

PROJECT MANAGEMENT AND FINANCIAL AND ECONOMIC SECURITY IN THE CONDITIONS OF GLOBALIZATION

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FOOD SECURITY OF THE COUNTRY IN CRISIS CONDITIONS

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Recent years have been filled with negative events: the coronavirus epidemic, climate changes, and war. All this, of course, has the negative consequences in the socio-economic sphere and national security.

It was found that the food security is a component of the national security and represents the state's sufficiency in providing adequate resources regardless of internal and external conditions and threats, the ability to guarantee self-sufficiency to the population as a whole and each citizen in particular physical and economic accessibility, quality and food safety and drinking water in the required amount.

It is estimated that about one billion people (16 % of the world's population) are currently suffering from chronic hunger at a time when there is more than enough food to feed the world's population. This is the problem of food security – to realize the ability to combat the increase in food shortages against the background of a constantly growing population.

To respond quickly to the negative effects of food insecurity, the Food and Agriculture Organization of the United Nations has developed a Rapid Response Plan to save lives and livelihoods to support the most vulnerable small and medium-sized farms in 2022.

It is proved that it is necessary to support the production and sale of food in order to counteract food security violations. An important component of support is investment in livelihoods in agriculture.

ПРОДОВОЛЬЧА БЕЗПЕКА КРАЇНИ В КРИЗОВИХ УМОВАХ

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Ключові слова:

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економічна криза, сільське
господарство, виробництво

Останні роки були наповнені негативними подіями: епідемія коронавірусної інфекції, зміни у кліматі, війна. Усе це, безумовно, несе негативні наслідки у соціально-економічній сфері та національній безпеці.

Виявлено, що продовольча безпека є складовою національної безпеки та являє собою достатність держави у забезпеченні відповідними ресурсами незалежно від внутрішніх та зовнішніх умов і загроз, можливість на принципах самозабезпечення гарантувати населенню країни у цілому та кожному громадянину зокрема фізичну та економічну доступність, якість та безпеку продуктів харчування і питної води в необхідному обсязі.

Встановлено, що наразі приблизно один мільярд людей (16 % населення планети) страждає від хронічного голоду в той час, коли є більше ніж достатня кількість їжі для того, щоб нагодувати жителів планети. У цьому полягає проблема продовольчої безпеки – реалізувати здатність боротися зі збільшенням дефіциту продовольства на фоні постійно зростаючої кількості населення.

Задля швидкого реагування на негативні наслідки порушення продовольчої безпеки, продовольча та сільськогосподарська організація ООН розробила

План швидкого реагування для проведення заходів зі збереження життя та засобів до існування, щоб підтримати найбільш вразливі дрібні та середні фермерські господарства впродовж 2022 року.

Доведено, що необхідна підтримка виробництва та реалізації продуктів харчування задля протидії порушення продовольчої безпеки. Важливою складовою підтримки є інвестиції в засоби до існування у сільському господарстві.

Statement of the problem

The country’s food security is an important component of overall national security. Food security is currently at risk. russia’s military action against Ukraine could lead to a global economic crisis and deal a devastating blow to the world. Therefore, it is important to get acquainted with and study the structure and means of ensuring food security, maintaining it at a high level.

Analysis of recent studies and publications

The issue of food security of the country has been the subject of research in the scientific works of such domestic and foreign scientists as Kulish I. M. [2], Kolisnyk G. M. [3], Pavlenko D. G. [6], Kish L. M. [8], Ternavska I. B. [10], T. Bruck, N. Habibi, C. Martin-Shiles [13] and others.

In the works of these scientists, the criteria of food security of the state are considered, natural and political problems of food security are highlighted, it was found that the process of formation and implementation of agricultural food security policy should begin with a study of the composition of food products, which on this basis is the modeling of food regions and the physiological needs of the country’s population for food are predicted.

In the work of Pavlenko D. G. [6] the principles of national security in general are considered in more detail. Accordingly, the scientist defines the concept of “national security” in relation to a wide range of social systems to characterize their protection from various negative influences of natural and social nature.

In a joint work, T. Bruck, N. Habibi, and C. Martin-Schiles [13] explored the understanding of the correlation between food security and the level of violence in society.

Objectives of the article

The main purpose of this work is to summarize the most important factors in ensuring food security of the country and find ways to solve current problems and issues in this area.

The main material of the research

For a correct and more complete understanding of the concept “Food security” is necessary to define a broader concept that it also covers food security, namely “national security”.

The concept of “national security” is used in relation to a wide range of social systems to characterize their protection from various negative influences of natural and social nature. This concept characterizes the degree of protection of vital interests, rights and freedoms of the individual, society and state from external and internal threats or the degree of absence of threats to human rights and freedoms, basic interests and values of society and state. It can be considered as a specific property of dynamic systems, a comprehensive criterion for assessing their quality and efficiency [6].

Next, we turn to the interpretation of the concept of “food security”: to do this, we compare the definition of this economic category by different scientists, which will allow a deeper and more detailed study of this phenomenon (Table 1).

Thus, ensuring regional food security provides for such conditions as:

- availability of sufficient quality food;
- resource provision of the population, transportation, storage and consumption of quality food.

According to world experience, reliable food security of the state is ensured if 75–80 % of consumption of

Table 1 – Definition of “food security” by different scientists

The name of scientist	Definition
Zhivko Z. B., Danilenko N. B. and Stadnyk M. E.	Food security is the ability of the state, provided with adequate resources and potential, regardless of internal and external conditions and threats on the principles of self-sufficiency to guarantee the population of the country as a whole and each citizen in particular physical and economic accessibility, quality and safety of food and drinking water. levels of physiological norms, which ensures the physical and intellectual development of the individual, promotes the expanded reproduction of the population and guarantees socio – political stability in the country, its sustainable economic development, strengthens the country’s position at the international level [1].
Kolisnyk G. M.	Food security should be understood as the ecological and economic state of the state, in which all its citizens are provided with food in the required quantity, range and quality, which maintains the highest level of their physical and mental health [3].
Golikova K. P.	Food security reproduces a system of various factors, namely quantitative and qualitative indicators of the availability of own resources, the use of alternative sources of resources, the level of their consumption and others [4].
Dudar V.	Food security is the ability of the state to guarantee and meet the needs of people in quality and safe food at the level of scientifically sound consumption standards to maintain an active and healthy life of all segments of the population [5].

all types of food falls on the domestic market. At the same time, priority types of products are identified, the production of which should be the subject of special attention by the state.

Countries with high economic potential, intensively joining the world market, carefully maintain a high level of self-sufficiency. For example, in the United States and France this level is about 100 %, in Germany – 93 %, in Italy – 78 %, even poor fertile soils in Japan adhere to a 50 percent level of self-sufficiency.

A sufficient level of food self-sufficiency or food independence is achieved when the main groups of food products (meat and meat products, milk and dairy products, eggs, bread and bakery products, potatoes, vegetables and fruits, oil, sugar, fish and fish products) imports do not exceed 30 % of their domestic consumption.

The above nine food groups provide 90 % of the caloric content of food and are the most important and indispensable in terms of balance of essential nutrients in quantitative and qualitative composition [1]. The excess of imported goods in the overall structure of food over 30 % is considered critical.

According to the Ministry of Agrarian Policy of Ukraine [16], during March 1 to May 9, 2022, more than 1.5 million tons of crops were exported (Fig. 1). In particular, the following were exported: 51.088 thousand tons of wheat; 20.941 thousand tons of barley; 1.01 million tons of corn; 114.902 thousand tons of soybeans; 174.261 thousand tons of sunflower seeds; 31.558 thousand tons of soybean oil; 197.469 thousand tons of sunflower oil; 100.369 thousand tons of meal.

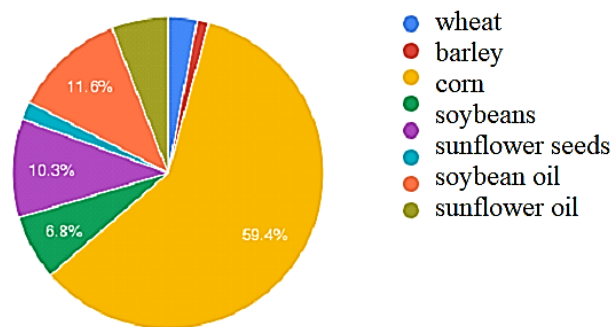


Fig. 1 – The volume of grain exports

Source: generated by the authors according to [16]

Ukraine has a strong agro-industrial complex, so for many countries it is a “breadwinner”. For example, 11.33 % of total exports belong to China, 4.28 % – to the Netherlands, 6.48 % – to Poland, 7.68 % – to Turkey (Table 2). The total amount of food exports in January 2022 reached 6020580.68 thousand dollars. USA.

According to the International Grains Council, Ukraine has been the world’s fourth-largest grain exporter in recent years. It sent 90 % of this raw material through ports in the Black Sea: before the Russian invasion, Ukrainian companies shipped about 5 million tons of grain a month for export through Black Sea ports. Without exaggeration, caravans of bulkers – special vessels for bulk cargo – went to

the Mediterranean from the Black Sea, and they all brought Ukrainian wheat, corn, barley and other grains [17].

Table 2 – Geographical structure of foreign trade in goods in January 2022

The country	Volume, thousand dollars USA	Total share in the structure
Belarus	66 209.92	1.10 %
Bulgaria	91 712.95	1.52 %
India	102 239.78	1.70 %
Italy	64 808.79	1.08 %
China	682 357.42	11.33 %
Lithuania	61 054.48	1.01 %
Libya	61 773.09	1.03 %
The Netherlands	257 655.89	4.28 %
Germany	186 746.61	3.1 %
Poland	390 392.39	6.48 %
Romania	139 843.81	2.32 %
Saudi Arabia	84 455.7	1.4 %
Slovakia	75 101.84	1.25 %
United Kingdom of Great Britain and Northern Ireland	84 555.19	1.4 %
USA	158 076.6	2.63 %
Turkey	462 215.88	7.68 %
Hungary	150 684.53	2.5 %

Source: generated by the authors according to [17]

Currently, the world has stocks of wheat in warehouses for about 10 weeks due to the war in Ukraine and due to the fact that India has banned wheat exports in recent weeks. This was stated by food security expert, CEO of the agricultural analytical company Gro Intelligence Sarah Menker during a meeting of the UN Security Council [18].

According to UNICEF [15], the world’s population is growing steadily. Technology is evolving at a dizzying pace, while economies are becoming increasingly interconnected and globalized. However, many countries around the world have not become part of this new economy. The number of conflicts and instability has increased, contributing to greater population displacement (migration). Climate change and its variability have a negative impact on agricultural productivity, food production and natural resources, which in turn affects food security, including the reduction in the number of farmers.

Food security is a difficult issue to address because it cannot be characterized or limited by geography, nor can it be defined by a single group, ie demography, education, geographical location or income.

Currently, about one billion people (16 % of the world’s population) suffer from chronic hunger at a time when there is more than enough food to feed the world’s inhabitants. This is the problem of food security – to realize the ability to deal with increasing food shortages against the background of a growing population [7].

Ensuring all forms of accessibility is the basis for the formation of the country’s food security system and an indicator of ensuring its interests in the international

food security system. The outlined aspect is key in the interpretation of the subject of this study. The level of food security depends to a large extent on the economic security of the state, as mentioned above, and thus – its national security, which is “protection of state sovereignty, territorial integrity, democratic constitutional order and other national interests of Ukraine from real and potential threats”.

The war in Ukraine, which began on February 24, 2022, led to large-scale human suffering in all regions of the country, and the destruction of our country’s agricultural potential provokes the beginning of the global food crisis.

According to Bloomberg, the Russian invasion has caused the loss of world grain trade to about \$120 billion. As the war continues to develop, much of the population is suffering from critical infrastructure damage, lack of basic services and supply chain disruptions, which requires multisectoral humanitarian assistance, without which food and security systems are disappearing in Africa and Asia.

In order to address the rapidly deteriorating food security situation, the Food and Agriculture Organization of the United Nations (FAO) has developed a Rapid Response Plan (RAP) to support life and livelihoods to support the most vulnerable small and medium-sized enterprises. farms during 2022 [11].

The Government of Ukraine has asked FAO to support vulnerable producers through financial assistance and agricultural resources, as well as to maintain shared access to key markets. FAO will continue to work closely with the government and partners in the Food and Livelihood Cluster Partners to ensure that response measures complement those of other actors.

The war in Ukraine dramatically changed market expectations, affecting prices in general, including agri-food primary products. In the global wheat market, which focuses on food security, wheat futures prices have risen 70 % since the invasion. World wheat production is threatened both by supply shocks caused by Ukraine’s and Russia’s share of wheat markets and by the shock of input costs, especially natural gas, nitrogen fertilizers and oxygen.

According to experts, the food crisis in Ukraine will affect up to 18 million people, including 6.7 million who will become internally displaced again. Food shortages in cities and millions of refugees and displaced persons are calling for urgent food aid to Ukraine [14].

It is also worth noting that the COVID-19 pandemic has become an important food security threat in recent years. It is a catastrophe that has caused enormous damage to humanity, disrupting life and livelihoods. The scale and severity of COVID-19 is unprecedented.

The World Bank estimates that the economic consequences of the pandemic could lead to 100 million people in poverty. Rapid unemployment, declining incomes and rising food prices are threatening access to food in both developed and developing countries. It is expected that each reduction of world GDP by one percent will lead to another 700.000 children with growth retardation. Particularly vulnerable are small farmers and their families, food workers in all sectors, and those living in countries dependent on commodities and tourism [12].

Regarding the actions taken to minimize the effects of the Russian invasion of Ukraine and affect the level of national security, it should be noted that in the future FAO will support the collection and analysis of data to monitor food security, the effects of war on agriculture and the need to provide funds existence at the level of households and regions.

In addition, FAO will continuously monitor the return of internally displaced persons in need of financial and material assistance to restore livelihoods and agricultural production.

We believe that investing in livelihoods in agriculture is key to maintaining food security for vulnerable populations. The availability of food will be increasingly constrained by reduced imports, and access to food will be constrained by rising prices, lack of resources and the destruction of production assets and infrastructure.

Immediate support is needed to help farmers sow crops on time and to help livestock farmers maintain their health and productivity. In addition, women, who are now mainly responsible for production and harvesting, have been given an additional burden of urgent care.

Timely delivery remains extremely important. The current season of sowing spring vegetable crops in most parts of the country has already begun (dates vary depending on the region, soil condition and weather conditions). Therefore, the purchase of seeds and related materials for growing vegetables and other crops needs to be increased, and distribution among farmers needs to be done immediately.

The winter wheat harvest, which was sown in October 2021, will be a critical product in the country and will be ready for harvest in June/July 2022. FAO works with government and private partners to provide farmers with the necessary equipment and resources to harvest. In the medium term, FAO plans to support farmers with various resources and funding so that they can prepare their land and sow winter wheat in the upcoming autumn sowing season in September/October 2022 [11].

Conclusions

Thus, we analyzed the concept of “food security” and identified the main trends of its existence in our time. According to processed sources, food security is an ecological and economic state of the state in which all its citizens are provided with food in the required quantity, range and quality, which maintains the highest level of their physical and mental health.

However, it was found that the key threats to Ukraine’s food security are the following: Russia’s aggressive actions; inefficiency of the system of national security and defense of Ukraine; corruption and inefficient public administration system; economic crisis; threats to energy security and information security; threats to the security of critical infrastructure; threats to environmental security.

Thus, this study identified the main signs of ensuring a stable level of food security in a crisis. The war and the pandemic, of course, negatively affected the pace of production and sales, but it has been proven that effective ways to combat food insecurity are investment in livelihoods, financial and material assistance to restore livelihoods and agricultural production, and so on.

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