

**Policy Brief  
Regional Food Trade**

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# Russia-Ukraine conflict: implications of disruptions in global food supply chains for food trade in Africa

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## Key Messages

The developments in Russia and Ukraine are piling pressure on already constrained global food markets.

African countries should swiftly seek alternative import sources to fill the gap created by restricted exports from Russia and Ukraine.

African countries should transform their food systems and increase investments in local food production, value addition, and intra-regional food trade, taking advantage of the growing African market facilitated by the AfCFTA.

African governments must ensure a transparent and predictable agriculture policy environment to boost domestic agriculture production investments.

African countries should strengthen regional integration and cooperation through intra-Africa agricultural trade. This is an opportunity for African

countries to deepen intra-Africa regional food trade to meet domestic food consumption needs.

African countries need to diversify their imported food sources, including strengthening regional food trade opportunities.

Ensuring functional strategic food reserves is critical for countries in Africa to stabilise their food supplies and prices to support the domestic food availability and affordability.

African governments should increase investments to ensure transformative, adaptive and resilient food systems to ensure nutritious and healthy diets for their citizens.

Scaled-up measures and investments (including adaptation to climate change variability and extremes) are required to increase productivity in strategic food surplus regions across the continent.

## Introduction

Increasing trade growth has contributed to deepening integration of the world agro-food global value chains and the world agro-food system (OECD, 2019; Greenville, Kawasaki, & Jouanjean, 2019a; Greenville, Kawasaki, & Jouanjean, 2019b). The restrictions/disruptions in grain trade directly expose agricultural markets, and increases in oil prices impact food production and transportation costs. Given the interconnectedness of global food markets, shocks in Russia and Ukraine, both major world food producers and exporters, would impact food supplies and food systems. Furthermore, the importance of the Black Sea region to the global production and trade of major staples (such as wheat, barley, corn and sunflower) implies that the impact of the Russia-Ukraine conflict on food trade, food prices and food security transcends beyond the borders of the two countries.

With most of the grain exports in the Black Sea region mainly transported by sea, which is at the heart of the military conflict, the disruptions of marine logistics pose a significant risk to global food supplies and prices. The disruptions of global food supplies from the region leaves importing countries from Africa, Asia and the Middle East vulnerable to disruptions in supply, and soaring prices of major cereal grains. The risk of the Russia-Ukraine conflict occurred when adverse weather conditions reduced the winter wheat outlook in the United States and corn and soybean in South America (The Daily Telegraph, 2022).

The war in Ukraine, the breadbasket of Europe, has significant impacts on food import-dependent countries (such as in Africa) that are still recovering from the aftereffects of the COVID-19 pandemic, and the perennial challenges of climate change variability and extremes. Overall, the impacts of food trade include disruptions in food supply chains, increases in global energy and shipping costs, closure of ports in affected areas, and limited availability of shipping vessels and containers. This brief discusses the impacts of the Russia-Ukraine conflict on disruptions in global food supply chains and implications for food trade in Africa.

### The importance of Russia and Ukraine in global food markets

The Black Sea region is an important hub for global food production and trade (Puma & Konar , 2022). Russia and Ukraine are major world producers and exporters of major grains such as wheat, barley and corn, and vegetable oils. Combined, the two countries account for between 25 and 30 percent of global wheat exports and about 80 percent of global sunflower seed oils. Figure 1 illustrates Russia's and Ukraine's important roles in global food markets. The instability in food production and trade (especially exports) has far-reaching consequences on food supplies, prices, and food security in import-dependent countries such as those in Africa.

**Figure 1: Russia and Ukraine's share of global trade, 2018-2020**



*Intra-EU trade excluded from computations*

Source: Own construction based on COMTRADE data referenced in Glauber & Laborde (2022)

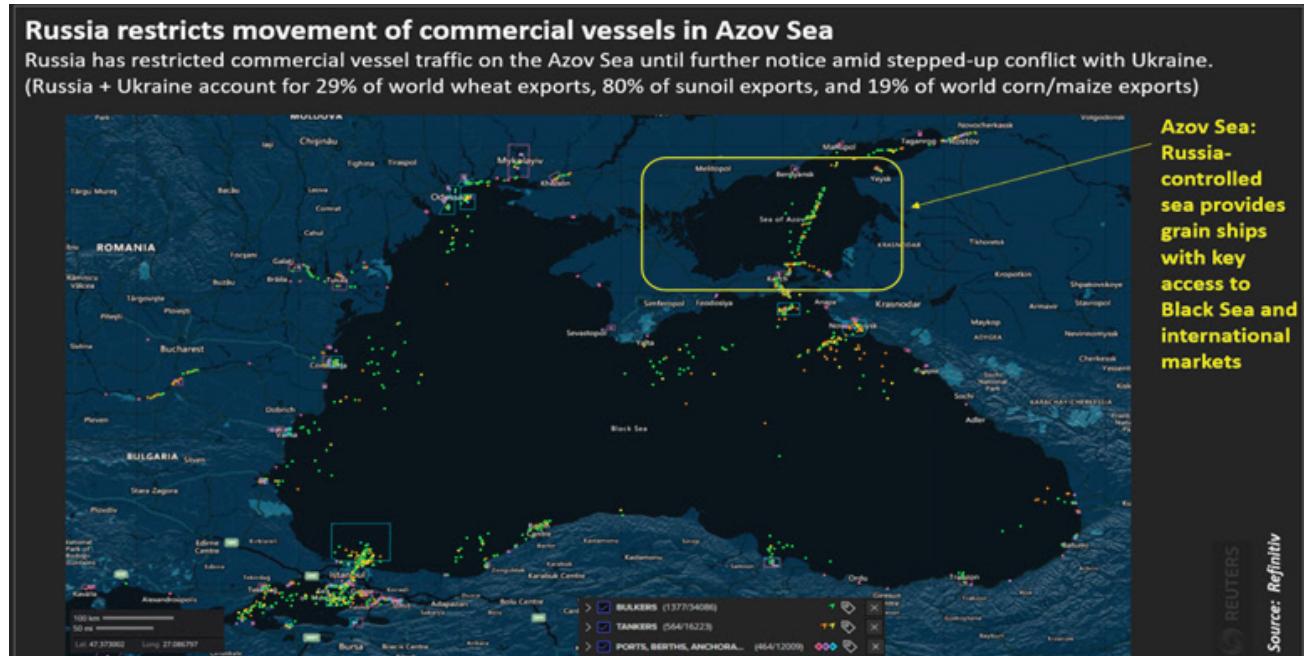
### Disruptions of trading activities and implications of food exports and global supplies

Russia ships its grain from ports in the Black Sea, which is also a major conduit of international grain shipments from Ukraine, one of the top exporters of barley, maize, sunflower and other oilseeds (AMIS, 2022b). The main grain export ports include Chornomorsk, Kherson, Mykolayiv, Odessa and Yuzhny (Devitt, Stolyarov, & Zinets, 2022). The disruptions of the Black Sea ports' logistical activities and normal functioning will impact exports from Russia, Ukraine, and neighbouring countries (Bulgaria, Kazakhstan, and Romania). Export deliveries will either be cancelled or delayed. The disruptions of the normal functioning of the Black Sea ports and grain exports from the region have a significant impact on global food supplies, and tight global supplies would further fuel food price increases around the world.

Ukrainian cities, including port cities key to the country's agricultural exports, have been battered by missiles and airstrikes, with shipping in and out of the country largely grounded. The conflict has throttled exports from one of

the world's largest suppliers of grains (Horner, MacDonald, & Deng, 2022). Following the Russian invasion on 24 February 2022, Ukraine's military suspended commercial shipping at its ports, raising fears of supply disruption from the largest grain and oilseeds exporters. Earlier, Russia had ordered the Azov Sea closed to commercial vessels until further notice (Devitt, Stolyarov, & Zinets, 2022). In addition, shipping stopped in the Azov Sea, an extension of the Black Sea to the east of Crimea, which exports up to 18 million tons of grains each year (Figure 2). Ships have also been banned from passing through the narrow Kerch Strait into the shallow sea, while ship-tracking data indicated dozens of ships (including bulk carriers that transport grains) had anchored in the strait (Horner, MacDonald, & Deng, 2022).

**Figure 2: Russia restricted the movement of commercial vessels in the Azov Sea**



Source: Devitt, Stolyarov, & Zinets (2022)

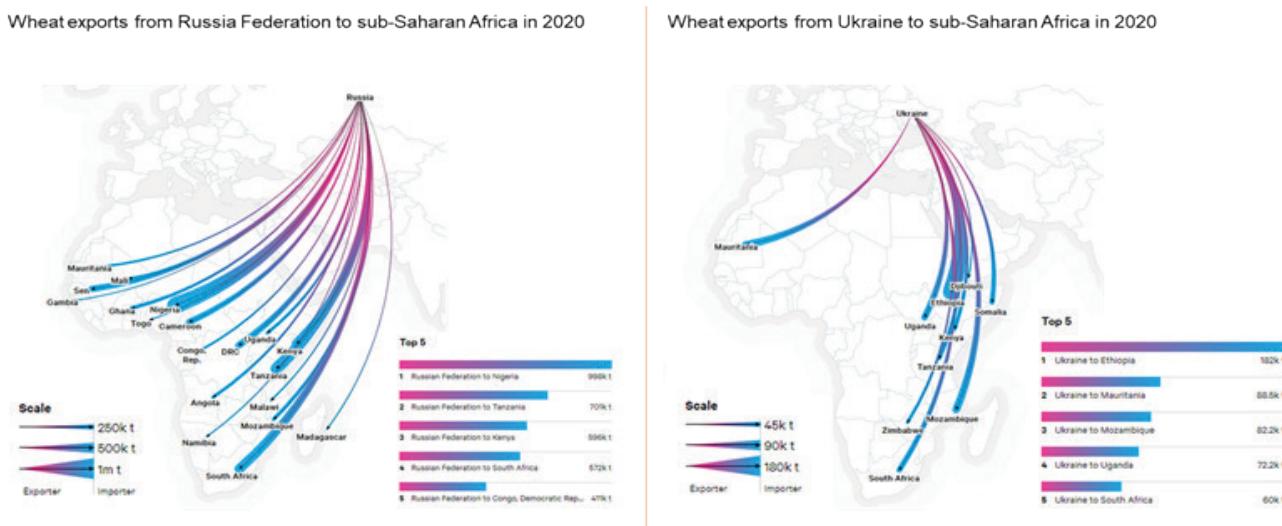
The disruptions of the normal functioning of these ports affect food exports from the two countries and affect global food supplies, given their significant share of global exports. The ongoing conflict has already led to the closure of some Ukrainian ports. Global food supplies will be affected if the conflict continues and further obstructs normal port transportation activities. Damage to port infrastructure due to the fighting, or a Russian naval blockade, would further threaten larger Ukrainian ports around Mykolaiv and Odessa, which handle upwards of 50 million metric tons of grain each year and are important to the country's agricultural sector (Horner, MacDonald, & Deng, 2022).

Food production in Ukraine is more directly impacted by the war, with farming activities disrupted. Some farmers might not start any activities with the planting season starting in a few weeks. Although farming activities in Russia are not directly disrupted by the war, the sanctions imposed on the country are already affecting the economy and will also impact food exports. An additional risk is if Russia restricts exports to keep domestic food prices low. This could further impact global food supplies and prices.

### Implications of trade disruptions in the Black Sea region for African countries

Given that Russia and Ukraine are major food exporters of major grains (such as wheat, barley and corn) and vegetable oils, the war will directly disrupt global food markets and affect food export patterns. The war directly reduces food exports from both countries affecting global food supplies. Russia and Ukraine are important sources of wheat imports for several countries in Africa, such as Egypt (more than 70 percent), Nigeria and Sudan. In 2020, Egypt and Sudan were some of the largest Russian and Ukrainian wheat importers. African countries that heavily depend on food imports from Russia and Ukraine, especially in North Africa (Algeria, Egypt, Libya, Morocco and Tunisia), face the greatest risk of not getting their imports from the two countries. The impacts of the Russia-Ukraine conflict are already threatening food availability in countries that depend on grains and other food exports from these two countries (Puma & Konar, 2022).

**Figure 3: Wheat exports from Russia Federation and Ukraine to sub-Saharan Africa in 2020**



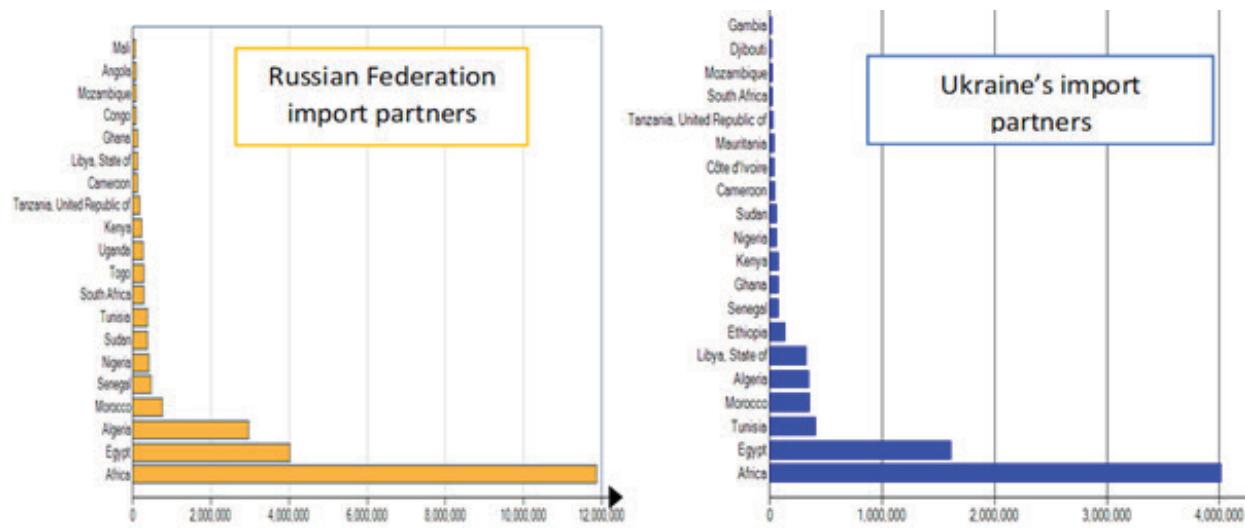
Source: <https://resourcetrade.earth/>. Accessed 6 March 2022

Considering that Russia and Ukraine are dominant exporters, finding replacement suppliers will not be easy in the short term. The global production shortfalls in food supplies due to drought conditions affecting major food-producing regions in South America, such as Argentina, Brazil and Paraguay, make it challenging to increase import volumes from alternative sources. Furthermore, the increased demand from countries seeking alternative suppliers and any restrictive export measures by major export countries will significantly affect global food supplies and keep the upward pressure on food prices.

The war-induced disruptions in food production would further affect future food supplies from the conflict-affected areas such as the eastern parts of Ukraine, which is the breadbasket of the country. Most of Ukraine's wheat (about 35 percent) is grown in the east, where fighting has been ongoing since the outbreak of the war. The uncertainties on food production activities in the conflict-affected areas imply that if the fighting is prolonged, the country's food production will decrease (especially wheat and corn), negatively affecting global food supplies. Tight global food supplies will continue to push food prices up with severe impacts on the accessibility of food by the poor in many developing countries. African countries are still grappling to fully recover from multiple shocks that include the impacts of the COVID-19 pandemic, persistent climate change variability and extremes, and conflict. For example, persistent drought conditions in the East Africa region (such as in Ethiopia, Kenya and Somalia) further compound food availability and prices in domestic and regional markets. In Southern Africa, the January edition of the AGRA Food Security Monitor projected dry conditions in the central and western parts of the region, which significantly affected cropping activities and harvest potential at the end of the main cropping season. In addition to the delayed season, parts of the region, Madagascar, Malawi and Mozambique were devastated by the Tropical Storm Ana late January, which destroyed livelihoods, infrastructure and agricultural activities. The rainfall conditions have contributed to mixed crop conditions in the ongoing main cropping season and will significantly impact the potential seasonal harvests in the affected areas and the region. With disruptions in global food markets around the Black Sea region inevitable, domestic and regional food prices will continue on an upward trend in areas already experiencing food insecurity and rising food prices.

The magnitude of the war's effects on the continent is expected to be country-specific, and affect countries with more trading ties (Figure 4). In sum, many African countries trade with the Russian Federation and Ukraine. Maghreb countries (Egypt, Algeria, Morocco, Tunisia) are the largest importers from the Russian Federation, and Ukraine, followed by Nigeria, Ethiopia, Senegal, Uganda, Kenya and South Africa. Hence, these countries are expected to be the most afflicted by the war in the medium term. With the unfolding of the war that could last for months or more, African Countries are urged to anticipate the effects in their economies. This also implies the need to diversify the markets, build stocks, strengthen regional blocks, and particularly increase intra-African trade to move products within the continent.

**Figure 4. Top twenty (20) import partners of the Russian Federation and Ukraine in Africa**



### Implications of disruptions in fertilizer supplies and energy costs

The Black Sea region is a major exporter of nitrogen, potassium and phosphorous fertilizers. Russia and Belarus are major exporters of fertilizers. Fertilizer prices surged to above \$200 per ton when Russia invaded Ukraine, even though they were already at historically high levels before the conflict. The scarcity of fertilizer adversely affect global food systems when some or all of the 13 percent of global corn and 12 percent of global wheat exports from Ukraine could be lost (Puma & Konar , 2022). The high fertilizer prices will have knock-on effects on food systems in Africa that are still struggling to recover from the impacts of the multiple risks facing the continent. The upward trend in fertilizer prices makes it difficult for many African farmers to access fertilizers, impacting their potential harvests and food supplies. In his parliamentary address on 1 March 2022, Kenya's Cabinet Secretary for Ministry of Agriculture (Hon Peter Munya) highlighted that with the country importing most of its fertilizer from Russia and China, the Russia-Ukraine war's impact on global supplies could trigger the local prices to sharply rise to Sh 7,000 per 50kg bag without any subsidy in place<sup>1</sup>. The knock-on effects on food production activities across the continent would further contribute to food price inflation and worsening the food and nutrition security of millions of the continent's populations.

Additionally, Russia is the largest natural gas exporter and the second-largest exporter of crude oil. The Russia-Ukraine conflict and economic sanctions imposed on Russia are disrupting global energy markets, and oil prices are expected to soar. With freight costs usually related to fuel prices, this will directly impacts shipping and logistical costs, transmitting them to the prices of inputs (such as fertilizer) and food commodities. The increase in input prices (such as fertilizer) that was already high before the war would significantly affect access to improved inputs by smallholders, affecting the progress in transforming food systems to become resilient to shocks.

According to the Agricultural Market Information System, the implications of the Russian-Ukraine war, such as the induced and prolonged rise in fertiliser and oil prices on agriculture markets, are yet to be established. Some of the impacts depend on how the conflict affects production in the countries and how long export channels remain blocked. However, in the short-term global food prices are expected to continue to increase due to the uncertainty, further negatively impacting global food security (AMIS, 2022b).

### Conclusion

The conflict is affecting the movement of food products within Ukraine and exports to major trading partners. Trade in grains and other staple foods from the Black Sea region are affected by disruptions in port activity and road transport. The disruption to grain exports from the Black Sea region are significantly impacting the food security of food the import-dependent countries that rely on food imports from Russia and Ukraine. Given the dependency on food imports, many African countries may need to turn to other major suppliers to fill the gap created by the disruptions in supply activities from the Black Sea region. This is also an opportunity for African countries to deepen intra-Africa regional food trade to meet domestic food consumption needs.

<sup>1</sup> <https://www.citizen.digital/news/fertilizer-prices-to-hit-over-ksh7k-due-to-russia-ukraine-war-n293599>. Accessed 5 March 2022.

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