KSE | Center for Food and Land Use Research at Kyiv School of Economics

Is Ukrainian wheat easily replaced? Global trade flows review

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INTRODUCTION

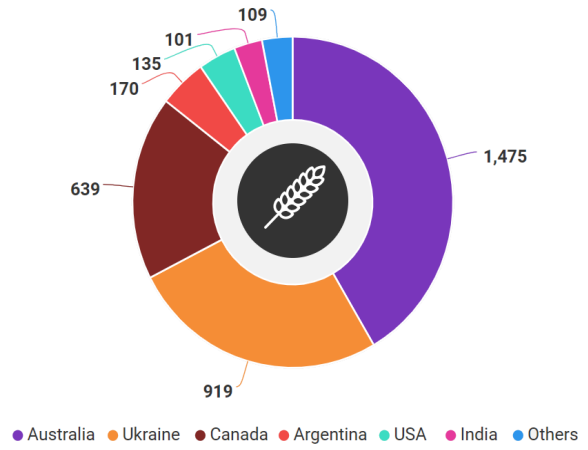
The RF's full-scale invasion of Ukraine is severely undermining global food security, which can be seen in various directions. In this issue, we examine the changes in global trade flows. Specifically, this report outlines how top Ukrainian wheat importers such as Indonesia, Turkey, Bangladesh, Morocco, Egypt, and Tunisia have modified their origins of wheat supplies due to the low supplies of Ukrainian wheat into the global food market caused by the seaports blockade by RF. The report also describes the role of the Black Sea region in the global market balance of wheat and analyzes Ukraine's and RF's grain exports after the start of the war.

I. HOW MAJOR UKRAINIAN WHEAT IMPORTERS REPLACE THE SHORTAGES. AND DO THEY?

INDONESIA

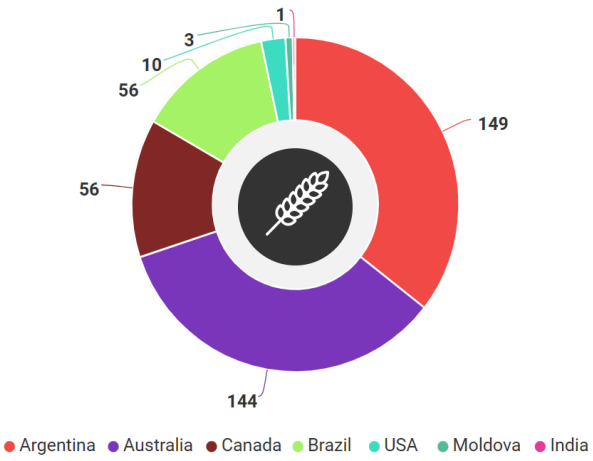
Ukrainian wheat supplies in Indonesia accounted for almost one-third of the total supplies of wheat in 2021. Consequently, after the start of the RF's invasion of Ukraine in February 2022, the Ukrainian share of wheat was mostly replaced by Australia and Argentina. Australian wheat was typical for the Indonesian market due to its favorable geographic location, while the share of Argentinian wheat increased significantly compared to 2021. Each of the aforementioned countries made up around 30% of the total Indonesian wheat imports in March 2022, and the remaining one-third was covered by the US, Brazil, and India. Until this season, the latter two countries were not regarded as major wheat suppliers on the global agricultural market.

Figure 1. Wheat imports in Indonesia, 2021 (mln usd)



Source: ITC Trade Map

Figure 2. Wheat imports in Indonesia, March 2022 (mln usd)

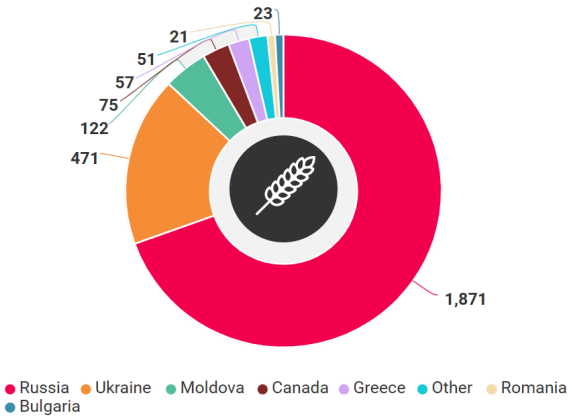


Source: ITC Trade Map

TURKEY

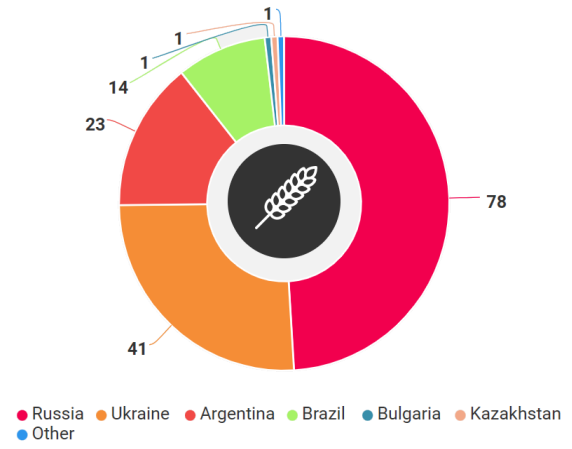
In 2021, Turkey was highly dependent on RF's wheat - the share of RF in total wheat supplies accounted for almost 75%, followed by Ukraine. On the contrary to Indonesia, Turkey was able to continue importing Ukrainian wheat with RF's share still prevailing (nearly 50%). Almost a quarter of wheat imported in March 2022 came from South America. This demonstrates the intention of Turkey to diversify its sources of grain and confirms the strengthening role of Brazil as a global wheat supplier.

Figure 3. Wheat imports in Turkey, 2021 (mln USD)



Source: ITC Trade Map

Figure 4. Wheat imports in Turkey, March 2022 (mln USD)

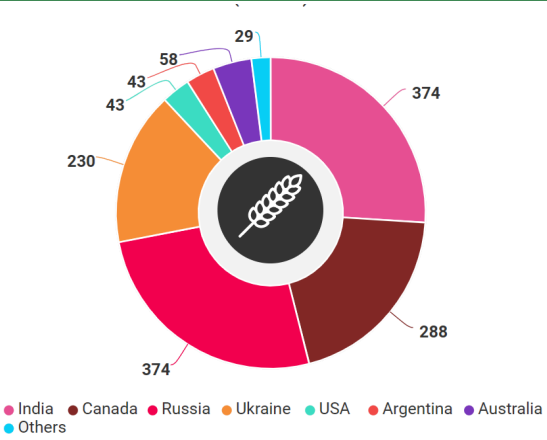


Source: ITC Trade Map

BANGLADESH

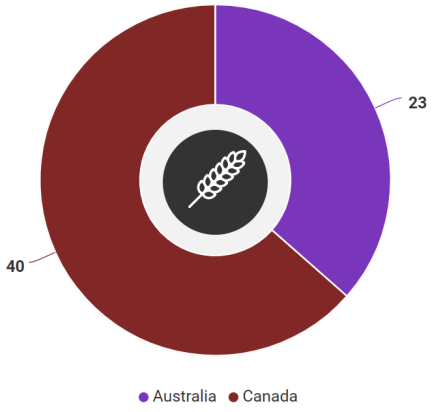
In 2021, Bangladesh had a manifold set of wheat suppliers with Ukraine being the fourth top importer. To elaborate, 40% of supplies were provided by RF and Ukraine. This is in contrast to March 2022, when only Australia and Canada supplied wheat to Bangladesh. This indicates that Ukraine, RF, India and USA were removed from the initial suppliers set. The share of Canada in March 2022 imports was around 65% (20% in 2021). It can be suggested that in the following months Bangladesh will import South American wheat to diversify supplies with other grain producers.

Figure 5. Wheat imports in Bangladesh, 2021 (mln USD)



Source: ITC Trade Map

Figure 6. Wheat imports in Bangladesh, March 2022 (mln USD)

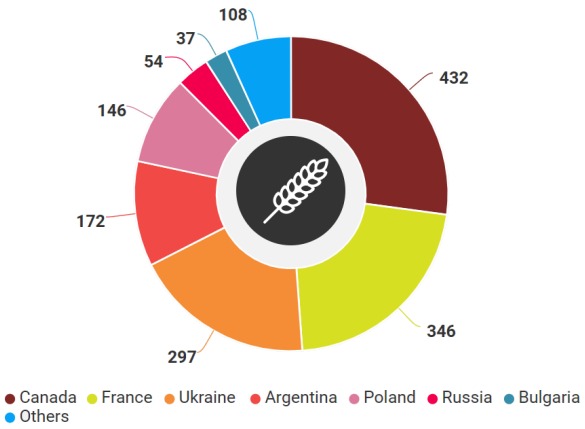


Source: ITC Trade Map

MOROCCO

The wheat imports structure in Morocco, which is given below, indicates that the top three origins of the wheat supplies in the country are Canada (30%), France (20%) and Ukraine (16%). The data on Moroccan imports hasn't been revealed yet, but according to the World-Grain report published on 1st June, in 2022 Morocco is expected to continue to import wheat from these countries. It is possible that RF may be included in the 2022 imports structure as well.[1]

Figure 7. Wheat imports in Morocco, 2021 (mln usd)



Source: ITC Trade Map

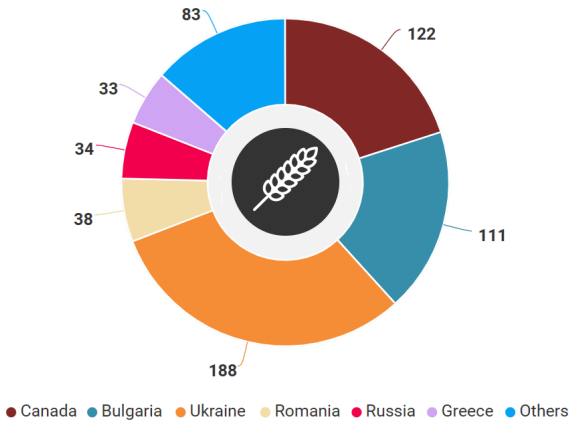
EGYPT

Before the start of the war, RF was the top exporter of wheat into Egypt (45%), followed by Ukraine (23%) and Romania (16%). As reported by Bloomberg[2] Egypt is currently considering Argentina and France as its main wheat suppliers. On the last tender which was held on July 20-21, it was announced that Egyptian General Authority for Supply Commodities (GASC) has bought 760 thsd tons of wheat, including such countries as France (390 thsd tons), RF (310 thsd tons), Germany (30 thsd tons), and Lithuania (30 thsd tons)[3]. This shows that after the invasion, the share of the Black Sea wheat origin in Egypt's imports has decreased sharply.

TUNISIA

During the past seasons, Tunisia received wheat mostly from Ukraine (32%), Canada (19%) and Bulgaria (16%). Due to RF's war, Tunisia is experiencing a severe food crisis. As for today, there is no open data on Tunisia's imports of wheat since the war had started.

Figure 8. Wheat imports in Tunisia, 2021 (mln usd)



Source: ITC Trade Map

II. THE ROLE OF THE BLACK SEA REGION IN THE GLOBAL MARKET BALANCE OF WHEAT

GLOBAL MARKET BALANCE

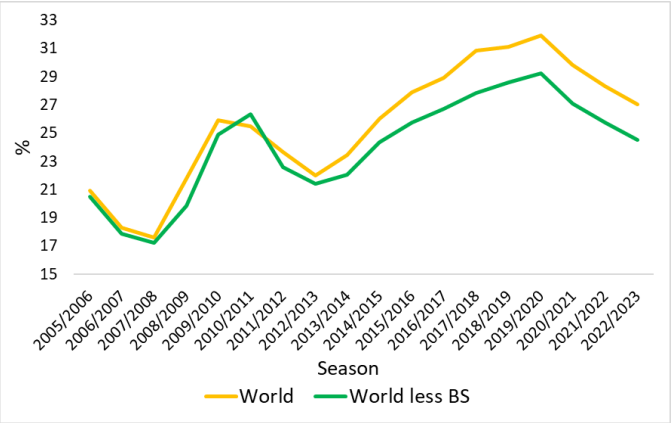
According to USDA data, the role of the Black Sea region in global food security has increased in recent years. Market tightness can be approximated by stock-to-use ratio, which is the relation between the carryover stocks and consumption volume. Figure 9 shows that: a) current stock-to-use of wheat is low, but is still far from the historically low level during the food crisis of 2007-2008; b) difference of the ratio for the world market and for the world market excluding Ukraine and RF is widening over the past years. As of 2022/23 season, this gap is 2.5%. This means that an essential part of global grain supply is accumulated in the Black Sea region and thus can be blocked due to the conflict.

[1] https://www.world-grain.com/articles/16313-focus-on-morocco#:~:text=Morocco's%20total%20grains%20imports%20are,tonnes%2C%20down%20from%202.9%20million

[2] https://www.bloomberg.com/news/articles/2022-03-29/egypt-wheat-imports-may-fall-to-9-year-low-as-war-disrupts-trade

[3] http://www.sunseedman.com/

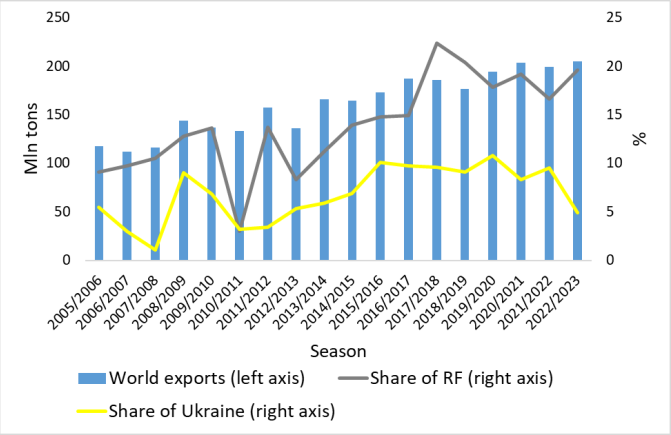
Figure 9. Wheat stock-to-use ratio for global market



Source: USDA

Since stock-to-use ratio is a relative indicator, it does not represent the absolute terms due to the constant growth of global consumption. Meanwhile, the increasing share of Black Sea wheat in global exports confirms its high role in feeding the world (Figure 10).

Figure 10. Share of Black Sea wheat in global exports



Source: USDA

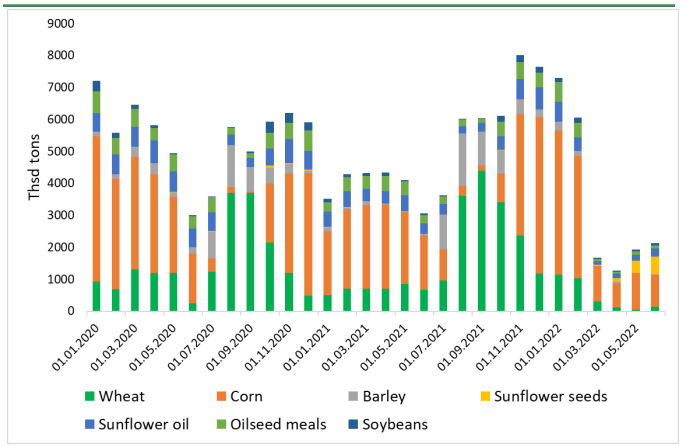
REVIEW OF THE BLACK SEA EXPORTS

a) Ukraine

As mentioned above, the blockade of seaports in Ukraine has a serious negative impact on export flows. As of February 24, around 27 mln tons of grains, oilseeds, and oils remained inside the country. The only way to export these volumes is through the railway stations located on the western border of Ukraine into the EU countries. From these points, Ukrainian grain is delivered to Baltic and Romanian seaports. River ports on the Danube (Izmail, Reni) are another alternative. From there grain can be transported to Romania.

Figure 11 indicates that monthly grain exports dropped threefold after the invasion, ranging from 1.28 mln tons in April to 2.17 mln tons in June. The loading stations on the borders were bottlenecks in the supply chain. According to the state transport operator Ukrzaliznytsia, there are 13 main railway stations on the western border which can load around 220 thsd tons of dry cargo per day. In fact, only 7 stations are actively used; they are located on the borders with Poland and Romania. Therefore, the actual loading volumes are around 110 thsd tons per day. Their carrying capacity is limited by the difference in width of railway in the EU and Ukraine, which does not allow Ukrainian tracks to move to other loading stations in the EU. Besides that, at some stations, grain traders face strong competition with exporters of non-agricultural commodities, iron ore in particular. The rest of the border stations are located near Slovakia and Hungary. They are mostly ignored by exporters due to various logistic issues and lack of demand from EU buyers in these directions.

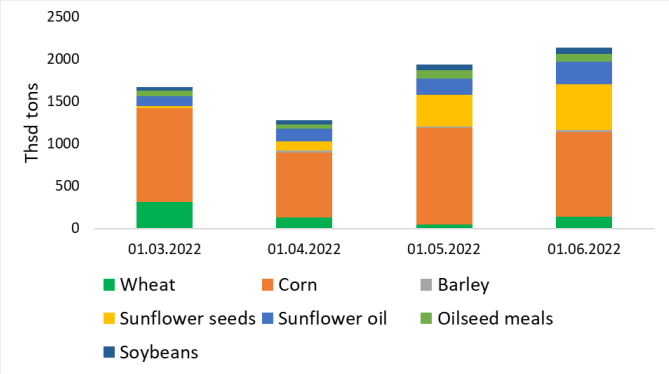
Figure 11. Grains and oils exports from Ukraine



Source: Ukrstat

The war affected not only the physical volumes of agricultural exports, but also their structure. Corn remained the main export product, while the share of wheat decreased (Figure 12). This can be explained by a) smaller stocks of wheat; and b) changes in trade policy to support internal food security within the country. On March 6, the government introduced export licensing for wheat, corn, sunflower oil and other food products. However, on March 24, the export licensing of corn and sunflower oil was canceled. Exports of milling wheat remained somewhat limited, as this product is considered strategic in wartime. In March-June, the monthly values of exports decreased. Due to the new wheat crop, the export licensing was canceled at the beginning of July.

Figure 12. Grains and oils exports from Ukraine after the invasion



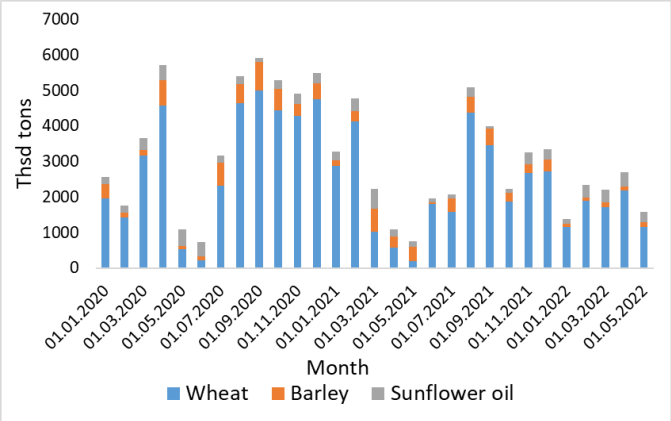
Source: Ukrstat

In contrast to wheat, corn trade flows were not reduced so much; farmers provided an essential discount on the domestic market to sell large stocks of this crop. The similar situation was for sunflower seeds. In the pre-war period, exports of this product were small due to export duty and strong demand from the local crushing industry. Sunflower was exported mostly in the form of sunflower oil and meal. But in recent months, the volume of sunflower seed exports has increased. Farmers want to provide storage space for the new crop and have begun mass selling sunflower seeds. In many cases, exporting this crop was more profitable than selling them to crushing plants, which were not active buyers amid large oil reserves.

b) RF

Grain exports from RF did not fall significantly after February 24. In recent months, the volume of exports amounted to about 2 mln tons, which is typical for the spring months. In addition, on February 15, the RF government set a wheat export quota of 8 mln tons until June 30, 2022. The line-up data shows that Russian traders had already exported around 6 mln tons of wheat within the quota as of June 1 (Figure 13). Thus they probably filled the quota until June 30.

Figure 13. Grains export line-ups from RF



Source: Logistics OS

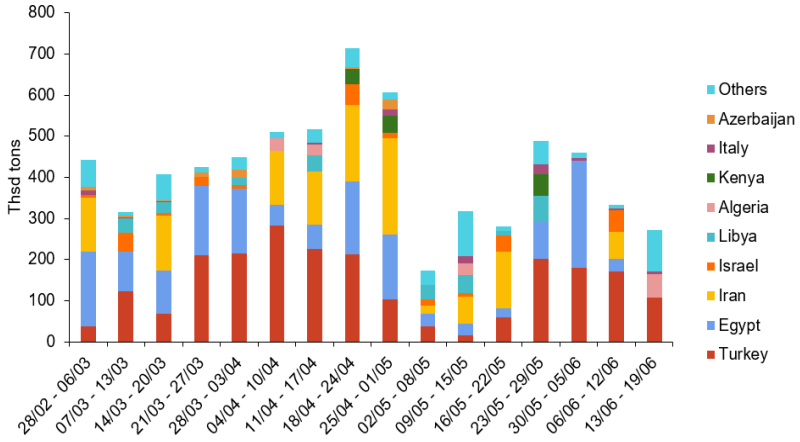
RF's grain exports were at the planned pre-war levels despite several factors negatively affecting international demand on the local origin. Firstly, extremely firm ruble pressured domestic prices and thus discouraged farmers from selling as they tried to hedge exchange rate risk by keeping grain. Secondly, traders are facing permanent issues with dollar payments for export contracts due to refusal of foreign banks to work with Russian banks, even those which are not under sanctions. Thirdly, sanctions have undermined the ability of banks to finance grain exporters, which could not provide the pre-payments to farmers. Fourthly, logistics was affected by several issues: high freight and insurance costs for RF, refusal of many foreign ships to enter RF ports,

issues with updates of electronic navigational maps. Finally, price rally on global markets led to the increase of flexible export duty for Russian wheat, limiting its competitiveness to other origins.

The main destinations for RF wheat after the invasion were Turkey, Egypt, and Iran (Figure 14). The geographical structure of exports changed compared to the pre-war period; RF traders focused on importers which are located nearby. For many distant markets such as Bangladesh and Nigeria, exports have been disrupted.

The sunflower oil sector faced similar issues. According to the Oil and Fat Union of RF, in the first month after the invasion, crushing plants faced a shortage of sunflower seeds due to low financial resources and restricted supply from farmers. Another problem for the oil sector was the risk of transporting sunflower meal by railroad through the Baltic States due to the threat of confiscation of railway cars. Nevertheless, both production and export volumes of sunflower oil and meal recovered in April. As of April 15, the export quotas on sunflower oil and meal were implemented, at 1.5 mln tons and 0.7 mln tons respectively. The quotas will end on August 31, 2022. Current export volumes allow both quotas to be fulfilled until this date. Russian sunflower oil remains competitive on the global market amid the absence of Ukrainian origin and reduced export duty after the change of calculation methodology for it.

Figure 14. RF's wheat line-ups by country



Source: Logistics OS

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