Agricultural Cooperation in The Kyrgyz Republic: Potential, Problems and Prospects
Сельскохозяйственная Кооперация В Киргизской Республике: Потенциал, Проблемы, Перспективы

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Abstract

The article has been written in order to disclose the development potential of agricultural cooperation in the Kyrgyz Republic in the conditions of its integration into the unified food market of Eurasian Economic Union member states. Cooperation is considered an efficient economic mechanism of integration of small agricultural producers into national and global food value chains. Upon examination of works revealing the potential of cooperation in the development of value chains, analysis of the agrarian structure and evaluation of the potential held by member states for cooperation, the authors of the article have proposed measures for comprehensive development of agricultural cooperation in the Kyrgyz Republic. The article is based on the materials by international organizations, the National Committee of Statistics of the Kyrgyz Republic, the Eurasian Economic Commission and results of research conducted by separate authors. The article’s materials can be used to generalize the international practice of studying the role of cooperation in the development of food value chains and to improve institutional conditions and government policy of supporting cooperation in the Kyrgyz Republic. They are also of interest for a broad group of researchers in the field of agricultural cooperation.

Key Words: food value chains, agricultural cooperation, agrarian structure, members of cooperatives, trade logistics centers of agricultural products.

Аннотация

Статья подготовлена с целью раскрыть потенциал развития сельскохозяйственной кооперации в Киргизской Республике в условиях её интеграции в единый продовольственный рынок стран-членов Евразийского экономического союза. Кооперация рассматривается как эффективный экономический механизм интеграции мелких сельскохозяйственных производителей в национальные и глобальные продовольственные производственно-сбытовые цепочки (Value added chains). В статье, на основе изучения работ, раскрывающих потенциал кооперации в развитии цепочек создания ценности, анализа аграрной структуры и оценки потенциала членской базы для кооперации, предложены меры по комплексному развитию сельскохозяйственной кооперации в Киргизской Республике. Работа основана на материалах международных организаций, Национального статистического комитета Киргизской Республики, Евразийской экономической комиссии и результатов исследований отдельных авторов. Материалы статьи могут быть использованы для обобщения международной практики исследования роли кооперации в развитии продовольственных производственно-сбытовых цепочек, совершенствования институциональных условий и государственной политики поддержки кооперации в Киргизской Республике, а также представляют интерес для широкого круга исследователей в сфере сельскохозяйственной кооперации.

Ключевые слова: продовольственные производственно-сбытовые цепочки, сельскохозяйственная кооперация, аграрная структура, членская база кооперативов, торгово-логистические центры сельскохозяйственной продукции.

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212 Federal State Budgetary Scientific Institution "Federal Research Center of Agrarian Economy and Social Development of Rural Areas - All-Russian Research Institute of Agricultural Economics" under Ministry of Science and Higher Education of Russian Federation, Moscow, Russia
Introduction

Agrarian reforms executed in the Kyrgyz Republic at the beginning of the 21st century have resulted in the formation of a small-scale structure of agricultural production. Nearly all products are made by small entities (farming enterprises and households).

The established structure of production negatively influences industrial competitiveness, national food security and public nutrition, as well as the pace of the agrarian sector’s integration into the commodity system of the Eurasian Economic Union (EAEU) that the country joined in 2015.

At the same time, the Kyrgyz Republic currently has a unique possibility of forming cooperative relations in agricultural production, processing, storage, transportation, distribution, procurement and services. However, agricultural cooperation has so far been poorly developed in the Kyrgyz Republic despite its broad socio-economic basis. An overwhelming majority of entities are not integrated into value chains that are focused on national and global sales markets.

The approved National Development Strategy of the Kyrgyz Republic for 2018-2040 (Decree No. 221, 2018) gives prerequisites for the establishment of a national horizontally and vertically integrated cooperative system to combine all forms of rural cooperation.

The resolution of this problem is comprehensive and includes measures to get small agricultural producers involved in food value chains, to improve the agrarian structure, to establish a national center for the development of cooperation, to organize trade logistics centers, etc.

Literature review

Problems related to the establishment of value chains are studied by many international organizations (World Bank (2019), FAO (n.d.), UNIDO (n.d.), International Centre for Trade and Sustainable Development (n.d.), etc.) and separate researchers. Their works are marked by a wide coverage of various links of value chains and the depth of their research. Specifically, M. Porter (1985) considers a value chain at the level of a separate enterprise as a strategic planning tool that is based on the enterprise’s competitiveness in the market (Porter, 1985). G. Gereffi, M. Korzeniewicz and R. Korzeniewicz (1994) study commodity chains in the conditions of the global economy. D. Neven (2015) considers this problem in a comprehensive manner, on the one hand, disclosing consistently all links of the production chain and, on the other hand, covering national and international food markets. Methodological aspects of value chain analysis are generalized in the article by R. Kaplinsky and M. Morris (2001).

Applied aspects of improving the competitiveness of agrarian industries, in which micro and small businesses dominate, are considered in the article by O. Kula and M. Field (2006). The latest tendencies in value chains that are linked with transnational cooperation are examined in articles by J. Bijman, A. Cechin and R. Muradian (2014-2016), etc.


Based on the aforementioned research, we took a subsequent step in the article: agricultural cooperation was considered as a mechanism designed to integrate small agricultural producers into national and global value chains and the potential of its development in the Kyrgyz Republic was investigated.

Proposed methodology

General description

The article was written as part of research conducted at the Russian Research Institute of Agricultural Economy. The study covered agricultural cooperatives that are part of value chains, their potential base of members, economic relations, institutions and mechanisms designed to provide their operation and development in the Kyrgyz Republic.

The sources of empiric information included legal statutory acts of the Kyrgyz Republic, data from the National Committee of Statistics of the Kyrgyz Republic, materials provided by the Ministry of Agriculture, Food and Melioration of
the Kyrgyz Republic and the Association of Agricultural Cooperatives of the Kyrgyz Republic, as well as initial data personally collected by us.

The study is a logical continuation of conducted earlier research aimed to examine problems related to the development of value chains and the integration of small agricultural producers into them by means of their cooperation, organization of management and formation of an economic mechanism of operation and development of the cooperative system in the Kyrgyz Republic.

In the course of the study, we applied various methods of research (abstract logical, analytical and economic statistical).

Algorithm

The study’s algorithm consisted of consecutive steps taken to study theoretical and methodological approaches to the problem of integrating small agricultural producers into value chains based on the analysis of the agrarian structure and agricultural production in the Kyrgyz Republic into a unified food market of the EAEU, as well as based on the evaluation of the economic fundamental and the base of cooperative members and prospects of the establishment of agricultural cooperation in the republic.

On the basis of identified problems, tendencies and current potential, we proposed mechanisms and measures aimed to support and develop agricultural cooperatives in the Kyrgyz Republic.

Results and discussion

Agriculture is an important economic sector for the Kyrgyz Republic. Even though the share of agriculture in the Kyrgyz economy decreased from 18.5% in 2010 to 11.7% in 2018, in current prices agricultural production jumped by nearly 70% (The National Committee of Statistics of the Kyrgyz Republic, n.d.).

As a result of institutional reforms in the agrarian sector, the small-scale structure of production has been formed in the republic. As of January 1, 2018, 439,600 farming enterprises (farmers) (FE) and individual entrepreneurs operated in the agricultural sector and 473,000 farming households in rural areas. They manufacture 98.6% of aggregate agricultural products.

The established agrarian structure in the republic determined the distribution of agricultural land, including ploughland. In 2017, 1,040,600 out of 1,280,00 ha of ploughland was in private hands and distributed as follows: 72.2% was privately held by FE, 5.6% was in the hands of farming households and 3.4% was owned by collective farms.

As the practice shows, such agrarian structure (due to its small-scale and largely consumer character of production) restricts the attainment of objectives determined by the National Development Strategy of the Kyrgyz Republic for 2018-2040 to ensure food security and improve the nutrition of the public. Of need are cardinal institutional and organizational changes that aim to enlarge and improve the operating efficiency of agricultural producers, as well as to deepen the processes of integration and cooperation.

Over the past few years, the Kyrgyz Republic has shown the positive pace of economic and social development. In 2018, the country ranked 76th among 157 countries in terms of human capital development (The Global Human Capital Report, 2017).

The demographic environment is an important factor. The republic boasts of steady natural population growth (around 2% per year). For this reason, food security and nutrition of the population are urgent problems in the country.

As regards socio-economic indicators, it is necessary to note positive results in the efforts to reduce poverty in the country. The poverty rate in rural areas declined from 41.4% in 2013 to 23.7% in 2018. However, household income has so far been insufficient to keep public nutrition well balanced. Out of nine main food items, which are used in assessing food security in Kyrgyzstan, only in terms of two of them (food and vegetable oil) the consumption of main food items exceeds average nutrient ratios for the public as specified by the Government of the Kyrgyz Republic. The consumption of fruit, berries and especially fish is 50% below the standard.

As for the Kyrgyz agricultural sector, four categories of agricultural products are developed: FE, state-owned enterprises, collective farms (joint-stock companies, agricultural cooperatives) and farming households (Table 1).
Table 1. Breakdown of the Kyrgyz Republic’s agrarian sector

<table>
<thead>
<tr>
<th>Item</th>
<th>2000</th>
<th>2010</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of enterprises, unit State-owned and collective farms</td>
<td>634</td>
<td>573</td>
<td>453</td>
</tr>
<tr>
<td>Farming enterprises and individual entrepreneurs</td>
<td>71,163</td>
<td>331,059</td>
<td>439,602</td>
</tr>
<tr>
<td>Farming households (based on 1999 and 2009 Census)</td>
<td>458,900</td>
<td>473,100</td>
<td></td>
</tr>
</tbody>
</table>

Breakdown of agricultural products by categories of enterprises, %

<table>
<thead>
<tr>
<th>Item</th>
<th>2000</th>
<th>2010</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-owned and collective farms</td>
<td>9.5</td>
<td>2.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Farming enterprises and individual entrepreneurs</td>
<td>42.1</td>
<td>61.5</td>
<td>63.3</td>
</tr>
<tr>
<td>Farming households</td>
<td>46.9</td>
<td>36.0</td>
<td>35.2</td>
</tr>
</tbody>
</table>

Source: prepared on the basis of data from the National Committee of Statistics of the Kyrgyz Republic

Farming enterprises produce most agricultural products (over 63%) and their market share is on the rise. There is still collapse and divestiture of collective farms into smaller units. As a result, their contribution to agricultural output declined to 1.6%. Farming households turn out over 35% of agricultural products.

In 2018, FE produced 88.9% of grain, 92.9% of raw cotton, 85.6% of sugar beet, 68% of potatoes, 64.8% of vegetables, 56.3% of wool, 52.7% of meat (in dressed weight), 50.3% of milk and 37.8% of eggs out of the republic’s total output.

Farming households produced 67.5% of fruit and berries, 49.1% of milk, 46.7% of meat (in dressed weight), 43.4% of wool, 36.2% of eggs, 34.4% of vegetables and 30.8% of potatoes.

The farming form of economic activities is marked by increasingly small land plots. The average size of land plots used by FE is below 2.2 ha, and declined by 28.4% compared to 2005.

In addition, nearly 75% of FE are small, with land plots not exceeding 5 ha. Also, 20% of farming enterprises are mid-sized, with land plots ranging from 5 to 25 ha and only a small portion of enterprises (5% or roughly 20,000) are big, with lands plots of 25+ ha.

Our analysis showed that the socio-economic fundamental for production cooperation in the Kyrgyz Republic is small (up to 5 ha) and mid-sized (from 5 to 20 ha) FE, farming households, including companies whose owners are engaged in other than agricultural activities and those belonging to pensioners and people who cannot independently manufacture products on land plots they own.

The basis of agrarian services cooperation is agricultural production cooperatives and FE, regardless of their size and commodity enterprises of households.

However, despite a wide group of participants, the number of agricultural cooperatives has been falling. Their development peaked in 2006 after reaching 1,240. Within four subsequent years (until 2011) their number slid to 374.

This contraction was driven by the introduction of the new Tax Code of the Kyrgyz Republic. Large agricultural producers need to pay the value-added tax according to the relevant articles of the Code. For this reason, to minimize the tax burden most enterprises, of which cooperatives are part, had to break up and get registered as FE. The number of cooperatives has become more stable starting in 2011. However, a reduction in the number of cooperatives persists.

Along with agricultural production cooperatives, agricultural services cooperatives are established and operate in the Kyrgyz Republic. They amounted to 45 in 2017. They are mainly procurement cooperatives designed to keep farmers supplied with machinery and spare parts. The analysis and evaluation of the prevailing institutional, organizational and economic conditions of the operation of agricultural cooperatives show that required and sufficient prerequisites for their intensive development have been formed in the Kyrgyz Republic. The core of their membership base is main agricultural producers (small rural enterprises).
The establishment of cooperatives will contribute to the integration of small agricultural producers into value chains, which are being formed, first of all, within the EAEU.

Mutual trade of food and agricultural raw materials between the Kyrgyz Republic and EAEU member states currently exceeds the republic’s exports by 11.6% and imports by a factor of 2.1.

Agricultural imports to the Kyrgyz Republic exceed exports by several times, and this is a sign that it is necessary to expand the country’s export potential. Main export food items and agricultural raw materials are dairy products, sugar and molasses while major import items include grain, flour and vegetable oil.

Higher agricultural output and, accordingly, exports were driven by the more intensified output on the part of FE. For this purpose, it is important to provide for mechanisms and measures of FE government support that will be differentiated depending on the size of FE.

Close attention should be paid to major FE with land plots of 25+ ha and cooperatives that show strong performance. Later, once the land market develops this group can grow quantitatively and transform into major specialized high-production concerns.

As regards plant cultivation, this can be enterprises engaged in the production of sugar beet, cotton, grain and feed crops. In the animal husbandry sector, they include meat and dairy concerns, companies specialized in horse breeding and pedigree livestock. Activities carried out by this group of enterprises should be focused on higher agricultural exports and measures aimed to keep smaller producers supplied with high-yield seeds, planting stock and pedigree livestock.

Apart from low-interest loans that can be issued to this group of enterprises, it is reasonable to subsidize payments under loans granted to buy agricultural technologies, machinery and equipment, to establish trade logistics centers, to boost export potential, etc. The main term for government support can be a higher output of agricultural products, including for exports.

FE whose land plots vary from 5 to 25 ha are also a relatively stable group. The development of a system of agricultural services cooperatives is primarily topical for this group of enterprises.

The cooperation of enterprises from this group should be carried out given local conditions (the size of a rural area, the number of localities and farming enterprises in it, the availability of production assets, storage facilities for fruit and vegetables, etc.). The establishment of efficient agricultural services cooperatives, including cooperative trade logistics centers, will also produce a boomerang effect. They will contribute to the development of their members (farming enterprises) and to the improvement of their financial and economic conditions. This will create prerequisites for the transformation of some of the most successful mid-sized enterprises into major FE.

A group of low-production FE with land plots below 5 ha is the largest and the most problematic. Output in this group mainly aims to satisfy the demand of families and the local market. They apply primitive agricultural technologies, thereby producing a negative impact on crop yield and livestock production.

At the same time, this group owns and uses the main part (50.5%) of the country’s ploughland. To make their economic activities more efficient and to help them unleash their potential as much as possible, it is important to get them concurrently involved in production and agricultural services cooperation.

Cooperative trade logistics agricultural centers can be the basis for the formation of a commodity distribution network inside of the general agrarian market of EAEU member states. The Government of the Kyrgyz Republic issued Resolution No. 321 “On the Approval of the Program for the Creation and Development of Trade Logistics Agricultural Centers in the Kyrgyz Republic for 2019-2023” on June 27, 2019 to provide assistance to the establishment and the operation of such centers [23]. Their supplies of agricultural and related products, which are provided by agricultural companies and agricultural cooperatives, are exempted from the value-added tax.

Trade logistics agricultural centers supplement such logistics functions that value chains currently lack: consolidation, storage, quality control, transportation and supply through the system of government purchases and exports. They are a connecting link between producers and end consumers of products (the local market and exporters).
In the conditions dominating in the Kyrgyz Republic, there can be two levels of trade logistics centers (local (district) and regional). District centers can be focused on the promotion of locally produced items. In addition to them, higher-level (regional) trade logistics centers can be established that, on the one hand, can buy products from district centers, conduct wholesaling and forward them to other regions or export. On the other hand, they can import products that are needed for domestic consumption and supply them to district trade logistics centers.

An important function of the Ministry of Agriculture, Food Industry and Melioration of the Kyrgyz Republic should become the development and implementation of a government policy aimed to develop commodity production by forming stable value chains and cooperation in agriculture.

We find it reasonable to establish an independent body (the Republican Center for the Development of Agriculture, Logistics and Cooperation) for the efficient performance of organizational and other work aimed to form a well-balanced agrarian structure.

The Center’s main tasks can be to provide scientific, methodological, organizational and financial support for the formation of the efficient agrarian structure, logistics infrastructure and agricultural cooperation. The Center can implement government programs, coordinate research aimed to elaborate models of specialized commodity FE, to establish trade logistics centers and to develop production and agricultural services cooperation and financial rehabilitation of cooperatives.

The Center can make an examination of statutory legal acts regulating activities carried out by trade logistics centers and agricultural cooperatives, jointly with local self-government bodies provide information and make explanations that the development of cooperation is advantageous, as well as organize measures to establish pilot cooperatives and trade logistics centers.

The Center’s organizational and methodological activities should be carried out in close contact with agrarian research institutes, the republican union of cooperatives and its sectorial, regional and local representative offices, as well as the association of trade logistics centers.

Measures aimed to expand and provide agricultural producers with stable access to financial resources regardless of their ownership or activities conducted can become an important function of the Center. In our opinion, it is reasonable to revise the mission of Aiyl Bank OJSC, which accounts for 86% of loans granted to agricultural producers, and to position the bank as the Bank for Development of Agriculture, Logistics and Agricultural Cooperation. This will make it possible to open the agrarian market for other banks and to allow credit unions and microfinance organizations to provide more loans in rural areas.

For the purpose of developing a system designed to keep farmers and cooperatives informed, as part of the Center, it is extremely necessary to create a unified information consultative and marketing network. The creation of such a network will allow farmers and cooperatives to timely react to changes in the environment in the Eurasian agricultural and food market and to promptly make decisions on changes in the structure of production.

Conclusions

The study allows us to draw the following conclusions.

Agricultural cooperation contributes to the formation of stable value chains and is the most important mechanism for the Kyrgyz Republic’s integration into the single food market of EAEU member states.

The operation of the agrarian sector of the Kyrgyz Republic’s economy within the EAEU makes it necessary to develop large-scale commodity production on the basis of cooperation and measures to improve the competitiveness of agricultural products. To this end, it is important to approve the Development Strategy of Agricultural Cooperation in the Kyrgyz Republic for the period until 2040 that aims:

- to create a favorable institutional environment for the operation of agricultural cooperatives, including by means of amendments and supplements to the Law “On Cooperation” of the Kyrgyz Republic, to elaborate and approve cooperation development programs with certain specific mechanisms, measures of government support and sources of funding to be determined;

- to create a single national competence center (the Republican Center for the
Development of Agriculture, Logistics and Agricultural Cooperation;
- to keep the structure of agrarian production balanced through the comprehensive solution of problems related to the development of large, mid-sized and small FE through their production and agricultural services cooperation;
- to form a cooperative system at regional, sectorial and local levels and to provide assistance to cooperatives, which are part of the system, in obtaining financial support from government and international organizations;
- to establish the Cooperative Agricultural Development Bank with the participation of credit unions and microfinance organizations that operate in rural areas. The state can be one of its founders and participate in the provision of funds for infrastructure investment projects, subsidies and grants, including those for the development of agricultural cooperation;
- to organize flows of food through the system of district and regional trade logistics centers;
- to develop an information consultative system for farmers and cooperatives.

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