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# CURRENT SITUATION OF FOOD SECURITY OF UKRAINE AND METHODICAL APPROACHES TO ITS EVALUATION

*The article analyzes modern methodological support for the analysis of the trends of food security in Ukraine. The main methodological approaches to the assessment of food security in accordance with the regulation documents are investigated. The trends of food security is estimated on the basis of statistical data on indicators and their limit values contained in the developed methodological recommendations of public authorities and management of Ukraine. The main reasons of the threats of food security are systemized.*

*There are presented the results of the assessment of such food security indicators, as: the daily energy value of the diet; the sufficiency of consumption in the context of the main types of food; the adequacy of the state's food grain reserves; the economical availability of food; the differentiation of the cost of food by social groups; the domestic market capacity; the food independence by products. The conclusions on current trends of the state food security are formulated.*

*It is established that the main threats to the food security of the state are the imbalanced consumption of food and low solvency of the population. Malnutrition in food groups such as meat, milk, fish, fruits and berries is reported. The high differentiation of the level of living of the population by social groups and the economic inaccessibility of food due to low and unstable incomes of the Ukrainian people, rising consumer prices for foodstuffs at a faster rate than incomes, does*

*not allow to ensure food security at a sufficient level for high-quality and complete nutrition of the population.*

*The advantages and disadvantages of the existing methods of analysis of the trends of food security of the country from the point of view of further development of the food security strategy are highlighted. The methodological base for defining a food security strategy and making appropriate strategic decisions has been identified. It is proved that the food security assessment is carried out in a fragmentary way with the inability to identify the problem components and identify priority areas of strategic planning. Basic recommendations to improve the analytical framework for the formulation of a food security strategy are given in the article.*

**Keywords:** *food security, methodological approaches, analysis and assessment of food security*

**Introduction**

Food security is an important component of the economic and national security of the state. The current crisis in the Ukrainian economy leads to the deepening of socio-economic problems, which in turn lead to the deterioration of the food supply of the population. Food security trends are positively influenced by such factors as a sufficiently developed agricultural sector of the economy, the supply of food resources due to the increase in the production of agricultural products and the improvement of the state's self-sufficiency in food.

However, despite these favorable factors, the country's food security still remains unsatisfactory. The actual level of food consumption by the population does not meet rational standards, there is an imbalance in the diet. Due to low purchasing power, Ukrainians have to meet their nutritional needs at the expense of cheaper and lower quality food products. With a sufficient amount of food, the population of the country cannot afford to consume vital food at a medically sufficient level. The outlined range of problems is reinforced by the underdeveloped system of state control over food quality, the inconsistency of state regulatory instruments with market needs. The consequences are inhibition of the

development of the export potential of the state, a decrease in the competitiveness of the agricultural sector on the domestic and world markets.

Therefore, Ukraine needs an effective national food security strategy, which in turn requires an objective analytical basis. The assessment of modern trends in food security and the identification of key problems reinforces the need to improve the methodological support for the analysis of food security trends in the country.

**Literature review**

The study of the key issues of the food security of the state was carried out quite thoroughly in the fundamental works of such scientists as: O. Bilorus, O. Borodina, Ya. Zhalilo, G. Kaletnik, S. Kvasha, B. Paskhaver, R. Trynko, I. Romanyuk, V Trehobchuk, O. Shpychak and others. Regulation of issues of methodical provision of assessment of food security of Ukraine according to the developed indicators is carried out by current legal acts and methodical recommendations. Theoretical and methodical aspects of food security assessment in Ukraine are presented in the scientific works of authors V. Vlasov, O. Hoychuk, O. Kardash, P. Sabluk, and others. Despite the fact that domestic and foreign experts and legislators have made a significant contribution to the formation of the methodological foundations of food security analysis, most of the considered methods in normative legal acts and author's works leave aside the need for further development of a strategy based on an analytical base based on existing indicators and indicators. As a result, the assessment of food security is carried out in a fragmented manner, it is quite difficult to single out problematic components and outline the priority vectors of strategic planning. The development and implementation of a food security strategy requires an in-depth analytical base to identify existing problems and develop recommendations for their elimination in the long term.

**Research objective**

The objective of the article is the study of modern methodological approaches to the assessment of state food security and the analysis of food security trends using a system of food security indicators and their limit values.

**Results**

General methodological approaches to the analysis of the trends of food security as one of the components of economic security are considered in the Methodological recommendations for calculating the level of economic security of Ukraine of 29.10.2013 No. 1277. The assessment of the level of food security in accordance with the specified recommendations is carried out using a system of indicators: daily caloric intake of food, thousand kcal.; the ratio of production and consumption of the main groups of food products, %; grain production per person, tons; the level of grain stocks at the end of the period, % before consumption; the share of sales of imported food products through the trade network of enterprises, % [5]. Methodological recommendations present the algorithm for calculating indicators and sources of input information. The given indicators do not allow to effectively assess the level of food security due to the lack of important components of the economic availability of food for citizens.

Assessment of the level of food security is most often carried out according to the Methodology for determining the main indicators of food security of 05.12.2007 No. 1379 “Some issues of food security”, which contains the following indicators and their threshold values [2].

1. The daily energy value of the ration, which is equal to the sum of the products of the mass of products consumed by a person per day, and their energy value. The minimum limit value is 2500 kcal per day, while the daily diet should contain 55% of animal products.

The table 1 presents data on the daily energy value of the diet and calculated the nutrition structure.

It can be concluded that, although the caloric content of the average daily diet of the population exceeds the recommended value of 2500 kcal, the excess is insignificant. In addition, the share of products of animal origin in the daily diet is only 29% against the norm of 55%. A low level of consumption of products of animal origin in the diet of the population is observed. Ukrainians consume the main part of calories together with products of plant origin.

Table 1

Daily energy value of the diet

| Indicators | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|
| Caloric content of the average daily diet of the population, kcal | 2969,0 | 2939,0 | 2799,0 | 2742 | 2707 |
| Including products of animal origin | 868,0 | 849,0 | 791,0 | 790 | 781 |
| products of plant origin | 2101,0 | 2090,0 | 2008,0 | 1952 | 1926 |
| The share of products of animal origin in the diet (regulatory value – 55 %),% | 29 | 29 | 28 | 29 | 29 |

Source: compiled by author according to the data [14]

2. Sufficiency of consumption in terms of the main types of food products, which is calculated as the ratio between the actual consumption of a separate product and its rational norm from a medical point of view. The table 2 presents data on the sufficiency of consumption of basic food products by the population of Ukraine and calculated the indicator of adequacy of consumption.

Table 2

Calculation of the indicator of sufficiency of food consumption

| Foods | Rational rate of consumption per person per year [6, 7] | Actual consumption | | | | | Indicator of consumption sufficiency | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2014 | 2015 | 2016 | 2017 | 2018 |
| meat and meat products, kg | 80 | 54,1 | 50,9 | 51,4 | 51,7 | 58,8 | 0,68 | 0,64 | 0,64 | 0,65 | 0,74 |
| milk and dairy products, kg | 380 | 222,8 | 209,9 | 209,5 | 200 | 229,2 | 0,59 | 0,55 | 0,55 | 0,53 | 0,60 |
| eggs, pcs. | 290 | 310,0 | 280,0 | 267 | 273 | 228 | 1,07 | 0,97 | 0,92 | 0,94 | 0,79 |
| fish and fish products, kg | 20 | 11,1 | 8,6 | 9,6 | 10,8 | 16,8 | 0,56 | 0,43 | 0,48 | 0,54 | 0,84 |
| sugar, kg | 38 | 36,3 | 35,7 | 33,3 | 30,4 | 32,4 | 0,96 | 0,94 | 0,88 | 0,80 | 0,85 |
| oil and other vegetable fats, kg | 13 | 13,1 | 12,3 | 11,7 | 11,7 | 18 | 1,01 | 0,95 | 0,90 | 0,90 | 1,38 |
| potatoes, kg | 124 | 141,0 | 137,5 | 139,8 | 143,4 | 75,6 | 1,14 | 1,11 | 1,13 | 1,16 | 0,61 |
| vegetables and melon food crops, kg | 161 | 163,2 | 160,8 | 163,7 | 159,7 | 106,8 | 1,01 | 1,00 | 1,02 | 0,99 | 0,66 |
| fruits, berries and grapes, kg | 90 | 52,3 | 50,9 | 49,7 | 52,8 | 45,6 | 0,58 | 0,57 | 0,55 | 0,59 | 0,51 |
| bread and bread products, kg | 101 | 108,5 | 103,2 | 101 | 100,8 | 99,6 | 1,07 | 1,02 | 1,00 | 1,00 | 0,99 |

Source: compiled by author according to the data [14]

The analysis of the table allows us to conclude that the population of Ukraine does not have the possibility of sufficient nutrition in accordance with the

living needs for almost all types of food, except for oil and vegetable fats. This indicates negative trends and the forthcoming of the food security level according to this indicator to a critical level. The low level of food consumption is a consequence not so much of insufficient volumes of agricultural production, but of the low solvency of the population, especially certain social groups.

3. Sufficiency of the state food reserves of grain, which is calculated as the ratio between the volumes of the state grain reserve and the volumes of bread and bread products consumed by the population in terms of grain. According to Art. 9 of the Law of Ukraine “On State Support of Agriculture in Ukraine”, the Agrarian Fund creates a state intervention fund to ensure food security, which must exceed 20% of the annual domestic consumption of the product for the previous marketing period [1].

The table 3 shows the volumes of state food reserves of grain in recent years.

Table 3

The volume of state food reserves of grain

| Indicators | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|
| The volume of the state intervention fund determined by the Law of Ukraine "On State Support of Agriculture of Ukraine", % of the volume of domestic consumption | 20 | 20 | 20 | 20 |
| Average annual domestic consumption of bread and bread products in terms of grain, thousand tons | 6224 | 5897 | 5745 | 5655 |
| Volumes of food grain in the state food reserve, thousand tons | 124480 | 117940 | 114900 | 113100 |

Source: compiled by author according to the data [14]

It is obvious that with the increase in food grain consumption, the amount of the state food reserve is also decreasing.

4. Economic availability of food, which is equal to the share of total food costs in the structure of total household costs. The maximum limit value of the indicator is 60%.

We will analyze the economic availability of food products according to the data in the table 4.

Table 4

Economic availability of food

| Indicators | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Cumulative expenses on average per month per household, UAH | 4048,9 | 4952,0 | 5720,4 | 7139,4 | 8308,6 |
| Cumulative expenditure on food products per month on average per household, UAH | 2101,4 | 2629,5 | 2848,8 | 3419,8 | 3963,2 |
| The share of expenditure on food products and non-alcoholic beverages in the structure of total household expenditure, % | 51,9 | 53,1 | 49,8 | 47,9 | 47,7 |

Source: compiled by author according to the data [14]

According to the data in the table, it can be concluded that in the structure of people expenditures, food expenditures are less than the normative value of 60%. At the same time, in economically developed countries, this indicator is from 10 to 15%. Despite the fact that the condition of ensuring food security is formally met, food expenses make up about half of the population's expenditures. This indicates a low standard of living of the population and a threat to food security. The low purchasing power of the population is the most important factor in the low food security of Ukrainians.

5. Differentiation of the cost of food by social groups, which is defined as the ratio of food costs of 20% of households with the highest incomes to food costs of 20% of households with the lowest.

The table 5 shows the dynamics of this food security indicator.

Table 5

Analysis of the differentiation of the food expenditures by social groups

| Indicators | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|
| Expenditures on food products of 20% of households with the lowest incomes, UAH per month | 2189,35 | 2228,44 | 2289,53 | 2761,87 |
| Expenditures on food products of 20% of households with the highest incomes, UAH per month | 3284,03 | 3298,68 | 3650,14 | 4464,24 |
| differentiation of the food expenditures by social groups, times | 1,50 | 1,48 | 1,59 | 1,62 |

Source: compiled by author according to the data [10, 14]

The coefficient of differentiation of the cost of food by social group was 1.62 in 2017 against 1.59 in 2016. Households belonging to the first quintile in

terms of average per capita equivalent income are practically on the verge of food insecurity, as the share of their consumer spending on food approaches the threshold criterion (60%) [10].

6. The capacity of the domestic market, which is calculated in natural terms by foods and is equal to the product of the consumption of the food and the average annual population.

The domestic market capacity indicator is an important component for drawing up supply and demand balances and determining food independence for a particular food. The table 6 below shows the capacity of the domestic market of certain types of food.

Table 6

Domestic market capacity of foods, thousand tons

| Foods | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| meat and meat products | 2447,8 | 2176,5 | 2188,8 | 2191,4 | 2478,6 |
| milk and dairy products | 10080,8 | 8975,3 | 8921,5 | 8477,3 | 9661,5 |
| eggs | 771,0 | 694,0 | 659,0 | 670,0 | 671,0 |
| fish and fish products | 502,2 | 367,7 | 408,8 | 457,8 | 708,2 |
| sugar | 1642,4 | 1526,5 | 1418,1 | 1288,5 | 1365,8 |
| oil and other vegetable fats | 592,7 | 525,9 | 498,2 | 495,9 | 758,8 |
| potatoes | 6379,7 | 5879,5 | 5953,3 | 6078,2 | 3186,8 |
| vegetables and melon food crops | 7384,1 | 6875,8 | 6971,1 | 6769,1 | 4502,0 |
| fruits, berries and grapes | 2366,4 | 2176,5 | 2116,4 | 2238,0 | 1922,2 |
| bread and bread products | 4909,2 | 4412,8 | 4301,0 | 4272,5 | 4198,5 |

Source: compiled by author according to the data [14]

Due to the decrease in the volume of consumption by the population of certain foods, there is a decrease in the capacity of the domestic market, which can be seen from the results of the analysis. The reduction of the capacity of the domestic market is observed for such types of food as potatoes, vegetables and melon food crops, fruits, berries and grapes, bread and bread products, eggs.

7. Food independence for a separate food, which is equal to the ratio of the volume of imports and the capacity of the domestic market in natural indicators. The limit maximum criterion is set at the level of 30%. Methodology No. 1379 obliges to conduct an annual assessment of the state food security according to the presented indicators [2].

The table 7 shows the dynamics of food independence by basic foods.

Table 7

Food independence by main foods, %

| Foods | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|
| meat and meat products | 8,21 | 7,26 | 8,31 | 10,63 |
| milk and dairy products | 3,54 | 0,87 | 1,18 | 1,56 |
| eggs | 0,86 | 1,59 | 0,76 | 1,05 |
| sugar | 0,43 | 0,26 | 0,35 | 0,54 |
| oil and other vegetable fats | 37,62 | 30,42 | 43,95 | 48,19 |
| potatoes | 0,63 | 0,29 | 0,45 | 0,39 |
| vegetables and melon food crops | 3,05 | 1,38 | 1,95 | 1,91 |
| fruits, berries and grapes | 36,17 | 27,02 | 34,59 | 36,60 |
| bread and bread products | 5,36 | 4,31 | 5,58 | 5,97 |

Source: compiled by author according to the data [14]

Analysis of the table allows us to conclude that food independence exceeds the 30% level for such food products as oil and other vegetable fats and fruits, berries and grapes. In general, in Ukraine, food independence has been ensured for almost all types of food at a high level in recent years. The population's needs for vital food products are met at the expense of domestic production.

Based on the analysis of the state of food security according to Methodology No. 1379, it can be concluded that the considered system of indicators does not allow to objectively assess the trends of food security of Ukraine, since indicators of agricultural production and its efficiency are not included in the Methodology. There is also no assessment of resource provision of the agricultural sector and import dependence of the country's food supply, which is extremely important for strategic planning. In addition, the adequacy of the consumption of basic food products is assessed only by compliance with rational standards and energy value. At the same time, the balance of nutrition according to the types of origin of food, which is the basis of a complete diet, is not taken into account. Indicators of food quality and safety are not provided, which is especially relevant in modern conditions.

The draft Law of Ukraine “On Food Security of Ukraine” No. 8370-1 provides a list of eight indicators that characterize the state of threat to food

security of Ukraine when the actual values of the indicators do not correspond to the established limit values [3]. The draft law proposes limit values only for 3 out of 8 indicators.

Based on a comparative analysis of the considered regulatory documents, it can be concluded that only one of them – the indicator of economic availability of foods – is included in both lists in the same wording. The indicator of the level of consumption of foods by the population provided by the Law consists of two main indicators given in the Methodology No. 1379: supply of the diet with the main foods (minimum permissible criterion – 17 %) and daily energy value of the diet (minimum permissible criterion – 2500 kcal.).

Draft Law No. 8370-1 lacks the main target social indicators of food security (differentiation of the cost of food by social groups and the capacity of the domestic market), which are included in the Methodology No. 1379. However, the system of indicators of the Draft Law has been expanded with new ones:

1) physical availability of foods, which includes an additional 7 indicators;

2) stability of the food market, which includes an additional 4 indicators;

3) food safety and quality, which includes an additional 3 indicators;

4) the level of development of the agro-food sector, which includes an additional 7 indicators;

5) characteristics of the natural resource potential and efficiency of use, which includes an additional 3 indicators.

However, it is possible to observe a transition from an emphasis on individual food security (of an individual person) to a general one (availability of the resource as a whole). According to Draft Law No. 8370-1, in the system of food security indicators of Ukraine and assessing its threats, special attention is paid to the level of independence of the food market, which is determined by the following indicators:

1) food independence by foods (the share of imports in the overall structure of their sale);

2) the level of self-sufficiency in foods (sufficiency of their stocks);

3) the amount of state food reserves;

4) the balance of foreign trade in foods.

Based on the specifics of food security indicators in accordance with the draft Law of Ukraine No. 8370-1, we will supplement the analysis of the food security with an assessment of food price indices, the level of profitability and the level of self-sufficiency in food products, which is calculated as the ratio of the volume of production to the volume of internal use in the territory of Ukraine (table 8).

Table 8

Price indices for agricultural products, % to the previous year

| Foods | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|
| meat and meat products | 122,9 | 138,6 | 100,4 | 140,1 |
| milk and dairy products | 106,5 | 120,8 | 126,1 | 131 |
| eggs | 118,6 | 167,5 | 83,5 | 104,3 |
| sugar | 122,1 | 160,5 | 105,9 | 98,1 |
| oil and other vegetable fats | 124,9 | 182,8 | 114,2 | 104,2 |
| potatoes | 112,3 | 79,9 | 104,9 | 127,1 |
| vegetables and melon food crops | 137,6 | 142,7 | 108,4 | 112,4 |
| fruits, berries and grapes | 116,6 | 163,7 | 99,1 | 134,4 |
| bread and bread products (grain) | 132,8 | 156,6 | 119 | 109,2 |

Source: compiled by author according to the data [14]

Consequently, a significant increase in the prices of main foods leads to an increase in household expenditures, a decrease in economic availability, and a violation of the balanced structure of food and deterioration of its quality. The most rapid increase in prices for foods of animal origin (meat and meat products, milk and dairy products) and fruits was identified.

According to the data in the table 9, it can be concluded that the production of meat and meat products and eggs in Ukraine is low-profitable. The production of sugar, potatoes, and vegetables is unprofitable. This means that in order to fully feed the population with these foods at affordable prices, measures of state support for commodity producers and price regulation are necessary.

Table 9

The level of profitability of production of the main foods, %

| Foods | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| meat and meat products | -21,13 | -9,08 | -13,85 | -6,43 | -5,42 |
| milk and dairy products | 11,10 | 12,70 | 18,60 | 26,90 | 16,1 |
| eggs | 58,80 | 60,90 | 0,50 | -9,00 | 5,4 |
| sugar | 17,80 | 27,70 | 24,60 | 12,40 | -11,4 |
| oil and other vegetable fats | 36,70 | 78,40 | 61,90 | 41,30 | 32,5 |
| potatoes | 9,90 | 24,60 | 0,60 | 10,00 | 6,8 |
| vegetables and melon food crops | 14,50 | 32,00 | 15,30 | 9,90 | 16,7 |
| fruits, berries and grapes | 65,80 | 58,30 | 25,00 | 35,40 | 38,2 |
| bread and bread products (grain) | 25,70 | 42,60 | 37,80 | 25,00 | 24,7 |

Source: compiled by author according to the data [14]

The need to guarantee food security requires maintaining an appropriate level of food self-sufficiency, subject to the use of effective state support for domestic producers of agricultural products and import control to protect the domestic market from competition. The table 10 presents indicators of self-sufficiency in foods in Ukraine.

Table 10

Self-sufficiency in main foods

| Foods | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|
| meat and meat products | 101,20 | 106,2 | 105,4 | 105,1 |
| milk and dairy products | 103,60 | 105,0 | 103,6 | 107,7 |
| eggs | 116,50 | 113,9 | 114,0 | 119,8 |
| sugar | 131,7 | 95,5 | 142,3 | 158,4 |
| oil and other vegetable fats | 878,1 | 872,6 | 1088,3 | 1265,5 |
| potatoes | 105,50 | 96,3 | 101,6 | 101,7 |
| vegetables and melon food crops | 103,40 | 100,3 | 101,6 | 102,9 |
| fruits, berries and grapes | 82,00 | 92,3 | 84,9 | 82,9 |
| bread and bread products | 230,90 | 238,9 | 290,5 | 292,2 |

Source: compiled by author according to the data [14]

Therefore, due to own production, the population's consumption of meat and meat products, milk and dairy products, bread and bakery products, eggs, vegetables and melon crops, potatoes, oil, and sugar is fully ensured. The production of oil and grain crops covers the consumption fund within the country several times, and forms a powerful base of Ukrainian agricultural exports.

We will analyze the balance of foreign trade in foods with the help of indicators: the trade balance, which is defined as the difference in the value of food exports and imports, and the coefficient of coverage of imports by exports (index of the state of the balance), which is determined by the ratio of food exports to imports (table 11) [17].

Table 11

Analysis of the balance of foreign trade in foods

| Foods | Trade balance, thousand tons | | | | Coefficient of coverage of imports by exports | | | |
|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015 | 2016 | 2017 | 2014 | 2015 | 2016 | 2017 |
| meat and meat products | 17,0 | 87,0 | 121,0 | 118,0 | 1,08 | 1,55 | 1,66 | 1,51 |
| milk and dairy products | 170,0 | 386,0 | 329,0 | 703,0 | 1,48 | 5,95 | 4,13 | 6,33 |
| eggs | 2424,2 | 1991,3 | 1852,8 | 2562,8 | 21,00 | 11,45 | 22,40 | 22,14 |
| sugar | 33,0 | 149,0 | 500,0 | 610,0 | 5,71 | 38,25 | 101,00 | 88,14 |
| oil and other vegetable fats | 4355,0 | 4093,0 | 4885,0 | 5749,0 | 20,53 | 26,58 | 23,31 | 25,05 |
| potatoes | -23,0 | -2,0 | -22,0 | -6,0 | 0,43 | 0,88 | 0,19 | 0,75 |
| vegetables and melon food crops | 69,0 | 117,0 | 88,0 | 315,0 | 1,31 | 2,23 | 1,65 | 3,44 |
| fruits, berries and grapes | -506,0 | -264,0 | -449,0 | -528,0 | 0,41 | 0,55 | 0,39 | 0,36 |
| bread and bread products | 33160,0 | 38148,0 | 41211,0 | 42244,0 | 127,08 | 201,78 | 172,71 | 166,66 |

Source: compiled by author according to the data [14]

The analysis of the independence of the food market is key in Ukraine's foreign trade in food. According to the results of the calculations of its criteria, legal restrictions on the export and import of food or other restrictions on ensuring food security are introduced without violating the international legal obligations of the state, in particular WTO norms.

A critical analysis of the provisions of Draft Law No. 8370-1 allows us to conclude that taking into account the indicators of the food market and state food reserves is extremely important for the formation of an effective food security strategy. However, among the list of indicators of the Draft Law, there are no ones that reflect the efficiency of food production and its provision of the country's internal needs. Normative documents contain methodical approaches to the

calculation of indicators and their information sources, but they are not perfect, require clarification, thorough research, and reasoned recommendations.

In the works of domestic scientists, the content of the concept of food security is reduced to the definition of a system of criteria and indicators that make it possible to comprehensively characterize its current state, dynamics and trends of change. The following blocks of indicators are distinguished in evaluating food security: sufficiency, availability, independence, sustainability, safety and quality, physical availability, economic availability. It is also proposed to distribute the formed set of indicators by each of the indicator blocks [9].

Other researchers propose to take into account the following factors for the diagnosis of food security: the level and structure of the final consumption of food products; the food potential of the agricultural sector and natural resources for agricultural purposes;

– volumes and structure of food export-import in the region, which characterize the interregional aspect of reproduction;

– food quality and safety [8].

The conducted research allows us to come to the conclusion that the existing methodical approaches to the analysis of the state of food security in Ukraine are represented by a set of regulatory and legal acts that are not sufficiently coordinated among themselves. Threshold values are not set for all the considered indicators, and there are not even recommended threshold values. The adopted system of indicators does not allow for an objective and comprehensive assessment of the trends and dynamics of food security, taking into account the tasks of strategic planning and making informed strategic decisions, and therefore cannot be an effective methodological basis for developing a food security strategy. Today, economic science and the legislative framework do not have a single approach to the analysis of the trends of food security. It is necessary to develop an analytical base for the formation of a food security strategy, which may include:

– development of an objective system of indicators that would take into account all the components on which food security depends, namely: production, market, resources and social aspect;

– development of an information support system for assessing and preventing threats to food security;

– development of an information system for the automation of food security monitoring;

– application of methodological approaches of strategic planning to improve the process of forming a food security strategy and its implementation.

**Conclusions**

The assessment of food security trends showed that the main threats to the country's food security are unbalanced food consumption. Malnutrition is identified in such food groups as meat, milk, fish, fruits and berries. High differentiation of the standard of living of the population by social groups and the economic inaccessibility of food due to low and unstable incomes of the population, the growth of consumer prices for food products at a faster pace than incomes, does not allow ensuring food security at a sufficient level for high-quality and complete nutrition of the population.

The conducted study of the existing methodical approaches to the analysis of the country's food security shows that the state legal acts that regulate the methodical provision of its assessment are not agreed among themselves in terms of the list of indicators and their normative values. The proposed indicators do not allow for an objective systematic analysis of the state and dynamics of food security, taking into account strategic tasks. The methodological basis for the formation and implementation of the food security strategy has not been finalized today. A critical analysis of the scientific literature and legal framework showed that in modern conditions in Ukraine, a single methodical approach to the analysis and assessment of the state of food security according to the system of indicators that directly determine its level has not been adopted.

Therefore, there is a need to improve methodical and methodological support for food security assessment, which would take into account the components of food security strategies and allow identifying areas of strategic planning that require increased attention, and vice versa, areas on the basis of which it is possible to form a reliable basis for strengthening the country's food security.

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