



Price Shocks and Associated Policy Responses Stemming from the Russia-Ukraine War and Other Global Crises: Ghana

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1. Price Analysis

An upward surge in the prices of fuels, fertilizers and food have had significant implications for food security in Ghana. Since 2020, the combined effects of the Covid-19 pandemic, droughts affecting crop/livestock production, and the more recent Russia-Ukraine War has led to significant global price shocks. As a small open economy, Ghana is generally a price taker and strongly affected by any global economic instability, including price hikes. Thus, these global disturbances have resulted in a high cost of fuel and fertilizers required for food production and distribution in Ghana.

Despite significant disruptions in the global supply of fuel caused by the Covid-19 pandemic, it did not result in notable price hikes in Ghana through the end of 2021. This is because, during this time period, both global and local demand for oil was curtailed, particularly when Covid-19 movement restrictions were enforced. However, the onset of the Russia-Ukraine War in March 2022

seems to have triggered a sharp increase in the price of petroleum products in Ghana (Figure 1a). Specifically, the price of refined oil increased incrementally from less than 300 Ghana pesewas (Gp) per liter in January 2022 and peaked at over 1,300 Gp per liter in December 2022. (A Ghanaian pesewas 1/100 of a Ghanaian cedi (GH¢).) Given that many sectors of the Ghanaian economy (including electricity

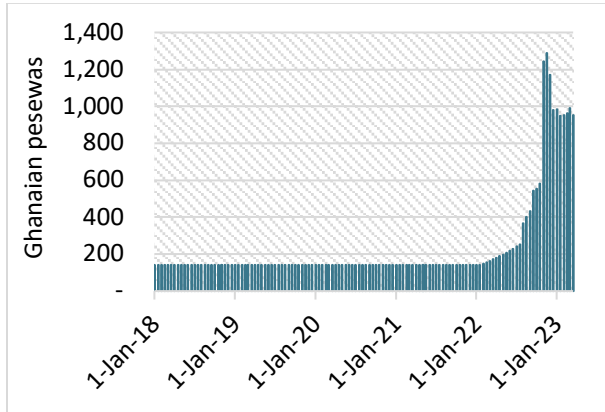
Key Messages

1. Between 2019 and 2023, Ghana experienced three major crises, namely the Covid-19 pandemic, drought, and the fallout of the Russia-Ukraine War.
2. These crises created severe disruptions in global supply chains, causing the prices of fuel, fertilizer, and food to drastically increase in Ghana.
3. The Ghanaian government responded to these price shocks with various policies and programs. Some of these responses were reactive, while others were proactive.
4. Ghana should explore alternative import sources for inorganic fertilizers and should strengthen public and private sector efforts to produce and distribute organic fertilizers.
5. Resilience cannot be built during a crisis or shock. Rather, long-term efforts to build resilience should remain a sustained priority.



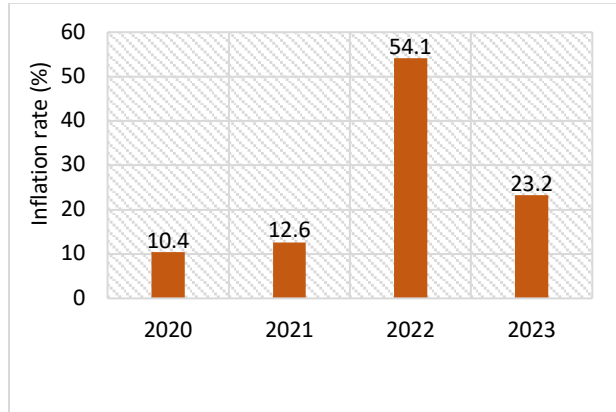
generation, transportation, and manufacturing) depend on petroleum products, this has had ramifications for prices of goods and services. Food price inflation rose to its highest point in over 30 years from nearly 10.4% in 2020 to 54.1% in 2023 (Figure 1b). This has eroded the purchasing power of consumers and potentially pushed the poor and vulnerable further down the poverty line.

Figure 1a: Prices of refined oil



Source: National Petroleum Authority

Figure 1b: Food inflation in Ghana (2020-2023)



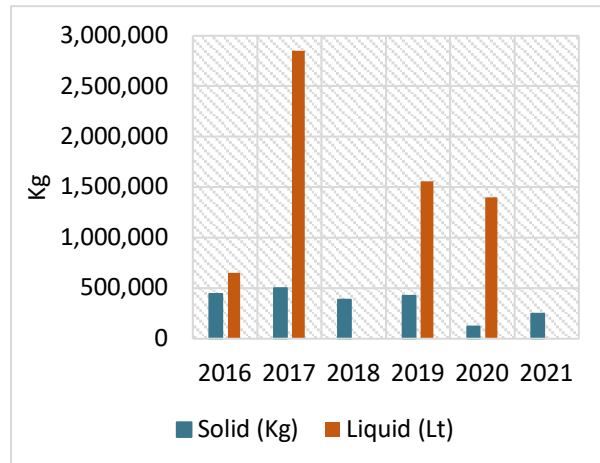
Source: Ghana Statistical Service

Prices of fertilizers also increased sharply (Figure 2b). This prompted a decrease in the quantity of fertilizers imported as public sector subsidies were generally withdrawn (Figure 2a). Retail prices of fertilizers began increasing in 2020, albeit at a relatively slow rate. This was a result of the Covid-19 pandemic and the restrictive measures which aimed to curtail the spread of the virus and ultimately caused a break in the global fertilizer supply chain. While this could have resulted in a decrease in fertilizer availability in Ghana, the effects were minimal because preparation for the 2020 production season had already been undertaken in 2019. According to experts who participated in key informant interviews and workshop discussions, the decline in fertilizer availability in 2021 forced local retailers to increase the price of fertilizers, which in turn decreased demand for fertilizer and resulted in reduced fertilizer application. Although impacts of the Covid-19 pandemic were somewhat muted, fertilizer prices rose dramatically when the Russia-Ukraine War began in 2022, and by 2023, prices of fertilizers had more than doubled (Figure 2b). Note that Russia is a key player in the supply of fertilizers, and the onset of the war resulted in disruptions in the export of their fertilizer products.

The price of major staple foods in Ghana (maize rice and cassava) increased due to the three global crises under study. For instance, Figure 2 shows that the price of maize saw significant increases beginning in 2020. In 2020, this was due to restrictive measures introduced during the Covid-19 pandemic. In 2021, this was due to a mild drought in major agricultural production centers. In 2023, the high rates of inflation induced the government to intervene by restricting the export of maize. Consequently, the price of maize began to drop.

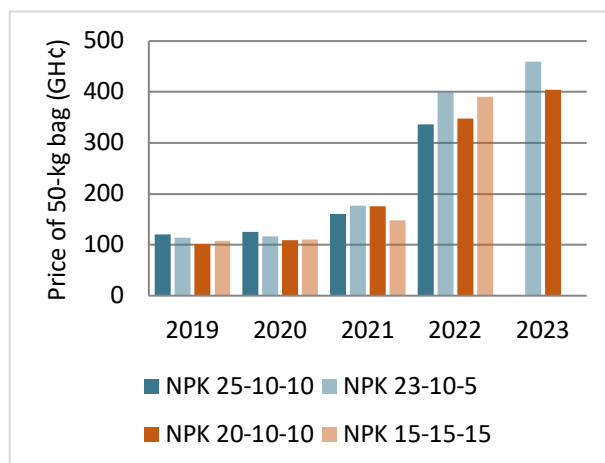


Figure 2a: Ghana's fertilizer imports



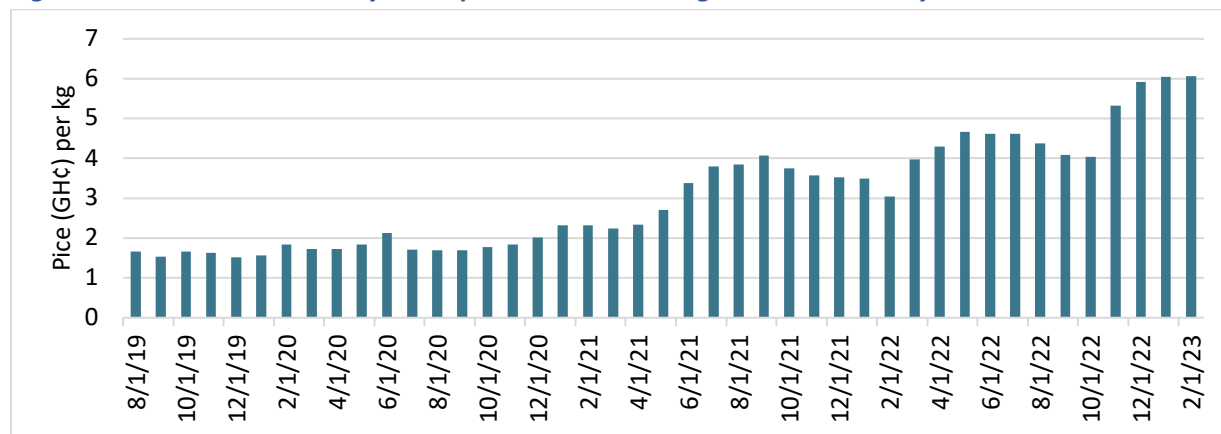
Source: Ministry of Food and Agriculture, Ghana

Figure 2b: Retail prices of fertilizers in Ghana



Source: Ministry of Food and Agriculture, Ghana

Figure 3. White maize monthly retail prices in Ghana: August 2019-February 2023



Source: Authors' analysis of data from the World Food Programme

2. Policy responses

The Ghanaian government responded with various policies, plans and programs to these price shocks which emanated from the Covid-19 pandemic, droughts, and the Russia-Ukraine War. Some of these policies and programs were reactive, while others were proactive. Reactive policies include those instituted during the crises to mitigate their negative effects. Proactive policies were those which existed before the crises and their implementations were revamped and/or expedited to mitigate the negative effects of the crises. Table 1 shows the timeline for the initiation of these policies.

Response to the Covid-19 pandemic

During the Covid-19 pandemic, lockdowns and restrictions on social gatherings, which were intended to limit the spread of the virus, resulted in an increase in the price of food commodities. Some businesses collapsed, and some people in the informal sector lost their livelihoods. The government's first line of action to mitigate these economic hardships was to introduce the Coronavirus Alleviation Programme (CAP), a short-term policy response which included various economic stimulus measures. Notable among



these was the provision of free water and electricity for three months to all Ghanaians. The government also introduced another short-term policy targeted at revamping the activities of Micro, Small, and Medium Enterprises (MSMEs). Thus, through the Coronavirus Alleviation Programme-Business Support Scheme (CAP-BuSS), some MSMEs received soft loans to revamp their operations.

In 2021, the government also introduced a long-term policy response called the Ghana CARES Obaatanpa. This policy sought to consolidate the gains of the first two short-term policies and optimize the implementation of government flagship programs such as the “Ghana Beyond Aid” agenda. Although this policy was launched with strong optimism, key informants noted that economic growth has not improved significantly, inflation has gone up, and the country’s public debt keeps growing. While the government’s short-term policy responses to the pandemic were perceived as very appropriate, the long-term measures seem not to have been quite as effective. This failure is attributed to the additional unexpected shocks emanating from the Russia-Ukraine War.

Table 1: Timelines of policy responses

Global Crises	Policies, Plans, and Programs	Timeline					
		2013	2017	2020	2021	2022	2023
Covid-19	Coronavirus Alleviation Programme (CAP)						
	Coronavirus Alleviation Programme-Business Support Scheme (CAP-BuSS)						
	Covid-19 Alleviation and Revitalization Enterprise Support						
Droughts	One-District-One-Dam initiative						
	Development of drought-tolerant crop varieties						
Russia-Ukraine War	National Fertilizer Policy						
	Planting for Food and Jobs						
	Gold for Oil Programme						

Source: Authors’ review of national policy documents

Response to drought

During the 2021 drought, the government made use of two long-term policies to respond to the crisis and mitigate its adverse effect on crop productivity and food security. First, a revamp of the One-Village-One-Dam initiative led to the reconstruction and further construction of some earth dams and dug-outs for irrigation purposes. The new dams ensured that farmers in beneficiary communities were able to mitigate the effects of drought and access water for their livestock. Second, the Centre for Scientific and Industrial Research’s (CSIR) development of drought-tolerant maize varieties is expected to improve productivity of maize in times of drought. These two policy responses are viewed by stakeholders as being quite appropriate, and it is expected that they will reduce poverty amongst farmers and improve the country’s food security situation in the long term.

Response to the Russia-Ukraine War

The Russia-Ukraine War induced two major shocks in Ghana, namely an increase in the price of petroleum products and an increase in the price of fertilizers. To respond to the petroleum price increase, the government formulated and implemented the gold for oil short-term policy in 2022 and 2023. This program seeks to reduce the rate of the depreciation of the Ghanaian cedi by using gold in a direct barter to purchase crude oil on the international market. As of the time of writing, prices of petroleum products such as petrol and diesel have generally stabilized, and key informants expressed satisfaction with this initiative.



To respond to the increase in fertilizer prices, the government renewed its commitments under the national fertilizer policy, the Planting for Food and Jobs program, and the fertilizer subsidy program. These are all long-term policies which could have cushioned Ghana against the price shock. However, while these policies were generally well-designed, key informants noted that they were not implemented well in practice. Nevertheless, the shock of the Russia-Ukraine War motivated the government to expedite their implementation, and according to key informants, this shift in priorities has resulted in farmers' increased adoption and use of locally produced organic fertilizers. Local fertilizer production companies are now scaling up to meet the rising demand for organic fertilizers.

3. Conclusion

This policy brief documented the short- and medium-term impacts in Ghana of the global crises in food, fuel and fertilizer availability and prices. It further examined the government's policy responses to these crises. Our findings point to the following lessons and policy recommendations:

First, resilience cannot be built during a crisis or shock, and long-term commitments to build resilience should not be pushed to the back burner during good times. Although CSIR has the necessary human resources and physical infrastructure to conduct research on agriculture and food systems, there is a lack of adequate and predictable operational capital to commission sustained research. The government should ensure that resources are consistently made available for long-term breeding programs to improve Ghana's stock of drought-tolerant seed varieties.

Second, as Ghana is not a major producer of inorganic fertilizers, any global bottleneck in the supply of these fertilizers will have severe ramifications. It follows that public and private sector partnerships in the production and distribution of organic fertilizers, as well as education on the use of these fertilizers, will be crucial. In addition, Ghana should explore alternative import sources for inorganic fertilizers. For instance, Nigeria is gradually becoming an important producer of inorganic fertilizers in Africa, and they could become a strong ally for Ghana in the long run. Plans to locally produce inorganic fertilizers with petroleum gas from western Ghana should also be given additional impetus.

Third, in developing long-term policy responses to revamp businesses through government interventions, it is important that local authorities are involved from beginning to the end. Some communities complained about the low quality of the earth dams constructed under the One-Village-One-Dam initiative. These communities do not have the leverage to query contractors. This should change to ensure that every cedi invested to prepare for shocks yields the maximum benefit.

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