

# The Impact of Military Actions on Food and Labor Security

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## Abstract

The main purpose of the article is to explore the impact of military actions on food and labor security. The stabilization of the economic situation after COVID-19 on the European continent was aggravated by the beginning of the military aggression of the Russian Federation against Ukraine. Tracking the change in the situation became possible with regard to the food and labor security of Ukraine by comparing the nature of the threats that affected their level before and during the active phase of the military confrontation. The military actions not only exacerbated previously existing threats, but also provoked the emergence of new ones that received a higher level of priority. The large-scale military aggression also provoked the emergence of new threats to the EU countries due to the influx of a significant number of refugees and countries in Africa and the Middle East as a result of the cessation of food supplies. The military actions have exacerbated the problem of ensuring food and labor security both in Ukraine and at the international level, requiring a consolidated solution to stabilize the situation and avoid global famine. As a result of the study, the impact of military actions on food and labor security was investigated

### Keywords:

*military actions, food security, labor security, threat, food, labor resources*

## 1. Introduction

The development of mankind is accompanied by military actions. During the times of Ancient Greece and Rome, China and Medieval Europe, philosophers and scientists attempted to explain the causes and consequences of wars. The justification for numerous victims and the devastation of the territories was the achievement of the goals of gaining control over the area and seizing the resources of the 21st century. characterized by the deepening of globalization processes, the rapid pace of technological development and the further development of the information sphere, due to which information and knowledge become priority unlimited resources that

determine the competitive position of each country in the global economic space. Already after the First World War, the use of economic instruments of influence made it possible to obtain better results in confrontation compared to direct military actions. Despite this, if it is impossible to achieve interests in the political and economic plane, individual countries continue to resort to military aggression, the consequences of which extend far beyond the territory of military actions and form new threats to the victim country, the aggressor country and humanity as a whole [1].

Within the framework of one study, it is rather difficult to present all the results of the consequences of military actions taking place in Ukraine. Our attention is focused on the characterization of threats before and during the active phase of the military confrontation in relation to food and labor security. This choice is primarily due to several important circumstances: with regard to food security, we are talking about the need for each person to satisfy the needs of food as a matter of priority, and based on the fact that Ukraine until February 24, 2022, with full satisfaction of domestic needs, contributed to the avoidance of hunger not less than 400 million people in other countries, in particular in Africa and the Middle East.

Labor and resource security is viewed from the perspective of the development and effective use of labor resources, which have undergone changes due to large-scale military actions, accompanied by the massacre of civilians and the destruction of infrastructure, not only within the combat zone, but due to missile strikes throughout the country, which forced almost 7 million people leave the country (mostly women with children and people over 60)

who have found asylum in the EU, and another 8 million have become internally displaced [2].

Comparison of the content of threats before and after February 24, 2022 is focused on substantiating the importance of the international response to military aggression, the results of which in the modern world are not limited to a separate territory of direct military actions, but complicate the possibility of achieving the goals of sustainable development of mankind.

## 2. Methodology

The study involved the sequential fulfillment of several tasks: clarification of the essence of the modern understanding of the concepts of "food security" and "labour resource security"; characterization of threats to food and labor security, which were a priority until February 24, 2022; detection of the latest threats that have arisen since the start of a large-scale war. The study was based on analytical materials of the State Statistics Service of Ukraine and the National Barque of Ukraine, as well as international organizations such as FAO, World Bank, UNDP, World Food Program, United Nations Human Rights[3].

The main difficulty of the study was that at the time of preparation of the materials, active military actions were continuing and the analytical basis was operational data that supplemented and did not always accurately convey the content of the processes of ensuring food and labor security.

To determine the impact of military actions on food and labor resource security, the following methods were applied: induction and deduction, comparison and systematization - when characterizing food and labor resource security before and during the active phase of military actions; synthesis and analysis - to determine the content of the main threats to food and labor security; morphological analysis - to clarify the essence of the modern understanding of the concept of "food security" and "labor security"; abstract-logical - for theoretical generalizations and conclusions of the study.

## 3. Research Results and Discussions

A comprehensive study of the impact of military actions finds touchpoints regarding food and labor security, but the coverage of the results of the study will be carried out sequentially to improve the clarity of the presentation of the material.

The problem of food security is very acute at all levels (Table 1) [4].

Table 1: Basic levels of food safety threats

<i>№</i>	<i>Basic levels</i>
1	for each person, if necessary, receive a certain amount of food daily to maintain the viability of the body and its development;
2	within a certain settlement or region by creating conditions for the production, storage and supply of the required volume of food based on the existing population;
3	on a national scale to stimulate domestic production and create conditions for imports in order to regulate the volume of the food market in accordance with the real needs of the population;
4	at the international level in order to avoid hunger, and therefore prevent social disturbances and increased migration, which can lead to an imbalance in economic development in the global dimension

The problem of food security has always faced humanity because of the dependence on natural conditions for growing agricultural products, the gradual improvement of food production technology, the imperfection of the regulation of production and consumption processes. Despite significant advances in food production technology and technology, the challenges of rapid population growth, resource-limiting climate change and conflict have become more complex. If the solution of the first two problems is aggravated by their scale and the impossibility of achieving results within a short period of time, then conflicts are the result of the direct initiative of people and can be prevented and eliminated by applying a civilized approach, at least based on the reality of avoiding hunger for a significant number of the population.

International organizations have played an important role in the scientific substantiation of the problem of ensuring food security. Thus, in 1983, FAO experts proposed to significantly expand the understanding of the basic foundations of food security, providing it as "... a guarantee that all people at any time will have physical and economic access to the basic foods they need" [5].

It can be argued that for the majority of the population, food security in accordance with this definition is associated precisely with the possibility of physical and economic access to the necessary food products. Along with this, the modern understanding is somewhat broader and takes into account at least three additional aspects. So we are talking about food safety, that is, food should be produced without the use of harmful chemical components that temporarily avoid hunger, but in the long run can cause changes in the body, leading to death. No less important is the aspect of food matching in terms of quality to the real needs of each person, that is, in terms of the composition of microelements that allow one to develop and effectively resist various diseases. The third aspect, which is becoming increasingly important due to climate change, is the provision of access to water and sanitation, because today more than 2 billion people have limited free access to water, and 3.6 billion are struggling with safe and sanitary living conditions [6].

Summarizing, it can be argued that each of these aspects (economic and physical accessibility, food security, food balance, water sufficiency and sanitary

conditions) is important and only their comprehensive achievement allows creating safe conditions for the development of mankind. Along with this, the high dynamics of socio-economic processes and the deepening of globalization makes us consider the issue of ensuring food security not in relation to an individual, region or country, but on an international scale, including due to the significance of the impact of military actions, which will be further proved. on the example of Ukraine.

The food security situation before and during military actions differs significantly. This can be reasonably proved on the example of Ukraine. To characterize the level of food security, we will use certain elements of the Methodology for determining the main indicators of food security, officially used by state institutions in Ukraine. The main efforts will be aimed at characterizing not only the physical and economic availability of food for the population, but also proving the role of Ukraine in ensuring international food security, with a subsequent focus on the changes taking place as a result of the military aggression of the Russian Federation [7].

A fairly clear idea of the level of food security can be formed based on the official data of the State Statistics Service of Ukraine on the calorie content of the average daily consumption of food by the population. In the last ten years, that is, in 2010-2020, there have been minor changes in the level of this indicator. In 2020, its value was 2674 kcal, which is only slightly higher than a certain norm (2500 kcal). For a comprehensive characterization, we additionally made several comparisons: in relation to 1990, that is, before gaining independence, in Ukraine, the average daily calorie intake was 3597 kcal, that is, the negative dynamics of this indicator of food security is obvious; in accordance with the established norms, in the structure of the daily diet, 55% should be occupied by products of animal origin, when in fact in 2020 this share was 30%, which indicates an imbalance in nutrition, therefore, there is a complication of the process of development and maintenance of the necessary rhythm of life activity; compared to other countries (USA - 3788 kcal, Poland - 3537 kcal), the situation in Ukraine is much worse [8].

The identified problems with the imbalance in the nutrition of the population in Ukraine prompted us to consider several more indicators that characterize the economic and physical availability

of food. The Core Indicator Methodology mentioned above contains a provision for a cap on the share that households can spend on food at 60%. In accordance with the data of the State Statistics Service of Ukraine within 2010-2020, there is a constant increase in household spending on food, and their share in the total structure of expenditures ranges from the maximum in 2015 - 53.1% to the minimum in 2019 - 46.6%. In 2020, a value of 48.1% was recorded, which allows us to state the fact of the low level of income of the population of Ukraine, when the priority remains the satisfaction of the need for food with the restriction of other needs, in particular, in education, recreation, etc. This conclusion is confirmed by the results of comparing the share of food expenditures in other countries, in particular, in the EU, the actual value of this indicator does not exceed 20-25% [9].

The conclusions drawn regarding the unsatisfactory level of economic affordability of food were specified by us and according to the existing restrictions in relation to certain types of products. It was found that among the 10 main food products, the consumption of such products as meat and meat products (in 2020 compared to the norm by 32.8%), fish and fish products (-38%), milk and dairy products (-47%). It can be argued that the population is limited in access to high-calorie foods, the consumption of which is necessary to maintain important body functions. Replacing these products with others, that is, bread, potatoes and vegetables, allows you to satisfy your hunger, but slows down development and does not contribute to maintaining the necessary level of immunity.

The last of the indicators chosen for consideration characterizes the volume of production and consumption of grain crops. Important is the fact that within 2010-2020, there were two distinct trends: an increase in grain production (for example, in 2010 - 39.3 million tons, and in 2019 - 75.1 million tons) and a decrease in domestic consumption (in 2010 6.8 million tons and in 2020 - 5.4 million tons), which is explained in the first case by the results of land reform, improved technology and an increase in the amount of arable land [10].

Summarizing, it can be argued that until February 24, 2022, the food security of Ukraine was affected by a number of threats, including the main economic and physical limitations in access to high-calorie and balanced nutrition, despite the fact that

the country's agricultural potential allows to produce much more agricultural products, the need in which it actually exists in other countries. In the future, we will focus on certain changes that have occurred in the process of ensuring food security due to the military aggression of the Russian Federation.

A significant increase in food prices can be considered a threat to food security. According to the State Statistics Service of Ukraine, the total increase in food prices as of June 1, 2022 compared to the beginning of the year was 16.6%. To a greater extent, prices increased for vegetables (69.3%) and fruits (46.6%). This aspect is important against the backdrop of the loss of jobs by a significant number of the able-bodied population, which will be noted later[11].

Summarizing the results of identifying the latest threats to food security, it should be emphasized that the previously identified threats have not disappeared, they have only given way to priority, requiring adjustments to the protection system at the state level. Military actions, along with the aggravation of the problem of ensuring food security in Ukraine and other countries that are food importers, have a significant impact on labor and resource security. This is manifested primarily in the change in the list of priority threats. In our opinion, this list should be supplemented with the following threats with a higher level of priority compared to the current ones until February 24, 2022.

The issue of labor and resource security, in particular during a full-scale military confrontation, is no less important than food security, because it is updated at all levels, that is, from the individual to the international one. At the heart of labor security are two basic concepts, that is, "security" and "labor resources". If the first is identical to the general understanding applied to food security as protection, the implementation of measures to prevent the realization of threats, then the second requires some clarification. Labor resources can be considered a part of the able-bodied population that has the psycho-physiological, physical and intellectual qualities necessary for the implementation of socially useful activities. Within the limits of labor resources, two groups of persons are conditionally distinguished: the first is real workers, and the second is potential, who are not employed, but can work. Such a classification proves the importance of the place of labor and resource security, first of all, in the

structure of the national security of each country, because it concerns the largest group of the population. It is equally important to consider the subject area of ensuring labor safety, which is not limited to tracking the dynamics of labor resources. In our understanding, labor and resource security consists in the comprehensive implementation of measures to create a safe environment for the development and efficient use of labor resources with a focus on achieving national interests. Such a rather concise definition implies a preliminary definition of threats arising from demographic, social and economic changes that directly affect the development and efficient use of labor resources [12]. This is a complex concept that characterizes the demographic situation in the country, that is, the change in population, social infrastructure, which allows you to obtain relevant knowledge, and the economic atmosphere, which contributes to the use of your own labor potential by each person. It should also be taken into account the fact that today labor resources are one of the key factors of economic growth, which means that against the backdrop of deepening globalization processes, there is an intensification of the struggle for them. In view of the excellent levels of economic development of each country, the effectiveness of ensuring labor and resource security further strengthens the competitive positions of leaders, assigning outsiders the role of a raw material appendage, including suppliers of labor resources. Based on the above, the process of ensuring labor and resource security is quite complicated, because it must be based on a carefully formed monitoring system and the interaction of state regulation institutions to counter key threats. Military actions also have a significant impact on the process of ensuring labor and resource security, in particular due to a change in the priority of countering key threats. In the future, we will first consider the threats relevant to Ukraine until February 24, 2022, with a further description of the newest ones, which became a priority during large-scale military actions.

Based on the considerations presented above, we identified labor and resource security threats that had the highest priority level until February 24, 2022[13]:

- population decline due to higher death rate compared to birth rate;
- increased burden on the able-bodied part of the population as a result of growth;

- disproportion in the training of specialists, resulting in a shortage of labor force for work processions and unemployment among people with higher education in the humanities;
- low wages, stimulating labor migration;
- reducing the need for highly skilled workers due to the raw material orientation in the development of the economy;
- strengthening of tendencies towards the emigration of young people in order to receive education and further labor activity;
- An unsatisfactory level of income, which makes it difficult to meet the primary needs for food and medical care.

It is indisputable that the military actions led to certain modifications in the list and priority of these threats, which will be emphasized in the future.

The military actions provoked the emergence of another threat, which consists in complicating the formation of labor resources, which is most associated with the education of young people. According to the Ministry of Education of Ukraine, 1939 educational institutions (schools, vocational education institutions and universities) were bombed, of which 184 were completely destroyed. It is important that such destruction is not limited to the zone of direct military actions, but takes place throughout the country due to missile attacks on civilian infrastructure [14].

The last of the latest threats is associated with the slowdown of economic processes, which worsens the efficiency of the use of labor resources, that is, leads to a decrease in the level of labor security. According to World Bank analysts, the Ukrainian economy may shrink by approximately 45.1% by the end of 2022, which largely depends on the duration of military actions. EBRD specialists give more optimistic forecasts, believing that the fall will not exceed 30% and, subject to peace negotiations this year, the next 2023 will ensure the growth of the Ukrainian economy by 25%. The current situation, characterized by the partial cessation of the activities of more than 50% of companies and the destruction of supply chains, forms the dominance of the position of employers in the labor market, a decrease in wages and the absence of prerequisites for a quick recovery in demand among the population and products, except for essential goods [15].

The updated list of threats to food and labor security creates the necessary basis for improving

state regulation to stabilize the situation through the implementation of appropriate protective measures.

#### 4. Conclusions

The process of ensuring food and labor security of Ukraine until February 24, 2022 was characterized by the presence and strengthening of the negative impact on a significant number of threats. Regarding food security, the key threats were related to the limited physical and economic access to high-calorie and balanced nutrition. At the same time, over the past ten years Ukraine has become one of the leaders in the export of grain crops, which allowed it to contribute to the escape from hunger for more than 400 million people in Asia and the Middle East. The financial resources received from food exports were directed to the stabilization of the national economy, but did not allow to eliminate the main threats to the food security of every citizen.

For labor security, a significant number of threats are associated with the demographic crisis, which is characterized by a higher death rate over births, which is partly due to insufficient calories and unbalanced nutrition. In addition, the unsatisfactory pace of development of the national economy and its current focus on raw materials, in particular on the production and export of agricultural products with a low level of added value, pushes a significant part of the able-bodied population to labor migration, young people to get an education and continue their careers in the EU countries.

The military actions in a certain way changed the list of key threats to the food and labor security of Ukraine, and also provoked new threats at the highest, that is, the international level. Along with the reduction in planted area, which created problems with the size of the 2022 harvest, the blockade of seaports prevents producers from exporting food and then accumulating the necessary resources for field work in the fall of 2022, which increases the risks for the 2023 harvest. Given the role of agriculture in the formation of the budget of Ukraine, the current situation will further reduce the economic access to food for a significant number of the population, and the destruction of supply chains has already complicated physical access. The latest threats to labor and resource security are: a significant number of refugees abroad and internally displaced persons; a

decrease in the quality of education due to the interruption of the educational process and the destruction of educational institutions; an increase in unemployment and a decrease in wages.

The military actions in Ukraine have also created threats to food and labor security at the international level as well. Today it is still difficult to predict the possible consequences, but in fact, the growth of world prices for wheat and the prerequisites for increased hunger in countries such as Lebanon, Tunisia, Yemen, Libya and Pakistan, as well as the complication of the situation in Egypt, Turkey, Bangladesh and Iran. A partial solution to the problem to prevent a significant increase in victims from malnutrition and death from starvation lies in the plane of unblocking seaports, including through the organization of transport corridors under the control and protection of international organizations.

A significant number of refugees create an additional burden on the social infrastructure of those EU countries that give them protection, provoking rising food prices, reducing wages and requiring changes in the functioning of social infrastructure. Summarizing, it should be emphasized once again that large-scale military actions negatively affect the food and labor security not only of the countries that are victims of aggression, but also create new threats at the international level, which makes it difficult to achieve sustainable development goals.

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