

RUSSIA-UKRAINE CONFLICT AND FOOD SECURITY IN NIGERIA, 2016- 2024

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Abstract

This study examines the link between the Russia-Ukrainian conflict and food security in Nigeria from 2016 to 2024. The study used qualitative design based on documentary analysis, as well as the World-Systems Theory to interrogate how geopolitical tensions have cascaded into Nigeria's food security, affecting agricultural inputs, trade dynamics, and socio-economic stability. Findings revealed that as major exporters of grains and fertilizers, the Russia-Ukrainian conflict has disrupted food supply chains, leading to rising food prices, thereby heightened food insecurity in Nigeria due to heavy reliance on imported staples such as wheat and maize. The study contributes to the broader understanding of global interdependence and offers policy recommendations aimed at strengthening food security and economic resilience amid geopolitical uncertainties. It contends that diversifying food sources through local production and new trade opportunities is essential in promoting sustainable agriculture, supporting smallholder farmers, and enhancing local food systems.

Keywords: Russia-Ukraine conflict, globalization, agriculture, food security, food inflation

Introduction

The international system has undergone significant transformation, becoming more complex and interconnected. This interconnectedness involves both state and non-state actors and underscores the vital role of globalization in fostering global interdependence. Events in one country can have far-reaching impacts elsewhere, exemplified by the Russia-Ukraine conflict, which demonstrates how geopolitical tensions threaten global stability (Abdulmalik, 2023).

Historically, Russia and Ukraine have shared deep cultural and historical ties dating back to the formation of the Soviet Union in 1922. This relationship shifted notably during Mikhail Gorbachev's leadership, when reforms such as Glasnost introduced greater openness and democratic reforms, leading to the USSR's collapse in 1989. The conflict escalated in 2014 following Ukraine's political upheaval that ousted pro-Russian President Viktor Yanukovich. Russia annexed Crimea, and fighting broke out in Eastern Ukraine, where separatist groups supported by Russia challenged Ukrainian sovereignty. Despite ceasefire efforts mediated by the Organization for Security and Cooperation in Europe (OSCE), the conflict persisted, becoming a

proxy war by 2016 with Russia backing separatists and Western nations providing military aid to Ukraine (Miller, 2016).

The Russia-Ukraine conflict, which escalated into a full-scale war in February 2022, has significant implications for developing countries. Nigeria, a major developing economy, is particularly affected due to its reliance on imported staples such as wheat, maize, and cooking oil. Prior to the conflict, Nigeria maintained complex economic relations with Russia and Ukraine, especially in agricultural trade, energy cooperation, and strategic partnerships. Ukraine was a key source of wheat imports for Nigeria. In 2022, Russia supplied fertilizers and military equipment worth approximately \$350 million and \$200 million to Nigeria. The ongoing conflict has disrupted global supply chains, leading to cascading effects on Nigeria's agricultural inputs and food security. Rising food prices, inflation, and food insecurity in Nigeria have been linked to reduced grain exports from Ukraine and Russia two of the world's primary suppliers resulting in higher costs for Nigeria's food imports and exacerbating socio-economic inequalities (Adeoti & Oladipo, 2022).

Despite the extensive analyses on the causes, transformations, and implications of the war (Kaldor, 2013), there remains a critical knowledge gap in understanding how external conflicts influence the political economy of major developing nations and constrain policy-making effectiveness. This study aims to address this gap by examining the linkage between the Russia-Ukraine conflict and Nigeria's food security from 2016 to 2024. Understanding this linkage is essential not only for appreciating how global interdependence and national resilience influence food security but also for developing resilient strategies to safeguard food systems amid ongoing geopolitical tensions.

Literature Review and Theoretical Framework

The concept of global conflict encompasses a broad spectrum of disputes that transcend national borders and involve multiple nations, regions, or international actors. These conflicts are characterized by their complexity, as they often originate from a multitude of interconnected political, economic, social, cultural, and environmental factors. Unlike localized disputes, global conflicts tend to have far-reaching implications that threaten international stability, security, and development. Scholars such as Gray and Starke (1984) have emphasized that global conflicts are rooted in structural violence, systemic inequalities, injustice, and disparities that manifest through direct violence or social exclusion. This perspective aligns with the broader debate in conflict studies regarding whether conflicts are primarily driven by material grievances or structural inequalities.

As globalization accelerates the flow of goods, information, and people across borders, the potential for conflicts to escalate and spread increases, creating a networked system of tensions and

disputes that challenge traditional notions of sovereignty and state-centric security. This interconnectedness raises critical questions about the adequacy of traditional security paradigms and whether they sufficiently address transnational and systemic sources of conflict. The literature highlights that global conflicts are often driven by underlying issues such as economic disparities, resource scarcity, environmental degradation, and strategic competition. Darling and Fogliasso (1999) argue that economic underdevelopment and poverty serve as significant catalysts for conflict, especially in fragile states where weakened institutions create fertile grounds for violence. Resource scarcity particularly of water, arable land, and energy intensifies tensions between nations and within regions, contributing to violent conflicts and migration crises. Environmental issues, including climate change, are increasingly recognized as accelerants of conflict, as they threaten livelihoods and exacerbate existing inequalities (Kaldor, 2012). The interconnectedness of these issues implies that disruptions in one part of the world can generate ripple effects globally, impacting economic stability, migration patterns, and security dynamics elsewhere.

The concept of food security has evolved significantly since its initial conceptualization, reflecting shifting understandings of hunger, nutrition, and sustainable development. The modern conception of food security emerged during the 1970s global food crisis, initially defined narrowly in terms of aggregate food supply at national and global levels (Sen, 1981). This supply-side focus underscored concerns about food availability, assuming that sufficient food production equated to food security.

However, Sen's groundbreaking work challenged this perspective by demonstrating that hunger often results not from food scarcity but from people's inability to access available food. This paradigm shift redirected scholarly and policy attention toward food access, emphasizing that economic, social, and political factors influence whether individuals can obtain adequate nutrition, even when food supplies are sufficient. This debate has spurred ongoing discussions about the multidimensional nature of food security, encompassing availability, access, utilization, and stability.

Food security is now widely recognized as a multifaceted concept involving several interrelated components necessary to ensure that all individuals have reliable access to sufficient, safe, and nutritious food. This study focuses on three key components: food availability, affordability, and importation.

- i. Food availability pertains to the physical presence of food through domestic production, imports, and stock levels (FAO, 2008). It is fundamental, ensuring food is physically accessible within a country's borders.

- ii. Food affordability relates to the economic capacity of individuals or households to purchase sufficient, nutritious food (FAO, 2008). It is closely linked to income levels, food prices, and purchasing power. High food prices can hinder access, particularly among low-income populations.
- iii. Food importation plays a crucial role, especially in regions where domestic production cannot meet demand. Relying heavily on imports exposes countries to global market fluctuations and supply chain disruptions, which can threaten food security. Literature underscores that dependence on food imports increases vulnerability to international price swings and supply shocks (Headey & Fan, 2010).
- iv. Additionally, food utilization involves the nutritional value and biological use of food, which depends on dietary diversity, food safety, health, and sanitation (FAO, 2008). Proper utilization ensures that nutrients are effectively absorbed and metabolized, with malnutrition and foodborne diseases posing ongoing challenges.
- v. The stability component refers to the resilience of food systems over time, ensuring consistent access despite shocks such as economic crises, natural disasters, or conflicts (FAO, 2008). Climate change and economic volatility threaten this stability, making food security a dynamic, ongoing challenge (FAO, 2017).

Within this framework, this study primarily emphasises food affordability, given its critical importance in Nigeria. Many households in Nigeria live on limited incomes, and disruptions in global food systems exacerbated by the Russo-Ukrainian conflict have led to increased prices and reduced access to essential commodities like wheat, maize, and fertilizer. Nigeria's heavy reliance on imported cereals renders it particularly vulnerable to international fluctuations, thereby intensifying food accessibility issues for its population.

Empirical Literature Review

Andam, Diao, Dorosh, Pradesha, and Thurlow (2022), using a computable general equilibrium (economy-wide) simulation model calibrated on pre-crisis household and macroeconomic data, this IFPRI study projected how war-induced increases in wheat, fertilizer, and energy prices would raise poverty and reduce food consumption across Nigerian households, with urban and lower-income groups disproportionately affected. The findings rest entirely on ex-ante simulation rather than observed post-shock household data, so they cannot capture actual behavioural adaptation (dietary substitution, informal coping strategies) or intra-national heterogeneity across Nigeria's geopolitical zones. The model also cannot incorporate shocks that emerged after 2022 such as naira redenomination, subsidy removal, and worsening farmer herder conflict that likely interacted with and amplified the war's effects.

Abay, Breisinger, Glauber, Kurdi, Laborde Debucquet and Siddig (2022) traces how rising wheat import costs were transmitted into higher bread prices and reduced product sizes arguing

that these increases disproportionately burdened low-income Nigerian households and recommending diversified, more resilient food supply chains. The analysis is confined to a single commodity chain (wheat-bread) and does not extend to rice, maize, cassava, or fertilizer, limiting its representativeness of Nigeria's broader food basket. It is also purely descriptive, without regression or time-series testing to establish the statistical strength of the price transmission it describes, and it does not specify an explicit theoretical framework guiding the analysis.

Ejere, Bassey and Owubokiri (2025) drawing on qualitative, documentary analysis of secondary sources, this study situates Nigeria within a broader African narrative of import dependence on Russian and Ukrainian commodities, concluding that the war heightened Nigeria's food insecurity and recommending domestic production support. The continental framing is imperfectly narrowed to the Nigerian case, risking overgeneralization from Africa-wide patterns to a country with its own distinct trade structure. No primary data (surveys, price indices, interviews) were collected, and pre-existing structural drivers of Nigerian food insecurity such as insurgency, farmer-herder violence, and exchange-rate instability are not controlled for, making it difficult to isolate the war's independent contribution from domestic shocks.

Okpala (2024), adopting a historical-descriptive, political-science approach, this study examines Nigerian food security over a decade-long window and recommends strengthening domestic industrial capacity and building policy resilience against geopolitical shocks. The 2014–2023 periodization is not clearly justified, since the war itself began only in 2022; it is unclear how the 2014–2021 baseline is operationalised or compared statistically to the post-2022 period. The study is conclusion-heavy and policy-prescriptive without accompanying data tables, price indices, or hypothesis testing, and it lacks an explicit theoretical framework linking cause (the conflict) to effect (food insecurity) beyond narrative association.

Balma and Fofana (2024), using a long-run general equilibrium trade model across three scenarios reduced Ukrainian production, elevated Black Sea trade costs, and an outright Russian export ban this continental study finds severe effects on grain imports and prices for import-dependent African countries, highlighting Nigeria's high share of consumption expenditure devoted to food (approximately 59 percent). The model is pan-African and not tailored to Nigeria's specific import structure, fiscal space, or social protection architecture, so its Nigeria-specific findings are more illustrative than precise. Being simulation-based, its long-run projections are not validated against Nigeria's actual observed post-2022 price and consumption data, and it does not incorporate Nigeria-specific compounding shocks that occurred within the same period.

The reviewed studies display recurring weaknesses that any new empirical contribution should address: overreliance on simulation and secondary data rather than nationally representative primary household surveys collected in Nigeria after 2022; weak attribution design, with few studies isolating the war's effect from concurrent Nigeria-specific shocks such as currency reforms, subsidy removals, insurgency, and flooding; thin or mismatched theoretical grounding,

with some studies being atheoretical and others applying conflict theories suited to explaining the war's persistence rather than its global economic transmission; limited sub-national disaggregation by geopolitical zone, rural/urban location, or gender, obscuring which Nigerian populations are most affected; short observation windows concentrated on the initial 2022 price shock, with little longitudinal analysis extending into 2023–2025; and a lack of methodological triangulation, with descriptive price analysis, and qualitative policy review within a single Nigeria-focused analysis.

Theoretical Review

Beyond empirical description, explaining how a war between two Eastern European states translates into food insecurity in Nigeria necessitates a robust theoretical framework capable of elucidating structural vulnerability, transmission mechanisms, and domestic political responses.

Dependency Theory, associated with Raúl Prebisch, Andre Gunder Frank, and Theotonio dos Santos, conceptualizes the global economy as divided into a dominant "core" and a subordinate "periphery." In this framework, the underdevelopment of peripheral economies like Nigeria is actively produced through their trading and financial relations with the core. Nigeria's dependence on imported wheat and fertilizer exemplifies its entrenched periphery status as a commodity-exporting, food-importing country, which explains how external shocks such as disruptions in global grain markets can rapidly translate into domestic food crises. However, this binary core-periphery model tends to be relatively static and insufficiently accounts for domestic policy failures or elite decisions, such as neglecting local agricultural development. It also struggles to classify countries like Russia and Ukraine, which do not fit neatly into traditional core or periphery categories.

Developed by Robert Keohane and Joseph Nye, the theory of complex interdependence describes a world interconnected through multiple channels economic, institutional, and transnational where states are mutually sensitive and vulnerable. This framework helps explain why regional conflicts can produce near-immediate global price transmission and why countries like Nigeria experience deeper, longer-lasting vulnerability due to limited alternative suppliers. Yet, it was primarily designed to analyze relations among relatively symmetric, developed liberal democracies and is less capable of capturing the persistent structural inequalities that place countries like Nigeria at a disadvantage. It often treats interdependence as negotiable rather than as a consequence of long-standing global hierarchies.

Food Systems Theory, rooted in systems thinking, views food security as the outcome of interacting subsystems including production, processing, distribution, and consumption shaped by environmental, economic, social, and political drivers. It illustrates how external shocks, such as import disruptions, cascade through access, utilization, and stability, providing a useful lens for designing multi-sectoral policy responses. However, as a primarily descriptive framework, it does

not directly address the political-economic causes of structural vulnerability or explain how countries are positioned within the global system.

Political Economy Theory broadly examines the interactions between political power, class interests, and economic outcomes. It emphasizes how elite interests, rent-seeking behaviors, and policy choices like subsidy politics shape Nigeria's responses to external shocks. Nonetheless, it is less effective at theorizing Nigeria's specific position within the international system and is often applied in an eclectic manner without a comprehensive framework linking domestic power dynamics to global structural forces.

In light of the rapidly growing but fragmented empirical literature on the impact of the Russia-Ukraine war on Nigeria's food security, it becomes evident that current studies heavily rely on simulations and secondary data, with limited primary post-shock information. They often lack clear attribution of effects amid domestic shocks, and their theoretical grounding is inconsistent. Among the various frameworks, World-Systems Theory emerges as the most coherent, offering a comprehensive account of Nigeria's structural exposure, the tiered nature of involved actors, the mechanism of unequal exchange, and the multi-scalar, cumulative dynamics of the crisis.

Theoretical Framework: World-Systems

This study adopted world-systems theory as its framework of analysis. The World-Systems Theory is a socio-economic framework that explains the global economic and political order through the lens of a single, interconnected system. Originating in the late 20th century, it was developed by sociologist Immanuel Wallerstein in the 1970s, building upon and critiquing traditional modernization and dependency theories. The theory posits that the global economy is not a collection of nation-states operating independently but rather a single integrated system shaped by economic, political, and social forces that favor the core nations at the expense of the periphery.

Proponents of the World-Systems Theory include scholars like Wallerstein, Giovanni Arrighi, and Samuel Huntington. They argue that the world economy is characterized by core-periphery relations, where wealth and power are concentrated in core regions, which exploit peripheral regions for raw materials and labour, thus perpetuating global inequalities. Over time, the theory has evolved to incorporate insights from globalization, transnationalism, and environmental issues, broadening its analytical scope while maintaining its core premise of an interconnected world system.

The theory assumes that the modern world system is a single, interconnected economic and political entity, with actions and developments within one part having far-reaching impacts on other regions. It also assumes that the world-economy is cyclical and historically dynamic,

experiencing periods of expansion, crisis, and restructuring driven by economic competition, technological change, and shifts in hegemonic power among nations.

This study adopted World-Systems Theory as its analytical framework to explain how the global interconnectedness influences Nigeria's food insecurity amid the Russia-Ukraine conflict. The theory specifically elucidates food insecurity by highlighting Nigeria's position as a peripheral country within the global system, which relies heavily on imports of food and agricultural inputs from core and semi-peripheral nations like Russia and Ukraine. Trade disruptions caused by the conflict, such as reduced grain exports and logistical challenges, are understood through the lens of core-periphery relations, where Nigeria's dependence on external suppliers exposes it to systemic vulnerabilities. Fertilizer shortages are similarly explained as a consequence of the global system's reliance on a few dominant suppliers, with disruptions in these supply chains disproportionately impacting Nigeria's agricultural productivity. Grain import dependence reflects the structural inequality embedded in the world economy Nigeria acts as a price-taker due to its peripheral status, making it susceptible to global shocks. Agricultural dependency is rooted in the historical and systemic exploitation of resources within the world-systems framework, where peripheral nations are integrated into the global economy primarily as raw material exporters. Exchange rate pressures are also illuminated by the theory's emphasis on systemic transfer of value and unequal exchange, which often lead to currency devaluations and inflationary pressures in Nigeria as it absorbs shocks from core-driven market fluctuations. Overall, World-Systems Theory offers a comprehensive explanation of how Nigeria's structural vulnerabilities within the global system magnify the impacts of the Russia-Ukraine conflict across various dimensions of food security.

Research Methodology

This research adopted an ex-post-facto exploratory design to investigate the impact of the Russia-Ukraine conflict on Nigeria's food security. The study relied on a documentary approach, analyzing existing literature, reports, and records to identify patterns, themes, and relationships related to the conflict's effects. This study used a systematic documentary analysis approach to examine Nigeria's food security during the Russia-Ukraine conflict, selecting relevant policy documents, official statements, media reports, expert analyses, and international agreements from 2016 to 2024 based on strict inclusion and exclusion criteria. Data sources included reputable institutions like Nigeria's National Bureau of Statistics, the Central Bank, IMF, World Bank, and UN, ensuring credibility. Both qualitative data such as government briefs and diplomatic communiqués and quantitative indicators, including trade volumes and food prices, were analyzed through coding and thematic analysis to identify key patterns and relationships. Rigorous verification methods, triangulation, and inter-coder reliability checks were employed to ensure the validity and reliability of findings, providing a comprehensive understanding of the interconnectedness between global conflict and Nigeria's food security.

Russia-Ukraine Conflict and Food Security in Nigeria

Nigeria's pre-war reliance on imports reveals critical vulnerabilities. Domestic wheat production was minimal averaging only sixty thousand metric tons annually while consumption reached six million tons, resulting in a 99% import dependency (FAOSTAT 2021). Russia supplied nearly a third of Nigeria's wheat imports in 2021, with additional volumes passing through Black Sea ports from neighbouring countries (National Bureau of Statistics, 2021). The country's fertilizer dependency was similarly concentrated, with Russia and Belarus providing nearly half of Nigeria's annual fertilizer imports, which are vital for its agriculture (Federal Ministry of Agriculture and Rural Development, 2021). These dependencies stem from deliberate policy choices rather than agricultural constraints, as Nigeria has significant arable land but faces infrastructural deficits and policies favouring oil over food production, leading to systematic de-agriculturalisation despite population growth (World Bank 2020; Kwaja & Ademola-Adeoye 2021).

Nigeria is a net food importer. Despite having significant agricultural land, the country relies heavily on imported wheat, fertilizers, and vegetable oils to feed its over 220 million people (NBS (2024). Prior to the conflict, Russia and Ukraine collectively supplied a substantial share of Nigeria's essential agricultural imports. Table 1 highlights Nigeria's major agricultural imports from Russia and Ukraine

Table 1: Nigeria's key agricultural imports from Russia and Ukraine (Pre-Conflict, 2021)

Commodity	Russia Share (%)	Ukraine Share (%)	Combined Share (%)	Annual Volume (MT)
Wheat	24%	12%	36%	~ 4.5 million
Fertilizers (Urea)	21%	N/A	21%	~ 1.2 million
Sunflower/Vegetable Oil	10%	35%	45%	~ 300,000
Maize / Corn	5%	18%	23%	~ 600,000
Barley	15%	10%	25%	~ 150,000

Source: NBS (2024)

The data in Table 1 underscores Nigeria's heavy reliance on imports from Russia and Ukraine for crucial agricultural commodities, including wheat, fertilizers, sunflower/vegetable oil, maize, and barley. Prior to the conflict, these two countries supplied a significant share of Nigeria's food and agricultural inputs, making the country highly vulnerable to disruptions in supply chains caused by the ongoing war. The interruption of wheat imports threatens food availability and affordability, especially since wheat-based products are staple foods in Nigeria. Similarly, fertilizer shortages could lead to reduced agricultural productivity, which would negatively impact crop

yields and farmers' livelihoods. Reduced imports of sunflower oil, maize, and barley could also result in shortages and price increases, further exacerbating food insecurity. For Nigeria, this dependence on conflict-affected regions exposes systemic vulnerabilities, heightening the risk of food shortages, inflation, and limited access for low-income populations. Overall, the conflict has the potential to significantly worsen Nigeria's food security by disrupting supply chains and increasing reliance on global markets, highlighting the urgent need for diversification and local production capacity to build resilience against future shocks. Table 2 and 3 illustrate major price movements.

Table 2: Global commodity price changes following the Russia-Ukraine conflict (2022 vs 2021)

Commodity	2021 Avg Price (USD)	2022 Peak Price (USD)	% Change	Impact on Nigeria
Wheat (per MT)	\$271	\$443	+63%	Bread/flour price surge
Sunflower Oil (per MT)	\$1,290	\$2,200	+70%	Cooking oil crisis
Maize (per MT)	\$271	\$360	+33%	Feed/food cost rise
Natural Gas (per MMBtu)	\$4.50	\$9.80	+118%	Energy / fertilizer costs
Urea Fertilizer (per MT)	\$410	\$900	+119%	Farm input crisis

Source: NBS (2024)

Table 2 shows that Nigeria's food inflation was already elevated before the war. The conflict compounded existing pressures, driving food inflation to record levels in 2022 and 2023, as highlighted by the National Bureau of Statistics (NBS).

Table 3: Nigeria's Food Inflation Rate (Year-on-Year, 2020–2024)

Year	Food Inflation Rate (%)	Headline Inflation (%)	Conflict Contribution	Key Driver
2020	14.89%	13.21%	Pre-conflict	COVID-19
2021	20.6%	17.38%	Pre-conflict	Insecurity/FX
2022 (H1)	24.4%	20.77%	High	War + FX depreciation
2022 (H2)	26.1%	21.47%	Very High	Global commodity shock
2023	29.3%	24.08%	Sustained	Subsidy removal + war
2024 (Q1)	37.9%	33.86%	Compounded	Naira collapse + war

Source: NBS (2025)

The data in Table 3 indicates a significant escalation in Nigeria's food inflation rate from 2020 to 2024, with a sharp increase particularly from 2022 onward, coinciding with the intensification of the Russia-Ukraine conflict. The high conflict contribution in 2022, marked by war-related disruptions and currency depreciation, underscores the direct impact of global geopolitical tensions on Nigeria's food prices. The sustained and compounded inflation in 2023 and early 2024 reflects the ongoing effects of global commodity shocks, subsidy removal, and the Naira's collapse, all exacerbated by the conflict. For Russia and Ukraine, the war has directly disrupted grain supplies and global food markets, contributing to rising prices worldwide. For Nigeria, these dynamics have translated into heightened food insecurity, driven by increased costs of imports, fertilizer shortages, and exchange rate pressures, thereby deepening socio-economic vulnerabilities and highlighting the interconnectedness of global conflicts and national food systems within the framework of systemic dependencies.

In Ukraine, active combat reduced planting by over 30%, especially in contested regions where over 60% of arable land experienced severe disruption (Kyiv School of Economics, 2022). Fuel shortages, labour attrition, and limited access to inputs like fertilizers and pesticides further hampered production, with fertilizer imports declining by over 80% in some cases (Ukrainian Grain Association 2022; Ministry of Agrarian Policy and Food of Ukraine, 2022). Export infrastructure was also severely compromised by the Russian blockade of Black Sea ports, leading to massive grain stockpiles and storage challenges, despite efforts to reroute exports through land

corridors and mediated initiatives like the Black Sea Grain Initiative, which remained fragile and limited in capacity (Ukrainian Sea Ports Authority, 2021; UN, 2023). Simultaneously, sanctions and logistical barriers reduced Russian and Belarusian fertilizer exports sharply, causing prices to spike by over 230% for key inputs like urea and DAP, with regional impacts varying based on infrastructure and market access (International Fertilizer Association, 2022; World Bank, 2022).

Nigeria is one of Africa's largest consumers of wheat-based products. Annual wheat consumption is estimated at 5–6 million metric tons, with domestic production accounting for less than 5% of this demand. The majority is imported, largely from the Black Sea region. The disruption of Black Sea exports forced Nigeria to source wheat from alternative, more expensive suppliers such as the United States, Canada, and Australia, significantly increasing import costs. The downstream effect was immediate: bread prices in Lagos nearly doubled between January 2022 and December 2022. Bakery closures increased, small-scale bakers reduced loaf sizes, and bakeries began switching to alternative flours all signaling deep structural distress in the food value chain.

Table 4: Impact of the Russia-Ukraine Conflict on selected food prices in Nigerian markets (Lagos Average, Naira)

Food Item	Jan 2022 Price (NGN)	Jan 2023 Price (NGN)	Jan 2024 Price (NGN)	% Change (2022-2024)
Bread (big loaf)	₦700	₦1,100	₦1,800	+157%
Wheat flour (50kg)	₦16,000	₦25,000	₦42,000	+163%
Vegetable oil (1 litre)	₦1,200	₦2,000	₦2,800	+133%
Spaghetti / Pasta (500g)	₦350	₦600	₦1,000	+186%
Tomato paste (70g)	₦150	₦250	₦450	+200%
Rice (50kg local)	₦30,000	₦38,000	₦63,000	+110%

Source: NBS (2024)

The data highlights a significant surge in food prices in Nigeria from January 2022 to January 2024, driven by disruptions in global supply chains caused by the Russia-Ukraine conflict. Nigeria's heavy dependence on imported staple foods like wheat, rice, and vegetable oil makes it highly vulnerable to external shocks, leading to increased costs for consumers and worsening food insecurity. The sharp price increases reflect systemic vulnerabilities in Nigeria's position within the global food system, where conflicts in core exporting countries directly impact prices in peripheral economies.

For Russia and Ukraine, the conflict has disrupted their roles as major grain suppliers, which in turn destabilizes global markets and exacerbates food insecurity in dependent nations like Nigeria. The rising prices serve as a clear indication of how geopolitical conflicts and systemic inequalities within the global economy threaten long-term food security in vulnerable countries, emphasizing the interconnectedness and fragility of the current global food system. Household consumption responses followed established patterns from food security literature. The Nigeria Living Standards Survey (NBS/World Bank, 2023) tracking 10,000 households documented that seventy-three percent of households reduced meal frequency, sixty-eight percent decreased protein consumption, and forty-two percent withdrew children from school to reduce expenditure. The proportion of households experiencing moderate or severe food insecurity defined as uncertain access to adequate nutritious food increased from thirty-eight percent (2021) to fifty-seven percent (2022), representing an additional thirty-eight million Nigerians facing food access challenges. Severe food insecurity, involving actual hunger and potential starvation, affected sixty-three million Nigerians by December 2022 versus forty-seven million pre-conflict, a thirty-four percent increase (Cadre Harmonisé Analysis, 2023).

These input constraints affected production immediately and prospectively. The 2022 wet season rice production declined an estimated fourteen percent due to reduced fertilizer application, with yield per hectare falling from 3.2 tons to 2.8 tons in major producing states including Kebbi, Niger, and Kaduna (USDA Foreign Agricultural Service Nigeria, 2023). Maize production faced similar pressures, with total output estimated at eleven million metric tons versus projections of 12.8 million tons, creating domestic supply shortfalls requiring imports, despite Nigeria's historical maize self-sufficiency (FAOGIEWS, 2022). Smallholder farmers constituting eighty-three percent of Nigerian agricultural producers and operating average 1.5 hectare plots faced particularly acute constraints as fertilizer costs consumed forty to fifty percent of production budgets versus thirty-two percent historically, forcing reduction in application rates from recommended 300kg/hectare to actual 150kg/hectare or complete fertilizer omission (International Food Policy Research Institute Nigeria Strategy Support Program, 2022).

Food system shocks transmitted through macroeconomic channels amplifying household-level impacts. Nigeria's import bill for food and agricultural inputs increased from \$6.4 billion (2021) to \$9.8 billion (2022) despite volume reductions, entirely attributable to price inflation (Central Bank of Nigeria, 2023). This forty-seven percent import cost increase exacerbated foreign

exchange pressures in an economy where oil exports generating eighty-five percent of forex earnings faced production declines due to theft, underinvestment, and OPEC plus quota constraints. Furthermore, naira depreciated from ₦416/\$1 (official rate, January 2022) to ₦446/\$1 (December 2022), with parallel market rates reaching ₦750/\$1, further increasing import costs and food prices through exchange rate pass-through estimated at 0.65 (sixty-five percent of currency depreciation transmits to domestic prices within six months) (Adeosun & Gbadebo, 2020).

The Russo-Ukraine conflict's impact on Nigerian food security demonstrates how global food system integration transforms localised disruptions into widespread crises; with vulnerabilities distributing unevenly based on structural economic characteristics, governance capacity, and historical development pathways. Nigeria's experience illustrates a broader pattern affecting import-dependent middle-income countries: sufficient resources to avoid humanitarian catastrophe yet insufficient capacity to fully insulate populations from global market shocks, creating sustained elevated food insecurity affecting tens of millions while remaining below thresholds triggering major international humanitarian response.

Conclusion

The analysis underscores the profound interconnectedness of the global system, where conflicts such as the Russia-Ukraine war have extensive ripple effects beyond immediate battlegrounds, significantly impacting developing nations like Nigeria. The conflict has exposed vulnerabilities in global food systems, particularly through disruptions in grain exports, supply chains, and fertilizer markets, which disproportionately affect food security in vulnerable countries. Nigeria's heavy reliance on imported staples, especially wheat and maize from Ukraine and Russia, has led to rising food prices, increased inflation, and heightened food insecurity, especially among low-income populations. The situation exemplifies how geopolitical tensions can cascade into domestic socio-economic challenges, underscoring the importance of establishing resilient, diversified, and sustainable food and economic systems.

To address these challenges, Nigeria must strategically diversify its food and agricultural sources by investing in local production and establishing alternative trade partnerships to reduce dependency on geopolitically vulnerable regions. Promoting sustainable agriculture practices, such as climate-smart farming and improved irrigation, and investing in smallholder farmers through accessible credit, extension services, and technology transfer are critical steps toward enhancing self-sufficiency. Additionally, strengthening local food systems by improving infrastructure, such as storage facilities and transportation networks, can mitigate supply chain disruptions. The government should also implement policies that incentivize local production, support agro-processing industries, and foster regional trade alliances to build economic resilience and reduce exposure to external shocks.

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