



24 February 2023

Lower World Market Prices Will Ukraine lose market shares in Africa?

- Part I A year later. War and Grains Prices
- Part II A year later. War and Fertilizers Prices
- Part III Sunflower oil market impact
- Part IV Stolen lands, stolen grains.
Losses that Russia has inflicted on Ukraine since 2014

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 101000751





Part I

A YEAR LATER

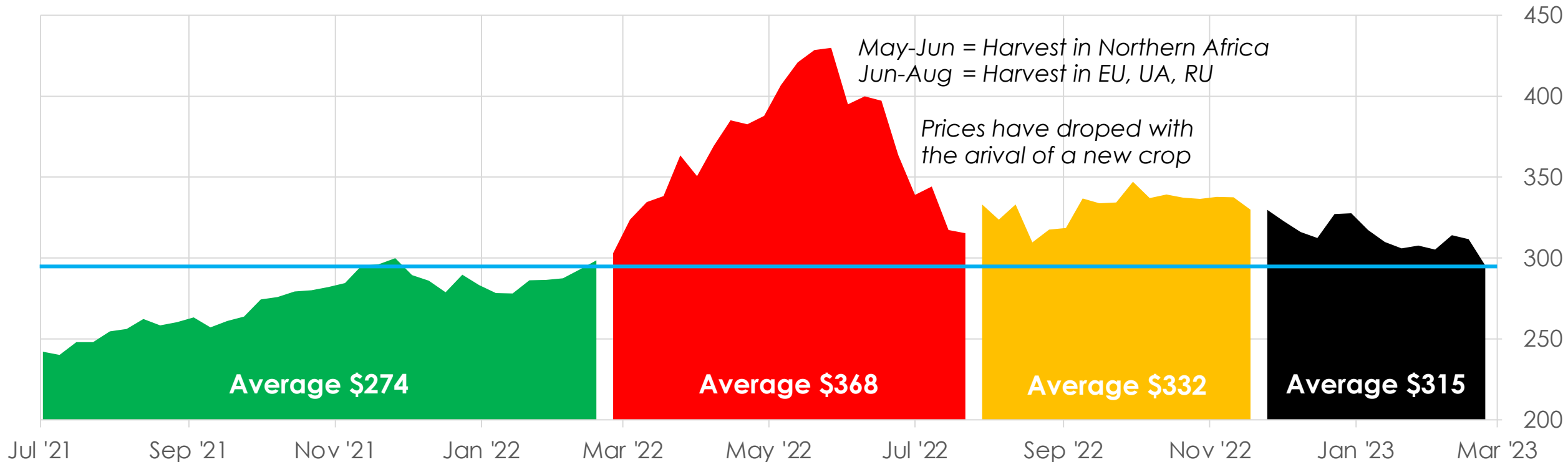
War and Grains Prices

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Wheat Euronext May 2023 futures (\$/t)

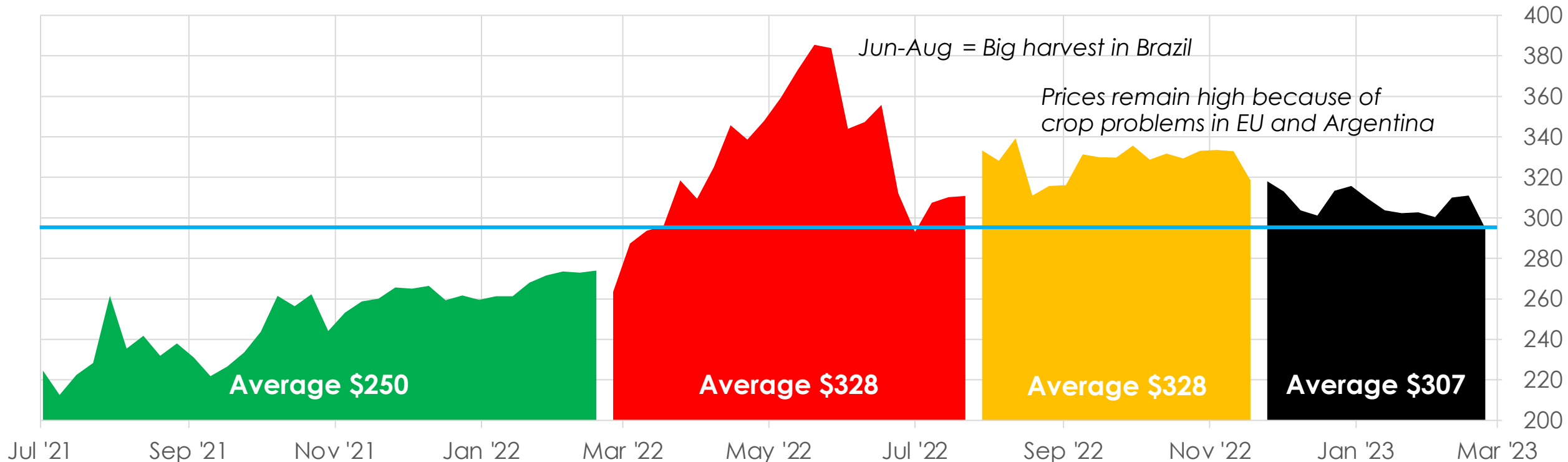
■ 2021-22 ■ Full-scale invasion ■ Grain Initiative #1 ■ Grain Initiative #2



Since the extension of the Grain Initiative in November, wheat prices have fallen to the level they were before Russia's full-scale invasion of Ukraine began. In addition to the continued flow of wheat from Ukraine, the factors contributing to the decrease are the absence of critical weather problems for winter wheat in the Northern Hemisphere, as well as the slowdown in the rate of inflation in the world. Domestic farm revenue, however, suffered from higher shipment costs and market uncertainties, in turn affecting investment confidence – and increased competition on export destinations including Africa.

Corn Euronext June 2023 futures (\$/t)

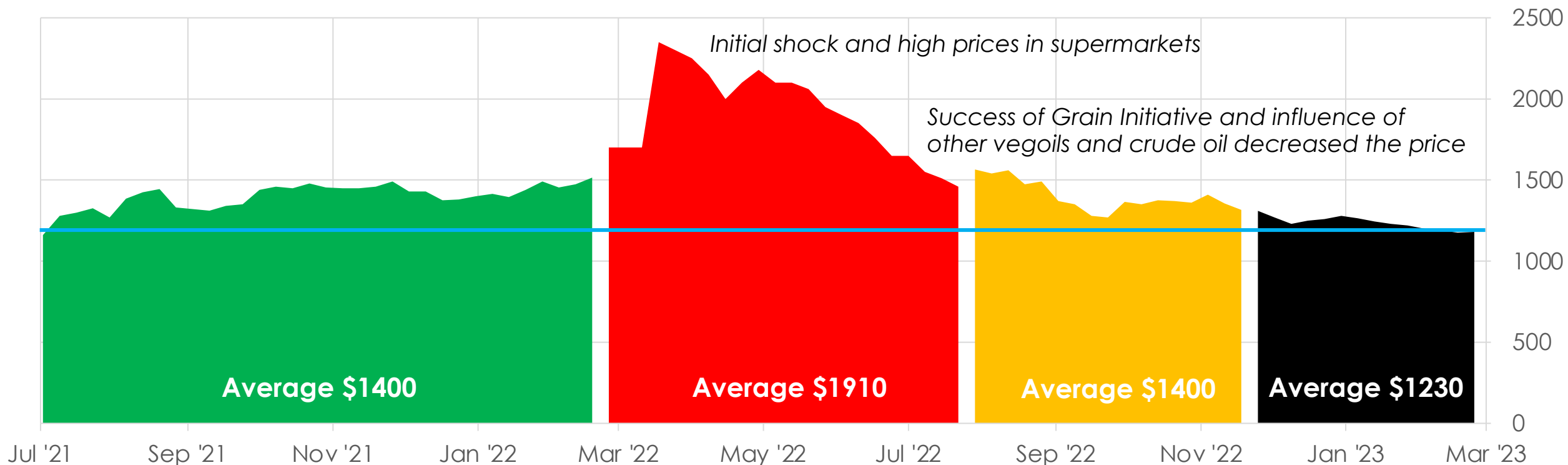
■ 2021-22 ■ Full-scale invasion ■ Grain Initiative #1 ■ Grain Initiative #2



Unlike wheat, the price of corn remains high. First of all, the reasons are problems on the part of world production, which arose after the start of the Grain Agreement. Firstly, there was a crop failure in the EU, secondly, weather problems in Argentina. Thirdly, due to the war and heavy rains, the harvest in Ukraine was delayed until the end of February (that is, for 2 months) and the quality of corn, accordingly, is often poor. But, like for wheat, ROI at farm gate remains depressed by war impacts.

Sunoil price in EU (North-West Europe)

■ 2021-22 ■ Full-scale invasion ■ Grain Initiative #1 ■ Grain Initiative #2



After the first shock, with panic purchases e.g. in Germany, importers began to adapt to the situation, including purchasing alternatives (palm, soybean, rapeseed oil). In addition, Ukraine actively exported sunseed, which it has never done in recent decades due to developed domestic processing. Accordingly, buyers in the EU processed seeds at their own factories, Ukrainian farmers were able to receive at least some cash. However, this is a crisis phenomenon, because the export of sunseed in this way means lost profits both for the processing industry of Ukraine and lost much-needed revenues for the budget of Ukraine. Despite everything, vegoil prices in the EU are already lower than they were before February 24, 2022.



Part II

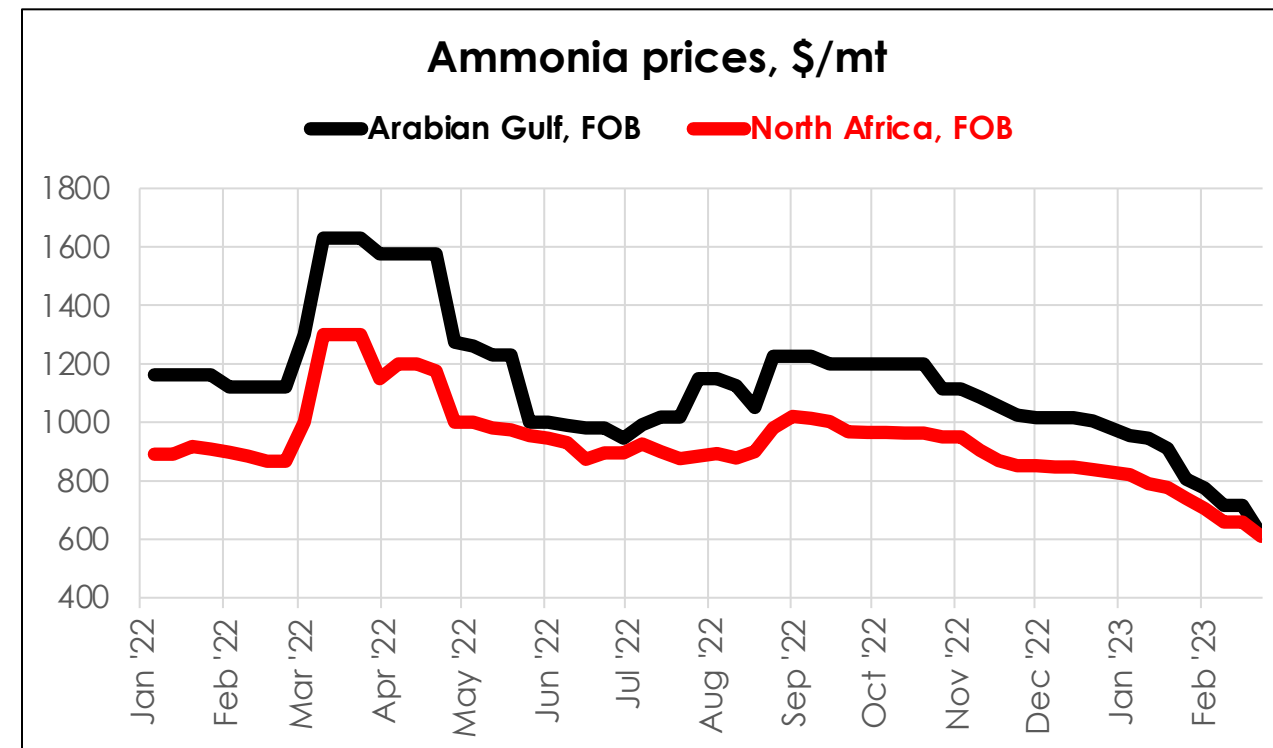
A YEAR LATER

War and Fertilizer Prices

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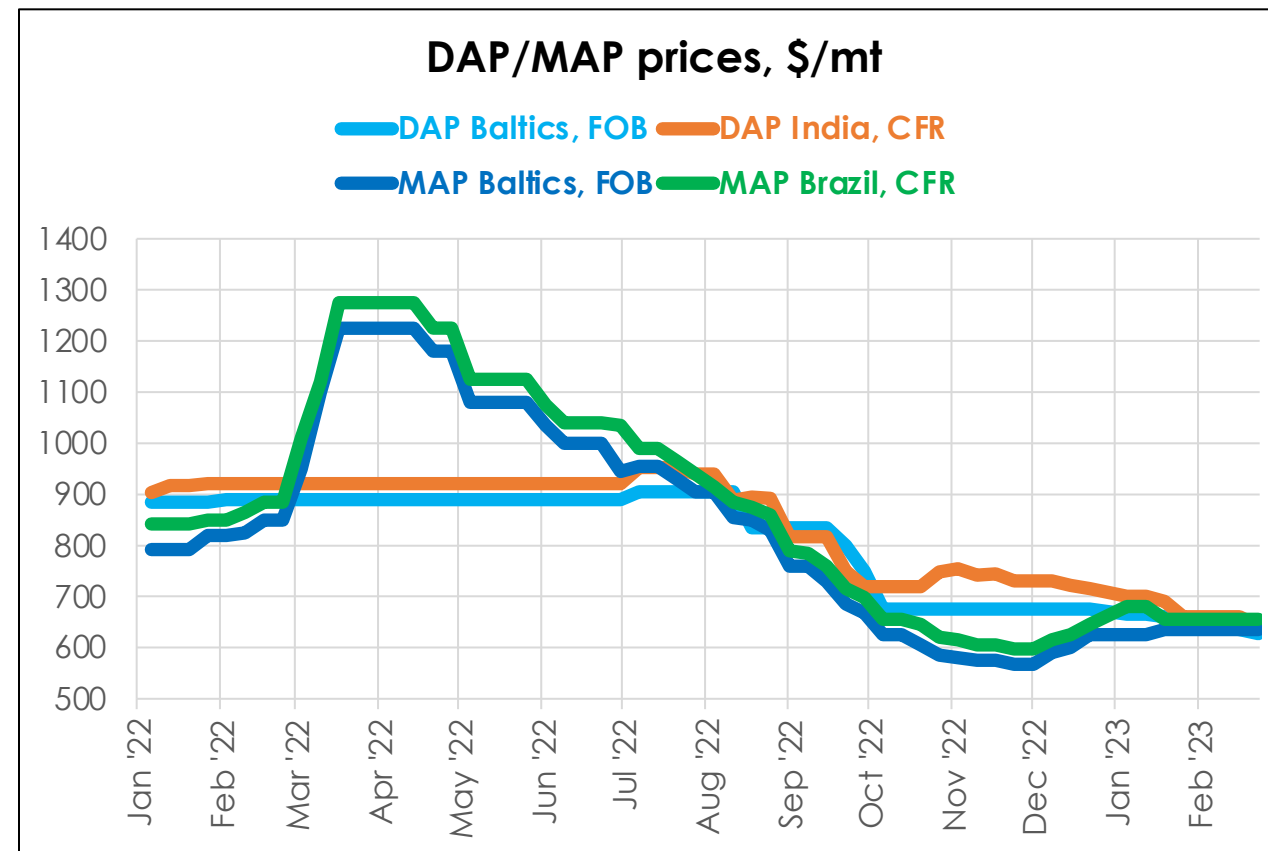
- After February 24, 2022, fertilizers prices surged extremely in few weeks on possible supply issues from leading global supplying countries – with ripple effects as far as Indonesian paddy farms.
- US, EU **haven't imposed sanctions on Russian fertilizers** and after the period of uncertainty the market calm down and prices started to decrease
- Russian exporters have issues with finding vessels, financing and insurance, which deters export supplies but doesn't stop it
- Ammonia supplies suffered the most as transit via ammonia pipeline Togliatti-Pivdennyi has suspended because of military actions
- After the spike in the third quarter on record European gas prices, negative dynamics in nitrogen fertilizers market goes on due to weak demand in key importing countries



	Urea FOB			Ammonium Nitrate FOB	Ammonia FOB	
	Baltics	Arabian Gulf	Northern Africa	Baltics	Arabian Gulf	Northern Africa
24.02.2022	545	574	605	715	1120	868
23.02.2023	280	335	388	260	615	610

Price increase from February 24 to March 10, 2022	
Urea	62-83%
Ammonium Nitrate	6-10%
Ammonia	46-50%

- MAP (Monoammonium Phosphate) prices significantly rose in March on the back of possible supply issues from Russia which is the world third supplier with market share 19-23% in the previous 5 years. DAP (Diammonium Phosphate)/MAP prices are sliding because of raw materials (ammonia, phosphate rock, sulphur) cost decrease.
- MOP (Muriate of potash) prices rise in March was caused by possible supply issues from the second and third world suppliers Russia and Belarus, which accounted for more than 40% of global exports. Major importers massively bought MOP in the first half of the year and sharply cut imports in the second half due to high stocks, which then resulted in price reduction.



	DAP		MAP		MOP	
	Baltics FOB	India CFR	Baltics FOB	Brazil CFR	Baltics FOB	Brazil CFR
24.02.2022	890	922	850	885	661	765
23.02.2023	628	643	635	655	468	498

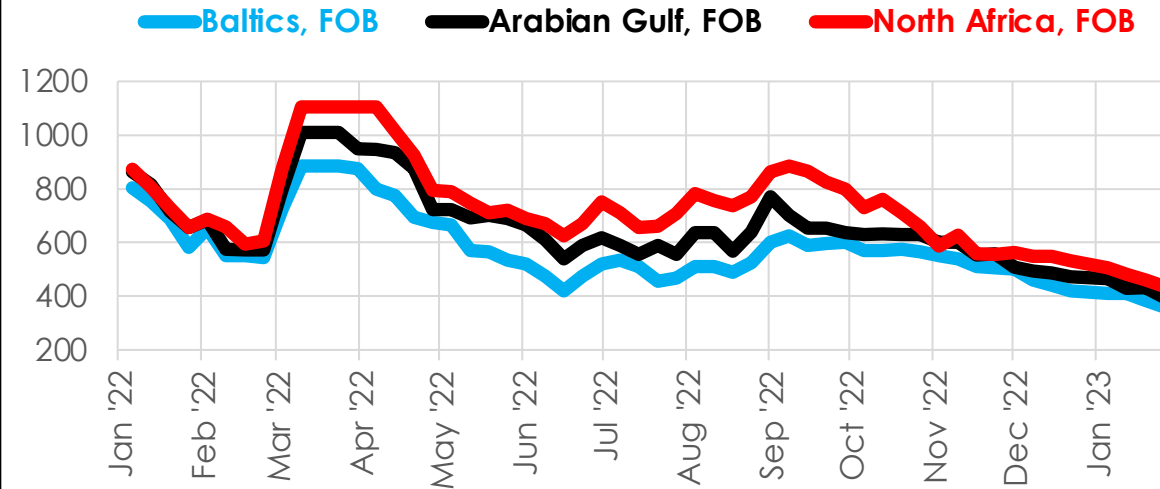
Price increase from February 24 to March 10, 2022

DAP	0%
MAP	44%
MOP	57%

Russia has closed fertilizers export-import statistics.

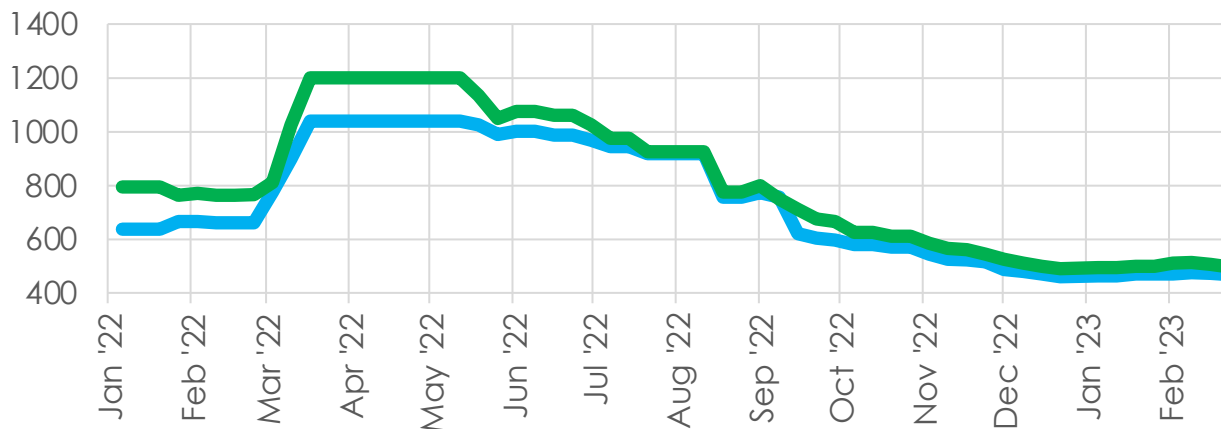
Only a few importing countries have released reports for 2022. Perhaps significantly, it is now impossible to get correct mirror data on actual Russian fertilizers export caused by war start.

Urea prices, \$/t



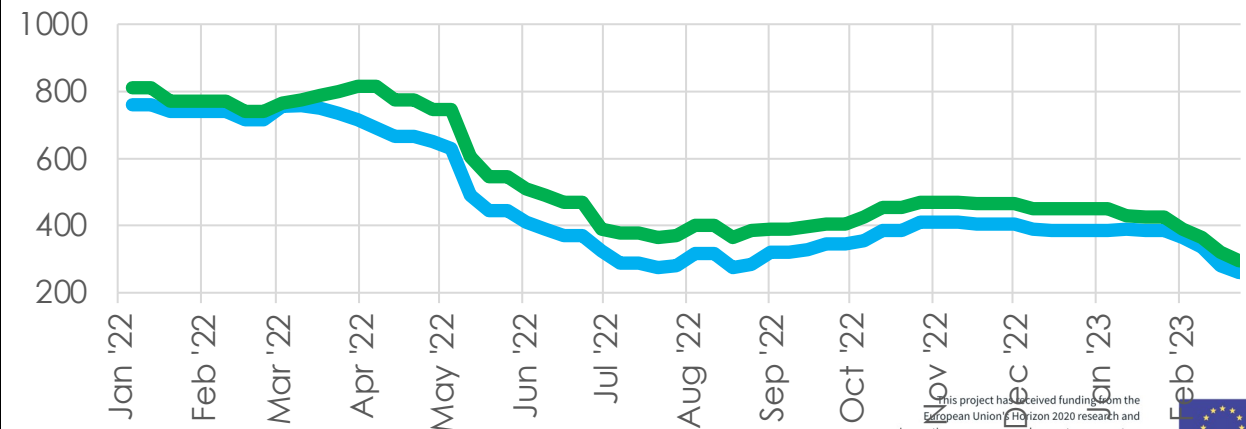
MOP prices, \$/t

Legend: MOP Baltics FOB (blue), MOP Brazil CFR (green)



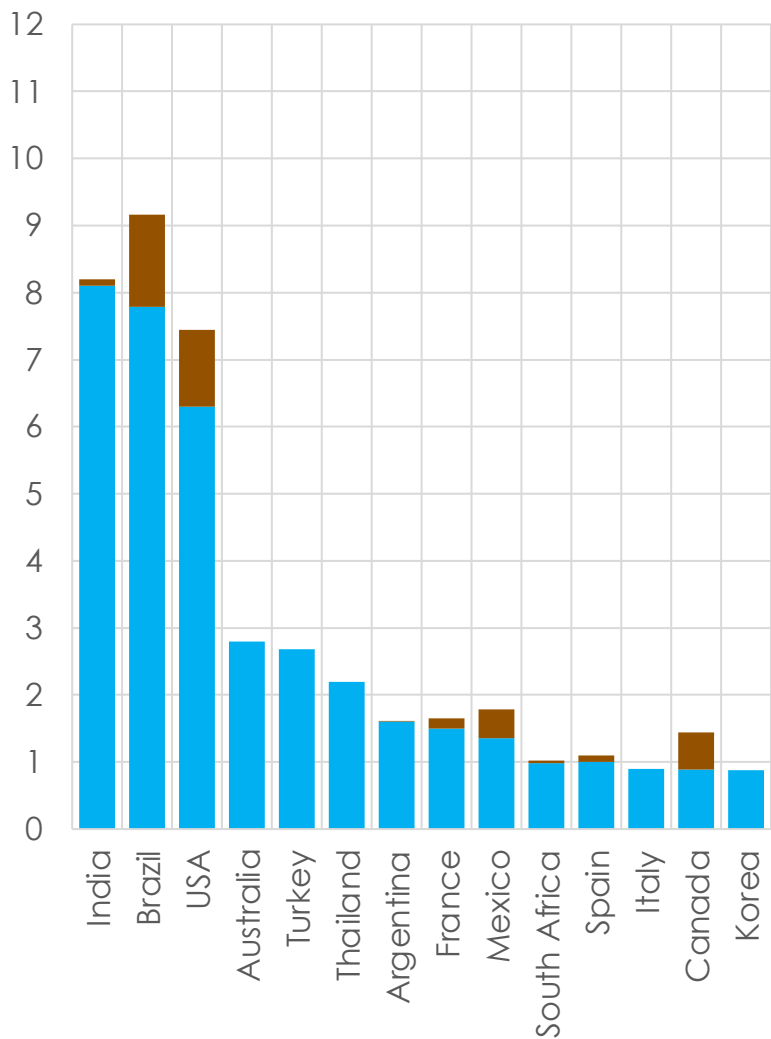
Ammonium nitrate prices, \$/t

Legend: Baltics, FOB (blue), Brazil, CFR (green)



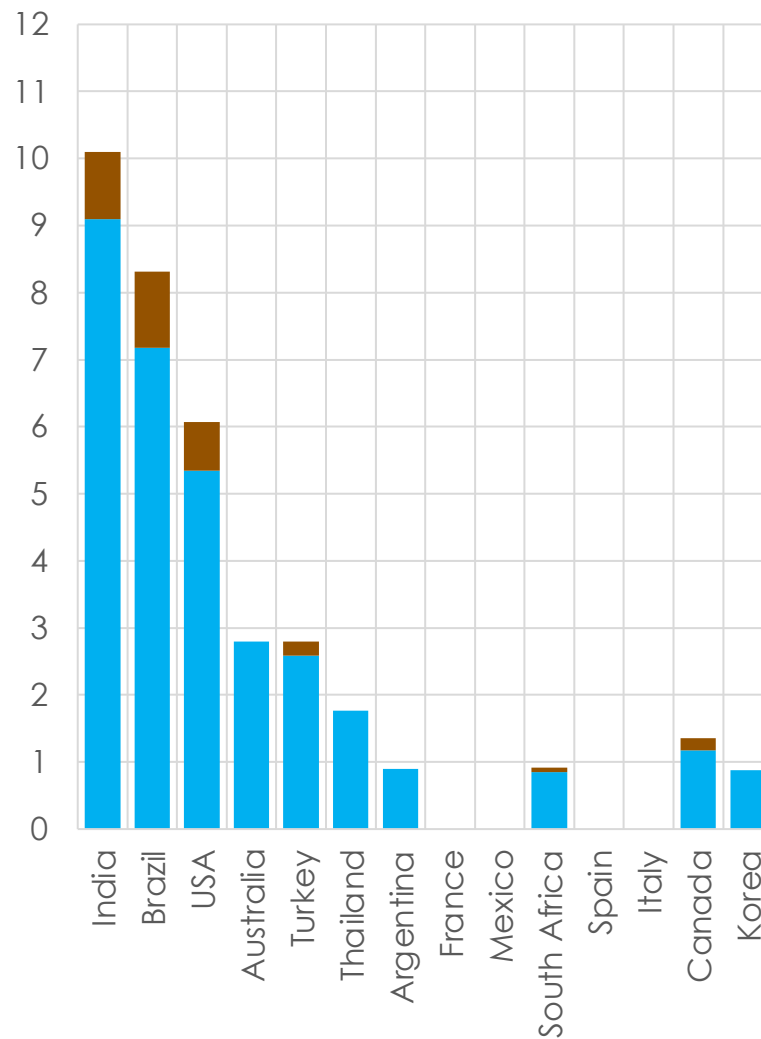
Urea imports 2021 (mln t)

■ From others ■ From Russia



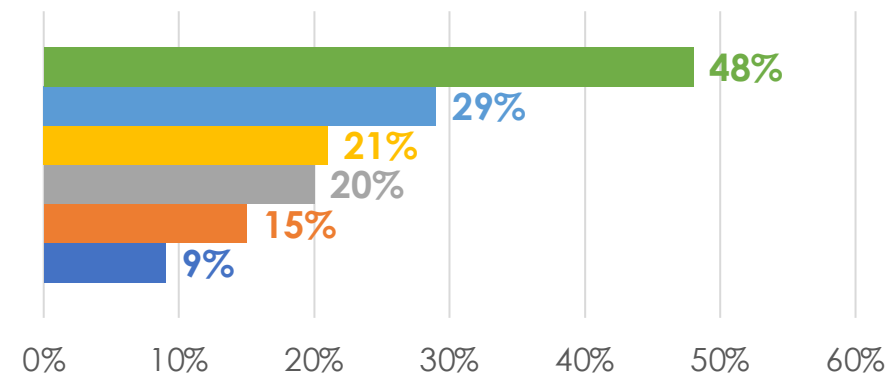
Urea imports 2022 (mln t)

■ From others ■ From Russia



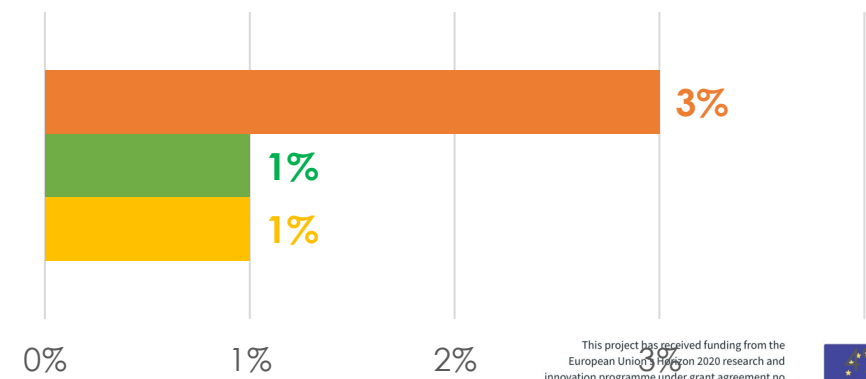
Russia share in global fertilizers market (2021)

■ Ammonium nitrate ■ MOP ■ Ammonia ■ MAP ■ Urea ■ DAP



Ukraine share in global fertilizers market (2021)

■ Urea ■ Ammonium nitrate ■ Ammonia





Part III

Sunflower oil market impact

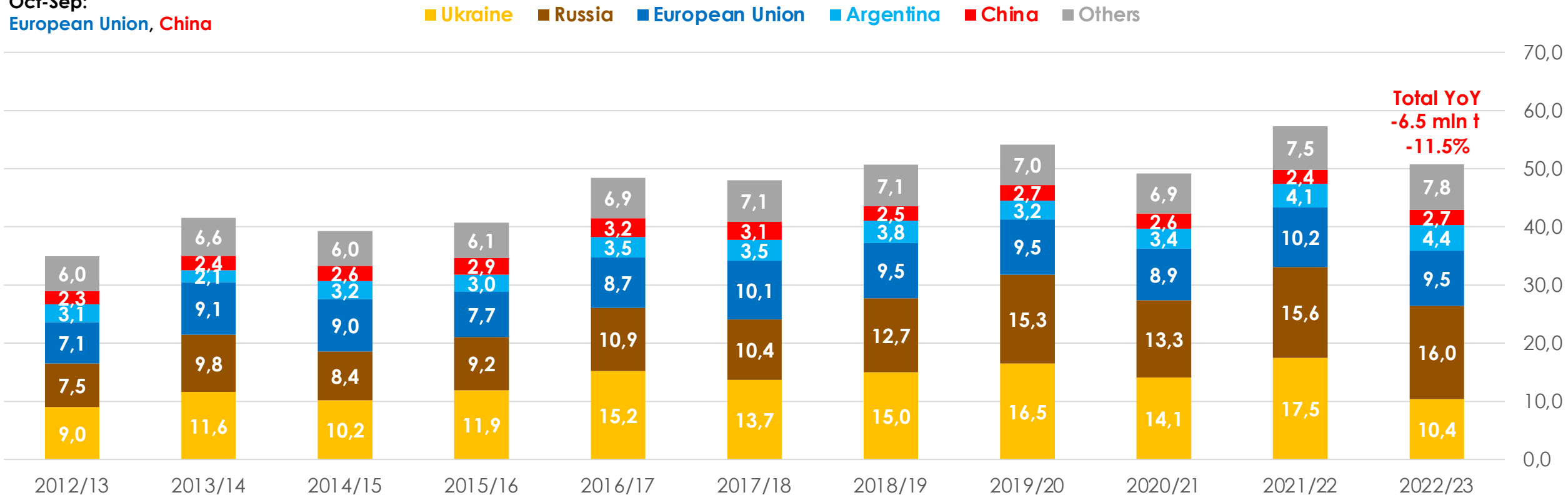
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Marketing Year for sunflower:

September-August:
Ukraine, Russia, ArgentinaOct-Sep:
European Union, China

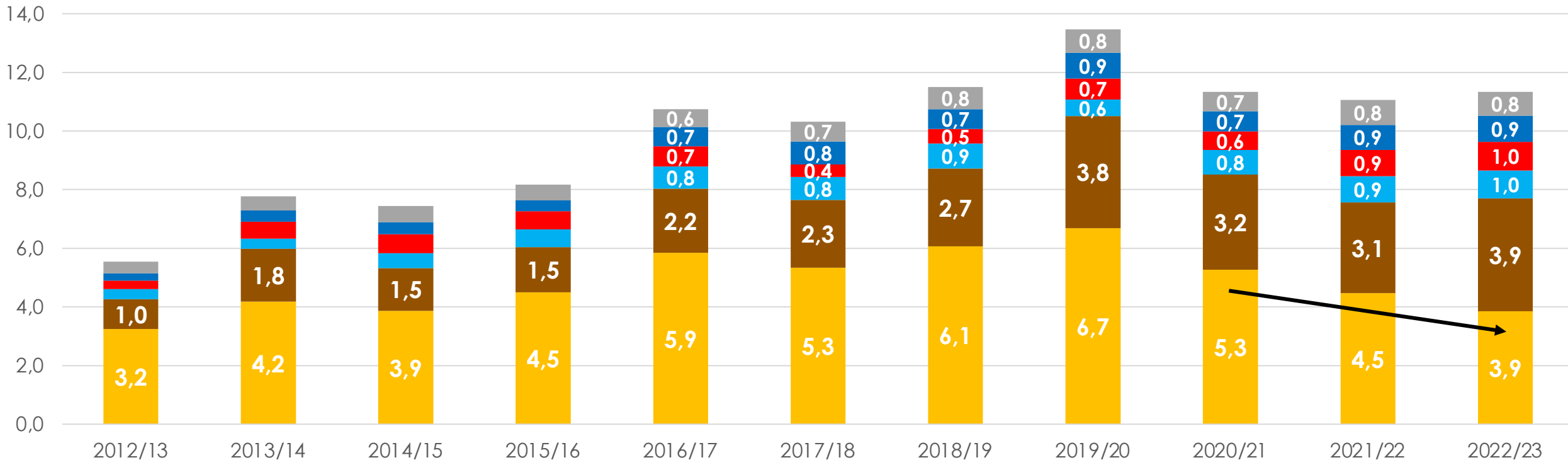
World sunflower production by selected countries and others, mln t



- Global production is **11.5% below the prior year's record**
- The **main decline** in world production was due to the start of the full-scale Russian invasion in Ukraine, which led to a **decrease in the production of sunflower in Ukraine**
- Global production could be even lower due to adverse weather conditions in Argentina.

World sunflower oil exports, mln t

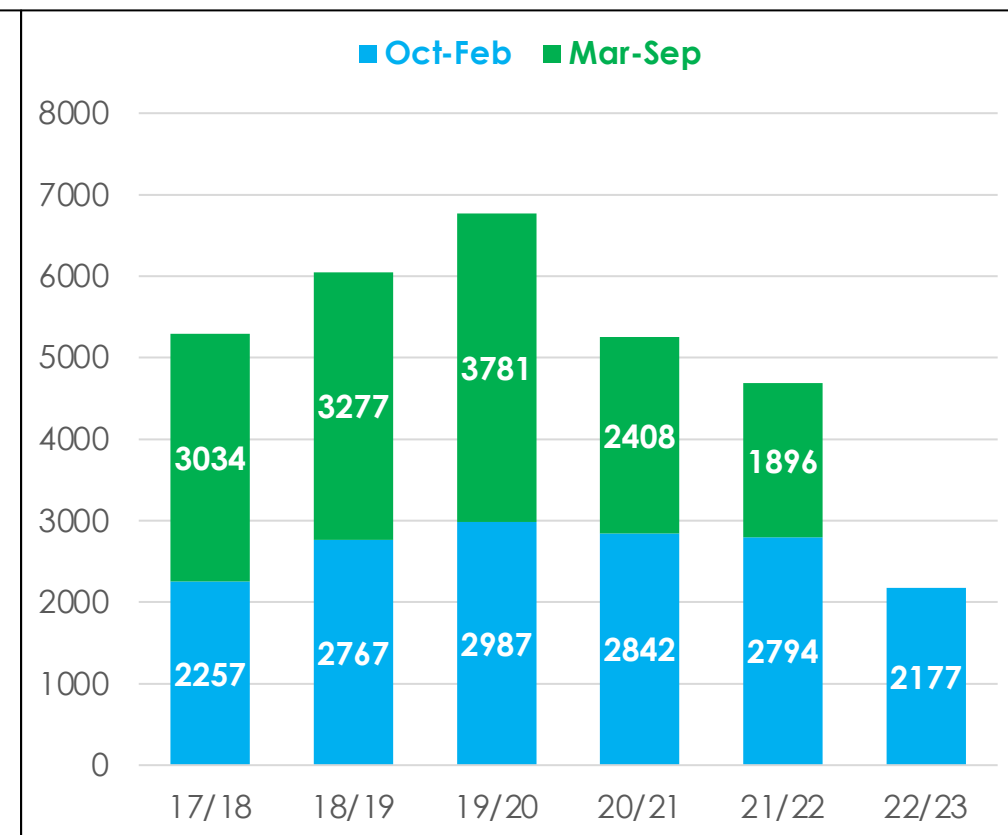
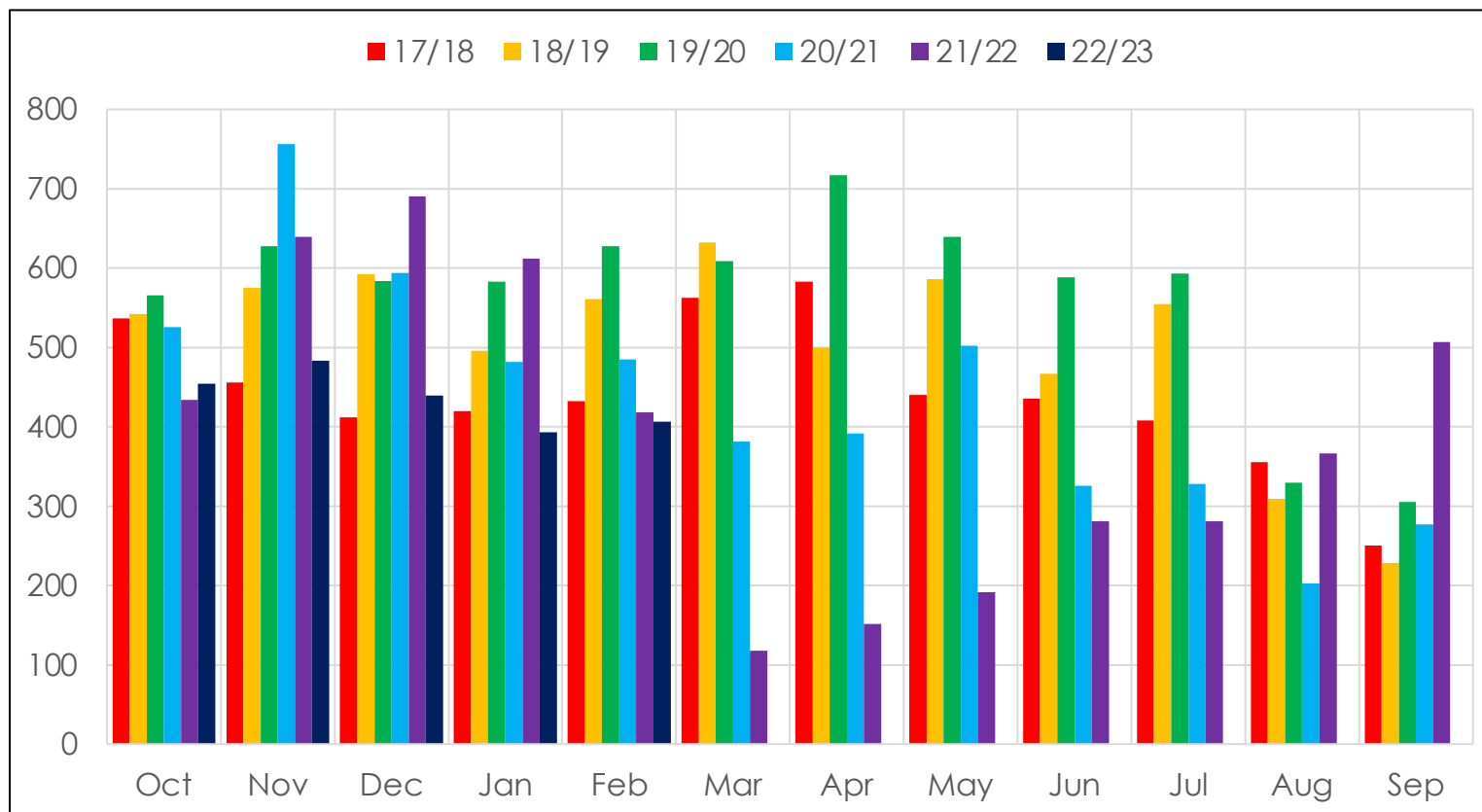
■ Ukraine ■ Russia ■ Argentina ■ Turkey ■ European Union ■ Others



- Global sunflower oil exports dropped significantly after record volumes in 2019/20 MY
- In 2020/21 MY, the decrease occurred due to a lower sunflower production in the Black Sea region
- **In 2021/22 and 2022/23, the pace of oil exports from Ukraine decreased due to logistical restrictions by the Russian side in the Bosphorus — which limits world supply and thus supports prices**

Monthly export paces of sunoil from Ukraine, kt

Total export of sunoil from Ukraine kt

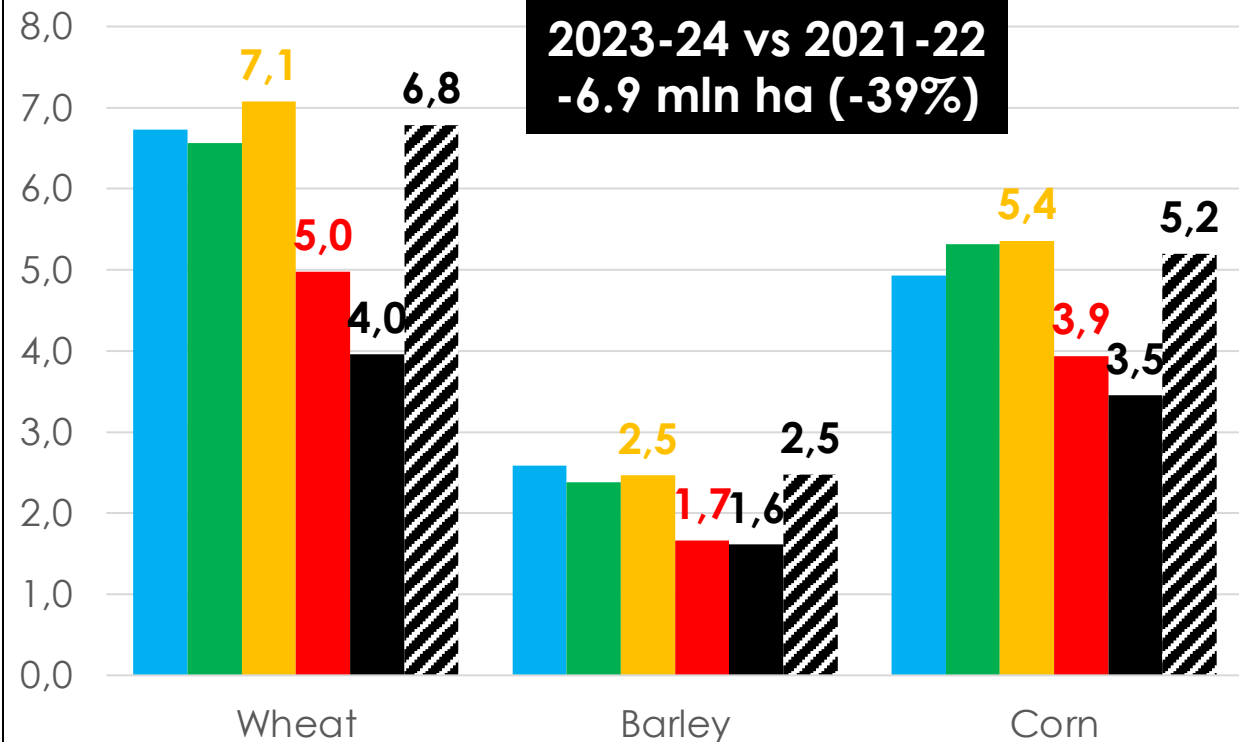


- Since the beginning of the season, Ukraine has demonstrated relatively good export pace, which significantly improved situation with discharge of excessive stocks
- However, as the deadlines of the Grain Initiative approached, the pace of export significantly slowed down
- USDA forecasts final exports at the level of 3.9 mln t (Oct-Feb 2.2 mln t done), which seems achievable. **But only under the conditions of the Grain Initiative continuing undisturbed.**

Major grains planted area (mln ha)

■ 19-20 ■ 20-21 ■ 21-22 ■ 22-23 ■ 23-24 ▨ W/o invasion

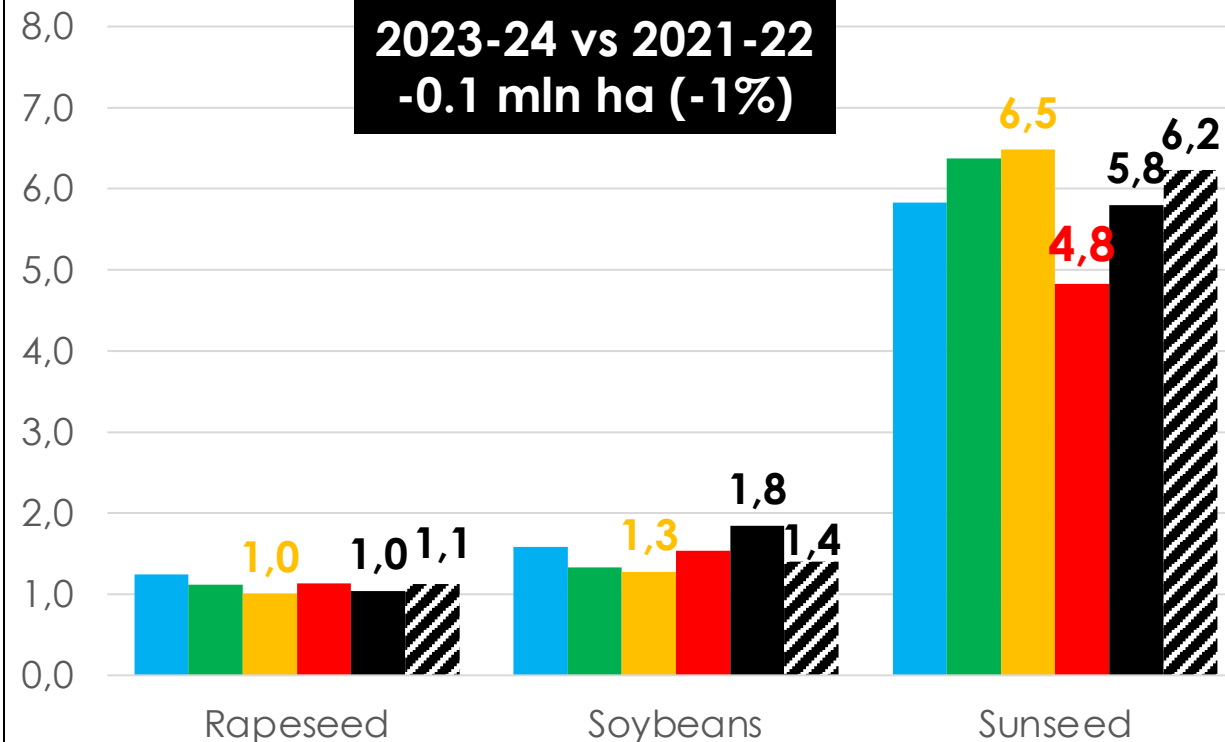
**2023-24 vs 2021-22
-6.9 mln ha (-39%)**



Major oilseeds planted area (mln ha)

■ 19-20 ■ 20-21 ■ 21-22 ■ 22-23 ■ 23-24 ▨ W/o invasion

**2023-24 vs 2021-22
-0.1 mln ha (-1%)**



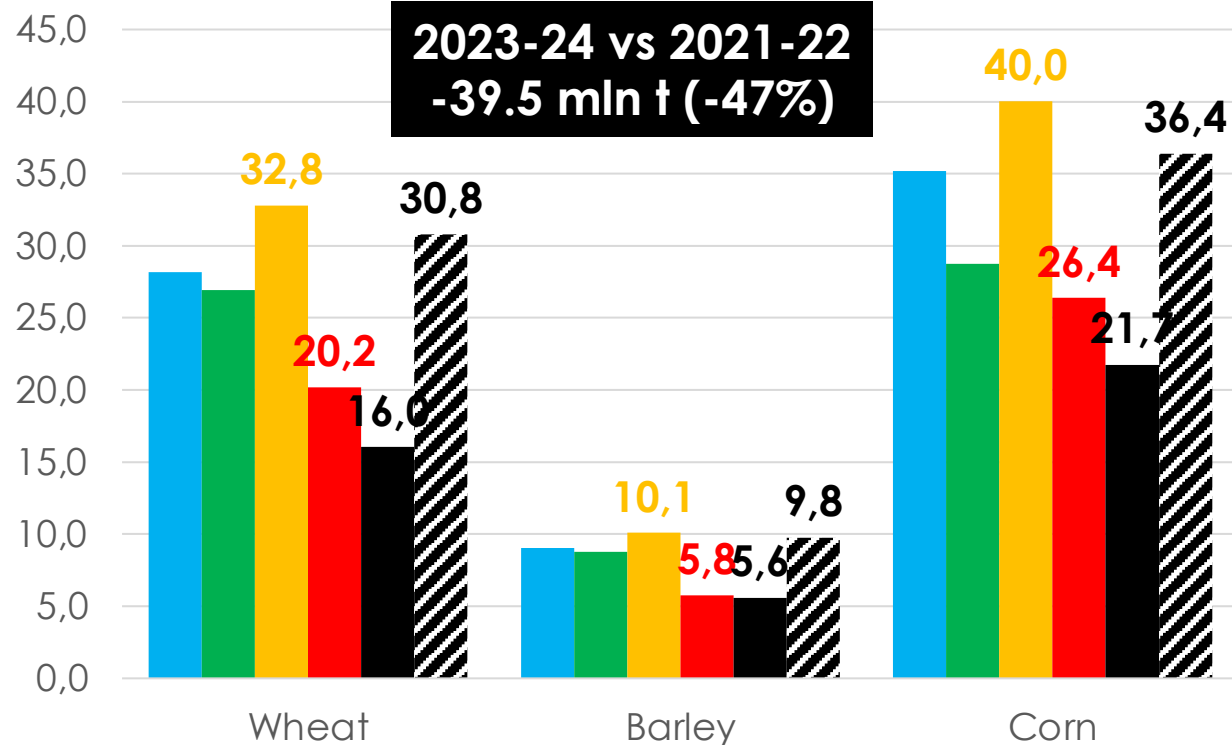
The wartime profitability of oilseed production vs grains production may encourage growers to shift acreage to sunflowers, soybeans, and (perhaps) rapeseed. For Ukraine, the EU is an important sales market for all the listed oilseed products.

On the other hand, the EU is a competitor for Ukraine in respect of wheat. Grains in general have a much worse export expenditures calculation due to high logistics costs. This is especially noticeable in the eastern oblasts.

Major grains production (mln t)

■ 2019 ■ 2020 ■ 2021 ■ 2022 ■ 2023 ▨ W/o invasion

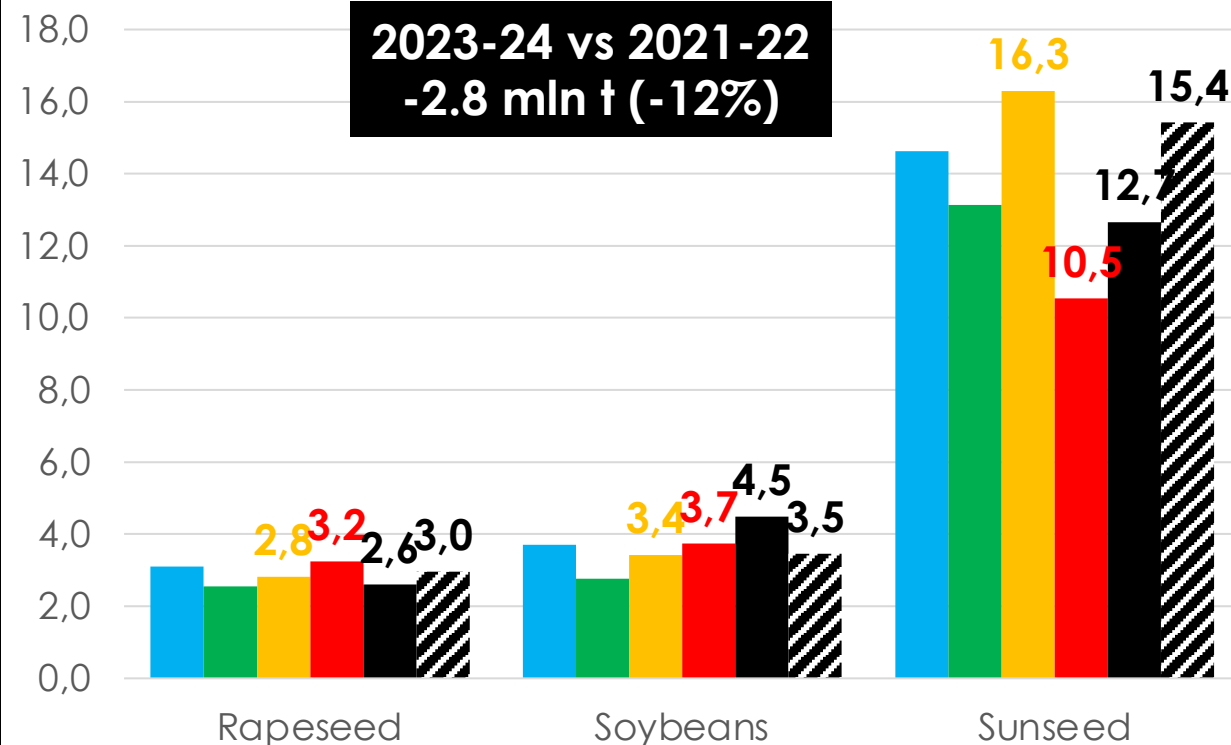
2023-24 vs 2021-22
-39.5 mln t (-47%)



Major oilseeds production (mln t)

■ 2019 ■ 2020 ■ 2021 ■ 2022 ■ 2023 ▨ W/o invasion

2023-24 vs 2021-22
-2.8 mln t (-12%)



The drop in grain harvest in 2023 could be colossal. All the problems leading to this are caused by Russian invasion. Temporarily occupied and mined important fertile lands; sabotage of seaborne exports has led to very expensive logistics and unpredictable selling prices in absence of the forward market.

Corn and the main part of barley will be sown in the spring, farmers are already preparing for field work, so there is no time for a radical change of plans.



Part IV

STOLEN LANDS, STOLEN GRAINS

Losses that Russia has inflicted on Ukraine since 2014

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Annexation of Crimea:

- 4.3% of Ukraine's population
- 1.5-1.6% of Ukraine's foreign trade
- 3.7% of national GDP
- 80% of its oil and gas deposits in the Black Sea
- 5 ports and 2 two ferry crossings

Ukraine in 2014 may have lost 1.5 mln t only of grain crops. Meanwhile, Crimean Grain Terminals do not tranship grain and are idle.

Due to the cessation of water supply to the peninsula, experts estimate that 120 k ha of irrigated crops will be lost and the damage can only be compensated for within 2-3 years. The overall losses for the entire agricultural sector of the region could amount to \$1.5 billion.

Occupied Donetsk and Luhansk oblasts

- **Cases of seizure of local elevators.** There are 37 grain warehouses in Donetsk oblast, 19 in Luhansk
- **In 2015, in Donetsk oblast harvesting area was 36% less** than in 2014. In Luhansk 18% less
- Only 10.3 kt of **flour were produced in Donetsk** oblast from January to June 2015, which **was 11 times less** than for the same period in 2014. **The production of cereals in this region decreased by 9.5 times.**
- In **Luhansk** oblast, the volume of **flour production decreased by 25 times**, and cereals - **by 77 times.**

The blockade of Ukrainian ships sailing through the Kerch Strait must now pass through territorial waters that Russia considers its own

As a result of the **annexation of Crimea** and the **occupation of part of Donetsk/Luhansk Ukraine** lost:

- **7% of National GDP in 2014, 10% in 2015.**
- **More than 30 state-owned enterprises.**
- **10% of total ports' capacity.**
- **More than 115 coal mines in Donbas coal area.**
- **Infrastructure of "Ukrainian Railways" - 645 km of railway track only in Crimea.**
- **Access to the Black Sea from the Sea of Azov and from parts of its continental ports, and unhindered navigation of vessels through the Kerch Strait.**
- **Inflation in 2014 was 25%, in 2015 – exceeded 43%.**
- **The total direct losses caused by the occupation of Crimea (not including lost opportunities) amount to 950 billion UAH. The market value of the lost material and natural resources in Crimea is estimated at 126.8 billion UAH. The overall losses suffered by Ukraine due to the occupation are currently estimated at over 1 trillion UAH.**

Crimea occupation is affecting grain exports from Ukraine as a whole. In the previous two seasons (2011/12 and 2012/13 MY), the volume of grain and oilseed exports amounted to 23.4 and 24.6 mln t, which ensured 58.2% and 61.2% of ports capacity. However, in 2013/14 MY, Ukraine's export potential sharply increased to 36 mln t of grain and oilseeds because of a record harvest and yields. Such a volume of exports would have loaded Ukraine's grain terminal capacity by 90%, but the need to transship grain bypassing Crimean ports lead to 100% loading of the remaining capacity of mainland Ukraine.

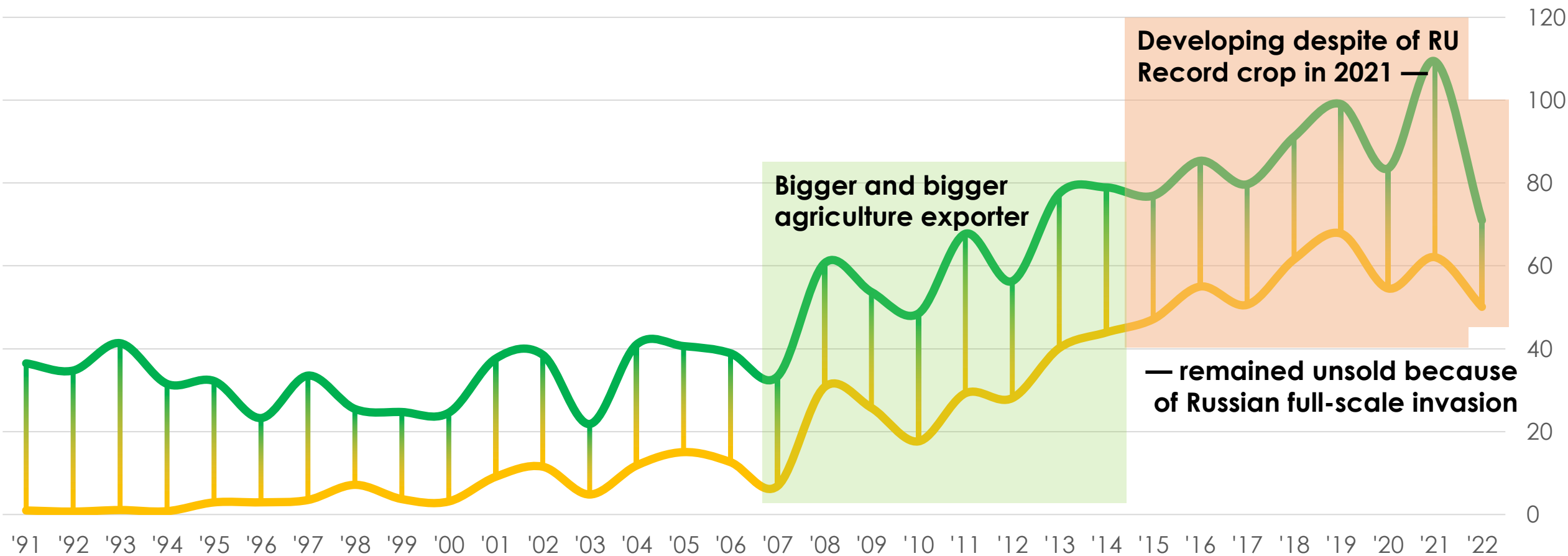
In fact, **the infrastructure for grain milling, storage and exports had to work at the limit of its capabilities. Production forecasts for grain for the next years promised that the record of 2013 of 77.4 mln t would not be the last***, so the port industry for grain storage and transshipment would have to be developed intensively.

* In 2016 Ukraine harvested 85.4 mln t, in 2019 99.0 mln t, and in 2021 109.4 mln t even without Crimea and part of Donetsk/Luhansk.



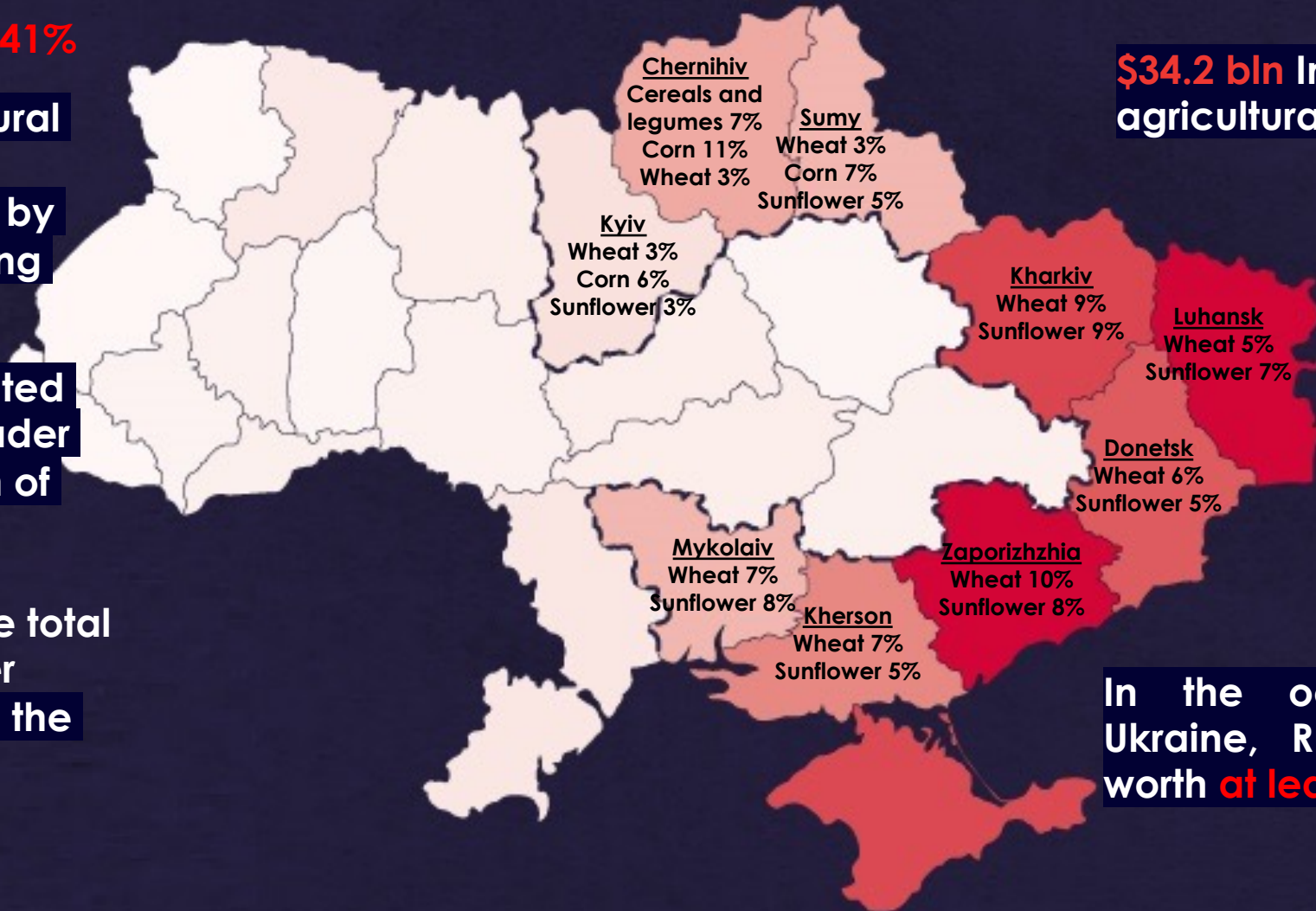
Ukrainian major crops production and exports (mln t)

— Production — Exports



2022-23. STOLEN LANDS, STOLEN GRAINS

- Harvested area **-41%**
- Share of agricultural production in all oblasts, affected by ceased or ongoing hostilities **38%**
- Each of the affected oblasts was a leader in the production of certain products
- Almost **51%** of the total area under winter wheat located in the most dangerous regions



\$34.2 bln Indirect losses of agricultural sector caused by war

The amount of damage in the agricultural sector is **\$6.6 bln**, which represents 5% of the total estimated infrastructure damage

In the occupied territories of Ukraine, Russia collected wheat worth **at least \$1 bln**.

The war is a threat to global food security given the importance of both Ukraine and Russia as major exporters of food and fertilizers.

This led to the **Black Sea Grain Initiative, an agreement** signed in July 2022 under the auspices of the United Nations, which has **permitted substantial food exports from the region to continue.**

But unfortunately, **some media [says](#) that the rise in global food prices in 2022 was to a large extent due to speculation in world markets**, concerns revolved around the fact that both countries are major food exporters, especially to several food deficit countries in the Global South. **These media claims that the issue at the core of the war related to who controls the agricultural land in the country known as the “breadbasket of Europe”?** (Source: oaklandinstitute.org)

Not only the issue has been over-dramatized, but also since the land market got liberalized, only a small fraction 140 k ha or 0.5% of agriculture land has been sold.

As for the oligarchs referred to in the [article](#) (issued in February 2023)- **their companies are legally working in Ukraine and pay taxes. It is economically more attractive to rent/lease the land.** Ukrainian land owners realize that 5-6 times annual rent equals the market value of land for sale, and make simple choice to continue renting it out instead of selling.

While prohibition of land sale (moratorium) was in force - market found it's way around it, concluding 50-year rental agreements called Emphyteuses (*a long-term, alienated and inherited real right to someone else's property, which consists in granting a person the use of someone else's land plot for agricultural purposes in order to obtain fruits and income from it, with the obligation to use it effectively in accordance with its intended purpose*).

Basically, one year after Russia's new incursion, WMP levels have returned to pre-war levels. However, price variations and farm revenues have dramatically increased – without the unsubsidized Ukrainian operators being able to manage the new risks with new insurance tools. This impacts on farm revenues, foreign exchange returns, and African food security.

About 71% of the country's surface (42 million hectares) is used for agricultural activities.

About 80% of the agricultural area is arable land, two-thirds of it - the agriculturally rich black soil (chernozem).

Key results for the entire land sale period as of June 27, 2022:

- ✓ average weighted contract value for one plot — UAH 33,105 (~ \$1200);
- ✓ the total number of transactions of purchase and sale of plots of land for commodity agricultural production (shares) — 39,455, which is 22% of all transactions with land;
- ✓ the total area of sold shares is 140323 hectares;
- ✓ the average size of the sold plot is 3.56 hectares;
- ✓ the maximum price of the object of purchase and sale — UAH 5,035,000 in the Lviv oblast;
- ✓ the maximum plot size in the Kharkiv oblast is 67.05 hectares;
- ✓ the highest weighted average price for 1 hectare in the Ivano-Frankivsk oblast is UAH 76,900.

