

# New Approaches to the Formation of the Food System in Modern Conditions

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## Abstract

The main purpose of the article is to analyze the main approaches to the formation of the food system in modern conditions. The constant growth of the population, the increase in the level of use of natural resources against the background of a decrease in their reserves causes a number of risks for the food security of both a person and the country as a whole. The problem of the formation of food security has always remained at the center of scientific interests of both domestic and foreign researchers. In the context of globalization, this issue is considered as one of the key global problems in the system. Theoretical and methodological basis of a systematic approach to the study of fundamental provisions of economic science regarding the formation of the food system. Based on the results of the study, the main approaches to the formation of the food system in modern conditions were characterized. The study has limitations associated with the lack of the ability to analyze the food system on the practical activities of a single socio-economic system.

### Keywords:

*Food system, food security, system of reforms, factors of food system functioning, food resources, sustainable development.*

## 1. Introduction

The food system is an important component of the socio-economic policy of the state from the standpoint of local and global dimensions, because, along with the undeniable mission of ensuring national sovereignty, it determines its status in the international agro-food arena. Such an important and at the same time multi-vector context of the formation of the food system presupposes, firstly, systematic steps towards the development and adoption of managerial decisions in the field of active search for opportunities to increase the potential of food security for social growth; secondly, it stimulates the need for systemic monitoring of the level of food self-sufficiency and constant identification of consumer needs of the population in

affordable, high-quality, ecological food products; thirdly, it necessitates the development of indicators for assessing the level of food security in the context of the formation of their separate groups in accordance with the imperatives of the strategic development of the food security sphere. Consequently, the substantiation and improvement of theoretical and methodological foundations and the development of practical recommendations for the formation of the food system acquire a fundamentally new relevance in the current conditions of the internationalization of the world market and the strengthening of the openness of the national economy. The main purpose of the article is to analyze the main approaches to the formation of the food system in modern conditions.

The structure of the article provides for a description of the research methodology, the presentation of the main results of the analysis and the conclusions drawn.

## 2. Methodology

The theoretical and methodological basis of the study is a systematic approach to the study of the fundamental provisions of economic science regarding the formation of the food system. In the process of studying the problems of the food system, a number of general scientific and special research methods were used.

## 3. Research Results and Discussions

Rapid changes and often unpredictable institutional and socio-economic fluctuations in the market business environment, as well as the

intensification of globalization shifts in economic systems, require timely management decisions at the national level in terms of developing appropriate strategies, programs, plans for the formation of the country's food security.

At the national (state) level, the problems of food production by their main types are solved, balancing supply and demand in the food market, as well as continuous monitoring of the state of the food system in the country as a whole - an integrated system for monitoring, collecting, processing, summarizing and analyzing indicators of the level . and patterns of consumption by the population of food products, their economic affordability, the sufficiency of public food resources and food independence. It should be noted that the subjects of ensuring food security of this level are the government and legislative and executive authorities through the development of a legislative, regulatory and resource base to ensure the food system, the establishment of various funds and their reserves, and the stabilization of socio-economic development [1-3]. The object of the global level of food security is world food security. It is this level that is the platform for solving the problems of world hunger, malnutrition, poverty and the poor quality of life on the planet.

The food system is proposed to be understood as a complex of socio-economic, organizational, legal, scientific and innovative, informational, environmental and other measures aimed at protecting the vital interests of a person, society, region and state in terms of the possibility of physical, economic and social accessibility, security and food quality, stability of food security and food sovereignty. In our opinion, the systemic nature of the formation of food security implies the configuration of the principles for building an integral food supply system and competent management support for this process.

Modern threats caused by the uncertainty of the environment, problems in government regulation, limited investment resources, low technical and technological security of the food production process, at the present stage are multiplexed, combined with the risks associated with transboundary processes, an increase in the likelihood of epidemiological situations when microorganisms can become carried by plant or animal organisms.

At the same time, as already noted, the current regulatory legal acts in the field of food security do not yet fully meet the tasks and challenges of sustainable development, are framework, contain declarative provisions, are not without legal conflicts, do not have specific implementation mechanisms, and therefore, they do not directly address the issue of ensuring the food system of the state, establishing only certain program areas and guidelines. Weak positions are over-theorizing, lawyers' passion for distorting the categorical apparatus, inconsistency, fragmentation of the normative fixing of choice and the use of regulatory levers from the entire arsenal of measures tested by world practice, the lack of approved markers for achieving specific results, as well as real sanctions [4-6].

The analysis of the food system involves: a) the definition of indicators that quantify the processes and phenomena that form it; b) determination of standards (standard values) of these characteristics; c) calculation of food security indicators that reflect the discrepancy between the actual and desired values of safety indicators.

The main problems of ensuring food security are presented in Figure 1.



Fig.1. The main problems of ensuring food security

The result of a quantitative assessment of food security are integral coefficients that aggregate the value of particular indicators into synthetic coefficients of food security.

To form an integral system of characteristics of food safety, it is advisable to distribute them depending on their role in the formation of safety. Taking into account the methodology of structural modeling, the process of formation of food security can be represented as a step-by-step transformation of input parameters (signals) into initial results. The input signals are the resource potential of the country (region). The output signals are directly the level of food security, which in quantitative terms takes the form of its indicators. The processes during which security is formed (the transformation of inputs into outputs) should include: a) the production of food products (includes the production of agricultural products, their processing); b) the distribution of available food (distribution between regions, the formation of conjuncture in domestic food markets); c) food consumption.

Among the factors of direct impact, it is necessary to take into account the efficiency of agricultural (primarily agricultural) producers. In quantitative terms, most of the direct action factors take the form of indicators of food security.

The basis for the effective provision of the country's food security is continuous monitoring, which should be based on an assessment methodology that takes into account all quantitative and qualitative aspects of security. Based on the results of such an assessment, it is important not only to determine the current state and problems of ensuring food security, but also to identify current trends and calculate prospective changes in its key indicators. In the context of this study, the consistency of food security assessment is proposed to be considered from two perspectives: firstly, it is important to use a system of complementary indicators; secondly, the food security of the country is formed by the degree of security of its components in the regional context. That is why the assessment and analysis of the level of food security should be

carried out both at the macro level (general state level) and at the meso level (at the level of administrative regions). In the developed assessment methodology, it is proposed to take into account four types of indicators and indicators of food security: resource potential, food production, distribution and consumption of food products.

The formation of a strategy for ensuring the country's food security should be based on a thorough analysis of the security of its administrative-territorial units. The results of this analysis will serve as a basis for identifying regions that produce more food than they need and regions that require food purchases from outside. It is important that such an analysis reflects a holistic picture of the level of self-sufficiency of the administrative regions of the country, and its results are presented in the most understandable form.

In recent decades, the world has begun to pay closer attention to food policy and food security as components of the national economic policy of the state. It can be argued that the strategic goal of the development of food policy, which is still in its infancy, is to improve the standard of living of the population, to raise to a new qualitative level the entire complex of socio-economic factors that ensure the process of life and the well-being of members of society. Given this, there is an objective need to analyze current trends that take place in the development of the domestic food market, as one of the most significant segments of the national

economy. Today, it is he who determines the relations that are formed in the process of production, exchange and consumption of goods and services [7-10].

Today it can already be stated that the food market is a system of socio-economic relations between its subjects (producers, intermediaries, consumers), which is formed and develops in the process of the exchange of goods and services mediated by the monetary form, designed to meet the personal needs and interests of consumers, aimed at ensuring the integrity and continuity of the process of social reproduction, in particular human capital. Given its social role and place in the life support of the population, the food market can be considered a subsystem of the country's socio-economic system with its inherent features and functioning tasks.

Consistent food policy is an important factor in the effective development of the market, which provides an impact on the daily life of the population, contributes to the improvement of consumer welfare and creates a favorable business environment for conscientious producers of goods and services. The main task of public authorities is to continue the process of turning any country into a rich European state, the priority of which is to create high living standards for the population [11-15].

The key elements for improving the food system are shown in Figure 2.

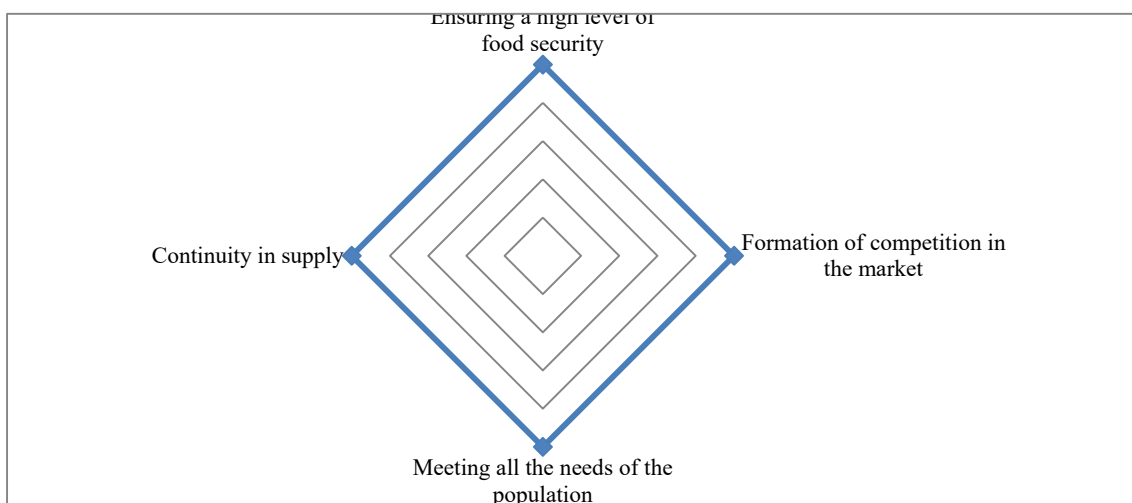


Fig.2. The key elements for improving the food system

It can be stated that the problems of food policy in the context of stabilizing the national economy depend on the state of domestic production that can provide the consumer market; import of food products, including goods that can be produced in the country and goods that cannot be produced in the country; the level of development of the processing industry; the ability of the population of different regions to buy goods that are inextricably linked with the saturation of the consumer market and the level of income of the population. Therefore, the prerequisites for its formation at the present stage is the development of theoretical and conceptual foundations for the institutional support of this process in accordance with socio-economic realities and taking into account European experience. Achieving economic and social balance of national and regional food markets is the ultimate goal of macroeconomic regulation of the agrosystem and a condition for ensuring food security. One of the essential elements of food security should be an increase in the share of producers' income in the price of products and the availability of food.

#### 4. Conclusions

Summing up, it should be noted that the food system assumes that citizens will have constant and stable physical and economic access to quality food in adequate quantities, despite the occurrence of economic, environmental, climate or political crises in the country. In recent years, characterized by a change in climatic conditions in the world. A drier climate changes crop growing conditions, worsens yields and increases costs.

Drawing conclusions, it can be noted that the mechanism for the formation of the food system in modern conditions of economic transformation should be based on the principles of ensuring the physical and economic availability of food, self-sufficiency, quality and safety, adequacy, priority and stability. To implement these principles, it is necessary to ensure an increase in the production of agricultural products and food products in accordance with the food needs of the population, to provide state support for domestic agricultural producers, to stimulate the development of animal husbandry in agricultural enterprises and households,

to promote the formation of an infrastructure system for the agro-food complex, to provide social protection for low-income citizens, to ensure the growth of incomes of the population to increase the economic accessibility of food.

Based on the results of the study, the main approaches to the formation of the food system in modern conditions were characterized. The study has limitations associated with the lack of the ability to analyze the food system on the practical activities of a single socio-economic system.

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