

Effects of the Iran Conflict on Fuel, Fertilizer, and Food Prices in Nigeria

Oliver K. Kirui, Adetunji Fasoranti, Temilolu Bamiwuye, Bedru Balana, Joe Glauber, Charlotte Hebebrand, and Steven Were Omamo

Nigeria faces a new wave of economic pressure from the ongoing Iran conflict, with disruptions around the Strait of Hormuz causing sharp increases in global oil and fertilizer prices and threatening to reverse the recent decline in Nigeria's food inflation. Although Nigeria could benefit from higher oil and fertilizer export revenues due to its expanding domestic refining and urea production capacity, the country remains heavily dependent on imported refined fuel, potash, phosphate, and other fertilizer inputs. Rising transport, logistics, and production costs are already increasing pressure on farmers, food systems, and household welfare. At the same time, however, the crisis presents a strategic opportunity for Nigeria to strengthen domestic refining, expand fertilizer production, deepen regional trade, and reposition itself as a major supplier of fuel and fertilizer across Africa.

Crisis and Opportunity

The ongoing Iran conflict, which began in late February 2026, has triggered one of the most significant global economic shocks in recent years, primarily through disruptions in energy and fertilizer markets. The closure and insecurity around the Strait of Hormuz—a critical artery for global oil, natural gas, and fertilizer trade—has sharply reduced supply and increased oil prices worldwide. The immediate effect has been the tightening of global supply conditions, with global crude oil prices surging above \$100 per barrel, nitrogen fertilizer prices increasing by 40–50 percent, and phosphate fertilizers by 20–30 percent, driven by both actual supply disruptions and heightened risk expectations in global markets.

The Gulf countries' combined energy and fertilizer exports are vital to global agricultural supply chains. Some 30 percent of global fertilizer trade transits through the Strait of Hormuz, including close to 40 percent of global urea trade, 30 percent of ammonia, 26 percent of diammonium phosphate (DAP), 13 percent of monoammonium phosphate (MAP), and up to 50 percent of sulfur. Sulfuric acid is an essential raw material for making phosphoric acid, the key component of phosphate fertilizers, while ammonia is a key input for nitrogen fertilizers. Disruptions to the flows through this corridor, therefore, directly affect fertilizer markets worldwide.

For Nigeria, the situation presents a paradox. As an oil-producing nation, Nigeria can benefit from higher crude prices that boost export revenues and potentially reduce poverty and undernourishment. Nigeria also stands to benefit from higher fertilizer prices, having become a much more significant producer of ammonia and urea and exporter of urea in recent years. This possibility is supported by [IFPRI's Food Policy Model \(FPM\) simulations](#), which suggest the country could experience net welfare gains under scenarios where increased earnings from oil and fertilizer exports outweigh rising domestic price pressures.

At the same time, however, Nigeria's heavy dependence on imported refined petroleum products, food, and industrial inputs leaves the economy highly vulnerable to imported inflation. The fertilizer sector illustrates this dual exposure clearly. Despite Nigeria's substantial ammonia and urea production and urea exports, nearly all (99.8 percent) of the country's fertilizer imports, including ammonium sulfate, MOP (muriate of potash), and DAP, come from China, Russia, and Morocco. Nigeria's fertilizer blending capacity depends almost entirely on these three imported raw materials, which it combines with domestically produced urea to produce NPK fertilizers (nitrogen-phosphorus-potassium). Thus, any disruptions to these supply corridors and severe restrictions in the Strait of Hormuz directly affect Nigeria's NPK blending capacity.

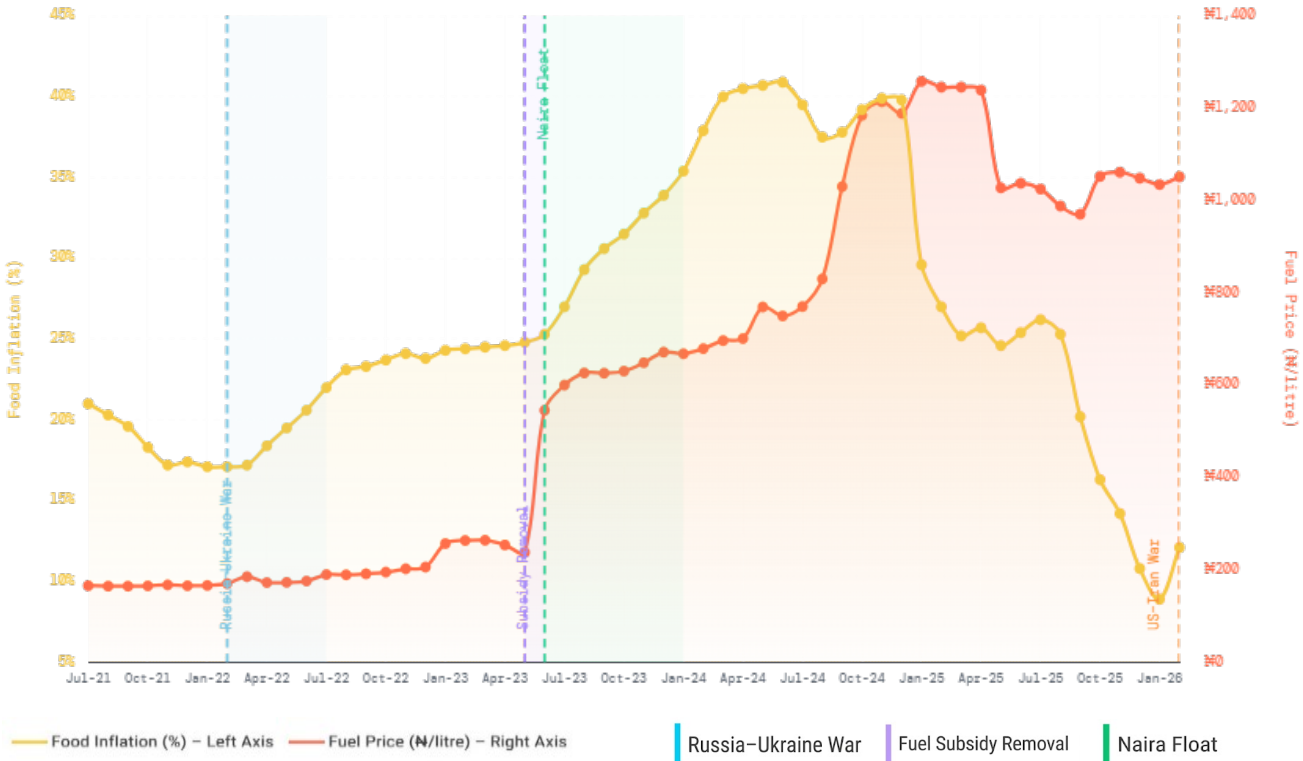
The current crisis has hit Nigeria at a particularly vulnerable moment, striking through hikes in fuel, fertilizer, and food prices, while the country is still struggling to recover from the impacts of recent shocks including COVID-19 and the Russia-Ukraine war. Fuel price increases after the government's decision to remove its fuel subsidy led to food price inflation that reached almost 40 percent in July 2024, and today stands at about 15 percent. Floating the naira exchange rates, beginning in mid-2023, compounded the damage; weakening the power of the currency has increased the cost of imported agricultural inputs, including fertilizers, seeds, and agrochemicals.

Nigeria's position in this shock is structurally different from previous global disruptions. On the one hand, Nigeria's significantly expanded fertilizer and crude export capacity creates a potential upside through export earnings and global market repositioning. On the other hand, the economy remains highly exposed through refined fuel imports, logistics costs, foreign exchange pressures, and imports of fertilizers and intermediate inputs. This complexity makes the policy response particularly consequential. Thus, rather than a simple "winner versus loser" story, the analysis that follows is organized around three interconnected dimensions: (1) the transmission channels through which the Iran conflict reaches Nigeria's food and energy systems; (2) the short- versus medium-term adjustment dynamics as markets, firms, and households respond; and (3) the strategic implications for Nigeria's agrifood and energy transition agenda.

Food Price Inflation

Figure 1 illustrates the strong link between major economic shocks and sharp rises in food price inflation and fuel prices from 2021 to 2026 in Nigeria. Both metrics were relatively stable until early 2022, when the Russia-Ukraine war disrupted global grain and fertilizer supplies, triggering an immediate surge in food inflation. This inflation was amplified in 2023, when Nigeria removed the fuel subsidy and allowed the naira to float, which together caused fuel prices to skyrocket. Food inflation reached 40.9 percent in June 2024, as higher transport and production costs rippled through the food system. According to Nigeria's National Bureau of Statistics, food inflation showed a slow decline of around 21–23 percent by mid-2025, due to relative stability of the naira, tightened monetary policy, and good harvests that increased food supply in some regions. However, the higher fuel prices triggered by the Iran conflict may reverse this downward trend in food prices.

Figure 1: Economic shocks, food inflation, and fuel prices, 2021–2026



Source: National Bureau of Statistics (NBS).

Prices have risen not because of reduced supply of food but primarily due to increased costs at every stage of the value chain. This reflects a classic cost-push inflation dynamic (where higher production, transport, energy, and marketing costs drive up food prices even without a significant reduction in food supply), reinforced by structural constraints within the domestic economy. Evidence from previous global shocks, including the 2008 food crisis, the COVID-19 pandemic, and the Russia-Ukraine war, suggests that such conditions often lead to sustained food inflation for extended periods, particularly when input and energy costs remain elevated.

Fertilizer Value Chain: Growth and disruptions

Figure 2 illustrates the structural transformation of Nigeria’s fertilizer sector over the past 15 years. Between 2010 and 2025, domestic fertilizer production increased dramatically, from roughly 70,000 tons to more than 4.2 million tons.¹ Over the same period, fertilizer exports expanded from approximately 20,000 tons to nearly 3 million tons, while domestic consumption grew from around 400,000 to slightly more than 1 million tons.

Despite this significant industrial expansion, fertilizer imports have remained a persistent and highly volatile component of Nigeria’s fertilizer supply system. In particular, imports of NPK fertilizers and their key raw material components, including DAP, MOP, and ammonium sulfate, continue to play a critical role in meeting domestic demand.

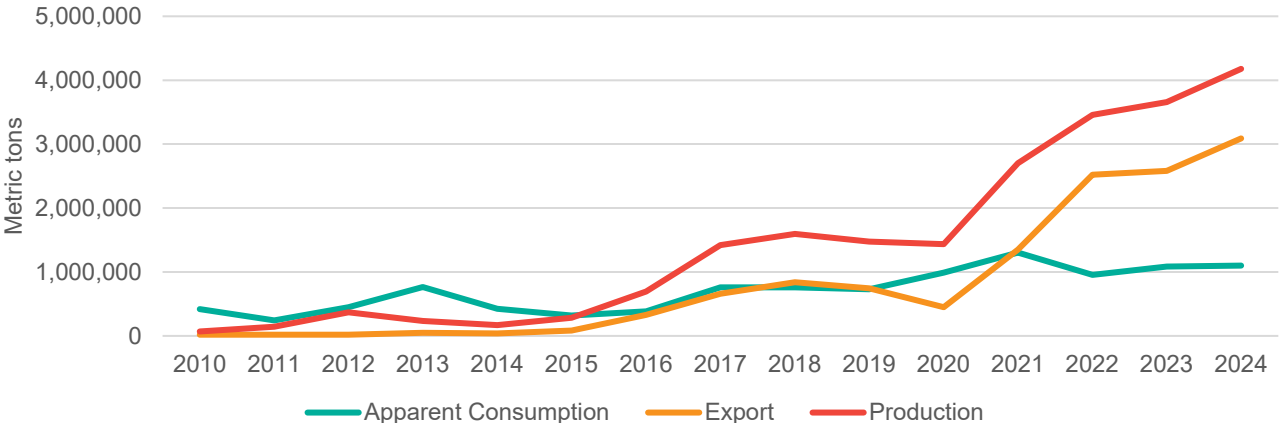
¹ All tons are metric tons.

As shown in Figure 3, this continued dependence on imported raw materials suggests that domestic production, despite its scale and recent growth, still depends on foreign supply of potash and phosphate, which are not produced within the country, as well as imports of sulfuric acid. This highlights an important structural characteristic of Nigeria’s fertilizer sector: even as local manufacturing capacity (mainly urea and ammonia) expands significantly, the sector remains deeply integrated into global commodity and input markets. Moreover, a substantial share of domestically produced urea is currently exported to large international markets, such as Brazil, India, and the United States, where demand and foreign exchange earnings are attractive.

Nigeria’s fertilizer sector therefore remains structurally vulnerable to external shocks. Both domestically produced fertilizers and imported inputs are tied to international commodity prices, meaning that global disruptions are transmitted into the domestic economy through higher production costs, supply uncertainty, and price volatility. With 40 percent of global urea exports originating from the Gulf region, market disruptions from the current crisis have triggered rapid price responses, including a 59 percent increase in urea prices in a single month, up from an average of \$490 to \$780 per ton. For Nigeria, the timing of these disruptions is particularly critical. The planting season for major staple crops (including maize, rice, and cassava) typically runs from March through May/June. In 2024, more than 53 percent of Nigeria’s fertilizer imports arrived during the first and second quarters of the year, precisely the period now most exposed to supply disruptions.

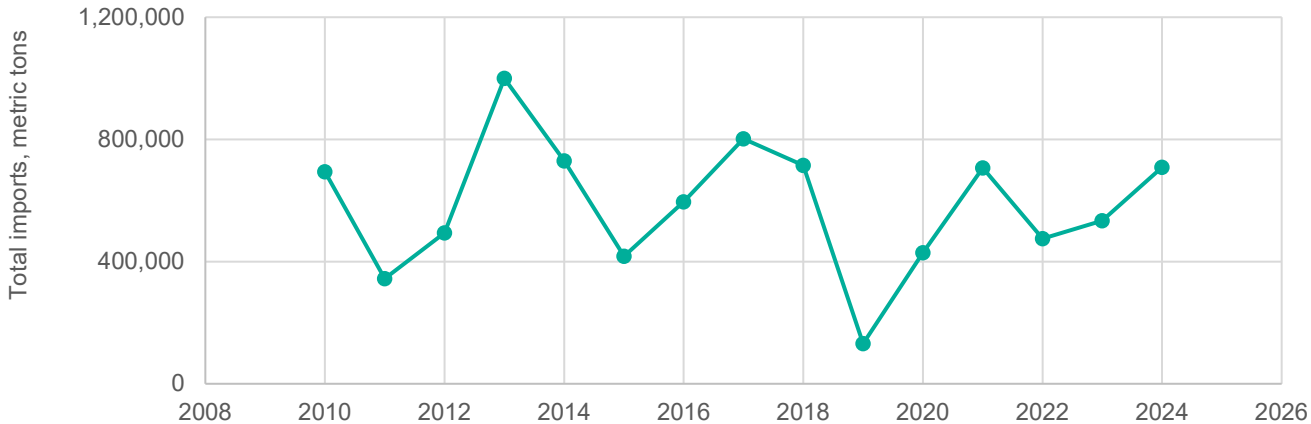
This situation raises policy considerations around the allocation of Nigeria’s growing urea output between export markets and national and regional agricultural needs. Fertilizer application rates across West and Central Africa remain among the lowest globally, and at the continental level, Africa’s heavy reliance on fertilizer imports leaves its agricultural systems highly vulnerable to energy price shocks, geopolitical tensions, export restrictions, and rising freight costs. This raises important questions about whether a larger share of production should be directed toward strengthening regional food systems and agricultural productivity closer to home, which would, in turn, require greater efforts to improve national and regional logistics and last-mile delivery.

Figure 2: Fertilizer in Nigeria: Consumption, export, and production, 2010–2024



Source: Fertilizer Technical Working Group (FTWG)/ AfricaFertilizer.

Figure 3: Fertilizer imports in Nigeria, 2008–2026



Source: Nigeria Customs Authority/AfricaFertilizer.

The situation also reopens important policy debates around agricultural input supports. Following the removal of fuel subsidies in 2023, fertilizer subsidies remain a politically and economically sensitive issue in Nigeria. Historically, government-supported fertilizer distribution initiatives, including the Growth Enhancement Support (GES) Scheme introduced under the Agricultural Transformation Agenda in 2011 and implemented from 2012, were designed to improve farmers’ access to subsidized fertilizer and improved seeds while reducing their exposure to input price volatility. The GES scheme utilized an electronic wallet (e-wallet) system to deliver subsidies directly to farmers and represented a significant shift from previous distribution approaches. However, challenges related to targeting, coverage, logistics, and timely delivery often limited its effectiveness and reach. With fertilizer prices now rising sharply in response to the Iran-related disruptions and broader global market uncertainties, discussions around reinstating, expanding, or redesigning targeted fertilizer subsidy and voucher programs are likely to regain prominence as policymakers seek to cushion farmers from escalating production costs and safeguard domestic food production.

Support is particularly important because fertilizer demand among Nigerian farmers, especially smallholders operating under severe liquidity constraints, is highly price sensitive. As fertilizer prices increase, farmers typically reduce application rates, scale back cultivated area, or switch to less input-intensive crops. While these responses may be rational coping strategies at the household level, collectively they contribute to lower agricultural productivity, tighter food supply conditions, rising food prices, and ultimately, heightened food insecurity.

Oil Price Surge: Fuel costs hit farmers and distribution chains

Nigeria’s downstream energy sector has undergone a notable structural transformation in recent years, with increased refinery capacity. According to the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA), 62.47 percent of premium motor spirit (petrol/gasoline) consumed in 2025, equivalent to approximately 11.85 billion liters, was imported, while domestic refineries accounted for the remaining 37.53 percent. By February 2026, the balance had reversed dramatically, with domestic refineries estimated to supply about 92 percent of Nigeria’s daily petrol requirements. Much of this increase in local refining capacity was driven by the ramp-up of the Dangote Refinery.

Diesel and other refined petroleum products have shown similar trends toward increased local supply. This transition was enabled largely by the Government of Nigeria’s downstream petroleum sector reforms, including the removal of fuel subsidies in May 2023 and the deregulation of pump prices. These reforms created the commercial incentives necessary for viable large-scale domestic refining operations.

Nevertheless, increased domestic refining has not insulated consumers from rising fuel costs. Petrol prices in Nigeria have surged dramatically since the removal of fuel subsidies in May 2023—rising from around ₦195 per liter to over ₦1,248 per liter by June 2026, a more than fivefold increase in response to global crude oil market dynamics. Diesel prices have followed a similar trajectory.

This development presents a complex macroeconomic dynamic. On one hand, higher oil prices generate a positive terms-of-trade effect through Nigeria’s exports. Government revenues are likely to exceed budget benchmarks, while improved foreign exchange inflows could provide short-term fiscal relief. Nigeria’s external sector remains heavily dependent on hydrocarbon exports despite ongoing efforts to diversify its exports. Crude petroleum products continue to account for the bulk of export earnings and foreign exchange inflows, while non-oil exports remain comparatively limited. Fertilizer exports, particularly urea, have expanded significantly in recent years following increased domestic production capacity associated with the Dangote Fertilizer Plant and related investments. Nevertheless, fertilizer exports still constitute a relatively small share of total export revenues compared with crude oil and petroleum products. Consequently, fluctuations in global oil prices continue to exert a dominant influence on Nigeria’s exchange rate dynamics, fiscal position, import costs, and domestic fuel pricing environment (NBS Foreign Trade Statistics, 2024–2025; CBN External Sector Reports).

On the other hand, Nigeria remains highly exposed to broader price shocks. Global crude prices continue to transmit into the domestic economy through higher feedstock costs, exchange rate pressures, and rising logistics expenses. Increased feedstock costs for domestic refiners place upward pressure on pump prices regardless of whether refining occurs domestically or abroad. The Iran conflict’s impact on global crude markets pushed Dangote’s gantry price from ₦1,175 to ₦1,245 per liter, with pump prices in several states climbing to nearly ₦1,400 per liter by March 2026, with continued volatility. These are some of the highest retail fuel prices ever recorded in Nigeria in nominal terms. That said, a critical comparative context is warranted: Nigeria’s retail petrol price of approximately \$0.91 per liter as of June 2026 remains roughly 40.5 percent below the global average of \$1.53 per liter. However, the burden on Nigerian consumers—whose purchasing power is a fraction of their counterparts’ in higher-income economies—is still high.

These increases affect agriculture directly. Farmers face higher transportation costs, increased fuel expenses for irrigation and mechanization, and rising costs associated with postharvest processing. At the same time, accessing agricultural inputs and transporting produce from farms to markets becomes more expensive. Energy costs therefore operate as a generalized cost-push factor, contributing to inflation across multiple sectors, particularly food. Given Nigeria’s heavy dependence on road transportation for domestic trade and food distribution, these effects are especially pronounced. The result is a more costly distribution system that further amplifies food price pressures.

The implications for food security are severe, although recent [IFPRI Food Policy Model](#) simulations present a nuanced picture. The simulations suggest that Nigeria’s increased export earnings from oil and fertilizers could partially offset welfare losses for some population groups, a finding that warrants further disaggregated analysis as the shock evolves. Nonetheless, Nigeria already faces one of the world’s most severe food insecurity crises. According to the FAO’s *2025 State of Food Security and Nutrition Report*,

approximately 75 percent of the population, equivalent to about 170.4 million people, experience moderate or severe food insecurity. These conditions have been compounded by conflict, economic hardship, and insecurity, particularly in key food-producing regions of the country.

In this context, reduced fertilizer application rates are likely to suppress agricultural yields, increase domestic food prices, and increase dependence on imported staple foods. For many Nigerian households, food already accounts for the largest share of their total expenditure. Further increases in food prices risk placing nutritious and diverse diets beyond reach, with potentially long-lasting consequences for health, nutrition, and human capital development.

In sum, for Nigeria, the Iran conflict's global impacts represent not simply another external shock, but also a multiplier of existing structural vulnerabilities. It threatens to erode hard-won gains in agricultural productivity, food access, and economic resilience, affecting both rural and urban households, and disproportionately harming those least able to absorb additional shocks.

Opportunities for Nigeria?

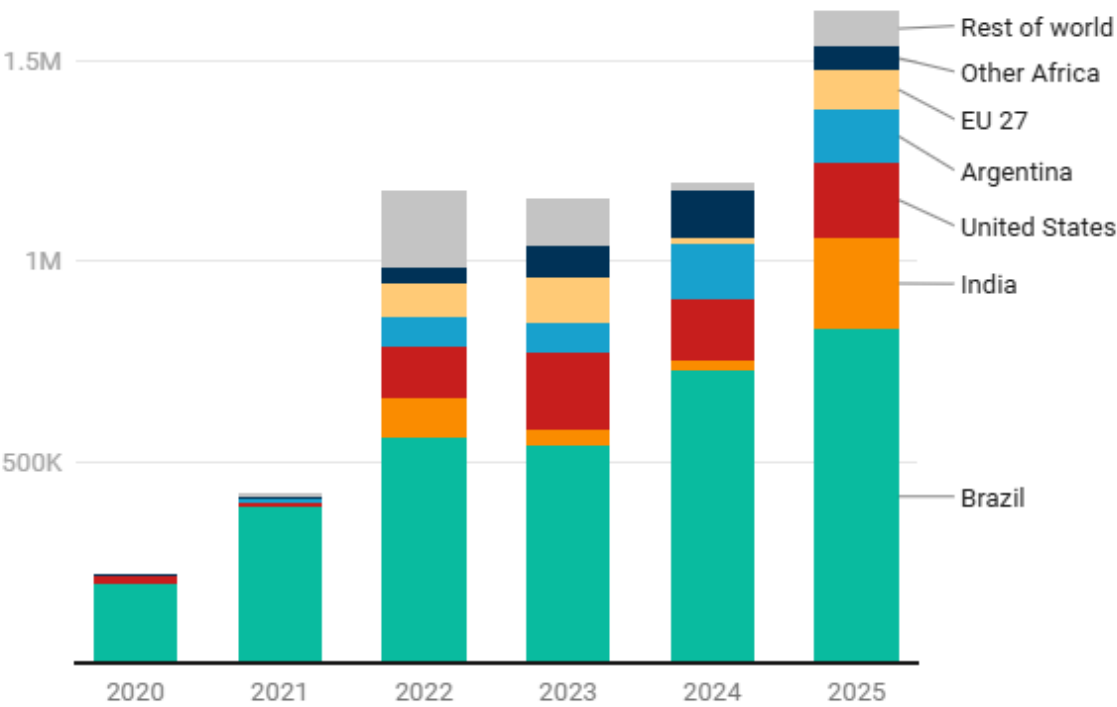
Although the Iran conflict has disrupted global supplies of fertilizer and oil to many countries, including Nigeria, it has also created a potential strategic opening for economic transformation. Nigeria's expanding domestic refining and fertilizer production capacity, anchored by the Dangote Refinery and Dangote Fertilizer plants, positions the country more favorably than many of its continental peers to convert short-term disruptions into longer-term structural gains. These opportunities include increased export revenues, job creation, industrial expansion, and the emergence of Nigeria as a major regional supplier not only of crude oil, as historically has been the case, but also of refined petroleum products and fertilizers across Africa.

Fertilizers

Dangote Fertilizer operates Africa's largest granulated urea fertilizer complex, with an annual production capacity of approximately 3 million tons of urea and ammonia. At present, a substantial share of this output is directed toward large export markets (Figure 4). A comparatively smaller share serves domestic Nigerian demand and regional African markets, where fertilizer application rates remain among the lowest globally. However, as global fertilizer prices rise and traditional supply chains face disruptions linked to the Iran conflict, demand for Nigerian-produced fertilizer has increased significantly, particularly across West, Central, and East Africa, where supply gaps are widening.

Nigeria's geographic position outside the immediate conflict zones, combined with the relative stability and scale of its production facilities, provides the country with an important structural advantage over traditional producers currently affected by the crisis. There are also reports of plans to further expand Nigeria's fertilizer production capacity, potentially enabling the country to increase exports while simultaneously improving fertilizer availability across the region. However, balancing export ambitions with domestic and regional food security needs will require deliberate and carefully calibrated policy choices.

Figure 4: Global urea imports from Nigeria, 2020–2025, in metric tons



Source: TDM (Trade Data Monitor), from reporting importers. Tonnage in nitrogen equivalents. https://www.datawrapper.de/_y92zn/

Energy

The energy sector tells a similarly important story. Nigeria consumes an estimated 50–60 million liters of petrol per day, accounting for nearly one-fifth of Africa’s total demand. As a result, domestic fuel availability and pricing remain extremely sensitive to developments in global energy markets. As recently as 2025, approximately 63 percent of petrol consumed domestically was imported, with local refineries supplying the remainder. By February 2026, however, the situation had changed significantly, with domestic refineries, led primarily by the Dangote Refinery, accounting for an estimated 92 percent of Nigeria’s petrol supply. Commissioned in 2023 and reaching near-full operational capacity in early 2026, the refinery has rapidly altered the country’s downstream energy landscape.

The impact of this transition extends well beyond Nigeria’s borders. As the Iran conflict has disrupted the flow of refined petroleum products into African markets, Dangote Refinery has emerged as an increasingly important regional supplier, providing refined products to Cameroon, Côte d’Ivoire, Ghana, and other import-dependent economies across the continent. In doing so, Nigeria has helped cushion some of the immediate effects of the crisis both domestically and regionally. This evolving role positions the country to capture a larger share of intra-African trade in refined petroleum products, strengthen its economic influence across the continent, and assume a more prominent role in Africa’s emerging energy security and fertilizer supply architecture for the long term. At the same time, regional fertilizer procurement, that is, the joint purchasing and coordination of fertilizer imports at the regional level by ECOWAS members could facilitate Nigeria’s access to fertilizer supplies during a period of global shortage while improving supply security across West Africa.

Conclusion

The Iran conflict highlights Nigeria's continued structural vulnerability to global shocks despite its status as a major oil producer. Rising fuel, fertilizer, and food prices underscore the deep interconnections between global geopolitical developments and domestic welfare outcomes. Although the immediate effects of the crisis are inflationary and economically disruptive, the situation also presents a strategic opportunity for Nigeria to deepen industrial capacity, strengthen food systems, and reduce dependence on imports, in addition to providing fuel and fertilizers across Western Africa. The extent to which these opportunities translate into long-term gains, however, will depend critically on the speed, coherence, and effectiveness of policy responses.

However, these potential gains should be interpreted cautiously. Higher fertilizer prices and potential constraints in fertilizer access could significantly undermine agricultural productivity, particularly for small-holder farmers and vulnerable households already facing rising food costs and declining purchasing power. Reduced fertilizer affordability may weaken crop yields, constrain food production, and exacerbate food insecurity risks, especially among low-income rural populations. The extent to which emerging opportunities translate into broad-based and inclusive long-term gains will therefore depend critically on the speed, coherence, and effectiveness of policy responses aimed at stabilizing input markets, protecting vulnerable households, and strengthening domestic food system resilience.

ABOUT THE AUTHORS

Oliver K. Kirui (O.K.Kirui@cgiar.org) is a Research Fellow and Country Program Leader – Nigeria Strategy Support Program (NSSP) and Ghana Strategy Support Program (GSSP) in the Development Strategies and Governance Unit, IFPRI, Abuja, Nigeria.

Adetunji Fasoranti (afasoranti@outlook.com) is a consultant in the Development Strategies and Governance Unit, IFPRI, Abuja, Nigeria.

Temilolu Bamiwuye (bamiwuyetemmy@gmail.com) is a consultant in the Development Strategies and Governance Unit, IFPRI, Abuja, Nigeria.

Bedru Balana (B.Balana@cgiar.org) is a Senior Research Fellow with the Agrifood Innovation and Resilience Unit, IFPRI.

Joe Glauber (J.Glauber@cgiar.org) is a Research Fellow Emeritus with the Director General's Office, IFPRI.

Charlotte Hebebrand (C.Hebebrand@cgiar.org) is Director of Communications and Public Affairs, IFPRI.

Steven Were Omamo (S.W.Omamo@cgiar.org) is Director of the Development Strategies and Governance Unit, IFPRI.

ACKNOWLEDGMENTS

We gratefully acknowledge funding from the CGIAR Policy Innovations Program.

The Nigeria Strategy Support Program (NSSP) is managed by the International Food Policy Research Institute (IFPRI) and is financially supported by CGIAR Policy Innovations Program. This publication has been prepared as an output of the Scaling for Innovation Program and has not been independently peer reviewed. Any opinions expressed here belong to the author(s) and are not necessarily representative of or endorsed by IFPRI.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

A sustainable world free of poverty, hunger, and malnutrition

IFPRI is a CGIAR Research Center

1201 Eye Street, NW, Washington, DC 20005 USA | T. +1-202-862-5600 | F. +1-202-862-5606 | Email: ifpri@cgiar.org | www.ifpri.org | www.ifpri.info

© 2026 International Food Policy Research Institute (IFPRI). This publication is licensed for use under a Creative Commons Attribution 4.0 International License (CC BY 4.0). To view this license, visit <https://creativecommons.org/licenses/by/4.0>.