The Impacts of Russia-Ukraine War on Food Security in Nigeria-An Assessment of the ECOWAS Intervention

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ABSTRACT

The prices of staples and grains have increased significantly in local markets in Nigeria. This increase has had a substantial impact on food availability in the country. The prices of agricultural machinery, chemicals, and fertilizers have also risen significantly between 2022 and 2024. This increase is linked to Russia's invasion of Ukraine in February 2022. Russia and Ukraine have been major exporters of grains and staple products to West Africa, particularly Nigeria. Nigeria and most West African countries rely heavily on grains from Russia and Ukraine for food security. This study seeks to investigate the impacts of the Russia-Ukraine war on food security and examine ECOWAS interventions to address food security challenges in Nigeria. The study relied on a mixed-method research design, combining primary and secondary data for its analysis. The findings indicate that the Russia-Ukraine war has affected food prices, the costs of food logistics, fertilizers, and other agricultural products. The war has also led to the destruction of climate and food storage facilities that support food production, disruptions in international food logistics, and the displacement of farmers. The study recommends the intervention of the United Nations to ensure the reinstatement of the Black Sea Grain Initiative and calls for the stabilization of ECOWAS member states to reduce military interference in governance and promote good governance.

INTRODUCTION

Studies on the causes of food insecurity in Nigeria and other West African countries have largely focused on the activities of bandits and terrorists in Nigeria, which have disrupted farming activities; the increase in exchange rates, which has driven up the price of agro-products; massive youth migration out of Nigeria and across West Africa, which significantly impacts the agricultural workforce; and the effects of climate change on food security. However, these studies often fail to provide a clear linkage between the war in Ukraine and its impact on climate change. The Russia-

Ukraine war, which began in February 2022, marks one of the most significant military conflicts

in Europe since World War II. Rooted in long-standing geopolitical tensions, the war's origins can

be traced back to the collapse of the Soviet Union in 1991, which left Ukraine as an independent state. Russia and Ukraine had an agreement under which Ukraine gave up the Soviet nuclear weapons stationed on its territory. Russia has continuously viewed Ukraine as part of its sphere of influence, and the conflict has escalated over issues of sovereignty, regional autonomy, and political alignment. In particular, Russia has expressed concerns about Ukraine's growing ties with Western institutions, including the European Union (EU) and the North Atlantic Treaty Organization (NATO) (Mearsheimer, 2022).

The interconnected nature of global agricultural markets, with Russia and Ukraine as major suppliers, has been significantly impacted by Russia's military invasion. Despite the fact that Russia and Ukraine contribute only 2% of global GDP, they are both vital producers and exporters of major agricultural products, minerals, fertilizers, and energy (Zainab, 2023). Their dominance in these sectors makes global markets highly susceptible to shocks and volatility caused by the ongoing military confrontation in the region (Glauber, Joseph & Laborde, 2023). This war comes at a time when food prices in Nigeria and other West African countries were already very high due to climate change, insurgency and banditry, post-COVID-19 effects, and other factors. The conflict is exacerbating these pre-existing challenges, driving food prices even higher. In Nigeria, the combination of these factors with high exchange rates has made the ongoing impacts of the war highly uncertain. Nigeria and other West African countries rely heavily on food and agro-product imports, particularly wheat and other grains, from Ukraine and Russia.

It is essential to understand how disruptions in global food and fertilizer markets caused by the war could lead to long-term price hikes and reduced availability, posing a significant threat to global food security.

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The war caused immediate and severe disruptions to food security by affecting cultivation, storage and logistics. Military actions have short- and long-term consequences for Ukraine's ability to transport agricultural products both domestically and internationally, especially due to attacks and closure of port facilities and rail networks. Grain shipments from Ukraine, particularly maize, which is typically exported in the spring and early summer were impacted on. An estimated 95% of Ukraine's grain exports move through its Black Sea ports, including Odessa, Mariupol, and Kherson, all of which have sustained significant damage. Moreover, the blockade of these ports has virtually halted Ukraine's exports (Hatab, 2022). The conflict disrupted farming activities, with many farmers unable to work their fields, while conscription and population displacement have led to labor shortages in Russia and Ukraine (Rochat, 2022). Access to crucial agricultural inputs like fertilizers has become limited, complicating both the ongoing spring planting season and the upcoming winter crop harvest, typically scheduled for June or July (Sohag, Islam, Žiković & Mansour, 2023).

It is therefore on this prism that this study seeks to understand the impacts of the Russia-Ukraine war on food security in Nigeria. This study is divided into three major parts, the introduction, literature review, methodology, empirical verifications and findings and conclusion.

Conceptual Clarifications

Russia-Ukraine War

The Russia-Ukraine war is an ongoing military conflict that started on February 24, 2022, when Russia launched a full-scale invasion of Ukraine. This conflict stems from deep-rooted political, historical, and territorial disputes between the two nations, exacerbated by Ukraine's desire to establish both economic and military alliance with the European Union (EU) and the North Atlantic Treaty Organization (NATO). Russia seeks to reassert control over its neighbor and prevent further Western influence and NATO alliance towards Russia (Mearsheimer, 2022). The war was triggered by Russia's recognition of two separatist regions in Ukraine's eastern Donbas area, Donetsk and Luhansk, as independent republics, followed by the deployment of Russian military forces into Ukrainian territory (BBC, 2022). Russian President Vladimir Putin framed the invasion as a "special military operation" aimed at demilitarizing Ukraine and protecting Russian-speaking populations in these areas, though these claims have been widely disputed (Giles, 2022). This war represents the most significant European conflict in decades, leading to widespread international condemnation, severe sanctions against Russia, and a global humanitarian and economic crisis (UN, 2022).

Food Security

Food security refers to the condition in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences (FAO, 2006). The concept encompasses four key dimensions: food availability, food access, utilization, and stability. Food availability refers to the sufficient production and supply of food, while food access involves individuals' ability to obtain it through purchasing or other means. Utilization emphasizes the proper consumption of food, ensuring that it meets the nutritional needs of individuals, and stability refers to the consistent availability and access to food over time, without fluctuations due to external shocks such as conflict, climate change, or economic crises (FAO, 2021). Food security is a fundamental aspect of human well-being and sustainable development. When compromised, it leads to malnutrition, hunger, and long-term developmental challenges, especially for vulnerable populations. Achieving food security is central to addressing global inequalities and reducing poverty (United Nations, 2015).

Empirical Review

A review of scholarly publications on the impacts of the Russia-Ukraine war on food security highlights how the conflict has disrupted global food systems, exacerbating hunger and malnutrition in vulnerable regions.

Ben Hassen & El Bilali, (2022), the study reviewed the "Impacts of the Russia-Ukraine War on Global Food Security: Towards More Sustainable and Resilient Food Systems?". The study adopted a qualitative research design. The study illustrated how the conflicts between Ukraine and Russia is redefining global food security due to the shares of influence the two countries command in food production. The study illustrated in three ways how global food availability has been affected by the war. The study finds that countries which depends on food importation for survival will be adversely affected.

Xi-Yin et al., (2023) in "Influence of Russia-Ukraine War on the Global Energy and Food Security, Resources, Conservation and Recycling". The study adopted a systematic review approach. The study noted that The Russia-Ukraine War has significantly influenced global energy and food security. However, the extent of this influence, key vulnerabilities, and the mechanisms driving these effects remain unclear. To address this, the study developed an improved under-load cascading failure model that incorporates overload limitations to evaluate the war's impact on global energy and food security. Additionally, the study introduced a method to assess network structural characteristics, including robustness and resilience, through model simulations under various scenarios. Key findings include the following: The upper load limit of nodes plays a dominant role in determining global energy and food security, while the lower load limit has a minimal effect. Most networks exhibit relatively consistent recovery and resistance capabilities against the Russia-Ukraine War and associated global panic, except for the barley trade network. Notably, the largest trade flow disruptions do not occur at the failure nodes, which are often countries with smaller economies and lower political influence.

Bentouir (2022) in "The Russia-Ukraine invasion toward increasing food security threat for population: An empirical study using T-GARCH model". The study adopted a qualitative research design. TheT-GARCH model used concluded that the variables are highly affected by the bad news including both of the Covid-19 pandemic followed by the Ukraine war in the middle of 2022. This finding confirmed what was stated in the global reports about the food insecurity risk which has become a real threat for the population

El Bilali, & Ben (2024), "Disrupted harvests: how Ukraine - Russia war influences global food systems – a systematic review". The study adopted a systematic review of 62 publications. The war has impacted all dimensions of food security, with the most significant effects observed in food access. Reduced domestic food production and productivity, damage to production assets, food stocks, and infrastructure, increased input costs, land use changes and degradation, and labor shortages in rural areas have severely diminished food supply and availability, particularly of cereals. This decline in availability has driven up food prices and inflation. Combined with disruptions in agri-food trade, markets, and supply chains, these factors have significantly constrained food access, especially for poor and vulnerable populations. The war's effects on food utilization are evident in the reduced quality and diversity of diets. The stability of the food system has also been undermined, primarily due to volatile food prices and uncertainties surrounding future food supplies. Similarly, the war has disrupted all dimensions of food system sustainability-environmental, social, economic, and political. Notably, the socio-economic impacts are pronounced, manifesting as heightened food insecurity, malnutrition, poverty, vulnerability, migration, and displacement. To address these challenges, evidence-based strategies

and policies that are efficient, effective, and sustainable are essential. Furthermore, extensive research into the medium- and long-term consequences of the conflict is critical, particularly in developing countries, which have largely been neglected in previous studies.

Most reviewed texts discuss how the Russia-Ukraine war has impacted global food supplies and the logistics of other agricultural materials, such as fertilizers. However, the studies fail to highlight the war's impacts on food security in Nigeria and its effects on climate change, which is a major factor influencing food security in Nigeria and West Africa.

Theoretical Framework

The study is built on the foundation on DeLanda's account of *assemblages* and *social complexity theory*. *The theory* provides a framework for understanding the dynamic, non-linear, and multiscalar nature of social systems. Grounded in the philosophy of Gilles Deleuze and Félix Guattari, DeLanda's *assemblage theory* challenges traditional hierarchical and reductionist models of society, offering instead a view that emphasizes the fluidity and contingency of social entities. DeLanda defines assemblages as heterogeneous wholes composed of diverse parts, where the interactions between these parts give rise to emergent properties that cannot be reduced to the sum of their components (DeLanda, 2006).

DeLanda's social complexity theory rejects the idea of societies as stable, monolithic entities. Instead, societies are seen as assemblages of various components that can coalesce, interact, and disintegrate, depending on various factors such as technological innovations, cultural shifts, and economic pressures (DeLanda, 2016). This view offers a more nuanced and flexible approach to understanding social systems, focusing on their capacity for transformation rather than stability DeLanda's *social complexity theory* draws from complexity science to understand how social systems exhibit patterns of order and disorder. According to DeLanda, social complexity arises from the interactions of multiple agents within a system, where simple rules of behavior can generate complex, emergent phenomena (DeLanda, 2011). This approach contrasts with classical social theories that often explain social phenomena through top-down causality or deterministic structures. In DeLanda's theory, social entities—whether individuals, groups, or institutions—are dynamic, adaptive systems. These systems are characterized by non-linear interactions, meaning that small changes in one part of the system can lead to disproportionately large outcomes, akin to the "butterfly effect" in chaos theory (DeLanda, 2002). Social structures, therefore, are subject to constant flux and are best understood as adaptive assemblages that respond to changes in their environment.

In application of the theory, Manuel DeLanda's *assemblage theory* and *social complexity theory* provide a useful framework for understanding the multifaceted and dynamic impacts of the Russia-Ukraine war on food security in Nigeria. According to DeLanda, social systems, such as global food supply chains, can be understood as assemblages—composite systems of interconnected parts that interact in complex, non-linear ways (DeLanda, 2006). These assemblages, like food systems, are characterized by contingent relationships among various components, including agricultural production, transportation, governance, and markets. Using DeLanda's theory, the impact of the war on food security in Nigeria can be seen as a destabilization of a global food assemblage, with significant consequences for local food systems.

The Russia-Ukraine war has disrupted global agricultural assemblages, particularly through the interruption of wheat and fertilizer supplies. Russia and Ukraine are major global suppliers of wheat, accounting for roughly 30% of global exports (FAO, 2022). These exports are crucial

components of the global food assemblage, influencing food availability and pricing across various regions, including Nigeria. In DeLanda's terms, this disruption can be understood as a form of *deterritorialization*, wherein the war destabilizes the established flows of agricultural commodities, breaking down the stability of global supply chains.

Nigeria, which imports a substantial portion of its wheat from Russia and Ukraine, is part of this broader food assemblage. As the war hampers wheat exports, Nigeria's local food security assemblage is affected, leading to higher prices for bread and other staple foods (Ogunbiyi, 2022). The non-linear dynamics of this assemblage imply that the conflict in one part of the world can have ripple effects across distant systems, as seen in the sharp rise in food prices and inflation in Nigeria. DeLanda's *social complexity theory* highlights how small disruptions in one part of an assemblage can lead to unpredictable and large-scale changes elsewhere due to the non-linear interactions between components (DeLanda, 2011). In the case of the Russia-Ukraine war, the initial disruption of agricultural production and trade has resulted in emergent consequences that extend beyond food supply. For instance, Nigeria has also faced rising fuel and fertilizer costs, as Russia is a key global exporter of these products (Zhou, 2023). The combination of higher fuel prices and fertilizer shortages has negatively impacted local agricultural production, leading to reduced crop yields and compounding food insecurity (World Bank, 2022).

The complex interplay of factors ranging from global commodity prices to local agricultural production illustrates how the war has created a cascading crisis in Nigeria. As DeLanda's theory suggests, these emergent consequences are not easily predictable due to the dynamic nature of the assemblage. The interconnectedness of global supply chains, local economies, and political decisions in Nigeria demonstrates the complexity of food security, where multiple, interacting variables produce large-scale outcomes.

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Methodology

The study adopted mixed methods research design. It seeks to combine both primary and secondary sources of data to understand the impacts of the Russia-Ukraine war and food security in Nigeria. It analyzes market trends and prices of food in the local markets in order to understand the level of impacts of the war. In this study, a documentary was collected from reports from international organizations like the Food and Agriculture Organization (FAO), World Bank, and United Nations (UN) that detail global food security trends and the impacts of the war on agriculture. Policy documents from Nigerian government ministries (Ministry of Agriculture) and international trade organizations concerning food imports, especially wheat and fertilizer supplies. Media articles, journals, and scholarly publications that analyze the effects of the war on food prices, agricultural productivity, and trade in Nigeria. Trade and market statistics from organizations like the International Grains Council, providing data on wheat imports and prices before and after the onset of the conflict. Academic studies that discuss the broader socioeconomic impacts of the war on developing nations, especially those dependent on Russian and Ukrainian exports.

The documents will be analyzed thematically to understand how the war has affected food security in Nigeria. This would involve: Identifying key themes related to food security, such as the disruption of wheat supply chains, fertilizer shortages, rising food prices, and agricultural productivity declines. Analyzing trends in the available data, such as changes in food prices in Nigeria before and after the war, or shifts in food imports. Through careful analysis of the collected documents, researchers can develop a comprehensive understanding of how the Russia-Ukraine war has affected food security in Nigeria. For example, documentary research could reveal how Nigeria's reliance on wheat imports from Ukraine and Russia has made the country vulnerable to

global supply disruptions. It can also highlight how rising fertilizer prices (due to sanctions on Russia) have impacted local agricultural production, worsening the food crisis (FAO, 2022).

Impacts of Russia Ukraine War on Climate Change and Food Production in Nigeria

Nigeria depends on Russia and Ukraine for food production in several ways, including the procurement of fertilizers and other seedlings needed for cultivation. A survey of the main markets in the six geo-political zones in Nigeria reveals a scarcity of food and high prices of imported goods (Nasir, Nugroho & Lakner, 2022). The Russia-Ukraine war has significant environmental impacts, particularly due to the use of bombs, missiles, and other forms of military weaponry. These impacts contribute to climate change and environmental degradation, ultimately affecting food production both in Ukraine and globally. The destructive consequences of the war are exacerbated by the extensive use of heavy artillery, which causes direct damage to ecosystems and indirectly affects global climate and agricultural systems (Klaus, Daniel & Ali, 2023).

The use of bombs, missiles, and other explosive devices releases large amounts of carbon dioxide (CO₂) and other greenhouse gases into the atmosphere (FAO, 2022). Military activities, including the deployment of heavy vehicles, fighter jets, and tanks, are energy-intensive and contribute to the global carbon footprint. Studies estimate that the military sector is responsible for approximately 6% of global greenhouse gas emissions (Crawford, 2019). The war has led to the destruction of ecosystems through the bombardment of forests, wetlands, and other natural habitats. The bombing of industrial areas and infrastructure, including chemical plants and oil depots, releases hazardous substances into the environment, further degrading ecosystems (Zibtsev et al., 2023).

The long-term effects of the Russia-Ukraine war on the environment and food production are profound. Bombings have devastated Ukraine's agricultural infrastructure, while the environmental damage caused by military operations continues to contribute to climate change. This combination of environmental degradation and climate disruption threatens global food security by reducing the availability of key agricultural commodities, raising food prices, and increasing the risk of food shortages in vulnerable countries like Nigeria. Additionally, the environmental destruction caused by the war will likely require decades of restoration, further delaying recovery efforts for both food systems and ecosystems (Mackenzie, 2022)

Blockage of the Black Sea Grain Initiative

The Black Sea Grain Initiative was a diplomatic agreement brokered by the United Nations and Turkey in July 2022. The initiative sought to address the global food crisis that emerged due to disruptions in grain exports caused by the conflict between Russia and Ukraine. Both countries are major producers and exporters of wheat, corn, and other agricultural products, and the conflict significantly impacted the availability of grain on the global market, particularly for countries in Africa, the Middle East, and Asia that rely heavily on these imports (Barker, 2022).

The initiative allowed for the safe transportation of grain, foodstuffs, and fertilizers from Ukrainian ports such as Odesa, Chornomorsk, and Pivdennyi. In exchange, Russian food and fertilizer exports were permitted, which had also been hindered by sanctions. The deal established a Joint Coordination Centre (JCC) in Istanbul, which was responsible for overseeing the safe navigation of vessels carrying agricultural goods through the Black Sea. This coordination involved inspections to ensure that the ships were not transporting arms or other illicit cargo (United Nations, 2022).

By facilitating the movement of grain and other critical food supplies, the Black Sea Grain Initiative played a crucial role in stabilizing global food prices and alleviating hunger in vulnerable regions. According to the United Nations, more than 30 million tons of grain were exported under the agreement before its expiration in July 2023. Despite efforts to renew the deal, geopolitical tensions between Russia and Ukraine led to the termination of the initiative, further exacerbating global food insecurity (Foy & Olearchyk, 2023).

The Russia-Ukraine war has had a significant impact on global food logistics, including the disruption of the Black Sea Grain Initiative, which has directly affected food supply chains in countries like Nigeria. The initiative, established in July 2022, was designed to allow safe passage for grain exports from Ukraine, one of the world's largest producers of wheat, corn, and sunflower oil. However, the ongoing conflict and the eventual collapse of the deal in July 2023 have created logistical bottlenecks, increasing food insecurity in countries highly dependent on imported grain, including Nigeria (Barker, 2023).

Before the war, Ukraine and Russia collectively accounted for approximately 30% of global wheat exports, with significant portions destined for African nations. Nigeria, in particular, relied heavily on Ukrainian grain to meet domestic food demands, especially for wheat, which is crucial for products like bread and pasta. The war disrupted these supply chains, leading to sharp price increases in food commodities across Nigeria. The suspension of the Black Sea Grain Initiative worsened the situation by limiting the flow of grain from Ukrainian ports, causing additional delays and price hikes in Nigerian markets (Foy & Olearchyk, 2023).

In addition to grain shortages, the initiative's breakdown exacerbated the volatility of global food prices, as speculators anticipated further supply disruptions. For Nigeria, this resulted in rising inflation in the food sector, with the price of staples like wheat flour increasing significantly. According to the World Food Programme (WFP), the suspension of the initiative compounded existing food security challenges in West Africa, including Nigeria, which was already grappling with inflation, currency devaluation, and the aftereffects of the COVID-19 pandemic (World Food Programme, 2023).

The termination of the Black Sea Grain Initiative has also created logistical challenges in securing alternative sources of grain. Nigeria, being highly import-dependent, faced delays and increased transportation costs as shipping routes and schedules were disrupted by the war. Efforts to diversify import sources and increase domestic production have been slow to meet the shortfall caused by the collapse of the initiative (Olukoju, 2023).

Impacts of Russia-Ukraine War on Production of Fertilizer and Other Agronomies

The Russia-Ukraine war has had profound effects on the production and distribution of fertilizers and other agricultural inputs, which in turn has exacerbated global food security concerns. Both Russia and Ukraine are major players in the global agricultural sector, not only for their grain exports but also for their substantial role in the production and supply of key fertilizer components, including potash, nitrogen, and phosphates. The conflict has disrupted the production, export, and transportation of these essential agronomic inputs, resulting in a global supply chain crisis (FAO, 2023).

Fertilizer production has been particularly affected due to Russia's position as the world's largest exporter of nitrogen fertilizers and a key supplier of potash and phosphates. Western sanctions imposed on Russia in response to its invasion of Ukraine have limited access to these fertilizers, driving up prices. Additionally, the war disrupted natural gas supplies another crucial input for nitrogen-based fertilizers—especially in Europe, where natural gas is essential for fertilizer

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manufacturing. The resultant energy crisis has further constrained global fertilizer production, leading to skyrocketing costs for farmers worldwide (Hedden, 2023).

For Ukraine, the war has directly impacted its agricultural output and fertilizer production. Key infrastructure, such as ports and manufacturing plants, has been damaged, reducing the country's capacity to produce and export agricultural inputs. Moreover, Ukrainian farmers have struggled to access fertilizers due to both the conflict and the collapse of the Black Sea Grain Initiative, which allowed for the export of fertilizers. The interruption in exports from both countries has strained global fertilizer supplies, especially in developing nations where agricultural productivity is heavily dependent on imported inputs (Fertilizer Institute, 2022).

The shortage of fertilizers has had cascading effects on global agricultural productivity. Farmers, particularly in regions such as sub-Saharan Africa and South Asia, have faced difficulties in accessing affordable fertilizers, leading to reduced crop yields. This, in turn, has aggravated food insecurity, as declining production levels contribute to higher food prices. The United Nations Food and Agriculture Organization (FAO) warned that the war's disruption of fertilizer production could cause a long-term global food crisis if these supply issues are not resolved (FAO, 2023).

In addition to fertilizers, the war has affected other agronomies such as pesticides and herbicides, which rely on raw materials and chemicals that are either produced or transported through Russia and Ukraine. The conflict has complicated the logistics of importing and exporting these products, further straining the agricultural sector's ability to meet global demand (Hedden, 2023).

Impacts of Russia-Ukraine War on Grain Logistics and Food Prices in Nigeria

Nigerian market over three years (2022, 2023, and 2024) as a result of the Russia-Ukraine war and other contributing factors such as inflation, currency devaluation, and local production challenges. The prices are in Nigerian Naira (\mathbb{N}) and represent average market prices.

Food Item	2022 Price (₦)	2023 Price (₦)	2024 Price (₦)	Percentage Increase (2022- 2024)	Key Factors
Rice (50kg bag)	38,000	75,000	100,000	140%	Global grain shortages, high import costs, and currency devaluation.
Wheat Flour (50kg)	15,000	30,000	40,000	167%	Russia-Ukraine war disrupted wheat exports; Nigeria relies heavily on imports.
Bread (1 loaf)	350	700	1,000	186%	Dependent on wheat flour, which became scarcer and more expensive over time.
Vegetable Oil (1L)	1,200	2,500	3,500	192%	Ukraine is a major sunflower oil exporter; war disrupted supply and raised costs.
Maize (100kg)	20,000	35,000	50,000	150%	Increased demand for local grains; fertilizer scarcity raised production costs.
Beans (100kg)	30,000	50,000	70,000	133%	Higher demand for protein sources due to reduced meat imports and rising costs.
Semolina (1kg)	500	1,000	1,500	200%	Derived from wheat; price increased due to wheat scarcity and import challenges.
Pasta (1kg)	600	1,200	1,800	200%	Wheat-based product; affected by global wheat price hike and import costs.

Sugar (1kg)	450	800	1,200	167%	Increased transportation and production costs due to global energy crisis.
Garri (1kg)	300	500	800	167%	Increased demand for local staples as alternatives to expensive grains.

Source: Open Market survey, (2024)

The Russia-Ukraine war triggered immediate and far-reaching disruptions in global grain and fertilizer supplies, sending shockwaves through Nigeria's economy and driving sharp increases in food prices. As the conflict dragged on, sustained disruptions to global supply chains, coupled with rising inflation and the relentless devaluation of the Naira, exacerbated the situation, pushing prices even higher. Local food production, already strained by the high cost of fertilizers, widespread insecurity in farming regions, and inadequate infrastructure, struggled to keep pace with growing demand. Meanwhile, the cost of imports remained prohibitively expensive, fueled by the Naira's steep decline against the US dollar and ongoing instability in global markets.

The war's impact was particularly severe on key commodities such as wheat, sunflower oil, and fertilizers, which Nigeria heavily relies on for both consumption and agricultural production. As the Naira continued to lose value, the cost of importing these essential goods soared, further straining the country's already fragile food supply. Inflation surged to alarming levels, with food prices bearing the brunt of the crisis. Farmers faced mounting challenges, from accessing affordable fertilizers to navigating insecurity in key agricultural zones, while inadequate infrastructure hindered the efficient distribution of what little was produced. The combination of these factors created a perfect storm, driving food prices to unprecedented levels and deepening the economic hardship faced by millions of Nigerians.

Analysis of ECOWAS intervention to Food Security Nigeria

The Economic Community of West African States (ECOWAS) has played a critical role in addressing food security challenges in Nigeria, particularly in response to the region's increasing vulnerability to food crises exacerbated by climate change, conflicts, and economic instability. ECOWAS has implemented various strategies and frameworks aimed at mitigating the impacts of these challenges, improving agricultural productivity, and enhancing food security across the West African region, including Nigeria (ECOWAS, 2021).

One of the main interventions by ECOWAS is the ECOWAS Agricultural Policy (ECOWAP), adopted in 2005, which seeks to promote agricultural development and ensure food security across member states. ECOWAP is focused on increasing agricultural productivity, improving access to markets, and ensuring the sustainability of food systems through better resource management and regional cooperation. For Nigeria, ECOWAP has provided a framework for aligning national agricultural policies with regional objectives, enhancing collaboration, and accessing funding for agricultural development (FAO, 2022). Through ECOWAP, ECOWAS has facilitated projects aimed at boosting Nigeria's agricultural capacity, including supporting smallholder farmers, who account for the majority of agricultural production in the country. Programs under ECOWAP have promoted the use of improved seeds, fertilizers, and climate-resilient farming techniques, which have been critical in addressing food production shortfalls in Nigeria, especially in the face of growing environmental and economic challenges (OECD, 2022).

In response to food security crises, ECOWAS established a Regional Food Security Reserve (RFSR) in 2013 to provide emergency assistance to member states facing food shortages. This reserve acts as a buffer against food insecurity by stockpiling essential grains, including maize,

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millet, and sorghum, which can be distributed to countries in need during times of crisis. For Nigeria, the RFSR has provided crucial support during periods of acute food shortages, particularly in northern regions affected by conflict and drought (ECOWAS, 2020).

The RFSR has been instrumental in mitigating the effects of food crises in Nigeria by allowing for timely interventions during emergencies, such as the food shortages caused by the Boko Haram insurgency and climate-induced disasters. It has enabled Nigeria to access emergency food supplies, helping stabilize local markets and prevent price spikes that disproportionately affect vulnerable populations (Badiane & Resnick, 2021).

ECOWAS has also been a key player in fostering regional cooperation on climate resilience, which directly impacts food security in Nigeria. Initiatives such as the West Africa Agricultural Productivity Program (WAAPP) have promoted research, innovation, and the dissemination of climate-smart agricultural technologies across member states, including Nigeria. These initiatives aim to enhance the resilience of the agricultural sector to climate change, which is a growing threat to food security in the region. Through WAAPP, Nigeria has benefited from improved agricultural practices, including water management systems and drought-resistant crop varieties, which have contributed to better food production outcomes (World Bank, 2021).

In addition, ECOWAS works with international partners, such as the World Food Programme (WFP) and the Food and Agriculture Organization (FAO), to implement food security initiatives in Nigeria. These partnerships have facilitated the distribution of food aid and supported efforts to build more resilient food systems through investments in agriculture and rural development (FAO, 2022). Despite ECOWAS's interventions, challenges remain in fully addressing food security in Nigeria. Issues such as political instability, insecurity in key agricultural regions (e.g., the Northeast), and limited infrastructure continue to hamper the effectiveness of food security

initiatives. Furthermore, the impact of global crises, including the COVID-19 pandemic and the Russia-Ukraine war, has placed additional pressure on Nigeria's food systems, underscoring the need for stronger regional cooperation and more robust domestic agricultural policies (ECOWAS, 2021).

Looking forward, ECOWAS's ongoing efforts to improve food security in Nigeria will require a focus on strengthening food value chains, increasing investment in agricultural technology, and addressing the root causes of food insecurity, including conflict and climate change. Enhancing intra-regional trade, improving transportation networks, and reducing barriers to food imports and exports within West Africa will also be critical in ensuring that food can flow freely across borders to meet local demands (OECD, 2022).

Conclusion and Recommendations

The Russia-Ukraine war has significantly impacted food security in Nigeria due to the country's reliance on imported food products, especially cereals, from both Russia and Ukraine. The conflict has caused a sharp increase in food prices across Nigeria and West Africa, driven by disruptions in international logistics and the foreign exchange market. The war has affected food exports to Africa, leading to a decline in production, the destruction of food storage facilities, disruptions in international food logistics, and displacement of farmers. Nigeria's reliance on imported agricultural products, particularly cereals from Russia and Ukraine, has made the country vulnerable to the global impacts of the war. Regarding ECOWAS intervention, the study found that the ECOWAS Agricultural Policy (ECOWAP) has not effectively improved food security in Nigeria during the war, primarily due to internal challenges within ECOWAS. The policy has not been able to mitigate the effects of the crisis on Nigeria's food supply. The study suggests the need for United Nations intervention to reinstate the Black Sea Grain Initiative and stabilize ECOWAS

member states by promoting good governance and reducing military interference. This would help

address food security challenges exacerbated by the war.

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