

Sustainable use of natural resources as a basis for food security and a green economy

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Abstract. The current state of Russia's food security is analyzed, the main assessment criteria of its level are determined, and strategic objectives to increase the level of food security in accordance with each assessment criterion are substantiated. Effective ways to improve the level of food security are proposed, taking into account current trends in the development of the country's food market. The influence of increasing the efficiency of the functioning of the agro-food sector on the state of food security of the state is determined. The algorithm of formation and implementation of food security policy is investigated. The article examines the problem of food security from an economic point of view, as well as the need for its development. The assessment of the state of development of the country's food security system is given, with the definition of the main problems at the macro and meso levels.

1 Introduction

The system of state regulation of agricultural development combines a number of conditions (factors), each of which affects the effectiveness of management to one degree or another, ensures the effectiveness of production. In general terms, they represent a complex of organizational, economic, scientific, technical, social and political conditions for the functioning of productive forces and industrial relations. Interacting with each other, they determine the level of production efficiency in the agro-industrial complex as a whole, in sectoral product subcomplexes, individual business structures and industries.

One of the main directions of Russia's state policy is to address issues in the field of food security, the solution of which reveals the processes of activity of both representatives of the agricultural sector and the economy as a whole, political independence and stability, the ability of the state to meet one of the urgent needs of its citizens - the need for food.

Providing the population with food of adequate quality and in sufficient quantity contributes to a high level of physical and mental activity, maintaining human health at an appropriate level and reducing social tension in society.

Russia can be classified as a state in which administrative-territorial units (regions) have their own characteristics and differences in development due to different socio-economic

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and historical conditions of their existence. The regions of Russia have both positive and negative phenomena and trends in ensuring their own food security.

This leads to significant discrepancies in the levels of their food security. The efforts of state and regional authorities in Russia should be aimed at reducing these discrepancies and ensuring a high level of quality of life for the population of different regions.

A number of scientific works by foreign and domestic scientists are devoted to theoretical and practical issues of food security, including: I. V. Andronova [2], I.A. Boldyreva [3], K.F. Davis [4], A.G. Miftakhov [6], E.V. Prudius [8], M.R. Vakhitova [10] and others.

However, despite the significant amount of work on this problem, additional research and development of ways and tools aimed at improving the country's food security and ensuring it at a high level are required.

2 Materials and Methods

The study used statistical and financial data characterizing the level of development of the country's economic security, using elements of analysis, comparison and evaluation [11].

From a methodological point of view, the criterion for identifying certain contradictions in the economic sphere may be an approach in which, in case of a discrepancy between certain interests, there are contradictions. Taking this into account, the objectively existing main contradictions in the economic sphere within the framework of the implementation of Food Security Programs are the following:

- between the objective need to meet the growing needs of people and the economic opportunities of the country's economic system;
- between the needs of the economy in various resources necessary for its effective functioning and the possibilities of providing them;
- between the needs of the economy for an effective economic mechanism based on the principles of a market economy, as well as the completeness and pace of its creation;
- between the needs of the economic system in the structure of public administration and regulation, the consistency and effectiveness of its functioning;
- between national and regional interests in the economic sphere;
- between national economic interests and the economic interests of the primary units of the national economy;
- between national interests in the economic sphere and international economic interests and the economic interests of other countries.

3 Results

Based on the methods and methodology outlined, national economic interests should be understood as a set of objective economic needs of a sovereign country, the satisfaction of which ensures the effective functioning and sustainable development of its economic system and the economy as a whole.

In the field of food security, economic interests are an objective expression of the functioning of the economic component of the security of the state, its regions and agricultural enterprises. They act as a leading component of the systemic totality of national interests, based on the fact that the economic sphere is the basic one in any country.

Thus, the protection of national economic interests is the most important function of the economic security system.

The food security of every country in the world consists of three components:

- accessibility of food for all segments of the population;

- availability of sufficient resources to grow food;
- the level of development of technologies for processing food raw materials.

Food security is becoming one of the main elements of the national security of the state, ensuring its autonomy and independence from neighboring countries.

The problem of food security in Russia does not lose its relevance, since the economic development of a country or a particular region is determined primarily by the level of food security. Nevertheless, it should be noted that ensuring the food security of a country or region cannot be excluded from ecological and economic interaction in agricultural production. The state of providing the population with high-quality food depends on the ecological situation in agricultural production.

A necessary condition for the formation of a competitive domestic economy is to guarantee the food security of the state, which, in turn, is impossible without a proper institutional framework for sustainable development of the agricultural sector and state agrarian policy. A state with a highly efficient agrarian economy and a food supply system has the necessary prerequisites for the formation of food independence and export potential. At the same time, the strategic priorities of the state should be aimed at ensuring the food security of the population in the face of global challenges and threats.

Thus, the most acute problems that hinder the formation of a food security strategy are the imperfection of the institutional framework, which does not allow the full realization of the potential of the state in the field of food security. Simultaneously with the incompleteness the interaction of institutions and institutions, financial, information, legal support, obstacles arise to the development of the agricultural sector of the economy and certain branches of agriculture, the implementation of state agrarian policy, technical and technological modernization of the agricultural sector, its reorientation to the investment and innovative foundations of development [12].

Therefore, a full-fledged set of food products is necessary for human life, which ensures its development, health, quality of life, efficiency, creativity, and active longevity.

4 Discussion

Ensuring food security of the state requires an appropriate institutional framework that allows creating the necessary mechanisms and tools of state agrarian policy, as well as forming a food security strategy that requires consistency between participants in the food security system and coordination of their actions in the implementation of practical measures with clear requirements. mechanisms of their implementation and sources of financing.

American scientist D. North defines institutions as "... rules of the game created by society", or formal and informal restrictions, norms unrelated to individuals and organizations [3].

According to I.V. Andronova [2], rules are necessary in order to be observed, and organizations are the result of fixing rules to achieve a goal, that is, the formation of an institution. An organization cannot be identified with an institution. Institutions (principles, rules, traditions, mentality) in the market mechanism of social development take the form of institutions (competition, law, property, organization, department, etc.). An organization is a mechanism of interaction, a link between an institution and an institution of an institutional structure.

In this case, it is advisable to define the institute of food security as a structure created by society, the individual and the state, in the form of an organizational and economic system, a mechanism and a set of tools that ensure the formation of a food security mechanism. The institute of food security should be understood as state and market-based sustainable "rules of conduct and regulation" that create conditions, establish areas of

interaction, develop relations between subjects (institutions) of food security and create conditions for effective interaction, coordination and monitoring in the process of implementing a food security strategy.

The system of institutions that ensure the functioning of the food security mechanism contains the following main elements:

- the Institute of Market mechanisms and market pricing, which covers the processes of price formation for agricultural products and food in the domestic and foreign markets based on supply and demand;
- the Institute of Technical Regulation, Certification, Product Safety and Quality makes it possible to form a system of basic requirements, measures and tools in the field of food quality and safety, regulation of agricultural market operators, inspection measures, regulatory tools for import, export and re-export;
- the Institute of Commodity and Financial Interventions "Food Reserve" deals with issues of price regulation, planning and use of strategic state reserves of food and agricultural products;
- the Institute of State Agrarian Policy and Measures to Support Producers is engaged in the creation and implementation of an effective system of mechanisms, measures and tools for state support of producers through financing, customs and tariff regulation, development of agricultural sectors and price regulation;
- the Institute of Agricultural and Food market infrastructure allows you to create and maintain the functioning of the logistics system and market infrastructure, mechanisms for regulating the activities of market intermediaries and others;

Self-sufficiency plays a special role in food security, which means that the existing level of development of the domestic agro-industrial complex allows meeting the needs of the population in food products mainly through its own production. The concepts of food independence and self-sufficiency are somewhat similar, but they cannot be identified. Food independence means a state of the national economy in which the state provides the population with the necessary amount of food, regardless of external conditions (reduction of imports, increase in the cost of imported goods, etc.). Accessibility means the opportunity to purchase food in the required quantity. Physical accessibility means the availability of food products in the required quantity and assortment in the retail network. Economic accessibility means that all segments of the population have sufficient funds to purchase food. Quality means the consumption of safe and high-quality food by the population [3].

Traditionally, the following levels are distinguished in food security studies [6]:

1. The global level. Achieving food security at the global level means that the world as a whole produces enough food to meet the food needs of the world's population.
2. National level. Food security of the state is achieved when all segments of the population are stably provided with food in the amount of physiological norms due to their own production and the necessary imports of those food products for the production of which there are no internal conditions.
3. Regional level. The food security of a region can be defined as a state of security and physical security that guarantees human survival through its own (regional) food production.
4. Household level. Household food security means ensuring that every person has physical and economic access to safe and high-quality food at any given time.

Each of these levels of food security has its own specific features of formation and functioning.

Speaking about Russia's food security, it is worth noting that the presence of territorial differences of a natural, climatic and socio-economic nature in the country necessitates consideration of food security at both the federal and regional levels.

The food security of the region is formed and operates on the basis of the same objective laws as food security at the federal and global levels [8]. At the same time, food security at the regional level has certain features, namely:

- unlike at the federal level, there are no issues in maintaining strategic food reserves at the proper level in the region;
- the need to achieve self-sufficiency in food in order to guarantee food independence for the regional level, unlike at the federal level, is losing its urgency;
- In order to protect food security as a component of national security, the state uses a number of means that are unacceptable to the regions (customs duties, excise taxes, embargoes, etc.) [9].

Schematically, the implementation of state policy in the field of formation and management of food security can be represented as follows (Fig. 1).

Perhaps the only work in which food security was assessed in a regional context is [5], in which the author proposed to determine the level of food security in the region as an integral indicator calculated on the basis of 4 main indicators of food security: the index of sufficiency of consumption, the index of development of the agricultural sector, the index of food independence and the index of economic accessibility of food. The advantage of this technique is that it allows not only to conduct a study of the level of food security in the region, but also to compare regions with each other by the value of the resulting integral indicator.

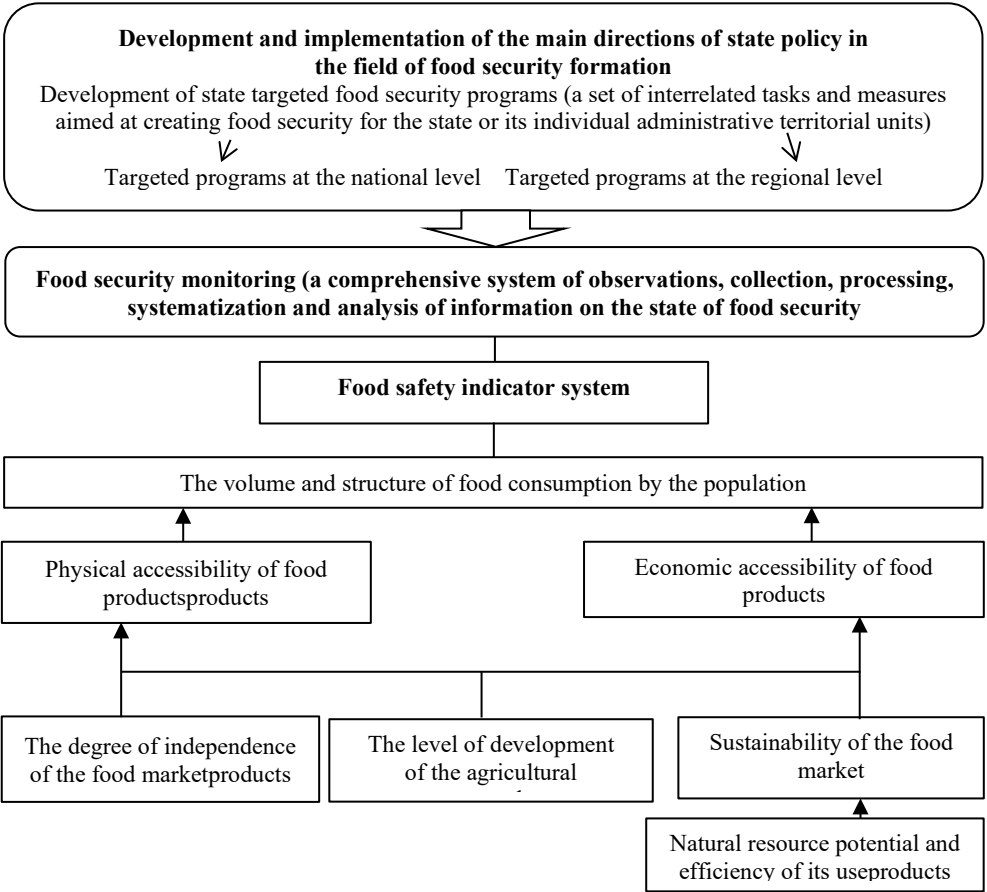


Fig. 1. Fundamentals of state policy in the field of food security formation

In addition, not only the meso-level plays an important role in addressing food security issues. In particular, the micro-level, namely business entities working in the agricultural sector, play a special role in solving the problems of food security of the country. However, the analysis conducted within the framework of this study shows that the financial security of business entities plays a special role in solving a number of problems. Therefore, the subjects of this system should be those persons, departments and services that are directly involved in ensuring financial security by analyzing and monitoring its condition, promptly responding to changes in the situation, preparing documents for decision-making on certain financial problems, as well as monitoring their solution. The level of financial security of an agricultural enterprise depends on how effectively its management, services and individual specialists are able to identify and prevent possible threats in advance, eliminate the negative impact of certain components of the external and internal environment.

The functioning of the financial security system of an economic entity occurs through the implementation of certain actions on its objects, which include sources and volumes of financial resources, the structure of assets and capital, profits, cash flows, investments, financial risks, financial innovations, financial information, property and non-property rights, etc.

Thus, based on the specifics and size of enterprises, the nature of the subjects depends on the specific objects of financial security, since the functions of ensuring it can be assigned to both certain structural units and individual employees.

However, the most important in the structure of the overall system, in our opinion, is the financial security management subsystem, which provides for the implementation of financial diagnostics, the use of financial levers and methods to ensure financial security, as well as financial analysis and control.

Each economic method corresponds to certain economic levers (prices, credit rates, exchange rate, tax rates, working capital adequacy ratio, and others). In addition, it is necessary to identify the following levers of managerial influence as incentives and incentives for employees to make effective management decisions, as well as fines and other sanctions for the negative consequences of their actions in the field of financial security.

Therefore, each business entity in the process of forming its own financial security system should compile a list of possible financial methods and levers both for managing financial security in conditions of stability and for managing it in conditions of crisis and financial uncertainty.

5 Conclusion

Thus, the formation of food security takes place taking into account economic interests and when creating an economic mechanism that stimulates the development of the agro-food sector. The increase in its productivity due to domestic raw materials will allow us to obtain a three-pronged solution to the problem of food security.

First, the availability of food will increase.

Secondly, there will be an increase in gross physical domestic product and gross regional product, ensuring an increase in the filling capacity of the respective budgets and, accordingly, the possibility of implementing social programs that increase the level of economic accessibility of food. The latter can also grow due to lower prices for food products that have low price elasticity of demand, provided that new production technologies are introduced and prices for resources consumed in the industry are stable. At the same time, there will be a reduction in the level of differentiation in food consumption between individual social groups of the population, since low-income categories of the

population spend a larger share of income on food than groups with medium and high incomes.

Thirdly, there will be opportunities to increase the competitiveness of the agri-food sector, which will ensure an increase in revenue, including export.

Consequently, the agri-food sector can become a basic prerequisite for the broader development of the entire economy and the formation of the highest level of food security.

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