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STATE POLICY TO SUPPORT AGRICULTURAL COOPERATIVES IN KAZAKHSTAN

The cooperative movement in the agriculture of Kazakhstan is not developing systematically but throughout its independent development it enjoys the attention of both the state and agricultural producers. State support has played and continues to play a strong role in agriculture, as well as in many foreign countries, especially at the stage of the formation of agricultural cooperatives. The main purpose of the article is to study the measures of state policy in relation to agricultural cooperatives and to give recommendations for its adaptive use, taking into account foreign practices and local conditions. The article briefly outlines the history of agricultural cooperatives in Kazakhstan since the 19th century, the main performance indicators of agricultural cooperatives, systematizes measures of state support and suggests further directions for the sustainable development of cooperatives in agriculture. To prepare the article, qualitative research methods, such as monographic, analysis and synthesis, logical and abstract constructivism, SWOT analysis were used. The results of this study contribute to the systematic and sustainable compromise development of relations between the state and cooperatives and the clarification of state policies and measures to ensure the prosperity of cooperative formations in agriculture.

Key words: agricultural cooperatives, state support of agriculture, agricultural cooperation.

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Қазақстандағы ауыл шаруашылығы кооперативтерін қолдаудың мемлекеттік саясаты

Қазақстанның ауыл шаруашылығындағы кооперативтік қозғалыс жүйелі түрде дамымай отыр, бірақ тәуелсіз даму барысында мемлекет тарапынан да, ауыл шаруашылығы тауарын өндірушілер тарапынан да көңіл бөлінеді. Мемлекеттік қолдау ауыл шаруашылығында күшті рөл атқарды және жалғастыруда, алайда көптеген шет елдерде ауылшаруашылық кооперативтерінің қалыптасу кезеңінде. Мақаланың негізгі мақсаты – ауыл шаруашылығы кооперативтеріне қатысты мемлекеттік саясат шараларын зерделеу және шетелдік практика мен жергілікті жағдайларды ескере отырып, оны бейімдеп пайдалану жөнінде ұсынымдар беру. Мақалада 19 ғасырдан бастап Қазақстандағы ауыл шаруашылығы кооперативтерінің тарихы, ауыл шаруашылығы кооперативтері қызметінің негізгі көрсеткіштері қысқаша көрсетілген, мемлекеттік қолдау шаралары жүйеленген және ауыл шаруашылығындағы кооперативтердің орнықты дамуы бойынша одан әрі бағыттар ұсынылған. Мақаланы дайындау барысында ғылыми зерттеудің сапалы әдістері қолданылды – монографиялық, талдау және синтез, логикалық және дерексіз конструктивизм, SWOT талдау. Осы зерттеудің нәтижелері мен ұсыныстары Қазақстандағы мемлекет пен ауылшаруашылық кооперативтер арасындағы өзара қарым-қатынастарды жоспарлы және тұрақты ымыралы дамытуға және ауыл шаруашылығындағы кооперативтік құрылымдардың өркендеуін қамтамасыз ету жөніндегі мемлекеттік саясат пен шараларды нақтылауға ықпал етеді.

Түйін сөздер: ауыл шаруашылығы кооперативтері, ауыл шаруашылығын мемлекеттік қолдау, ауыл шаруашылығы кооперациясы.

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Государственная политика поддержки сельскохозяйственных кооперативов в Казахстане

Кооперативное движение в сельском хозяйстве Казахстана развивается несистематично, но на протяжении независимого развития пользуется вниманием, как со стороны государства, так и сельскохозяйственных товаропроизводителей. Государственная поддержка играла и продолжает играть сильную роль в сельском хозяйстве как, впрочем, и во многих зарубежных странах особенно на этапе становления сельскохозяйственных кооперативов. Основная цель статьи – изучить меры государственной политики по отношению к сельскохозяйственным кооперативам и дать рекомендации по ее адаптивному использованию с учетом зарубежной практики и местных условий. В статье кратко обозначены история сельскохозяйственных кооперативов в Казахстане начиная с 19-го века, основные показатели деятельности сельскохозяйственных кооперативов, систематизированы меры государственной поддержки и предложены дальнейшие направления по устойчивому развитию кооперативов в сельском хозяйстве. При подготовке статьи были использованы качественные методы исследований – монографический, анализ и синтез, логический и абстрактный конструктивизм, SWOT анализ. Результаты этого исследования способствуют планомерному и устойчивому компромиссному развитию взаимоотношений между государством и кооперативами и уточнению государственной политики и мер по обеспечению процветания кооперативных формирований в сельском хозяйстве.

Ключевые слова: сельскохозяйственные кооперативы, государственная поддержка сельского хозяйства, сельскохозяйственная кооперация.

Introduction

Throughout history of agriculture development, state support for agricultural cooperation has been playing vital role in how farmers operate to ensure food safety, establishing infrastructural development and coordination. One of them was stimulating agricultural producers to cooperate to save expenses and share experience.

The development of cooperation in the agriculture of independent Kazakhstan is uneven in terms of time and regions, the specifics of the activity. In this paper the history of development of agricultural cooperation, divided into the Soviet and post-Soviet periods, is studied and the current state of agricultural cooperation and state support for farmers and householders in Kazakhstan are analyzed.

Building reliable network, ecosystem and coordination between farmers and state, farmers and consumers, farmers and other shareholders is one of the key issue to consider for scholars and state agricultural policy makers and responsible state and non-government bodies. That is why authors of this paper keeping close attention to agricultural cooperatives organization and operation and how state support their sustainability, which is in some ways means sustainable development of

rural territory and agriculture as a whole branch of national economy.

There is not enough updated information and systemic studies on agricultural development in rural places, not to mention agricultural cooperatives in Kazakhstan. Also, state support for agriculture amid COVID-19 was studied, however specific measures to this type of agricultural business were not provided.

Methodology

The basis of the article is a detailed literature review on the experience of agricultural cooperatives in Kazakhstan. Different data sources are used to demonstrate current situation in state support of particular type of agribusiness. Data were gathered from official authorities' platforms, statistical data base and research publications. For various solutions in the process of the study appropriate qualitative and quantitative research methods have been used: monographic, SWOT- analysis, analysis and synthesis, logical and abstractive constructional, etc.

Literature review

Throughout history of agriculture development, agricultural cooperation and its state support has

been playing vital role in how farmers operate to ensure food safety, establishing infrastructural development and coordination. One of them was stimulating agricultural producers to cooperate to save expenses and share experience.

From the 1960s through to the early 1980s, the promise of cooperatives attracted many supporters: government departments and international organizations like FAO and the World Bank, as well as development assistance agencies of industrialized countries. If in developed countries cooperatives are becoming bigger and stronger, but in developing countries financial support and privileges for cooperatives are decreasing, and cooperatives are increasingly obliged to compete with conventional businesses. Without their former privileges, many of the above regulations put cooperatives at a competitive disadvantage in the marketplace (FAO, 2004).

USDA has long been the leading advocate for cooperatives in rural America. The goal of the Cooperative Programs of USDA Rural Development is to promote understanding and use of the cooperative form of business. This is accomplished through education (including a large library of co-op publications), research and statistics, and technical assistance. We also administer programs that provide financial support to co-ops. Some other USDA agencies also have programs that help cooperatives, including the Agricultural Marketing Service (AMS) and the Cooperative State Research, Education and Extension Service which is now known as the National Institute of Food and Agriculture (NIFA) (OECD, 2019). The Government and the Donor community with joint coordinated efforts in Georgia have been supporting development of cooperative enterprises in rural areas through provision of technical assistance to the management and members of cooperatives, and allocation of small-scale machinery and equipment. Government support mainly has included allocation of cooperative members with small scale equipment of land cultivation under preferential terms and conditions, and that of the Donors consisted of procurement of different types of equipment. The source of former Member support was solely Government programs. Across regions, former – Members in Imereti and Kakheti have not received any type of support, while in Kvemo and Shida Kartli, about half and all growers, respectively, have received support from the Government (Sirbiladze et al, 2016).

The policy context changed abruptly in early 2020, with the outbreak of the COVID-19 pandemic.

Governments all over the world introduced a wide set of policies in response to the virus and associated lockdown restrictions. These responses included the provision of various forms of support to farmers and other actors along the food chain; initiatives to keep food and agricultural supply chains moving; and the delivery of support to consumers and vulnerable populations, among others. Several countries took active steps to facilitate trade, although some countries also introduced export restrictions in efforts to ensure availability on domestic markets (Bhuyan, 2007)

According to OECD report the main changes in the country were amendments to agricultural legislation and an update of the 2021 State Program. The policy focus changed to orient agriculture to import substitution and to develop exports of high value-added products.

COVID-19 pandemic has impacted national economies differently. As always there are positive and negative influences. Government of Kazakhstan proposed Complex plan of measures to economic recovery, by increasing financing for poultry breeding, scientific support, benefited loans, spring sowing operations. In the context of the coronavirus pandemic in Kazakhstan, the acreage of agricultural crops increased by 2.5%. For sowing and harvesting operations, the average market price from the refinery is set at an average of 10-15% lower than the market price. In order to ensure high-quality and timely implementation of spring field work and obtain a stable harvest, a forward purchase of agricultural products for 24.55 billion tenge was made from 369 agricultural producers.

Effectiveness of cooperation and other questions related to agricultural cooperative management were studied over several decades and from different perspectives.

Membership in cooperatives has a positive effect on various performance indicators in agriculture, although taking into account the specific type of cooperative (Verhofstadt and Maertens, 2013). By exploring the values of local resources; creating links between participants to strengthen the loyalty of cooperative members; and creating interdependence with consumers, “territory” is used as an economic and managerial tool to help achieve better product valorization and reward for farmers – strengthen their social ties, using the example of clubs, to ensure stronger commitment and improve decision-making in supply chains (Ben et al, 1995).

State support to agricultural cooperatives in Kazakhstan was provided primarily through targeted loans, a special tax regime and subsidies.

All loans require collateral, which is not available in rural areas in this regard, it was proposed to replace the collateral with a guarantee of local budgets, then the local Executive power will be interested in promoting the success of farms; underdeveloped social infrastructure in villages, especially those remote from the district, regional centers; undeveloped transport and marketing logistics (Feng and Hendrikse, 2012). Rural consumer cooperatives can have a significant impact on the formation of short-supply food chains only in certain regions with a developed cooperative network. It is proposed to manage markets and food chains in General on the basis of the corporate social responsibility model using rural web networks (Ding et al,2019).

According to various respondents, limited access to finance, prejudices (unsatisfied expectations, extreme mutual distrust), lack of administrative / financial skills and discipline, as well as the complexity of certain state procedures and rules are the main obstacles to the development of horticultural cooperatives in Georgia (FAO,2011).

The main task of public policy is to ensure that politicians are aware of the need for new non-traditional cooperative models and adjust the legislative framework in accordance with these new models. The point of these models is not to attempt to violate antitrust regulation, but to bring the self-sustaining core of agricultural cooperatives into line with the requirements of an embedded institutional structure (Golini et al, 2017).

It was found that the ownership of crossed cattle, training of the Manager and institutional funding have a positive and significant impact on the performance of dairy farmers (Hansson, and Lagerkvist, 2012).

Studies of trust and loyalty on business performance in dairy supply chains have had a different level of influence (from negative to positive) depending on the region. Cooperative managers should have a clear policy on milk prices, and this policy should indicate transparency and accountability. It would be better if a dairy cooperative in Indonesia not only functions as a marketing cooperative, but also as an agricultural supply cooperative that can process or process milk into a more valuable product (How Does USDA Help Co-ops?, 2021).

The income per liter from processing milk at home is twice the average price paid by factories. In remote and isolated areas, the lack of traders and markets makes it difficult to sell livestock and livestock products, and transaction costs are high. Creating a supply chain for small farms in B2C

markets was considered in direct sales of the farmer to the consumer in retail markets, while the B2B aspect was represented by transactions through agricultural cooperatives. Key strategic decisions were evaluated, such as the need to enter into cooperative agreements with other farmers, and if so, how large the cooperative is, as well as the production volumes in which farmers would like to sell directly to customers with or without the cooperative. (Jang et al, 2011).

Cooperatives are analogous to transactional organizations and farmers become members. This form of organization allows them to purchase resources and sell products with maximum economic results (Kazakhstan adopted roadmap on dairy industry standards, 2021. A study of the Italian meat industry looks at the supply chain as a whole, identifying critical points for each stage in terms of economic, environmental and social sustainability. (Kazakhstan has increased the acreage of agricultural crops, 2021).

The value chain of an industrial enterprise's product, based on the analysis of the retail price of a unit of product, the establishment of a management link in the chain, the calculation of quality indicators of added value and integral evaluation indicators, allow you to more effectively form options for the enterprise and evaluate them (Filippi,2014). The relationship between dairy production behavior, dairy cow culture model, government regulation, corporate social responsibility, and quality assurance, as well as how they affect the competitive advantages of dairy supply chains, has shown that the interaction between them affects the competitive advantage of the milk supply chain in China (Ding et al, 2021).

According to Pronko et al, the success of agriculture in Western Europe, the United States, Canada, Japan, and China is bound not so much by the development of market relations in these countries, but by the limitation of the actions of market mechanisms of self-regulation using external levers of influence. This is state support to agriculture through subsidies, prices, quotas, credit and tax policies, etc (Pronko et al, 2020).

The main instruments of state support in Ukraine are interest-free budget loans to agricultural producers, tax exemptions, write-offs and debt restructuring, partial compensation of expenses for the purchase of agricultural machinery and equipment.

New legislation on Agricultural Producer Cooperatives launched from January 1, 2016 established the new concept of cooperation in

agriculture (fig 1). Since then there is only one type of cooperative in agriculture instead of previous several ones. New agro coop can operate various activities such as producing, marketing, supplying etc in agriculture and became commercial. It means that members of agricultural cooperatives can share earned profit between members. By previous regulation it was not possible; members could spend revenue only for cooperative purpose, mostly expanding volume of operation.

According to incomplete data, in 2015 there were 3,815 cooperatives of different types in rural areas, which after the adoption of the New Law in 2016 were reorganized into one type of agricultural co-operative – agricultural producer co-operative.

In the State Program for the Development of the Agro industrial Complex of the Republic of

Kazakhstan for 2017-2021 the task to raise the volume of gross agricultural production by 30%, to growth the labor productivity in agriculture by 38% is defined. The number of active agricultural co-operative is planned to be increased in 2021 up to 1204 with the number of members in its up to 500 thousand (Ministry of Agriculture, 2016).

In general, in the first quarter of 2020, there were 2,817 agricultural cooperatives with 7,524 employees. Agricultural cooperatives include 552 legal entities, 24,361 individual entrepreneurs and peasant or farm households, and 26,152 households.

As of April 1, 2020 in agricultural cooperatives, the number of cattle amounted to 114.4 thousand heads, of which 26.6 thousand cows of the meat herd, 94.5 thousand sheep and 8.5 thousand horses.

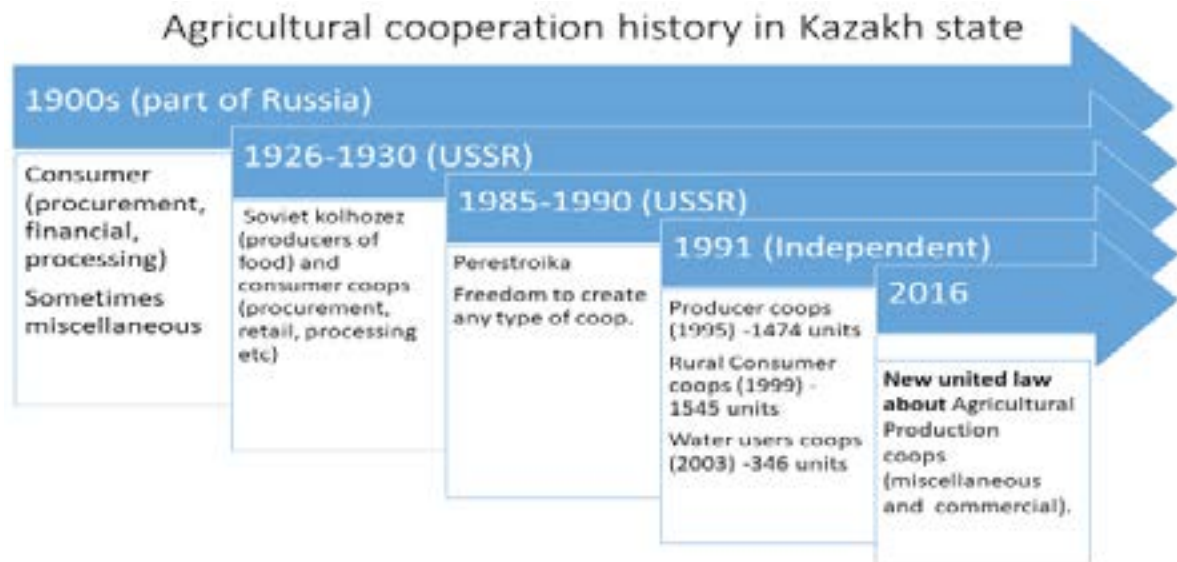


Figure 1 – Stages of cooperative development in agriculture (A.M.Balkibayeva et al,2019)

Note: Designed by authors

As we can see on Figure 2 ambitious plan of government on number of agricultural cooperatives was realized already in 2017 but house holdings involvement target was not reached. The state policy was performed top-down way. Each region planned the targeted number of agro coops to create approved with Ministry of Agriculture.

Members of cooperatives in agriculture mostly small producers such as house holdings and farms. (Agency for Strategic planning and reforms of the Republic of Kazakhstan Bureau of National statistics, 2021). This is due the fact that state policy

aimed to cooperate predominantly weak and small entities (fig 3).

One of the main instrument to increase number of agricultural cooperatives in Kazakhstan was state support. Before 2016 there was not significant state support for them (fig 3). Ministry of Agriculture after launching New Law released state subsidies rules for producing milk and meat, fruits, vegetables preferably for organized agro coops which invoked false cooperation. According the monitoring of the Ministry of Agriculture in 2018, 42% of those registered agricultural production cooperatives created formally, 18% are virtually inactive.

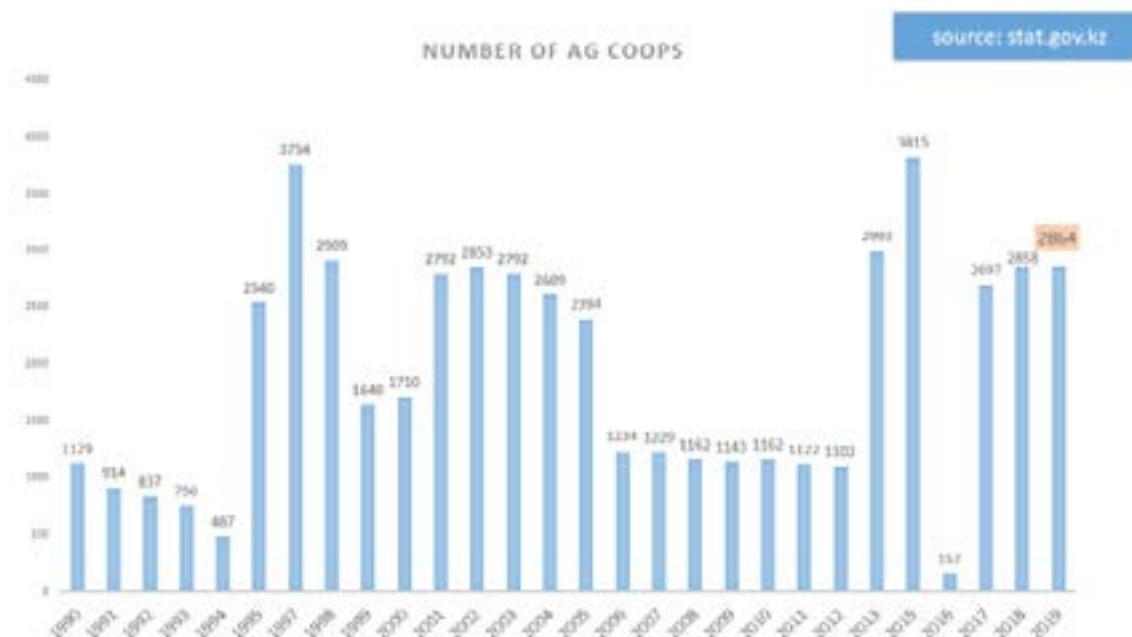


Figure 2 – Number of agro coops for 1990-2019
 Note: Source stat.gov.kz

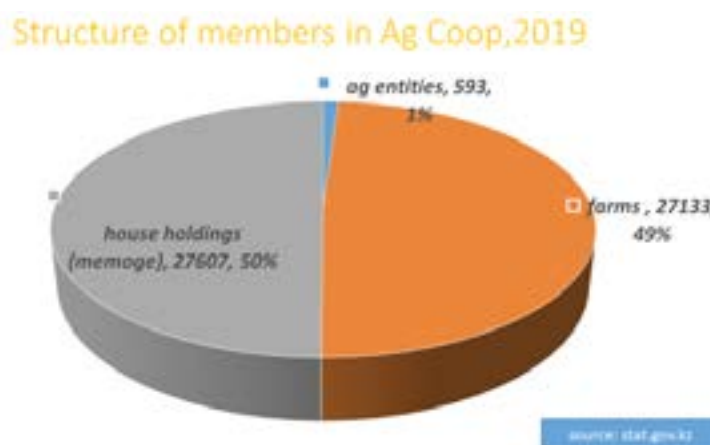


Figure 3 – Structure of agro coops, 2019
 Note: Source stat.gov.kz

It also observed that around 60% of newly registered co-operatives consisting of inactive or “false” co-operatives established chiefly to secure public subsidies (Report of the First Vice-Minister of Agriculture, 2019).

Particularly in livestock state support is provided in form of subsidizing of pedigree, artificial insemination, purchase of young cattle for feedlot, milk delivered to processor, investment

subsidies (5-7% per annum for investment loan in comparison to market rate 19-22%). State body for financial support for small and medium agribusiness and agricultural cooperatives is Fund for financial Support to Agriculture. For the period of 2016-2018, tree hundred fifty-three agro coops got beneficial loans from Fund for financial Support to Agriculture, 97 % of them for dairy and meat coops.

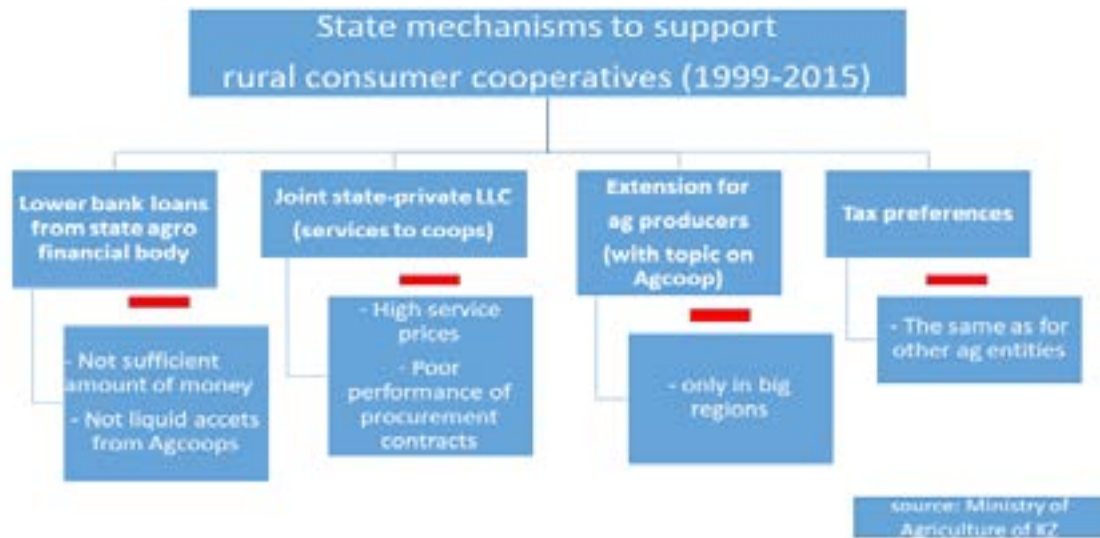


Figure 4 – State support for agro coops before New Law
 Note: Source: Ministry of Agriculture of Kazakhstan

Discussion and Policy Recommendations

In order to understand how strong is state policy and support for agricultural cooperatives we run phone interview with scientists’ group in agricultural economics (table 1). Agricultural policy limited

to legislation changes, statistics data collection, beneficial financial loans only to buy equipment. After changing Ministry of agriculture team in 2019 there is no beneficial support to agricultural cooperatives. Many agricultural cooperatives created mainly to get subsidies stopped their activities.

Table 1 – SWOT analysis of state agricultural policy for agro coops

S (strength)	W (weakness)	O (opportunity)	T (threat)
Priority provision of the state support in the form of subsidies, investment subsidies, concessional lending and taxation, etc.	Insufficient preferential funding for all APC seeking it lead to a negative attitude towards the process of cooperation, the mistrust of agrarian reforms	State program Development of Agro industrial Complex for 2017-2021 includes few parameters for agro coops	Constant changes in government management would affect execution of reforms on agro coop
The local bodies, public organizations, scientific and educational institutions were activated in conducting explanatory work on the organization of the Agro coop prior to New Law	In remote areas not accessible sources of information (specialized trainings, internet)	Government ambitious export plans increased the number of agro coops in meat production sector	Constant changes in government management would affect execution of reforms on agro coop
The legislative base for the development of agricultural cooperatives has been updated	No supportive infrastructure (National and Local levels) Only 2 Revision Unions in whole country created, National Union for Agro coops in 2017 established, but currently not active	Global trends: increasing population, organic agriculture	WTO, EuraEconUnion regulations could lead to increase import of food and increase costs for certifications, lower farmer’s income
Templates of documents for Agro coops developed	Lack of info for Agro coops, no special reports and brochures		
Website agrobilim.kz and call center opened	No data about economic performance		
State stat data about Agro coops on website stat.gov.kz			

Note: Designed by authors

Total Support Estimate in agriculture of Kazakhstan was 0.77% of GDP 2017, which has increased relative to the size of the economy, representing about 1% of GDP in 2019 (fig 5).

The share of producer support in gross farm income (%PSE) was 3% in 2017-19. In 2019, domestic producer prices remained on average below world levels although to a lesser extent than in 2018, leading to a negative aggregate price support and an implicit transfer from farmers to consumers as measured by the Consumer Support Estimate (CSE). Support to fixed capital formation accounts

for the majority of budgetary transfers to producers. General services to the sector accounted for a quarter of the budgetary expenditure for agriculture in 2017-19, of which spending on inspection and control made up close to 50%, and spending on infrastructure 35% (OECD, 2020).

The number of agricultural cooperatives on September 2019 accounted for 2 848.

Three main regions with the vast amount of agro cooperatives are Turkestan (South of Kazakhstan), Eastern Kazakhstan and Akmola (North of country).

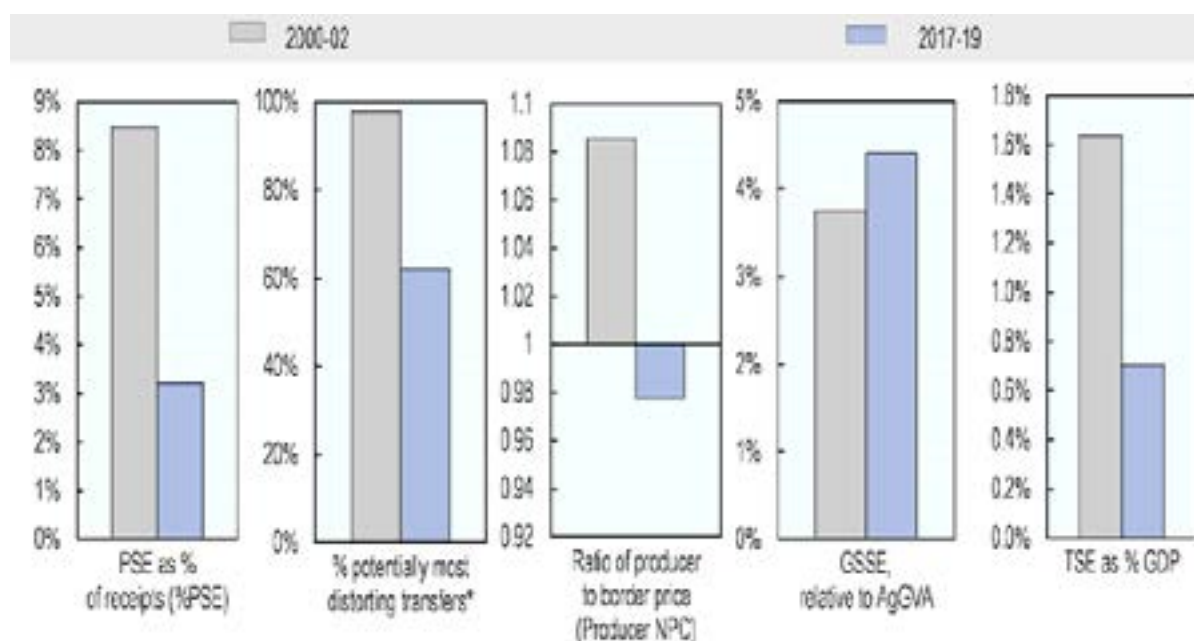


Figure 5- State support for agricultural producers, %

Note: * Share of potentially most distorting transfers in cumulated gross producer transfers.

Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database) [23]

Table 2 – Number of operating agro coops

	Number of active agro coops	Number of agro coops specialized in seasonal crop cultivation	Number of agro coops specialized in livestock
Total	2848	209	1163
Turkestan region	641	94	47
Eastern Kazakhstan region	316	24	182
Akmola region	289	10	214
Almaty region	231	15	54

Source: Ministry of Agriculture of Kazakhstan

Southern agro coops are specialized in crop production due to more pleasant climate and North and East regions operate on cattle breeding and dairy.

Farm holdings with less than 200 hectares of land accounted for 61% of agricultural land use by individual farms in Turkistan, 26% in Almaty, and 18% in Zhambyl, indicating higher population densities and a prevalence of small-scale production in the southern regions.

The reason of why agro coops are spread more in above mentioned places is firstly, the number of cattle with milk specialization concentrated in those regions (they belong to top 10 regions out of 14) and secondly, state initiated support for dairy and meat coops predominately (subsidies for milk, meat).

While number of cattle, cows increased up to 11% and milk production up to 6% for 2016-2018 there is decrease in milk yield (table 3).

Table 3 – Milk production

	2016	2017	2018	2018/2016, %	Rank out of all regions
Number of cattle, M heads					
Total	6,413	6,764	7,150	111,4	
Turkestan region	0,834	0,915	0,993	115	2
Eastern Kazakhstan region	0,868	0,895	0,952	110	3
Akmola region	0,394	0,404	0,422	107,3	8
Almaty region	0,928	0,963	1,004	108,1	1
Number of cows, 000 heads					
Total	3,209	3,362	3,576	111,4	
Turkestan region	369,3	413	447,5	211	3
Eastern Kazakhstan region	473,5	483,5	530	119	1
Akmola region	204,5	204,1	211,2	103	5
Almaty region	455,4	479,5	511,3	112,2	2
Milk production, 000 tons					
Total	5,341	5,503	5,686	106	
Turkestan region	674,6	687,1	706,6	105	3
Eastern Kazakhstan region	839,2	879,6	917,7	109	1
Akmola region	378,6	385,3	387,4	102	6
Almaty region	696,9	723,4	758	109	2
Average milk yield per cow, liter					
Total	2 324	2 337	2 340	101	
Turkestan region	2 342	2 361	2 327	99,3	8
Eastern Kazakhstan region	2 167	2 204	2 145	99	9
Akmola region	3 056	3 063	3 035	99	2
Almaty region	2 808	2 742	2 714	97	6

Source: Ministry of Agriculture of Kazakhstan

Together, households and individual farms account for the vast majority of production of a number of commodities, including vegetables (94%), potatoes (92%), meat (77%), milk (94%), wool (96%) and cotton (95%). These high-value livestock and horticultural products are characterized by higher net incomes per hectare, offering greater opportunities for small-scale producers.

Sales volume performed by agro coops for 2018 (fig 6) confirms that specialization of created agro coops is milk and beef. In April, 2020 sales of milk

increased significantly and reached over 2 billion KZT and accounted just over 1, 2 billion KZT for beef.

In order to secure following cooperative principals especially in financial recourses distribution and expenditures internal and external revision committees play significant role. In Kazakhstan in 2018 two Revision Unions were registered to conduct internal auditing (Turkestan and Kyzylorda oblasts) which revised 140 agro coops activities and government subsidized 50% of auditing expenses. That was another state support to keep agro coops activities.

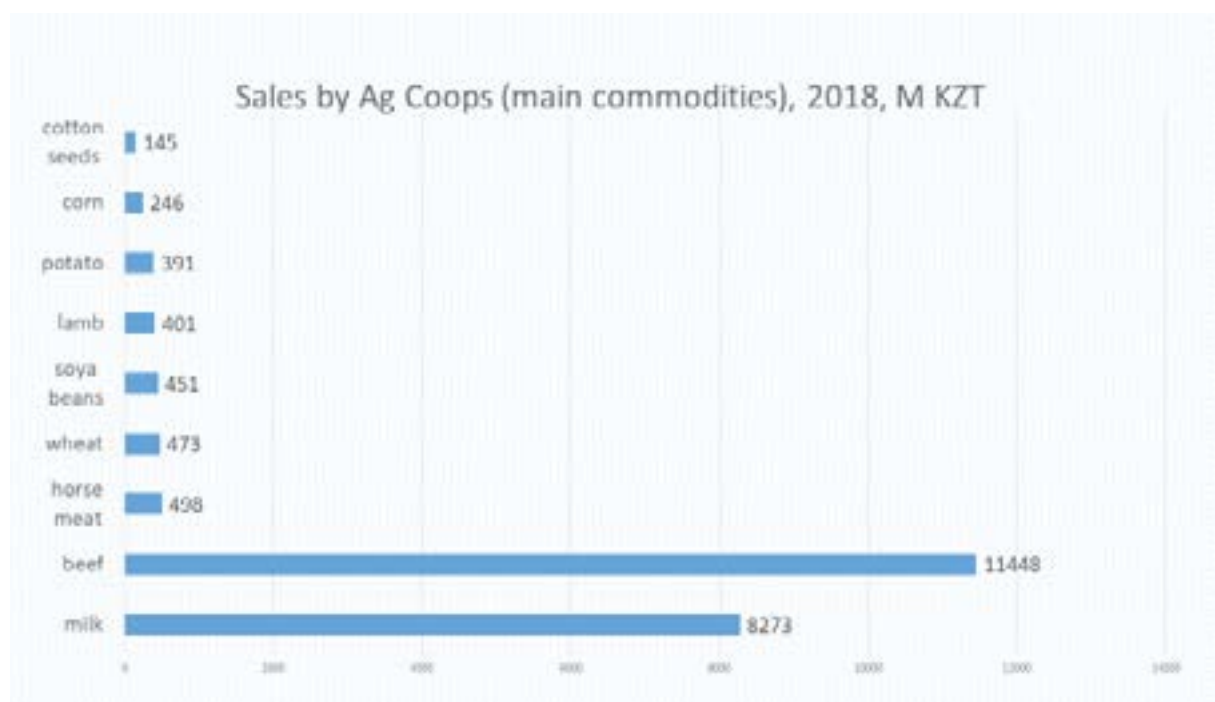


Figure 6 – Sales made by agro coops, 2018
Source: Ministry of Agriculture of Kazakhstan

Conclusion

Observing situation around agricultural cooperatives we identified following: state support for agriculture realized not effectively, organized on past experience rather than strategically. Particular form of support for agricultural cooperatives has been provided occasionally, depending on vision of agricultural authorities. There are no yet successful models of functioning agro coops to advertise and promote for others. Some of the reasons for that could be high operation costs due to large distance between main markets and farm gates; not strong belief in cooperative as a legal form (past soviet

kolkhozes left not good impressions in memory of soviet youth generation-middle age farmers); not accessible information, extension, training, enough publications on coops especially in Kazakh language; low market prices and consequently low income; not enough trained agriculture specialists in rural areas, in agro cooperation particularly; no land available for agro producer coops (land already in rent by others); application process to get financial support complex and complicated (online application using already created and functioning egov.kz portal could be one of decision)

We recommend for policy makers to further develop and make sustainable agricultural ecosystem

based on cooperative type of agribusiness support organizations such national and international bodies for food security and agricultural cooperation, which can provide guidance to movements and governments willing to encourage cooperatives through regulatory reform. Ministry of agriculture and rural authorities, cooperatives' leaders should seek for such assistance and later on organize system of such kind not on temporary but constant base. Farm decision-making could be further improved by incorporating environmental concerns

into agricultural policies which would support sustainable agricultural development in the country and form positive international reputation. State support measures should be provided not only by financial support but also in forms of consulting, training and extension and rather proactively than passively, based on consultation with farmers and other agricultural producers.

Research should continue in relation of addressing COVID 19 problems by agro cooperatives and state policy measures to overcome their influence.

References

- Agricultural Policy Monitoring and Evaluation 2020. Getting the agricultural policy mix right [Electronic resource]. FAO. 2004. Available at <http://www.fao.org/3/al751e/al751e00.pdf> [accessed 02.05.2021]
- Monitoring the development of agricultural co-operatives in Kazakhstan. OECD 2019. Available at <http://www.oecd.org/eurasia/competitiveness-programme/central-asia/Kazakhstan-Monitoring-Agricultural-Co-operatives-2019-EN.pdf> [accessed 02.05.2021]
- G.Sirbiladze, N.Memarnishvili. Research Report on farmer cooperatives in Georgia (Produced by Elkana, Tbilisi, Georgia, 2016)
- Bhuyan, S. 2007. The 'people' factor in cooperatives: an analysis of members' attitudes and behavior. *Canadian Journal of Agricultural Economics* 55: 275-298.
- Ellen Verhofstadt and Miet Maertens. Cooperative membership and agricultural performance: Evidence from Rwanda. Working Paper Series Working Paper 2013/6, p. 1-47
- Ben Craig Ben, John Pencavel. Participation and Productivity: A Comparison of Worker Cooperatives and Conventional Firms in the Plywood Industry, 1995. P 121-174
- Feng, L. and G.W.J. Hendrikse. 2012. Chain interdependencies, measurement problems and efficient governance structure: cooperatives versus publicly listed firms. *European Review of Agricultural Economics* 39: 241-255.
- Ding, H., Fu, Y., Zheng, L., & Yan, Z. (2019). Determinants of the competitive advantage of dairy supply chains: Evidence from the Chinese dairy industry. *International Journal of Production Economics*, 209, 360–373.
- FAO. 2011. Dairy development in Kazakhstan, by Anton van Engelen. Rome. [Electronic resource]. Available at <http://www.fao.org/3/al751e/al751e00.pdf>. [accessed 02.05.2021]
- Golini, R., Moretto, A., Caniato, F., Caridi, M., & Kalchschmidt, M. (2017). Developing sustainability in the Italian meat supply chain: an empirical investigation. *International Journal of Production Research*, 55(4), 1183–1209.
- Hansson, H. and C.J. Lagerkvist. 2012. Measuring farmers' preferences for risk: a domain-specific risk preference scale. *Journal of Risk Research* 15: 737-753.
- How Does USDA Help Co-ops? [Electronic resource]. Available at <https://clck.ru/qcBib> [accessed 02.05.2021]
- Jang, W., Klein, C.M. Supply chain models for small agricultural enterprises. *Ann Oper Res* 190, 359–374 (2011). [Electronic resource]. Available at <https://doi.org/10.1007/s10479-009-0521-8>. [accessed 02.05.2021]
- Kazakhstan adopted roadmap on dairy industry standards. [Electronic resource]. Available at <http://www.fao.org/europe/news/detail-news/en/c/1204811/>. [accessed 02.05.2021]
- Kazakhstan has increased the acreage of agricultural crops. [Electronic resource]. Available at <https://kapital.kz/economic/92458/v-rk-uvlichili-posevnyye-ploshchadi-sel-khozkul-tur.html>. [accessed 02.05.2021]
- Maryline Filippi. Using the regional advantage: french agricultural cooperatives' economic and governance tool. *Annals of Public and Cooperative Economics* 85:4 2014. pp. 597–615
- DING, Huiping, FU, Yanan, ZHENG, Lucy and YAN, Zhu. Determinants of the competitive advantage of dairy supply chains: Evidence from the Chinese dairy industry (Available from Sheffield Hallam University Research Archive (SHURA) at: <http://shura.shu.ac.uk/20850/>).
- Pronko, Lyudmila & Furman, Irina & Kucher, Anatolii & Gontaruk, Yaroslav. (2020). Formation of a State Support Program for Agricultural Producers in Ukraine Considering World Experience. v 9- n 1-p. 364
- Ministry of Agriculture. (2016). State program of development of agro industrial complex of Kazakhstan for 2017-2021. [Electronic resource]. Available at <https://moa.gov.kz/ru/documents/1> (in Russian). [accessed 02.05.2021]
- A.M.Balkibayeva, A.M.Kazambayeva, S.M. Yessengalieva, S. S. Lim. Development of agricultural cooperatives of Kazakhstan: monograph/ Almaty: Lantar Trade LLP.2019-151 p.
- Agency for Strategic planning and reforms of the Republic of Kazakhstan Bureau of National statistics. [Electronic resource]. Available at <https://stat.gov.kz/> [accessed 02.05.2021]
- Report of the First Vice-Minister of Agriculture (2019). Evniev A.K. on the development of agricultural cooperation, May 29, 2018. [Electronic resource]. Available at <http://mgov.kz/ru/auyl-sharuashyly-y-kooperatsiyasyn-damytu-m-selesi-bojynsha-auyl-sharuashyly-y-birinshi-vitse-ministri-a-evnievti-bayandamasy/> (in Russian). [accessed 02.05.2021]
- OECD (2020). "Producer and Consumer Support Estimates", OECD Agriculture statistics (database) Available at https://www.oecd-ilibrary.org/sites/928181a8-en/1/3/2/1/index.html?itemId=/content/publication/928181a8-en&_csp_=2101acf3044857a6975685747086cf09&itemIGO=oecd&itemContentType=book