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Classification of agribusiness risks in modern conditions of managing

Risk and uncertainty are always present in agricultural production. Therefore, any action the farmer brings the possibility of failure, loss, is risky. In conditions of market relations in the entrepreneur increases the risk of losses in the industrial, commercial and financial areas. Therefore, to minimize the losses, one need to manage risk.

Risk management – the process of identifying the level of uncertainty, making management decisions that prevent, reduce the negative impact of random factors, the transmission (transfer) risk through the use of effective risk insurance system or the development of risk. To do this, one must analyze the causes and factors of its occurrence, the possible consequences, to know and to use the methods, indicators of its impact on results of operations, methods and sources of its undesirable effects.

Risk assessment process faced by the farmer, and to minimize the costs associated with these risks, called risk management. A businessman should know how to reduce the likelihood of risk; it must be capable of reducing the risk of negative consequences, even in the most adverse circumstances.

**Key words:** risk, agricultural risks, risk management, risk insurance.

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Заманауи шаруашылық шарттарында агробизнестің тәуекелділіктерін жіктеу Агроөнеркәсібінде тәуекелділік және белгісіздік әрқашан болады. Сондықтан фермердің кез келген тәуекелді іс-әрекеті сәтсіздікке, шығындарға әкелуі мүмкін. Нарықтық қатынастар шарттарында кәсіпкердің өндірістік, коммерциялық және қаржы саласында қауіпі өседі. Сондықтан мүмкін болатын шығандарды төмендету үшін тәуекелділіктерді басқару қажет.

Тәуекелділіктерді басқару – тәуекелділіктерді сақтандырудың тиімді жүйесімен пайдаланып, немесе тәуекелділіктерді меңгеріп, тәуекелділіктерді беруге, кездейсоқ факторлардың теріс әсерін төмендететуге, тоқтатуға мүмкіндік беретін басқару шешімдерін қабылдау, белгісіздік деңгейін анықтау үрдісі. Бұл үшін олардың пайда болу себептерін және факторларын, мүмкінді болатын салдарын талдау, қызметтің нәтижесіне әсер ететін көрсеткіштерін, әдістерін, оның жағымсыз әсер ету тәсілдерін және көздерін білу және пайдалану.

Фермердің тәуекелділіктерді бағалау және осы тәуекелділіктермен байланысты шығындарды төмендету үрдісі тәуекелдікті басқару деп аталады. Бизнесмен тәуекелділіктің ықтималдылығын қалай төмендетуін білу керек, ең жағымсыз жағдайларда тәуекелділіктің теріс салдарын төмендету мүмкіндіктерін қарастыру қажет.

**Түйін сөздер:** тәуекелділік, аграрлық тәуекелділік, тәуекелділіктерді басқару, тәуекелділіктерді сақтандыру.

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Классификация рисков агробизнеса в современных условиях хозяйствования Риск и неопределенность всегда присутствуют в аграрном производстве. Поэтому любое действие фермера несет в себе возможность неудач, потерь, является рискованным. В условиях рыночных отношений у предпринимателя возрастает опасность потерь в производственной, коммерческой и финансовой сферах деятельности. Поэтому, чтобы минимизировать возможные потери, необходимо управлять риском.

Управление риском – это процесс выявления уровня неопределенности, принятия управленческих решений, позволяющих предотвратить, уменьшить негативное воздействие случайных факторов, передачи (перевода) риска путем использования эффективной системы страхования рисков или освоения рисками. Для этого необходимо проанализировать причины и факторы его возникновения, возможные последствия, знать и использовать методы, показатели его влияния на результаты деятельности, способы и источники его нежелательного воздействия.

**Ключевые слова:** риск, аграрный риск, управление рисками, страхование рисков.

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## CLASSIFICATION OF AGRIBUSINESS RISKS IN MODERN CONDITIONS OF MANAGING

Agricultural production in any country always refers to the production of high-risk. However, the industry paid attention to little in the peer-reviewed literature related to risk management. Analysis of the literature shows that very often the concept of «agricultural risk» in the classification of types of risk is not used. One can find a description of the specific features of agricultural risks, which make them stand out in the general classification together.

Risk in business – is the risk of unforeseen loss of expected profit, income, property, funds due to random changes in the conditions of economic activity, adverse circumstances and natural disasters [1].

Eliminating risk is necessary, because they affect the final results, the decrease of profit. Therefore, one should regularly examine the sources and risk factors to prevent them or to get out of the risk zone. If the risk was associated only with a negative result, the entrepreneur would not have showed readiness to it. The desire for risk is justified because there is a powerful incentive – to obtain high profits. The founders of businesses (R. Cantillon, J. Tyunen, F.Nayt) believed the entrepreneur's ability to sound risk source of business income.

Risk – an event that may or may not occur. In the case of its commission are three possible results: negative, neutral and positive.

Risk and uncertainty are always present in agricultural production (instability of weather conditions, market conditions). Therefore, any action the farmer brings the possibility of failure, loss, is risky. In conditions of market relations in the entrepreneur increases the risk of losses in the industrial, commercial and financial areas. Therefore, to minimize the losses, one need to manage risk.

**Crisis management** is the process by which an organization deals with a major event that threatens to harm the organization, its stakeholders, or the general public. The study of crisis management originated with the large-scale industrial and environmental disasters in the 1980s.[2]It is considered to be the most important process in public relations [3].

Risk management – the process of identifying the level of uncertainty, making management decisions that prevent, reduce the negative impact of random factors, the transmission (transfer) risk through the use of effective risk insurance system or the development of risk (as much as possible all reasonable and appropriate), (long

sentence) To do this, one must analyze the causes and factors of its occurrence, the possible consequences, to know and to use the methods, indicators of its impact on results of operations, methods and sources of its undesirable effects.

Farmer, attracting funds of shareholders and the shareholders, assumes the risk does not meet their expectations (dividend, share price growth, etc.). In turn, the shareholders (shareholders), employing executive management of farm organizations face the risk not only to the incompetent conduct of affairs on the part of managers and specialists, but also deception, fraud. With such a risk faced by leaders and forming collectives of enterprises and their divisions.

The company takes the credit in the bank, what increases the risk of default funds and unpaid interest. The company cooperates with government agencies and assumes the risk of default in front of them. The risk is less if there are many years of experience in these natural conditions, and the risk is easier if a high profitability of farms.

So is any risky business operation due to objective uncertainty of the future, organizational and economic failures.

In practice, the economic risks may be so large that the businessmen to avoid them refuse to carry out operations that require a large initial investment and time. Similar phenomena are observed today in all CIS countries, including Kazakhstan, they are caused by the instability of the economic mechanism and other elements of the external business environment

A risk factor is for the business a strong incentive for the permanent implementation of the austerity regime forces to carefully analyze the profitability of the projects, to develop estimates of investment, hiring appropriate personnel.

The risk – risk of possible (probable) loss of resources or shortfalls in revenue, the threat that an entrepreneur can incur losses in the form of additional costs beyond the envisaged project, program or action to obtain an income below the amount at which it is expected [1]. Therefore can not be taken into account in the business project. If you can anticipate the loss of advance, they have to be regarded as inevitable and included in the estimated calculation (income and expenditure balance).

Against the risk of loss that may arise in the implementation of business activity in agricultural production, divided into material, labor, financial, time and special [1].

Material losses in farming are manifested at an additional cost or direct loss of material objects (buildings, structures, equipment, products, materials, raw materials, energy and others.). For example, in the cultivation of vegetables due to bad weather conditions we had to conduct additional processing of inter-row cultivation, which was not foreseen the technological map. As a result, there was over-expenditure of fuel and other materials. Another example: the burned animal farm – it is also the loss of material resources.

Losses are expressed in the units, which measure the amount of this type of material resource. In units of mass, volume, area, length or in pieces. To bring together all the material losses, measured in different units, made their evaluation in terms of value. To do this, the losses in the physical dimension is multiplied by the unit price of the corresponding financial resources.

Employment losses are the loss of working time due to the random, unforeseen events. These include the labor costs of tractor-drivers for additional (non-technology cards) row cultivation, simple construction workers due to untimely supplying of building material.

Employment losses are expressed in man-hours or man-days. Translation employment losses in terms of value made by multiplying the number of man-hours (days) for evaluation (price) one hour (of the day).

Financial losses arise in the case of direct monetary loss associated with the need for payments not stipulated by the investment project, payment of fines, penalties, loss (shortfall) of cash depreciation of securities. They appear also in non-receipt or shortfall of money from those sources from which they expected to receive.

In addition to the final, irrevocable losses may be temporary financial loss due to the freezing of accounts, delayed delivery of funds, deferred payment of debts.

Temporary losses occur in cases where the process of farming is slower than planned. They arise, for example, due to the fact that the equipment for grinding grain came to the farm later than planned, due to which there was a delay in the start of the mill, and this resulted in a loss of finished products and related revenues are expected to farm.

The direct assessment of losses is carried out in the hours, weeks, months of delays getting the intended result. In order to assess their values in terms of value it is necessary to determine to what loss of income from farming could lead to wasting time.

Special losses manifested in damage to human health and life (as a result of increased injuries due to

non-compliance with safety), the environment, the prestige of a businessman, as well as other adverse social, moral and psychological consequences. Often, special types of losses is difficult to quantify and even more value.

Risks can be classified according to various criteria. First of all, identify two types of risk: pure and speculative. When you clean the risks, you can only lose (eg, property loss due to fire); when speculative (exchange operations), either positive or negative. A significant part of business decisions is speculative.

According to the sources of risk to distinguish between the following types: commercial; associated with human personality and due to natural causes.

Due to the occurrence of the risk is classified as a result of uncertainty about the future; the unpredictability of the partners; lack of information.

At the time of occurrence of distinguished origin (design) and the current risk. The initial risk is assessed at the stage of preparation for implementation of the investment project, currently manifested in the course of industrial activity. It does not exclude the situation where conditions change in time for the worse than expected so much that you want to revise the decisions taken by the businessman.

All of these types of risks encountered in agricultural production. Thus, the prevailing part of agricultural risks, especially in the production of crop products, determined by natural causes, but there are risks and the economic and related to the individual person. A significant portion of the risks associated with the unpredictable behavior of business partners and the lack of information on potential markets for agricultural produce.

Under the entrepreneurial risk is the risk that arises in any activities associated with the production and sale of goods (goods, works, services), commodity-money and financial transactions, commerce, the implementation of socio-economic and scientific-technical projects.

The most important types of business risk include industrial, commercial, financial, investment, insurance, innovative.

Production risk is associated with the production and sale of goods (goods, works, services), the implementation of any kind of industrial activity. Almost all of the risks arising in agricultural production, related to the production.

This type of risk generated by the following factors: reduction in planned production and sale of goods; price reduction, which was planned to sell its products; increased material costs; overrun payroll;

payment of higher taxes and royalties; losses in the form of fines, natural attrition, as well as due to accidents, outages, natural disasters, epidemics, etc.; losses from overpricing.

Probable losses associated with production risk can be divided into defining and side. When a quantitative assessment of the level and likelihood of risks in industrial activity minor, minor losses can be avoided. Moreover, even among the defining loss can be isolated it is one that either largest probability of suppressing the others. In this case, the quantification of the level of risk in the calculation can only be made this type of loss.

Commercial risk (commercial business) – is the risk arising in the implementation of a businessman purchased goods, when they are resold.

The most important factors that should be considered when evaluating a commercial transaction, as follows: inflation; customer insolvency; currency fluctuations; adverse change (increase) the price of the purchased goods; unexpected decline in commodity procurement; reduction of the price at which goods sold; decrease in sales volume; the loss or decline in the quality of goods in the course of treatment; excess distribution costs.

Financial risks arise in the implementation of financial business or financial (cash) transactions. In addition to factors specific to other types of risk, in assessing the size and financial risk probability need to be taken into account such specific factors as insolvency of one of the parties to a financial transaction, the change rate of the securities, money, currency, restrictions on currency and monetary transactions, the possible removal of the financial resources in the implementation of productive activities and others.

Investment risk occurs when you select embodiments of investments, implementation of investment projects.

Insurance risk arises when managing the insurance fund.

Innovative risk associated with the selection, evaluation of business ideas, the use of innovation.

On the scale of the action is at the risk of the local, regional, national and international.

If possible security risk can be insured and the deductible (force majeure).

In conducting business have great influence political risks, which include restrictions (bans) on the export, import, currency conversion and remittance, strikes, political instability, coups, military action, change policy, and others.

The quantitative measure of risk is determined

by the absolute and relative level of losses that arise in the implementation of productive activities. In absolute terms, the risk may be determined by the size of the possible loss of tangible (physical) or value (monetary) dimension. In relative terms, it is defined as the potential losses, attributed to the base, as is usually assumed that a property condition manufacturer, or the total flow of resources for this type of industrial activity or the expected income from the business. The choice of a framework for assessing the level of risk does not matter, but in any case it is advisable to use a baseline with a high degree of reliability.

The business activities have identified a number of levels (levels, zones) risk: the minimum (loss of earnings up to 25%); increased (loss of profits from 25 to 50%); Critical (loss of income from 50 to 75%); invalid (loss of income from 75 to 100% or more, close to the size of its own funds or above).

Under acceptable risk is the risk, within which this kind of business or production activity maintains economic feasibility, and the excess of its level leads to a real risk of losing all or most of the expected profit. This includes minimum and increased risk.

Critical risk is associated with the risk of losing a large part of the expected (predicted) earnings.

Invalid (catastrophic) the risk is characterized by the threat of losing not only all the expected profit, but also a large part of its own capital, the threat of bankruptcy. Regardless of the value of property or pecuniary damage to catastrophic accepted to the risks associated with the direct danger to human life or the occurrence of environmental disasters.

Each level of risk corresponds to the probability of a certain level of losses (risk) and that loss (risk) will be above a certain level.

To assess risk, use a statistical expert, computational and analytical methods.

The essence of the statistical method is that analyzes the statistics of losses that have occurred in similar types of industrial activity, set the frequency of certain levels of losses and this frequency is predicted probability of losses. Statistical risk assessment method requires a large amount of background information, other methods are applicable in the absence of such information.

Expert method of risk assessment can be carried out by examining the views of experienced businessmen or professionals. However, the survey prepared by the whole spectrum of desired expert assessments (level and probability of acceptable, critical and catastrophic losses) is almost impossible. It is easier to put the expert a question: «What are the most probable losses in the form of productive

activity?» On the basis of expert data determine the frequency estimates by dividing the number of experts who expressed this assessment, the total number of expert assessments.

Cash-analytical method of construction waste and assessment on this basis, the probability of the risk parameters of the curve based on the elements of game theory, in principle, applicable to all types of risk. To assess the risks applied mathematical methods can be widely used in the implementation of investment projects.

Risk assessment process faced by the farmer, and to minimize the costs associated with these risks, called risk management [1]. A businessman should know how to reduce the likelihood of risk; it must be capable of reducing the risk of negative consequences, even in the most adverse circumstances.

The main methods of risk management are to prevent, retention, reduction, transfer.

1. Avoiding risk. Risk can be avoided. Avoid operations that contains certain risk. So, to avoid the risks associated with ownership of the property, do not buy it.

In absolute terms, this requirement is, of course, one can not be realized as a known risk inherent in any kind of business activity. In practice, to avoid the risk – so do not take the risk above the usual level (minimize economic ties outside the region, to take into account the possible price increase agreements, etc...).

Obviously, this principle is not suitable for the conditions of stability sufficient economy.

- 2. Risk retention. The risk can be kept. To take over, leave on your responsibility as an integral part of the business. In practice the farmer to take the risk on yourself it is advisable in the following cases:
- When a potential loss is too small to worry about it;
- When effective management can reduce the risk (this reduced risk may have to take on their own responsibility);
- When the cost of insurance is significantly high;
- When no other protection against the risk of potential there.

The decision on the amount of net retention is dependent on a number of factors, including the size of the paid-up capital, the liquidity of assets and so on.

3. Reducing the risk. It is dangerous to carry on business in conditions of constant high-risk. The risk can be reduced using a variety of preventive measures to prevent unpredictable disruptive events in order to reduce the probability and magnitude of damage.

Since prevent damage usually cheaper than compensate for the losses, each farmer is interested primarily in the preventive activity. However, this is not always possible for both technical and economic reasons. For example, it is impossible or difficult to prevent drought and other natural disasters.

One of the most common and reliable risk mitigation techniques is self-insurance, which is carried out through the establishment of the organization of special reserve funds (insurance stocks). So, farmers create insurance reserves of seed, feed.

Careful planning and forecasting of production at the plant (in the economy) also contribute to a significant reduction in business risk, so in the business plan of any businessman should be the analysis and miscalculation of risks.

The business plan is also developed measures to reduce these risks and to minimize the losses that may arise. These measures can be organizational, involving, for example, change of suppliers of equipment, raw material delivery methods in processing organizations or to provide risk insurance program.

4. Transfer of risk – the most common method in business. In farming often risk transfer occurs by insurance.

Insurance reduces the dependence of the agricultural producers against unanticipated adverse conditions. In this regard, it is the primary method of compensation. However, the insurance compensates for possible damage (completely or partially) in the form of money, but does not reimburse the lost material assets.

Insurance organizations is two kinds of contracts: primary and secondary. As host insurance contract is subject to property belonging to the farm (buildings, structures, machinery and equipment, livestock, agricultural crops) For additional can be insured property received by him under the contract of tenancy or received from other organizations and the public processing, repair, storage and the like. Among risk transfer methods include a bank loan. Its disadvantage is that it requires repayment of the funds received with interest.

Currently, as the risk transfer method for futures transactions on the commodity exchanges is widely used hedging.

It is appropriate to give a definition of a hedge. Hedging – an operation on purchase and sale of exchange contracts in connection with trade in real goods, which is for the purpose of insurance against possible adverse changes in prices in the period between the conclusion of the transaction and the delivery spot.

When futures transaction subject to purchase and sale of a commodity exchange is not a real product (at the time of his deal is not available) and standard (generic) contract for the supply of a strictly fixed number of the exchange goods at an agreed price in a stipulated time period. In fact, there is an act of purchase and sale of rights to future goods [4].

Each of the listed risk resolution methods has its advantages and disadvantages, so the businessman usually uses them in whole or in certain combinations. In addition, each method is used only until such time as his application costs will not exceed the returns. However, this rule can not be applied if the risk concerns of human life or the legality of an operation.

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