

Russia-Ukraine Conflict and Food Security in Nigeria

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Abstract

The study examined Russia-Ukraine conflict and food security in Nigeria between 2014 and 2023. Food weakness in Africa has deteriorated because of Russia's full attack on Ukraine. This is because the both fighting nations are at the core of worldwide food markets, and their contention has huge impact on worldwide food security, especially in Africa. The study adopted content analysis. Data was collected using a mixed method which involves documentary sources and survey by the use of key informant interview. The time series research design was used in the course of the research. The study also relied on the basic propositions emanating from the complex interdependency theory propounded by Keohane and Nye (1977). The study revealed that the Russia-Ukraine crisis took a major toll on the economy and most especially the food security of Nigeria. This is because, overtime, Russia and Ukraine have been the major suppliers of grains, fertilizer, wheat and other food products to Nigeria. This conflict which led to the blockage of trade routes, sea ports, and which led to a ban of food exportation on Ukraine cut the supply of food to Nigeria. This led to scarcity of food products and grains, leading to a high inflation rate in the prices of food commodities. The inaccessibility of food products from these suppliers caused Nigeria to face food insecurity which has also adversely affected other sectors of the economy. The study therefore concluded that the food insecurity being faced by Nigeria has affected other areas of lives leading to a low standard of living due to unavailability and unaffordability of food and agricultural products by the ordinary man. Various recommendations were made including Nigeria should develop key industries to produce and process food products in large quantities which will ameliorate the situation as this will help to reduce the inflation rate of food and agricultural products.

Keywords: Food, Nigeria, Security, Russia, Ukraine

Introduction

The ongoing conflict in Ukraine, combined with international sanctions against Russian grain and fertilizer exports, has affected global food supply chains, dealing a crippling blow to global food security. Grain and fertilizers are essential components of global food security. Grain supplies a major proportion of the world's dietary energy and nutrition need, especially wheat, which contributes about one-fifth of the total dietary calories and proteins worldwide. The use of fertilizers containing nitrogen (N), phosphorus (P), and potassium (K) can boost average crop yields by 30–50% in intensive agricultural systems, thus helping to sustain the ability of crop production to nourish the world's growing population. The Russian federation and Ukraine are among the world's biggest food producers. The two nations have very high food crop efficiency when contrasted with different nations. This is attributable to prolific horticultural land, now and again known as dark soil (Araujo-Ensiko, 2020). Russia and Ukraine assume a more significant part, as their variable food supply is a critical wellspring of shakiness for worldwide food markets (Svanidze, 2021). However, as a result of Russia's illegal and unprovoked military aggression against Ukraine, on 18th of December (2023), the EU and US adopted sanctions in response to Russia's incessant attacks on Ukraine (Amodu, 2024).

Subsequently, the US and its partners have forced sanctions on Russia while giving military help to Ukraine. The sanctions imposed severe financial, trade, shipping and immigration restrictions for the purpose of encouraging Russia to cease actions which destabilize Ukraine, undermine or threaten her territorial integrity and sovereignty (Ishmael, 2022). As well as being a helpful misfortune, Russia's intrusion of Ukraine has surfaced as an exogenous shock to world food supply, as the two countries are significant grain supply to the world, with serious repercussions for various African nations specifically, as well as overall far reaching influences as the contention

proceeds (Hatab, 2022). He proceeds to say that this is attainable since African nations depend generally on the worldwide market to supply their homegrown food prerequisites. At the end of the day, the mainland depends on food imported from outside its shores to the tune of over 80%, expanding its weakness and overburdening endeavors to kill hunger, lessen destitution, and accomplish food security on the landmass.

Besides, African nations' significant dependence on unfamiliar food markets, alongside the truth that the expense of essential wares as of now retains a huge lump of family use suggests that the continuous struggle has diminished food supply from one perspective and then again, prompted expansion in homegrown food cost expansion as proof at the beginning of the contention before the Unified Countries and Turkey's facilitated grains bargain that aided in deflecting worldwide food emergency in July 2022. That work brought about million metric lots of grains been sent out of Ukraine to the remainder of the world. This made Hatab (2022) to construe that, the continuous clash isn't simply a danger to food security however has the ability to excite and weaken African government and political foundations consequently the target of this study is because of the Russian-Ukraine struggle on African food security. The losses and the subsequent philanthropic calamity brought about by an enormous dislodged and blockaded populace are the most serious outcomes of the battling in Ukraine. Notwithstanding, there are major financial repercussions to this.

Before the flare-up of war, the main part of key worldwide macroeconomic files, for example, Gross domestic product and the purchaser buying record, were accepted to have recuperated to typical following the Coronavirus pandemic (OECD, 2022). Preceding the conflict, the cost of energizing feasts, as well as high paces of destitution set hood eats less unattainable for 66.2 percent of the total populace because of disparity (Food and Farming Association, 2019). In Africa, around 323.2 million individuals, or 29.5% of the populace, went hungry that year. Food uncertainty was considerably higher in West Africa and Focal Africa, representing 68.3% and 70% of the populace, separately (Osai, 2023). Under the shadow of the Coronavirus episode, the quantity of people encountering food uncertainty expanded. This present circumstance deteriorated with the beginning of battle in Ukraine. This is on the grounds that numerous African nations have significant exchanging joins with Ukraine and Russia. Africa imported agrarian items worth \$4 billion from Russia in 2020.

However, with the spike in price of global food supplies such as wheat, oils and other food items disrupted as a result of Russia and Ukraine crisis, Nigeria faces a wide variety of threats to its already precarious food security, since over 50% of food which are consumed in Nigeria come from purchased sources (Odenigbo, 2023). The inflation in the prices of food commodities threatens to place a wide number of people in a situation of worsening food insecurity. In particular, Nigeria's dependence on the importation of wheat has led to high prices and issues in supply.

Conceptualization of Russia-Ukraine Conflict and Food Security

1. Russia-Ukraine Conflict

Because of its impact on the global economy, trade dynamics, and food prices, Isaac (2021) claims that the crisis in Ukraine has had a particularly negative impact on food systems in North Africa. The ensuing spike in fertilizer costs has also had an impact on local food production, leading to lower yields and higher food costs. The Russia-Ukraine War explains the 70.72% shift in WTI and 73.62% shift in Brent crude prices.

In the same vein, Ibeneme (2022) noted that Brent crude oil prices have been more affected by Russia's conflict with Ukraine than WTI crude oil prices, given that Russia is a major energy importer to Europe. Variations in food prices are another indicator of market instability in Ukraine's agricultural sector. While global food and fuel prices have declined from their high, Milton (2022) pointed out levels are still high when compared to pre-war levels at the beginning of the conflict in February 2022. 29% of the wheat market was supplied by exports from Russia and Ukraine before the start of the conflict in late February 2022. As of right now, that stands at 14.3%, according to the World's Top Exports website.

The necessity to offer cheaper pricing in order to keep government coffers full was at least partially to blame for that decline in market share. Moreover, Cassandra (2020) observed that cereal yields on fertilized acres are often greater. Because farmers in low- and lower-middle-income nations typically apply less fertilizer, cutting back on application could further depress crop yields. Following Russia's invasion of Ukraine, fertilizer and grain prices rose, peaking in May 2022. Following the start of the battle, the price of crude oil increased. The price of crude oil determines the price of petrol. Consequently, Ikechukwu (2022) further explained that the conflict between Russia and Ukraine has caused a disturbance in the crude oil supply chain, which has raised the price of crude oil and affected the price of petrol. When there were more and more predictions of a possible Russian invasion of Ukraine in December 2021, the price volatility of energy commodities started to rise.

2. Food Security

Africa's food security circumstance is surveyed as far as interest, supply, food importation, food costs, Gross Public Item (GNP), and per capita calorie consumption. According to Dessalegn (2023), the landmass' food security circumstance is crumbling consistently, with over 20% of the mainland's populace actually undernourished, while Africa keeps on confronting the most noteworthy weight of lack of healthy sustenance. This was affirmed by Rochat (2022), who expressed that Africa is the main landmass where unquestionably the quantity of constantly undernourished individuals has expanded by however much 20% throughout recent many years, bringing about around 238 million individuals experiencing tireless hunger. Likewise, the African Association's Extensive African Horticulture Advancement Program (CAADP) Biennial Audit report of 2019-2021 showed that Africa is out of control on gathering its objective of killing yearning by 2025.

The report additionally revealed that, in 2022, more than 20 million individuals and somewhere around 10 million kids were said to have encountered serious food deficiencies in Africa because of yield disappointment and four sequential dry seasons. For example, the issue of yearning is especially uncommon in the Horn of Africa locale where Coronavirus pandemic, common clash and, perhaps of the most obviously terrible dry season in forty years have exacerbated the issue. A comparative melancholy picture emerges from South Sudan where almost 75% of the populace is managing an emergency of serious food deficiency (Ekene, 2022).

Results have shown that the Russia-Ukraine war has prompted deficiencies in compost accessibility, prompting excessive costs of manure. Similarly, costs of significant food items, like maize, rice, wheat and cooking oils, have been on the increase (Egbujor, 2022). Subsequently, the Russia-Ukraine war has prompted deficiencies in manure accessibility, prompting excessive costs of compost. The effects of the Russia-Ukraine war have uncovered the country's helpless agro-food framework and debilitated the cash, prompting unfamiliar trade deficiencies and high expansion (Okorie, 2022).

Theoretical Framework

This study is anchored on the complex interdependency theory propounded by Keohane and Nye (1977). Complex interdependence in international relations and international political economy is a concept put forth by Robert Keohane and Joseph Nye in the 1970s to describe the emerging nature of the global political economy (Idime, 2012). The concept entails that relations between states are becoming increasingly deep and complex. These increasingly complex webs of economic interdependence undermine state power and elevate the influence of transnational non-state actors (Muna, 2008). The complex interdependence theory emphasizes the intricate ways in which developing ties cause transnational actors to become mutually dependent, vulnerable to each other's actions, and sensitive to each other's demands. In this sense, actors could be nations or continents.

This theory is relevant to this study as the world has become a global village and as such, nations are interdependent on one another for survival of which Nigeria is inclusive. Over time, Russia and Ukraine have been major food suppliers to Nigeria due to the nature of their soil and whether which are favorable in the production

of grains and fertilizer. Due to the crisis that erupted between Russia and Ukraine, due to attacks on Ukraine and several sanctions placed on Russia preventing her from exportation of food commodities to other countries, Nigeria has suffered food insecurity as a result of lack of food importation from these countries. This has already been affected in terms of food insecurity as a result of the war going on in these nations. This is because countries are inter-dependent on one another. Russia and Ukraine have been the highest supplier of grains and agricultural products to Nigeria markets over a long period of time.

Russia's Blockage of Ukraine's Ports and Availability of Maize and Wheat in Nigeria

Since February 2022, the war in Ukraine has caused numerous consequences, including severe stress in food security, with impacts on the national and global levels. The reasons for this severe stress are rising prices and supply chain disruptions. Most importantly, Ukraine is one of the world's main breadbaskets. Ukraine exports approximately 20% of all wheat produced in the world. As for corn and sunflower, Ukraine accounts for 10% and 45% of global production, respectively (Ben-Hassen, 2022).

Ukraine is among the largest exporting countries of sunflower seeds, oilseeds, rapeseed, corn, and wheat. For example, Ukraine accounts for about a third of cereal supplies in the Middle East and North Africa region. East Africa is also heavily dependent on cereal imports, 45 per cent of which come from Ukraine. Fragile countries such as Libya, Pakistan, Yemen, and Lebanon receive 30% of their wheat imports from Ukraine, indicating that a large percentage of the population lives in food insecurity. In 2021, Ukrainian farmers grew the largest harvest in agro-production history; as a result, the exports to the EU increased by 50%, leaving behind the trade with China and Russia (El-Bilali, 2022).

Before the conflict, Ukraine provided 46% of the sunflower oil exports, 9% of wheat exports, 17% of barley exports, and 12% of corn exports to the world markets, according to data from the US Department of Agriculture. Despite the hostilities, food manufacturers are resuming work in the de-occupied territories, introducing new capacities in the western and central regions. The industry is restrained by export restrictions, a reduction in the purchasing power of the population, and an increase in the cost of production due to logistical difficulties and an increase in the price of energy carriers. However, some manufacturers maintain production volumes, reorienting themselves from the Ukrainian to the European market (Erickson, 2022).

As of 30 June 2022, the Agricultural Price Index was 34% higher in comparison to January 2021. Maize and wheat prices were 47% and 42% higher, respectively, when compared to January 2021, while rice prices are about 8% lower. According to the World Bank's April 2022 Commodity Markets Outlook, the war in Ukraine has altered global patterns of trade, production, and consumption of commodities in ways that will keep prices at historically high levels through the end of 2024, exacerbating food insecurity and inflation (Hsieh, 2023).

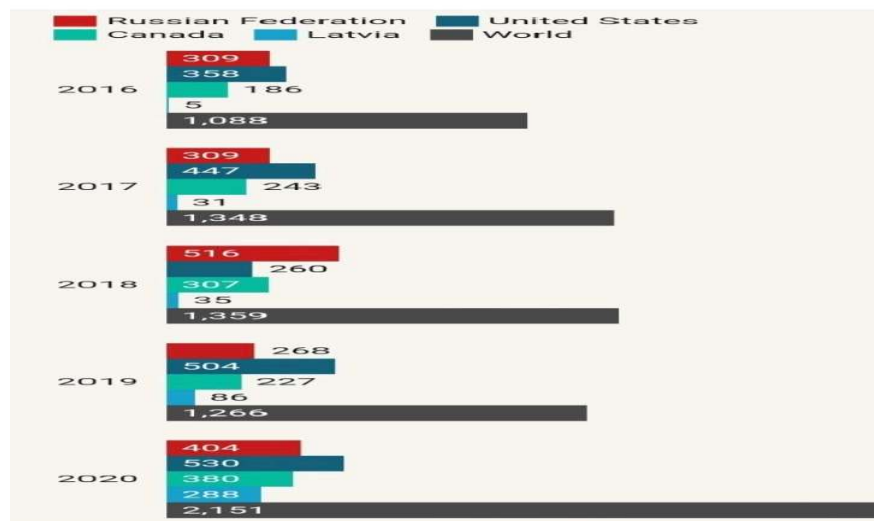
Food prices were already high before, and the war is driving food prices even higher. Commodities that have been most affected are wheat, maize, edible oils, and fertilizers. Global commodity markets face upside risks through the following channels: reduction in grain supplies, higher energy prices, higher fertilizer prices, and trade disruption due to the shutting down of major ports. According to the UN FAO, the disruptions caused by war in Ukraine have raised the average food price index to its highest level ever (Mbah, 2022). Thus, the FAO Food Price Index, which tracks international prices for the world's top-selling food commodities, increased by an average of 14.3% in 2022 compared to 2021, the highest since records began in 1990. The FAO Cereal Price Index in 2022 increased by 17.9% due to factors such as significant market disruptions, rising energy and input prices, adverse weather conditions, and continued high global food insecurity, FAO summed up.

According to Ukraine's ministry for agriculture, due to the Russian war on that country, approximately 22 million tons of grain are stranded in Ukraine waiting export (Antonio, 2022). As the UN Food and Agriculture Organization notes, Ukraine supplies up to 16% of the Nigeria's corn exports and more than 40% of the Nigeria's

sunflower oil. Importantly, as Russia and Ukraine jointly are the source of nearly 26% of wheat in the international export market, many countries in the world rely on wheat imports from Russia and Ukraine for meeting domestic food demand (BBC, 2022).

Nigeria is a huge consumer and importer of wheat products. According to the Central Bank of Nigeria (CBN), wheat is the third most-consumed grain in Nigeria after maize and rice, with domestic production accounting for only 1% of the 5 to 6 million metric tons of wheat consumed annually. Nigeria imported wheat worth over \$2.15 billion in 2020, a 40% rise from the previous year, and ranked as the world's fourth-largest importer of wheat after Egypt, China, and Turkey in 2020, making the commodity the largest item on the import bill after petroleum products (petrol and diesel) and the highest imported food item in Nigeria (National Bureau of Statistics (NBS), 2021). Russia was the second-largest source of wheat imports in 2020 (\$401 million) behind the United States (\$518 million). The table below shows Nigeria's imports in million USD.

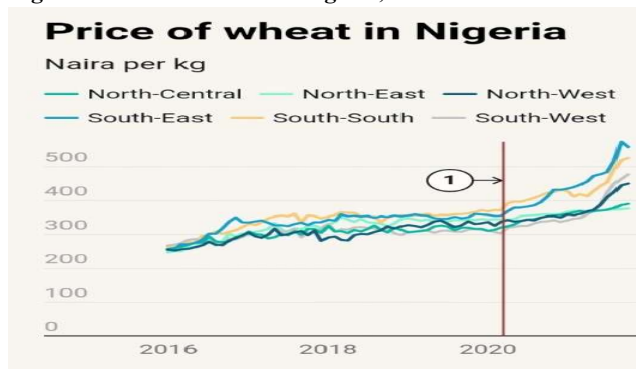
Figure 1: Nigeria’s maize and wheat imports in million USD 2016-2020



Source: COMTRADE, (2020).

In March 2021 price inflation of basic food commodities hit 23%, the highest level of the previous two years (NBS, 2021), and recent data from Nigeria’s National Bureau of Statistics (NBS) show food price inflation continued into March 2022 after the escalation of the conflict between Russia and Ukraine. Recent findings using comprehensive and long-ranging monthly food prices data has shown that significant increases in prices for all selected food items during the Russia-Ukraine conflict for example, prices of imported maize and wheat have increased by 41% and 21%, respectively (Amare et al., 2022).

Figure 2: Price of wheat in Nigeria, 2016 – 2020



Source: National Security Information (NSI), 2021

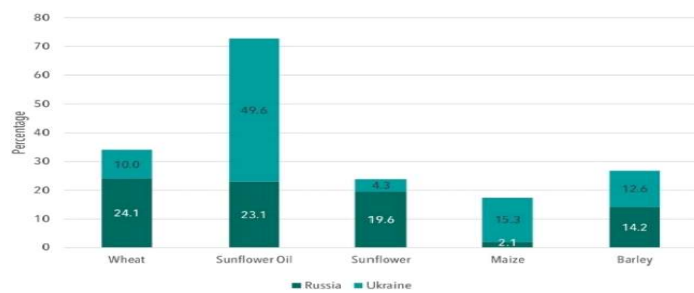
The figure above shows the evolution of wheat prices nationally and averaged across the six geopolitical zones in Nigeria. Wheat price levels and dispersion before the Russia-Ukraine conflict were relatively stable. Nationally, the price of wheat increased by 21% and the regions experienced a significant increase in price dispersion across markets after the conflict began, and prices continue to rise.

Disruption of shipping in the black sea, attacks in the red sea and availability of sunflower and barley in Nigeria

Before the war, Ukraine provided 46% of the sunflower oil exports, 9% of wheat exports, 17% of barley exports, and 12% of corn exports to the world markets, according to data from the US Department of Agriculture. Despite the hostilities, food manufacturers are resuming work in the de-occupied territories, introducing new capacities in the western and central regions. The industry is restrained by export restrictions, a reduction in the purchasing power of the population, and an increase in the cost of production due to logistical difficulties and an increase in the price of energy carriers. However, some manufacturers maintain production volumes, reorienting themselves from the Ukrainian to the European market (CBN, 2022).

Russia and Ukraine are large players in global cereal and oilseed markets. They account for more than a third of wheat exports and a quarter of barley exports. The figures are even more impressive for sunflower oil, with 72 percent of world market share accounted for by the two countries and almost 50 percent by Ukraine alone. Together, Russia and Ukraine represent 12 percent of total calories traded in the world (Glauber and Laborde 2022). Given this configuration, the beginning of the conflict raised significant concerns about the trade of cereals. Indeed, since Ukraine’s main ports were blocked, millions of metric tons of grain could not be exported, although some attempts were made through railroads in Poland with limited success. The supply disruptions also affected Russian exports due to the uncertainty and rising insurance costs in the Black Sea area.

Figure 3: Russia's exportation of Barley and Sunflower to Nigeria in 2023



Source: Glauber and Laborde (2022).

Both Russia and Ukraine are the major producers and exporters of wheat, maize, barley, sunflower seeds, potassium, phosphorus and urea (46% nitrogen) fertilizers (FAO, 2022; Glauber and Laborde, 2022; World Bank Group, 2022). In particular, 50 countries in Asia and Africa rely on Russia and Ukraine to fulfill 30% of their wheat food demand, and 26 countries meet 50% of their wheat demand through import from Russia and Ukraine (FAO, 2022). Sea ports in the Black Sea are the major gateway of the exports from Russia and Ukraine. Due to the armed conflict, ports in the Black Sea are unusable now. Grain transportation is disrupted due to the destruction of roads, bridges, and railways. The armed conflict between Russia and Ukraine has severely disrupted exports of crude oil, fertilizers, food grains including wheat (FAO, 2022).

As Russia and Ukraine are the source of more than a quarter of wheat traded in the global market, there is a consensus among researchers, think tanks, news agencies, and international donor agencies about the potential negative impacts of the ongoing armed conflict between Russia and Ukraine on the food security of Nigeria (Abay et al., 2022; Bechdol et al., 2022).

Conclusion

The Russia-Ukraine war has added to the disruption in already turbulent global markets. The impacts of the crisis on African countries must especially Nigeria, is substantial as a significant number of them are highly exposed, directly or indirectly, through their dependence on imports of food and fertilizers. The impact of this shock on African economies depends on the size of the shock, the overall degree of dependence of the country on imports, the share of Russia, Ukraine and Belarus in the country's imports, and on the measures put in place to mitigate the effects.

Findings discussed in this paper show that the magnitude of the shock has been significant. Observed price increases have been substantial and quantity disruptions significant, especially for fertilizers and to a lesser extent for food products, particularly wheat and vegetable oils. For these two sectors, several African countries are highly exposed, raising concerns about the coming crop years and the food security situation in the continent, which is already set back by the COVID-19 pandemic.

To this end, this study therefore recommends that the Nigerian government needs to do more to enhance its domestic capacity, as it relates to industrial activities, so that it's industries can still work even in the face of geopolitical shock arising from invasion and war. More so, the Nigerian state should have more realistic and actionable policies that would enhance the resilience of its economy to global shocks and changing dynamics of international politics, geopolitics and economics.

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