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Transformation of marketing logistics for the export of ukrainian crop production in the context of a full-scale war with the russian federation

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Abstract. In the context of a full-scale invasion of the russian federation, Ukrainian exporters faced problems with the physical supply of products to traditional sales markets. The purpose of the study was to analyse trends in the transformation of marketing logistics of crop production exports caused by the influence of martial law factors in Ukraine. The methodological basis of the research was a systematic approach and comparative analysis, monographic, statistical groupings, abstract and logical methods. The study examines the views of researchers on the content and role of marketing logistics in exports and highlights the main problems of exporters of crop production caused by a full-scale war with the russian federation. Statistical data on the dynamics of the share of certain types of plant products in the total export of the country are analysed and trends in the transformation of its commodity and geographical structure are determined. The negative impact of production restrictions and marketing logistics restrictions on the export of processed crop products, which form a higher added value compared to grain crops, is established. The assessment of the transformation of the geographical structure of crop exports showed a significant increase in the share of European countries due to the availability of transport logistics to these sales markets and stimulating institutional state influences. The conclusion is made about the positive impact of the development of marketing and sales logistics in the conditions of war on the prospects for increasing sales volumes in European markets of crop production in the conditions of post-war recovery. Further implementation of measures for its development will allow domestic exporters to gain a foothold in these sales markets and restore their positions in the export of cereals and oilseeds in the traditional markets of African and Asian countries. The practical significance of the study is that its results can be used by state

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institutions responsible for the development of the agricultural sector, when substantiating measures to support the crop industry and stimulate the export of its products, commodity producers and traders – when developing export strategies, scientists – when further studying the problems of export marketing logistics development

Keywords: plant products; export markets; product distribution channels; alternative logistics systems; armed aggression; post-war recovery

Introduction

Since the beginning of the active phase of the Ukrainian-russian war on February 24, 2022, the role of marketing logistics for export-oriented companies has become strategically important. Traditional distribution channels for crop production were partially blocked. The occupation of part of the territory of Ukraine, the destruction of elevator capacities, and the periodic de-energisation of the remaining part of them led to the fact that agricultural producers and traders faced not only problems with the sale of products but also their physical safety. Under these conditions, some of them were able to reorient themselves to other sales markets, reviewing not only the distribution channels but also the degree of processing of products. The analysis of the main trends in changes in the commodity structure and export areas of Ukrainian crop production determines the degree of adaptability of the marketing logistics system of industry enterprises and substantiates proposals for its further development in the conditions of post-war recovery.

O.S. Molnar *et al.* (2022) note the importance of an enterprise's logistics mission in its marketing system. N.H. Hurzhiy (2017) suggests that the functional content of sales, which is an element of the marketing complex, includes three generalising functions: marketing, which combines market analysis, distribution and sales directly; logistics – responsible for the physical distribution of products (commodity movement); organisational and managerial – provides motivation and control of sales activities, forms an organisational sales mechanism. E. Sos (2021) emphasises that logistics should be considered as a separate industry and that cooperation with the marketing field is important, so in the long run, the development of marketing logistics strategies is necessary for effective customer service. A similar opinion is held by O.Y. Hromova & N.S. Tereikovska (2019), stating that the development of modern marketing and logistics concepts leads to the fact that none of the concepts is effective without using a different concept. D.H. Kholmammatov (2022) simultaneously includes almost the entire complex of marketing and logistics functions in the content of the concept of “marketing logistics”. G.O. Kholodnyi (2019) defines marketing logistics as “a system aimed at the most optimal customer satisfaction in order to achieve sustainable competitive advantages by integrating, optimising, and rationalising logistics flows that include material, financial, and information flows”. O. Velychko *et al.* (2019) argue that marketing logistics primarily combines the areas of supply and distribution logistics. R. Bilovol & A. Chaikina (2016) came to the conclusion that marketing logistics of agricultural enterprises is

a subsystem of general logistics management of the enterprise, which is the process of managing planning, control of marketing logistics operations in order to meet consumer demand with minimal costs, considering the features that are associated with the production, warehousing, storage, and transportation of agricultural products.

The problems of developing export logistics of domestic crop production on the eve of a full-scale invasion were outlined by O. Kaliuzhna *et al.* (2019), who noted that inefficient logistics is a barrier to the future growth of grain exports from Ukraine, and identified areas for its improvement. Less categorical about the assessment of its effectiveness is I. Mayorova (2021), who suggests that “logistics schemes for grain delivery in Ukraine require partial modification”. The results of the analysis of the pre-war and current state of the grain logistics system and suggestions on ways to develop it during the war and after its end are given in the paper by O. Zakharchuk *et al.* (2022). T. Larina *et al.* (2020) structure the problems of export agricultural logistics at micro-, meso-, macro-, and supranational levels, and provide proposals for increasing the export potential of the agricultural sector in Ukraine, most of which require active involvement of state institutions for their practical implementation. The role of the national government in shaping the international marketing logistics system is also emphasised by Obaid-Ur-Rehman (2016).

From the analysis of these publications, it is clear that the development of marketing logistics for the export of Ukrainian crop production is relevant, but the impact of new factors caused by martial law on it requires further study.

The purpose of the study was to analyse trends in the transformation of marketing logistics of crop production exports caused by the influence of martial law factors in Ukraine.

Materials and Methods

The theoretical basis of the research was Ukrainian and foreign studies devoted to the problems of defining the content of the concept of “export marketing logistics” and the problems of its development in Ukraine. The information base of the study was the official data of the State Statistics Service of Ukraine (Commodity pattern of foreign..., 2023; Countries by commodity structure of foreign..., 2023), operational information of the Ministry of Agrarian Policy and Food of Ukraine on the commodity and geographical structure of crop exports (The state of foreign trade in..., 2023), and the results of monitoring the dynamics and trends of its changes by specialists of the National Research Centre “Institute

of Agrarian Economics” (In January-August 2022, Ukraine exported..., 2022, In January-August 2022, the European Vector..., 2022). To achieve this goal, the research was structured into successive stages: analysis of the dynamics of exports of agricultural products of Ukraine as a whole and the shares of the main groups of crop production in it for 2017-2022; determination of the main factors of the influence of wartime on the marketing logistics of export of crop products; comparative analysis of the geographical and commodity structure of exports in the pre-war and war period and determination of trends in transformation. In the course of the research, a systematic approach to the study of economic phenomena was used, which consists in dismembering the multicomponent system of marketing logistics of export of crop production based on the principle of the greatest importance of the connections of its components and highlighting the main properties of the system object with an indissoluble connection of structure and function in their dynamics and simultaneous changes in the state and transition to a qualitatively new level under the influence of exogenous factors. The methodological basis of the study was made up of theoretical methods: retrospective, comparative analysis, statistical groupings, abstract and logical. The use of the analytical method and content analysis allowed characterising the features of marketing logistics of export of Ukrainian crop production and identifying the main factors of security, institutional, production, transport, and sales nature, instigated by the war, which affected the state and its functioning under these conditions. The retrospective method in combination with comparative analysis was used to investigate the dynamics of export volumes of the main groups of agricultural

products, their contribution to the total export revenues of Ukraine, and identify trends in their changes. Using the method of statistical groupings, trends in the transformation of the geography and structure of exports of Ukrainian crop production were determined, and the use of graphical and tabular methods for presenting indicators – to illustrate the results of the analysis of statistical indicators. The abstract and logical method was used to substantiate theoretical generalisations about trends in the development of the research subject and generate conclusions.

Results and Discussion

Dynamics of exports of agricultural products of Ukraine as a whole and shares of the main groups of crop production in pre-war and war times

Ukraine plays a significant role in maintaining global food security. 2017-2021 was characterised by a rapid increase in the volume of exports of domestic agricultural products, in particular, the increase in sales of plant products on foreign markets amounted to 68.6%, and finished grain products – 39.9% (Table 1), however, the consequences of full-scale military operations were a drop in these indicators. The current situation in Ukraine has negatively affected the level of food security in some countries of the world. According to Human Rights Watch, “... this has already exacerbated the food crisis in the Middle East and North Africa. In particular: Lebanon receives 80% of wheat from Ukraine; Egypt buys wheat and large volumes of oil; Libya imports more than 40% of wheat; Yemen – at least 27%. In addition, the authorities of northwestern Syria provide the region with wheat and flour purchased through Turkey, which also imports 90% of wheat from Ukraine” (Melnyk, 2022).

Table 1. Dynamics of exports of agricultural products of Ukraine, thous. USD

Product name according to UCT ZED	2017	2018	2019	2020	2021	2022 *
1. Live animals; products of animal origin	1.108.757	1.210.638	1.277.016	1.188.165	1.345.195	1.353.988
2. Products of plant origin. incl.	9.215.708	9.886.060	12.914.543	11.883.238	15.538.028	12.037.374
<i>live trees and other plants</i>	3.957	4.443	6.480	5.743	8.143	4.668
<i>vegetables</i>	235.369	235.683	184.515	168.147	196.607	93.554
<i>edible fruits and nuts</i>	195.287	228.564	260.112	238.390	368.197	291.816
<i>coffee, tea</i>	13.610	12.059	11.709	15.011	15.901	10.246
<i>grain crops</i>	6.501.134	7.240.558	9.633.334	9.410.669	12.343.846	8.079.764
<i>products of the flour and cereal industry</i>	181.891	175.811	202.099	154.491	148.284	119.680
<i>seeds and oilseed fruits</i>	2.060.121	1.954.150	2.563.242	1.842.431	2.435.156	3.406.193
<i>natural shellac</i>	588	1.091	819	944	3.607	2.363
<i>plant materials for manufacturing</i>	23.750	33.702	52.233	47.412	18.287	29.092
3. Fats and oils of animal or vegetable origin	4.605.666	4.496.511	4.732.237	5.746.922	7.037.234	5.434.186
4. Ready-made food products. incl.	2.826.723	3.018.601	3.220.384	3.361.028	3.788.475	2.214.411
<i>finished grain products</i>	296.408	268.310	269.366	313.079	414.599	229.368

Note: * – for January-November 2022

Source: according to data (Commodity pattern of foreign ..., 2023)

Therewith, according to K. Deininger *et al.* (2023), the implications for regional and global food security will be far-reaching, with 41.5 million hectares of highly fertile land exceeding the agricultural area of France (18 million hectares), Germany (12 million hectares), and Poland (11 million hectares) combined, given Ukraine's traditional role as a breadbasket and the main exporter of wheat and sunflower oil. The authors note that losses in the production of Ukrainian agricultural products can increase if farmers are unable to harvest due to lack of resources or do not want to do so, because they will not be able to sell it – for example, due to a lack of storage facilities, and suggest identifying areas or groups that are particularly affected by the crisis and may need short-term support. This corresponds to the results of the study on the need to support agribusiness by government and international institutions in the development of logistics infrastructure during the war to ensure the sale of products.

N.M. Ngoc *et al.* (2022), examining the risks to the global supply chains of the Russian-Ukrainian war, also concluded that “the war has created additional pressure on the already strained global supply chain. Freight rates, especially for sea and rail transportation, are already very high and may increase even more due to the negative consequences

of the conflict. The impact of food disruptions is also inevitable, as Russia and Ukraine together account for more than a quarter of wheat exports, 19% of corn exports, and 80% of global sunflower oil exports, with Ukraine alone accounting for almost a quarter of sunflower oil exports”. At the same time, the concern of economists that problems with supply chains can delay global economic growth and lead to higher inflation in all countries, and the search for alternative sources of raw materials requires long-term investment before it is possible to supply products to the world market, contributed to the search for opportunities to develop alternative logistics systems for supplying Ukrainian agricultural products to foreign markets.

According to the published data of the State Statistics Service of Ukraine for January–November 2022, there was a significant reduction in exports of finished grain products (-39.4% compared to the same period of the previous year) and vegetable products (-12.1%), with the exception of seeds and fruits of oilseeds (+49.7%) (Table 1).

The share of the main groups of crop production in January–November 2022 in the total volume of exports of Ukrainian producers increased compared to previous periods, which is conditioned by a significant decrease in absolute and relative terms of most types of industrial products (Table 2).

Table 2. Dynamics of the share of certain types of plant products in the total export of Ukraine, %

Product name according to UCT ZED	2017	2018	2019	2020	2021	2022 *
Plant-based products	21.3	20.9	25.8	24.2	22.8	29.6
Grain crops	15.0	15.3	19.2	19.1	18.1	19.9
Products of the flour and cereal industry	0.4	0.4	0.4	0.3	0.2	0.3
Seeds and oilseed fruits	4.8	4.1	5.1	3.7	3.6	8.4
Fats and oils of animal or vegetable origin	10.6	9.5	9.5	11.7	10.3	13.4
Finished grain products	0.7	0.6	0.5	0.6	0.6	0.6

Note: * – for January–November 2022

Source: according to data (Commodity pattern of foreign ..., 2023)

At the same time, the authors share the opinion of P. Putsenteilo *et al.* (2018) and O. Zakharchuk (2021) that the raw material orientation of Ukrainian exports makes Ukraine's position in foreign markets vulnerable, since the demand for raw materials is unstable and characterised by significant seasonal price fluctuations, and the experience of many countries shows that producers receive the greatest profit from the sale of processed products, and not from the sale of raw materials. Therefore, developed countries process raw materials before exporting their products in order to sell the final product of consumption at a higher cost. **The main factors of wartime influence on the marketing logistics of crop production exports**

In the pre-war period, the high potential of the Ukrainian grain sub-complex did not provide proper performance for all grain market participants, which was explained by the imbalance between domestic consumption and export supplies, the high price of financial resources, and the lack of

clarity of state functions (Kazmir, 2021). At the beginning of a full-scale invasion, new problems generated by the war were added to this complex of unsolved problems.

Military actions on the territory of any country affect the functioning of the economy and the behaviour of economic entities. This impact is determined by the duration and intensity of the war. In agricultural production, which forms the export supply, the consequences can be divided into short-, medium-, and long-term.

With the beginning of the second active phase of the Ukrainian-Russian war, the agricultural sector of Ukraine faced the following problems (Nehrey & Trofimtseva, 2022):

- Occupation of Ukrainian territories: destruction of production capacities, infrastructure, problems of organisation of the sowing, lack of animal feed, shutdown of agricultural enterprises, a large number of mined territories (about 100 thousand hectares – Chernihiv, Luhansk, Donetsk, Kharkiv, Kherson, Zaporizhzhia, Kyiv oblasts).

- Problems with logistics: the aggressor’s blockade of sea transportation, which negatively affected the implementation of foreign trade operations of national economic entities, the release of capacities for storing grain of the future crop; the destruction of transport infrastructure, the destruction/out-of-sync of logistics chains within the country and outside.

- A decrease in the volume of the domestic market and a decrease in the purchasing power of the majority of Ukrainians. The deficit of consumption of meat and dairy products by Ukrainians, which was observed even before the war, increased significantly during wartime.

- Lack of resources for agricultural production: lack of fuel, lack of feed, shortage of certain types of fertilisers, lack of plant protection products, problems with resources and facilities, as well as rising prices for the means of production of the agricultural sector.

- Problems with the labour force: internal and external migration, mobilisation to the Armed Forces of Ukraine, rising unemployment, psychological problems of personnel: work under constant stress and anxiety.

- Theft of Ukrainian agricultural machinery and products: grain, oil, vegetables, fruits, etc.

This list can include the disruption of distribution channels due to the shutdown of some processing and elevator companies, and unpredictable changes in the price situation on the market for each type of commodity.

A shortage of storage capacity in the 2022 season, caused by the inability to export sufficient output, and a war-induced shortage of key resources such as fuel, fertiliser, seeds, or labour, can affect farmers’ decisions regarding crops and crop management in 2022 and subsequent seasons (Deininger *et. al.*, 2023).

Under such conditions, the creation of an alternative logistics system became an urgent issue of the national economy as a whole, since Ukraine had the opportunity to export already produced agricultural products (harvest 2021) for USD 7-10 billion, which would ensure the receipt of foreign exchange earnings in the country and this would be an important component of supporting its economy in war conditions. In addition, farmers had to free up storage capacity for a new crop.

Comparative analysis of the geographical and commodity structure of crop production exports in the pre-war and war periods and determination of transformation trends

Analysing the geographical structure of grain exports, it can be stated that in 2021 they were delivered to 122 countries of the world, but 79.9% of deliveries in monetary terms accounted for 15 countries, in particular, China – 20.7%, Egypt – 11.2%, Turkey – 7.4%, Indonesia – 6.1%, Spain – 5.2%, the Netherlands – 4.2%, Iran – 4.3%. The value of exports to these 6 countries amounted to USD 7,337,496.1 thousand (Fig. 1), which accounted for 59.4% of the total export amount for this group (Countries by commodity structure..., 2022).

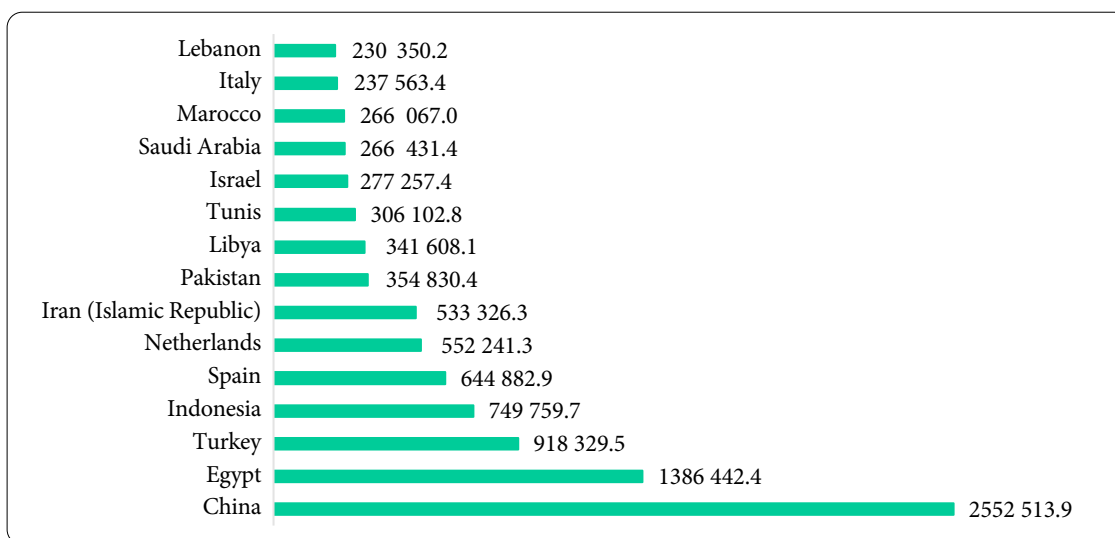


Figure 1. Largest exporting countries of Ukrainian grains in 2021, thousand USD

Source: based on (Countries by commodity structure..., 2022)

For 11 months of 2022, grain exports in monetary terms decreased by 24.8% compared to the same period of the previous year, but only by 5.3% compared to 2020. According to the National Research Centre “Institute of Agrarian Economics”, the largest buyers of Ukrainian grain in January-August 2022, as before, were the countries of Asia, the European Union, and Africa. The leading position in the

rating of the main importers of Ukrainian grain is held by China, whose share in total exports during this period amounted to 14.4% of the cost of deliveries. This Asian country purchased USD 749 million worth of Ukrainian grain (In January-august 2022, Ukraine..., 2022). At the same time, there is an increase in the total share of European countries, which account for more than 35% of exports (Fig. 2).

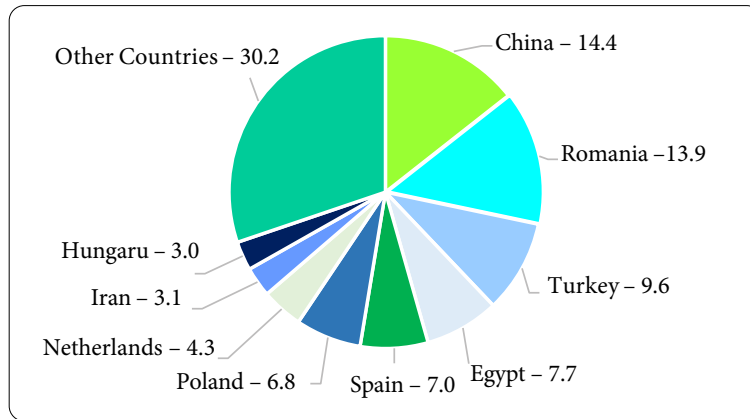


Figure 2. Shares of individual countries in the exports of Ukrainian grain crops in monetary terms in January-August 2022, %

Source: based on (In January-august 2022, Ukraine exported..., 2022)

The products of the flour and cereal industry form a higher added value compared to grain. According to G. Kundieieva & O. Kulish (2017), each tonne of flour sold brings an additional USD 100 more in foreign exchange earnings compared to wheat exports. But it occupies a small share in the total volume of exports of domestic products and the negative trend is its reduction in dynamics, while

in absolute terms the decrease amounted to USD 33,607.3 thousand in 2021 compared to 2017. In 2021, the products of this group were delivered to 132 countries of the world, among which 13 provided 57.3% of the total sales of products of this group, while relatively insignificant percentage values for each of the buyer countries indicate the diversification of sales markets (Fig. 3).

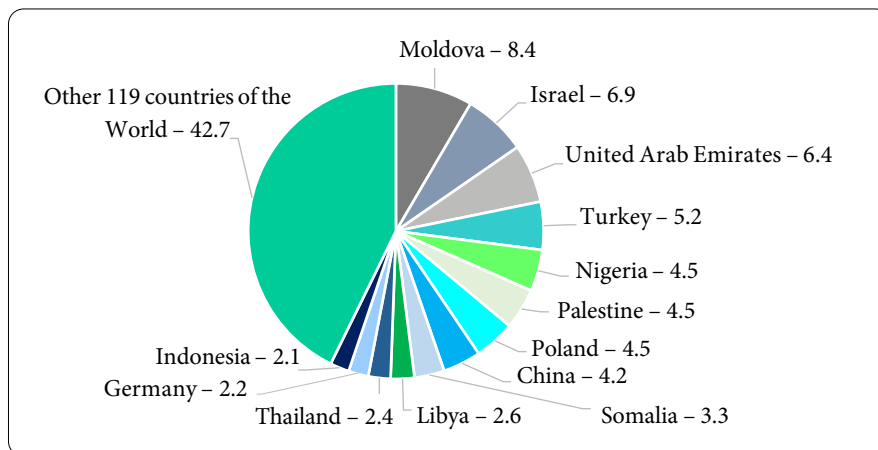


Figure 3. Shares of individual countries in exports of Ukrainian products of the flour and cereals industry in monetary terms in 2021, %

Source: based on (Countries by commodity ..., 2023)

The main volumes of exports of flour and cereal industry products in 2022 fell on the second half of the year, as exporters gradually mastered new logistics supply routes, mainly to EU countries after opening their market for Ukrainian products by abolishing duties and quotas (Fig. 4).

In 2021, Ukraine exported seeds and oilseed fruits to 92 countries, but only 13 of them accounted for 90.6% of the total value of products sold in this group on the foreign market and more than 60% to European countries (Fig. 5).

A significant increase in the export of seeds and oilseed fruits in 2022 was mainly conditioned by the difficulty of selling vegetable oils that were traditionally exported by sea, and the logistics of land transport for the transportation of these products was not adjusted, which led to mass exports in 2022, primarily sunflower seeds, the logistics of supplies to European countries was well established. For 8 months of 2022, the so-called "leader" – buyers have changed (Fig. 6).

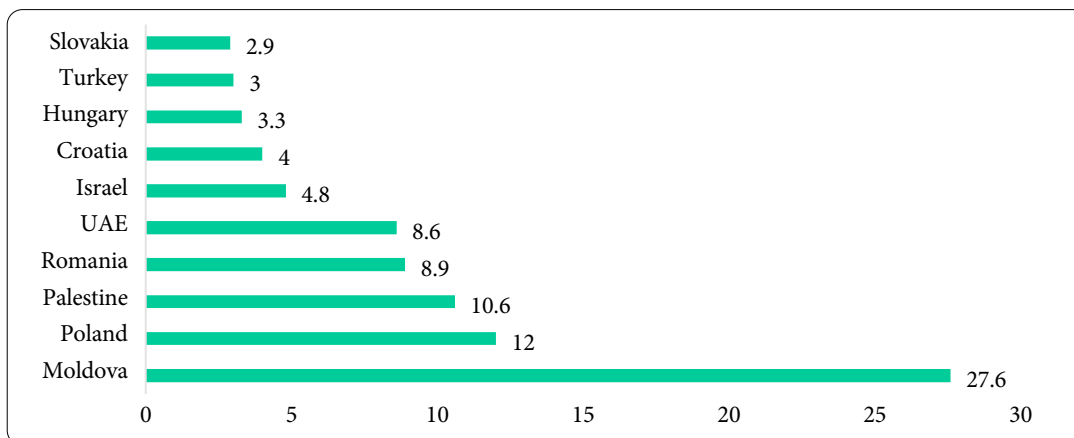


Figure 4. Shares of individual countries in the export of Ukrainian flour in 2022, %

Source: (Flour exports from ... Ukragroconsult, 2023)

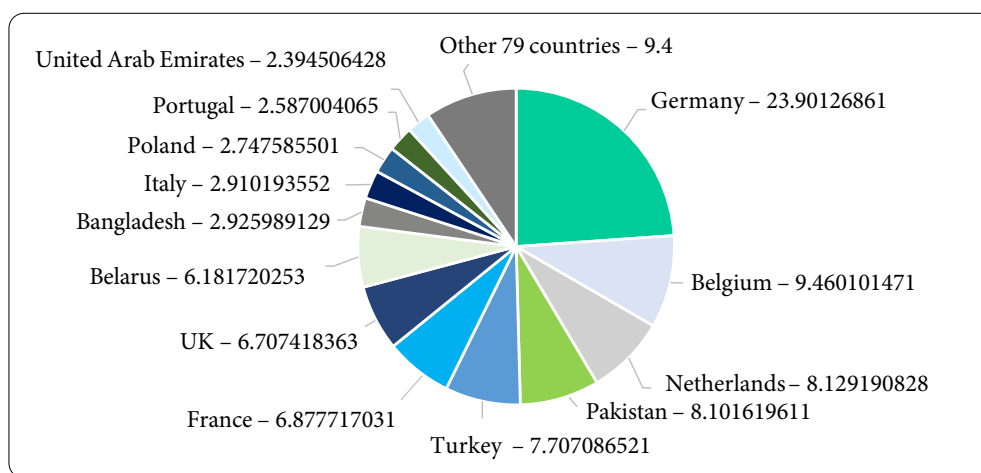


Figure 5. Shares of individual countries in exports of Ukrainian seeds and oilseed fruits in monetary terms in 2021, %

Source: (Countries by commodity 2 2023)

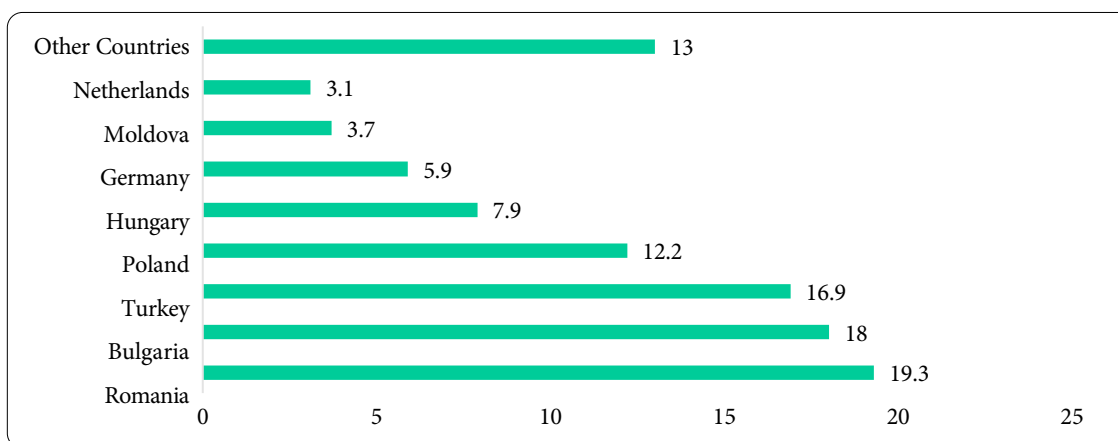


Figure 6. Shares of individual countries in exports of Ukrainian seeds and oilseed fruits in monetary terms in January-August 2022, %

Source: (In January-August 2022, the European vector..., 2022)

The production of fats and oils of animal or vegetable origin creates a large added value compared to the products of the previous group, so the positive trend was to increase the volume of its exports by 65.5% in 2021, compared to 2017. Trade in these goods in 2021 became the fourth for Ukraine in terms of foreign exchange revenue after trade in ferrous metals (sold for a total of USD 13.96 billion),

cereals (USD 12.35 billion) and ore (USD 7.13 billion) (It became known ..., 2022). In total, deliveries in 2021 were made to 149 countries, but the main buyers were mainly Asian and European countries. Thus, India, China, and Iraq accounted for 45.9% of exports in monetary terms, while the Netherlands, Spain, Poland, Italy, France, and the United Kingdom accounted for a total of another 33.2% (Fig. 7).

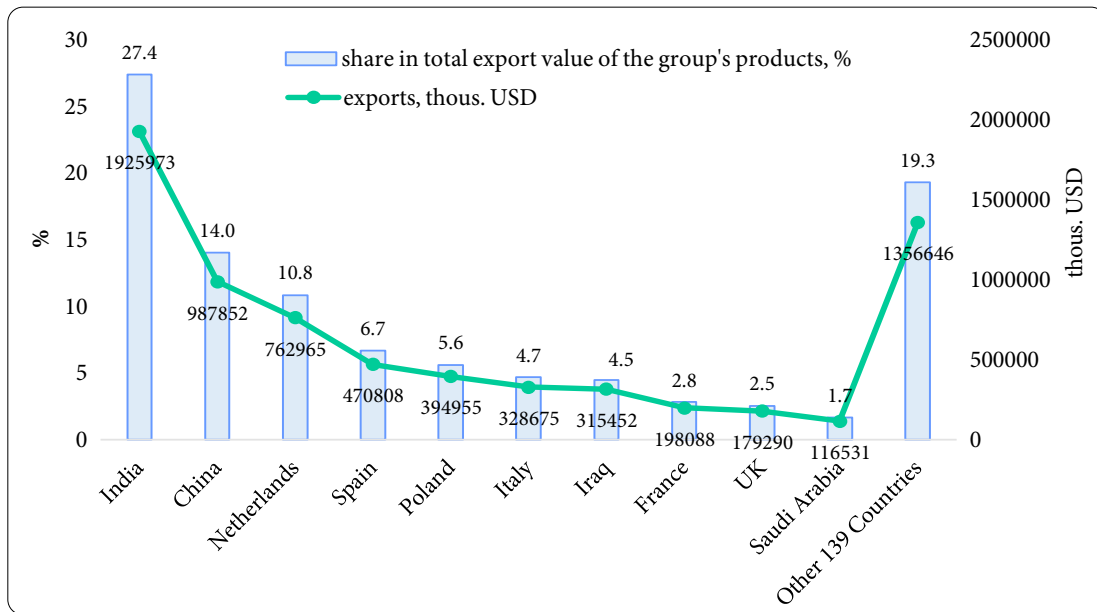


Figure 7. The cost of exporting Ukrainian fats and oils of animal or vegetable origin and the share of individual countries in it in 2021

Source: (Countries by commodity ...State Statistics Service of Ukraine. 2023)

The reduction in foreign exchange earnings from the export of oilseeds and fats in 2022 is conditioned both by the complete shutdown of industrial enterprises, in particular, oil-producing and fat-oil in the war zones and in the temporarily occupied territories of Ukraine, and due to the blocking of the ports of the Black and Azov seas in the first months of the war. This forced exporters to create

new logistics chains, search for alternative sales markets, and reorient exports from closed ports to western borders, using rail transportation. After the resumption of exports through the Black Sea ports, the supply of products of this group sharply intensified, but these trends affected the geography of exports (Fig. 8) and the total share of European countries in it has increased markedly.

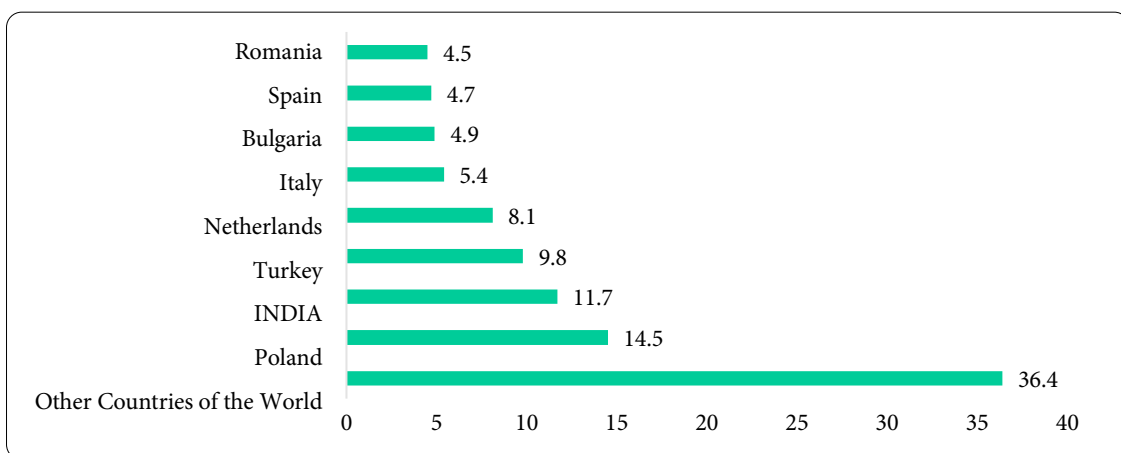


Figure 8. Shares of individual countries in exports of Ukrainian fats and oils of animal or vegetable origin in monetary terms in January-August 2022, %

Source: (In January-August 2022, the European vector..., 2022)

Analysis of the transformation of transport logistics routes for agricultural products shows that during the first months of the war, export volumes decreased by more than four times compared to the pre-war period. In this situation, subjects of foreign economic activity with the participation of the government of Ukraine began to search for alternative opportunities for product distribution. At that time, the only possible export destination was the western border of Ukraine, and traders paid attention to the routes of movement of products that were traditionally not popular with them in the past. An alternative to sea transportation was to be road and rail transport, using the capabilities of the ports of Izmail and Reni with further transportation for European consumers of grain along the Danube River, and for others – through Romanian ports. However, each of these options had significant drawbacks.

The radius of use of road transport for grain transportation increased by 2.5 times compared to the pre-war indicator and amounted to 1 thousand km. This dramatically increased transportation costs due to the high cost of fuel and lubricants, which negatively affects profitability. Theoretically, it is possible to export grain by road, but the costs incurred made the business unprofitable or even detrimental. As for railway transport, in this context, the problem, on the one hand, was the use of different widths of railway tracks in Ukraine and the EU (respectively 1,520 against 1,435), and on the other – until recently, the European railway was not massively used for the transportation of grain and oilseeds, which led to a shortage of European-style grain wagons. In addition, six railway border crossings (on the border with Poland – Izov – Hrubieszów, Mostyska – Medyka, and Jagodin – Dorohusk; with Romania – Vadul-Siret – Dornești; with Slovakia – Chop – Čierna nad Tisou; with Hungary – Chop – Zahony) had a total capacity of 534 grain wagons per day. Consequently, both modes of transport could not fully meet the needs of exporters and mainly worked only on the territory of Ukraine, and their main task was to

transport grain and oil to the so-called “dry ports” (a multimodal logistics centre with an infrastructure that allows the cargo owner to enjoy all the advantages of a seaport, but on land) on the western border. Further, as a result of joint work of European partners and the government of Ukraine, the products continued their movement to the addressee due to the so-called “Solidarity Lanes”. The implementation of this area of logistics allowed doubling the volume of deliveries from April to July. Agricultural products were exported through 12 checkpoints on the border with Romania, Hungary, Slovakia, and Poland, as well as on the Moldovan-Romanian border. At various stages of development, there were 15 more transport routes where Ukrainian grain and seeds were to be delivered to the ports of the Baltic, North, Mediterranean, and Adriatic seas (Polska, 2022).

Since the first months of the war, the Danube River ports were actively involved in the export of products, through which grain was transhipped to Romanian seaports. However, this area had a significant drawback due to the lack of sufficient capacity for unloading/loading. In addition, during the harvest period, experts predicted the appearance of logistical problems associated with seasonal loading of Romanian, Serbian, Hungarian, and Bulgarian winter wheat and barley, for which this is a traditional transportation channel. This did not inspire confidence in the future stability of the work.

Positive developments in the development of alternative ways of exporting products did not allow Ukraine to compensate for the loss of direct sea transportation and reach pre-war volumes, since they provided only 50% of what is needed. Given the aggravation of the food crisis in certain regions of the world, the UN and Turkey joined the solution of the problem, which signed an agreement with the Russian Federation on the creation of the so-called “grain corridor” (“Black Sea Grain Initiative”). Since the beginning of its operation (1.08.2022), it has been possible to significantly increase the volume of exports of cereals and oilseeds (Fig. 9).

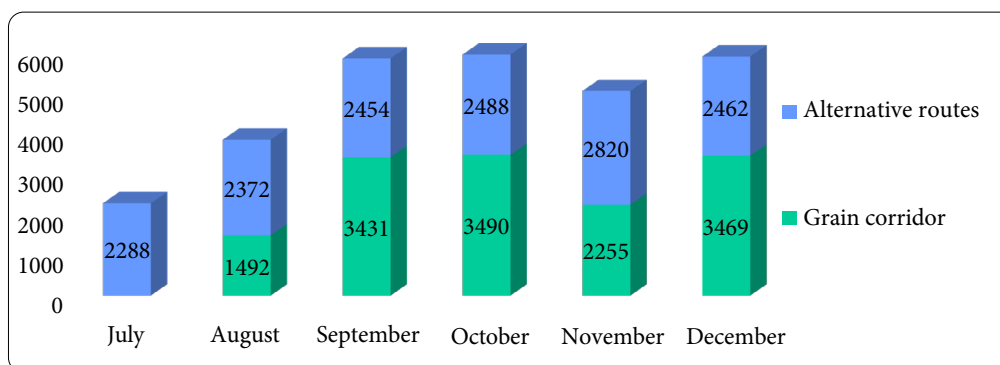


Figure 9. Export of grain and oilseeds by the “grain corridor” and alternative routes in July-December 2022, thous. tonnes

Source: (The state of foreign ..., Ministry of Agricultural policy and food of Ukraine, 2023)

Thus, despite the extreme challenges of wartime and logistical restrictions, Ukrainian producers and traders of crop products managed to partially reorient themselves to

new European markets, but their consumers do not physically need all the grain and oil that Ukrainian farmers are able to offer for export.

Conclusions

Military operations on the territory of Ukraine after a full-scale invasion of the Russian Federation forced exporters of crop products, in conditions of limited access to traditional sales markets due to the blocking of sea transport routes, to look for opportunities to organise new marketing logistics systems. The active support of the international community, in particular the UN and Turkey, to unblock Black Sea transportation, although allowed the supply of products to the markets of Asia and Africa, but in very limited volumes, compared to the pre-war period. As the analysis showed, in 2022 there was a change of “leaders” among buyers of all varieties of such products and a significant increase in sales volumes in the European market. This became possible, first of all, due to the abolition of export quotas and duties by the European Commission and the active work of Ukrainian officials to develop new export logistics routes. At the same time, Ukrainian entrepreneurs have gained more experience in new markets and established new business contacts. The key task after the victory of Ukraine for domestic exporters is to consolidate in these markets, as there is a constant demand for crop products with relatively high added value – Ukrainian vegetable oils and products of the flour and cereal industry, and to

restore their positions in the export of cereals and oilseeds in the traditional markets of African and Asian countries. Further development of marketing logistics of Ukrainian grain exports directly depends on the consolidated efforts of Ukrainian and foreign governmental and intergovernmental institutions, since individual economic entities – market participants – are not able to solve the problems of free access to foreign markets, attract investment in the restoration and development of warehouse and transport infrastructure, and support farmers in demining fields. A promising area of transformation is to increase the production and export of finished products from grain crops, which would allow Ukrainian enterprises to get higher incomes, increase employment, reduce the tonnage of external supplies and increase the cost of 1 tonne of exports. Therefore, further research is needed on the problems of forming external demand and stimulating sales in the export markets of Ukrainian ready-made food products.

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Conflict of Interest

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Трансформація маркетингової логістики експорту української продукції рослинництва в умовах повномасштабної війни з рф

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Анотація. В умовах повномасштабного вторгнення рф українські експортери зіткнулися з проблемами фізичного постачання продукції на традиційні ринки збуту. Метою статті був аналіз тенденцій трансформації маркетингової логістики експорту продукції рослинництва, зумовлених впливом чинників воєнного стану в Україні. Методологічну основу дослідження складав системний підхід та методи порівняльного аналізу, монографічний, статистичних групувань, абстрактно-логічний. В дослідженні розглянуто погляди науковців на зміст та роль маркетингової логістики в експорті та виокремлено основні проблеми експортерів продукції рослинництва спричинені повномасштабною війною з рф. Проаналізовано статистичні дані щодо динаміки частки окремих видів рослинної продукції у загальному експорті країни та визначені тенденції трансформації її товарної й географічної структури. Встановлено негативний вплив виробничих обмежень і обмежень маркетингової логістики на експорт продуктів переробки рослинництва, що утворюють більшу, порівняно з зерновими культурами додану вартість. Оцінка трансформації географічної структури експорту рослинницької продукції показала значне зростання частки європейських країн внаслідок доступності транспортної логістики до цих ринків збуту та стимулюючих інституційних державних впливів. Зроблено висновок щодо позитивного впливу розвитку маркетингової збутової логістики в умовах війни на перспективи нарощування обсягів збуту на європейських ринках продукції рослинництва в умовах повоєнного відновлення. Подальша реалізація заходів з її розбудови дозволить вітчизняним експортерам закріпитися на цих ринках збуту й відновити свої позиції по експорту зернових та олійних на традиційних ринках африканських та азійських країн. Практичне значення дослідження полягає в тому, що його результати можуть бути використані державними інституціями, відповідальними за розвиток аграрної сфери, при обґрунтуванні заходів з підтримки рослинницької галузі та стимулюванні експорту її продукції, товаровиробниками і трейдерами – при розробці експортних стратегій, науковцями – при подальшому вивченні проблем розвитку експортної маркетингової логістики

Ключові слова: продукти рослинного походження; експортні ринки; канали розподілу продукції; альтернативні логістичні системи; збройна агресія; повоєнне відновлення