

INSURANCE SYSTEM IN THE AGRICULTURAL SECTOR: STATE AND PROBLEMS

АГРАРЛЫҚ СЕКТОРДАҒЫ САҚТАНДЫРУ ЖҮЙЕСІ: ЖАҒДАЙЫ ЖӘНЕ МӘСЕЛЕЛЕРІ

СИСТЕМА СТРАХОВАНИЯ В АГРАРНОМ СЕКТОРЕ: СОСТОЯНИЕ И ПРОБЛЕМЫ

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Abstract. The relevance of the topic is determined by the importance in modern conditions of formation of mechanism for effective risk management in agriculture - one of the priority tasks of the development of agro-industrial complex. The authors analyze the problems of using the insurance mechanism in agricultural sector of the Republic of Kazakhstan. Its importance in increasing the efficiency of production in the branches of agro-industrial complex is shown. Variants of using the insurance system such as risk management tool are considered, foreign experience in this area is studied. The features that characterize the insurance activity in crop production are revealed. For agricultural crops, this is government participation aimed at protecting farms from losses caused by emergencies; financial assistance in the implementation of insurance is manifested in the form of compensation for damage caused by insured events. It has been established that the existing insurance sector does not solve the main problem of protecting the property interests of policyholder related to compensation for losses if insurance payments are required. It was revealed that this mechanism has not received widespread use due to the extremely short term for concluding insurance policy. The aggregated nature of the indices makes it possible to obtain quantitative estimates of the probability of insured event occurring, to a certain extent, possessing the property of universality, regardless of the indicators used and methodology of their calculation. The experience of applying the mechanism of this type of insurance services on the materials of the East Kazakhstan region has been studied.

Аңдатпа. Тақырыптың өзектілігі агроөнеркәсіптік кешенді дамытудың басым міндеттерінің бірі – ауыл шаруашылығындағы тәуекелдерді тиімді басқару тетігін қалыптастырудың қазіргі жағдайында маңыздылығымен анықталады. Авторлар Қазақстан Республикасының аграрлық секторында сақтандыру механизмін пайдалану мәселелерін талдайды. Оның АӨК салаларындағы өндіріс тиімділігін арттырудағы маңызы көрсетілген. Сақтандыру жүйесін тәуекел-менеджмент құралы ретінде қолдану нұсқалары қарастырылған, осы саладағы шетелдік тәжірибе зерделенген. Өсімдік шаруашылығындағы сақтандыру қызметін сипаттайтын ерекшеліктер анықталған. Ауылшаруашылық дақылдары үшін бұл шаруашылықтарды төтенше жағдайлардан туындаған шығындардан қорғауға бағытталған мемлекеттің қатысуы; сақтандыруды жүзеге асырудағы қаржылық көмек сақтандыру жағдайларынан келтірілген залалды өтеу түрінде көрінеді. Қазіргі сақтандыру секторы сақтанушының сақтандыру төлемдері қажет болған кезде оның шығындарын өтеуге байланысты мүліктік мүдделерін қорғау жөніндегі негізгі міндетті шешпейтіні анықталған. Бұл механизм сақтандыру полисін жасасудың өте қысқа мерзіміне байланысты кең қолданылмағаны анықталды. Индекстердің біріктірілген сипаты пайдаланылатын көрсеткіштер мен оларды есептеу әдіснамасына қарамастан, белгілі бір дәрежеде әмбебаптылық қасиеті бар сақтандыру оқиғасының басталу ықтималдығының сандық бағаларын алуға мүмкіндік береді. Сақтандыру қызметтерінің осы түрінің тетігін Шығыс Қазақстан облысының материалдарында қолдану тәжірибесі зерделенген.

Аннотация. Актуальность темы определяется значимостью в современных условиях формирования механизма эффективного управления рисками в сельском хозяйстве – одной из приоритетных задач развития агропромышленного комплекса. Авторы анализируют проблемы использования страхового механизма в аграрном секторе Республики Казахстан. Показано его значение в повышении эффективности производства в отраслях АПК. Рассмотрены варианты применения системы страхования как инструмента риск-менеджмента, изучен зарубежный опыт в данной сфере. Выявлены особенности, характеризующие страховую деятельность в растениеводстве. Для сельскохозяйственных культур – это участие государства, направленное на защиту хозяйств от убытков, вызванных чрезвычайными ситуациями; финансовое содействие в осуществлении страхования проявляется в виде возмещения ущерба, причиненного страховыми случаями. Установлено, что существующий сектор страхования не решает основную задачу по защите имущественных интересов страхователя, связанных с компенсацией ему потерь при необходимости страховых выплат. Выявлено, что данный механизм не получил широкого применения из-за чрезвычайно короткого срока заключения страхового полиса. Агрегированный характер индексов позволяет получать количественные оценки вероятности наступления страхового события, в определенной мере обладающие свойством универсальности вне зависимости от используемых показателей и методологии их расчета. Изучен опыт применения механизма данного вида страховых услуг на материалах Восточно-Казахстанской области.

Key words: agricultural sector, insurance mechanism, insured, market, production, agricultural products, risks, quantitative assessment, financing, State.

Түйінді сөздер: аграрлық сектор, сақтандыру механизмі, сақтанушы, нарық, өндіріс, ауылшаруашылық өнімдері, тәуекелдер, сандық бағалау, қаржыландыру, мемлекет.

Ключевые слова: аграрный сектор, механизм страхования, страхователь, рынок, производство, сельскохозяйственная продукция, риски, количественная оценка, финансирование, государство.

Introduction. Agriculture is a very important sector for society, as it provides the population with food, industrial enterprises with raw materials and ensures food security of the country. In the current situation, AIC and agriculture will largely depend on the scale of production, its maturity and efficiency, improving the living standards of the population and ensuring food security in general [1]. At the same time, agriculture has the highest risk among all sectors of eco-

nomy, as it is directly dependent on natural and climatic factors. It can be considered that there has not been a year when nature has not harmed the agricultural sector.

Kazakhstan can be classified as a country with a high level of risk in agricultural production. This situation is mainly explained by economic policy of the State in socialist period, the issues of sustainability of agricultural production, long-term economic efficiency and stability, environmental and

social compatibility played a secondary role in political and economic decision-making. Land turnover was introduced in the areas with low agro-climatic potential, which led to the emergence of marginal production zones. If in the past agricultural production was subsidized by the State, now agricultural enterprises are forced to make their own decisions on issues arising from high production risks. Insurance is one of the main tools to stabilize the income of agricultural entrepreneurs, which can be used without violating the rules of the WTO.

Research materials and methods. In the study of this topic, the scientific works of foreign and domestic economists were used as a scientific and methodological basis for the development of agricultural production potential, the specifics of the use of insurance system in this area.

In justification and solution of the methodological issues of the research, the authors used the methods of comparative, systematic analysis in determining the use of PPP projects, based on the basic principles of modern economics.

Materials of domestic and foreign publications and scientific-theoretical, scientific-practical conferences, materials of branch State programs, periodicals on the use of public-private partnership in the field of agriculture of the country were used as an information base of the research.

Research methods were scientific abstraction and extrapolation, induction and deduction. Justification of theoretical rules was carried out on the basis of general scientific methods and techniques, methods of analysis and synthesis, systematic and integrated approaches, in addition to official statistical materials and information potential of the Internet, individual observations and data from scientific and practical activities.

Results and their discussion. In order to reduce the negative factors and ensure sustainability of agricultural production, AIC enterprises should look for the ways of risk management. One of the most effective measures taken to ensure the stability of agricultural production and minimize the risks of agricultural producers is insurance [2]. Insurance as a risk management tool is used in the following cases:

* insurance should be used when probability of realization of the risk is low and the potential damage may be significant;

* application of insurance, if the risk is high and potential damage is insignificant;

* insurance is required when the probability of potential losses exceeds the threshold values. The number of such risks and their degree of homogeneity can be any;

* insurance is used in cases where the method of avoiding risks is unfavorable, as well as in cases in accordance with legislation, when there is a risk of catastrophic risks.

In many countries around the world, in particular, the United States, Canada, Italy, Spain, France and others. Insurance in agriculture is an important part of the activities of any business entity operating in this sector of economy. It guarantees the restoration of property interests damaged in case of natural and technogenic disasters and other unforeseen events [3].

Due to the high cost of crop insurance in the territory of the Republic of Kazakhstan due to the high risk of agricultural production, public support is provided to ensure its availability for agricultural producers.

Analysis of the world experience of insurance in the field of agricultural production showed that features of crop production insurance systems are as follows:

1. In almost all developed countries, crop insurance is carried out with the active support or participation of the State.

2. Insurance operations with participation of the State are carried out systematically, often in the framework of a unified public policy in the field of agriculture, which foresees: taking into account the interests of agricultural producers, the State and insurance organizations:

* implementation of the function of crop insurance process coordination by the relevant government agency (Ministry of Agriculture, special agency or other organization);

* consolidation of accumulated financial resources in this type of insurance in order to ensure stability of insurance operations by creating a special reserve fund or by conducting reinsurance operations with certain guarantees from the State.

3. The financial participation of the State in the implementation of insurance is manifested in the form of subsidizing part of the insurance premium paid by farms, or its participation in compensation of damage caused by the insured case.

4. Crop insurance with the support or participation of the State is mainly aimed at protecting farms from losses due to emergencies, catastrophic risks, natural disasters. In addition, insured cases in such insurance programs have specific criteria and need to be documented. The insurance

guarantee with the participation of the State does not apply to the whole crop yield, but to a certain part of it, which provides only the necessary minimum support to agricultural producers. This is achieved by setting certain levels of restrictions on the minimum and maximum amount of insurance coverage [4].

Unlike other sectors of economy, agriculture is at the greatest risk, which is directly related to the adverse effects of weather, natural disasters and market conditions. Despite the adoption of the Law of the Republic of Kazakhstan "On Compulsory Insurance in Crop Production" in 2004, insurance services for insurance of agricultural sector were not widely used. The relatively low level of activity of insurance (reinsurance) organizations licensed for compulsory insurance clearly shows the interest of insurance companies in this class of insurance and their failure to take responsibility for the risks of agricultural production anywhere in Kazakhstan. According to the Ministry of Agriculture of the Republic of Kazakhstan, 8 out of 10 insurance companies that have previously participated in insurance have voluntarily returned their licenses.

In order to address the above issues and increase the efficiency and affordability of insurance for agro-industrial complex, some legislative acts of the Republic of Kazakhstan "On some agricultural legislation of the Republic of Kazakhstan", the Law of the Republic of Kazakhstan "On Amendments and Additions to the Issues of Complex Regulation" was adopted. At the same time, the Law of the Republic of Kazakhstan "On Compulsory Insurance in Crop Production" was abolished.

The irrelevance of insurance tariffs set in 2004, as well as cost rates set in 2009, led to the formalization of insurance - agricultural producers pay an insurance premium of about 100 tenge per 1 ha and receive insurance premium of 3,500 tenge in the case of insured event, and its minimum production costs are about 15,000 tenge.

Thus, the current insurance system does not solve main task aimed at protecting the main property interests of the insured in connection with the reimbursement of losses in the insured case.

Voluntary agricultural insurance is used on a temporary basis when leasing machinery and farm animals. The temporary form is applied to licensed grain receiving enterprises [5].

Local authorities have advised farmers to insure crops against soil shortages during the

current growing season. In 2020, for the first time in agro-industrial complex of the Republic of Kazakhstan, a system of index insurance of crops against moisture deficiency was introduced. Agricultural insurance services are provided in electronic format through the digital platform "QOLDAU" for business. With the help of this site, space monitoring of arable lands will be carried out when determining the insurance case [6].

One of the main differences between index agricultural insurance and traditional complex agricultural insurance is the use of actuarial calculations, including the use of methodologically simple mathematical data in determining the probability of insurance case [7].

Due to the short duration of insurance contracts, this system was not widely used, as can be seen from the table below. On June 8, of this year, the State announced a new insurance product and subsidized part of the insurance premium, and it was necessary to conclude an insurance contract only until June 15.

Subsidized insurance products must meet the following requirements:

- * availability of recommendations of second-tier banks;

- * make an insurance payment no later than 30 (thirty) calendar days from the date of submission of the full package of documents on the insurance case;

- * Application of cost standards not less than scientifically justified parameters of non-profit joint-stock company "National agricultural research and educational center";

- * Spread of the most dangerous diseases of animals included into the list of diseases approved by the Order of the Minister of Agriculture of the Republic of Kazakhstan from October 30, 2014 № 7-1/ 559 "On approval of regulations in the field of veterinary medicine";

- * Presence of reinsurance at least 50% of the risks in the reinsurance company with financial stability rating of not less than "B +" on the scale of the international rating agency Standars & Poor's or equivalent ratings on the scale of other international rating agencies [8].

Most Kazakhstani agricultural producers did not know about the introduction of a new insurance system in crop production within the allotted seven days.

Subsidies are paid in the following conditions:

- * the presence of a valid insurance contract in the register, concluded by the insurer and the insured person, which foresees the purchase of insurance products approved by the operator;

* confirmation that the insured person has paid part of the insurance premium in accordance with the amount of subsidy as a result of the information interaction of the

insurance information system and the bank payment system;

* the insurer files application for subsidy through the web portal [9].

Table - Volume of participation in the index insurance system

Regions	Insurance premium amount, in tenge	Including subsidized amount, tenge	Number of applications	Insurance area, ha
Akmola region	32 234 698,0	16 117 349,0	16	26 462,1
East Kazakhstan region	70 085 782,0	35 042 891,0	28	28 290,4
Karaganda region	15 653 652,0	7 826 826,0	3	8 127,0
Kostanay region	13 102 220,0	6 551 110,0	4	8 289,8
Pavlodar region	14 624 576,0	7 312 288,0	14	14 512,5
North Kazakhstan region	18 345 778,0	9 172 889,0	14	11 830,3
Total in the RK	164 046 706,0	82 023 353,0	79	97 512,1

Note - compiled by the authors according to the data of the Ministry of Agriculture of the RK

Recently, in Shemonaikha and Glubokoe districts, East Kazakhstan farmers received their first insurance payments to insure their soil moisture deficit, as the soil moisture assessment indices show a moisture deficit and there is an insurance case. The aggregate nature of indices, regardless of the type of indices and method of their calculation, has a certain degree of universality and allows to obtain quantitative estimates of probability [10].

Thus, the introduction of index insurance in agriculture has many advantages: low administrative costs associated with the use of reliable and accessible data, which in turn, as in traditional types of insurance, data collection, expert assessment in the event of insurance case, cost assessment and other measures at the farm level does not require costs; possibility to insure systemic agricultural risks due to natural conditions; reduction of the burden on the State budget in case of significant damage to agricultural enterprises in adverse weather conditions.

Conclusions

1. Unlike other sectors of economy, agriculture is at greatest risk, which is directly related to the adverse effects of weather, natural disasters and market conditions.

2. Due to high cost of crop insurance in the territory of the Republic of Kazakhstan due to the high risk of agricultural production, public support is provided to ensure its availability for agricultural producers.

3. This year, for the first time in agro-industrial complex of the Republic of Kazakhstan, a system of index insurance of crops against moisture deficiency was introduced.

4. One of the main differences between index agricultural insurance and traditional

complex agricultural insurance is the use of actuarial calculations, including the use of methodologically simple mathematical data in determining the probability of insurance case.

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