



Ukrainian Commodities for Global Food Security and Ukrainian Farmer Security

- Part I Ukraine's role as a global exporter
- Part II Ukraine's Production and Exports are down
- Part III Current impediments for Ukrainian agricultural exports: seaports and western border

Without permanently open sea and land routes, and open borders for transit trade, Ukraine can no longer invest, produce, and ship food.

Russia's Weaponization of Grain Trade increased

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Part I

Ukraine's role as a global exporter

**Infrastructural Damage, Flooding, and Transport Blockages
act as multipliers of Russia's aggression impact on Ukraine**

Before the full-scale Russian invasion

Results of Ukraine's agriculture in 2021:

- ✓ **The highest production growth:** Agricultural production on farms increased by 19.2%.
- ✓ **About 14% of the country's population** was employed in agricultural production
- ✓ **The highest percentage of GDP:** Agriculture accounted for over 10% of Ukraine's Gross Domestic Product (GDP), the highest among all sectors. Agricultural and food products also represented the largest percentage of Ukraine's total exports, at approximately 41% for the year.
- ✓ **Growth in foreign trade:** The foreign trade turnover of agricultural products and foodstuffs increased by 24% compared to 2020, reaching over \$35.4 billion, or 25.1% of Ukraine's total foreign trade in goods.

- ✓ **Twenty years ago**, Ukraine provided food for **40 million people worldwide**.
- ✓ **In 2021**, Ukraine's contribution was equivalent to feeding approximately **400 million people worldwide**, not including its own population.
- ✓ **By 2030**, Ukraine's strategy for the development of the agricultural sector aims to ensure food security for **1 billion people worldwide**.

Ukraine accounted for over 40% of global exports of sunflower oil, 13% of corn and almost 18% of barley, as well as about 10% of wheat.

After the full-scale Russian invasion

The full-scale Russian invasion into Ukraine has inflicted significant damage on Ukraine's agricultural sector.

- ✓ Approximately **36% of pre-war grain cultivation** in the country was directly affected by the conflict.
- ✓ **About 30% of Ukraine's territory** is at risk of landmines.
- ✓ Additionally, **the Black Sea blockade and damage to agricultural enterprises** have increased costs and risks for grain production, transport, seaport storage, and export.
- ✓ Three months into the full-scale war, losses in Ukraine's agricultural sector already reached \$4.3 billion, which accounts for nearly 15% of the country's capital. Currently, it is impossible to accurately determine the total losses in the agricultural sector due to ongoing hostilities.
- ✓ **The overall losses** in the Ukrainian agricultural sector are already estimated at **\$40.2 billion**, with **direct losses** accounting for **\$8.7 billion**.
- ✓ In 2022 The revenues of the agricultural sector and related industries have **decreased by 10% to 30%** due to the war.

Small-scale producers are also suffering from the negative consequences of the war. **44% of producers report a catastrophic increase in the cost of production**, and every fourth respondent mentions production reduction or cessation due to the war.

As a result of the hostilities, some workers on agricultural enterprises and farms were not only forced to halt their economic activities in the agricultural sector but also had to leave their homes. **More than 150,000 farmers/workers in the food system** were directly affected by the war and/or forced to migrate. The prospects for them to resume their economic activities on their own land are uncertain, which may lead to their exit from the agricultural business or a change in specialization.



After the full-scale Russian invasion

Despite everything, in the conditions of a full-scale war, Ukraine's agricultural sector has demonstrated remarkable resilience in 2022.

- ✓ Ukraine achieved **one of the five best harvests in the last 30 years.**
- ✓ Ukraine remained **one of the guarantors of global food security.**

This positive trend has shifted downwards and has the potential for further decline.

Ukraine **still** maintains its position as one of the world's **leading exporters of sunflower oil** **but** is no longer the leader in sunflower production, with a market share of 21.8% in 2023 compared to 31% in 2021.

Ukraine has retained its **fourth place among global corn exporters**, **but** its share has decreased to 10% (-3% despite a 5%-reduction in global exports volume).

Additionally, Ukraine has **dropped** from third **to sixth place among global barley exporters** with a share of 6.8% (-11% despite a 19%-reduction in global exports volume) and from fifth **to seventh place in wheat export** with a share of 5.3%, which is almost half of the pre-war figures.

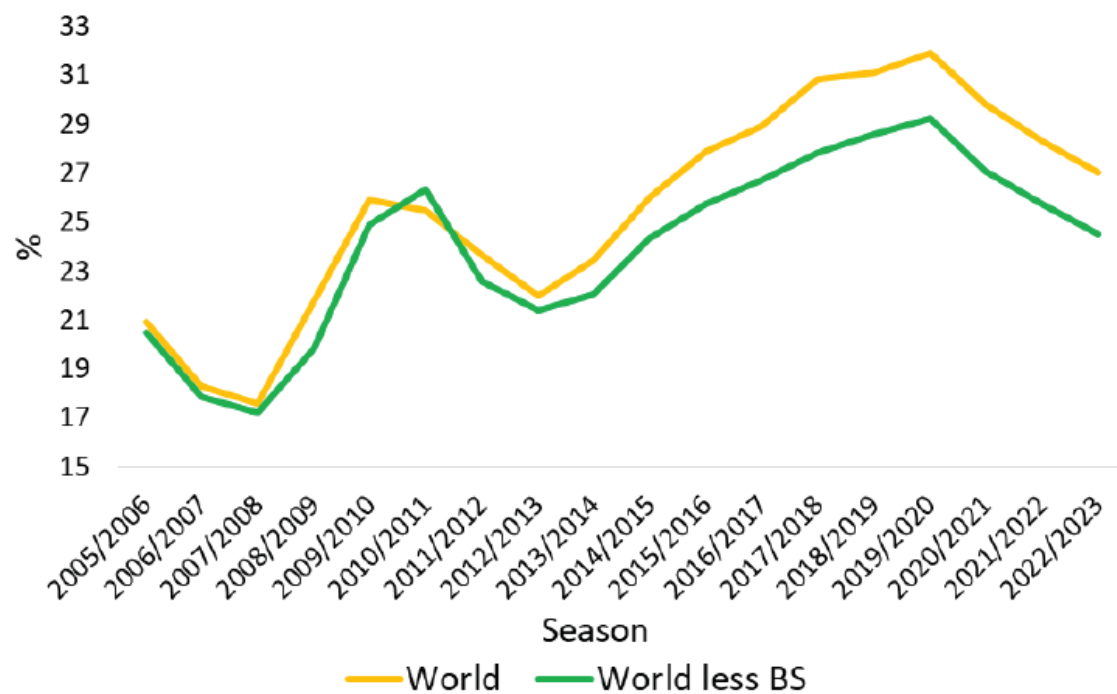
However, assessing the consequences of the conflict for the agricultural sector is complicated by the lack of analogies, as Ukraine has such a massive and crucial agricultural sector in the global market.

The role of the Black Sea region in global food security has increased in recent years

The current market tensions can be roughly estimated by the stocks-to-use ratio, which shows that:

- current stocks of wheat to use are low, but still far from the historically low level during the 2007-2008 food crisis;
- the difference between the stock-to-use ratio for the world market and the world market excluding Ukraine and Russia, has been increasing in recent years.

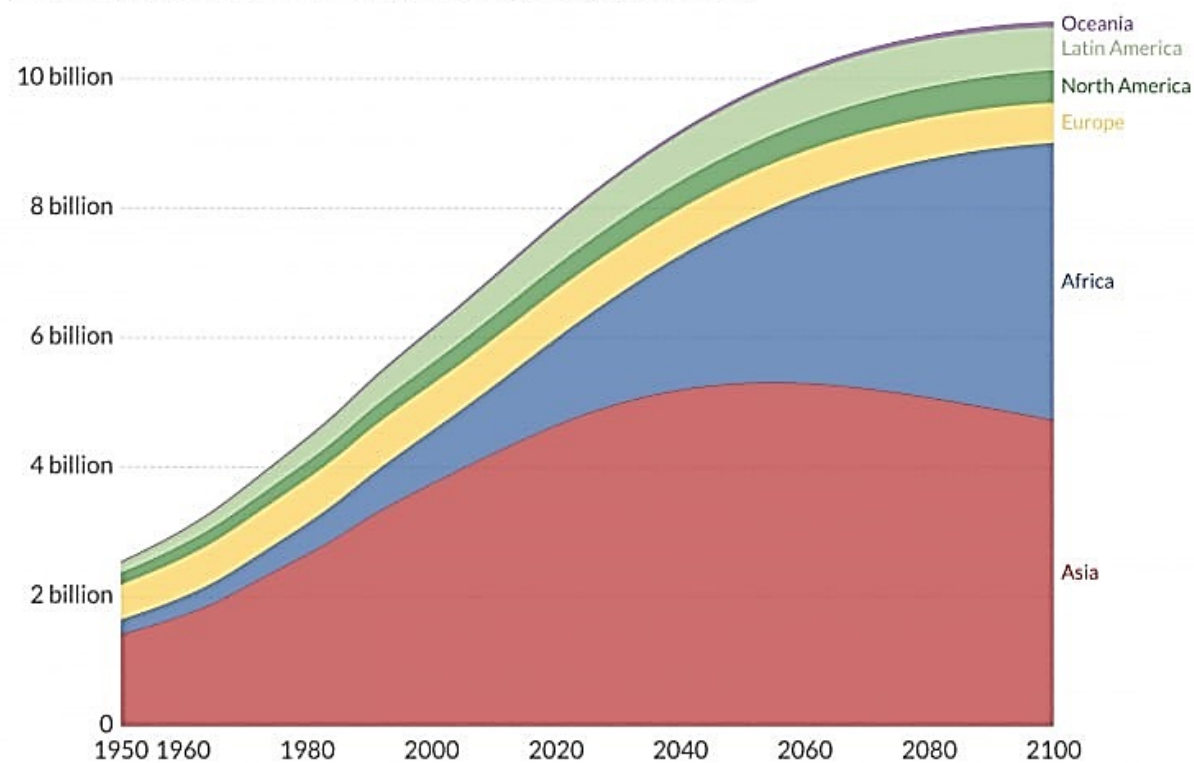
In 2022/23 MY this gap was 2.5%, which confirmed the significant accumulation of part of the world's grain supplies in the Black Sea region and their blockade.



Since inventory utilization is a relative measure, it does not reflect absolute values due to the constant growth of global consumption. Meanwhile, the increase in the share of Black Sea wheat in global exports confirms its significant role in the world's food supply.

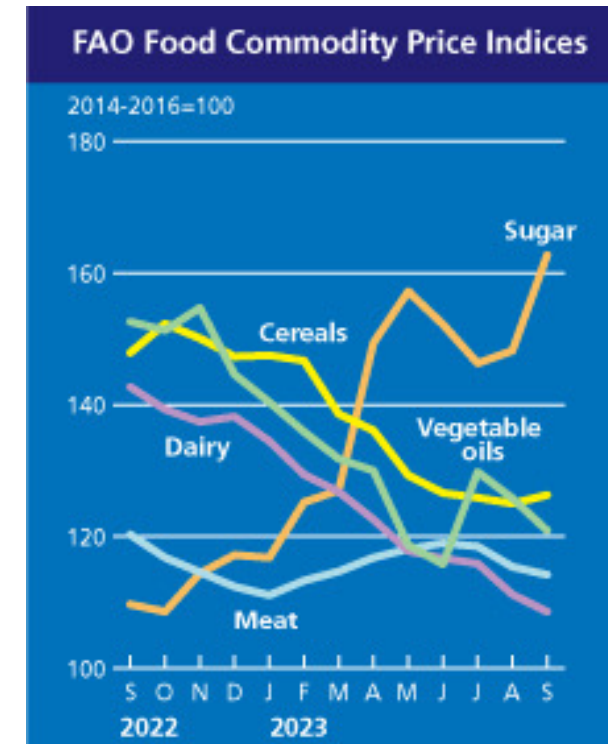
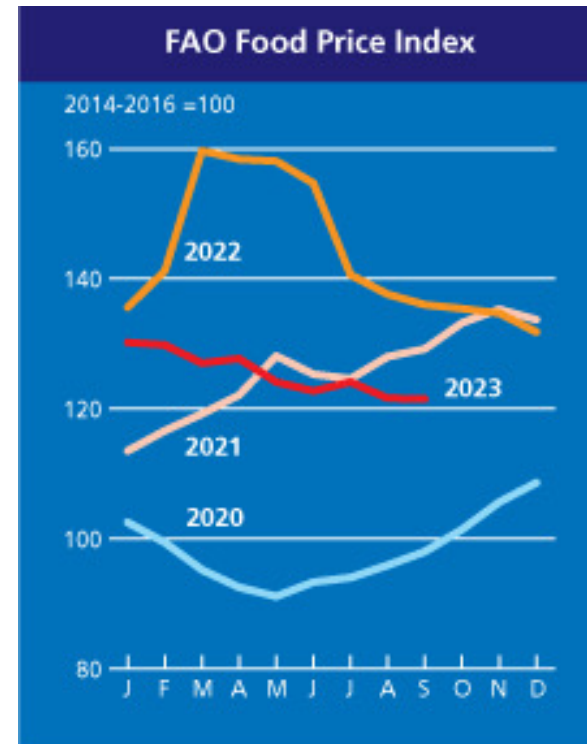
World population by region projected to 2100

Projected population to 2100 is based on the UN's medium population scenario.



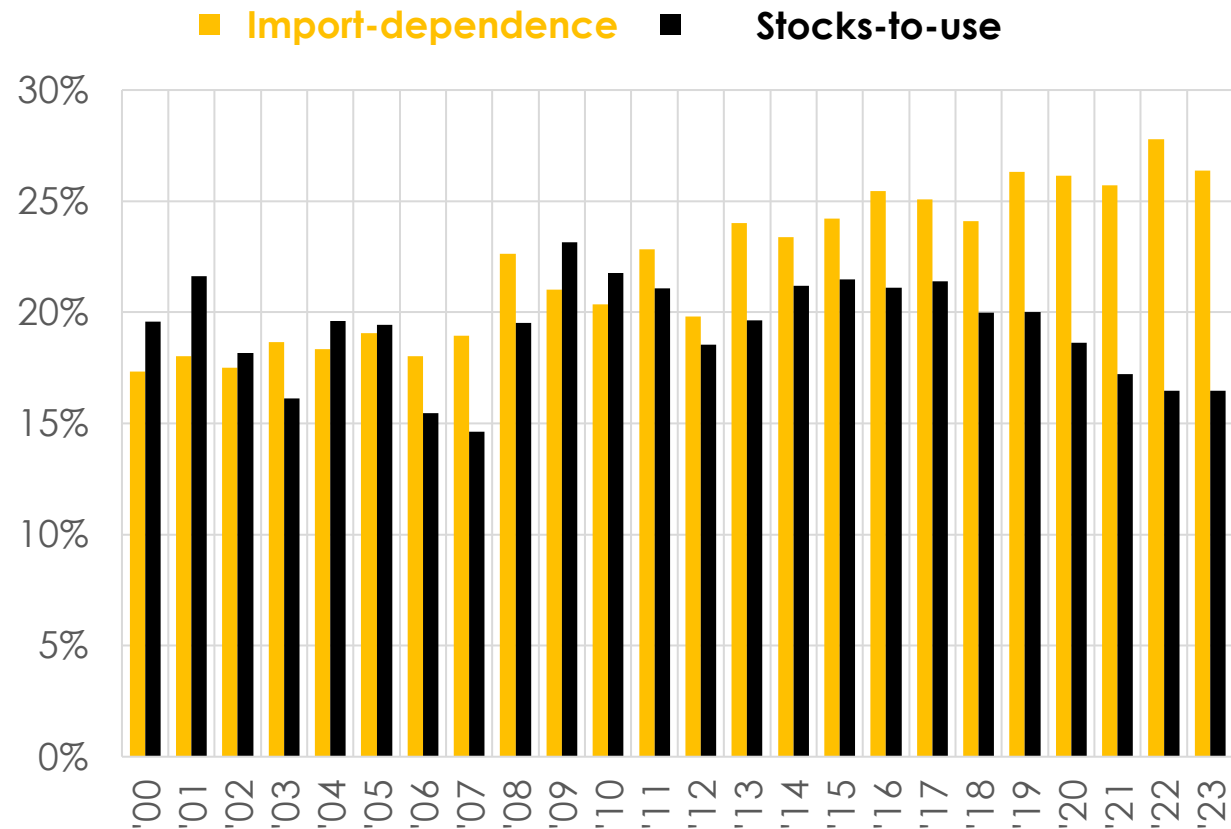
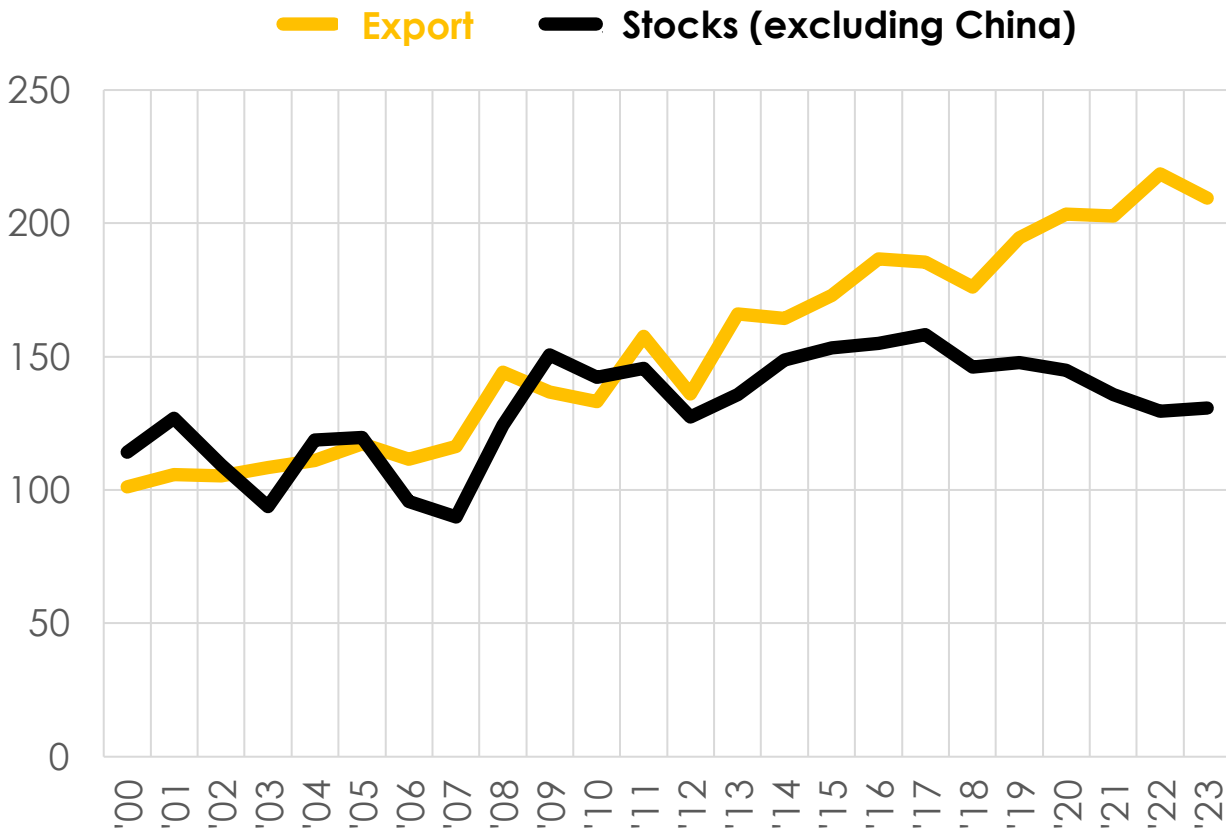
So why are world grain prices falling rather than rising?

- ✓ In August, **international prices for food commodities decreased**, with the exception of rice and sugar. The FAO Food Price Index stood at 121.4 points, which is 2.1% lower than in July.
- ✓ The FAO price index for **vegetable oils** decreased by 3.1%, partially reversing the sharp increase of 12.1% in July. Prices for sunflower oil also decreased by almost 8% during the month due to weakening global import demand and excess supply from major exporters. Furthermore, the price index for **cereals** decreased by 0.7% compared to July. World prices for **wheat** fell by 3.8% in August due to increased seasonal supply from several leading exporters, while global prices for coarse grains dropped by 3.4% amid sufficient world corn supply thanks to record harvests in Brazil and the rapid start of the harvest in the United States.
- ✓ **Global food prices remained stable in September. At this level, the index was 10.7% lower than the corresponding level of the previous year and 24% lower than the peak reached in March 2022.**
- ✓ The **grain price index rose** by 1% month-on-month due to a 7% increase in global corn prices amid strong demand for supplies from Brazil, less active sales of farm products in Argentina, and higher barge transportation tariffs due to low water levels in the Mississippi River in the United States.
- ✓ **Wheat prices fell** by 1.6% due to high stocks and favorable harvest forecasts in Russia.
- ✓ **The oil price index** decreased by 3.9% as prices for palm, sunflower, soybean and rapeseed oils declined, partly due to a seasonal increase in production and a significant export supply.



**Is it so easy to replace Ukrainian agricultural products?
Or was the world just lucky with the weather and harvest this year?**

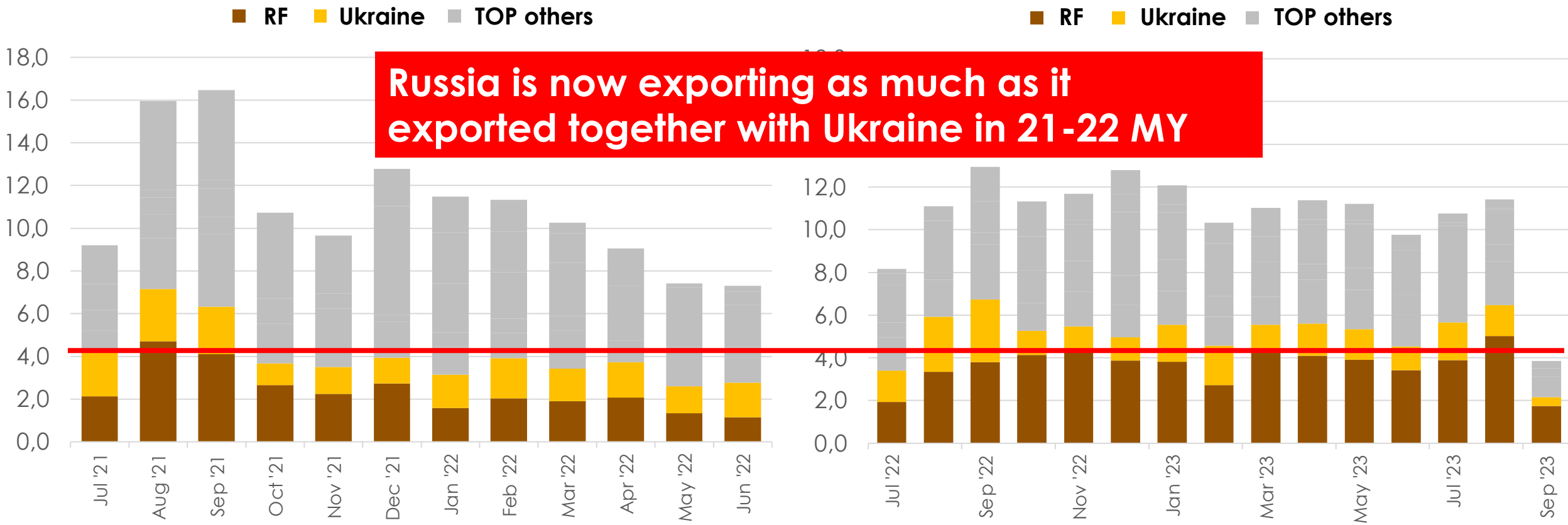
World wheat exports and the ratio of stocks to world consumption



- ✓ First of all, this applies to milling wheat, which is in short supply, in part due to lower harvests in exporting countries.
- ✓ Demand is still strong, but so far it has been met primarily by Russia with its large harvest.

From the perspective of the global balance sheet, future price growth looks promising.

Reasons why the world is not "fighting" for access to Ukrainian grain (mln tons)



Russia is now exporting as much as it exported together with Ukraine in 21-22 MY

- ✓ Thanks to a bumper harvest, Russia continues to dominate the global market. This is happening despite the existence of an export tax that restrains supply.
- ✓ Local analysts in Russia estimate a much larger wheat harvest than the USDA, which was the case last year. The export of grain from the temporarily occupied territories remains a painful issue.

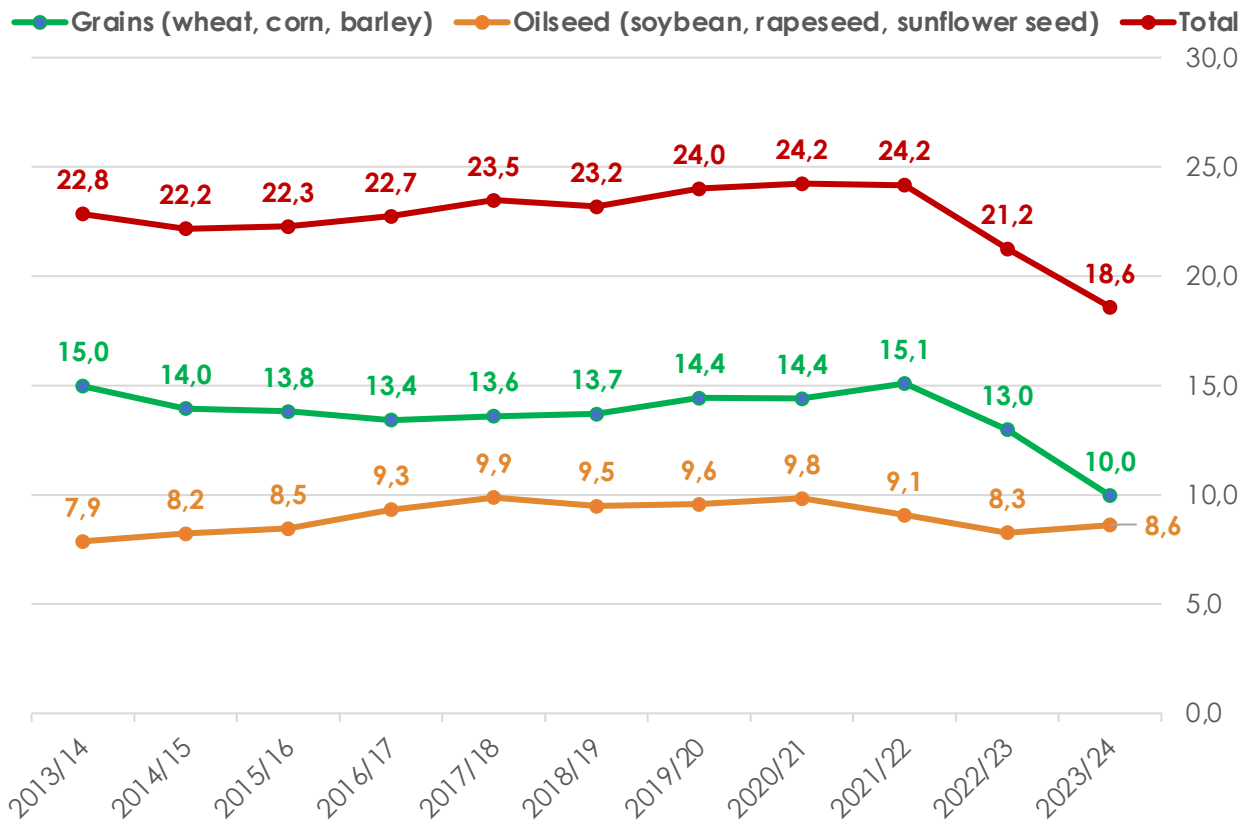
The longer Ukraine does not have free access to major markets, the less demand we can expect in the future.



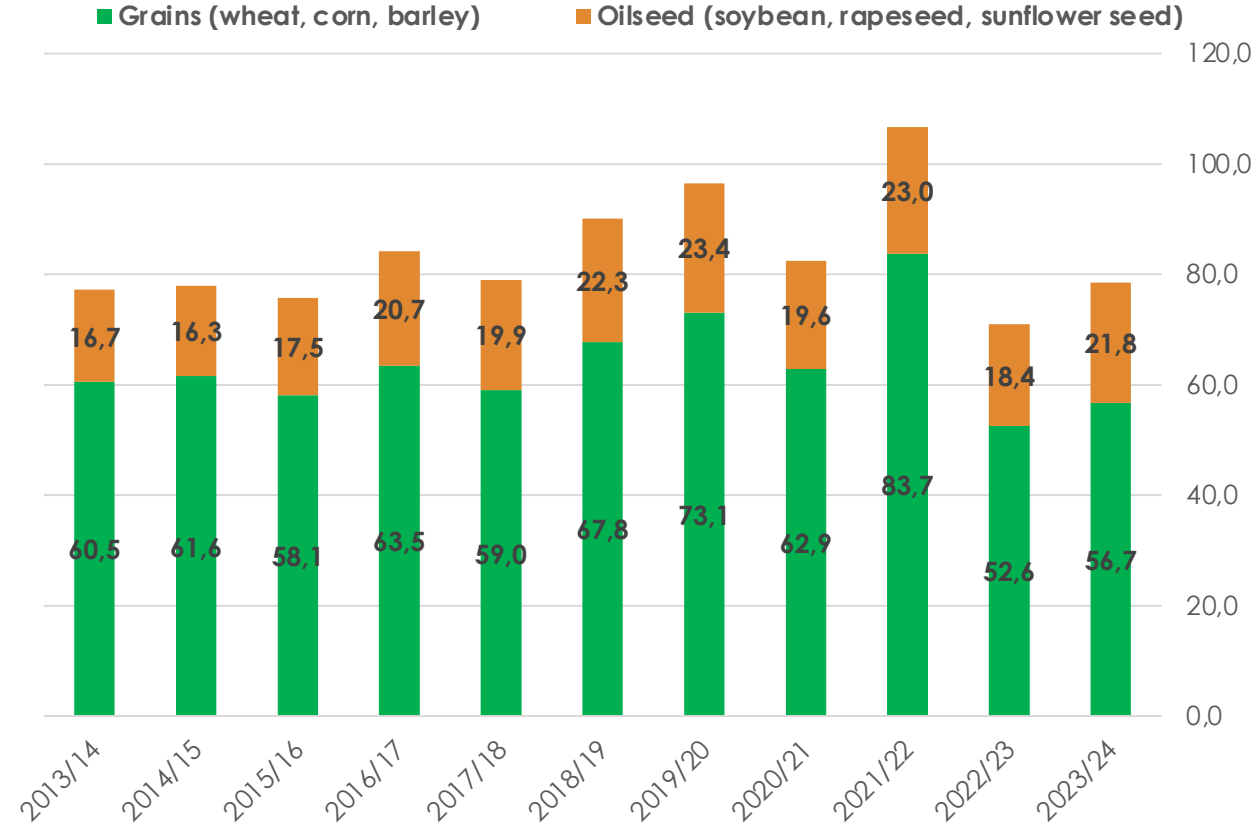
Part II

Ukraine's Production and Exports are down

Planted area in Ukraine for grains & oilseeds, mln ha



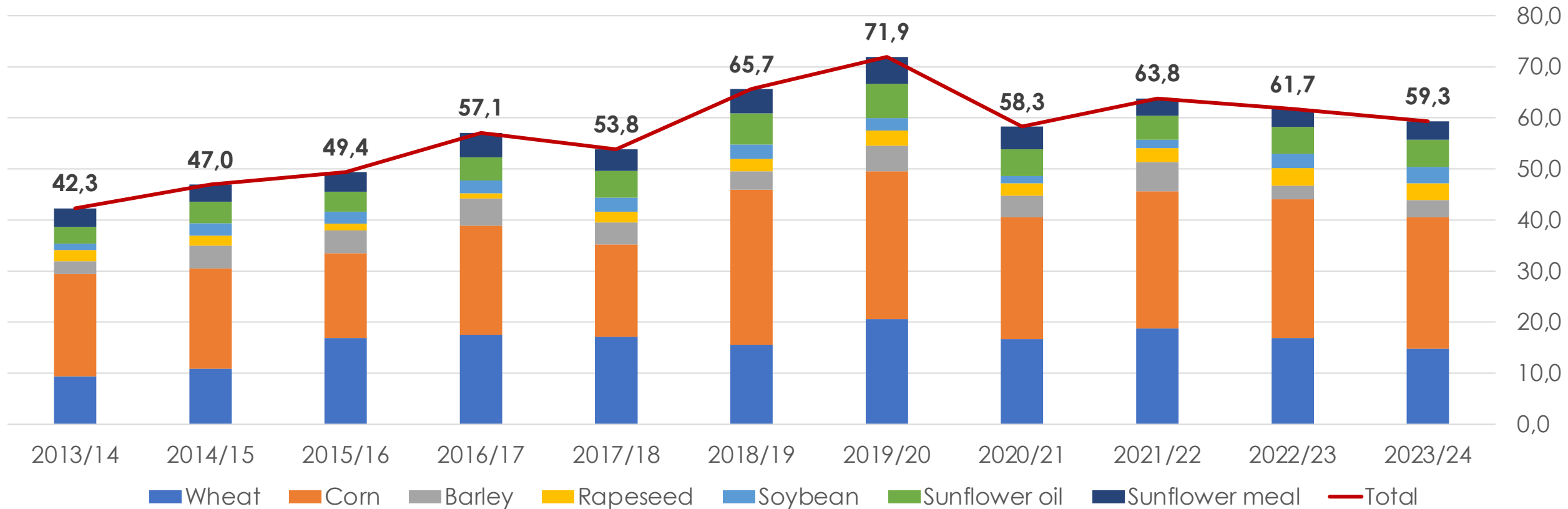
Ukrainian grain & oilseed production, mln t



Against the backdrop of the prolonged war in Ukraine, the agricultural sector continues to stagnate. **The area under grain crops is significantly reduced.** Currently, for all major grain crops, the farmer is making a loss at current prices. Oilseeds look more profitable, and farmers are betting on them. **The increase in production in 2023/24 MY is due to higher yields compared to the previous MY.**

We would also like to remind you that the current dry weather conditions may result in even less winter wheat acreage (2024/25MY).

Export of grain agriproducts from Ukraine, mln t

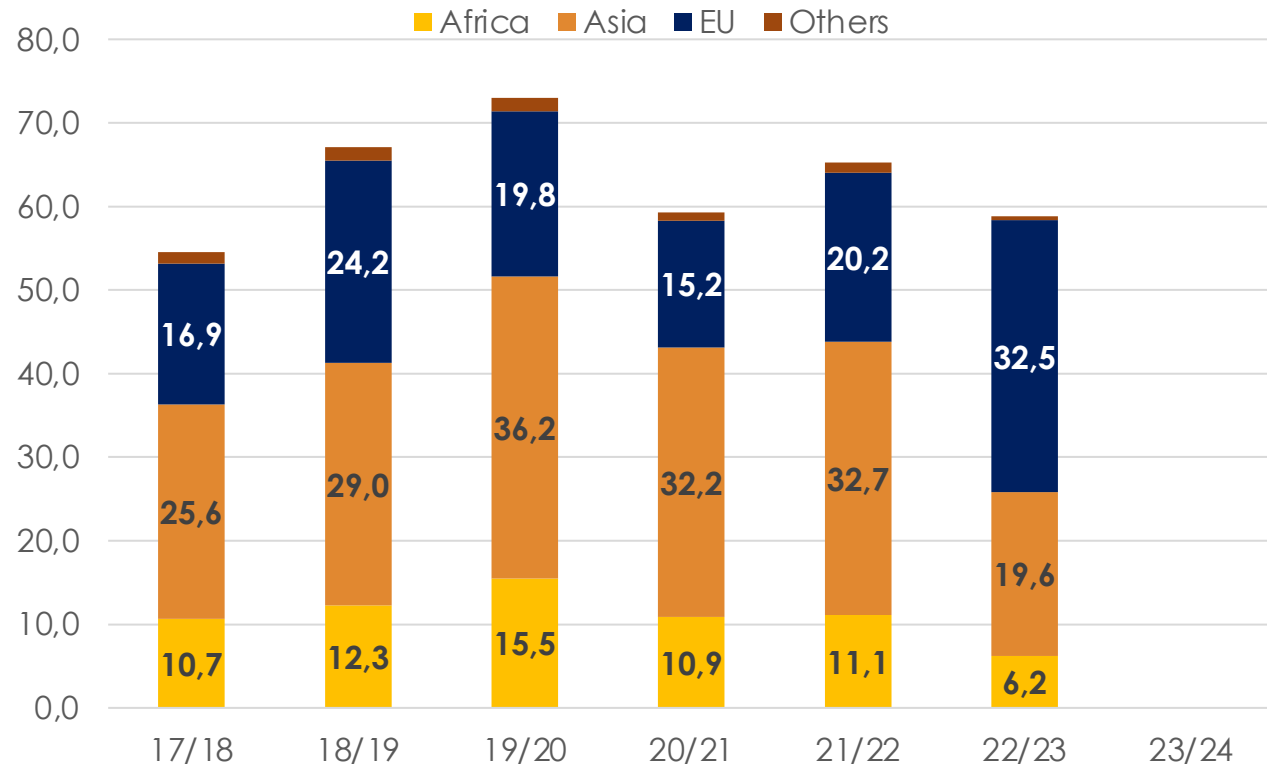


The continuation of such trends in the market will gradually lead to a **decrease in domestic production**. Consequently, the overall agricultural export supply from Ukraine will decrease from year to year.

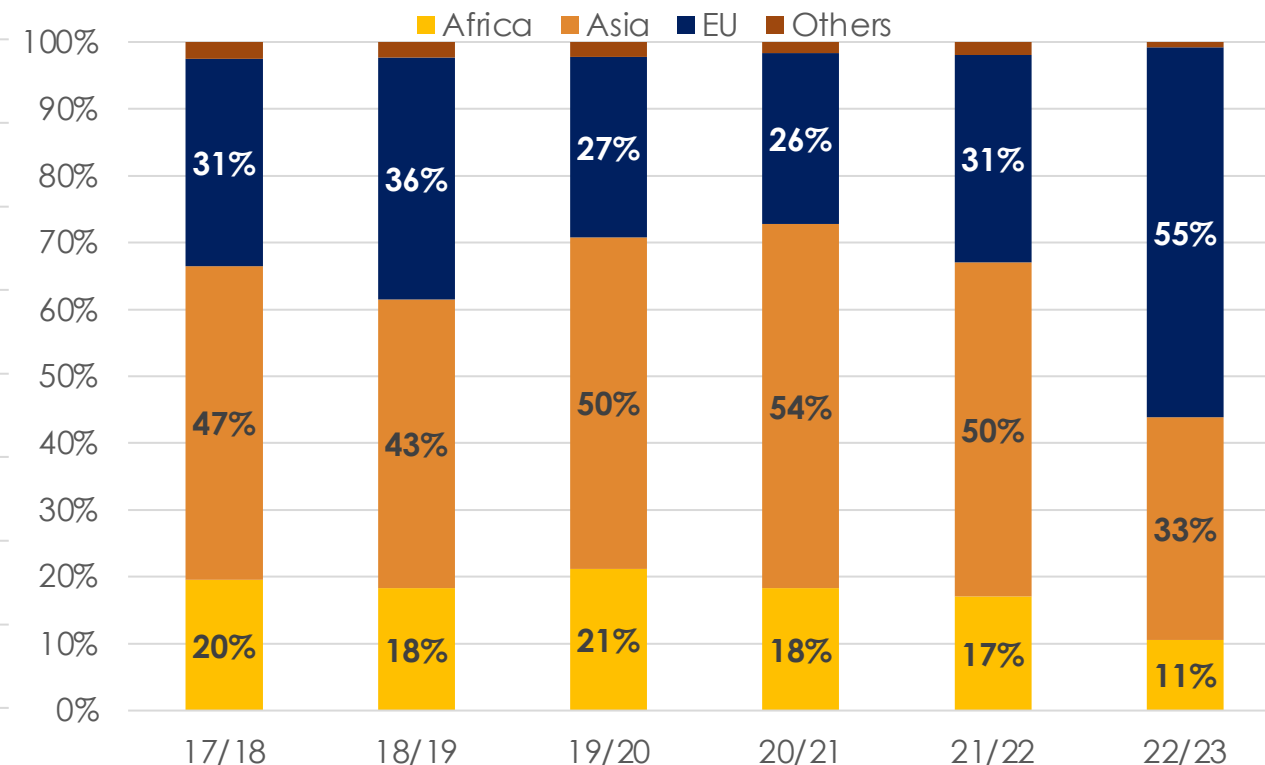
One of the key components is logistics. Against the backdrop of war and the inability to export normally and uninterrupted through deep-sea ports, the farmer incurs additional logistics costs.

This affects profitability and may lead to a reduction in the agricultural sector in future seasons.

UA export by destinations, mln t



UA export by destinations, %



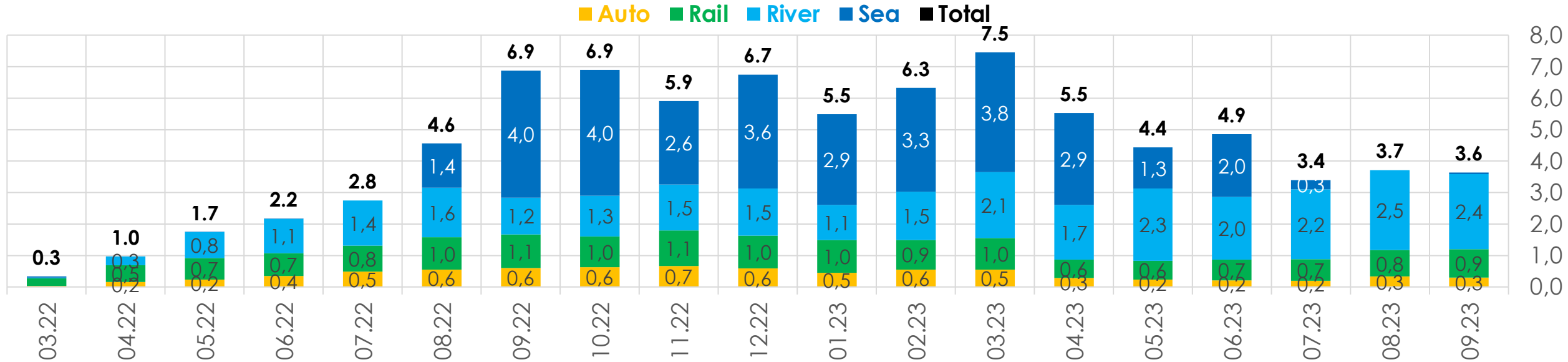
The previous season was very significant in terms of export destinations.

As we previously mentioned, the lack of possibility of normal functioning of deep-sea ports has led to a significant change in the geography of destinations.

Destinations such as Africa or Asia require the ability to operate Panamax vessels to remain competitive against other exporters. **Before the start of the war, Ukraine on average exported about 20% of all agricultural products to Africa, then after only 11%.** As we mentioned earlier, the key reason is logistics.

Given the inability to export through deep-sea ports, Ukraine was forced to increase its presence in the EU market.

Total grains and oilseed export paces from Ukraine by mode of transportation, mln t



August and September 2023 passed **without the Grain Initiative** operating. We have seen what Ukrainian logistics is capable of without deepwater ports and taking into account the deterioration of export conditions to the EU (**import ban to the EU-5**).

In the direction of **the Danube ports**, Ukraine **reached a peak of 2.5 mln t per month**, despite the fact that market participants are using any opportunity, including mooring ships right off the coast. There is no progress by rail and auto either.

It can be concluded that without significant changes in the existing conditions, **Ukraine has an export potential of up to 4 mln t without deepwater ports**. Considering the export potential of Ukraine in 2023/24 MY, we **need to export at least 4.8 million tons of total agricultural products per month**.

The backlog for the first 3 months of 2023/24 MY is already 3.7 million tons, i.e. almost a month of export.

In the September data there is no separate allocated export from deepwater ports; these volumes are credited to the river. However, market participants note that at least 10 ships left deepwater ports.

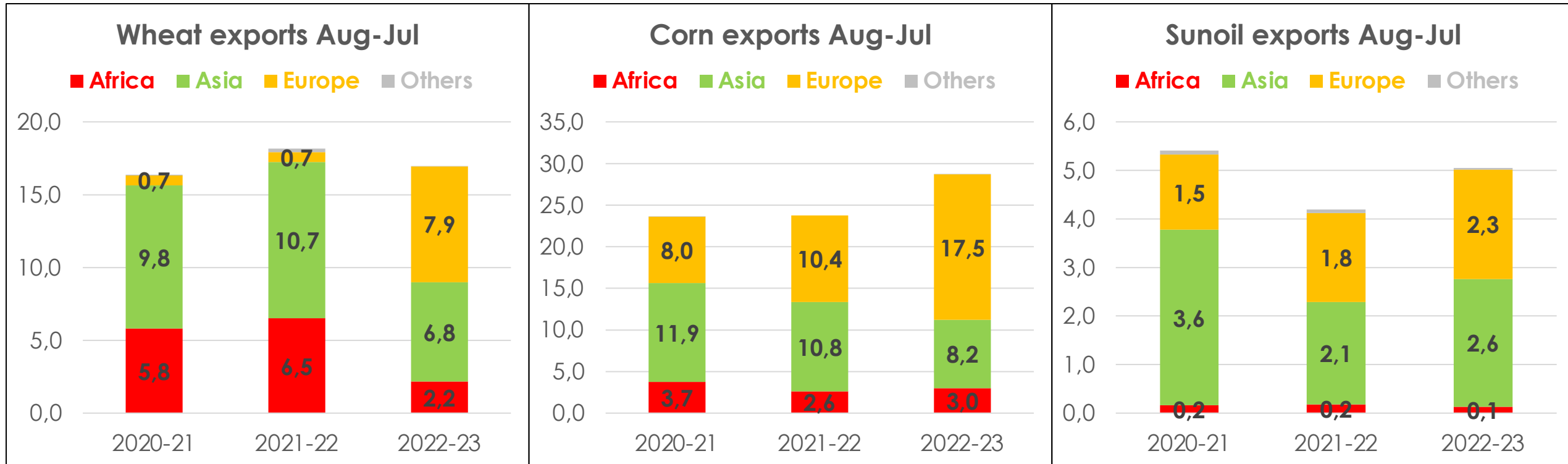
Visually, this graph perfectly shows how important Ukraine's access to exports through deep-sea ports is. Otherwise, the downward trend in overall production and export potential will continue.



Part III

Current impediments for Ukrainian agricultural exports: seaports and western border

Ukrainian export performance (mln t)



The charts reflect the periods from August to July. This is useful for comparing export performance. In August 2022, the Grain Initiative started exports and they lasted until July 2023.

As shown in the grain charts, **Ukraine's exports did not return to normal between August 22 and July 23:**

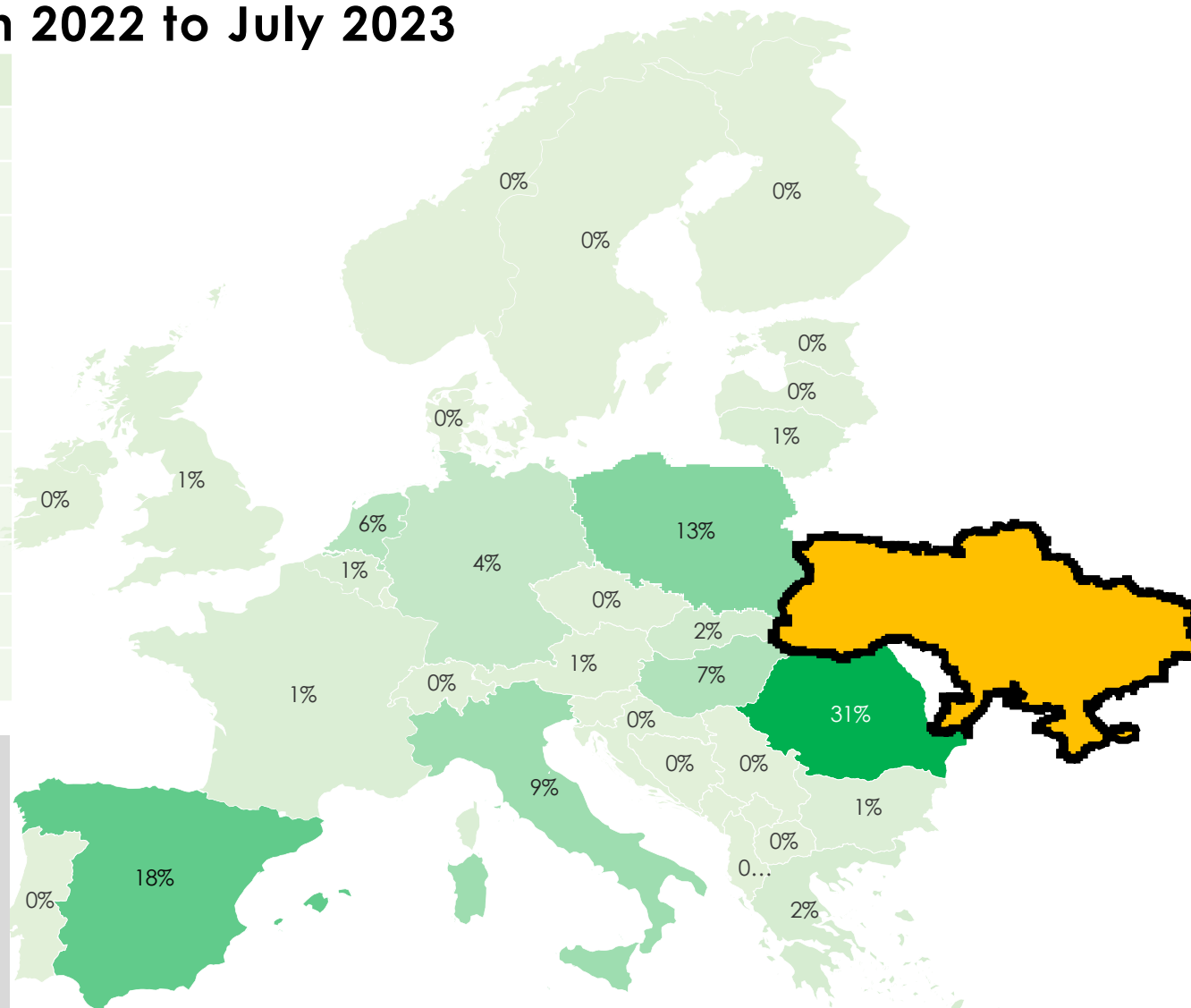
1) Monthly exports of all major crops by deepwater ports peaked at 4 mln t in September and October 2022, when Russia was not conducting outright sabotage. But later, Ukraine was unable to overcome Russia's artificial obstacles and update this record. For comparison, in October 2021, exports of major crops through seaports reached 8.2 mln t, twice as much as the peak exports by ports during the Grain Corridor.

2) Thus, **Ukraine continued to be heavily dependent on other destinations leading to the EU** - directly and in transit through European ports. Unfortunately, customs statistics (shown in the charts) cannot separate where the crop went further.

However, AGRIColumn reports that from May to September 26, 2023, 9.5 mln t of Ukrainian crop transited through Romania.

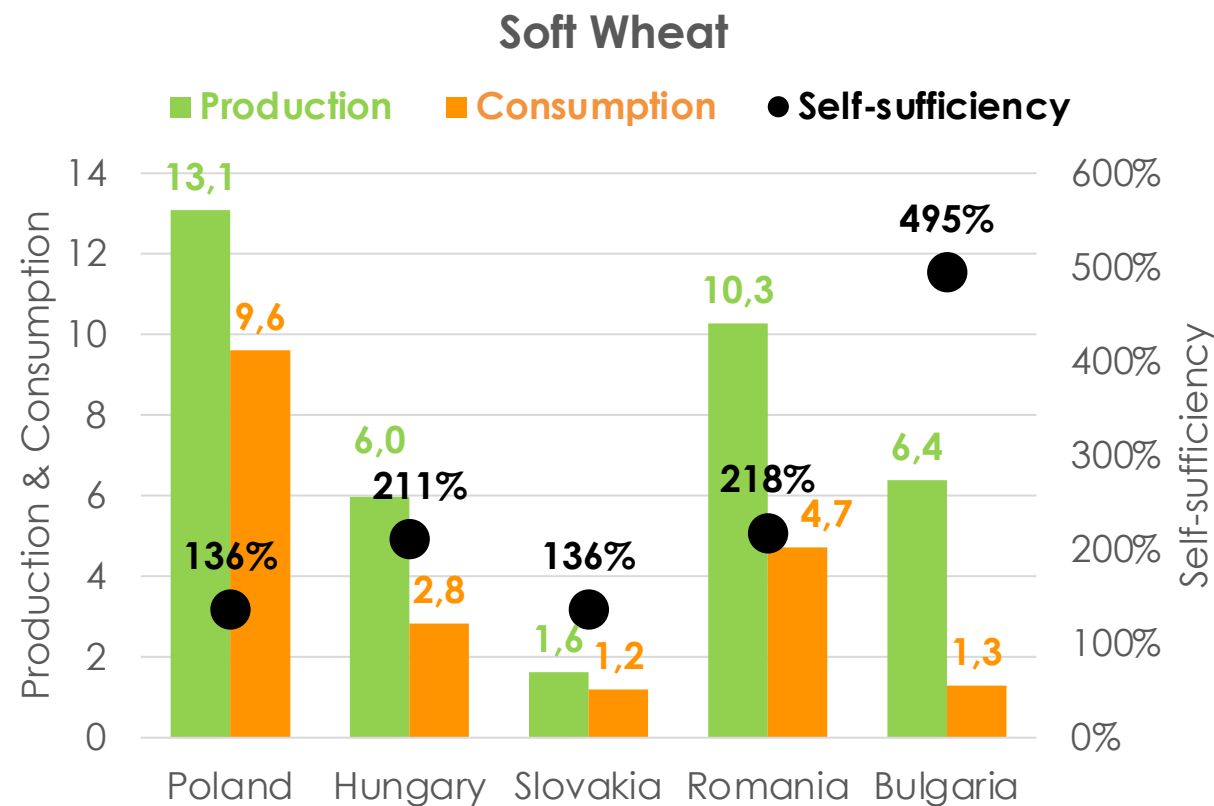
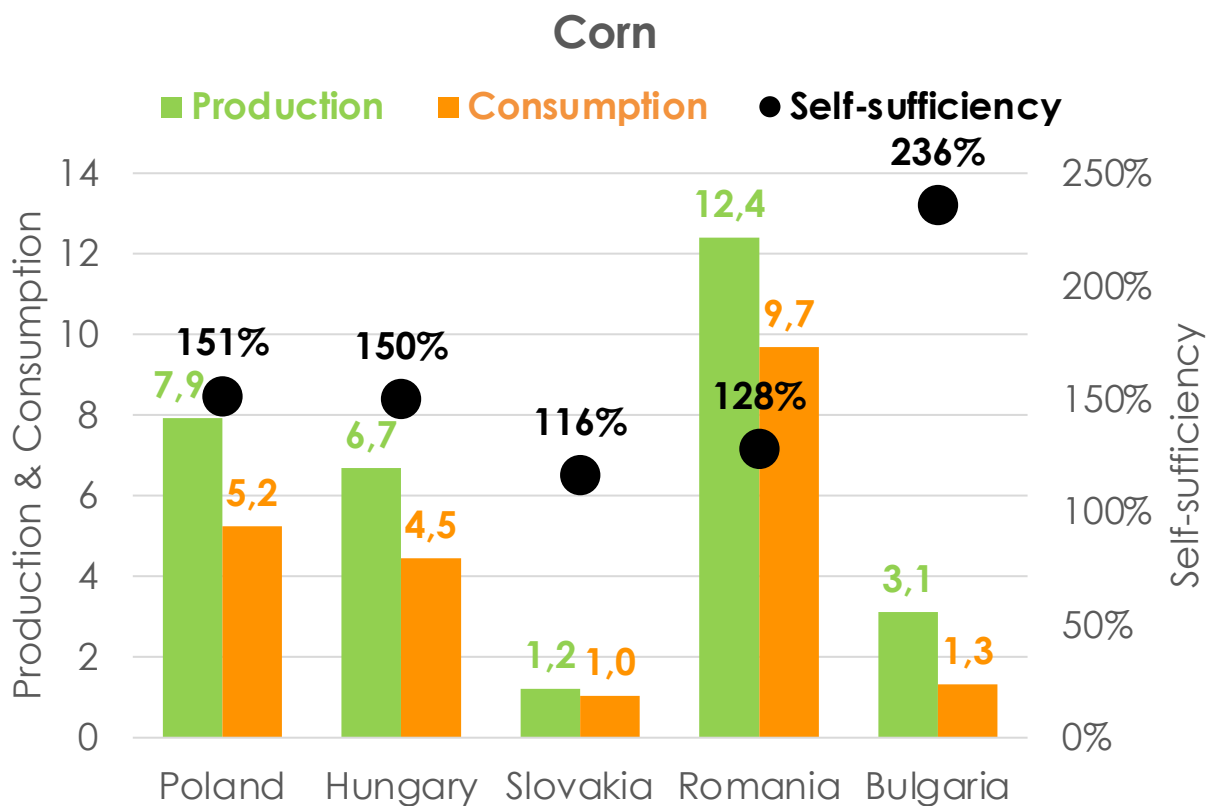
Total Ukrainian exports of grains, oilseeds and sunflower oil from March 2022 to July 2023

	Wheat	Barley	Corn	Soybean	Rapeseed	Sunoil	Total
Romania	2,851	707	6,244	433	924	452	11,612
Spain	2,639	492	3,218	48	12	222	6,631
Poland	894	63	2,631	202	785	256	4,831
Italy	630	9	2,390	260	1	181	3,471
Hungary	294	12	1,955	126	82	45	2,514
Netherlands	76	2	1,668	219	76	182	2,223
Germany	87	0	768	195	462	36	1,548
Slovakia	133	17	584	36	116	5	891
Greece	320	41	192	53	28	2	636
Others	342	181	1,449	189	816	486	3,463
Total	8,266	1,525	21,099	1,761	3,302	1,867	37,820



Since the beginning of the full-scale invasion, Ukraine has been actively transporting its crops to and through European countries. Due to expensive land logistics as well as technical difficulties, **it is not financially feasible for Ukraine to transport its crops far**, as can be seen on the map. Spain stands out from its neighbors because it used to ship crops there by sea. The map shows that most European countries account for less than 1% of total exports.

The EU-5's need for grain imports from Ukraine (mln t)



Each of the 5 EU countries that insist on banning imports of Ukrainian grain has no need for it. Moreover, each of these countries has its own export surplus.

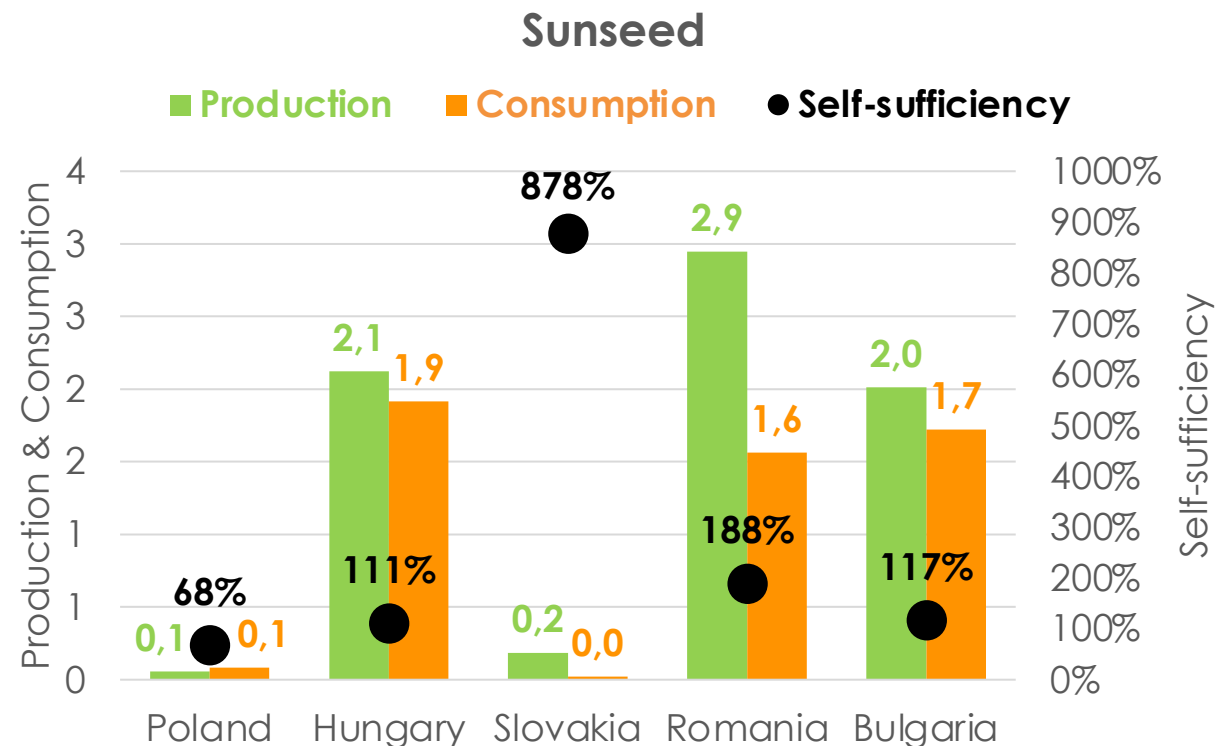
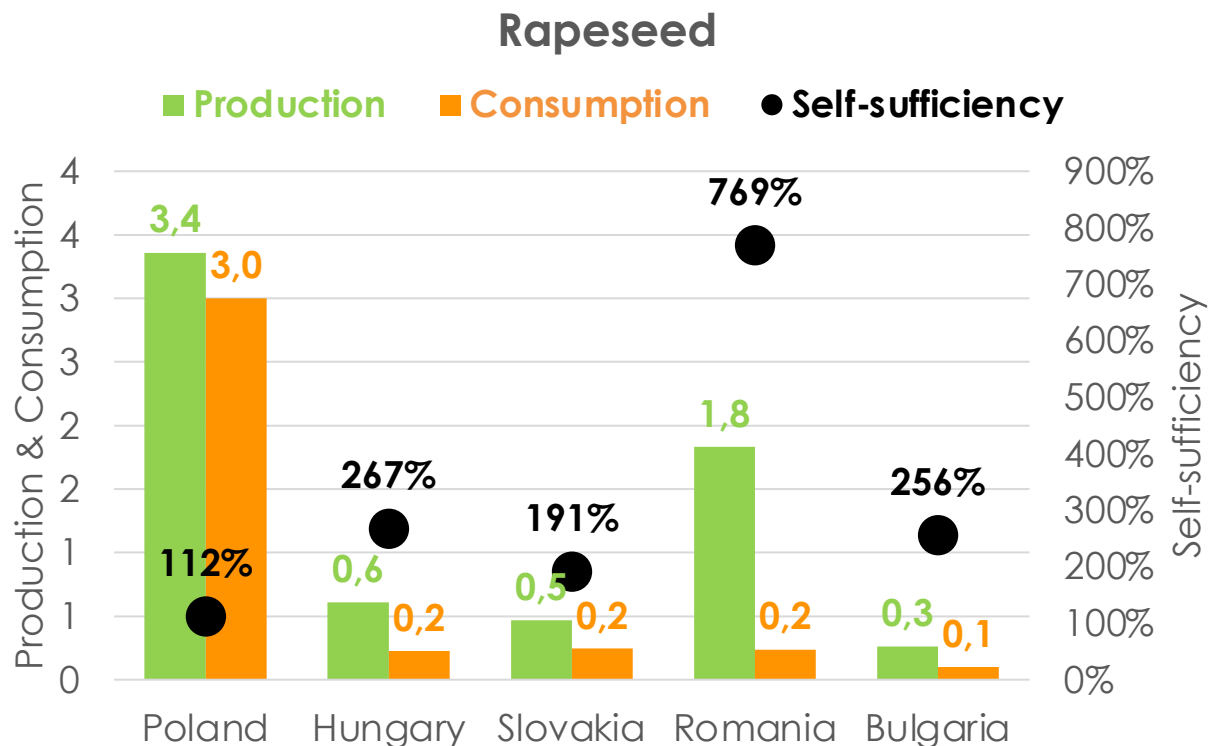
As for corn, **Poland** has been a net exporter of corn since 2012, with its own grain being enough to cover 130-150% of its needs.

Hungary only needs to import more grain in lean years, such as 2022. The situation is similar in **Slovakia**.

Romania and **Bulgaria** always have a surplus - even in lean years.

As for wheat, the countries are also self-sufficient. In the 23-24 season, Poland and Slovakia harvested a third more wheat than they consume. Hungary and Romania produce twice as much as they consume, and Bulgaria 5 times as much.

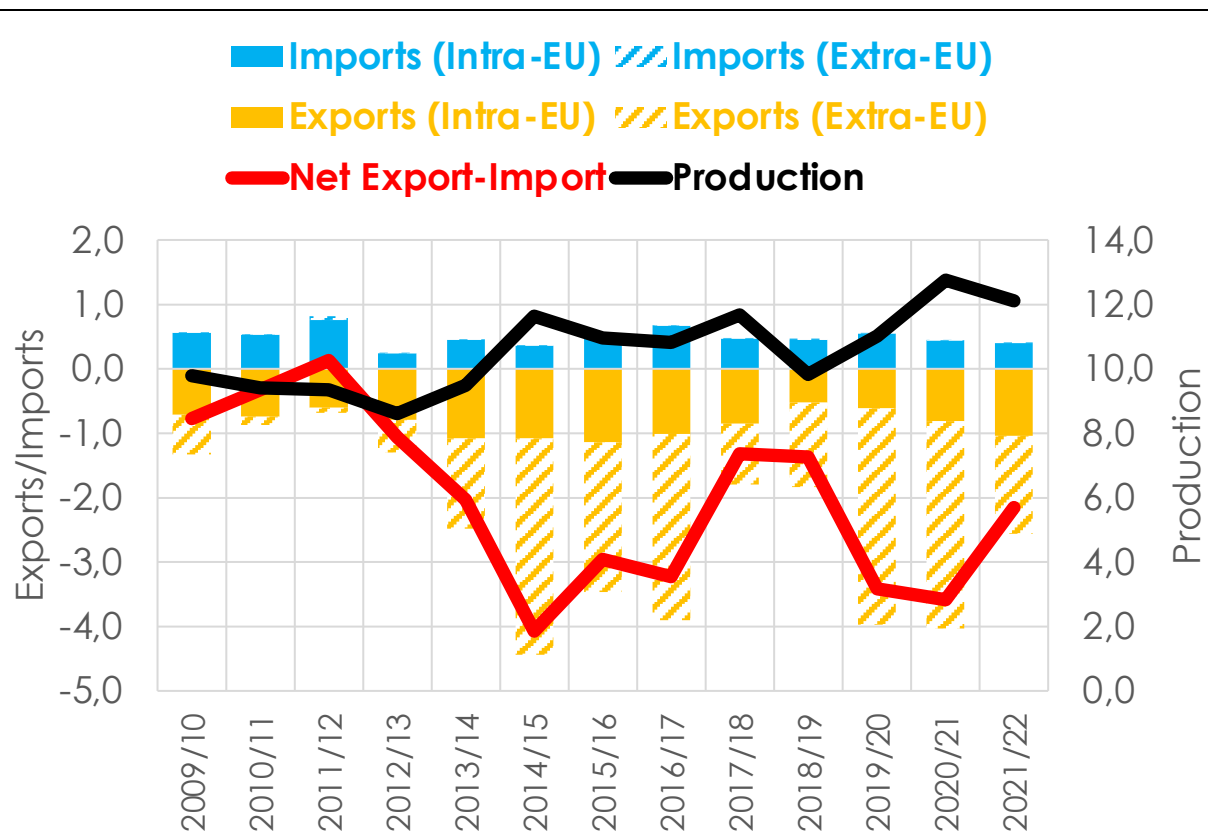
The EU-5's need for oilseeds imports from Ukraine (mln t)



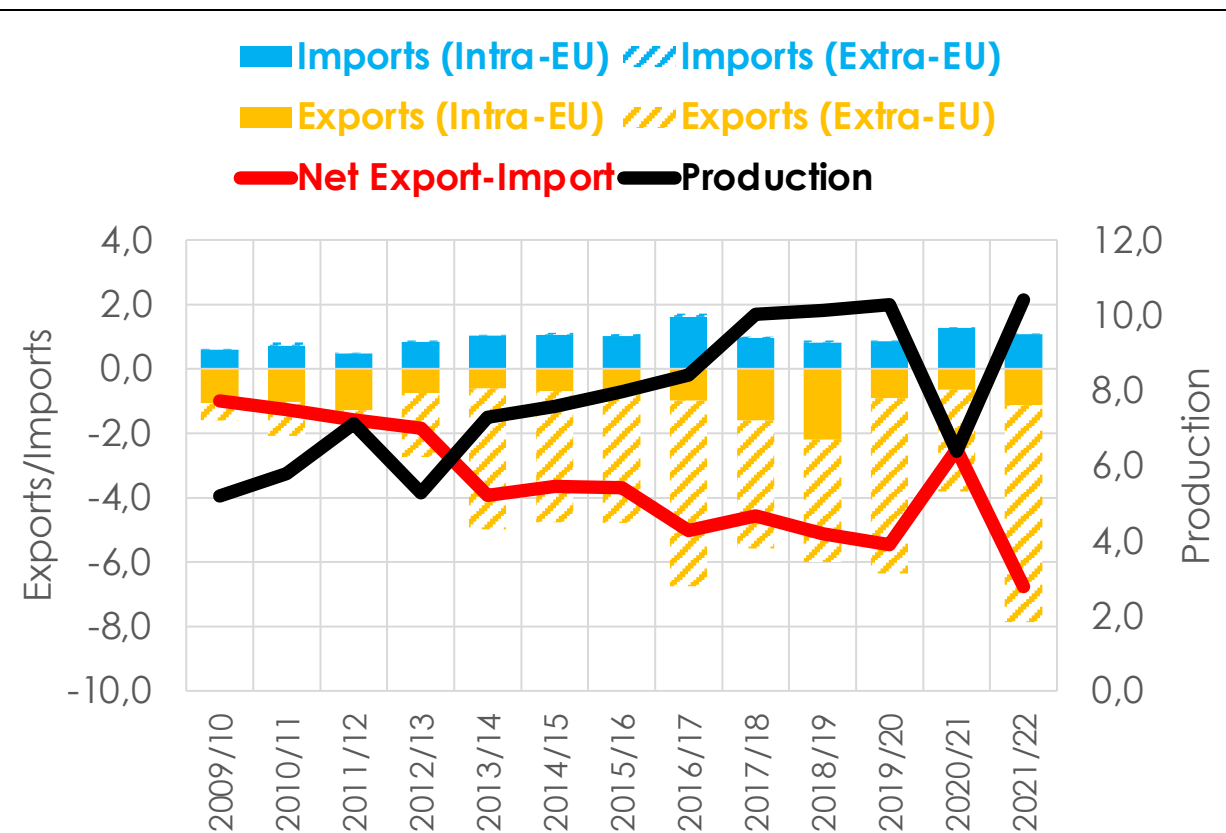
The situation with rapeseed in Poland attracts the most attention. In this country, the balance has always been "tense" - domestic consumption grew along with the increase in production. In 2022/23, Poland harvested a record crop, making it a net exporter for the first time since 2014 and, of course, affecting domestic prices. During this time, Ukraine additionally saturated the Polish market with record exports of 702 kt. In the 2023/24 season, Poland again received a huge harvest and the prospects for competition with Ukraine in the domestic market cannot be satisfying. **Other EU-5 usually produce enough to cover own needs.**

As for sunflower, it is a popular crop only in Hungary, Romania and Bulgaria. In the 22-23 season, a lot of Ukrainian seeds were exported abroad, as domestic processing could not cope with the export of oil and meal. Now the situation has improved. The EU-5 does not want additional supplies from Ukraine and it does not seem to be a serious problem for it.

Poland wheat trade dynamics (mln t)



Romania wheat trade dynamics (mln t)



Previous slides have shown that Ukraine's neighbors do not need additional grain. These graphs are shown to emphasize that **there is no direct threat to Ukrainian exports to neighboring markets after EU accession**. Romania, Poland, France, Germany - these countries are all members of the EU and are among the key grain exporters. Although they have huge grain surpluses, they do not "collapse" the markets of their neighbors, because they have enough demand from importers who are willing to pay for this grain.

The only reason Ukrainian grain is in trouble is that deepwater exports are blocked due to the war with Russia. So this is just a forced step due to the lack of other alternatives for the survival of the agricultural business. When Ukraine wins and peace comes, and maritime exports are fully restored, exports to EU neighbors will become an interesting direction.

Pricing principles for exports by sea

	C&F		FOB		CPT
	<p>C&F</p> <p>“Cost and Freight”</p> <p>Price at the port of importer. Price benchmark for competing exporters</p>	<p>←</p> <p>Costs and freight due transportation</p>	<p>FOB</p> <p>“Free on board”</p> <p>Price of cargo, loaded on vessel in the port of exporter</p>	<p>←</p> <p>Costs of loading on vessel (fobbing)</p>	<p>CPT</p> <p>“Carried to port”</p> <p>Price of cargo at the port of exporter</p>
No war	256 \$/t		240 \$/t		230 \$/t
Now	256 \$/t	<p>←</p> <p>16 \$/t</p> <p>40 \$/t</p>	216 \$/t	<p>←</p> <p>10 \$/t</p> <p>27 \$/t</p>	189 \$/t

To remain competitive, Ukraine should offer the importer grain supplies at the same prices as other competitors (Russia, Romania, Australia, etc.). Therefore, the **C&F price should be at least at the market level**, or even lower - due to the consequences of the ongoing active war, Ukraine faces the risk of supply disruption, loss of goods, etc. As a result of military risks, **freight rates for Ukraine are 2.5 times higher than usual**. The benchmark is the freight rate for the neighboring Romanian port of Constanta. The threat of shelling also prevents the normal functioning of port terminals, making **port operations 3 times more expensive than before**.

If Russia had not been weaponize the grains, a Ukrainian farmer could sell milling wheat in the port for **\$230/t**. Now he can expect a maximum of **\$189/t**. Given that intermediate market operators also work on the terms of a war premium, the real price that a farmer will receive under current conditions may be even 10-15 \$/t lower - 174-179 \$/t. This difference of \$55 is a quarter of the price for milling wheat that a Ukrainian farmer does not receive. This is a lost profit that will mean greater savings in the production of the next harvest, and as a result, greater potential losses in future yields and profits.



Annex

Current impediments for Ukrainian agricultural exports: western border

Stage 1.

Growing chaos and intervention of the European Commission

April 3	April 16	April 20	April 25
The prime ministers of Poland, Bulgaria, Romania, Slovakia, and Hungary (EU-5) have asked the official Brussels to limit the amount of Ukrainian food entering the European Union.	Poland suspends imports of agricultural products originating in or imported from Ukraine until June 30, 2023. Other countries are considering similar bans.	The EU is preparing emergency restrictions on Ukrainian grain imports to five EU member states, as individual trade restrictions are contrary to EU law.	The EU-5 agreed to lift the unauthorized restrictions and will continue negotiations with the EU Trade Commissioner. But until the process is agreed upon, the conditions for exports and transit are chaotic and individual for each country.

Stage 2.

Approval and introduction of an official ban

May 2	May 24	June 1	June 5
The European Commission officially announces the introduction of "exceptional and temporary" safeguard measures against imports from Ukraine, restricting the entry of certain Ukrainian agricultural products into the EU-5 bordering Ukraine. The measures apply to only four agricultural products - wheat, corn, rapeseed and sunflower seeds of Ukrainian origin.	Throughout May, the EU-5 countries gradually lifted their personal restrictions. as of May 24, Hungary remained the only country that maintains unilateral restrictions against Ukrainian agricultural imports.	EU Commissioner for Agriculture Janusz Wojciechowski said that restrictions on grain imports from Ukraine should be extended at least until the end of October.	The decision to ban imports of wheat, corn, rapeseed, and sunflower from Ukraine by EU-5 is published.

Intermediate results.

Financial consequences.

June 26	July 11	July-August
<p>EU allocates €100 mln to five countries blocking Ukrainian grain.</p> <ul style="list-style-type: none"> • Bulgaria will receive €9.77 mln; • Hungary €15.93 mln; • Poland €39.33 mln; • Romania €29.73 mln; • Slovakia €5.24 mln. 	<p>The IMF estimates that in the event of further import restrictions, trade reorientation will be difficult even if transit is maintained.</p> <p>Thus, the negative impact on exports will amount to about \$170 million per month until mid-September, and will increase further to \$270 million per month if the restrictions continue when the new harvest begins to arrive.</p>	<p>The EU-5 countries expect and demanded an extension of the ban after it expired on September 15.</p> <p>Some other EU countries support these demands.</p>

Stage 3.

A sharp escalation on both sides

WTO	Restrictions	Dramatic September 18
<p>September 6 Ukraine will file a lawsuit with the WTO if the EU grain ban is extended.</p> <p>September 8 Poland calls Ukraine's intention to complain to the WTO about grain a pressure</p>	<p>September 15 European Commission does not extend restrictions on Ukrainian grain imports to five EU countries.</p> <p>September 16 Poland, Hungary, and Slovakia extend the embargo on Ukrainian grain imports despite the European Commission's decision.</p>	<ul style="list-style-type: none"> Poland expands the list of banned Ukrainian products. In addition to wheat, corn, rapeseed, and sunflower seeds, the list includes wheat flour, wheat and corn bran, and oilseed cake. Five EU countries rejected the action plan prepared by Ukraine on measures to control grain exports. They also refused to cooperate within the working group Ukraine filed lawsuits against Poland, Slovakia and Hungary in the WTO

Stage 4.

Turning the disagreement into a constructive direction

Joint efforts		Ukraine Initiative
<p>September 19: The Ministry of Agrarian Policy unveils the developed mechanism for controlling the supply of Ukrainian grain to the EU.</p> <p>September 20: Ukraine wants to avoid a WTO trial and find common ground with its neighbors.</p>	<p>September 22: The crisis of Ukrainian grain can be resolved without bringing it to the WTO, the European Commission believes.</p> <p>September 24: The government of the Republic of Poland has created transit corridors for the export of Ukrainian grain to countries that need it.</p>	<p>During second half of September Ukraine is developing and implementing a grain export licensing system with each EU-5 country. This system has found support from Romania and Slovakia.</p>

Current state.

Fundamental disagreements remain.

Ukraine-WTO	EU-5 position	Situation at the border
<p>Ukraine has set a condition for withdrawing its claim from the WTO: "It is very important for us that the Polish side and other states and the European Union guarantee us that such restrictions will not happen in the future. Only when we receive these guarantees will we formally announce to the whole world that this dispute has been exhausted," said Taras Kachka, Deputy Minister of Economy and Trade Representative of Ukraine.</p>	<p>Poland does not intend to lift the embargo on Ukrainian agricultural products, even if Ukraine withdraws its complaint to the WTO</p> <p>Poland and Hungary ignore the EC meeting to consider Ukraine's plan</p>	<p>Poland does not allow wagons with meal from Ukraine: queues at the border are growing</p> <p>In particular, the accumulation of such cargoes is currently almost 900 railcars (approximately 2,800 railcars are heading to the junction). This is primarily due to the fact that on September 16, Poland expanded the list of goods banned for import. It includes restrictions on meals and cakes.</p>

Results and expectations

In general, the position of all sides is clear.

Unfortunately, given that the conflict occurred because of Ukraine's urgent need to continue exporting by all means possible, the conflict cannot be resolved by a win-win system. It is a difficult path of compromise.

Ukrainian side:

Ukraine has to acknowledge that its grain volumes are unwanted in neighboring EU countries and instead of forcing the EU countries to give in to their own interests, Ukraine should direct its efforts so that the EU helps to secure the maritime exports. If the deep-water ports are fully operational, the problem on the border will be exhausted, because logistics by sea makes sales through Odesa and Mykolaiv much more profitable than through the EU border (i.e., a return to pre-full-scale invasion conditions).

But for now, exports through the EU need to be clearly regulated so that grain does not end up in the neighboring countries that are exporters themselves.

EU side:

The EU must understand that the best way to "get rid" of Ukrainian grain without ruining Ukrainian agribusiness and the economy is to help restore normal maritime exports. This includes joint efforts to ensure the safety of ships and strengthening Ukraine's air defense. Another option that Romania is currently implementing is to strengthen its own air defense near the Danube ports. In the past, Russian drones have already crashed into Romanian territory, so Russia has once again proved that its actions are a threat to all neighbors, not just those it is trying to capture at a particular moment.

Ukraine is Europe, and efforts must be united to achieve the victory of democracies.