



IRSTI 06.75.00

UDC 65.01.005

DOI: 10.46666/2021-2.2708-9991.08

<https://www.jptra-kazniiapk.kz>

INTEGRATION PROCESSES – THE COMPONENT OF THE EFFECTIVE IMPLEMENTATION OF PUBLIC-PRIVATE PARTNERSHIPS

ИНТЕГРАЦИЯЛЫҚ ПРОЦЕСТЕР – МЕМЛЕКЕТТІК-ЖЕКЕМЕНШІК ӨРІПТЕСТІКТІ ТИІМДІ ІСКЕ АСЫРУДЫҢ ҚҰРАМДАС БӨЛІГІ

ИНТЕГРАЦИОННЫЕ ПРОЦЕССЫ – СОСТАВЛЯЮЩАЯ ЭФФЕКТИВНОЙ РЕАЛИЗАЦИИ ГОСУДАРСТВЕННО-ЧАСТНОГО ПАРТНЕРСТВА

K. TIREUOV^{1*}

Dr.E.Sc., Professor

S. MIZANBEKOVA¹

Dr.E.Sc. RK, Dr.E.Sc. RF, Professor

L. PECHENAYA²

Dr.E.Sc., Professor

¹*Kazakh National Agrarian Research University, Almaty, Kazakhstan*

²*Moscow State University of Food Production, Voronezh, Russia*

**corresponding author e-mail: ktireuov@mail.ru*

К.М. ТИРЕУОВ^{1*}

э.ғ.д., профессор

С.К. МИЗАНБЕКОВА¹

э.ғ.д. ҚР, э.ғ.д. РФ, профессор

Л.Т. ПЕЧЕНАЯ²

э.ғ.д., профессор

¹*Қазақ ұлттық аграрлық зерттеу университет, Алматы, Қазақстан*

²*Мәскеу мемлекеттік тамақ өндірісі университеті, Воронеж, Ресей*

**автордың электрондық поштасы: ktireuov@mail.ru*

К.М. ТИРЕУОВ^{1*}

д.э.н., профессор

С.К. МИЗАНБЕКОВА¹

д.э.н. РК, д.э.н. РФ, профессор

Л.Т. ПЕЧЕНАЯ²

д.э.н., профессор

¹*Казахский национальный аграрный исследовательский университет, Алматы, Казахстан*

²*Московский государственный университет пищевых производств, Воронеж, Россия*

**электронная почта автора: ktireuov@mail.ru*

Abstract. *The aim* is to justify proposals for improving public-private partnership for the development of grain product sub-complex. The implementation of effective forms of production and economic activity requires an increase in the volume of products in various sectors of economy of Kazakhstan. *Research methods* contribute to the integration of commodity producers, combining the links of reproduction cycle in technological chain into a single complex - from the availability of raw materials to production of finished goods. *Results* – it was noted that integrated entities, formed on the basis of the principles of public-private partnership, achieve a high level of efficiency and competitiveness. It is shown that in modern economic conditions, the functioning mechanism of PPP in sectors of agriculture, industry, providing production, transportation, storage and processing of grain in the republic, does not allow to fully systematically carry out large-scale innovation processes. The in-depth systematization and analysis of the experience of using the mechanism of public-private partnership in grain complex, both by domestic and foreign producers who have achieved high results in this area, are required for the successful implementation of such projects, since grain industry has its own specific features. *Conclusions* – during the functioning of economic entities at the stage of grain processing, inter-industry relations in tech-



Түйінді сөздер: ауыл шаруашылығы, астық өнімдерінің кіші кешені, мемлекеттік-жекеменшік әріптестік тетігі, тауар өндірушілердің интеграциясы, өндіріс, шикізат ресурстары, қосылған құн, бәсекеге қабілеттілік.

Ключевые слова: сельское хозяйство, зернопродуктовый подкомплекс, механизм государственно-частного партнерства, интеграция товаропроизводителей, производство, сырьевые ресурсы, добавленная стоимость, конкурентоспособность.

Introduction. An important role in ensuring food security and stability of the state is played by the grain-product subcomplex, which is one of the main parts of the agro-industrial sector of the economy, where a large number of workers are employed and financial resources are involved in the turnover.

The high importance of grain products for the population of Kazakhstan, which occupies a significant share in the diet, contributes to the sustainable development of agricultural and grain processing enterprises [1].

However, a sharp decline in many sectors, including the production of agricultural products and related industries, caused the market transformation of the economy, accompanied by the phenomena of crisis. These circumstances were not reflected in the best way on the relationship of agro-industrial enterprises, with an increase in grain losses and a simultaneous decline in the quality of finished products.

Search and use of new, more effective forms of implementation of production and economic activity requires transition to sustainable development trajectory of various sectors and spheres of economy of Kazakhstan. Given the complexity of socio-economic conditions for the current period, one of the most in-demand sectors of the national economy is agriculture, and grain products subcomplex of agro-industrial complex. In this regard, the priority of the national policy is to ensure not only to prevent recession in various sectors of the agrarian sector, but also to ensure increase of production volumes both to fully meet the needs inside the country and to increase export. This approach requires combining the efforts of all entities of the agro-industrial complex, coordination of activities and targeting to achieve a high end result.

Material and methods of research. For the national economy of Kazakhstan the accession to the WTO, on the one hand, created opportunities for a more complete interaction with the world economy, on the other hand, led to a number of restrictions that have caused an urgent need to protect domestic production and create competitive conditions for enterprises of grain and food complex [2]. Based on the scale, as well as well-

functioning economic, financial, organizational and social relations, the grain market can serve as a model of sustainable and competitive development for other markets of agricultural products, raw materials and food [3].

The system of territorial location of grain production in the country, which existed in the pre-reform period, was based on the following principles: the maximum use of agroclimatic resources and the use of areas minimally at risk of natural disasters, causing the loss of crops and reducing the yield of grain crops use zones that provide maximum economic efficiency and concentration of commercial production in these areas, etc. [4].

Directly in the process of functioning of the economic entities of the grain product subcomplex of the agroindustrial complex the generation of the system of inter-branch relations in the technological chains of exchange of capital and resources, distribution of added value and functional "load" [1k.4].

In this regard, the most important direction of economic policy that promotes the activation of innovation vector of development is to ensure the equivalence of inter-branch exchange, the formation of price proportions aimed at maintaining the competitiveness of agribusiness, the proportional development of all subjects of this technological chain.

Results and their discussion. The cause of financial imbalance and unfavorable price proportions, which, in turn, leads to the withdrawal of significant monetary resources from the sphere of agribusiness. can become a local monopoly of processing and transactional structures. Increasingly higher demands are made on the mechanism of interaction between different branches within the consolidated entity as vertical integration develops (at the national and international levels). This mechanism can be considered as the main way to improve the efficiency of inter-branch exchange, structural and institutional modernization, restoration of the potential of the grain product subcomplex of the agroindustrial complex [5,6]. It is in the system of vertical integration that the inter-branch exchange of resources and capital acquires an intragroup character. In this context the equivalence of inter-branch exchange is determined by in-

trigroup factors and factors of competitive environment (for example, the agrarian market of regions).

The group of structural and institutional factors that determine the ratio of forms of management in the agroindustrial complex of the region and their market positions, the nature of property relations and corresponding proportions of inter-branch exchange (within the value added chain) is the most important in the totality of the identified factors of influence. In this case, the possibility of regulating the value proportions of inter-branch exchange and distribution is determined by the competitive positions of the subjects of integrated formation, the degree of dominance of processing and transactional structures in the regional agro-food markets, the ratio of the shares of the corporate sector and small forms of agribusiness in the structure of the agroindustrial complex, the level of integration of enterprises (organizations) [Ik.5,6].

In Kazakhstan, the volume of gross agricultural production in Kazakhstan in 2020 increased by 5.6% and amounted to 6.3 trillion tenge. Akmola oblast is one of the main agricultural regions as an important component of the grain and food subcomplex of the agroindustrial complex of the country.

Gross output of agriculture in Akmola region for 11 months of 2020 amounted to 650.7 million tenge, including: crop production – 468 million tenge, million tenge. Investments in fixed capital in agriculture for 11 months of this year amounted to 53.7 billion tenge or 110.3% to the same period of 2019.

Exports of agricultural products for 10 months of 2020 amounted to 929.3 thousand tons for \$235.5 million. About 41.7 billion tenge amounted to state support for 2020 as part of the State program for the development of the agro-industrial complex of Kazakhstan in 2017-2021. The amount of 14.1 billion tenge was allocated to subsidize crop production. 3 billion tenge were allocated for the development of entrepreneurship in rural areas as part of the Program for the Development of Productive Employment and Mass Entrepreneurship. According to the results of 2020, the implementation amounted to 3 billion tenge or 100% of the plan, and 774 loans were issued.

In Akmola region harvesting area of spring crops amounted to 4.9 million hectares, including cereals and leguminous crops - 4.4 million hectares. Thus the main food crops spring wheat – 3.7 million hectares, oil crops occupy 240.3 thousand hectares, fodder crops – 200.3 thousand hectares. The gross harvest of cereals and leguminous crops

amounted to 5.2 million tons from the area of 4.4 million ha, with the average yield of 11.8 cwt/ha. Gross harvest of oilseeds was 147 thousand tons from the area of 240.3 thousand hectares with an average yield of 7.0 cwt/ha. Crop yield was influenced by the use of seeds of high reproductions. In 2020, agricultural producers of the region sowed seeds of elite 45.3 thousand tons on the total area of 424 thousand hectares or 8.2% of the filled volume. Sowing with seeds not lower than the third reproduction was 96.5%, while in 2019 - 83.7%. Thanks to the state support, agricultural producers of the region purchased from certified subjects of seed production 40 thousand tons of high reproductions and this volume of seed purchase is a record for the last 5 years. Over 8 thousand pieces of combine harvesters, including 3.7 thousand pieces of modern highly productive, 2.5 thousand pieces of reapers on the whole area of the crops – 3.8 mln ha or 102.3% to the planned volume, including 2.5 mln ha against dicotyledons and 1.3 mln ha against cereals - participated in harvesting.

In 2020 farmers of the country were supplied with cheaper diesel fuel at a price not exceeding 165 tenge per liter; 792 thousand tons of diesel fuel were allocated for sowing and harvesting works from February till October 2020. Additional 47 thousand tons of diesel fuel has been supplied for grain drying, 20.8 million tons of cereals threshed allow to fully satisfy the domestic needs of the Republic and to provide for export.

In order to provide the population with food, a pilot project was launched to develop a cooperative chain in rural areas "from field to counter" in Almaty, Zhambyl and Turkestan regions [7,8]. Under the preferential lending program "Economy of simple things" 300 billion tenge were allocated to support processing and 300 billion tenge to support production in the agricultural sector (including 30 billion tenge for spring field and harvest work) [Ik.7,8].

The mechanism of guaranteeing loans of banks of the second level continues to be implemented, the guarantor under this program is the JSC "Fund for Financial Support of Agriculture". Guarantees are provided for the implementation of investment projects in all types of activities in agriculture, and food production activities [Ik.5,7]. Conditions of guaranteeing apply to loans up to 3 billion KZT at rate no more than 17 % per annum for the term no more than 10 years [7,8]. The size of guarantee is no more than 50% of the amount of principal debt, on priority investment pro-

jects the size of guarantee is up to 85%. The instrument of state support allows the subjects of the agro-food sector to attract bank loans in the absence of a sufficient collateral base.

The search for and use of new, more effective forms of implementation of production and economic activity requires the development of production in various sectors and spheres of Kazakhstan's economy. One of the methods of solving this problem is the integration of commodity producers, which allows uniting all links of the reproduction cycle in the technological chain "production of raw materials - output of finished products" in a single complex. The study of domestic and foreign experience shows that a high level of efficiency and competitiveness is achieved by integrated entities formed on the basis of public-private partnership principles.

Despite a fairly widespread network of such associations, including in many regions of the Republic of Kazakhstan, a number of methodological issues in respect of a wide variety of organizational and legal forms, composition of participants, types of activities, forms of ownership are still not solved.

Practical experience shows that despite the intensification of integration processes in the conditions of public-private partnership, there are inefficiencies in the functioning, as well as the disintegration of a number of such formations [9]. This is largely due to the fact that in the new economic conditions the traditionally functioning mechanism of public-private partnership in the grain product sub-complex of Kazakhstan does not allow to ensure the systemic implementation of large-scale innovation processes, being limited to minor (local changes).

For successful implementation of the projects of public-private partnership in grain product subcomplex it is necessary to study, generalize and systematize experience of using of this mechanism by both national and foreign companies which achieved high results in this sphere. At present, public-private partnership continues to remain at the initial stage of development, which is largely due to the specific high-risk features of the industries of the grain product subcomplex.

These circumstances emphasize the importance of detailed analysis of methods and tools for improving the competitiveness of enterprises and organizations of the domestic grain product subcomplex, first of all, target investment of production.

In order to develop directions and recommendations for effective interaction between private business and state in modern

complex economic conditions, interregional and intercountry relations it is necessary to have a new methodical approach providing a conclusion to a higher quality level of the mechanism of interaction between government and business. It concerns forms of mutually advantageous medium- and long-term cooperation of the state and business directed on the decision of socially significant tasks, including maintenance of food safety.

Radical changes in the world economic space due to the current circumstances cause the need to revise methods and mechanisms of economic management in any country, including the Republic of Kazakhstan. In such circumstances the main objective is to ensure national food security. For this purpose it is necessary to focus the efforts of both the state and private businesses in a single set of measures to ensure the progressive and sustainable building of the capacity of the grain product subcomplex of the agroindustrial complex of Kazakhstan [9].

To strengthen partnership relations at the regional, national and international levels, it is necessary to have a mechanism of partnership relations between the subjects of agro-industrial production, different from the previous ones, which allows to combine in a single complex the entire reproduction cycle - starting from the production of raw materials and ending with the output of products intended for final consumption. Integrated formations, functioning in the conditions of public-private partnership, which are becoming increasingly widespread in many regions of the Republic of Kazakhstan, are characterized by a wide variety of organizational-legal forms, the composition of participants, types of activities, forms of ownership.

The study of practical experience in this area has shown that despite the intensification of integration processes in the conditions of public-private partnership, many associations do not function effectively, which leads to the collapse of a significant part of such entities [10].

The experience of Canada in developing varieties of rapeseed - canola, the second most important crop after wheat for Canada. which with minimal content of erucic acid and glucosanolates turns this crop into a food oilseed crop, can serve as an example of successful public-private partnership [11].

The supply-demand balance of Canadian canola has tightened this year as a result of lower production and increased exports. As a result of reduced supply, Canadian canola prices in the local market have reached \$730 per ton this season, up 70% from last year.



public-private partnership the state participation in the investment process and its coordination was carried out.

The division of responsibilities between the state and private capital varies from non-state companies acting as contractors to the complete transfer of certain public activities to private organizations. This model involves the state transferring part of the risks to partner companies, private sector companies, taking into account their experience and capabilities. This type of relationship creates advantages for the state, which include a reduction in the need for budget financing of projects. And for private companies the advantage in turn becomes the expansion of the clientele and stable markets, increasing stability, etc.

The solution of a number of priority tasks is required to obtain the proper effect from the implementation of the mechanism of public-private partnership. First of all, it is a search for a manager of property, which remains with the state. It is also necessary to carry out the procedure of value-added to increase the volume of services provided and transfer of risks associated with planning, construction, investment, management of the subject's activity to partners.

It must be said that public-private partnership has its advantages, because the state benefits not only directly - from investing funds and receiving dividends, but also indirectly, from harmonization of market conditions, investment attractiveness, tax revenues, etc.

Drawing conclusions, it can be noted that despite the existing risks, the importance of public-private partnerships for business is constantly growing, as the management of investment detail is convenient and multidisciplinary.

Significant experience in the use of various institutional forms and types of partnerships between the state and the private sector in the investment sphere of the economy is accumulated abroad.

In Kazakhstan the introduction of public-private partnership projects in the system of management of transport and logistics companies in the sphere of railway transportation of grain cargo has become widespread. And at present the introduction of the mechanism of public-private partnership in the system of management of transport and logistics companies engaged in transportation of grain cargoes has not lost its relevance.

In the implementation of products (storage, transportation, sales) global logistics chains are a means of saving national resources: material, raw materials, energy, fi-

nancial, labor. The goals of the state and private capital are different.

In these circumstances the state becomes the main actor of the global logistics chain. In managing this process, the state must guide the economy by determining the order of implementation of major infrastructure projects, necessarily carried out with the participation of the state. Most of the major logistics centers in developed countries are built and operate in the format of public-private partnerships.

In our opinion, public-private partnership is the most promising mechanism of development and increase of logistics potential of the country's grain export, which in future will lead to effective functioning of the entire agriculture of the country. Participation of the state in large logistics projects is due to many reasons: for countries with developing and unstable economies the high cost of logistics projects and the long payback period are typical.

The implementation of the mechanism of public-private partnership makes it possible to save state budget funds by attracting private capital in the creation of infrastructure facilities. But this requires specific and clear mechanisms to stimulate investors. Public-private partnership is first of all a mechanism of successful interaction between the state and business in solving many socially important tasks on mutually beneficial terms. In the transport and logistic sphere of Kazakhstan one of the most proven forms is concession. The advantage of concession is primarily the ability to attract private investment in the economy of Kazakhstan, as well as a balanced distribution of risks in the implementation of infrastructure projects.

Conclusions

In the new economic conditions the functioning mechanism of public-private partnership in the grain product subcomplex of Kazakhstan does not allow to fully ensure the system implementation of large-scale innovation processes.

Participation in the WTO, for the national economy of Kazakhstan has provided opportunities for wide interaction with global producers, but at the same time created a number of limitations, which in turn requires protection of the interests of domestic producers and the creation of conditions of competitiveness for enterprises.

As a model of sustainable and competitive development and for other markets of agricultural products and raw materials are organizational, social, financial, economic relations in the grain product market.

The formation of an effective mechanism of public-private partnership requires solving problems, including the search for an effective property manager, which remains with the state; transfer to partners the risks associated with the current activities of the subjects, in terms of planning and investment.

References

- [1] Алтухов, А.И. Зернопродуктовый под-комплекс страны: современные проблемы и возможные пути их решения / А.И. Алтухов // Научное обозрение. – 2015.- №10-1.- С. 213-224.
- [2] Алтухов, А.И. Состояние рынка зерна государств – участников СНГ / А.И. Алтухов // Агропромышленный комплекс. -2016. - №2-С. 49-63.
- [3] Алтухов, А.И. Зерновой рынок Евразийского экономического союза: проблемы и основные пути их решения / А.И. Алтухов // Вестник Курской Государственной сельскохозяйственной Академии.- 2017.-№4.-С.44-51.
- [4] Алтухов, А.И. Зерновой рынок как основа развития аграрной экономики / А.И.Алтухов, Т.Эльдиева, И.Петрова // Предпринимательство.- 2009 - № 5. С.164-169.
- [5] Алтухов, А.И. Важный фактор активного расширения экспорта российского зерна / А.И. Алтухов // Экономика сельского хозяйства.- 2009. -№9. - С. 24-35.
- [6] Джолдасбаева, Г.К. Экспорт продукции зерноперерабатывающих предприятий / Г.К. Джолдасбаева, Л.М. Есахметова // Проблемы агрорынка. – 2020 - №2. - С. 126-133.
- [7] Экспорт пшеницы увеличился на 27% за год [Электронный ресурс].-2021.-URL: <https://24.kz/ru/news/social/item/469545-eksport-pshenitsy-uvlichilsya-na-27-za-god> (дата обращения: 23.04.21).
- [8] Малых, Н.И. Зерновой рынок как основа развития аграрной экономики / Н.И. Малых, И.Ф. Петрова, Е.Н. Заузолкова // Вестник Института дружбы народов Кавказа Теория экономики и управления народным хозяйством.- 2010.- № 3 (15). - С. 143-150.
- [9] Кантуреев, М.Т. Меры по обеспечению равной конкуренции на общем аграрном рынке государств-членов ЕАЭС / М.Т. Кантуреев, Г.А. Кожаметова, Т.Ж. Демесинов. // Проблемы агрорынка.- 2018.- № 4.- С.7 -13.
- [10] Алтухов, А.И. Производство зерна в мире и в России / А.И. Алтухов // Комбикорма.- 2008 - №1.- С. 17-19.
- [11] Волкова, Е.В. Актуальные тренды формирования и развития экономического потенциала перерабатывающих предприятий АПК / Е.В. Волкова // Вести Национальной Академии Наук Беларуси. Серия аграрных наук.– 2019.- Т.57.-№1.- С. 51-62.

- [12] Мизанбекова, С.К. Совершенствование организации внешнеторговых операций на рынке зерна / С.К. Мизанбекова, А.В. Богомолов, И.Т. Мизанбеков // Международные научные исследования.– 2020.- №1 (26).- С. 157-165.

References

- [1] Altukhov, A.I. (2015). Zernoproduktovyi podkompleks strany: sovremennye problemy i vozmozhnye puti ih resheniya [Grain product sub-complex of the country: modern problems and possible ways to solve them]. *Nauchnoe obozrenie – Scientific review*, 10-1, 213-224 [in Russian].
- [2] Altukhov, A.I. (2016). Sostoyanie rynka zerna gosudarstv-uchastnikov SNG [State of the grain market of the CIS member states]. *Agropromyshlennyy kompleks – Agroindustrial complex*, 2, 49-63 [in Russian].
- [3] Altukhov, A.I. (2017). Zernovoi rynek Evraziiskogo ekonomicheskogo soyuza: pro-blemy i osnovnye puti ih resheniya [Grain market of the Eurasian Economic Union: problems and main ways to solve them]. *Vestnik Kurskoi gosudarstvennoi sel'skohozyaystvennoi akademii – Bulletin of the Kursk State Agricultural Academy*, 4, 44-51 [in Russian].
- [4] Altukhov, A.I. (2009). Zernovoi rynek kak osnova razvitiya agrarnoi ekonomiki [Grain market as a basis of agrarian market development]. *Predprinimatel'stvo – Entrepreneurship*, 5, 164-169 [in Russian].
- [5] Altukhov, A.I. (2009). Vazhnyi faktor aktivnogo rashireniya eksporta rossiiskogo zerna [Main factor of active expansion of Russian grain exports]. *Ekonomika sel'skogo hozyaystva Rossii – Agricultural economics of Russia*, 9, 24-35 [in Russian].
- [6] Dzholdasbayeva, G.K. & Yesakhmetjva, L.M. (2020). Eksport produktsii zernopererabatyvayushih predpriyatij [Export of products of grain processing enterprises]. *Problemy agrorynka – Problems of AgriMarket*, 2, 126-133 [in Russian].
- [7] Eksport pshenitsy uvelichilsya na 27% za god [Wheat exports increased by 27% over the year]. – 2021 - Available at: <https://24.kz/ru/news/social/item/469545-eksport-pshenitsy-uvlichilsya-na-27-za-god.html> (date of access: 23.04.2021) [in Russian].
- [8] Malyh, N.I., Petrova I.F & Zauzolkova e.N. (2010). Zernovoy rynek kak osnova razvitiya agrarnoi ekonomiki [Grain market as a basis of agrarian market development]. *Vestnik Instituta druzhby narodov Kavkaza. Teoriya ekonomiki i upravleniya narodnym hozyaystvom – Bulletin of the Institute of Friendship of the Peoples of the Caucasus. Theory of Economics and National Economy Management*, 3 (15), 143-150 [in Russian].

[9] Kantureev, M.T., Kozhakhmetova, G.A. & Demesinov, T.Zh. (2018). Mery po obespecheniyu ravnoj konkurencii na obshchem agrarnom rynke gosudarstv-chlenov EAES [Measures to ensure equal competition in the common agricultural market of the EAEU member states]. *Problemy agrorynka – Problems of AgriMarket*, 4, 7 -13 [in Russian].

[10] Altuhov, A.I. (2008). Proizvodstvo zerna v mire i v Rossii [Grain production in world and in Russia]. *Kombikorma-Compound feeds*, 1, 17-19 [in Russian].

[11] Volkova, E.V. (2019). Aktual'nye trendy formirovaniya i razvitiya ekonomicheskogo potentsiala pererabatyvayushchih predpriyatij APK

[Actual trends in the formation and development of the economic potential of agro-industrial processing enterprises]. *Vesti Nacional'noj akademii nauk Belarusi. Seriya agrarnykh nauk – News from the National Academy of Sciences of Belarus. Agrarian Science Series*, 57 (1), 51-62 [in Russian].

[12] Mizanbekova, S.K., Bogomolov A.B. & Mizanbekov I.T. (2020). Sovershenstvovanie organizatsii vneshnetorgovykh operatsij na rynke zerna [Improving the organization of foreign trade operations in the grain market]. *Mezhdunarodnye nauchnye issledovaniya – International scientific researches*, 1 (26), 157-165 [in Russian].

Information about authors:

Tireuov Kanat - The main author; Doctor of Economic Sciences, Professor; First Vice-Rector; Kazakh National Agrarian Research University; 050010 Abay ave., 8, Almaty, Kazakhstan; e-mail: ktireuov@mail.ru; <https://orcid.org/0000-0003-3904-3553>

Mizanbekova Salima; Doctor of Economic Sciences RK, Doctor of Economic Sciences RF, Professor; Professor of the Department of Management and Organization of Agribusiness; Kazakh National Agrarian Research University; 050010 Abay ave., 8, Almaty, Kazakhstan; e-mail: salima-49@mail.ru; <https://orcid.org/0000-0002-7602-9710>

Pechenaya Lyudmila; Doctor of Economic Sciences, Professor; Professor of the Department of Economics and Management of Socio-Economic Systems; Moscow State University of Food Production; 125080 Volkolamsk highway, 11, Moscow, Russia; e-mail: remont-rt@mail.ru; <https://orcid.org/0000-0002-3553-223X>

Авторлар туралы ақпарат:

Tireuov Kanat Maratovich - негізгі автор; экономика ғылымдарының докторы, профессор; бірінші проректор; Қазақ ұлттық аграрлық зерттеу университеті; 050010 Абай данғылы, 8, Алматы қ., Қазақстан; e-mail: ktireuov@mail.ru; <https://orcid.org/0000-0003-3904-3553>

Mizanbekova Salima Kaspijevna; экономика ғылымдарының докторы ҚР, экономика ғылымдарының докторы РФ, профессор; «Агробизнесі басқару және ұйымдастыру» кафедрасының профессоры; Қазақ ұлттық аграрлық зерттеу университеті; 050010 Абай данғылы, 8, Алматы қ., Қазақстан; e-mail: salima-49@mail.ru; <https://orcid.org/0000-0002-7602-9710>

Печеная Людмила Тимофеевна; экономика ғылымдарының докторы, профессор; "Экономика және әлеуметтік-экономикалық жүйелерді басқару" кафедрасының профессоры; Мәскеу мемлекеттік тамақ өндірісі университеті; 125080 Волоколамск тас жолы, 11, Мәскеу қ., Ресей; e-mail: remont-rt@mail.ru; <https://orcid.org/0000-0002-3553-223X>

Информация об авторах:

Tireuov Kanat Maratovich - основной автор; доктор экономических наук, профессор; первый проректор; Казахский национальный аграрный исследовательский университет; 050010 пр. Абая, 8, г. Алматы, Казахстан; e-mail: ktireuov@mail.ru; <https://orcid.org/0000-0003-3904-3553>

Mizanbekova Salima Kaspijevna; доктор экономических наук РК, доктор экономических наук РФ, профессор; профессор кафедры «Менеджмент и организация агробизнеса»; Казахский национальный аграрный исследовательский университет; 050010 пр. Абая, 8, г. Алматы, Казахстан; e-mail: salima-49@mail.ru; <https://orcid.org/0000-0002-7602-9710>

Печеная Людмила Тимофеевна; доктор экономических наук, профессор; профессор кафедры «Экономика и управление социально-экономическими системами»; Московский государственный университет пищевых производств; 125080 Волоколамское шоссе, 11, г. Москва, Россия; e-mail: remont-rt@mail.ru; <https://orcid.org/0000-0002-3553-223X>