

SCIENTIFIC ACHIEVEMENTS IN AGRICULTURAL ENGINEERING AGRONOMY AND VETERINARY MEDICINE

ECONOMIC SECURITY AND RISK MANAGEMENT IN THE AGRICULTURAL SECTOR

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ABSTRACT

The paper reports on research into economic security and risk management in agriculture. A number of themes are concerned including the main types of risks and threats that prevent the effective enterprise activities in terms of gross output formation and export return in grain branch of national economy. The article aims to highlight the strategic guidelines, components of economic security mechanism and risk assessment. The aims of development, indicators of threats, correlation schemes of profit and risk are systematized and summarized to make motivated and rational management decisions and to find the ways for risk prevention. The study demonstrated the need for system of state control of agricultural support with the help of the mechanisms of institution improvement and programs of balanced development of the agrarian sector and the use of economic security tools as an effective risk management instrument.

INTRODUCTION

The development of the world economy is accompanied by gradual changes in the directions of realization the relationship between their participants. We deal with the growing competition, increasing demands on highly-qualified staff of the subjects of market relations, including the criteria of business environment, ecological compatibility and security of forming and using the resource component. These trends of globalization processes are discovered in the agricultural sector, and became the first and foremost direction of economic growth in Ukraine.

In order to protect interests of Ukrainian agricultural producers and to identify and foresee possible threats and risks we propose to use the possibilities of mechanisms and methodological features of economic security and risk assessment. Our perspective is that the following procedure could contribute to determining the sequence of steps, necessary for preventing possible crises and risks. In addition, it guarantees to improve evaluation mechanisms of economic risks in terms of administrative decisions.

SUBJECTS AND METHODS

The object of our research is the process of economic security managing and risk assessment of the agrarian enterprises. The aim of the present work is to analyze the safety components of the mechanism of competition policy realization at agricultural enterprises, and to conduct a complex assessment of the economic security components of market activities of producers of main export sector with further determination of market activities priorities, and to demonstrate the methodological approaches to threat assessment and risks security of production and sales.

RESULTS

The importance of competitive advantages of certain economic entities and the country as a whole is emphasized in the context of Ukrainian integration with the international economic space and globalization features of this continuum. Competitive policy as a component of economic policy, with the help of the system of state measures contributes to the formation of a competitive environment and ensures protection and support for participants. The possibility to achieve the strategic objectives requires keeping to priority stages of their realization. One of such items is the formation of protective instruments of destructive influence grading of risks and raising the level of economic security.

As is well known, the market dictates conditions to its subjects as far as conjuncture and prices changes are concerned. Consequently, Ukrainian market of agricultural products which is presented by trade groups, based primarily on cereal crops, fruit, eggs [Main economic indicators of production..., 2015] that provide the highest level of profitability and enable enterprises to increase export capacity. Unfortunately, there is a lack of products of animal origin in the existing trade offer. It can't but affects the achievement of scientifically based consumption standards and Food Balance, while the public policy goal is "the creation of organizational and economic conditions for the effective development of the agricultural sector on the basis of unity of economic, social and environmental interests of society to provide the population with qualitative, safe, affordable foodstuffs and to supply industry with agriculture raw materials " [The strategy of development..., 2013].

The increasing competition forces to react quickly and to improve the existing management decisions and results to strengthen safety components of the mechanism of risk management and its rating. A successful enterprise, which specializes in manufacturing agricultural production operates in terms of certain risk groups, which are both common to all industries and have differences depending on the specialization and concentration

of production. It should be mentioned that both the competition and economic risks and dangers increase in terms of saturation of the market conditions with certain products, and it leads to increasing of economic risks.

Among the risks associated with the specialization of agrarian enterprises it is advisable to identify the following types of risks:

- Frequent change of crop rotation and ecological technologies and increasing of general level of risk due to the limited number of crops and the effect of weather-condition factor (mainly for grain producers);
- Business risks, including instability of prices and exchange fluctuations [Ulyanchenko, 2014];
- Unjustified market oversaturation with the commodity offer and inefficient use of raw material resources, that is typical for the grain industry;
- Imbalance of Ukrainian engineering market [Ivanishin, 2012] and undeveloped logistics infrastructure [Ivanishin, 2011];
- Legislation imperfection, particularly in the tax and customs spheres;
- Incompleteness of land reform.

Origin of risks, factors of their influence, the possible effects and, as a result, methods and ways of their overcoming and decreasing of their level appear according to each type of risk. We believe that it's of vital importance to distinguish safety components, focusing on methods receiving and applying the information to protect from unfair competition, to increase requirements for accounting analytical component of information security at all levels. Price risks being the security element of mechanism of competitive policy realization at the agrarian enterprises, have a huge impact on their economic security. After all, both in terms of the machinery, fertilizers, protection tools and fuel rise in price, and lack of appropriate infrastructure and logistics capabilities heads of small and medium enterprises are forced to cut costs. As a result, it affects the quality of products, releasing the workers, and sometimes causes closing a business.

It is important to ensure the economic security of the country, and in particular - its food security in the context of raising of production rate and aggressiveness of the global economic system. The ability of the competitive advantages of the enterprise to withstand the factors of external environment indicates that the competitiveness of enterprises is a complex of industrial and financial, intellectual and human abilities of the enterprise, which provides it with a firm and competitive positions [Artemenko and Melnik, 2010].

We have found in the process of examining the condition status and trends of Ukrainian agricultural market that without state regulation and institutional approaches to the implementation of the competitive policy the agrarian enterprises cannot prosper. There is a number of factors which are characterized by the imperfection of the complex mechanism of development strategy realization. And one of the most significant, in our opinion, is factor of safety. We should determine the strategic issues of the agrarian sector and highlight the priorities of its development only with the help of preventive steps.

Potential of the agricultural sector of Ukraine makes the realization of ambitious projects to expand sales markets and increase its competitiveness possible. However, there are several items that must be considered in terms of strategic guideline formation of separate sector development and interstate cooperation. Nowadays grain production is considered to be one of the most successful branches of the agrarian sector of Ukrainian economy in terms of gross output growth and exports, providing more than 60 million tons of gross harvest and 30 million tons of grain exports per year [The state statistics service of Ukraine...].

Per capita consumption of grain is much higher than the norm. Grain domination in the structure of the large-scale commercial producer holding companies, which are exporters of grain, allows us to make a conclusion about the necessity of formation and development of economic security, risk assessment and justification of economic decisions. There are certain determinants, which in short or long term, can limit the effectiveness, create a dangerous situation, appear in the specific types of risks and cause risks which can lead to disastrous situations.

The key role in assessing the level of agricultural enterprises competitiveness plays the size of their land Bank and volumes of investment that are not always reflected in high quality of products. So, in grain production, about 40% of foodstuffs are sold for export in the form of raw grain. This fact doesn't assist the improvement of social infrastructure of country territories, increasing the employment and, in our opinion, is threatening in terms of the country. Moreover, it slows down the development of small and medium agrarian business, depletes and contaminates the soil, delays the development of animal husbandry.

Economic security is the state of the national economy, which allows to resist internal and external threats, to ensure high competitiveness in the global economic environment and which characterizes the ability of the national economy to keep the sustained and balanced growth [About approval of Methodical recommendations..., 2013].

The economic security of the agricultural sector is defined as a sustainable state of development of the agrarian sector of the economy where the minimum needs of the society in the relevant agricultural products, raw materials for other sectors of economy, including social needs, food security and the formation of insurance reserves in case of force majeure under the influence of internal and external threats are satisfied. The key criteria are defined in the areas of maintenance of the existing potential and abilities for self-development, taking into account the characteristics of the agricultural sector which is based on the formation of economic security in connection with social stability provision [Sabinski, 2015].

The main characteristics of economic security of grain producers coincide with the given characteristics. However, we need to take into account the individual conditions of functioning, relationships, competitiveness, opportunities to prevent and protect internal and external dangers and risks. Therefore, a comprehensive assessment determines the main advantage of the research status and development opportunities of economic security. It provides for the monitoring of indicators for all functional components. An important element for the grain industry, according to our research, is systematic and complex formation of strategic directions, priority of development, opportunities and threats. The identification of risks and their prevention is the key to success.

A risk assessment methodology of participants of the national grain market must include the impact of global competitiveness and appropriateness of corporate responsibility [Lukin and Solomakha, 2011]. This would prevent the negative trend in cereal production; certain grain producers are extremely sensitive to price volatility both on the grain and on the formation of the resource potential for projecting the next harvest (fuel, fertilizer, equipment, logistics and infrastructure availability).

The definition of strategic guidelines of economic security at the country level involves the use of a multiplicative form of the integral index with the procedure of standardization of indicators and thresholds, justification of the weighting factors [Kharatishviliet. al.].

The indicators in the grain producer activities are calculated according to statistical reports, their definition and as well as their use cause no problems, whereas the identification of indicators in the spheres of identifying and evaluating of risks is more challenging. In addition, complex system of obstacles should be taken into consideration, in particular, the branch imbalance of agriculture, activities in the grain market of large producers, which leads to country unemployment, demographic crisis. The overwhelming majority of monoculture production leads to an unbalanced diet.

In the context of contemporary challenges of economic instability, it is important to formulate the methodology for the assessment of threats and risks in the sphere of production and realization of grain crops, as part of the economic security from the point of view of influence of the industrial development in the financial, social and environmental aspects of economic systems.

The development of grain farming, primarily by large commodity producers, is based on the demand and the monetary effect. This approach should not be based on marketing agriculture, which has specific characteristics in determining the structural characteristics of necessity to grow the product.

We should consider the position of stakeholder assessment and interested parties management, forming a conceptual scheme of the methodology of threats assessing and security risks in production and marketing. We propose to consider this approach in the context of the State target program of development of agrarian sector of economy for the period up to 2020 and to include a State program "Grain of Ukraine 2020".

The globalizations of modern economy and export opportunities of the certain grain producers have a negative impact on the general development of countryside areas. We have arrived to the conclusion that the main reason for this statement is the lack of state influence mechanisms on the rational use of agricultural lands, on their concentration within a single commodity, environmental stress, demographic security, lists of social responsibility of business and so on. Monopolistic activities of large agricultural holdings leads to danger of effective functioning of the state agricultural potential with the help of future, not necessary and not scientifically proved, from our point of view, a strategy of unlimited increase of grain production.

Large-scale enterprises that have export opportunities and get foreign exchange earnings in terms of exchange rate currency fluctuations operate steadily and profitably. To buy seeds, equipment or components abroad is not a problem for them. Whereas medium and small-scale producers receive income in national currency, so are in trouble. This is a kind of a system crisis, the manifestations of which are observed in the protests of the farmers regarding the VAT taxation, which in itself requires a separate research and feasibility studies. To prevent such risks, farmers can be insured through financial partners' programs and have the ability to regulate the cost and profit. The economic safety complex estimation system of grain producers and their international economic relations include the financial mechanisms improvement to facilitate business. Thus, the financial component of economic security prioritizes the grain producer's economic security.

Threat to the economic safety in the grain industry is price volatility in both domestic and foreign markets, mainly due to the influence of the grain market conjuncture. Defining economic security indicators in this direction are the global production and crops sale, the grain Fund structural use of grain world manufacturers.

The economic security formative factor, we believe grain market development infrastructure and its manufacturers. The river transport development, the powerful elevators construction should be a state priority, whereas today these problems are solved by separate holding company. The infrastructure issues and logistics capabilities development of small producers are generally left unattended and are posed a threat to their performance.

It is required improvement and activity managerial field of grain market participants. Recruiting, training and staff development, a high level of adaptability and flexibility in management, professionalism and the ability to self-improvement and self-realization also determine economic security.

Accounting and analytical and information support, innovation in the informational technologies development as economic security components is also required the study and implementation.

The economic security separate priority of the grain sector, consider the rational use possibility of seeds' wastes for the needs of Ukraine's energy independence formation and development. The modern grain production volumes allow to obtain raw materials to support the activities of the enterprises on fuel briquettes manufacture (straw, stalks, cobs of corn for the solid fuel production, seed corn for biofuel). Continuous monitoring requires a grain production balance with the preventing risk aim of environmental and economic risks.

The issue in question requires innovative directions of Ukraine's grain sector development. The active Agro holding structures definitely indicate the modern techniques usage and technologies in production, storage and grain crops sale. The development innovative direction of the agricultural logistics system, which involves the development of infrastructure component in terms of ensuring producers of grain by warehouses for products storage, construction and highways repair and access roads, the railway transport improvement and the its potential maximum usage, the river transport slow development. All of these components will provide progressive return on investment and reduce losses. However, the government in collaboration with the scientists using their own institutions, through the involvement mechanism of public-private partnerships and priorities economic security must monitor, control and regulate the producers' activities and to establish effective strategy and grain farming tactics.

DISCUSSION

One of the regulation key tools of the agrarian market is the prices system and agricultural products pricing, which determines the next priority to the economic security of the grain sector. Through the taxation and regulation, government funding, increase in intervention Fund, it is possible to shape economic security and producers' stability. In particular, article 9 of the Law of Ukraine "On state support of agriculture of Ukraine" stipulates that the intervention Fund for each object of state price regulation may not be less than 20% of their annual domestic consumption for the preceding marketing period [9]. However, the purchases volume of grain crops in 2015 was about 2% of the gross harvest and 35% of domestic consumption, contrary to the law.

The potential resource of Ukraine forms industry development trends and identifies opportunities to strengthen their strategic prospects. From a position of economic security export opportunities create certain threats to the individual businesses effective development, which is manifested in the decrease of their yield and the economic interest reduction in the grain production. The strategy formation of grain farming development should be based on the food security needs of the country, to protect the producers' interests with a view to ensuring their economic security, as well as the need to consider the business development social component, especially large-scale business entities.

At the state level it is necessary to develop strategy of grain industry development, which will include the export grain strategy, a mandatory element should be economic security. This integrated approach will ensure the productive forces development, to improve competitiveness and will open further opportunities for the grain export as a raw resource, but will also enhance the investment attractiveness of the mining sector will increase the power export of grain products with increased added value.

The state support system reform with an emphasis on small farmers, the land reform completion and the state enterprises reform is declared as the main priorities in the "agrarian sector development strategy 3 + 5". Five main directions are the markets' development, organic production and niche crops, rural development, irrigation and food safety [Strategy of development of agrarian sector "3 +5"]. In terms of implementation increases the security importance, because access to foreign markets has not only advantages for national producers, but also facilitates entry into the country cheap, poor quality products, has the market due to low purchasing power of the population and demographic crisis. Thus, there

is a threatening situation the loss of competitive advantages, and that underscores the measures importance of security and counter negative phenomena.

The Ministry of economic development and trade of Ukraine has announced the grain export strategy development with the investment Fund Western NIS Enterprise Fund (WNISEF) support in the framework of the program: «Ukraine leadership Program, promoting exports, attracting investment and development» (ULEAD) [Bulge]. The Fund provides practical assistance in the methodological development and practical recommendations and consultancy services for the development and implementation of export promotion policy, in particular in the public-private partnerships field. It is noted that the existing potential are linked with the relevant challenges that in our opinion, emphasizes the need to focus development of the export grain strategy in the ensuring the economic security direction of producers and the industry as a whole.

The threats definition, hazards, risks rationale will contribute to the grain farming stabilization, because it stands as a tool to support export producers, especially middle management, which will form the development rural areas potential, thereby ensuring the social policy implementation in the village revival sphere by creating jobs, infrastructure development.

A key step in the development of such strategy, we consider a systematic approach to the its elements implementation formation. We must consider the current realities in the globalization of economic relations and especially transnational cooperation opportunities, including financial, grain products potential consumers, and the price changes dynamics, the fluctuations factors and market conditions in the world grain market.

The problematic issues for grain crops producers is also a land and its quality, which do not always correspond to the declared. Enterprises with land banks of over 100 thousand hectares are not always interested in preserving and improving the soils' quality, monoculture in their rotation is a danger from the point of view of cultivation agro technologies of ecological production that can be manifested in social dissatisfaction and which leads to unpredictable consequences. Such scenario, in our opinion, should also be considered in the list of dangers in the elements system formation for the realization of the grain export strategy.

To meet the domestic grain market challenges, as primary in determining the export policy priorities, include: the other countries initiatives interception for the entire chain from production to grain sale, accompanied by the deformation (through the state subsidies mechanisms) and competitive environment in the world grain market; the destabilization

of the internal pillars of Ukraine's food security, which will increasingly depend on the motives of economic expediency manufacturers and traders (companies, the foreign capital share which is constantly growing) to expand the supply to the foreign market and their ability to influence the price dynamics of food products in the domestic market [Dergaluk, 2010].

The export potential formation danger and grain production development should be considered as currency fluctuations, since the national currency depreciation is beneficial to exporters to sell grain and to get the profits that is diametrically opposite the situation in the strengthening of the hryvnia, so the General state of the economy correlates with the interests of large players on the grain market, leads to the economic security imbalance among the individual producers of the region.

The tax legislation imperfection, increasing tax burden has a particularly negative impact on small and medium enterprises, which in rising inflation conditions, appreciation of the resource component in grain production reduces profitability and threatens the downward trend in production.

Declaring increase in grain production and export in Ukraine is almost no effective system of exchange trade with grain. There is a separate practice of forward contracts, but futures contracts are extremely rare, that can be attributed to the economic security interests sphere, since the futures market is the insurance risk tool, in particular the hedging of commodity price risks.

Thus, Ukraine's grain export policy should be formed by taking into account the position of the producers' economic security, subject to consistency in the implementation of its elements which will help to define strategic guidelines for the industry development.

The economic interests sphere of the business entities entrepreneurial activities is located in plane search promising and business development profitable directions. The identifying and developing process such areas include monitoring of the market situation and capacity assessment. The risk assessment simultaneous carrying out and economic security formation will allow you to make informed management decisions that will allow you to react threats and to apply modern management methods to derive economic benefits.

CONCLUSIONS

One of the main industries that form a significant part of Ukraine's export is agrarian, therefore the potential and monitoring study of its threats and risks determine the development strategy directions. One of them consider the economic security priority of the

grain industry, as it affects the economic systems development with the control mechanism help and risk assessment.

Risk management and the tools use of economic security form the combating concept and preventing threats and hazards. The risks of imperfect resource provision, price fluctuations, competition, liquidity depend on political and economic decisions, and adverse climatic conditions, natural disasters, social conflicts, requires measures of economic safety in order to minimize them, is in active risk management.

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