

FOOD SECURITY IN THE CONTEXT OF WAR IN UKRAINE: ECONOMIC AND LEGAL ASPECTS

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Abstract. The need to study the economic and legal issues of Ukraine's food security and ensure an adequate level of availability and sufficiency of food for the population at the present stage is caused by a number of factors. A prominent place among them is occupied by the challenges caused by the war that has been going on in Ukraine for many years. The food security situation in the country is rapidly deteriorating in the context of a full-scale war, and in some regions (especially those affected by military operations) it is catastrophic. At the same time, the pre-war food security legislation is not able to properly regulate existing relations. Similarly, research conducted in peacetime has largely lost its relevance. Thus, the topic of this article is relevant and the research is timely. Its *purpose* is to analyse the regulatory framework for food security, identify key shortcomings and formulate proposals for their elimination. The study is based on a set of *methods* of scientific knowledge, in particular: the philosophical dialectical method, the method of analysis, formal legal and formal logical methods. *Results.* The article establishes that in Ukraine the provision of such food security indicators as: daily energy value of the human diet; provision of the human diet with basic types of food; economic affordability of food is at a low level. It is proved that one of the reasons for this is the imperfection of regulatory support. The paper reveals the absence of such important features as 'safety' and 'quality' of food in the legislative definition of the concept of 'food security'. Attention is focused on the risks of simplifying the rules for handling genetically modified organisms in the context of food production. *Practical implications.* The publication substantiates the need to develop and adopt a State programme for ensuring food security, which should be targeted and designed for a long-term period. This will, firstly, make it possible to clearly define the priority of food security in the social and economic policy of Ukraine; secondly, it will make it possible to clearly define the measures to ensure food security, the executors, the timing and other necessary criteria.

Keywords: food security, food security indicators, food, quality and safety, constitutional rights of citizens, genetically modified organisms, sustainable development, human health, environmental protection.

JEL Classification: K38, O13, Q01, Q18

1. Introduction

Eliminating hunger, ensuring food security, improving nutrition and promoting sustainable agriculture is one of the global goals of sustainable development (UN General Assembly Resolution of September 25, 2015 "Transforming our world: the 2030 Agenda for Sustainable Development") (Transforming our world: the 2030 Agenda for Sustainable Development). Incidentally, these goals were also enshrined in the Decree of the President of Ukraine of September 30, 2019 "On the Sustainable Development

Goals of Ukraine for the period up to 2030" (achieving food security, improving nutrition and overcoming poverty) (The Decree of the President of Ukraine "On the Sustainable Development Goals of Ukraine for the period up to 2030" No. 722/2019 of 2019). In the context of a full-scale war in Ukraine, their implementation, unfortunately, is becoming virtually impossible. Today, the situation with food supply in the country is so critical that the Food and Agriculture Organisation (FAO) and the World Food Programme (WFP) of the United Nations have included

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Ukraine in the list of 20 hotspots in the world that are experiencing acute food shortages (Hunger Hotspots FAO-WFP early warnings on acute food insecurity June to September 2022 outlook, 2022). In addition, according to the *speaker of the UN Office for the Coordination of Humanitarian Affairs in Ukraine, S. Abreu*, 18 million Ukrainians need humanitarian assistance, which includes the need to provide the population with food (UN Office for the Coordination of Humanitarian Affairs: 18 million people in need of humanitarian assistance in Ukraine, humanitarian situation expected to deteriorate, 2023). Accordingly, in such circumstances, the need to address the problem of accessibility and sufficiency of food for the population comes first. At the same time, there is no question of its quality and safety. Given this, the study of the issue of legal support for the country's food security is of particular **relevance**.

The purpose of the article is to analyse the current legislation and identify the problems in the legal framework for food security of Ukraine in the context of war and to find ways to solve them. The main **objective** of the paper is to reveal the state of provision of such food security indicators as: daily energy value of the human diet; provision of the human diet with basic types of food; economic affordability of food; and, on this basis, to assess the effectiveness of the legal mechanism for ensuring food security in the country.

2. Analysis of Recent Researches and Publications

Given the extreme importance of food security both for an individual/person/citizen and for the state as a whole, the issue of ensuring (including legal) food security has been the subject of scientific research on numerous occasions. A significant contribution to this area was made by S.O. Lushpaev, who studied the legal basis of food security in Ukraine on a monographic level (Lushpaev, 2014). It is also worth noting the work of scientists from the Yaroslav Mudryi National Law University, which became a kind of generalisation of organisational, legal and institutional issues of food security (Batygina et al., 2013), the work of T. V. Kurman and O. M. Tuyeva on legal issues of food security in Ukraine (Kurman & Tuyeva, 2021), etc. Obviously, over time, due to the dynamics of changes in the legal, economic, and social environment, some conclusions have lost their relevance, but this does not diminish or negate the importance of such research in general. Currently, research into the economic and legal aspects of food security, including under martial law, is ongoing. It is worth mentioning here the work of T. E. Kharitonova and H. A. Grigoryeva, who, based on the experience of countries such as Syria,

Ethiopia, Eritrea, Sudan, Afghanistan, Iraq, Kosovo, Yemen (i.e., those that have had experience of solving food security problems through war), developed proposals for ensuring food security in Ukraine (Kharitonova & Grigoryeva, 2023). From the point of view of the subject matter of the study, the proposals of Byaruhanga R., Isgren E. to introduce the "concept of food sovereignty" as an alternative to the current model of food security are of interest. It should also be noted that these scholars rely on the Ukrainian experience of overcoming food security problems in the context of unprecedented (since the Second World War) Russian armed aggression (Byaruhanga & Isgren, 2023). The conclusions of scholars on the impact of the Russian-Ukrainian war on the deepening of the global food security problem are also important (Alibay et al., 2023). There are also works on specific aspects of food security. For example, improving food security by ensuring agro-ecological development, including in the period of post-war recovery of Ukraine (Novak et al., 2024), the impact of an appropriate level of legal regulation of the use of biotechnology in agriculture to ensure food security (Novak et al., 2023).

At the same time, there has been no separate in-depth study of food security indicators and the current conditions and state of their legal support, so this paper aims to fill this gap.

3. Methodology

The methodological basis of the study, which made it possible to achieve the goal and solve the outlined tasks, was a set of methods of scientific knowledge. In particular, the following methods were used: the philosophical (dialectical) method, the formal logical method, the method of analysis and the formal legal method. The dialectical method made it possible to determine the state and trends of changes in the field of food security in relation to economic and social factors. The formal legal method was used to formulate the conclusions of the study. The same method helped to identify shortcomings and gaps in the legal regulation of food security relations. The analysis method contributed to the study of the substantive and qualitative aspects of food security indicators. The content of legal norms was determined using the formal legal method of scientific knowledge.

4. Results and Discussions

4.1 The Concept of Food Security

Turning directly to the issue of legal regulation of food security in Ukraine, it is necessary to pay attention to the definition of this concept contained in the national legislation. Thus, according to the Law of Ukraine of 24 June 2004 "On State Support

of Agriculture of Ukraine", food security is the protection of human vital interests, which is expressed in the state's guarantee of unimpeded economic access to food in order to maintain normal life activities (clause 2.13 of Article 2) (The Law of Ukraine "On State Support for Agriculture in Ukraine" No. 1877-IV of 2004). As far as EU legislation is concerned, food security is linked to the possibility of constant access to sufficient, safe and nutritious food (Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2 December 2021 establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013). Looking at international legislation, for example, the Rome Declaration on World Food Security, adopted at the World Summit on Food Security (Rome, 16-18 November 1996), defines food security as physical, social and economic access to sufficient, safe and nutritious food to meet people's dietary needs and food preferences and to lead an active and healthy life (The Global Food Security Index). In addition, the Global Food Security Index (hereinafter referred to as *GFSI*) includes food quality and safety as mandatory components (The Global Food Security Index, 2022). All this allows to take into account the factors that have a significant impact not only on the level of food supply, but also on the extent to which food consumption is balanced and conducive to human development. In addition, the national agrarian and legal literature has repeatedly drawn attention to the need to include the above criteria in the concept of food security (Kurman, 2013). In view of the above, it seems appropriate to use this approach in Ukrainian legislation.

According to the Methodology for Determining Key Indicators of Food Security, approved by the Cabinet of Ministers of Ukraine on December 5, 2007, No. 1379 (hereinafter – the Methodology), the indicators characterising the state of food security in Ukraine are defined by law as: 1) daily energy value of the human diet; 2) provision of the human diet with basic types of food; 3) economic affordability of food; 4) adequacy of grain reserves in state resources; 5) differentiation of food costs by social groups; 6) capacity of the domestic market for certain products; 7) food independence for a particular product (The Resolution of the Cabinet of Ministers of Ukraine "Certain Issues of Food Security" No. 1379 of 2007). In this study, the focus will be on the characteristics of the first 3 of them.

It should be noted that the study is mainly based on official statistics that are publicly available

(currently for 2021). This is due to the lack of official information for 2022-2024 and the objective impossibility of obtaining and summarising relevant data given the temporary occupation of a large part of Ukraine's territory and active hostilities in a number of regions. It should be added that the described situation with the provision of at least the above-mentioned food security indicators is constantly changing towards deterioration.

4.2 Daily Energy Value of the Human Diet as an Indicator of Food Security

With regard to the first indicator (daily energy value of a person's diet), its limit (threshold) criterion, as defined by the Methodology (The Resolution of the Cabinet of Ministers of Ukraine "Certain Issues of Food Security" No. 1379 of 2007), should be 2500 kcal per day. For comparison, the corresponding figure for a European citizen is 3400 kcal, and it is planned to increase further to 3500 kcal in 2050 (Jelle Bruinsma European and Central Asian Agriculture Towards 2030 and 2050, 2021). In addition, the Ukrainian legislator stipulates that 55% of the daily human diet should be made up of animal products. However, according to statistics in 2021, the nutritional value of the daily diet of a Ukrainian was 2677 kcal, of which 795 kcal (30%) were of animal origin and 1882 kcal (70%) were of plant origin (Statistical collection "Agriculture of Ukraine" for 2021, 2022). There is a slight excess of the overall nutritional threshold (by 0.7%) against the background of almost double (30% vs. 55%) underconsumption of animal products. Thus, it can be concluded that the average daily diet of a Ukrainian is at the minimum consumption level, and therefore, there is no question of any physical development.

4.3 Provision of the Human Diet with Basic Products as an Indicator of Food Security

The next indicator is the provision of the human diet with basic types of food. These include: bread and bakery products; potatoes; vegetables, melons; fruits, berries and grapes; sugar; oil; meat and meat products; milk and dairy products; fish and fish products; eggs (clause 2 of the Methodology). This list covers the minimum number of products that can meet the physiological needs of the population. At the same time, the List of Goods of Significant Social Significance, approved by the Resolution of the Cabinet of Ministers of Ukraine of 22 April 2020 No. 341 (The Resolution of the Cabinet of Ministers of Ukraine "On Measures to Stabilize Prices for Goods of Significant Social Significance and Anti-Epidemic Goods" No 341 of 2020), only buckwheat, granulated

sugar, high-grade wheat flour, domestically produced pasta (vermicelli made from high-grade wheat flour), pasteurised milk with a fat content of 2, 5 %, rye-wheat bread, C1 chicken eggs, poultry (chicken carcass, chicken carcass quarter), still mineral water, butter with a fat content of 72.5 %, loaf, refined sunflower oil. It is notable that four of the twelve products listed are bread and bakery products, while meat and meat products, fish and fish products, and vegetables and fruits are conspicuous by their absence. It is therefore pertinent to inquire as to why these products have not been included by the legislature in the list of those of significant social importance.

The analysis of statistical indicators below allows to conclude that, in fact, most indicators of consumption of basic foodstuffs are either at the lower limit of the physiological minimum consumption or even do not "reach" it. This indicates that the vast majority of the Ukrainian population receives a level of calories that may have a negative impact on their health.

Table 1

**Consumption of basic food products
(annual per capita, kg)**

Product	2020	2021
Meat and meat products	53,8	53,0
Milk and dairy products	201,9	201,5
Eggs, pcs.	278	272
Fish and fish products	12,4	13,2
Sugar	27,8	28,5
Oil	12,3	13,6
Potatoes	134,0	132,4
Vegetables, melons and gourds	164,0	165,4
Fruits, berries and grapes	56,5	59,0
Bread products	96,6	92,7

Source: Ukraine in figures 2022. Statistical collection. Kyiv, State Statistics Service of Ukraine. 2023. 34 p.

Table 2

**Recommended rational norms of consumption
of basic foodstuffs per capita (annual per capita, kg)**

Type of product	Kg/year, norm (rational)*
Meat and meat products	80
Milk and dairy products in terms of milk	380
Eggs, pcs	280
Bread products	101
Potatoes	124
Vegetables and melons food crops	161
Fruits, berries and grapes	90
Fish and fish products	20
Sugar	38
Oil	13

Source: Recommended rational norms of consumption of basic foodstuffs per capita for 2005-2015, approved by the Ministry of Health of Ukraine. Available at: <https://dostup.pravda.com.ua/request/27338/response/S1411/attach/3/SCAN%20114762...pdf>

Comparing the data in Table 1 and Table 2 shows that the diet of an average Ukrainian citizen is equal to or exceeds the scientifically based (rational) nutritional standards for the following products: potatoes – 106.77%, vegetables and melons – 103.04%, and oil – 104.62%. Nevertheless, the underconsumption of the following products should be of serious concern: fish and fish products – 34.0%, fruit – 34.44%, sugar – 25%, eggs – 2.86%, meat and meat products – 33.75%, milk and dairy products – 46.7%, and bread products – 8.22%.

In addition, a study of the composition of the minimum consumer basket shows that the process of underconsumption of basic foodstuffs by the population is deepening. Thus, if to compare the set of food products approved by the Resolution of the Cabinet of Ministers of Ukraine No. 780 of October 11, 2016 (The Resolution of the Cabinet of Ministers of Ukraine "On Approval of Food Sets, Non-Food Sets and Service Sets for Key Social and Demographic Groups" No. 780 of 2016), and the rational consumption norms (Table 3 and Table 2, respectively), one can conclude that for all products except bread, they are underestimated by an average of one third, for oil – by almost half, and for milk and dairy products – by two thirds. Hence, the type of diet of Ukrainians will continue to be characterised not by a developmental diet, as in the advanced countries of the world, but by a survival diet.

Table 3

Consumption norms (annual per capita, kg)

Product type	Kg/year per person
Meat and meat products	53
Milk and dairy products in terms of milk	138,5
Eggs, pcs.	220
Bread products	101
Fruits, berries and grapes	64
Fish and fish products	13
Sugar	24
Potatoes	95
Vegetables and gourds	107
Oil	7,1

Source: The Resolution of the Cabinet of Ministers of Ukraine "On Approval of Food Sets, Non-Food Sets and Service Sets for Key Social and Demographic Groups" No. 780 of 2016. Available at: <https://zakon.rada.gov.ua/laws/show/780-2016-%D0%BF#Text>

The above-mentioned Resolution of the Cabinet of Ministers of Ukraine No. 780 of October 11, 2016 was declared unlawful and invalid by the District Administrative Court of Kyiv on April 25, 2018, primarily due to violations of the procedure, in particular, the scientific and public examination of a set of food, non-food products and services to establish the subsistence minimum (The Resolution of the Supreme Court of December 20, 2018 in case

No. 826/3639/17). At the same time, the decision did not mention at all that the set of food products included in the consumer basket was formed without taking into account the standards of rational consumption developed by the Ministry of Health. Moreover, the decision of the District Administrative Court of Kyiv was cancelled by the Supreme Court's ruling of December 20, 2018 (The Resolution of the Supreme Court of December 20, 2018 in case No. 826/3639/17). As a result, the Resolution of the Cabinet of Ministers of Ukraine No. 780 of October 11, 2016 (The Resolution of the Cabinet of Ministers of Ukraine "On Approval of Food Sets, Non-Food Sets and Service Sets for Key Social and Demographic Groups" No. 780 of 2016) continues to be in force.

4.4. Affordability of Food as an Indicator of Food Security

The underconsumption of most staple foods can be explained solely by the economic unaffordability of food. The economic affordability of food for the population is the ability of the population to satisfy their rational food needs at the expense of their own income (Yermolenko, 2011). The threshold criterion for the affordability of products is 60%.

An indicator of the economic affordability of food is primarily the income of the population. An analysis of statistics shows that in urban areas, about 60% of the population had an income below the minimum wage (i.e., below 6,500 UAH in 2021), while in rural areas this figure was about 75% (see Table 4).

Table 4
Distribution of the average monthly income of the population (2021)

Total income per month, UAH per person	In urban areas, %	In rural areas, %
up to 3000,0	4,0	8,9
3000,1-4000,0	11,3	14,7
4000,1-5000,0	16,6	19,2
5000,1-6000,0	15,2	17,9
6000,1-7000,0	14,0	14,4
7000,1-8000,0	10,9	8,4
8000,1-9000,0	8,3	6,5
9000,1-10000,0	5,8	3,2
10000,1-11000,0	4,5	2,3
11000,1-12000,0	3,0	1,6
over 12000,0	6,4	2,9

Source: *Expenditures and resources of Ukrainian households (according to a sample survey of household living conditions) for 9 months of 2021*. Available at: <https://www.ukrstat.gov.ua/>

An analysis of statistical data on the structure of household cash expenditures shows that almost half of consumer expenditures are spent on food (Table 5).

Table 5

Consumer expenditure structure of households

Expenditure type	% to consumer spending
Food and non-alcoholic beverages	46,8
Alcoholic beverages	1,2
Tobacco products	2,4
Clothing and footwear	5,7
Housing, water, electricity, gas and other fuels	17,8
Household items, household appliances and routine maintenance	2,6
Healthcare products	5,4
Transport	5,2
Communication	4,0
Recreation and culture	1,9
Education	1,2
Restaurants and hotels	2,1
Miscellaneous goods and services	3,7

Source: *Expenditure and resources of households of Ukraine in 2021 year (2022)*. Statistical collection. Part 1. Kyiv, State Statistics Service of Ukraine. 433 p.

Thus, already in the pre-war period, it is possible to state a violation of the constitutional right of Ukrainian citizens to an adequate standard of living for themselves and their families (Article 48 of the Constitution of Ukraine) (The Law of Ukraine "The Constitution of Ukraine" No 254к/96-BP of 1996). At the same time, not a single legal act aimed at a comprehensive solution to this problem was adopted. Moreover, it was virtually ignored at the state level. For example, the publication of information on the real state of food security in the country has ceased (the last available report was published in 2013).

To date, all of the above indicators have deteriorated. According to the Kyiv School of Economics, after six months of war, due to rising consumer prices and unemployment, the availability of food in Ukraine has decreased by 15-43% (Food security in Ukraine after six months of war, 2022).

That is, the situation with the availability of food for the majority of the population of Ukraine has long been catastrophic and has now been further exacerbated by the ongoing war. According to research conducted in early 2023, Ukrainians spend 66% of their budget on food and mandatory payments. For comparison, in European countries, this figure is less than 50% of the budget. The following generalisations are illustrative: about 67% of Ukrainians are willing to save money on food, and the vast majority (92%) of Ukrainians over the age of 58 make decisions to buy inexpensive food. On average, almost three-quarters (74%) of the Ukrainian population prefer inexpensive food products. In the second year of the full-scale invasion, food expenditures increased for a third of Ukrainians

(32%) compared to 2022, due to the constant rise in prices for this category of goods (Consumer sentiment of Ukrainians in the second year of the full-scale invasion, 2024).

4.5. Measures of Legal Influence on the State of Food Security in Ukraine

In order to stabilise prices for goods of significant social importance, the country introduced a regime of state regulation of prices by introducing a procedure for declaring price changes (Article 13 of the Law of Ukraine "On Prices and Pricing" dated June 21, 2012) (The Law of Ukraine "On Prices and Pricing" No 5007-VI of 2012). The procedure for declaring changes in retail prices for the above-mentioned goods was approved by Resolution of the Cabinet of Ministers of Ukraine No. 341 dated April 22, 2020 (The Resolution of the Cabinet of Ministers of Ukraine "On Measures to Stabilize Prices for Goods of Significant Social Significance and Anti-Epidemic Goods" No 341 of 2020). At the same time, for the period of martial law, regional military administrations, together with the National Police and the State Service of Ukraine for Food Safety and Consumer Protection, were vested with the authority to control the establishment of state regulated prices for goods of significant social importance at retail facilities (clause 2-1 of Resolution of the Cabinet of Ministers of Ukraine "On Establishing the Powers of Executive Authorities and Executive Bodies of City Councils to Regulate Prices (Tariffs)") (The Resolution of the Cabinet of Ministers of Ukraine "On Establishing the Powers of Executive Authorities and Executive Bodies of City Councils to Regulate Prices (Tariffs)" No. 1548 of 1996). Practice has proven the ineffectiveness of this mechanism. For example, in March 2022, specialists of the Main Department of the State Service of Ukraine for Food Safety and Consumer Protection in Poltava Oblast carried out 700 control measures to monitor the setting of prices for socially important goods by retailers. Violations were found in every second business entity (In March, every second business entity found overpricing of goods of significant social importance – State Service of Ukraine for Food Safety and Consumer Protection of Poltava Region, 2022). As a result, in June 2023, this mechanism ceased to be applied due to the expiry of Resolution No. 341 of the Cabinet of Ministers of Ukraine dated April 22, 2020 (The Resolution of the Cabinet of Ministers of Ukraine "On Measures to Stabilize Prices for Goods of Significant Social Significance and Anti-Epidemic Goods" No 341 of 2020).

Thus, in more than two years of war, Ukraine has not created an effective legal mechanism to ensure food security. Therefore, it seems reasonable to

suggest that the scientific literature should develop a comprehensive state programme to ensure food security, which should simultaneously include measures to immediately respond to the current food crisis and measures aimed at overcoming the consequences of hostilities, restoring industrial and social infrastructure, restoring the environment, and introducing a systematic approach to implementing such restoration measures (Pashchenko, 2022).

At the beginning of this article, an emphasis was placed on the need to introduce such characteristics as food quality and safety into the concept of "food security" used in national legislation. Unfortunately, in the context of the war, Ukrainian legislation has shown negative trends aimed at ignoring them. For example, the Draft Law "On State Regulation of Genetic Engineering Activities and State Control over the Circulation of Genetically Modified Organisms and Genetically Modified Products to Ensure Food Security" is one of the legal acts that may negate the principle of food safety (The Draft Law "On State Regulation of Genetic Engineering Activities and State Control over the Circulation of Genetically Modified Organisms and Genetically Modified Products to Ensure Food Security" No. 2911-IX of 2021). In particular, it provides for the state registration of plant varieties created using a GM source in accordance with the procedure established by law (clause 6 of Article 24 of the Draft) with the simultaneous removal from the preamble of the Law of Ukraine "On Seeds and Planting Stock" (The Law of Ukraine "On Seeds and Planting Stock" No. 411-IV of 2002) of the provision that its effect does not apply to the circulation of seeds and planting stock of genetically modified organisms (plants) (clause 4 of the Final and Transitional Provisions of the Draft). This creates a situation in which the state registration of plant varieties created with the use of GMOs will be carried out in accordance with the general procedure under the Law of Ukraine "On Seeds and Planting Stock" (The Law of Ukraine "On Seeds and Planting Stock" No. 411-IV of 2002). In addition, a number of provisions of the draft law contradict Regulation (EC) No. 1829/2003 of the European Parliament and of the Council of September 22, 2003 on genetically modified food and feed (Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed (Text with EEA relevance), 2003). Thus, according to the Regulation, no person shall introduce GMOs for use in food products unless they are covered by a permit and unless the relevant conditions of the permit are met (Article 4(2)). The draft also states that prior to the commencement of genetic engineering activities (the first risk level), its subject is obliged to submit a declaration of

intent to carry out such activities (Article 16). Accordingly, one cannot but agree with the opinion of the Main Scientific and Expert Department of the Verkhovna Rada of Ukraine that the adoption of the said proposal will not contribute to the implementation of such principles of state policy in the field of GMOs as the priority of preserving human health and environmental protection over obtaining economic benefits from the use of GMOs and preventing possible risks to human health and the environment (The Opinion on the Draft Law of Ukraine "On State Regulation of Genetic Engineering Activities and State Control over the Circulation of Genetically Modified Organisms and Genetically Modified Products to Ensure Food Security", 2021).

5. Conclusions

To summarise, the problem of food security in Ukraine was quite acute even before the war. This is evidenced by official data illustrating the level of compliance with at least 3 (1) daily energy value of the human diet; (2) provision of the human diet with basic types of food; (3) economic affordability of food) of its 7 indicators. This gives grounds to assert that the constitutional right of citizens to an adequate standard of living for themselves and their families (Article 48 of the Constitution of Ukraine) has been violated for a long time. In the harsh

realities of war, the situation with food supply is only getting worse. The daily diet of a Ukrainian becomes a diet of survival. The vast majority of staple food consumption indicators are either at the lower limit of the physiological minimum consumption or even fall short of it. The underconsumption of most basic foods should be primarily attributed to their economic inaccessibility. Moreover, the absence of such characteristics as food quality and safety in the legislative definition of "food security" can lead to negative consequences for both human health and the environment.

Given the crisis situation in this area, it would be advisable to adopt a long-term state targeted programme for food security approved by the Law of Ukraine. Such an approach would not only emphasise the priority of this issue in the socio-economic policy of the state, but would also facilitate the adoption of real measures to ensure the country's food security both during the war and in the post-war period.

The generalisations obtained will be useful for further scientific research on food security, and can also be used to develop the content of regulatory acts in this area, as well as to plan measures for the post-war reconstruction of Ukraine.

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References:

- Transforming our world: the 2030 Agenda for Sustainable Development <https://sdgs.un.org/2030agenda>
- The Decree of the President of Ukraine "On the Sustainable Development Goals of Ukraine for the period up to 2030" No. 722/2019 of 2019. Available at: <https://zakon.rada.gov.ua/laws/show/en/722/2019?lang=uk#Text>
- Hunger Hotspots FAO-WFP early warnings on acute food insecurity June to September 2022 outlook. Available at: <https://www.wfp.org/publications/hunger-hotspots-fao-wfp-early-warnings-acute-food-insecurity-june-september-2022>
- UN Office for the Coordination of Humanitarian Affairs: 18 million people in need of humanitarian assistance in Ukraine, humanitarian situation expected to deteriorate. Available at: <https://interfax.com.ua/news/interview/935083.html>
- Lushpaev, S. O. (2014). Legal principles of food security of Ukraine, 19.
- Batygina, O. M., Zhushman, V. M., Kornienko, V. M. & others (2013). Actual problems of legal support of food security of Ukraine: monograph. Kharkiv. 326 p.
- Kurman, T. V., & Tuyeva, O. M. (2021). The right to food security: education. manual Kharkiv: Jurayt, 92.
- Kharitonova, T. E., & Grigoryeva, H. A. (2023). Food security in the conditions of modern military conflicts: legal experience of foreign countries. *Legal scientific electronic journal*, Vol. 2, p. 287–291.
- Byaruhanga, R., & Isgren, E. (2023). Rethinking the Alternatives: Food Sovereignty as a Prerequisite for Sustainable Food Security. *Food ethics*, Vol. 8(16). DOI: <https://doi.org/10.1007/s41055-023-00126-6>
- Alibay, Y., Onuchko, M., Myrzantay, Zh., Menlikul, Sh., Baibolat, L., & Assel, K. (2023). Food Security as a Component Part of National Security: The Impact of the Russian-Ukrainian Conflict. *Journal of Educational and Social Research*, Vol. 13(3), p. 344–355.
- Novak, T., Melnyk, V., Kovalchuk, I., Pakhomova, A., & Nastina, O. (2024). Legal Support for Sustainable Agroecological Development: Evidence from Ukraine. *European Journal of Sustainable Development*, Vol. 13(2), p. 247. DOI: <https://doi.org/10.14207/ejsd.2024.v13n2p247>
- Novak, T., Melnyk, V., & Kovalchuk, I. (2023). Legal basis for the use of biotechnology in agriculture to ensure food security of Ukraine. *Modern Science – Moderní věda*, Vol. 3, p. 130–140. DOI: <https://doi.org/10.62204/2336-498X-2023-3-16>

The Law of Ukraine "On State Support for Agriculture in Ukraine" No. 1877-IV of 2004. Available at: <https://zakon.rada.gov.ua/laws/show/en/1877-15#Text>

Regulation (EU) 2021/2115 of the European Parliament and of the Council of 2 December 2021 establishing rules on support for strategic plans to be drawn up by Member States under the common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulations (EU) No 1305/2013 and (EU) No 1307/2013. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R2115>

The Global Food Security Index. Available at: <https://www.unccd.int/resources/knowledge-sharing-system/global-food-security-index>

Rome Declaration on World Food Security, adopted at the World Food Summit (Rome, November 13-17, 1996). Available at: <https://www.fao.org/3/w3613e/w3613e00.htm>

Global Food Security Index 2022. Exploring challenges and developing solutions for food security across 113 countries. Available at: <https://impact.economist.com/sustainability/project/food-security-index>

Kurman, T. V. (2013). Concept, features, main categories and principles of food security. Actual problems of legal support of food security of Ukraine: monograph. Kharkiv, p. 9–36.

The Resolution of the Cabinet of Ministers of Ukraine "Certain Issues of Food Security" No. 1379 of 2007. Available at: <https://zakon.rada.gov.ua/laws/show/1379-2007-%D0%BF#Text>

Jelle Bruinsma European and Central Asian Agriculture Towards 2030 and 2050. FAO Regional Office for Europe and Central Asia. *Policy Studies on Rural Transition*. No. 2012-1. 57 p. Available at: <http://www.fao.org/3/a-aq341e.pdf>

Statistical collection "Agriculture of Ukraine" for 2021. Kyiv, 2022. 222 p.

The Resolution of the Cabinet of Ministers of Ukraine "On Measures to Stabilize Prices for Goods of Significant Social Significance and Anti-Epidemic Goods" No 341 of 2020. Available at: <https://zakon.rada.gov.ua/laws/show/341-2020-%D0%BF/ed20230701#Text>

The Resolution of the Cabinet of Ministers of Ukraine "On Approval of Food Sets, Non-Food Sets and Service Sets for Key Social and Demographic Groups" No. 780 of 2016. Available at: <https://zakon.rada.gov.ua/laws/show/780-2016-%D0%BF#Text>

The Resolution of the Supreme Court of December 20, 2018 in case No. 826/3639/17. Available at: <https://reyestr.court.gov.ua/Review/73996223>

The Resolution of the Supreme Court of December 20, 2018 in case No. 826/3639/17. Available at: <https://reyestr.court.gov.ua/Review/78771927>

Yermolenko, V. M. (2011). Current issues of systematization of legislation on food security. *Modern problems of systematization of environmental, land and agrarian legislation of Ukraine: Collection of scientific papers of the Round Table* (March 18, 2011). Kyiv, p. 113–119.

The Law of Ukraine "The Constitution of Ukraine" No 254к/96-BP of 1996. Available at: <https://zakon.rada.gov.ua/laws/show/en/254%D0%BA/96-%D0%B2%D1%80#Text>

FoodsecurityinUkraineaftersixmonthsofwar.Availableat:https://kse.ua/wp-content/uploads/2022/11/1page_6-Months-Food-Security_ukr_mib_final.pdf

Consumer sentiment of Ukrainians in the second year of the full-scale invasion. 13.03.2024. Available at: <https://www2.deloitte.com/content/dam/Deloitte/ua/Documents/consumer-business/consumer-behavior-2024.pdf>

The Law of Ukraine "On Prices and Pricing" No 5007-VI of 2012. Available at: <https://zakon.rada.gov.ua/laws/show/en/5007-17?lang=uk#Text>

The Resolution of the Cabinet of Ministers of Ukraine "On Establishing the Powers of Executive Authorities and Executive Bodies of City Councils to Regulate Prices (Tariffs)" No. 1548 of 1996. Available at: <https://zakon.rada.gov.ua/laws/show/1548-96-%D0%BF#Text>

In March, every second business entity found overpricing of goods of significant social importance – State Service of Ukraine for Food Safety and Consumer Protection of Poltava Region. Available at: <http://polvet.gov.ua/uk/news/protyagom-bereznya-zavyshhennya-tsiny-na-tovary-shho-mayut-istotnu-sotsialnu-znachushhist-vstanovyly-ukozhnomu-drugomu-sub-yekti-gospodaryuvannya-derzhprodspozhyvsluzhba-poltavshhyny/>

Pashchenko, O. M. (2022). Problems of legal enforcement of food security under martial law. *Economic security of the state: theory and practice*, Vol. 1-2, p. 283–291. DOI: <https://doi.org/10.32850/sulj.2022.1-2.50>

The Draft Law "On State Regulation of Genetic Engineering Activities and State Control over the Circulation of Genetically Modified Organisms and Genetically Modified Products to Ensure Food Security" No. 2911-IX of 2021. Available at: https://itd.rada.gov.ua/billInfo/Bills/CardByRn?regNum=5839&conv=9&_gl=1*11fotlb*_ga*MTgyOTAwODÉwLjE1OTISMDkSMTQ*_ga_G9VY19PRSD*MTY5MTkzOTIwMy40LjEuMTY5MTk0MTc3MS42MC4wLjA

The Law of Ukraine "On Seeds and Planting Stock" No. 411-IV of 2002. Available at: <https://zakon.rada.gov.ua/laws/show/411-15?lang=en#Text>

Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed (Text with EEA relevance). OJ L 268, 18.10.2003, p. 1. Available at: <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32003R1829>

The Opinion on the Draft Law of Ukraine "On State Regulation of Genetic Engineering Activities and State Control over the Circulation of Genetically Modified Organisms and Genetically Modified Products to Ensure Food Security". Available at: https://itd.rada.gov.ua/billInfo/Bills/CardByRn?reg_Num=5839&conv=9&gl=1*11fotlb*_ga*MTgyOTAwODEwLjE1OTISMDk5MTQ.*_ga_G9VYI9PRSD*MTY5MTkzOTIwMy40LjEuMTY5MTk0MTc3MS42MC4wLjA

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