

Africa's Food Security under the Shadow of the Russia-Ukraine Conflict

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Abstract

The Russian invasion of Ukraine in February 2022 has emerged as an exogenous shock to global food supply chains, which foreshadows worrying impacts on Africa's food security and nutrition, and threaten to derail national and global efforts to end hunger and poverty and to achieve sustainable development goals on the continent. This article provides an early assessment of the implications of the invasion for Africa's food supply chains and food security. Two particularly aggravating factors, which explain the current and likely future impact of the invasion on Africa's food security are discussed: the timing of the invasion and the two parties involved in the conflict. The article underlines four major channels by which the invasion disrupts African food supply chains: energy markets and shipping routes, availability and prices of agricultural production inputs, domestic food price inflation, and trade sanctions and other financial measures. In addition, the article considers the risk of social and political unrest that disruption to food supply chains and spikes in domestic food prices may inflame. Finally, the paper briefly discusses options for short- and long-term responses by African governments and their development partners to mitigate the repercussions of the conflict on food supply chains, boost food and nutrition security, and build resilience of Africa's food systems.

Keywords: Food Security, Food Supply Chain, Food System, Russia-Ukraine Conflict, Africa..



1. Introduction

Contemporary food systems are increasingly globalised, constituting complex networks of multiple actors and multidirectional interlinkages between organisations at local, national, regional and global levels. Food systems are composed of sub-systems, including input supply systems, farming systems, and market systems, and they are not isolated from other systems (e.g., energy systems, trade systems, and health systems). Thus, they are constantly influenced by both internal and external stressors caused by nature-induced changes, socioeconomic shocks, and geopolitical conflicts (Abu Hatab et al. 2019). Accordingly, a structural change in food supply chains (FSCs) might originate from a change in another system. For instance, policies that promote the production of biofuels in the energy system will likely have a significant impact on FSCs. On the one hand, such characteristics of contemporary FSCs challenge the classical understanding of the “linearity” of supply chains, where one actor simply supplies materials or feeds resources into another. On the other hand, they make the task of a conceptual or computational assessment of FSC resilience to systematic shocks and extreme events challenging.

In Africa, food systems are particularly susceptible to the impacts of exogenous shocks, including geopolitical conflicts, due to the inherent physical, socioeconomic, environmental and institutional characteristics of agricultural production and food sectors. The United Nations Food and Agriculture Organization (FAO) (2021) estimates that over 280 million Africans, or 21% of the continent’s population, suffer from hunger. This is a higher proportion of people affected by food insecurity than in any other region in the world. Agriculture and food sectors contribute around a quarter of Africa’s GDP and provide employment and income for at least 50% of the population. Most of the continent’s agricultural output (85%), especially in sub-Saharan Africa, is produced by smallholder farmers. Moreover, African countries rely heavily on the international market to meet the food needs of their ever-growing population, and it is estimated that over 80% of food consumed domestically in recent years was imported from outside the continent, leading to an annual food import bill of around US\$40 billion between 2016 and 2019 (UNCTAD 2022). These characteristics of Africa’s agricultural and food sectors increase vulnerability to exogenous shocks and compound the consequences on food security and nutrition outcomes.

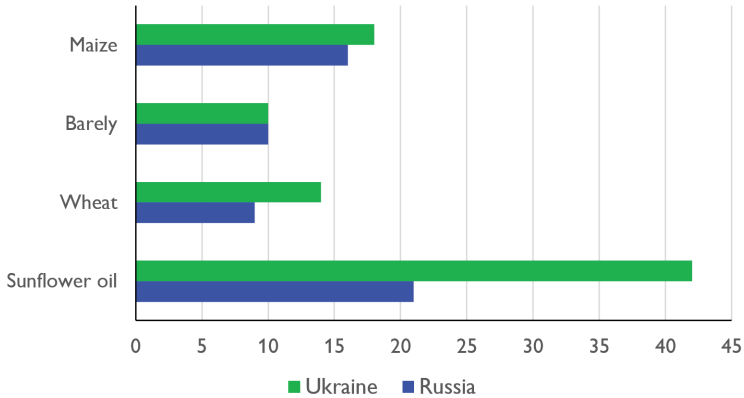
On 24 February, the Russian invasion of Ukraine emerged as an additional shock to Africa’s food systems that threatens to disrupt the already-fragile FSCs, exacerbate

food security challenges, and subsequently derail national and global efforts aimed at achieving SDG1 (end hunger) and SDG2 (end poverty). In the following section, I will briefly highlight two dimensions of the ongoing war that explain its worrying effects on Africa's food security and key pathways through which these effects will be transmitted to the continent. Next, I will offer some thoughts on policy strategies to mitigate the war's food insecurity effects on African countries. At the time of writing, the war is in its fourth month, and by necessity, some of what follows is speculative in nature. However, offering these thoughts at this stage, when other research undertakings are being designed or initiated, can identify key research gaps and avenues for future research on this topic.

2. The When and Where Dimensions of the Crisis

In particular, two dimensions explain the worrying impacts of the invasion on Africa's food security: when (the timing) and where (the parties involved). With regard to the timing, global FSCs went through a once-in-a-century crisis caused over the last two years by the COVID-19 pandemic, which disrupted supply chain activities from end to end and posed profound threats to global food security (Laborde et al. 2020). The pandemic had a disproportionate impact on FSCs in African countries, which felt the full brunt of the pandemic due to their resource constraints and limited governance capacity that prevented them from responding adequately to its consequences on hunger, poverty and inequities. The invasion of Ukraine took place at a time when FSCs in Africa were still struggling with or trying to recover from the COVID-19 pandemic, which has exerted substantial stress on FSCs in Africa for farm labour and production, processing, transport, and logistics, as well as major shifts in demand and consumption (Abu Hatab, Lagerkvist, and Esmat 2020). As a result, the FAO estimates that the pandemic has resulted in 130 million undernourished people in the world, including more than 40 million in Africa, and an increase in the proportion of Africans who are food-stressed and in food crisis by 30% and 35%, respectively between 2019 and 2020 (FAO 2021). In tandem with the pandemic, the outbreak of a desert locust across several East African countries between the end of 2019 and early 2020 placed particular pressure on already-vulnerable communities who rely on agriculture for their survival and posed a serious risk to food security and livelihoods, with over 13 million people plagued by severe acute food insecurity in the Horn of Africa (Salih et al. 2020).

Figure 1. Share of Russia & Ukraine in Global Food Exports (%), 2019–2020



Source: By author, plotted using data from World Integrated Trade Solution database (WITS): <https://wits.worldbank.org/>

The second dimension is related to “where”, that is, the two parties involved in this conflict, i.e., Russia and Ukraine, are key players in the international market for food and agricultural commodities, and their exports collectively account for around 12% of globally traded calories. The two countries are the source of nearly two-thirds of traded sunflower oil, and they jointly account for around one-quarter of global wheat exports and around one-fifth of global maize and barley (Figure 1). The majority of African countries are heavily dependent on food imports, especially wheat, from Russia and Ukraine to meet the demand of domestic markets. For instance, both Benin and Somalia obtain all of their wheat from Ukraine and Russia (WITS 2022). In 2019 and 2020, the dependency of Egypt, Sudan, Kongo, Senegal and Tanzania on Russian and Ukrainian wheat imports stood at 82%, 75%, 69%, 66% and 64%, respectively. Therefore, both the timing and geographic location of the conflict distinguish this crisis from previous food crises and explain why it especially threatens to endanger FSCs and crucial wheat supplies, as well as exacerbating food insecurity challenges in many of the African countries.

3. Pathways Through Which the Russia-Ukraine Crisis Threatens Africa's Food Security

There are four major channels through which the Russian military action against Ukraine threatens to have direct and indirect negative impacts on FSCs and subsequently on food security in Africa: (i) energy markets and shipping routes, (ii) availability and prices of agricultural production inputs, (iii) domestic food price inflation, and (iv) trade sanctions and other financial measures.

With regard to energy markets and shipping routes, Russia is a key player in the global energy market and is ranked the second-largest oil exporter worldwide. The ongoing military action significantly hampered Russia's ability to export oil and other energy products. In response, global oil prices have been soaring since the beginning of the military operation and exceeded the threshold of US\$100 a barrel for the first time since 2014. In addition, because 70% of Ukraine's food exports are distributed via ship and many parts of the Black Sea are now dangerous or unpassable, logistics firms have had to suspend services, and prices skyrocketed in the last two months. Indeed, this translated into higher ocean shipping charges for food and agricultural commodities and sharply increased charges for alternative modes of transportation, including air and rail freight, which in turn reinforced the already burdensome inflation in domestic food prices in African countries that jumped in many countries in recent months by more than 20% above their level a year ago (FAO 2022).

Regarding agricultural production inputs, the global fertiliser market is particularly susceptible to severe supply disruptions. Russia is the world's top producer of natural gas, which represents a main ingredient of the fertiliser industry, particularly the production of nitrogenous fertilisers such as ammonia and urea. Before the conflict, fertiliser markets were already under severe supply stress due to the sanctions that the EU and the US imposed on Belarus in 2021, as well as the sharp spikes in natural gas prices in 2021. Following the invasion, the Russian Industry Ministry established a temporary embargo on fertiliser exports to guarantee supplies to domestic farmers. Likewise, China has recently suspended urea and phosphate exports to ensure adequate supplies for domestic food production. Fertiliser consumption as a share of production in Africa ranges, according to 2018 data, between 20% and around 80%, implying the vulnerability of agricultural production to energy price fluctuation (World Bank 2019). Shortages in fertilisers or unaffordable fertiliser prices can reduce agricultural production and yields in times of declining global stocks and surging global food prices.

In connection with the previous impact pathways, the third channel through which the Russian invasion of Ukraine threatens food security in Africa is domestic food and non-food price inflation. This is attributable to the facts that African countries—as mentioned earlier—rely heavily on the international food market to meet the needs of their rapidly increasing population and that food represents a large share of African households' expenditure (e.g., 45% in Egypt, 54% in Nigeria). Increasing global food prices and shortages in the food supply in African markets stimulate inflation in domestic food prices—the FAO food price index stood at 200% in the first quarter of 2022—and sharply decrease the purchasing power of poor households. In addition, inflation in food prices in African countries customarily leads to enduring effects on headline inflation through inflationary expectations and workers' demands for higher wages (Abu Hatab and Hess 2021). During such acute crisis, domestic food price shocks are likely to exacerbate the pre-existing risks of food insecurity in the continent, especially for the most vulnerable populations.

Another impact pathway originates from the financial measures and trade sanctions imposed on and by Russia. As of June 2022, the EU Sanction Map (2022) shows that Russia is now the world's most sanctioned country, with over 9 000 different targeted sanctions. In response, Russia hit back at Western sanctions by imposing significant countersanctions against the US, EU member states, and several other countries, including the UK, Canada, Australia, New Zealand, and Switzerland. These countersanctions involved export bans on a string of products until the end of 2022, including agricultural commodities and some forestry products such as timber. On the import side, a disruption in global agricultural and food trade due to these sanctions and countersanctions is likely to adversely affect Africa's food security through accessibility and availability. For instance, the sanction imposed by the West targeted not only the Russian trade and financial systems but also the shipping industry, and the war has led to the closure of most Ukrainian ports. The intensification and prolongation of the conflict would create significant shortages in food supply in African markets, stimulate further spikes in food prices, and deteriorate food and nutrition security for consumers. What could make things worse is that the Russia-Ukraine war comes at a time when the drought and volatile climate conditions in several food-exporting countries are putting pressure on FSCs and global food prices.

On the export side, the import demand for food commodities (especially fresh fruit and vegetables) by Russia, and to a lesser extent in Ukraine, has been growing over the past two decades, fuelled by increases in real disposable incomes and the growing

tendency among domestic consumers to maintain healthier diets (Abu Hatab 2016). This offered export opportunities to small producers and exporters in many African countries (e.g., Egypt, Morocco and Kenya) to increase their market share in the Russian and Ukrainian markets for imported horticultural commodities. The closure of ports will lead to a sharp decline in demand for certain perishable foods that Russia and Ukraine import from African countries. For instance, South Africa's agricultural exports—mainly oranges, mandarins, lemons, pears, apples, fresh grapes, and wine—to Ukraine and Russia were valued at US\$260 million (around ZAR4 billion) in 2020, most of which were produced by smallholder farmers and exported by small- and medium-sized enterprises (WITS 2022). African producers and exporters without adequate storage facilities and with limited abilities to perform market shifts now find themselves with commodities that they cannot export, which is likely to have adverse effects on their livelihoods and food security that directly or indirectly depend on earnings from export food commodities to the two countries.

4. Conclusion and Policy Implications

For all the factors and their consequences presented above, the ongoing Russian-Ukraine conflict poses serious threats to FSCs and food security in Africa. In many African countries, sociopolitical unrest has traditionally coincided with periods of high and volatile food prices. Evidence shows that disruptions to FSCs and spikes in domestic food prices severely deteriorate the social and economic well-being of the vulnerable population groups and could result in dramatic rioting, often termed “food riots”. These have often been associated with an increased probability of social and political unrest (e.g., Bellemare 2015; Abu Hatab and Hess 2021). Thus, the impact of the Russia-Ukraine war on food supply and food price inflation could inflame conflict, destabilise governments, and cause violence to spill over borders. This scenario should not be taken lightly. It has been barely seven years since the rise in food insecurity across sub-Saharan Africa was attributed to violent conflict, and it has been nearly a decade since food price inflation played a major role in triggering the Arab Spring in North Africa and the Middle East (Abu Hatab and Hess 2021).

Therefore, the efforts of the African governments and their development partners and donors should respond to the consequences of the Russian-Ukrainian conflict by deploying short- and long-term responses to boost food and nutrition security, reduce risks, and strengthen food systems. In the short term, it is crucial to strengthen social

protection systems for nutrition and food, and nutrition assistance needs to be at the heart of the social protection programmes to protect food access for the most vulnerable by increasing their purchasing power or by directly providing food through government or community-based programmes. To accomplish this, there is a need to tailor nutrition-sensitive protection programmes and consider the potential benefits of different transfer modalities (e.g., in-kind, cash, or vouchers). In addition, African countries should take full advantage of the African Continental Free Trade Area to increase intra-African agri-food trade and reduce their reliance on the international markets during times of exogenous shock. Especially important is that the global response to the Russian invasion of Ukraine should take into consideration the food security dimension so that measures and sanctions imposed on Russia do not have a “third-party” effect that penalises African populations who are already food-insecure and rely on food supplies from Russia and Ukraine. Furthermore, it is important to ensure that export-restricting policies by food exporting nations, like those that were implemented at the onset of the COVID-19 pandemic, are avoided because they can add further pressures on the capacity of FSCs in Africa and cascading effects on food systems and consumers’ food security and nutrition.

The current geopolitical and strategic confrontation, and the shifts it causes, also require that Africa plays an active role on the world stage in terms of policy and diplomacy. African leaders are, however, divided with respect to the conflict between Russia and Ukraine. The dependency of African countries on wheat and agricultural imports from Russia and the ongoing efforts by African governments to navigate the conflict’s economic, political and food security consequences further explain the dividedness in the positions of African leaders. Their positions also reflect their frustration with how Western powers engage with issues related to fighting hunger and alleviating poverty on the continent and other social and economic development issues. Thus, while it seems impossible to speak with one voice, given the differences in foreign policy affiliations among the governments, it is important that, through the African Union, the continent seeks to limit the damage in direct engagement with both Russia and Ukraine. Securing food production and supply at relatively affordable prices for the people is a common interest shared by all African states. Hence, the efforts by the continental body to find ears on both sides of the war and support for potential solutions to ease the war-related impact on food security are appropriate means to limit the damages.

In the long run, stronger international cooperation is needed to build productive

capacities of African food systems and enhance the resilience and preparedness to deal with future shocks. While projections indicate that exogenous shocks will be more frequent in the future, it is crucial not only to reduce the effects and vulnerability of food systems in Africa but also to foster their preparedness and adaptive capacity to future pandemics and potential risks, particularly the barriers and enablers that determine their ability to adapt and recover from such events. To this end, accelerated investment in sustainable agriculture needs to be leveraged to deliver on that longer-term goal of a more inclusive, environmentally sustainable and resilient African food system. In this respect, integrated resilience-based approaches are crucial to take effective preventive measures before supply chain disruption and recovery measures occur, to recognise the complex nature of global FSCs, and to address the multifaceted and widespread effects of global crises and shocks channelled through FSCs to food security in Africa.

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