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The Russia-Ukraine Conflict: Impacts on Commodity Markets in Uganda

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Introduction

Ukraine and Russia are major players in the global grain, fertilizer, oil, and natural gas markets. The current Ukraine-Russia crisis has disrupted trade and commodity flows and brought about increases in international prices for most primary commodities. Prices of most commodities were expected to be significantly higher in 2022 compared to 2021 and are projected to remain high in the medium term. Some of these changes in global prices will be reflected in local prices depending on the extent of reliance on global trade. Markets for staple foods are one of the channels through which the disruption is being experienced by local communities, reaching far beyond major urban centers. This brief analyzes the short-run effects of the Ukraine-Russia crisis on commodity prices across local markets in Uganda.

In general, many African countries rely on imports to meet domestic demand for food commodities such as wheat, rice, and cooking oil. Most energy needs (fuel and liquified petroleum gas (LPG)) are also met through imports. Numerous countries are exposed to global trade shocks due to the export and/or import of food, fuel, and other commodities. The ongoing Ukraine-Russia crisis and its consequent disruption of global trade is a classic example of such a shock.

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There is evidence that many more African countries are exposed to the ramifications of the crisis than those that are directly involved in global trade. Badiane *et al.*, (2022) provide evidence of a significant contagion effect resulting from a dense network of re-exports into cross-border markets by primary importers, which spreads the disruption to many more countries. Contagion effects are also expected to be seen across commodities, for instance, in the transmission of shocks from commodities that are exported or imported by African countries to their domestically traded substitutes.

This brief focuses on Uganda's capital city, Kampala, examining weekly price data for selected basic food commodities (rice, wheat flour, sugar, and cooking oil), fuel (petrol and diesel) and LPG (cooking gas). Monthly price data for an additional three markets in Mbarara (urban), Gulu and Mbale (rural) were also analyzed for the same set of food and energy commodities. The data was obtained from the Uganda Bureau of Statistics (UBOS), a government agency responsible for collecting and compiling official statistics in Uganda. The prices are recorded in Uganda Shillings (UGX) per kilogram (Kg) of (rice, wheat sugar, and cooking gas) and UGX per liter of cooking oil, petrol, and diesel. The analysis involves tracking price changes from January to June 2022 (for Kampala market) and from January to May 2022 for the other three markets. These price changes are also compared to the observed changes in global prices of the same commodities or their derivatives. Global prices were obtained from the World Bank Commodity Market Outlook data which estimates monthly prices for about 46 commodities in specific markets.¹ The analysis shows how prices in local markets have responded to global changes and the extent to which these changes compare across local markets and with global price movements (World Bank, 2022).

2. Tracking price changes across local markets

For imported commodities, the Ukraine-Russia crisis is expected to have a direct impact on prices in local markets. The impacts may be transmitted directly because of the dependence on imports from the crisis-affected region or transmitted indirectly through a dense network of transborder imports and re-exports from countries that are trading directly with Russia and Ukraine. In addition, price increases may also be the result of higher shipping and transport costs driven by rising fuel prices. Further, a decline in available supplies due to export restrictions by exporting countries and 'hoarding' by re-exporting countries may also drive commodity prices upwards. Prices may also be influenced by local dynamics in production, regional trade, and market interventions by government.

2.1 Price changes for food commodities in urban and rural markets

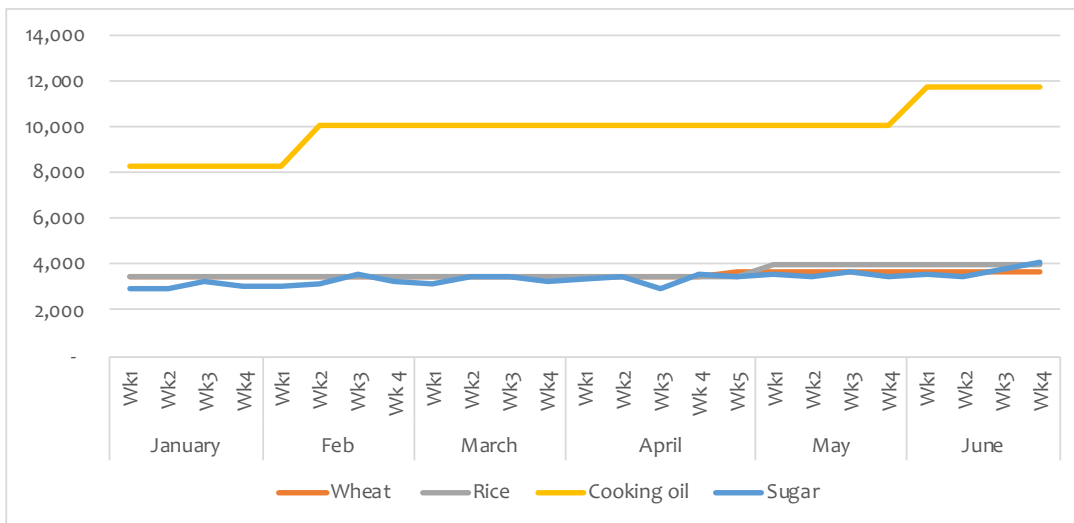
Notable price increases were observed for most commodities since March 2022 in both rural and urban markets. In the Kampala market, cooking oil recorded a sharp price hike of 41% between January and end of June 2022 (Figure 1). There were two price spikes, with the first occurring in the first week of February and the other in the fourth week of May. Uganda is a net importer of cooking oil, importing primarily from Indonesia, Kenya (a neighboring country) and Malaysia. Given Uganda's dependence on imported cooking oil, and global price increases over the period (19% increases from January to May/June 2022) it can be concluded that the rise in domestic prices is driven partly by global trends. Similar spikes in cooking oil prices were observed in Mbarara (11%) and the rural markets of Gulu (30%) and Mbale (11%) as shown in Figures 2, 3 and 4 respectively.

The price of wheat rose modestly in Kampala (6%) from the first week of January to the fourth week of June 2022 (Figure 1). Similar patterns were observed in Mbarara (8%) and Mbale (8%) as shown in Figures 2 and 4, respectively. These price increases were modest compared to the global average of 40% between January and May 2022 (see Table 1).

¹ <https://www.worldbank.org/en/research/commodity-markets>

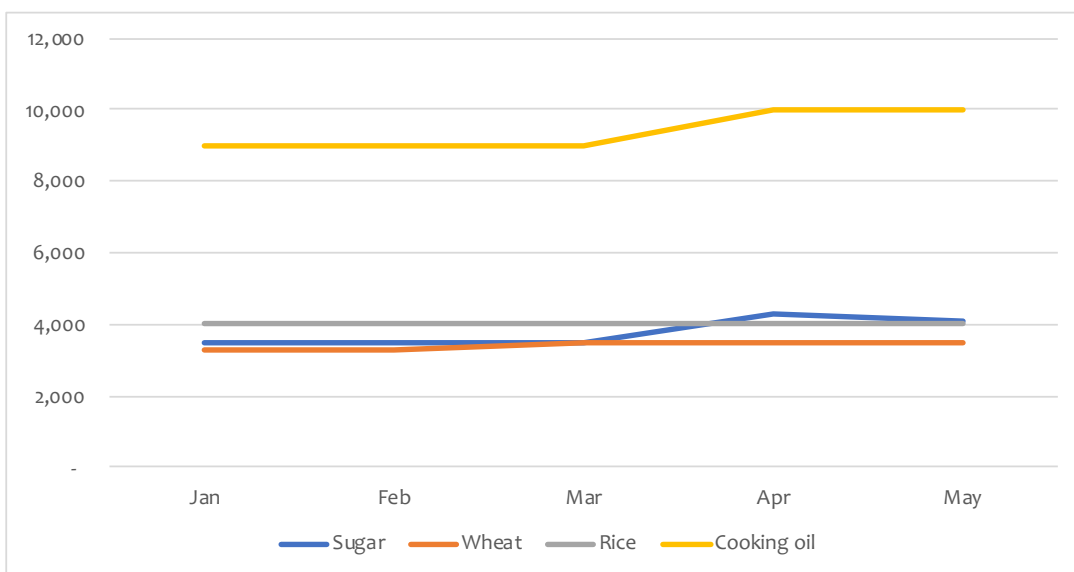
Uganda is a net importer of wheat and Russia is one of the major sources of its wheat imports. One plausible reason for the modest increase in wheat prices could be that wheat is not a major staple commodity in Uganda and other substitutes are available.²

Figure 1: Weekly prices (UGX)³ of food commodities in Kampala (Jan-Jun 2022)



Source: Author's computation based on UBOS data, 2022

Figure 2: Monthly prices (UGX) of food commodities in Mbarara (Jan-May 2022)



Source: Author's computation based on UBOS data, 2022

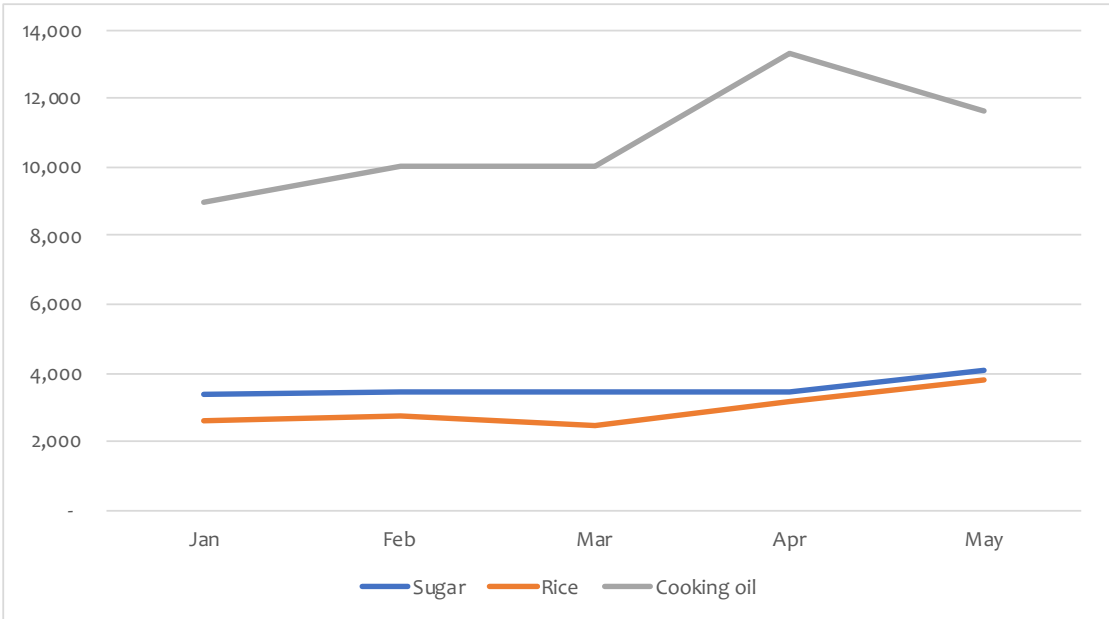
Sugar prices rose between January and May in all the markets considered. The highest increase was seen in Kampala (39%) where the price rose in the fourth week of April and remained high until the end of June (see Figure 1). In Mbarara and Mbale, sugar prices rose by 18% between January and May 2022 (Figure 2 and 4 respectively). In Gulu, sugar prices rose by 21% over the same period (Figure 3). Uganda is a net importer of sugar and domestic prices are expected to shift in response to global prices. However, global average monthly sugar prices rose by a modest 3% (Table 1) during the period of analysis (January to May 2022).

² In May 2022, local print media reported that the government was encouraging its citizens to avoid 'expensive' wheat and consume locally produced cassava instead <https://africa.businessinsider.com/local/leaders/eat-cassava-if-bread-is-expensive-president-museveni-tells-ugandans/gtb4ttz>

³ UGX=Uganda Shillings

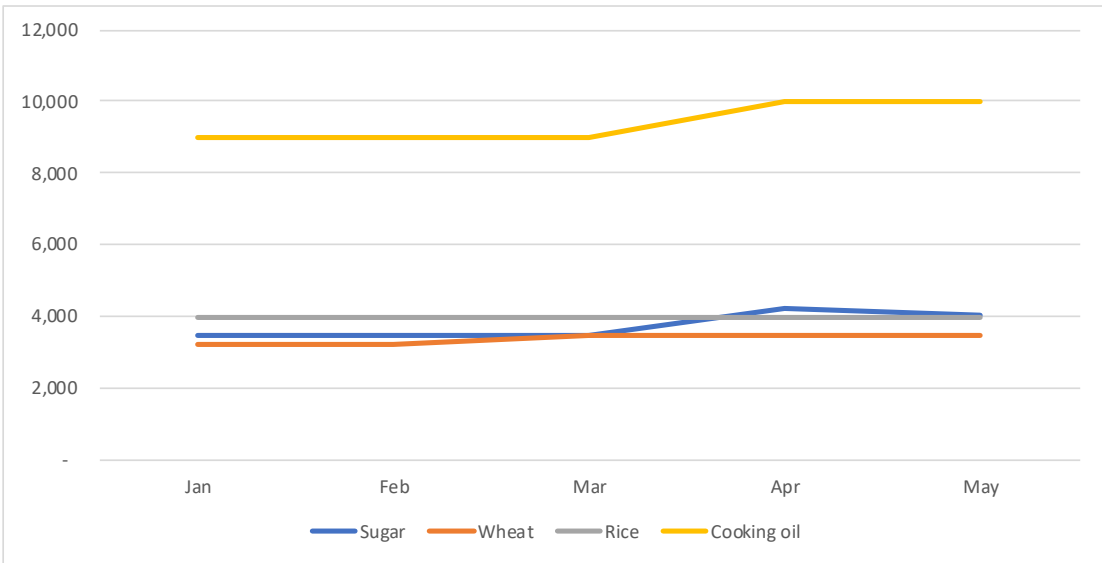
The price of rice remained unchanged in Mbarara and Mbale but increased substantially in Kampala (46%) and Gulu (46%) during the period under analysis. In Kampala, a sharp rise was reported in the last week of April (Figure 1) while in Gulu, the price began to rise in March, through April (Figure 3). Most rice from Uganda is grown in the eastern region (where Mbale is located) and the western region (where Mbarara is located).⁴ Local dynamics in production and supply could explain the stable/unchanged prices in these two markets. Uganda is a net importer of rice with neighboring Tanzania the principal source of rice imports. In 2019, annual production was estimated at 238,000 metric tons (Mt) while annual consumption was about 350,000 Mt, leaving a deficit of over 100,000 Mt that was met through imports. According to FAOSTAT, in 2020, rice imports from Tanzania accounted for 80% of total rice imports into Uganda.

Figure 3: Monthly prices (UGX) of food commodities in Gulu (Jan-May 2022)



Source: Author’s computation based on UBOS data, 2022

Figure 4: Monthly prices (UGX) of food commodities in Mbale market (Jan-May 2022)



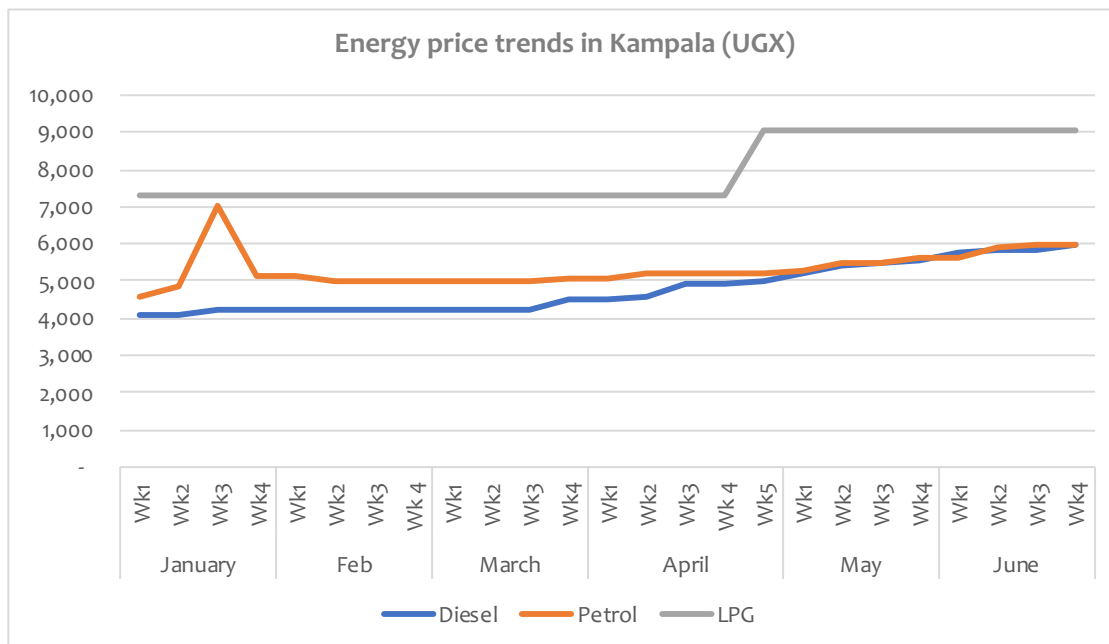
Source: Author’s computation based on UBOS data, 2022

⁴ Government of Uganda, 2009. Uganda National Rice Development Strategy (UNRDS). Ministry of Agriculture, Animal Industry and Fisheries (MAAIF).

2.2 Price changes for energy commodities (fuel and cooking gas) in local markets

The prices of fuel (petrol and diesel) and cooking gas have all risen in the four markets considered in this brief. Price rises for petrol and cooking gas from January to May 2022 have been the same in Gulu, Mbarara and Mbale at 12% and 27% respectively. In Kampala, a higher increase was reported for petrol (30%) while the increase in cooking gas prices (24%) was slightly lower, as shown in Figures 5 and 6. Diesel prices in Kampala rose more sharply by 45% (Figure 1). The price of diesel was not reported in the other markets, and it is therefore not possible to make a comparison, but it is expected that prices would also rise in those markets. The higher petrol prices in Kampala can partly be explained by the slightly longer period under consideration as prices continued to rise through June. Petrol price increases to the end of May 2022 were slightly lower at 22%. The price of fuel is determined by several components: the first (and most critical) is the price per barrel of crude oil (which rose by 30% from January); transportation costs from the nearest port to any of the country's distribution terminals (Uganda imports its fuel mainly through the port of Mombasa); the tax per liter (regulated by the government); the exchange rate; and the behavior of actors in the fuel supply chain. In Uganda's case, it is plausible to conclude that the rise in crude oil prices was the most important contributor to the increase in fuel prices as the other factors had not changed significantly in the recent past.⁵

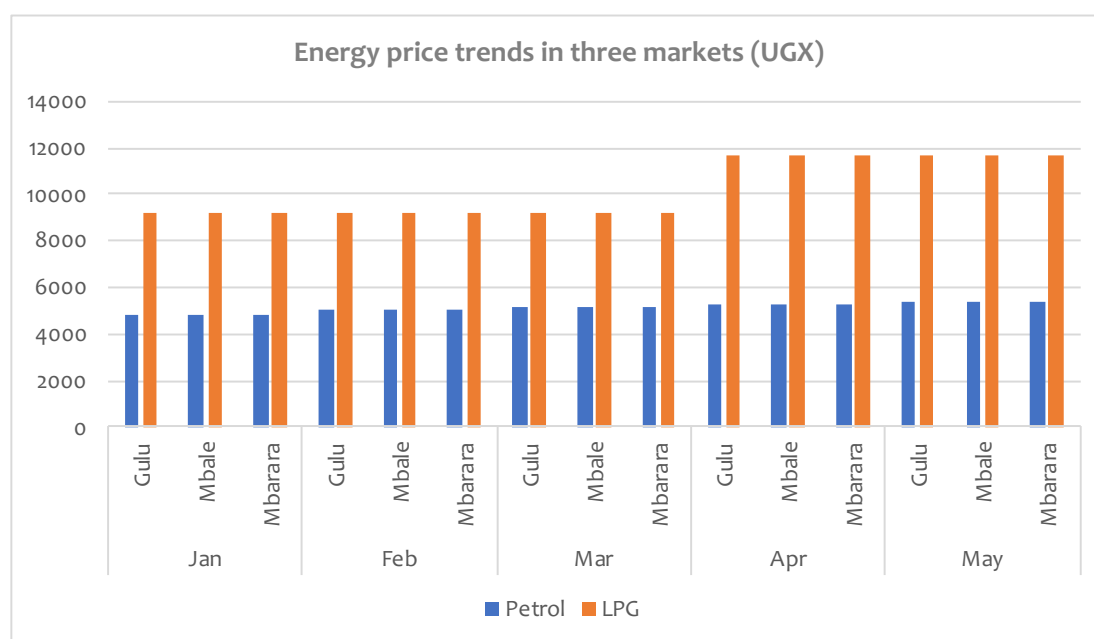
Figure 5: Weekly energy prices in Kampala (Jan-Jun 2022)



Source: Author's computation based on UBOS data, 2022

⁵ Reports in the local print media mainly attribute Uganda's rising fuel prices to external factors. <https://www.monitor.co.ug/uganda/news/national/motorists-feel-the-pinch-as-fuel-prices-continue-to-rise-3857432>

Figure 6: Weekly energy prices in Gulu, Mbale and Mbarara markets (Jan-May 2022)



Source: Author's computation based on UBOS data, 2022

2.3 Comparing price changes in local and global markets

Changes in the monthly averages of commodity prices in Uganda were compared to price changes for the same commodities in global markets. The results are summarized in Table 1.

Table 1: Summary of price changes (January-May 2022): Comparison between local markets in Uganda and global averages

Commodities	Global price change (%)	Change in local urban market (Kampala)	Change in local rural market (Gulu)
Wheat	+40%	+6%	
Sugar	+3%	+39%	+21%
Rice	+10%	+34%	+46%
Cooking oil	+19%	+41%	+30%
Fuel	Crude Oil: +31%	Diesel: +45% Petrol: +30%	Petrol: +12%
Liquefied petroleum gas (LPG)	+28%	+24%	+27%

Source: Author's computation based on UBOS 2022 and World Bank data, 2022

From the results in Table 1, changes in global prices of commodities were to a large extent similarly reflected in Uganda's local markets (both rural and urban). Some non-correspondences are also noted, especially sugar prices which rose sharply (39% in Kampala; 21% in Gulu) in comparison to the global average increase (3%). Global wheat prices increased by 40% from January, while in Kampala only a 6% corresponding rise was observed. This can be explained by the lower dependence on wheat as a staple commodity in Uganda and the availability of substitutes. Energy prices rose in the same direction and partly similar magnitude. A global price increase of 31% for crude oil is reflected in the rise of diesel and petrol prices by 45% and 30% respectively, in Kampala. Similarly, the price of LPG has risen by 24% and 27% in Kampala and Gulu respectively, in tandem with a global price increase of 28%. Based on this analysis, there appears to be strong transmissibility of changes in global prices to local markets, increasing Uganda's vulnerability to international shocks. Local policies and strategies targeted at dampening the effects of such shocks to local consumers are therefore required.

3. Conclusions and implications

This brief assessed the impacts of the Russia-Ukraine crisis on commodity prices in local markets in Uganda and compared them to changes in global prices. The analysis found that there has been a general rise in the prices of food and energy commodities in Uganda, similar to changes at the global level. For some commodities like sugar and rice, local prices rose more sharply than global prices with some differences in price change patterns, observed between rural and urban areas, attributed to local production dynamics.

The price increases are a concern to policymakers because of their negative impacts on the welfare of poor households. Rice, sugar, cooking oil and wheat flour are basic food commodities. One of the short-term solutions is to provide targeted social protection support to the most vulnerable households facing higher food and energy prices, similar to the measures Uganda implemented during the COVID-19 crisis. In addition, measures that facilitate more free intra-regional trade should be adopted and implemented so that emerging shocks can be distributed through transborder commodity trade over a broad area, thereby dampening their intensity. In the long term, boosting local food production and productivity is an effective strategy for reducing exposure and dealing with external shocks in global food markets. The Government of Uganda should continue and intensify funding to agriculture, especially for those programs that aim to increase production and productivity, so the country will be able to offset future global shocks on domestic food prices. Long term investments in energy saving technologies and improvements in energy efficiency are also required.

References:

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