Deeper specialization and development of interstate cooperation in the AIC of the EAEU countries

L Silaeva\textsuperscript{1*} and Zh Kulchikova\textsuperscript{2}

\textsuperscript{1}Federal Research Center of Agrarian Economy and Social Development of Rural Areas – All-Russian Research Institute of Agricultural Economics, 35, building 2 Khoroshevskoe highway, Moscow 123007 Russia
\textsuperscript{2}Kostanay branch of Chelyabinsk State University, 168A A. Borodina str., Kostanay 110006 Republic of Kazakhstan

E-mail: prognos@mail.ru

Abstract. The paper focuses on interstate cooperation of enterprises, networks, and infrastructure in the promising sectors of the agro-industrial complex of the EAEU countries, considering it as an objective process of economic development, which aims to increase the mutually beneficial activities and gain competitive advantages in the agricultural market for the free promotion of goods, technologies, means of labor, capital, etc. The level and dynamics of development of the agrarian sector is also addressed in the paper, which to a large extent determine the growth potential of related industries, resources for the agro-industrial complex, processing industry, and the agri-food market.

1. Introduction
Interstate cooperation of enterprises, networks, and infrastructure in the promising sectors of the agro-industrial complex of the EAEU countries is an objective process of economic development, which aims to increase the mutually beneficial activities and gain competitive advantages in the agricultural market for the free promotion of goods, technologies, means of labor, capital, etc.

In modern conditions, the vector of integration can be traced in the economic interaction of the countries of the Eurasian continent as a natural result of the multi-vector development of relations between Russia, Belarus, Kazakhstan.

2. Results and Discussion
The development of interstate cooperation in the field of agriculture is one of the priorities of the EAEU countries, requiring the implementation of measures to ensure systemic modernization and competitiveness of agricultural products, the development of social, market infrastructure of the village (informational, industrial, transport, trade, financial, etc.). When developing promising models of interstate cooperation, it is necessary to consider the prospects that open up for each of the participants and for the integration association as a whole. In this context, the grain market is an important integration component.

The aggregate demand for grain in the world is increasing: sales of wheat make up 20\% of world production, while sales of corn go up to 12\% [11].
In the grain market, there are the largest producers: Egypt (7–9 million tons), Brazil (5–8 million tons), the EU (5–7 million tons), Japan (5.5 million tons), countries of the Middle East and South Asia (10–15 million tons). Potential leaders influencing the food situation include Kazakhstan, Ukraine, and Russia. The share of these countries in the world grain trade in barley exceeded 36%, 21% in wheat, and 7% in corn. The share of Kazakhstan reached 75%, and Russia had 23%.

In 2021, Kazakhstan, Russia, and Ukraine will export 50 million tons of grain, most of which will be wheat. Russia is expected to increase grain exports compared to the average (2008-2012) by 62%, Ukraine – by 65%, Kazakhstan – by more than 60%.

The main feature of the world grain market is the counter-cyclical variability of gross yield and the volatility of market prices for grain.

To solve the problem of instability of grain production due to the adverse effects of climatic, energy, market factors in certain years (drought, sharp fluctuations in world energy prices), the formation of grain reserves during the periods of good harvests in the EAEU countries is of considerable importance. According to a number of experts [14], the reserves of grain in the EAEU countries should be about 18–20 million tons. According to our calculations, the reserves of grain should be slightly higher and be in the range of 20-25 million tons.

The main challenges in foreign trade in the EAEU can be classified as follows:

− The share of the EAEU countries in the export and import of Russia does not exceed 10%;
− The Republic of Belarus is highly dependent on grain trade with the Russian Federation;
− Insignificant volumes of trade between the Republic of Kazakhstan and the Republic of Belarus;
− Kazakhstan's exports are mainly directed outside the countries of the Customs Union.

The development of grain farming can be solved only in the context of the agrarian policy of the EAEU countries, which presupposes the creation of favorable conditions for increasing the production and processing of grain, introducing mutual cashless payments and exporting competitive products of the grain-producing subcomplex, improving the structure of grain production to ensure food security for the states entering to the economic community.

The organizational and economic prerequisites for creating interstate associations of enterprises, networks and infrastructure in the promising sectors of the agro-industrial complex of the EAEU countries, in particular in the grain industry, are:

− The raw material orientation of grain for export, its low diversification, a small proportion of high-tech products in the volume of exports;
− The need to coordinate domestic production and mutual interstate deliveries of grain and grain products;
− The need for a coherent marketing, transport and logistics policy aimed at the further development and strengthening of exports.

This requires the subordination of organizational and economic measures to regulate the grain market within the framework of the agreed agro-food policy of the EAEU countries, the creation of promising models of interstate associations of enterprises, networks and infrastructure in the promising sectors of the agro-industrial complex of the EAEU.

In connection with the above, we have identified priority areas for the creation of interstate cooperation between enterprises, networks and infrastructure in the areas of production, storage, processing, and marketing of grain and its processing products of the EAEU countries:

− Mutual access to the markets of the countries of the integration association, implying a transition to unified and international standards for products sold;
− Creation of a single infrastructure;
− Formation of national and supranational methods of state regulation;
− Cancellation or unification and coordination of export subsidies for products, a policy of smoothing out domestic state support for grain farming;
− Creation of an interstate information-analytical bank of communications and its implementation in the form of an inter-regional grain exchange or a grain pool;
− Structural improvement of the placement of grain production within the EAEU, deep specialization of the EAEU countries in the targeted territorial and sectoral distribution of the production of specific types of grain, leguminous, fodder and cereal crops with the definition of food clusters;
− Growth of innovation and investment orientation in the grain business,
− Creation of economic conditions for optimizing the structure of production;
− Stimulation of mutual trade in grain and ensuring equal conditions of market access, support for mutual investments;
− Creation of an integration mechanism of government procurement at the interstate level;
− balanced and advanced development of production and transport and logistics market infrastructure based on public-private partnerships;
− development of modern transfer technologies, focused on the structural modernization of the grain industry and the grain industry.

At the national level, each of the EAEU countries implements an extensive set of preventive and systemic measures for the state and market regulation of the grain market. The agreed grain policy of the EAEU countries will help to solve both the problems of overproduction and to withstand sharp conjuncture spikes in supply and demand on the world grain market. Quoting export volumes and regulating the price of grain and grain products (flour) within the framework of the EAEU can have a serious impact on the world grain market (for durum, strong wheat and flour).

The most effective models of interstate cooperation of enterprises, networks, and infrastructure in the areas of production, storage, processing and marketing of grain and its products of the EAEU countries are the formation of:

− Establishing a Common Grain pool by combining efforts and coordinating the actions of the countries participating in the grain market of the EAEU countries and other countries in promoting wheat to the world market to maintain a stable level of grain production and producer incomes, reduce fluctuations in world prices;
− Creating a Grain Holding Company through the merger of large grain producers, operating on the basis of a joint venture agreement while maintaining the legal and economic independence of each entity;
− Large vertically integrated structures in the system of production, storage, processing, transportation and marketing of grain and its products in the form of agricultural holdings, financial, and industrial groups focused on the production of final finished products with a complete production cycle from manufacturer to consumer with a single management system and property;
− Cooperative structures in the system of production, storage, primary processing and marketing of grain by combining grain producers and organizing its own storage system and its primary processing;
− A grain cluster focused on the effective interaction of enterprises in the system “production – storage – processing – transportation – sale” of grain and its processing products, united by a single technological cycle, the result of which is the final product created by the efforts of all participants in the process of promoting products from producer to consumer with the use of scientific achievements, high technologies, where the interests of private enterprises, agricultural producers, state, financial, public, and other organizations are intertwined.
Attempts to selectively coordinate measures of state regulation of the grain market in the EAEU countries have been made more than once. In 200, the Program of creation and functioning of the CIS grain market was adopted by the Intergovernmental Council on AIC for 2001-2010 [14].

The Agro-Industrial Policy Council of the EAEU Integration Committee (2012) approved a draft agreement on the organization and functioning of the grain market of the EAEU member states [7]. The idea of a “grain pool” of Ukraine, Russia, and Kazakhstan, put forward at the World Grain Forum (2009) in St. Petersburg, received a new development in 2013. However, Ukraine’s participation in the EAEU today is questioned by the prerequisites for the formation and effective functioning of the Grain Pool in connection with their cooperation under the EU “Eastern Partnership: program based on the principles of a deep and comprehensive free trade zone [24].

The adoption of a sectoral agreement on the grain market will make it possible to define (as a framework) the approach to the formation of specialization of each of the EAEU countries based on the rational use of the accumulated competencies and natural advantages of the EAEU countries, agree on a common paradigm of state support and regulation of the entire grain products sector, set target indicators of the grain market development within common agrarian policy.

In modern conditions, the policy of export of grain and grain products should be based on the principles of multi-vector and multi-polarity, allowing to diversify markets and show flexibility in choosing promising directions for the sale of grain.

It is necessary to structure the grain market by creating a Common Grain Pool within the EAEU in order to stabilize and regulate the domestic grain market: Russia established the United Grain Export Company, Kazakhstan did the Single Grain Holding [9].

Formation of a unified system for regulating the grain market through the formation of a Common Grain Pool provides for the abandonment of unilateral measures to support national grain production and equalization of domestic grain prices in the Eurasian space.

These measures presuppose equal conditions of competition for the grain business of the EAEU countries, the rejection of measures of one-sided support of market prices for their own consumers through the development of a joint grain business. The development of a strategy for the development of the grain market of the EAEU countries, including the deep processing of grain, involves the formation of clear guidelines for the grain business in terms of target placement of production and mutual trade in grain.

Under these conditions, the mechanism for creating the Common Grain Pool of the EAEU countries implies: a program-targeted subsidizing of the grain production and grain industry; establishing a flexible corridor of changes in the purchase prices for grain and grain products; conducting intervention operations in the grain market; supporting the demand for grain in the domestic and foreign markets, including through the development of the grain industry; establishing a coherent export grain policy; developing grain clusters; establishing a marketing research system focused on the interests of the grain business; providing information and analytical support for the activities of participants in the interregional grain market, etc.

In modern conditions, it is possible to single out a number of main directions for conducting a consistent policy of the EAEU countries in the field of creating interstate cooperation between the subjects of the grain market. Particular attention should be paid to solving the problems associated with the provision of technological and infrastructural modernization of the grain industry and grain farming to maintain production stability.

The priority areas of development of the Kazakhstan grain business in the formation of intergovernmental cooperation in the areas of production, storage, processing, and marketing of grain and its products in the EAEU countries include:

− Structural improvement of the location of grain production within the EAEU;
− Development and promotion of deep processing of grain, an increase in the production of high value-added products;
Creation of favorable conditions for the preservation of grain, reduction of costs during transportation and marketing, mutually beneficial trade and export of grain, etc.

In the Republic of Kazakhstan, regional specialization schemes for the optimal use of agricultural land for the production of specific types of products are being implemented, compiled according to the administrative, territorial and sectoral divisions of the republic, detailed down to areas based on key factors, each of which consists of a set of indicators: climatic factors; production factors; product sales opportunities.

Assessment of climatic factors involves conducting research on the following indicators: rainfall, soil type, salinity, acidity, terrain, soil fertility, the presence of irrigated land, the sum of temperatures of the growing season, etc. The analysis of production factors includes indicators of crop productivity, the presence of acreage in the region, recommended crop rotations, the presence and proximity of processing capacity and the retrospective specialization of regions, etc. The marketing factor is assessed according to the indicators of product sales opportunities: the presence and proximity of sales markets, the ability to deliver products to potential markets, etc.

Under the conditions of risky farming in the Republic of Kazakhstan, wheat, barley, and oat remain the most adapted crops. For this purpose, a cluster approach is needed to identify production zones (specialization and location) and export of grain crops. Thus, in the dry-steppe zone of Kazakhstan (Akmola, Karaganda regions), the share of grain crops in the crop rotation may decrease to 70%, and up to 50% in the northern part of grain regions.

Based on the research materials, it was found that in the group of food grains, it is necessary to increase the proportion of wheat of 1-3 classes with high baking properties, oats and barley should be the focus in the group of grain and forage crops, as well as corn for grain and leguminous crops. In the world market, in the near future, these types of grain are expected to have an acute shortage and, consequently, faster growth in world prices, due to increased demand for processing grain crops for technological purposes.

It should be noted that in Kazakhstan, it is important to reduce crops for food wheat to bring the grain balance in line with the potential sales and production volumes, as well as measures related to the implementation of the state program for the development of meat and dairy cattle breeding and the possible increase in the production of feed crops, food production and technical dual-use crops (that is, the use of products for food, feed and technical purposes).

Measures to stimulate the deep processing of grain in Kazakhstan should be considered in the context of the balanced development of the grain industry as part of the state program “Agribusiness – 2020” to increase the production of high value added products [15, 8].

These priorities are indicated in the relevant support tools, but it should be understood that the production of maltose syrups (molasses) and all other stages of deep processing and processing of products (with the exception of pure protein and, maybe, starch) is not entirely profitable to get from wheat compared to corn or other types of crops (due to the high market price).

From this position, a coordinated grain policy of the EAEU countries in this area is required, aimed at the development of grain legumes, grain fodder and cereals. In this regard, the deep specialization of the EAEU countries on the targeted territorial and sectoral distribution of the production of specific types of grain, leguminous, fodder and cereals with the definition of food clusters would be acceptable (for example: corn – Russia; wheat – Russia, Kazakhstan; rye – Russia, Belarus, Kazakhstan; oats, barley – Russia, Kazakhstan, etc.).

Creating a single integration mechanism for procurement and commodity interventions of public procurement at the interstate level, including mortgage operations, is an effective solution to the transport, logistics and marketing problems, as well as the most important mechanism for regulating relations between the EAEU countries.

Formed interstate reserves of grain of the EAEU countries can be accumulated and sold on foreign markets, as well as in order to provide food aid and ensure food security in the Eurasian space. To do this, it is necessary to create an interstate information and analytical bank of communications and
implement it in the form of an inter-regional grain exchange (liberal (market) scheme) or a grain pool (administrative-regulated (public-private partnership) scheme).

Kazakhstan provides insurance against all types of natural risks, rather than specific types of production risks, depending on the regional and territorial and sectoral specifics. The insurance subsidy mechanism in the Republic of Kazakhstan was initially aimed at spending significant budget funds while their return was low. This insurance mechanism, linked to subsidizing agricultural production, is not an insurance by its economic nature, but is aimed at obtaining additional financial resources for farmers at the expense of allocated subsidies in the absence of the insurer’s responsibility for risks and insured events. Farmers, often not receiving full payments for insured events, tend to violate or simplify production technology to reduce production costs.

The development of a risk management system in agricultural insurance requires the introduction of an assessment of the degree of financial stability of insurers (insurance companies) based on the construction of a multi-level risk redistribution system with state support. Accounting for reinsurance of agrarian risks with the most efficient use of the existing reinsurance capacity of the insurance market participants, the development of a unified risk underwriting method is required. The implementation of joint programs in the field of agricultural insurance of grain production in order to ensure the sustainability of producers' incomes will serve as the basis for leveling the economic conditions.

The development of a joint infrastructure of the grain market is necessary to create favorable conditions for the preservation of grain, reducing costs during transportation and marketing, mutually beneficial trade and export of grain. Transportation costs are still the main costs for exporting products, which impedes their sales [10, 3, 17]. Against the background of a decrease in grain prices, an increase in infrastructure costs (including transaction costs) of grain exports occurs. Thus, the growth of the railway tariff by 10-15% leads to an increase in production costs, an increase in the cost of storage and handling [16].

The creation of a network of grain terminals in the promising areas of Kazakhstan's exports and their effective functioning must be tied to the development of our own maritime shipping, since Kazakhstan is losing in sea transportation. The supply of grain with delivery to the sea ports of the buyer will be more attractive for grain importers and will have a stimulating effect on the export of grain, and this requires the acquisition of its own ships.

The specificity of the EAEU countries in the structural modernization of the economy is as follows: Russia and Kazakhstan are faced with the problem of the raw material orientation of grain exports and the need for deep diversification of the economy; in Belarus, the main problem of innovation development is a high share of the public sector in the economy and underdeveloped market mechanisms.

Transport logistics is a key element in the price competitiveness of grain. Transport tariffs unified in the framework of the EAEU (2013) are applied to Kazakhstani exports through Russia to other countries. The countries of the EAEU have assumed obligations to unify railway tariffs for freight transportation by type of communication (domestic, interstate).

It should be noted that the decision of the Commission CU No. 874 adopted the technical regulations of the CU “On the safety of grain” (2011) [23], which established uniform requirements for the application and execution of grain requirements, ensuring the free movement of grain released into circulation in a single customs territory and used for food and feed purposes. Grain for seed purposes and grain processing products do not apply technical regulations.

Within the framework of this regulation, grain is released into circulation in a single customs territory, provided that it has passed the necessary conformity assessment procedures (confirmation) established by this regulation, as well as other technical regulations of the EAEU, which apply to grain (technical regulation “On food safety”), i.e. the requirements for the processes of production, storage, transportation, sale, and disposal of grain, regulation of the rules for the release of grain into circulation, safety requirements, marking with a single product circulation mark, which are mandatory for use and execution.
Thus, a promising model of interstate cooperation of enterprises in the areas of production, storage, processing and marketing of grain and its processing products of the EAEU countries into a single distribution network with favorable conditions for access to the markets of third countries is the creation of a Common Grain Pool.

The Common Grain Pool is not created in the form of a legal entity, but it is based on a joint activity agreement with full preservation of the legal and economic independence of the subjects of the grain market of the EAEU countries. Participation of any other business entities in a single grain pool will be carried out by joining the agreement on joint activities.

A joint venture agreement is a framework agreement that defines key aspects of the relationship between the Grain Pool and interested participants of the grain market, joining together to achieve common goals. Participation in the contract is open and voluntary, any participant in the grain market has the right to join the contract and withdraw from it.

The need to create a Common Grain Pool for the EAEU countries is justified by the need to combine the economic entities of the grain market of the EAEU countries into a single distribution network to access third-country markets, develop infrastructure for the delivery of grain to world markets, etc.

The main objectives of the creation of the Grain Pool for the EAEU countries are:

− Coordination of actions of the EAEU countries in promoting wheat to the world market in order to maintain a stable level of grain production and producers' incomes, reduce fluctuations in world wheat prices, work out a model of impact on the world market;
− Achievement of the specified quality of wheat in accordance with the requirements of the buyer, the formation of conditions for the guaranteed sale of grain;
− Complementarity of existing potentials (production, logistics, a combination of wheat quality from different countries) and, on this basis, saving investments in expensive infrastructure projects, saving investments;
− Creation of several logistic corridors for the transportation of wheat to ports.

The main prerequisites for the formation of the Common Grain Pool for the EAEU countries are:

− Sufficient export potential of the largest grain producers (Kazakhstan, Russia, Belarus, etc.), the territorial neighborhood;
− Within the framework of the Customs Union, there is a unified tariff for transportation and transit through the territory of the countries participating in the union by rail, the conditions for the transit of Kazakh grain are comparable to Russian grain.

Interests of Kazakhstan in the creation of a Grain Pool:

− Increasing the efficiency of using export logistics (railway, Black Sea ports);
− Increasing exports of flour, pasta, gluten;
− Impact on the pricing of wheat;
− Refusal to process grain / wheat into biofuel;
− Diversification of crops and others.

The demand for Kazakh wheat in Central Asia, Afghanistan, Iran, and the Gulf countries is three times higher than the republic’s export capacity, while there is no adequate infrastructure for the delivery of grain in this direction. In 2001, Kazakhstan sent up to 100 thousand tons of grain per month, and up to 1 million 200 thousand tons for export to Iran per year by the existing railway, which passed through Uzbekistan, went to Turkmenistan, and then reached Syrach station in Iran. In addition, difficulties arose when unloading wagons, as in Iran and Kazakhstan there is a different gauge of the railway. Trucks were used to unload wagons in Iran, which also increased the idle time of wagons loaded with grain [4]. Another infrastructure problem in the export of Kazakhstani grain is the limited capacity of the Aktau sea port. The second route of Kazakh grain for export goes through the Caspian
Sea, through the port of Aktau, where the goods arrive in railway cars, but there is a problem of unloading, only one pier. The next route is in the direction of the Black and Baltic Seas through the territory of Russia, transit through Russia is expensive.

The prospect for Kazakhstani grain growers would be the new railway Uzen (Kazakhstan) – Kyzylkaya – Bereket – Etrek (Turkmenistan) – Gorgan (Iran), which enters Iran with a broad gauge of 86 km, and Iran will build its narrow gauge part of the road. The export potential of Kazakhstan with the start of operation of the new railway will grow.

Kazakhstan can export up to two million tons of grain to Iran through existing transport corridors, and the new railway Uzen-Gorgan will allow Kazakhstan to increase the transit and export potential of grain to three million tons per year. In the first year of operation of the railway branch, the volume of freight traffic will amount to about 4.5 billion tons. However, this figure will be increased by 3.5 times in 2025. By the end of the construction of the railway Uzen-Gorgan, the active phase of the construction of the corridor Uzbekistan-Turkmenistan-Iran-Oman-Qatar can begin [18].

The Grain Holding is also a promising model of interstate association of enterprises, networks and infrastructure in the areas of production, storage, processing, and marketing of grain and its processing products of the EAEU countries.

On June 21, 2013 in the National Managing Holding “KazAgro,” an agreement was signed on joint activities within the framework of the Single Grain Holding Company between the National Company “Food Contract Corporation” and the Republican Public Association “Union of Farmers of Kazakhstan.” It was done within the framework of fulfilling the instructions of the Head of State on the establishment of the Single Grain Holding, voiced in the Message to the people of Kazakhstan on January 27, 2012, as well as at the enlarged meeting of the Government of the Republic of Kazakhstan on January 23, 2013 [5].

The main activity of the JSC National Company “Food Contract Corporation” is to ensure the procurement, formation, accounting, organization of storage, renewal, movement, sale of state resources of grain and its products, as well as other functions determined by the Government of Kazakhstan. The sole shareholder of the company is the JSC KazAgro National Management Holding.

Thus, the organizational arrangements have been completed for the creation of the Unified Grain Holding, established on the principles of a voluntary and equal association of participants in the grain market while maintaining their legal and economic independence for achieving the following common goals:

- Provision of grain producers that are parties to the contract of priority access to the financing of spring field and harvesting and guaranteed sale of grain in the autumn at the market price;
- Sailing the grain and its subsequent distribution among the grain producers that are parties to the Food Contract Corporation;
- Creating and developing infrastructure facilities for storage and export transshipment of grain, etc.

The concluded contract creates a legal basis for attracting grain producers to join and participate in the work of the Single Grain Holding. To represent the interests of the parties to the contract, the Public Council for the Grain Market was created in the Food Contract Corporation, which is designed to balance the interests of the parties to the contract when developing and making decisions by the Food Contract Corporation. Such issues as determining the volume and prices of purchased grain, determining the selling price of grain, as well as approving the size and timing of distribution among the grain producers-parties to the contract of the part of the net profit of the Food Contract Corporation are subject to mandatory coordination with the Public Council.

In order to implement the agreement on joint activities, the participants conclude economic agreements between them for the purchase of grain and the financing of its production.

Based on the contract, the holding will act as the operator of state grain resources. Thus, the operator purchases grain on the domestic market from domestic grain producers, organizes the placement of state resources of grain for storage at authorized grain-receiving enterprises, organizes
the movement of state resources of grain in the volume and directions determined by the owner of state resources of grain [7].

Purchasing operations from domestic grain producers are carried out through the forward purchase of grain against guarantees of second-tier banks and direct purchase of grain in the autumn period.

Forward procurement is carried out through spring-summer financing of farms for sowing and harvesting, followed by the purchase of produced grain at a price determined by the Government of the Republic of Kazakhstan, minus a discount for using money. The size of the discount is set by the holding.

The financial support of the holding’s activities to perform the function of the operator of state grain resources is provided from the republican budget. For the performance of the functions of the operator of the holding from the funds received from the sale of state resources, a commission is paid. The amount of remuneration is established by the Government of the Republic of Kazakhstan and is provided for in the contract of assignment concluded with the holding.

In the domestic market, the holding sells grain through a commodity exchange. For export, the holding sells grain both independently and with the involvement of grain traders on market terms. The level of selling prices is set by the holding for a certain period of time (month, quarter) and can be agreed with the Public Council.

The income from the activities of the holding, after the adoption of the relevant decision by the sole shareholder of the holding, is distributed only among the grain producers-parties to the agreement on joint activities. The level of income to be distributed, as well as the timing of their distribution are determined by the holding in agreement with the public council after the audit of the financial and economic activities of the holding by international audit organizations.

A promising model of interstate cooperation of the EAEU countries in the areas of production, storage, processing, and marketing of grain and its products is the creation of large vertically integrated structures in the form of an agricultural holding, a financial and industrial group, etc. Today, the existing forms of interaction of enterprises between producers, processors and marketing of agricultural raw materials of the EAEU countries allow us to conclude that with the development of market relations, new forms of management, and improvement of their economic situation, forms of interaction between agricultural enterprises are expanding and improving.

The most effective on the grain market is the unification of agricultural enterprises with processing enterprises and trade organizations, i.e. creation of associations representing a vicious circle: the production of agricultural products, their processing and sale of the final product. The creation of an agricultural holding in the grain industry corresponds to this direction of integration.

The advantages of creating a grain holding in the areas of production, storage, processing, and marketing of grain and its products are:

- Combining the three areas of the agro-industrial complex and ensuring a complete technological cycle of reproduction (production, storage, processing and sale) allow one to restore the destroyed economic relations, centralize production management, establish logistics and marketing of products. They are competitive in the domestic and foreign grain markets;
- Elevators and HSP, flour mills, stably secured by agricultural raw materials, work rhythmically, and oil depots and processing enterprises can purchase fuel and lubricants, equipment, spare parts and chemicals in bulk at wholesale prices and sell them to agricultural enterprises at the lowest price, they also have the opportunity to use the services of agricultural services without intermediaries.

The experience of creating a large vertically integrated formation within the framework of the development of interstate cooperation of the EAEU countries in the form of a holding in the grain product subcomplex of Kazakhstan and Russia is the “Ivolga-Holding” LLP, which activities cover the weight of the technological cycle of production, storage, processing, and marketing of grain. The priority activity of the company in the agricultural sector is the production of grain, high-quality
wheat, soft and hard varieties. Agricultural holdings are located in Kazakhstan and Russia, their total area is more than 1.5 million hectares. The company manages one of the most powerful elevator networks in Russia and Kazakhstan, which unites 31 elevators and HSP, with a total volume of grain storage terminals of more than 3 million tons weighing [18].

The agricultural holding has seven regional projects in 10 districts of the Kostanay region, and each project represents a single technological cycle from the production of raw materials to the finished product. In addition, the “Ivolga-Holding” LLP has its own infrastructure, in particular, enterprises for providing fuel and lubricants, agricultural equipment, cars, and air transport.

This option of creating an integrated formation allows centralizing the management of technologically related industries and thereby increasing labor productivity, organizing effective accounting and control, eliminating or significantly reducing the scale of shadow financial transactions. Having our own trading network allows one to consistently receive cash and, in accordance with the centralization of management, solve the problem of non-payment.

The “Ivolga-Holding” LLC is one of the major exporters of grain in the domestic and foreign markets. Grain is exported to such countries as Afghanistan, Georgia, Uzbekistan, Tajikistan, Ukraine, Russia, Mongolia, Turkey, and Egypt. The production of wheat and rye flour is carried out at the flour mills located in Kazakhstan (10 mills) and Russia (6 mills). The number of employees of the company is about 42 thousand people in Kazakhstan and Russia, including seasonal workers.

The “Ivolga-Holding” LLP is one of the most integrated enterprise in the region and has significant competitive advantages in comparison with other agroholdings. Due to the centralization of financial resources, it becomes possible to reduce the severity of the problem of seasonal shortage of working capital in the links of a single technological cycle, as well as to facilitate the implementation of projects that are located both in the Republic of Kazakhstan and in the Russian Federation.

Each regional project is organized according to the principle of a closed cycle, i.e. from production to processing and marketing of products to the final consumer. Among the activities of enterprises is the production of high-quality wheat, sugar beet, vegetables, dairy, and meat products, bread and bakery products; production of agricultural machinery, spare parts, elevator and electrical equipment; as well as the provision of aviation services, the implementation of computer and office equipment, printing production and much more [25].

In the next 5 years, the following strategic directions were chosen for the company:

- Increase in the volume of trading operations (grain, sugar, petroleum products, chemical plant protection products);
- Increase in sales from grain processing (production of pasta, flour); and from processing in the field of animal husbandry (processing of milk and meat);
- Increase in elevator capacities in the Russian Federation;
- Expand the selective direction in the field of crop and livestock production;
- Increase the company profitability by investing in other industries.

The effectiveness of creating interstate associations of enterprises in the field of production, storage, processing, and marketing of grain and grain products with the aim of developing interstate cooperation of the EAEU countries in the form of large vertically integrated structures in the form of an agricultural holding, financial and industrial group, are as follows:

- Large agricultural holdings carry out the entire production cycle, from the production of raw materials and their processing to the sale of finished products in the distribution network; create a resource base that can fully meet the needs of the organization. For example, the “Ivolga-Holding” LLC provides a full cycle of grain production to finished products (flour, bread, bakery products, etc.) In addition, they have their own service infrastructure (elevators, HSP, shops, tank farms, road transport and airline);
- On the food market are allocated companies with great dynamics of development. Thus, the Ivolga-Holding LLP has its own raw materials, production, and sales units in ten districts of
the Kostanay region, with a total number of 42 thousand people, i.e. it becomes a company of national scale;

- The process of consolidation of financial and production resources in one legal entity, which allows you to eliminate the fragmentation of participation in capital and enterprise management, simplify the ownership structure, increase the investment attractiveness of the structure, develop its own retail networks;
- Creating own raw material base, modernization of capacities, etc.;
- The economic efficiency of grain production is higher than in other economic entities of the agroindustrial complex, functioning separately without unifying processes;
- The efficiency of using water-resource-saving technologies in the production of grain is higher in comparison with the conventional technology.

3. Conclusions

The development of interstate cooperation between enterprises of networks, infrastructure in the areas of production, storage, processing, and marketing of grain and its products of the EAEU countries will help solve the problems of small-scale agricultural production, reduce the size of land holdings of large agricultural formations, and develop a system for storing, processing, and selling products.

In turn, the enlargement of small farms based on their cooperation will make it possible to efficiently use land, labor, financial, and other resources, carry out large-scale breeding and breeding work, comply with scientifically based crop rotations, use modern technologies, reduce the cost of transportation, and provide agricultural services to outside organizations of their own cooperative enterprises.

The process of uniting agricultural producers into cooperatives will contribute to the development of infrastructure in the system of production, storage, processing, and marketing of grain and its products through the organization of joint cooperation objects (a granary, an elevator, etc.), increasing incomes and employment of the rural population through their effective activity, elimination of intermediaries between producers, and consumers of grain and products of its processing.

References

[1] Altukhov A I 2017 The territorial-sectoral division of labor in the agro-industrial production is the basis of interstate integration in the agrarian sector of the economy of the Eurasian Economic Union Russian Agricultural and Food Policy 10 pp 2-10

[2] Altukhov A I 2017 The integration in the agrarian sphere of the Eurasian Economic Union must begin with the improvement of the territorial-sectoral division of labor in the agro-industrial production Monograph Problems and prospects of development of agroindustrial production Eds L B Vinnichek and A A Galiulina (Penza, Russia: RIO PSAU) p 236

[3] Vasilyeva E. V and Petrova I V 2011 The main problems of forming the infrastructure of the food market Economics of Agricultural and Processing Enterprises 7 pp 79–80

[4] The issue of creating a Grain Pool of Kazakhstan, Russia, Ukraine has been postponed for now (https://www.zakon.kz)

[5] Information Agency “Kursiv” A Common Grain Holding is being created in Kazakhstan (http://www.fcc.kz)

[6] Information Agency “UNIAN” EBRD: the global grain market has become more dependent on supplies from Ukraine, Kazakhstan and the Russian Federation (http://www.unian.net)

[7] Information Agency “Kursiv” A Common Grain Holding started work (https://kursiv.kz)

[8] Government of the Republic of Kazakhstan Law of the Republic of Kazakhstan “On state regulation of the development of the agro-industrial complex and rural territories” (http://online.zakon.kz)

[9] Ministry of Agriculture of the Republic of Kazakhstan The concept of a Common Grain
Holding company (http://mgov.kz)

[10] 2007 The concept of creating the Eurasian commodity distribution system of agricultural products, raw materials and food (project) (Moscow, Russia) p 58

[11] Information and consulting service of the agro-industrial complex World grain market: main producers and consumers (http://yariks.info/index)

[12] Information Agency “News.mail.ru” The global market depends on the supply of grain from Ukraine and Kazakhstan (http://news.mail.ru)

[13] Information Agency “Oilworld.ru” The forecast for the development of the world grain market until 2021: the influence of external factors on the production and export of grain from the Black Sea region (http://www.oilworld.ru)

[14] Intergovernmental Council on Issues of the agro-industrial complex of the CIS member states 2001 Program for the creation and functioning of the CIS grain market (Program “Grain Market”) (Moscow, Russia)

[15] Ministry of Agriculture of the Republic of Kazakhstan 2012 Program for the development of the agro-industrial complex in the Republic of Kazakhstan for 2013–2020 (Agrobusiness 2020) (Astana, Kazakhstan) p 97

[16] Information Agency “Kazakh-Zerno” 2018 Transportation of all Kazakhstan grain will be provided by the joint venture (http://kazakh-zerno.kz)

[17] Poshkus B I 2009 Weak link in the “price chain” Economy of Agricultural and Processing Enterprises 2 pp 13–16

[18] Website of “Ivolga – Holding” LLP (http://www.ivolga.kz)

[19] Silayeva L P 2018 Placement and specialization of agricultural production in the EAEU as the basis for the formation of international cooperation Fundamental and Applied Research of the Cooperative Sector of the Economy 3 pp 59-65

[20] Silayeva L P Development of placement of various segments of the market of sensitive agricultural products in the EAEU countries Monograph “Problems and prospects of development of agro-industrial production” (Penza, Russia: RIO PSAU) pp. 18-30

[21] Information Agency “Prime” The Council on Agricultural Policy under the EurAsEC. Integration Committee approved the draft agreement on the grain market (http://primetass.ru)

[22] Technical Regulations of the Customs Union “On the safety of grain” (TR CU -015-2011) (http://www.eurasiancommission.org)

[23] Loaf A Who will get the share of Ukraine in the grain market (http://lenta.ru)

[24] Bogoviz A V, Sandu I S, Demishkevich G M and Ryzenkova N E 2019 Economic aspects of formation of organizational and economic mechanism of the innovational infrastructure of the EAEU countries’ agro-industrial complex Advances in Intelligent Systems and Computing 726 pp 108-117

[25] Semenova E I and Usoltseva E A 2013 Development of agricultural consumer cooperation Vestnik of Academy of Economic Security of the Ministry of Internal Affairs of Russia 1 pp 62-66