives are to a greater degree interested in providing rural residents with a job. A production cooperative is a social form of business that is aimed at meeting the needs of its members. This is where a significant portion of the rural population is employed.

Table 1. Size and Resource Security of Agricultural Organizations in Tambov Oblast, 2017

Indicators	Stock	Limited liability	Agricultural	State and	Total
	companies	companies	production cooperatives	municipal unitary enterprises	
Number of farms	33	196	35	3	267
On average per 1 farm:					
gross agricultural output, million rubles	468.1	285.7	63.4	152.3	277.6
agricultural area, ha	6,036	6,935	3,165	5,284	6,311
number of workers	139	73	48	117	79
fixed assets, million rubles	486.2	384.7	96.6	190.3	357.3
Capital-area ratio (value of fixed assets per 100 ha of agricultural land), thousand rubles	8,055	5,548	3,054	3,602	5,662
Capital-labor ratio (value of fixed assets per 1 worker), thousand rubles	3,503	5,259	2,011	1,631	4,554
Labor-area ratio (number of workers per 100 ha of agricultural land), people	2.3	1.1	1.5	2.2	1.2

Source: indicators are calculated on the basis of annual reports of agricultural organizations of the Tambov region provided by Tambovstat http://tmb.gks.ru

Cooperatives are endowed with the means of production worse than other organizational-legal forms of business. This is attested to by indicators such as the capital-area ratio and capital-labor ratio, which, respectively, are by 46.1% and 55.8% smaller than across agricultural organizations overall.

The purpose of activity by agricultural production cooperatives is to derive profits, as they are for-profit organizations.

Most cooperatives operate profitably, but the economic efficiency of their business activity is lower compared with that of other organizational-legal forms of business (Table 2).

In 2017, the return from land was by 54.4 %, the return from fixed assets was by 84.4 %, and labor productivity was by 62.0% lower in agricultural production cooperatives in

Tambov Oblast than across agricultural organizations overall.

Cooperatives posted the lowest level of profitability of agricultural production -1.2%. The current level of profitability of agricultural production in cooperatives does not allow them to implement reproduction on an enlarged scale at this time.

In cooperatives, the economic efficiency of agricultural activity largely depends on the intensity of agricultural production. Under the current conditions, some of the key areas for the intensification of production include the use of intensive and resource-saving technology, adoption of scientifically substantiated rotation crop systems, enhancement of seed production and stock breeding in livestock farming, employment of high-yield and more efficient plant, livestock,

and poultry varieties that offer the greatest future promise, application of mineral and organic fertilizers in optimal quantities, utilization of effective biological and chemical methods for the protection of agricultural crops, and reinforcement of the fodder base [12].

Table 2. Efficiency of Business Activity by Agricultural Organizations in Tambov Oblast, 2017

Indicators	Stock companies	Limited liability companies	Agricultural production cooperatives	State and municipal unitary enterprises	Total
Return from land (value of gross output per 100 ha of agricultural land), thousand rubles	7,756	4,120	2,004	2,883	4,399
Return from fixed assets (value of gross output per 100 rubles of fixed assets), rubles	96.3	74.3	65.6	80.0	77.7
Labor productivity (value of gross output per 1 worker), thousand rubles	3,373	3,906	1,320	1,306	3,538
Revenue per 1 farm, thousand rubles	18,781	43,461	699	2,666	34,163
Revenue per 1 ha of agricultural land, thousand rubles	3.1	6.3	0.2	0.5	5.4
Level of profitability, %	14.7	30.4	1.2	2.4	26.4

Source: indicators are calculated on the basis of annual reports of agricultural organizations of the Tambov region provided by Tambovstat http://tmb.gks.ru

Boosts in the efficiency of activity by cooperatives will be facilitated by the technical modernization of production and creation of a single production chain, which will incorporate the growing of produce and its processing, storage, grading, packaging, and sale.

The profitability of production largely depends on the successful sale of produce, i.e. on producers' marketing activity. Therefore, it may help to set up marketing units of their own in large cooperatives which turn out an extensive range of produce, as well as in farms that sell a major portion of their output to markets outside of their administrative district and oblast. Cooperatives with small volume of production may consider enlisting the services of specialized consulting firms. This may help provide executives and specialists at enterprises with information on product supply and demand and where and at what price it is advisable to sell their produce, and will help them make informed decisions when working out an optimal marketing strategy [8].

A necessary condition for the effective operation of production cooperatives is engaging them in agricultural consumer cooperation. The development of supply-sale, processing, servicing, and other consumer cooperatives will help resolve issues related to the provision of a cooperative's own members with the means and objects of production and services related to machinery and equipment maintenance and the processing and sale of output. Under the current conditions, it will be hard for a production cooperative to resolve these issues on its own.

The creation of consumer cooperatives will help foster effective interaction between producers and large retail chains, help producers expand their presence in the internal agri-food market, and help amplify their role in fulfilling government and municipal contracts. This will be facilitated by the creation of relevant logistics centers and wholesale-retail markets [5].

To some scholars, a promising form of cooperation in the area of production is interfarm cooperation, which incorporates cooperation among agricultural organizations, cooperation between agricultural enterprises and private subsidiary plots, and cooperation among private farms. Given that different farms are at different stages of economic and technological development, joining their efforts together on a mutually beneficial basis in terms of agricultural production may help achieve substantial boosts in production efficiency based on more rational use of available resources and deeper intrasectoral specialization. These scholars believe that interfarm cooperation can develop in two major forms:

(a)based on long-term sustainable productioneconomic ties, involving entering into supply contracts, services contracts, etc.;

(b)as part of relevant organizational-production systems, with new legal persons created [3, 4].

Quite often, interfarm cooperation develops informally, without a legal person getting created. Surveys of farmers indicate that in 80% of cases cooperation takes place without legal formalization [1].

The Concept on the Development of Cooperation in Rural Areas for the Period through to 2020 sets out a set of key areas for the organization and development of cooperative units in rural areas, with a focus on boosting the efficiency of agro-industrial production and returns on agricultural labor and ensuring sustainable development in rural areas.

The document sets out the following objectives on the development of cooperation: (i)creation of favorable statutory and socioeconomic conditions for the development of rural cooperation at the federal, regional, and municipal levels;

(ii)enhancement of the existing mechanism of government support and development of new measures for fostering rural cooperation, including public-private partnerships;

(iii)facilitation of boosts in the number of rural cooperatives across a variety of areas of activity and pursuit of wider coverage of agricultural producers and rural residents with cooperation; (iv)facilitation of major boosts in agricultural producers' profit margins by way of their active engagement in cooperative activity;

(v)more comprehensive and higher quality provision of various services to agricultural producers and rural residents;

(vi)creation and development of an independent cooperative system for the sale of agricultural output that will be capable of competing with large retail chains;

(vii)effective development of institutions of cooperation with a view to driving socioeconomic development in rural areas and improving the quality of life of rural residents; (viii)promotion of adherence to the principles of cooperation, legality, and the rule of law in the area of rural cooperation [10].

The development of rural cooperation must become one of the top-priority strategic areas for enhancing agricultural policy in the Federation. Greater government Russian support may need to be provided agricultural production cooperatives opposed to other producers, as the former are intended to resolve the social problems of the rural population as well. However, the Government Program for the Development of Agriculture and Regulation of Markets for Agricultural Produce, Raw Materials, and Food for the Period 2013-2020 does not provide for government support for development of agricultural production cooperation. Government support for agriculture is not differentiated by organizational-legal form of business (Resolution of the Government of the Russian [11].

Government support should help create the conditions for the successful development of cooperation in rural areas. There is a need to financial-credit resources accessible, including for the development of the material-technical base for the storage, processing, transportation, and agricultural output and food via concessional lending, reduce the tax load via the abolition property tax, and reduce insurance payments into the state non-budgetary funds pension, social insurance, compulsory medical insurance funds). The state is expected to provide assistance in putting in place a property framework for agricultural production via the transfer into one's use, on concessionary terms, of state-owned property and land and reimbursing one for a portion of expenditure on production. This will facilitate the development of cooperation and boosts in economic activity among the rural population, in the employment rate, and in income.

CONCLUSIONS

An agricultural production cooperative is not just a for-profit organization but also a social and labor form of business that is aimed at meeting the needs of its members. In the last few years, the number of cooperatives in Russia has declined sharply. One of the key reasons behind this is their low investment To successfully attractiveness. production cooperation, the nation needs to enhance its existing methods and tools for government support and ensure appropriate support in putting in place a sound materialtechnical base for cooperatives. A key way to achieve improvements in economic activity in the country is to intensify agriculture and direct it to a path of innovation-driven development.

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