

THE INSURANCE SYSTEM IN AIC: ADVANTAGES, STRUCTURE, MECHANISMS

АӨК САҚТАНДЫРУ ЖҮЙЕСІ: АРТЫҚШЫЛЫҚТАРЫ, ҚҰРЫЛЫМЫ, МЕХАНИЗМДЕРІ

СИСТЕМА СТРАХОВАНИЯ В АПК: ПРЕИМУЩЕСТВА, СТРУКТУРА, МЕХАНИЗМЫ

S.N. SUYEUBAYEVA^{1*}*C.E.Sc., Associate Professor***O. DENISSOVA¹***C.E.Sc., Associate Professor***J. SLONIEC²***Ph.D, Associate Professor*¹ *D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan*² *Lublin University of Technology, Lublin, Poland***corresponding author e-mail: Suyeubaeva@mail.ru***С.Н. СУЙЕУБАЕВА^{1*}***э.ф.к., қауымдастырылған профессор***О.К. ДЕНИСОВА¹***э.ф.к., қауымдастырылған профессор***J. SLONIEC²***Ph.D докторы, қауымдастырылған профессор*¹ *Д.Серікбаев атындағы Шығыс Қазақстан техникалық университеті,**Өскемен, Қазақстан*² *Люблин Технологіялық университеті, Люблин, Польша***автордың электрондық поштасы: Suyeubaeva@mail.ru***С.Н. СУЙЕУБАЕВА^{1*}***к.э.н., ассоциированный профессор***О.К. ДЕНИСОВА¹***к.э.н., ассоциированный профессор***J. SLONIEC²***доктор Ph.D, ассоциированный профессор*¹ *Восточно-Казахстанский технический университет им.Д.Серикбаев,**Усть-Каменогорск, Казахстан*² *Люблинский Технологический университет, Люблин, Польша***электронная почта автора: Suyeubaeva@mail.ru*

Abstract. The market of agricultural products, raw materials and food is of great importance for the development of economy of the Republic of Kazakhstan. Its main purpose is to meet the needs for food. The protection of interests of agricultural producers cultivating grain, oilseeds, vegetables from the consequences of adverse natural conditions will be ensured by organization of insurance activities in crop production. *The aim* – is to evaluate modern system of voluntary insurance in crop production section of Kazakhstan and develop recommendations for its improvement. *Methods* – statistical, structuring of processed information, causal and comparative data analysis. *Results* – reducing the risks of economic entities from emergencies due to the increased amount of insurance of the sown area in the republic will make it possible to increase the amount of financing for agricultural entities, and additional resources will be directed to the effective functioning of AIC. Within three years, the country will diversify production of crop products by expanding the area of arable land occupied by agricultural crops. The study of foreign and domestic experience made it possible to identify shortcomings in modern approaches to the system of voluntary insurance services and offer recommendations for improving methods of their application. Currently, public and private sectors are interested in the continuous expansion of agricultural insurance market in Kazakhstan. The standard for subsidizing part of insurance premium in agricultural sector has increased, which, in turn, will reduce cost of



Key words: agro-industrial complex, agricultural insurance, agricultural producer, crop production, insurance product, guaranteed insurance payments, insurance premium, risks, digital technologies.

Түйінді сөздер: агроөнеркәсіптік кешен, агроқұрылым, ауыл шаруашылығы өндірушісі, өсімдік шаруашылығы, сақтандыру өнімі, кепілдендірілген сақтандыру төлемдері, сақтандыру сыйлықақысы, тәуекелдер, цифрлық технологиялар.

Ключевые слова: агропромышленный комплекс, агрострахование, сельхозпроизводитель, растениеводство, страховой продукт, гарантированные страховые выплаты, страховая премия, риски, цифровые технологии.

Introduction. Crop production is a large branch of the agrarian sector of Kazakhstan, which is divided into: grain crops, industrial crops, vegetables, gourds, horticulture and viticulture. To date, programs and projects to support the agro-industrial complex initiated by the state, the Ministry of Agriculture and agricultural holdings of the country are producing positive results and improving the situation in the crop industry. In the Republic, about 22.58 million hectares are occupied by agricultural crops, since the main food crop is wheat, and then 15.90 million hectares (70% of the total area) are occupied by cereals.

Crops such as corn, oats, millet, barley, buckwheat, rice and spring wheat are also grown on the territory of the country. Significant areas are occupied by oilseeds - 2.90 million hectares and 161.40 hectares of sugar beets, cotton and tobacco. Grapes, melons, apples, potatoes, flax and cotton are cultivated on a total area of 65.30 hectares. In the Republic, there is a positive trend in increasing productivity in agriculture, as well as in crop production.

The positive dynamics in the industry makes us think about further prospects for the development of domestic crop production, namely, in matters related to subsidizing, reimbursement of part of the costs incurred by peasant farms as a result of natural disasters. 75% of the territory of Kazakhstan is at high risk of natural disasters, such as hurricanes, landslides, mudflows, floods, extreme temperatures, earthquakes. The level of agricultural insurance development currently does not allow us to talk about the use of this tool as a systemic institution for the development of the agro-industrial sector, with the range of opportunities that are widely used in international practice.

Material and methods of research. In the course of studying the theoretical aspects of the study, the method of induction was used. This made it possible to reveal the fact that the world experience of agricultural insurance suggests the use of rational insurance models, provides for full and partial state participation in the insurance system by subsidiz-

ing the insurance premium, as well as by providing guarantees of state reinsurance.

Quantitative and statistical data were studied using methods of analysis and comparison. The method of analysis contributed to the study of each of the considered types of insurance products in crop production separately. The synthesis method made it possible to combine, according to general classification criteria, the existing conditions of voluntary insurance and to identify the dynamics of its development.

The following legal acts were analyzed: Law of the Republic of Kazakhstan dated July 8, 2005 No. 66 "On state regulation of development of agricultural complex and rural territories" [1], "National project for the development of the agro-industrial complex of the Republic of Kazakhstan for 2021-2025" [2], Rules for subsidizing insurance premiums, approved by Order of the Minister of Agriculture of the Republic of Kazakhstan dated May 19, 2020 No. 172 [3], Rules for the development and approval of insurance products, approved by the Minister of Agriculture of the Republic of Kazakhstan dated May 14, 2020 No. 170 [4], as well as information and analytical data and Reports of the Ministry of Agriculture of the Republic of Kazakhstan.

To systematize the presentation of the data obtained in the course of the study, a descriptive method was used, including methods of continuous sampling, interpretation and systematization of the studied material. A graphical method was used to visualize and ensure the compactness of the material presentation.

Results and their discussion. Today, in world practice, there are different approaches to insurance in crop production, which differ in the degree of state participation. In Europe, state support for agricultural insurance is carried out both at the level of individual countries and at the level of the European Union (EU) as a whole [5,6,7]. Since 2010, the agricultural insurance system in France has been included in the measures of the Common Agricultural Policy of the EU and enjoys the support of the EU budget.

French agricultural insurance began in 1822 with hail insurance and currently the insurance market consists of ten companies and amounts to 1.8 billion. Euros, including 480 million Euros is crop insurance, which is divided into [8]:

- state-subsidized multi-risk insurance (about 300 million Euros in insurance premium);
- insurance against risks and hail (about 180 million Euros).

As part of state support, agricultural producers are paid about 65% of the insurance premium. Difficulties in insurance are added by climate change, problems with independent expert assessment, as well as frequent changes in legislation.

Crop insurance in Spain is an integral part of the national agricultural policy. On average, subsidies are at the level of 53% of insurance premiums, of which 40–45% are subsidized by the central government, and 10–15% by regional governments. In Spain, on the part of the state, planning and overall coordination is carried out by the State Agency for Agricultural Insurance ENESA (Entidad Estatal de Seguros Agrarios), which is part of the Ministry of Agriculture, Fisheries and Food. The system of agricultural insurance in Spain has always remained unchanged even despite the change of government. All agricultural insurance in this country is based on self-financing - that is, it does not use EU funds [9].

In Poland the insurance market in agriculture includes both non-compulsory and compulsory insurance, and some crop insurance is subsidized from the state budget. Pawłowska-Tyszko, J. and Soliwoda, M. [10] analysed the impact of agricultural insurance on the economic and financial sustainability of farms in Poland and proved that land productivity in farms with crop insurance was higher than in farms without insurance. This may indicate that insurance can help increase land productivity, and thus increase income levels.

The Serbian government has set a general subsidy rate of 40% for agricultural insurance, but for some regions where farmers grow their favorite crops, the applicable subsidy rate is 70%. As a result, the number of farmers purchasing subsidized crop insurance is much higher in the regions where the crop is harvested, the subsidy amount is 70%, compared to the rest of the country.

The Belarusian system of agricultural insurance is represented by compulsory insurance of agricultural crops with state support [11]. This is due to the fact that the republic is located in the zone of risky farming and

the fact that the state form of ownership prevails in agricultural production.

In the course of the analysis, several trends were identified, under the influence of which modern insurance in crop production is developing:

- firstly, the negative impact of climate change is increasingly of concern to both agricultural producers and insurance companies, which raises the question of the need to strengthen the agricultural insurance system;
- secondly, when developing agrarian policy, government structures are increasingly moving from simple insurance support to developing a single set of risk management measures, which include various insurance mechanisms and other measures as an integral part;
- thirdly, the introduction of digital technologies in the management of the agro-industrial complex opens up fundamentally new opportunities in terms of organizing agricultural insurance and its state support.

Since January 2020, Kazakhstan has changed the system of voluntary crop insurance. Compulsory crop insurance, valid for 15 years until 2020, has become unprofitable for Insurance Companies due to the low interest of farmers, whose payments do not cover even the minimum production costs. The new agricultural insurance system in Kazakhstan is in its third year of operation and allows farmers to decide whether they need to reduce their risks or not. Under the new conditions of voluntary insurance, 50% of insurance costs from premiums were subsidized by the state represented by "Agrarian Credit Corporation" JSC.

From September 05, 2022, the Ministry of Agriculture of the Republic of Kazakhstan announced changes and increased the amount of support (the standard for subsidizing part of the insurance premium) from 50% to 80%. The subsidy is paid directly to Insurance Companies, in line with international best practice. This approach is useful for the further development of the Crop Insurance Program, since farmers pay only a part of insurance premiums and they do not need to apply for a subsidy that can negatively affect cash flow in farms.

In terms of voluntary insurance, there are the following types of insurance products in crop production:

- * the level of moisture in the soil (drought or excess moisture). Grain (wheat, barley, corn, oats) and oilseeds (sunflower, rape, flax) crops are subject to insurance. Agrarians of grain-growing regions will be able to insure their crops: Akmola, Aktobe, East Kazakhstan, Karaganda, Kostanay, Pavlodar and

North Kazakhstan regions. Data for calculating the soil moisture index is provided by the Dutch company VanderSat. The insurance program is supported by Swiss Re, Munich Re and Hannover Re. For monitoring, information comes from remote sources of earth sounding. Moisture level is monitored on an ongoing basis, and the fact of an insured event is recorded automatically;

* deficiency during the vegetation period of plants and surplus during the harvesting period (when the equipment cannot enter the field due to rains);

* insurance of orchards (to insure crops or trees against death, fires, frosts and other causes).

Based on the various tasks, risks and characteristics of the agro-industrial complex, the product line in insurance will expand.

The Ministry of Agriculture is creating a program to subsidize voluntary crop insurance to:

- reduce the costs of farmers;
- finance through open insurance mechanisms;
- reduce the issuance of an insurance policy, since all procedures, from the conclusion of a contract to payments, can be done online, through the Qoldau system using the information system Agroinsurance [12]. Process automation minimizes the human factor and ensures their transparency.

The algorithm for issuing an insurance policy is as follows:

■ an agricultural producer registers on an electronic platform, selects an insurance product and an Insurance Company (an electronic digital signature is required for registration);

■ after that, the agricultural producer sends an application to the insurer to conclude a contract. The system fills in many sections of the application automatically, as it is integrated with the main information bases in accordance with the requirements;

■ the Insurance Company signs the insurance contract, which goes to the signature of the agricultural producer. It, in turn, signs it and pays 50% of the accrued insurance premium;

■ then the Insurance Company sends an application for the second part to the JSC "Agrarian Credit Corporation", which, after considering the application, transfers the rest of the premium to the Insurance Company;

■ after receiving 100% of the amount of the insurance premium, the contract is considered to have entered into force and is stored in the signed form on the electronic platform. The insurance payment process is similar.

Insurance Companies can participate in the program and provide a subsidized policy only with the approval of the Agency of the Republic of Kazakhstan for the regulation of the development of financial markets. According to information made available to the public on the Qoldau platform, the following Crop Insurance Companies currently participate in the subsidized Insurance Program:

- JSC "IC "Jýsan Garant";
- JSC "IC "VICTORIA";
- JSC "IC "Nomad Insurance";
- JSC "IC "Amanat";
- JSC "IC "London-Almaty".

Risks within these insurance products are reinsured in International Reinsurance Companies with an "A" rating in the global insurance market: SWISS RE (Switzerland), HANNOVER RE (Germany), MUNICH RE (Germany), which provide guaranteed payments in case of insured events.

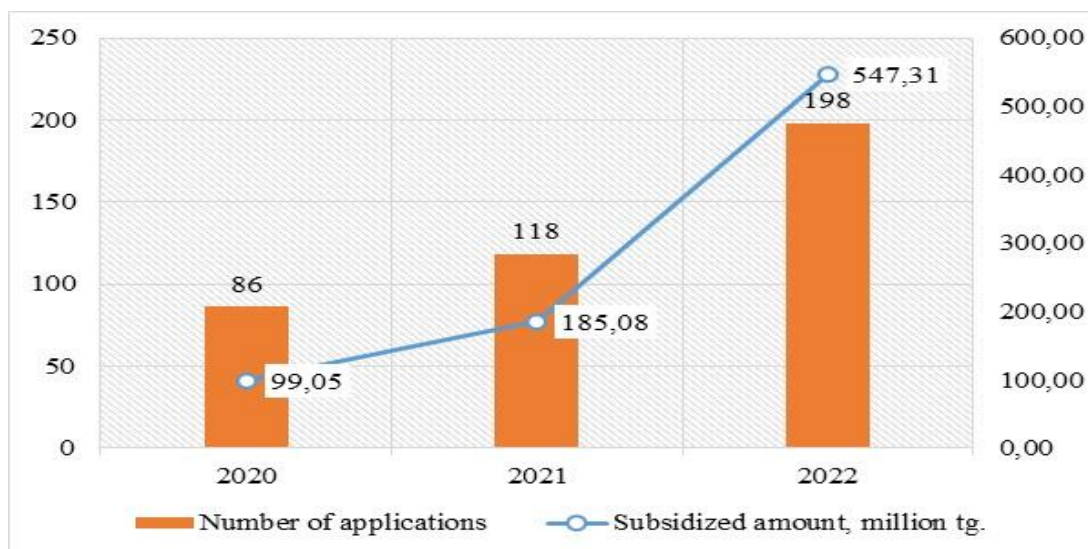
In 2020, as part of the "Moisture Index" insurance program, with the support of the state, 86 policies were issued, with an insured area of 115.03 hectares and with a premium amount of 198.10 million tenge. Agricultural producers from 31 districts purchased insurance policies. For this period, 518.30 million tenge of insurance compensation was paid to farmers.

In 2021, farmers purchased 118 policies and insured 150.64 hectares (0.68% of the total sown area in Kazakhstan). The amount of premiums amounted to 370.20 million tenge. In 2021, farmers in 34 districts purchased insurance policies under the program. In 2022, about 200 thousand hectares were insured for a total amount of about 750 million tenge.

Based on the data on the Qoldau portal, one can see an increase in the number of applications in 2022 by 2 times compared to 2020 (from 86 to 198) and a 5.5-fold increase in the subsidized amount over this period (from 99.05 million tenge to 547.31 million tenge) (figure).

Thus, the analysis of the performance of Insurance Companies showed promising growth and development of the agricultural insurance process in the Republic of Kazakhstan. The positive dynamics is formed to a large extent due to:

- personal liability of the agricultural producer (transition from compulsory to voluntary insurance);
- affordability of the cost of insurance (the form of state support for insurance has been changed, if earlier insurance payments were subsidized, now subsidies are aimed at stimulating agribusiness entities);



Note: data of Qoldau internet portal [Ik.12]

Figure - Dynamics of Electronic Applications and Subsidized Amount for Insurance in Crop Production for 2020-2021

- guaranteed insurance payments (attracting three international companies with an “A” rating in the global insurance market);
- appointment of one operator – “Agrarian Credit Corporation” JSC which is assigned all procedural aspects (Order of the Minister of Agriculture of the Republic of Kazakhstan dated May 06, 2020 No. 159 “On the definition of an operator in the field of insurance in the agro-industrial complex”);
- creation of an electronic platform – Qoldau, for the implementation of insurance processes (www.qoldau.kz);
- lack of evidence that the insured event has occurred (the satellite system records moisture indicators in the soil);
- obligations on the part of the state represented by “Agrarian Credit Corporation” JSC to pay 80% of the cost of insurance.

Conclusions.

Further development of agricultural insurance in Kazakhstan should take into account current trends and rely primarily on the opinions of the farmers themselves and the specific needs of the regions of Kazakhstan in protecting the risks of the agro-industrial complex.

1. An analysis of the current situation in the voluntary insurance market in crop production made it possible to prepare the following recommendations for improving insurance tools and further increasing the volume of programs:

- attraction of financial institutions of the country to finance the agricultural sector;
- expansion of the product line in

insurance;

- increasing the time for filing an application for concluding an agreement with an Insurance Company;
- clearly defining the obligations of participation in the subsidy program for Insurance Companies;
- ensuring the confidence of farmers in agricultural insurance, removing the stereotype among agricultural producers that an insurance policy is an additional cost;
- providing agricultural producers with an annual report on the amounts of insurance payments, the number of farmers receiving compensation, etc. – “Agrarian Credit Corporation” JSC;
- improvement of the Qoldau platform to simplify the work of both agricultural producers and government agencies.

2. Today there are much more risks in the crop growing industry than services in Insurance Companies, therefore it is necessary to pay special attention to the development of individualized insurance programs that take into account the features of specific areas of agricultural production, as well as to improve the convenience for agricultural producers of insurance procedures and claims settlement.

3. It is necessary to apply the principles of public-private partnership, which will facilitate cooperation between public bodies and private insurers within the framework of the state agricultural insurance program.

References

[1] Закон Республики Казахстан «О государственном регулировании развития агропромышленного комплекса и сельских территорий» от 8 июля 2005 года №66. [Электронный ресурс].-2005.-URL:<https://www.adilet.zan.kz/rus/docs/Z050000066> (дата обращения: 07.09.2022).

[2] Национальный проект по развитию агропромышленного комплекса Республики Казахстан на 2021-2025 годы [Электронный ресурс].- 2021.- URL: <https://www.adilet.zan.kz/rus/docs/P2100000732> (дата обращения: 07.09.2022).

[3] Правила субсидирования страховых премий, утвержденные приказом Министра сельского хозяйства Республики Казахстан от 19 мая 2020 года №172 [Электронный ресурс].-2020.-URL: https://www.online.zakon.kz/Document/?doc_id=32598514 (дата обращения: 17.08.2022).

[4] Правила разработки и утверждения страховых продуктов, утвержденные Министром сельского хозяйства Республики Казахстан от 14 мая 2020 года №170 [Электронный ресурс].- 2020.- URL: https://www.online.zakon.kz/Document/?doc_id=39203635 (дата обращения: 17.08.2022).

[5] Mahul, O., Stutley, Ch. J. Government Support to Agricultural Insurance: Challenges and Options for Developing Countries. World Bank [Electronic resource].- 2010.- URL: <https://www.openknowledge.worldbank.org/handle/10986/2432> (date of access: 07.09.2022).

[6] Agricultural Policy Monitoring and Evaluation 2013: OECD Countries and Emerging Economies. – is the online library of the Organisation for Economic Cooperation and Development: OECD Publishing, 2013. – 34 p.

[7] Niklas Möhringa, Tobias Dalhaus, Geoffroy Enjolras, Robert Fingera. Crop insurance and pesticide use in European agriculture [Electronic resource].-2020.- URL: <https://www.sciencedirect.com/science/article/pii/S0308521X20307630> (date of access: 07.09.2022).

[8] Лукичева, Е.А. Агрострахование: мировой опыт [Электронный ресурс].- 2019.- URL: <https://www.agri-news.ru/zhurnal/2019/32019/agrostrahovanie-mirovoj-opyit> (дата обращения: 07.09.2022).

[9] Enjolras, G., Capitanio, F., Adinolfi, F. The demand for crop insurance: combined approaches for France and Italy. Agricultural Economics Review [Electronic resource].-2012.- URL:<https://www.ageconsearch.umn.edu/record/253490> (date of access: 07.09.2022).

[10] Pawłowska-Tyszko, J., Soliwoda, M. Agricultural insurance vs. economic and financial sustainability of farms. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu [Electronic resource].- 2017.- URL: https://www.researchgate.net/publication/323011201_Agricultural_insurance_vs_economic_and_financial_sustainability_of_farms (date of access: 07.09.2022).

searchgate.net/publication/323011201_Agricultural_insurance_vs_economic_and_financial_sustainability_of_farms (date of access: 07.09.2022).

[11] Вереzubова, Т.А., Мухитбекова, А.М. Сравнительный анализ моделей агрострахования в Беларуси и Казахстане // Проблемы агрорынка.- 2018.- №3. – С. 141-148.

[12] Официальные данные Цифровой платформы для бизнеса Qoldau.kz раздела AgrolInsurance [Электронный ресурс].-2020.- URL: <https://www.agro-insurance.qoldau.kz/ru/insurance-product> (дата обращения: 07.09.2022).

References

[1] Zakon Respubliki Kazahstan «O gosudarstvennom regulirovanii razvitija agropromyshlennogo kompleksa i sel'skih territorij» ot 8 ijulja 2005 goda №66. [Electronic resource].- 2005.- URL: <https://adilet.zan.kz/rus/docs/Z050000066> (date of access: 07.09.2022) [in Russian].

[2] Nacional'nyj proekt po razvitiju agropromyshlennogo kompleksa Respubliki Kazahstan na 2021-2025 gody. [Electronic resource].- 2021.-URL:<https://adilet.zan.kz/rus/docs/P2100000732> (date of access: 07.09.2022) [in Russian].

[3] Pravila subsidirovanija strahovyh premij, utverzhdennye prikazom Ministra sel'skogo hozjajstva Respubliki Kazahstan ot 19 maja 2020 goda №172. [Electronic resource].- 2020.- URL: https://online.zakon.kz/Document/?doc_id=32598514. (date of access: 17.08.2022) [in Russian].

[4] Pravila razrabotki i utverzhdenija strahovyh produktov, utverzhdennye Ministrom sel'skogo hozjajstva Respubliki Kazahstan ot 14 maja 2020 goda №170. [Electronic resource]. - 2020.- URL: https://online.zakon.kz/Document/?doc_id=39203635 (date of access: 17.08.2022) [in Russian].

[5] Mahul O., Stutley Ch. J. Government Support to Agricultural Insurance: Challenges and Options for Developing Countries. World Bank [Electronic resource]. – 2010. – Available at: URL: <https://openknowledge.worldbank.org/handle/10986/2432> (date of access: 07.09.2022)

[6] Agricultural Policy Monitoring and Evaluation 2013: OECD Countries and Emerging Economies. – is the online library of the Organisation for Economic Cooperation and Development: OECD Publishing, 2013. – pp. 34.

[7] Niklas Möhringa, Tobias Dalhaus, Geoffroy Enjolras, Robert Fingera. Crop insurance and pesticide use in European agriculture // Agricultural Systems Volume 184, September 2020, 102902. Available at: <https://www.sciencedirect.com/science/article/pii/S0308521X20307630> (date of access: 07.09.2022)

[8] Lukicheva E.A. Agrostrahovanie: mirovoj opyt //Sel'skohozjajstvennye vesti – 2019. – [Elektronnyj resurs]. URL: <https://agri-news.ru/>

zhurnal/2019/32019/agrostraxovanie-mirovoj-opyt [in Russian].

[9] G. Enjolras, F. Capitanio, F. Adinolfi The demand for crop insurance: combined approaches for France and Italy. *Agricultural Economics Review*. – [Electronic resource]. - 2012. pp. 5- 23.-URL: <https://ageconsearch.umn.edu/record/253490>

[10] Pawłowska-Tyszkó, J.; Soliwoda, M. Agricultural insurance vs. economic and financial sustainability of farms. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu* [Electronic resource] 2017.-URL: <http://> <https://>

www.researchgate.net/publication/323011201_Agricultural_insurance_vs_economic_and_financial_sustainability_of_farms (date of access: 07.09.2022)

[11] Verezubova T.A., Muhitbekova A.M. Sravnitel'nyj analiz modelej agrostrahovanija v Belarusi i Kazahstane // *Problemy agrorynka*. - 2018. – №3. S. -141-148 [in Russian].

[12] Oficial'nye dannye Cifrovoy platformy dlja biznesa Qoldau.kz razdela Agrolnsurance [Elektronnyj resurs].-2020. Available at: <https://agro-insurance.qoldau.kz/ru/insurance-product> (date of access: 07.09.2022) [in Russian].

Information about authors:

Suieubayeva Saltanat Nurbolsynovna – **The main author**; Candidate of Economic Sciences, Associate Professor; Associate Professor at the School of Business and Entrepreneurship; D. Serikbayev East Kazakhstan Technical University; 070010 Serikbayev str., 19, Ust-Kamenogorsk, Kazakhstan; e-mail: suyeubaeva@mail.ru; <https://orcid.org/0000-0002-0290-6290>.

Denissova Oxana; Candidate of Economic Sciences, Associate Professor; Associate Professor at the School of Business and Entrepreneurship; D. Serikbayev East Kazakhstan Technical University; 070010 Serikbayev str.,19, Ust-Kamenogorsk, Kazakhstan; e-mail: denokkas@mail.ru; <https://orcid.org/0000-0001-7899-500X>.

Sloniec Jolanta; Ph.D; Associate Professor; Head of the Department of Enterprise Organization; Lublin University of Technology; 20-618 Nadbystrzycka str., 38D, Lublin, Poland; e-mail: j.sloniec@pollub.pl; <https://orcid.org/0000-0002-8869-5059>

Авторлар туралы ақпарат:

Суйеубаева Салтанат Нурболсыновна – **негізгі автор**; экономика ғылымдарының кандидаты, қауымдастырылған профессор; Бизнес және кәсіпкерлік мектебінің қауымдастырылған профессоры; Д.Серікбаев атындағы Шығыс Қазақстан техникалық университеті; 070010 Серікбаев қөш., 19, Өскемен қ., Қазақстан; e-mail: suyeubaeva@mail.ru; <https://orcid.org/0000-0002-0290-6290>.

Денисова Оксана Касымовна; экономика ғылымдарының кандидаты, қауымдастырылған профессор; Бизнес және кәсіпкерлік мектебінің қауымдастырылған профессоры; Д.Серікбаев атындағы Шығыс Қазақстан техникалық университеті; 070010 Серікбаев қөш, 19, Өскемен қ., Қазақстан; e-mail: denokkas@mail.ru; <https://orcid.org/0000-0001-7899-500X>.

Jolanta Sloniec; Экономика бойынша Ph.D докторы, қауымдастырылған профессор; «Кәсіпорын қызметін ұйымдастыру» кафедрасының меңгерушісі; Люблин технологиялық университеті; 20-618 Nadbystrzycka қөш., 38D, Люблин қ., Польша; e-mail: j.sloniec@pollub.pl; <https://orcid.org/0000-0002-8869-5059>.

Информация об авторах:

Суйеубаева Салтанат Нурболсыновна – **основной автор**; кандидат экономических наук, ассоциированный профессор; ассоциированный профессор Школы бизнеса и предпринимательства; Восточно-Казахстанский технический университет им. Д.Серикбаева; 070010 ул. Серикбаева, 19, г. Усть-Каменогорск, Казахстан; e-mail: suyeubaeva@mail.ru; <https://orcid.org/0000-0002-0290-6290>.

Денисова Оксана Касымовна; кандидат экономических наук, ассоциированный профессор; ассоциированный профессор Школы бизнеса и предпринимательства; Восточно-Казахстанский технический университет им. Д.Серикбаева; 070010 ул. Серикбаева, 19, г.Усть-Каменогорск, Казахстан; e-mail: denokkas@mail.ru; <https://orcid.org/0000-0001-7899-500X>.

Sloniec Jolanta; доктор Ph.D; ассоциированный профессор; заведующая кафедрой «Организация предприятия»; Люблинский технологический университет; 20-618 ул. Nadbystrzycka, 38D, г. Люблин, Польша; e-mail: j.sloniec@pollub.pl; <https://orcid.org/0000-0002-8869-5059>.