

APPLICATION OF A SYSTEMATIC APPROACH FOR THE ANALYSIS OF THE ECONOMIC SECURITY OF ENTERPRISES IN THE AGRICULTURAL SECTOR OF UKRAINE

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Implementing measures to increase the economic security of strategically essential branches of the national economy is necessary to support the stability of regions and the national economy. Management at all levels should contribute to preventing the occurrence of critical externalities in the macroeconomic environment that can lead to negative consequences in the context of ensuring the country's socio-economic development. The fundamental nature of achieving a high level of long-term economic security is identifying key determinants capable of identifying and eliminating potential threats. It is essential to emphasize the need to support the country's food security and the conceptual provisions that must be reviewed concerning global processes such as food embargo, geopolitical confrontation, etc. Modern agriculture is in a difficult situation, and the economic condition of the entire agro-industrial complex requires the search for solutions to the problems of permanent development of each enterprise, considering the development of long-term economic security. Searching for ways to form more favorable ways of functioning is a strategic direction of economic policy at all levels of management. It requires several global measures to support agribusiness enterprises' current, medium-term, and long-term efficiency. Economic security of the agricultural sector as an economic category has a complex multi-level system structure: food; ecological safety; biological (resource); financial and credit; social; inventory management; social indicators; insurance provision; state regulation; agricultural cooperation; monitoring; agricultural information; agriculture and animal husbandry; cars; population employment; trade; wholesale food markets; scientific support. The system of full-fledged economic security of enterprises of the agrarian sector involves the development of its effective organizational and functional structure, which may include the scientific theory of economic security of the agrarian sector, the concept of food security, food policy, state, and public institutions that ensure economic security, organizational and economic mechanism, indicators and indicators of economic security, monitoring of the actual state of economic security of the agrarian sector.

Keywords: economic security, agrarian sector, structure, systemic approach, subsystem.

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STATEMENT OF THE PROBLEM IN GENERAL

The economic security of the agrarian sector as an economic category has a highly complex multi-level system structure. Therefore, as a methodology for studying a complex system concept of economic security of the agrarian sector, it is advisable to apply the theory of economic systems, which is based on the following methodological provisions: dependence of each element on its place and functions in the system, taking into account that the properties of the whole are not identical the sum of the properties of its constituents; conditionality of the behavior of the system by the properties of its structure and features of its elements; mechanism of interaction between the system and the environment; hierarchy of this system; comprehensive multidimensionality of its reflection, etc. To the features mentioned above of the system, it is expedient to add its dynamism, i.e., functioning in time, which ensures the purposeful nature of the processes that determine the overall development of the system.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

T.G. Vasylytsiv notes that the concept of "economic security" is complex and requires a systematic approach to its measurement, and therefore, the substantiation of connections and dependence on such integral economic categories as competitiveness, potential, viability, financial stability and risk tolerance of enterprise [1].

N. V. Prus defines the economic security of an enterprise as protection against economic crimes, as a state of protection from internal and external threats, and as a state of effective use of resources or potential [2].

V.M. Heyets believes that the economic security of an economic entity is a complex dynamic system that ensures the sustainable functioning and development of the enterprise through timely mobilization and the most rational use of labor, financial, technical, technological, and other resources of the enterprise in the face of external and internal threats. [3].

Zub G.I. says that economic security is a practical activity of the enterprise, a prerequisite for sustainable development. [4].

The need for a systematic substantiation of the category of economic security of enterprises in the agricultural sector is because, based on the content embedded in it, all components of a full-fledged security system of the agricultural sector should be formulated.

The article aims to carry out a systematic substantiation of the category of economic security of enterprises in the agricultural sector.

PRESENTATION OF THE PRIMARY MATERIAL OF THE RESEARCH

As studies have shown, the main components of the system should include:

- the economic sustainability of the agricultural sector, a stable system of food and raw materials supply based on a robust national agro-industrial complex, which can constantly provide the population with food and industry with raw materials at the required level, adequately responding to market conditions;
- the system of physical and economic accessibility of the required quantity and an assortment of food for different categories of the population, which is ensured by their solvency, which does not jeopardize or undermine the satisfaction of other basic needs;
- the system of protection of the domestic producer of agricultural goods from import dependence both in the form of food and in the form of resource provision.

Studies confirm that the system of full-fledged economic security of enterprises in the agricultural sector provides for the development of its effective organizational and functional structure, which may include a scientific theory of economic security of the agricultural sector, the concept of food security, food policy, state, and public institutions that ensure economic security, organizational and economic mechanism, indicators and indicators of economic security, monitoring of the actual state economic security of the agricultural sector.

In some cases, there are many systems. Among them, we will be interested in those related to the economic security of the agricultural sector. We attribute the following systems to the data: production; biological (resource); Social; management of the enterprise and territory; product quality management; social indicators; insurance coverage; state regulation; Monitoring; Machines; employment; trade and wholesale food markets; scientific support; formation and distribution of food and raw materials; Consumption; management and others [5].

Under the production system in the context of economic security, we propose to understand the type of organization of the production process carried out to produce specific products to ensure the required amount of food. It is the set of elements necessary for implementing the production process on the part of its organization.

The production system is the main element of the integrated system of economic security of the agricultural sector since the level of efficiency of the functioning of domestic agricultural producers directly depends on the level of efficiency of the agricultural sector and food self-sufficiency of specific territories. The higher this level, the less dependent the region is on imports and the more potent its economic security.

A biological system includes all elements associated with the natural environment in a particular relationship and interdependence [6,7].

In the case of agriculture, the natural environment includes its components, such as the land (soil cover) and its qualitative characteristics, the vegetation used for animal feed, and the animals themselves. The most influential elements of the biological (resource) system on the economic security of the agricultural sector are land, water, and forest resources, especially their quantitative and qualitative characteristics. They determine the natural environment of the animal and plant world, where man's productive activity is carried out, as the main element of the social system, which is simultaneously a part of the biological system. The better the qualitative characteristics of these resources, the higher the potential of the territory's food and raw material self-sufficiency, and the more reliably the entire system of economic security of the agricultural sector will function.

The social system of the village includes the totality of social infrastructure, labor resources, and labor reserves, which determine the potential for the reproduction of qualified personnel for agricultural production carried out through the system of professional education. In this system, the stability factor is essential: the stability of the functioning of all its named elements. Unfortunately, a significant decline in agricultural production, as the basis of the economic sustainability of agriculture, seriously undermined not only the social infrastructure of the village but also the entire process of reproduction of the necessary personnel. That is, the level of stability of a social system mainly depends on the state of the economic system. This is a manifestation of their constant interdependence since the stability of the economic and

production systems will be determined by the characteristics of the social system. With significant deviations from the normal development of this system, catastrophic processes are possible both in the economic system as a whole and in the production system. The lower the characteristics of the elements of the social system, the worse the production functions, the weaker the economy, and ultimately, the reliability of the economic security of the agricultural sector deteriorates.

The system of social indicators is a set of indicators that characterize the state of the social sphere trends in the standard of living of different population groups. The system of social indicators includes the following leading indicators: the dynamics of security, the number of unemployed, the dynamics of prices, the level and rate of inflation, the commodity supply of the monetary unit, real incomes, real wages, and others. This system is an addition to the social system, monitoring the level of its functioning.

It can be concluded that there are two systems, but at different levels: the management system of an agricultural enterprise and the system of management of the territory (district, region, region). It is the presence of an effective management structure in the system of economic security that will allow more qualified solutions for such tasks as determining the priorities for the development of elements of the integrated system of economic security of the agricultural sector, establishing rational proportions between the level of food and raw material self-sufficiency of the territory and the volume of food imports, control over the activities of the product quality management system. This system is essential in the integrated system of economic security of the agricultural sector since the level of protection of the territory's population from low-quality products will depend on the reliability of its functioning.

An essential component of a comprehensive system of economic security is the inventory management system. It is necessary not only to compensate for the possible underproduction of agricultural products in lean years and during natural disasters but also to regulate the situation on the market in case of its monopolization. If there are stocks of certain types of products, it is possible to bring down prices on the market based on interventional "emissions" of similar goods from the reserve. This system can be represented as a set of appropriate management structures, equipped with the necessary equipment, carrying out the process of control over market prices and responding in time to their increase, using interventional stocks of food and raw materials, as well as performing periodic renewal of stocks, the volume of which depends on their actual availability at the time of production of a new volume.

The system of insurance coverage is closely correlated with this system. This is a scientifically grounded system of indemnification in property insurance, which serves the ratio between the insured amount of insured property and the actual loss, i.e., the degree of indemnity. Since, due to possible misfortunes and instability of the economic policy of the authorities, the formation of food and raw material stocks may not meet the interests of rural commodity producers (which has already happened more than once), there is a need to introduce a system of insurance of these reserves.

Most of the systems mentioned above are closely related to the state regulation of the economic security of the agricultural sector. This is a broader system consisting of the above-mentioned other elements (financial, credit, and tax levers, the introduction of collateral, parity, target, marginal prices, direct support for rural producers, adjustment of import volumes, etc.), which allows influencing market spontaneous processes in order to maintain the necessary level of economic security of the agricultural sector. The elements of this system should also include appropriate management structures, the functions of which are established by the government. The more efficiently the system of state regulation works, the more rationally all elements of the complex system of economic security of the agricultural sector interact.

The next component of the agricultural sector's complex economic security system is the trade and wholesale markets. This system is a set of points (places) in a specific territory for carrying out operations for the sale of agricultural products, where the interests of sellers and buyers meet, and where this system of economic security of the agricultural sector is implemented. Rural commodity producers, with the appropriate support of the state, produce and sell a sufficient amount of products through the trade system for their further functioning. The population eats at the level of scientifically based norms. If the industries serving agriculture are satisfied, contractual relations with importers of food products are observed without restricting the interests of the domestic food market, and the necessary reserves for a specific territory are formed. It can be assumed that this system of economic security functions effectively [8,9].

A monitoring system is a set of appropriate services, methods, and techniques for monitoring the state of the food security system to introduce the necessary adjustments to the interaction process of its elements (systems). This system adds flexibility, predictability, viability, and high efficiency to the complex system of economic security of the agricultural sector [7].

Ensuring the effective functioning of the system of economic security of the agricultural sector directly depends on the stability of the subsystem of provision, structural changes in the agro-industrial

complex, investment policy, formation of the subsystem of material and technical support, improvement of tax legislation, organization of banking services, creation of inventories of material and technical means, effective system of insurance of crops and property of agricultural enterprises, scientific and information support.

Thus, we have investigated that the most important theoretical issue in the problem of economic security of the agricultural sector is the definition of the system in which the processes of ensuring security take place. The main factors influencing the trends in the formation of economic security in the agricultural sector are, firstly, at the macroeconomic level and, secondly, within the framework of the activities of the agricultural formation itself. Therefore, the structure should reflect the factors of the first and second levels.

We propose to base the study on the principle of systematization, that is, placing elements of economic security, carried out by the similarity of their inherent features, identified based on pre-established cause-and-effect relationships.

Since the system is a set of interrelated elements that form a single whole, each system can be an integral part of a higher-order system – a system of the formation of economic security in the agricultural sector. In the modern scientific literature, system research is understood as a set of scientific problems, which, with all their specificity and diversity, are similar in understanding and consideration of the objects under study from the point of view of systems acting as a single whole (control subsystem, target, functional, providing, external environment, production costs, production results, new market requirements, etc.) of a single system of problems under study.

Thus, the system of formation of economic security of the agrarian sector includes subsystems: providing, functional, targeting, controlling, and regulating.

The functional subsystem covers the production of raw materials, food and the formation and distribution of resources.

The target subsystem implements the primary goal of the economic security of the agricultural sector – sustainable development of the industry and consumption of food and raw materials.

The economic security of the agricultural sector is associated with the subsystems of financial, logistical, informational, personnel, and scientific support.

The system of indicators of economic security of the agricultural sector is a controlling subsystem in the economic security formation system. The management subsystem covers both market mechanisms for regulating the system and measures of public administration, which adjusts the action of market regulators following the state of economic security of the agricultural sector according to the indicators of the controlling subsystem.

A systems approach should have institutional features, encompassing the leading institutions of the agricultural sector – formal and informal rules, mechanisms that ensure their implementation, and norms of behavior that structure repetitive interactions between people. Within the institutionalism framework, the influence of informal rules on human economic behavior is most fully considered.

Input flows in the system of economic security of the agricultural sector are characterized by the direct use of natural resources: soil, living organisms (plants, animals, microorganisms), abiotic elements, etc. An important role is played by the structure of landscapes involved in agricultural cycles and meteorological and climatic conditions of agricultural production, which are initially decisive in forming the final effective activity in the agricultural sector.

Output flows in the system of economic security of enterprises of the agricultural sector are formed in the process of internal and external consumption of products of the complex at different stages and individual components of agricultural production. Flows are represented by products used both within the agricultural environment (intermediate consumption) and in areas related to the use of raw materials or determined directly by final consumption.

Balancing the input/output system is a complex task of algorithmic solving, which is implemented in evaluating the effectiveness and calculating the efficiency of agricultural production. The correlation between the volumes of "output" and "input" can be characterized by the coefficient of efficiency (COP) of systems – a kind of analog of the efficiency of a particular economic activity. At the same time, it should be borne in mind that a significant number of economic systems are endowed with feedback – the impact of the results of the system's functioning on the process of their development, which is especially important in the study of the interaction of individual variable units in the system of economic security of the agricultural sector in the context of stabilization of agricultural production [10].

A typology of structural components of the system of management of economic security of an agrarian enterprise has been developed by allocating its functional components and elements, namely environmental, resource, financial and credit, integration, monitoring, informational, production, technical

and technological, personnel, sales elements, as well as a component of scientific and innovative support, inventory management, insurance provision, state regulation (Fig. 2).

CONCLUSIONS

The Economic security of enterprises in the agricultural sector as an economic category has a highly complex multi-level system structure. It belongs to the class of economic systems, commonly called large and complex. To the economic security of enterprises of the agricultural sector as a system, we attributed the following components: food; environmental safety; biological (resource); financial and credit; social; inventory management and management; social indicators; insurance coverage; state regulation; agricultural cooperation; Monitoring; agricultural information; agriculture and animal husbandry; Machines; employment; Trade; wholesale food markets; scientific support, etc. This creates an idea of the structural and logical scheme of the relationship and mutual influence of the main elements of the system of economic security of agricultural enterprises.

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ЗАСТОСУВАННЯ СИСТЕМНОГО ПІДХОДУ ДЛЯ АНАЛІЗУ ЕКОНОМІЧНОЇ БЕЗПЕКИ ПІДПРИЄМСТВ АГРАРНОГО СЕКТОРА УКРАЇНИ

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Здійснення заходів щодо підвищення економічної безпеки стратегічно значущих галузей народного господарства є необхідним елементом підтримки стабільності регіонів та національної економіки загалом. Управління всіх рівнях має сприяти недопущенню настання критичних екстерналій у макроекономічному середовищі, здатних призвести до негативних наслідків у контексті забезпечення соціально-економічного розвитку країни. Принциповий характер досягнення високого рівня довгострокової економічної безпеки полягає у виявленні ключових детермінантів, здатних ідентифікувати та нівелювати потенційні загрози. Важливо наголосити на необхідності підтримки продовольчої безпеки країни, концептуальні положення якої потрібно переглядати у зв'язку з такими глобальними процесами, як: продовольче ембарго, геополітична конфронтація тощо. Сучасне сільське господарство перебуває у складному становищі, а економічний стан всього агропромислового комплексу зумовлює пошуки вирішення проблем перманентного розвитку кожного окремого підприємства з урахуванням розробки довгострокової економічної безпеки. Вишукування способів формування більш сприятливих способів функціонування є стратегічним напрямом економічної політики на всіх рівнях управління та вимагає формування низки глобальних заходів для підтримки поточної, середньострокової та довгострокової ефективності підприємств агробізнесу. Економічна безпека аграрного сектора як економічна категорія має складну багаторівневу системну структуру: продовольча; екологічна безпека; біологічна (ресурсна); фінансово-кредитна; соціальна; керування запасами; соціальних індикаторів; страхового забезпечення; державного регулювання; сільськогосподарської кооперації; моніторингу; сільськогосподарської інформації; землеробства і тваринництва; машин; зайнятості населення; торгівлі; оптових продовольчих ринків; наукового забезпечення. Система повноцінної економічної безпеки підприємств аграрного сектора передбачає розробку її ефективної організаційно-

функціональної структури, яка може включати наукову теорію економічної безпеки аграрного сектора, концепцію продовольчої безпеки, продовольчу політику, державні і суспільні інститути, що забезпечують економічну безпеку, організаційно-економічний механізм, показники і індикатори економічної безпеки, моніторинг фактичного стану економічної безпеки аграрного сектора.

Ключові слова: економічна безпека, аграрний сектор, структура, системний підхід, підсистема.