

SUSTAINABLE DEVELOPMENT AND FOOD SECURITY

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Today, Ukraine and the world are experiencing a deep economic crisis, which is a consequence of the direct military aggression of the Russian Federation against Ukraine. Disruptions in supply chain logistics, shutdown and destruction of a number of oil refineries, solar power plants, massive job losses, frantic migration of Ukrainian citizens abroad, failure to meet the required annual volume of natural gas have put global food security at risk. The poorest, socially and economically vulnerable residents of both Ukraine and the planet are now at the greatest risk. The crisis also affected almost all European countries. Therefore, in order to prevent entire regions of countries from falling into poverty, it is necessary to ensure global cooperation to strengthen food security.

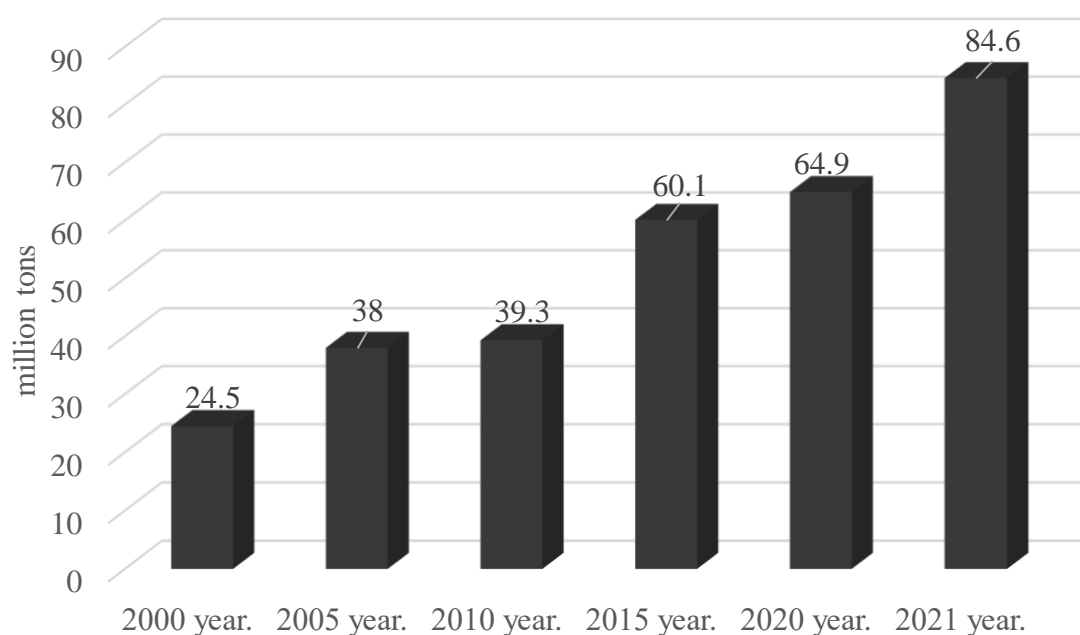


Fig. 1. Dynamics of grain and leguminous production in Ukraine during 2000-2021, million tons

Source: compiled according to data [9].

Today, Ukraine is a powerful producer and exporter of grain products in the world. In recent years, its potential has increased significantly (Fig. 1).

Ukraine ranks among the world's top 10 producers of wheat, corn, and sunflower seeds (Table 1).

According to the data in the table, it can be seen that Ukraine ranks 7th in terms of wheat grain production, 5th in corn grain production, and leads the rating in terms of sunflower seed production. If we consider the top five of these types of products, the table shows that such countries as China, India, Brazil, Argentina and Ukraine are in this top five.

According to the ministry's announcement, the share of agricultural products in 2020 was 48% of Ukraine's total exports. The main share of agricultural exports is grain and oil crops (48% and 23%, respectively) [11].

Table 1.

**Top 10 countries producing wheat, corn and sunflower seeds in 2021,
million tons**

The country's place in the rating	Country	Volume of wheat production	Country	The volume of corn production	Country	The volume of sunflower production
1	China	137	USA	383.6	Ukraine	17.5
2	India	110	China	272.4	Russia	15.5
3	Russia	75	Brazil	113.7	Argentina	3.4
4	USA	45	Argentina	53	China	2.9
5	France	37	Ukraine	41.8	Romania	2.9
6	Australia	36	India	32.5	Bulgaria	2.0
7	Ukraine	33	Mexico	27.6	France	1.9
8	Pakistan	27	South Africa	16.3	Hungary	1.8
9	Argentina	22	France	15.3	Turkey	1.8
10	Canada	22	Russia	15.2	Kazakhstan	1.0

Source: compiled according to data [10].

The TOP-5 countries that most imported Ukrainian agricultural products during the reporting period included China (10.2%), Egypt (10.1%), Spain and the Netherlands (8.0% each), Turkey (6.6%).

In dollar terms, it looks like this (Fig. 2).

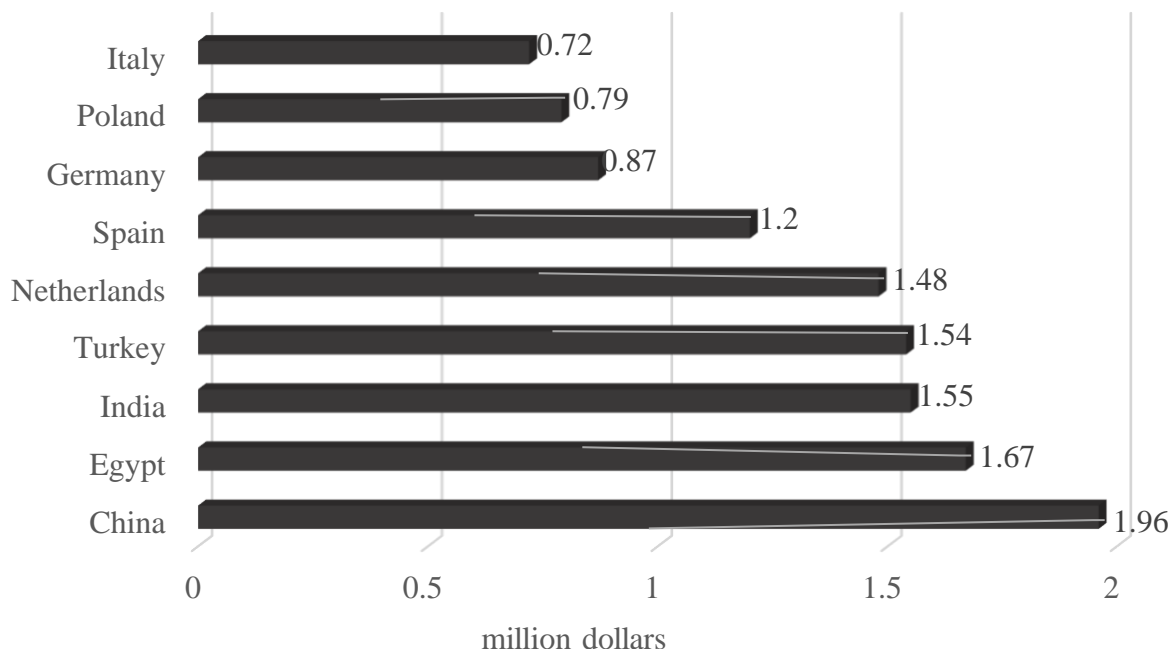


Fig. 1. The volume of imports of Ukrainian agricultural products in 2020, billion dollars. USA

Source: compiled according to data [11].

The first place is occupied by China - 1.96 billion dollars. the USA, the second - Egypt (1.67 billion US dollars), the third - India (1.55 billion US dollars), the following others - EU countries.

If we consider the EU countries, then Ukraine remains in the top five exporters of agricultural products to the EU. Brazil, the United States, Great Britain, Ukraine and China are among the top destinations for agro-industrial imports to the EU in 2021. These countries account for 34% of the total volume of such imports [12].

Ukraine increased the sale of grain crops in 2021/22 MR. As of June 15, 2022, 47.71 million tons of grain have been exported since the beginning of the 2021/22 FY. This is evidenced by the data of the Ministry of Agrarian Policy and Food of Ukraine. According to their data, this indicator is 4.5 million tons or 10.4% higher than the results of the same period in 2020/21 MR [13].

If considered in terms of grain crops, as of the reporting date, wheat was exported from Ukraine - 18.64 million tons, which is 1.71 million tons or 10.1% more than in the same period of 2020-2021; similarly to barley - 5.73 million tons (1.59 million tons or 38.2% more); rye – 160,000 tons (by 150,000 tons or 12.5 times more); corn - 22.87 million tons (by 0.7 million tons or 3.2% more) (Table 2).

Table 2

**Export of grain from Ukraine from the beginning of 2021/22 MR
as of June 15, 2022, million tons**

Period /Production	Wheat	Barley	Rye	Corn
2020-2021 MY	16,93	4,15	0,01	22,17
2021-2022 MY	18,64	5,73	0,16	22,87
Difference (+;-)	1,71	1,59	0,15	0,70
Difference (%)	110,1	138,2	1246,2	103,2

Source: compiled according to data [13].

According to these data, it would seem that everything is fine, even despite the war, the export of grain from Ukraine did not stop, but even increased. But it is not so. Here, data are taken for the 2021-2022 marketing year, which begins on July 1 of the current year and ends on June 30 of the following year. Therefore, if we consider the actual schedule of exports by month, the lion's share of exports falls on the second half of 2021 - 42.6 million tons of grain [14].

Starting from the first half of 2022, we see a sharp decline in the export of agricultural products (Table 3).

Table 3

Export of grain from Ukraine since the beginning of 2022, million tons

Period /Production	Wheat	Barley	Rye	Corn
February 21, 2022	17,80	5,60	0,16	18,70
June 15, 2022	18,64	5,73	0,16	22,87
Difference (+;-)	0,84	0,13	0,00	4,17
Difference (%)	104,7	102,3	101,3	122,3

Source: compiled according to data [14].

Table 3 shows that during the period from February 21 to June 15, 2022, almost nothing has changed. 840,000 tons of wheat were exported, 130,000 tons of barley, and no rye was exported at all. Among the four specified items, the largest amount of corn was exported - 4.17 million tons.

These indicators of the export of products for the current period indicate that Ukraine is not fulfilling the planned grain export schedule in the conditions of the war. There are many reasons, including disruptions in logistics supply chains, the destruction of a number of oil refineries in the spring months, a significant increase in fuel prices, the refusal of carriers to transport products from particularly dangerous areas, the blocking of ships in the port cities of Ukraine by Russia, and a number of other reasons. Starting from July, the export of products has changed somewhat for the better, but this is not enough to ensure the implementation of the plan until the end of the marketing year.

To solve the first question, we believe that the government of our country needs to make maximum efforts, which they are doing, to establish logistical connections with those countries in Europe and the world that need our products, in particular, agricultural products and products of their processing.

In order to make a profit from corn grain, including flour, of course, it is better to export it abroad. But in recent years, the demand for Ukrainian flour has significantly decreased in EU countries and the world. One of the reasons is the price, of course, which is more profitable for countries to purchase raw materials than finished products from them in the form of flour. Therefore, if we want to increase the potential for the production of grain and flour and obtain high profits, we must create processing enterprises that would process these products into a finished product that would be attractive for purchase and profitable for sale both inside Ukraine and abroad.

Therefore, today the most important thing is to develop those measures that would provide Ukraine not only with the increase in the volume of its own production of agricultural products, but also the products of its processing in order to export ready-made products of its own production to the countries of Europe and the world in the short term.

References:

1. Official website of the State Statistics Service of Ukraine. URL: <http://www.ukrstat.gov.ua/> [in Ukrainian].
2. LATIFUNDIST.COM. The main site about agribusiness, 2022. URL: <https://latifundist.com/rating/top-10-krayin-virobnikiv-pshenitsi-v-2021-22-mr> [in Ukrainian].
3. Ukraine increased the export of agricultural products by 14%. EkonomIchna pravda. 2020. URL: <https://www.epravda.com.ua/news/2020/02/20/657297/> [in Ukrainian].
4. Ukraine remains in the top five exporters of agricultural products to the EU. UKRINFORM. Multimedia platform of foreign language of Ukraine. 2021. URL: <https://www.ukrinform.ua/rubric-economy/3286008-ukraina-zalisaetsa-v-patirci-najbilsih-eksporteriv-silskogospodarskoi-produkcii-do-es.html> [in Ukrainian].
5. The war did not stop exports from Ukraine: about 48 million tons of grain were sold. LATIFUNDIST.COM. The main site about agribusiness. 2022. URL: <https://latifundist.com/novosti/59305-vijna-ne-zupinila-eksport-z-ukrayini-realizovano-blizko-48-mln-t-zbizhzhya> [in Ukrainian].
6. How much grain does Ukraine export? SLOVO I DILO. Analytical portal. 2022. URL: <https://www.slovoidilo.ua/2022/02/22/infografika/ekonomika/skilky-zernovyx-eksportuye-ukrayina> [in Ukrainian].