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**Food security as a component of national security of Ukraine**

*The article examines the definitions of the country's food security and the criteria for its assessment. Highlighted common problems of ensuring food security in Ukraine, as evidenced by international rating estimates. Analyzed the quantitative parameters of consumption food.*

*The balance of consumption of basic foodstuffs, the indicator of sufficiency of consumption and the caloric content of the consumer ration are defined and it is established that Ukraine occupies the last places among the EU countries and the world.*

*It has been established that ensuring food security of the country is associated with the following risks: natural and man-made, technological, environmental, social, trade and economic; political. It outlined a strategy for food security, which should provide an overwhelming amount of food (85-90%) through its own production.*

**Keywords:** *food security, national security, food, the indicator of sufficiency of consumption, caloric intake, the share of expenditure on food, risks.*

Food security is defined by two components - economic and physical accessibility. The availability of food is realized through the possibility of purchasing

it, taking into account purchasing power, price and its availability in the appropriate quantity and quality.

The issue of food security is given a special place in the national security concepts of most developed countries of the world. The integration of Ukraine into the world and European community actualizes this problem, since only under the condition of providing the population with food under any conditions can the state pursue an independent policy. From the constitutional definition of Ukraine as a social state, whose policy is aimed at creating conditions for ensuring a decent standard of living [3].

The degree of state food security depends on the basic potential of agricultural production. Agrarian policy in the field of food security should be aimed at assisting domestic agricultural producers using the strategy of agrarian protectionism.

A great contribution to the theory and practice of ensuring food security of Ukraine was made by such specialists as: V.R. Andreychuk, V.I. Bogacheva, P.P. Borschevsky, V.S. Balabanov, Yu.D. Bilyk, B. Danilishin, L.V. Deineko, A.I. Goychuk, S.M. Kvasha, P.T. Sabluk, V.G. Tkachenko, A.M. Chechil, A.S. Yurchishin and others. However, studies of this problem are not fully consistent with the current needs of state regulation of food security in modern conditions.

The aim of the work is to study the economic essence of the concept of “food security” as a component of national security and to determine the characteristics of its provision at the state level.

The country's food security is an integral part of its national security. Improving the provision of the population with food is an important socio-economic problem, the solution of which is of great importance for Ukraine. Ensuring food security is a priority of public policy, as it covers a wide range of national, economic, social, demographic and environmental factors.

Today, in countries with developed market economies, the production of agricultural products and their processing is considered as the most important condition

for political stability, as an indicator of national independence, and therefore regulated accordingly. The problem of food security for modern Russian society is one of the most important. This is due to a systemic crisis and a recession in all sectors of the national economy. Now the concept of state policy in the field of food security, which is built on a strictly legal basis, has been formulated. The Law of Ukraine "On Food Security of Ukraine" defines food security as a state of the economy, which ensures the food independence of the country and guarantees the availability of food for the entire population in the quantity necessary for an active and healthy lifestyle.

Among the various types of security of objects of social nature, a special place is occupied by the national security of the state, which refers to the state of the country when external and internal threats to national values and national way of life are absent or eliminated, ensuring that its important interests are realized. In other words, national security is the protection of the vital interests of citizens, society, state, as well as national values and lifestyle from a wide range of external and internal threats that are different in nature (political, economic, military, environmental, etc.) [2].

The role of food security is related to the fact that food is a basic indicator of human activity. The level of nutrition of the population characterizes the level of its economic development as a whole, since, as you know, food production was, is and will be the first condition for direct producers and all production in general, and the level of food supply is considered as the most important factor and determining criterion of the level of social life economic structure and state structure of the country.

Food insecurity arises due to natural disasters caused by natural phenomena, wars, various economic crises in the state, radical changes in the social system, etc. In this connection, the problem of a stable state arises for both an individual and a single state and the world as a whole. food security and food security. The importance of the problem of food security in the system of national security lies in the fact that it is closely related to environmental security. Agricultural activities have a decisive influence on the deterioration of the environmental situation in the world, which, on

the one hand, hinders the growth of agricultural production as a raw material for food, on the other - leads to the production of products contaminated with various toxic substances. In the 20th century, with the development of interstate trade, food began to be used as a weapon for the political pressure of some countries on others.

Thus, food security is an essential element not only of the state's economic security, but also of its political and economic security, determining the leading role of food security in national security. The problem of food security of the population has been the subject of active consideration by the world community since the mid 70s of the twentieth century. Food security - the state of the economy, in which the population of the country as a whole and each citizen individually is guaranteed access to food, drinking water and food products in quality, assortment and volumes necessary and sufficient for physical and social development of a person, ensuring health and expanded reproduction population of the country [9].

Food security is one of the central problems in the national security system, because without a reliable food supply, no country can avoid dependence on other states.

To assess the state of food security, the following system of indicators is used:

- 1) in the field of consumption: the level of economic accessibility of basic food products; the level of physical accessibility of basic foods; the level of household resources available by population groups; the level of consumption of basic types of food per capita, including at the expense of domestic production; food consumption by selected population groups; the proportion of the population for which the consumption of basic foods is below rational norms; - the volume of targeted assistance to the population; the proportion of imported and domestic food products identified as not meeting the requirements of technical regulations and other provisions of the legislation of Ukraine; daily caloric intake of a person; - the amount of proteins, fats, carbohydrates, vitamins, macro- and microelements, food inflation consumed by a person per day;

2) in the sphere of production and national competitiveness: the volume of production of agricultural and fish products, raw materials and food per capita; the share of domestically produced food products in the total volume of commodity resources of the domestic market for the corresponding products; the level of support for producers of agricultural products, raw materials and food in rubles per ruble of products sold; productivity of land and other natural resources used in agriculture; soil fertility of agricultural lands;

3) in the sphere of organization and management: the volume of state reserves of the main types of agricultural and fishery products, raw materials and foodstuffs in accordance with the established normative acts in force; the current level of stocks of agricultural and fish products, raw materials and food; the share of imports of agricultural and fish products, raw materials and food.

Ensuring the country's food security is associated with risks that can significantly weaken it. These include: macroeconomic risks caused by the worsening of the situation in world prices for certain export goods and a rise in prices for imported food; natural and man-made risks; technological risks; environmental risks; social risks caused by the gap between the standard of living in the countryside and in the city; trade and economic risks; political risks [1, p.39].

There are four main dimensions of food security.

1. Availability. Its measurement reflects the quantity, quality and variety of food. Indicators for assessing the availability are: energy sufficiency of the diet; the share of energy value is provided by grain, root crops and tubers; average volume of proteins produced; average volume of derived animal proteins; average food production;

2. Access. Its measurements include indicators of: physical accessibility and infrastructure; affordability, which is characterized by an index of domestic food prices; the extent of undernutrition;

3. Stability. It is a temporary determinant of food security. The stability measurement is divided into two groups: the first group includes various indicators

characterizing risk exposure factors; the second group is characterized by indicators of the frequency of such shocks as fluctuations in the food supply in the domestic market, political instability;

4. Use. Its measurements are also divided into two groups: the first group consists of variables that determine the possibilities of using food, in particular, indicators of access to water and sanitary and hygienic conditions; the second group contains indicators characterizing the end results of inappropriate use of food [3, p.73].

National characteristics of food security have the influence of threats that arise. These threats include

- imperfection of the quality control system;
- decrease in the purchasing power of the population;
- unbalanced consumption of food by the population;
- the rise in prices for agricultural products;
- low consumption of animal products and unprofitable livestock;
- dependence on imports for individual foods, etc. [7, p.64].

To assess the degree of achievement of ensuring food security, the following criterion is used - the share of domestic agricultural and fishery products, raw materials and food in the total volume of commodity resources of the domestic market, %: at least 95 grains; not less sugar - 80; vegetable oil no less than - 80; meat and meat products (in terms of meat), no less than - 85; milk and dairy products (in terms of milk) not less - 90; fish and fish products at least - 80; potato not less than - 95; salt food not less - 85 [4].

In 2017, as in the previous three, there was a reduction in the average daily nutritional value of the Ukrainian diet. According to statistics, last year, on average, Ukrainians consumed 2,707 kcal per day, or 35 kcal less than a year earlier. At the same time, the caloric intake of the diet only by 8% exceeds the maximum permissible level for this indicator - 2500 kcal. In 2016, on average, Ukrainians consumed 2742 kcal per day, or 57 kcal less than a year earlier. Every day, a resident of Ukraine

consumed an average of 84 grams of protein, is one of the lowest among the EU countries and 18% less than the average level of this indicator in developed countries (103 grams per day).

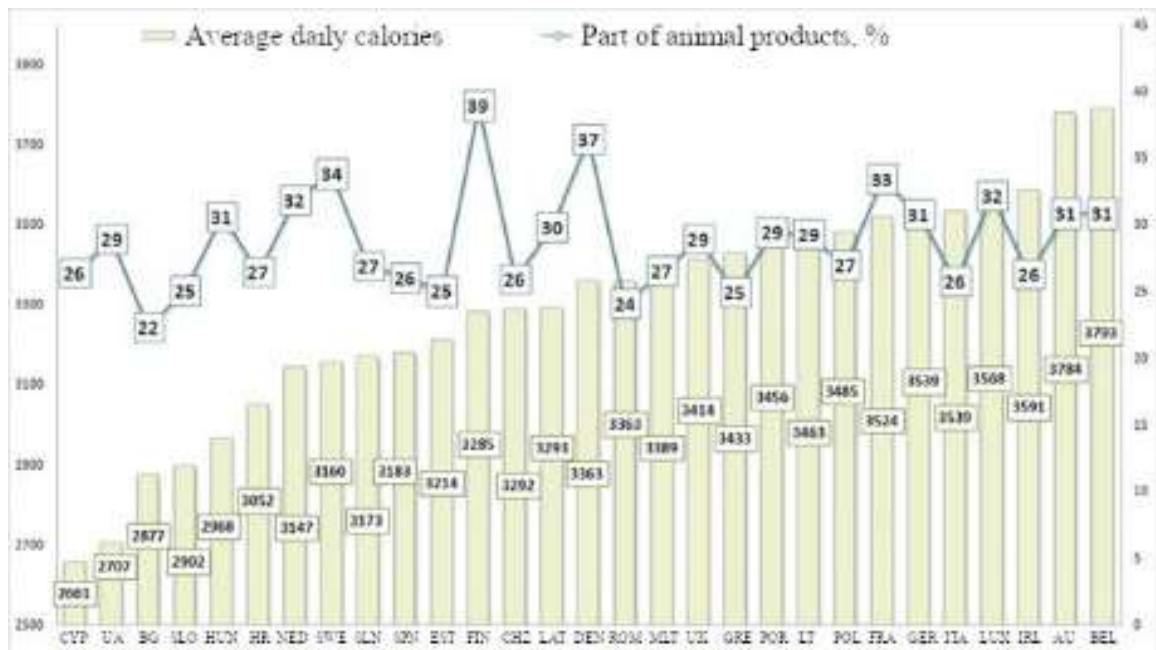


Fig. 1. Average daily caloric intake of human diet in the states of Europe. [7]

It should be noted that in 2017, the majority of calories (70.8%), Ukrainians consumed along with products of plant origin, but 29.2% of the average daily ration was provided by the consumption of animal products, 1.9 times lower than the established threshold criterion (55%). [5].

Compared with the EU countries, the average daily calorie intake in Ukraine is quite low. Thus, on average in the EU, the caloric value is 3,400 kcal, which is a quarter more than in Ukraine.

The balance of consumption of basic foodstuffs (Table 1) shows that in 2017 in Ukraine for such food groups as “bread and bakery products”, “potatoes”, “vegetable oil of all kinds”, “eggs” and “vegetables and melons” consumption exceeded the

rational rate. But such an excess is evidence of an imbalance in the nutrition of the population, trying to meet their own needs at the expense of affordable products.

Table 1 - Indicator of adequacy of food consumption  
(per person per year, kg) [8]

Types of products	Rational norm (calculations of the Ministry of Health of Ukraine)	Actual consumption in 2017 (according to the State Statistics)	Indicator of consumption adequacy
Bread and bakery products (in terms of flour).	101,0	100,8	1,0
Meat and meat products (in terms of meat)	80,0	51,7	0,65
Milk and dairy products (in terms of milk)	380,0	200,0	0,53
Fish and fish products	20,0	10,8	0,54
Eggs (pcs.)	290,0	273,0	0,94
Vegetables and melons	161,0	159,7	0,99
Fruits, berries and grapes	90,0	52,8	0,59
Potato	124,0	143,4	1,16
Sugar	38,0	30,4	0,80
Vegetable oil of all kinds	13,0	11,7	0,90

There is a noticeable lag behind rational consumption in the following groups: “milk and dairy products” - by 42%, “fruits, berries and grapes” - by 37%, “meat and meat products” - by 30%, “fish and fish products” - by 27%, “Sugar” - by 2%.

In 2017, the average monthly total aggregate expenses of one household were UAH 5,720.37 per month, and total consumer spending - UAH 5,331.53 per month. At the same time, the household received an average of UAH 2,944.32 on food. That is,



the indicator of economic affordability was 51.5%, with its 60% marginal criteria. Compared to 2016, this indicator decreased by 1.7 percentage points [8].

If we take into account not total, but only consumer total expenditures of households, then the share of expenditures on food products amounted to 55.3% (in 2016 - 58.9%). This indicator in Ukraine is several times more compared to the countries of the world (Fig. 2).

PART OF FOOD COSTS IN GENERAL CONSUMER COSTS IN THE WORLD COUNTRIES, %



Fig. 2. Share of food costs in selected countries of the world [5]

Ensuring national food security is associated with overcoming the influence of negative factors that pose threats to food security, leading to a decrease in the quantity, absence or deterioration of the nutritional and energy value of the main types of food. These include: a significant excess of the threshold value of saturation of the domestic market with imported products; low level of effective public demand for food; price disparities in the market of agricultural and fish products, raw materials and food; violation of the stability of the financial and credit system; insufficient level of development of the internal market infrastructure; moral and physical aging of the

material and technical base of the agro-industrial and fisheries complexes; lag in innovation; reduction of national genetic resources; possible expansion of the production of biofuels from agricultural products and raw materials; lack of qualified personnel.

Ensuring food security is a priority of public policy, as it covers a wide range of national, economic, social, demographic and environmental factors. In the field of food security, the key problems of agro-industrial and economic reforms, objective trends in the development of agricultural and food products, the domestic market, the degree of its dependence on the global food market, social status and solvency of consumers in different regions of Ukraine intersect.

With this approach, it becomes possible to transfer the solution to the level of the state, the purpose of which is to provide all citizens with constant access to a sufficient amount of food. This policy, we believe, should be based mainly on the following principles:

- food must be available as a result of local production, use of stocks or imports;
- product availability should be stable. People have daily needs that do not have to suffer from suddenly occurred or significant changes;
- food must be properly processed, stored and preserved, consumers must be sure that they consume products of acceptable quality and safe for health, food must be balanced;
- food must be available both in terms of their physical availability and their purchasing power [9].

The principles mentioned above are universal for all times and all countries.

The strategy of food security should be aimed at: ensuring the necessary quantity of food at the expense of own production (85-90%) and partly (10-15%) - at the expense of imports; maintaining the stability of food supply by reducing supply and demand fluctuations, adequate management of national food supplies, transport infrastructure development and sales systems; ensuring access of all sections of the

population to available food. It is necessary to ensure such socio-economic relations that guarantee access to food for all, without exception, the population of the country.

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