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State management of agro-industrial complex in the context of food security

The article deals with the problem of food security from the point of view of economic security, as well as the need for its development. An assessment is made of the state of development of the agricultural sector in Ukraine, the level of production of certain types of products, the definition of the country's food security at the macroeconomic and microeconomic levels. The components and principles of the formation of food security are considered. The main dimensions of food security have been identified. The national peculiarities of food security and threats to its impact are considered. It was established that the process of formation and implementation of the agrarian policy of food security provides that the food market should be based on its own production, should be its financial availability and finally increase the purchasing power of the population.

Keywords: *agri-food complex, food security, gross domestic product, agricultural products, profitability, global ranking, global food safety index.*

The aggravation of price disproportions between industry and agriculture, the rejection of reasonable protectionism against domestic producers and the almost complete opening of the domestic market for food imports - all this undermines the basis for the country's food self-sufficiency. But this does not mean holding a course for the complete isolation of the country from the world market. World practice has

developed a number of important and reliable approaches to solving this problem, among them - flexible and effective protection of domestic producers, regulation of ratios that allow all food imports to be covered also with food exports, the production of which is more efficient.

Now there is a real threat of loss of food independence of the country, if the danger is not timely realized and radical measures to prevent it will not be taken.

The issue of food security is devoted to a fairly large number of works by both domestic and foreign economists, namely V. Andreychuk, V. Boyko, P. Gaidutsky, B. Kvasnyuk, J. Luzan, V. Mesel-Veselyak, A. Mogilny, A. Stelmashchuk, P. Sabluk, C. Maistro and others. In their writings, they investigated the theoretical aspects of food security, its structure, assessment methods. However, a number of questions about mechanisms to improve food security remain unresolved: they require additional research and development.

The purpose of the work is to analyze the peculiarities of the state management of the agro-industry sector and to substantiate the main mechanisms for strengthening the country's food security.

Food in human life, and if we talk on a global scale - of humanity, play a special role. Experts believe that even during the lifetime of the current generation, the food problem could escalate into a deep international crisis.

Today, more than half of the population lives below the poverty line. The position of Ukraine is not only difficult, but also dangerous. In the course of reforms, agriculture suffered a blow that was comparable in results to a nuclear war. Especially suffered the basis of all agriculture - the land. Soil fertility is lost, does not receive fertilizers. A large part of the livestock of cattle, pigs and almost all sheep was cut (Table 1). Up to 40 percent of certain types of food are imported from abroad. That is, it is an indicator that we are already on the verge of losing food security [2].

Such a disappointing situation is explained by the fact that the total production of crop production in physical accounting increased (grains by 20%, sunflower 5.4

times), and livestock products - on the contrary, decreased by 2-3 times against the 1990 level (Table 1).

Table 1

Production of basic types of agricultural products, thousand tons [7]

Types of products	Year						
	1990	2000	2010	2014	2015	2016	2017
Cereals and legumes	51009,0	24459,0	39270,9	63859,3	60125,8	66088,0	61916,7
Sugar beets	44262,5	13198,8	13749,2	15734,1	10330,8	14011,3	14881,6
Sunflower	2570,8	3457,4	6771,5	10133,8	11181,1	13626,9	12235,5
Potato	16732	19832,1	18704,8	23693,4	20839,3	21750,3	22208,2
Vegetables	6666,4	5821,3	8122,4	9637,7	9214,0	9414,5	9286,3
Fruits and berries	2901,7	1452,6	1746,5	1999,1	2152,8	2007,3	2048,0
Livestock	24623,4	9423,7	4494,4	3884,0	3750,3	3682,3	3530,8
Pig	19426,9	7652,3	7960,2	7350,7	7079,0	6669,1	6109,9
Milk	24508,3	12657,9	11248,5	11132,8	10615,4	10381,5	10280,5
Meat of all kinds	4357,8	1662,8	2059,0	2359,6	2322,6	2323,6	2318,2
Eggs, mil. pounds	16286,7	8808,6	17052,3	19587,3	16782,9	15100,4	15505,8

The agrarian sector is an important component of the Ukrainian economy, from which the functional state of direct dependence is food security and state independence, the development of domestic and foreign markets, and hence the standard of living of the population. According to calculations, in 2017, the share of agriculture (along with hunting and forestry) in the total gross domestic product of all sectors of the economy amounted to 10.2% (Table 2).

According to Ukrainian statistics, the absolute value of the gross domestic product (nominal GDP) actually produced in Ukraine in 2017 amounted to 2982.9 billion UAH, which is 3 times higher than in 2010, 2.6 times in 2013. However, real GDP, given in dollar terms, after 2013 catastrophically decreases: in 2015 and in 2016, in 2 times, in 2017 by 49,1% relative to 2013.

Table 2

Gross domestic product (GDP) of Ukraine by types of economic activity (in actual prices, mln. UAH) [7]

Indicators	2010 г.	2013 г.	2014 г.	2015 г.	2016 г.	2017 г.
Agriculture	82948	132354	161145	239806	277197	305194
Industry	250774	303086	325242	393142	497949	647317
Building	36648	38450	36876	38928	49871	68152
Trade	162171	222789	233702	273989	331832	421368
Hotel Activities	10105	11540	9927	11946	13849	18130
Transport activity	87269	110085	100889	134978	156333	190229
Other activities	362260	518060	514938	596598	693408	1332530
Total	992175	1336364	1382719	1689387	2020439	2982920
Dollar exchange rate, UAH [1]	7,9	8	11,9	21,8	25,5	26,6
GDP, million USD	125591	167045	116194	77494	79233	112139

The profitability of agricultural production in Ukraine remains low, especially livestock. So in 1990 Ukrainian agriculture was profitable with a profitability level of 42.6%. After a series of reforms in 2000, agriculture became unprofitable with a profitability level of 1.0%, with livestock farming being the most unprofitable (-33.8%) and crop growing profitable (+ 30.8%). In 2017, agriculture as a whole became profitable, with a profitability level of 30.5%, crop production 36.1%, livestock production 12.3%, but production of cattle meat (-24.5%), pork (-4.5%) remains unprofitable) wool (-74.7%) and eggs (0.5%) [5].

Food security of Ukraine is one of the main directions of ensuring the national security of the country in the medium term, a factor in maintaining its statehood and sovereignty, an essential component of demographic policy, a necessary condition for the implementation of strategic national priority - improving the quality of life of Russian citizens by guaranteeing high standards of livelihood.

The long-term national interests of the state consist in enhancing the competitiveness of the national economy, turning Ukraine into a world power, whose activities are aimed at supporting strategic stability and mutually beneficial partnerships in a multipolar world.

The strategic goal of food security is to provide the population of the country with safe agricultural products, fish products and food. The guarantee of its achievement is the stability of domestic production, as well as the availability of the necessary reserves and reserves.

The main tasks of ensuring food security regardless of changes in external and internal conditions are:

- timely forecasting, detection and prevention of internal and external threats to food security, minimization of their negative consequences due to the constant readiness of the system of providing citizens with food products, the formation of strategic stocks of food products;

- Sustainable development of domestic production of food and raw materials, sufficient for ensuring food independence of the country;

- achievement and support of physical and economic accessibility for each national of the country of safe food products in volumes and assortments that meet established rational standards for the consumption of food products necessary for an active and healthy lifestyle;

- food safety [4].

Food independence of Ukraine is a sustainable domestic food production in the amount of not less than the established threshold values of its share in the commodity resources of the domestic market of the relevant products.

Based on the requirements of food independence, the main sources of food are products of agriculture, forestry, fish, hunting and food industry. The decisive role in ensuring food security is played by agriculture, fisheries and the food industry.

Strengthening and developing cooperation with international and regional organizations, establishing mechanisms for intergovernmental dialogues and developing relations with leading countries of all regions of the world on food security in accordance with the Ukrainian Foreign Policy Concept are in line with the country's foreign policy and economic interests.

A system is stable if it is self-extinguishing. In order to achieve food security at the level of self-sufficiency in the state, it must be based on its own production. Food self-sufficiency provides for the satisfaction of the main part of the food needs at the expense of domestic production, which predetermines the independence of the state in meeting the needs of the population. Therefore, the backbone center in ensuring food security is the agro-food complex of the country with which the system-related subsystems: sales and distribution; food reserves; food consumption: management; personnel, information and advisory support; financial security; logistics; scientific support and the like. [eight]

The system of national food security is based on the following principles: self-sufficiency, independence, accessibility, quality. These characteristics should be taken into account when shaping the state policy on food security, and should also provide such directions: effective development of the agro-industrial complex, foreign economic activity in the field of the agro-industrial sector, generation of incomes of the population, ensuring balanced and high-quality consumption (Fig. 1).

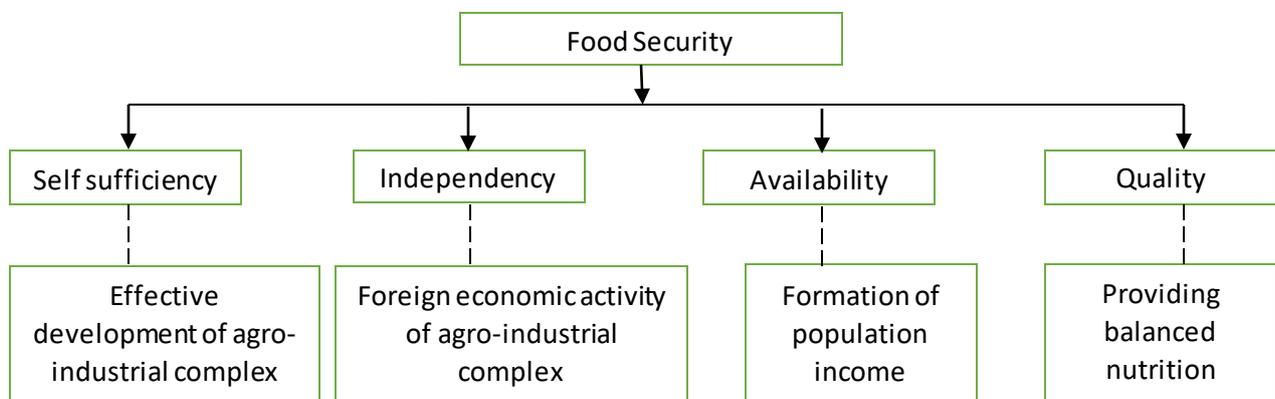


Fig. 1. Structure of food security

Determining the essence of food security is always associated with ensuring the life of a person, which is characterized by the state of his health. Therefore, a real understanding of the real food situation in the country can be obtained by comparing existing consumption with the levels of consumption presented in the classification, based on the principle of food supply compliance with the objectives of increasing fertility, maintaining health, active livelihoods of the person and achieving the maximum possible in modern conditions, average life expectancy [6].

In 2012, the Economist Research Unit proposed the Global Food Security Index, which, to the previous year, consisted of three common indicators: quality and safety, financial availability and physical availability. Last year added the fourth indicator - natural resources and sustainability. Such a change in the methodology of counting is due to the fact that in 2017 for the first time in five years there was a deterioration of world food security. In addition to traditional risks, problems with global warming and unfavorable weather conditions play an increasingly important role. And the withdrawal of the United States from the Paris Agreement has further aggravated the negative expectations regarding climate change. In addition, there has recently been a significant increase in global political instability. Therefore, starting from 2017, it was decided to consider the fourth indicator - the influence of natural factors.

Given the natural resources of the three leaders, it looks like: Ireland, Austria, France. These countries have good weather conditions, their products are financially and physically accessible, quality and safe. All three countries have a high standard of living, giving the population the opportunity to consume high quality and, most importantly, diverse food products. In addition, they have fairly high standards of food safety. Local producers, thanks to powerful government support and access to cheap loans, have the opportunity to provide not only domestic market needs but also to supply their own goods abroad. [9]

Among the greatest advantages that our state has are a relatively small percentage of people below the global poverty level, food safety, low food loss,

moderate import tariffs on agricultural products, production volatility and availability of food safety programs. Despite this, Ukraine ranks 63rd in the ranking of countries in food safety.

Serious challenges to food security in the country included high levels of corruption, gross domestic product per capita, insufficient funding for research and the latest developments in the agricultural sector, and risks of political instability. Also, unlike the developed countries of the world, Ukrainian agricultural producers have problems with access to cheap loans.

In accordance with the “Methodology for determining the main indicators of food security”, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1379 dated 12/05/2007. rational (normative), which is used for socio-economic calculations, and the minimum necessary - to guarantee the population in ychaynyh situations [3].

Ensuring the effective functioning of the food safety system is directly dependent on: the sustainability of the provisioning subsystem; structural changes in the AIC; investment policy; formation of a technical support subsystem; improvement of tax legislation; banking services; the creation of inventories of inventories; the current system of insurance of crops and property of agricultural enterprises; scientific information support.

As the Global Rating indicates, factors that are not related to purely agrarian problems, but related to the general state of the economy, have the greatest negative impact on the food security situation in Ukraine: high levels of corruption, too expensive loans, and the risk of political instability. Therefore, the improvement of the situation is directly related to a number of activities that will improve the overall state of the Ukrainian economy. Some progress in this direction can be observed: the state's economy has been growing slowly for several years, but it is growing, and it is the agricultural sector that is the main driver of this growth. For Ukraine, which has a strong potential in the field of agriculture, current indicators should be considered

extremely low. Further positive changes require a more consistent fight against corruption, protection of investors' rights, and an increase in citizens' incomes.

In the food safety management subsystem, the transition to regulated market relations should be in line with the basic principles of self-sufficiency, independence, accessibility, quality. This implies that the food market should be based on its own production, its financial availability and, finally, increased purchasing power of the population.

An important element of the state's agro-food policy is the regulation of food markets through the purchase of products and food interventions. The levers of state regulation in the subsystem of management are taxes, credits, subsidies, and the method of program-targeted planning - the dominant in solving the priority problems of food security of the country.

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