



# Impacts of the Ukraine Crises on Food Security in Kenya and Ethiopia: Options for Regional Trade Collaboration

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## Key findings

- The world economy experienced a slowdown due to two consecutive crises—the Covid-19 outbreak in 2020 and the Russian-Ukraine war that intensified in 2022, prolonging global economic recovery and putting some countries a step away from their track to achieving Zero hunger in 2030. The Russian-Ukraine crisis disrupted global trade in agricultural and non-agricultural products leading to spikes in global prices, especially for wheat and wheat products, oil and agricultural inputs. Although the global prices have subsided to the pre-crisis level, their effects on food security and welfare at the macro and micro economic levels are still being felt.

- In Kenya, the effects on the welfare of the Russian-Ukraine crisis are marginal but disproportionate, with higher-income households, women-headed households, and those in urban set-ups suffering more. Households in rural areas should be compensated between 0.1% and 0.3% of average monthly household food expenditure and between 0.2% and 0.3% for urban households. In Ethiopia, the impact of the crisis reduced the average income of the 25th percentile by 0.86%.
- In Kenya, marginal food insecurity effects were found, with the food poverty incidence and severity increasing by one percentage point (from 56% to 57%-incidence and severity from 11% to 12%) in urban areas. Similarly, the food poverty gap increased by one percentage point in rural areas (from 13% to 14%). The distributional food poverty effect of the crisis weighted more toward the middle-income class than the lower and upper-income categories. Similarly, in Ethiopia, the effect on poverty remained relatively low, yet led to an increase in incidents of poverty by one percentage point. The limited impact on Ethiopia is related to the small expenditure share of wheat in Ethiopia, about 5 to 8 %.
- There is a potential to turn this challenge into an opportunity. Ethiopia and Kenya can widen their trade to mitigate negative impacts from other countries, such as the Ukraine-Russian war. The heavy dependency on wheat from other countries could allow Ethiopia to invest in wheat production and export the surplus to Kenya – which is also the current Ethiopian government’s policy stance. At the same time, Kenya could invest increasingly in the food manufacturing industry, especially in dairy, focusing on exporting to Ethiopia, which imports such processed food from these countries in war.
- These investments and trade will work if the countries improve their trade logistics and invest in infrastructure that connects the Northern Kenya Frontier and Southern Ethiopia. Managing and eventually eliminating conflicts between the border communities and enhancing the infrastructure-roads, rail and telecommunication will enable trade and spur domestic investments in respective economic sectors.
- Further, the two countries must work closely on addressing potential bottlenecks, including trade logistics and trade facilitation. A joint working group to deliberate on these issues and develop a strategic engagement that could bring a win-win outcome for both is highly recommended.

## Introduction

Global economic growth suffered a slowdown from two consecutive crises- Covid-19, which intensified in 2020, and the Russia-Ukraine crisis in 2022. With the effects of Covid-19 still lurking, the Russian-Ukraine crisis started in February 2022, disrupting international oil trade, agricultural inputs and food commodities, especially cereals, with outcomes that most likely put countries a step away from achieving Zero hunger by 2030.

The African countries had modest effects from the Russian-Ukraine crisis; the effects have been both through non-agricultural (oil) and agricultural imports - especially fertilizers, wheat and wheat products. Global wheat prices immediately after the start of the crisis shot up from US\$ 8 per bushel in March to US\$ 11 per bushel (37.5% increase) and remained high through June 2022. It has since subsided to pre-crisis levels, but the effects on food security and welfare are still being felt. The spike in global wheat prices was occasioned by Russia's blockade of Ukraine's grain exports, jolting the global supply in the international market.

Russian-Ukraine war is still on, a year after, and most likely, the effects on food security and welfare are still manifesting (the recent Russian termination of the 'Black Sea Grain Initiative; being a case in point). There could also be indirect effects through the rising fertilizer, which affects food welfare from the supply and cost side.

This policy brief draws insights from a study on the impacts of the Russia-Ukraine crisis conducted between January and June 2023.

## Ethiopia's and Kenya's Trade dependency on Ukraine and Russia

Ethiopia's imports from Ukraine and the Russian Federation averaged 6.8% and 2.7% of the total value of imports, respectively, between 2018 and 2021. Over the same period, imports from Ukraine and the Russian Federation accounted for 2.1% and 5.1% of Kenya's total value of imports.

Wheat and wheat products make up the largest share of imports from the Russian Federation and Ukraine for both countries, accounting for over 98% of the imported value from either. Of the total imports of Kenya from Ukraine, wheat and wheat products constitute 86% (USD 78.26 million USD). In comparison, wheat and wheat products account for 99% (USD 106.37 million USD) of imports from the Russian Federation. In Ethiopia, wheat and wheat products imports from Ukraine and the Russian Federation accounted for 88% (USD 428.26 million USD) and 99% (USD 127.86 million USD), respectively, in 2021. Ethiopia imports more from Ukraine than Russia. The reverse is true for Kenya.

# Impacts of the War in Ukraine on Food Security in Ethiopia and Kenya

The global price spikes in oil, wheat and other agricultural inputs (especially fertilizer) that ensued immediately after March 2022 were transmitted into the domestic economies of Ethiopia and Kenya through imports.

## Imported inflation

Although Kenya does not import sizeable quantities of unmilled wheat from Ukraine, the effects of the crisis filtered through the international market prices, with prices of wheat and wheat products responding in sync with the suppressed global wheat supply, which exerted pressure on wheat and wheat-related products in Kenya.

For every 1% change in international prices of unmilled wheat, about 0.3% filters through into the domestic wheat flour prices, contributing to increased consumer prices. As a result, the price of unmilled wheat went up from KShs 61,331 per tonne to KShs 78,756 due to tightening global supply. By May 2023, the price of 2-Kilogram wheat flour was KShs 206, up from KShs 140 in January 2022, a 47% increase. Similarly, the price of 800g of bread increased by KShs 30 over the period January-June 2022. Prices of wheat and wheat products in Kenya have since remained relatively high.

Although this change in international price is the same for Ethiopia, evidence shows significant transmission of the rise in price (69%) in the Ethiopian case. During this period, the domestic price of cereal and bread (which uses wheat) increased by 36.3% between March 2022 and March 2023 in Ethiopia. This rate was also higher at 42.3% in the 2021/22 Ethiopian fiscal year that ends on June 30 and coincides with the period when the international wheat price increased following the Russian-Ukraine war.

## Household Welfare loss

Wheat products are consumed across the urban and rural divides. In Kenya, households allocate about 9% of their food budgets towards wheat and wheat products (estimates from KIHBS 2015/16). This figure also ranges from 5 to 8% in Ethiopia.

The crisis imparted marginal effects on welfare loss and food poverty, gap, and severity, irrespective of the divide in both counties. This effect, however, was marginal. In Kenya, the marginal effect of the wheat price change emanating from the Ukraine-Russian crisis is attributed to the small proportion of wheat that originates from Ukraine and that Kenya imports the bulk of its wheat from Russia, whose exports were unaffected by the crisis. As the crisis ranged, Kenya tended towards other countries like

Argentina, Australia and Lithuania for its wheat imports. In Ethiopia, the limited share of household expenditure on wheat, as opposed to other staples such as Teff in urban areas and maize and sorghum in rural contributes to its limited effect on household welfare, even though Ethiopia imports wheat more from Ukraine than Russia.

However, effects are disproportional considering whether a household is male or female-headed and located in an urban or rural area. Despite the marginal effects, urban households in Kenya were more affected than are rural households. Rural households lost between 0.1% and 0.3% of their average monthly household food expenditure for the lowest income decile to the highest income decile, while urban households lost between 0.2% and 0.3% of their average monthly household food expenditure. The welfare losses also increased towards the high-income categories. This was attributed to the fact that as income increased, households tended to allocate more income towards the consumption of wheat-related products. This implies that wheat products are still income elastic.

In Ethiopia, the impact of the crisis is to reduce the average income of a household by 0.86%. The 25th percentile of the household per adult equivalent expenditure had a threshold average expenditure value of Birr 7,410 (at the 2015/16 national average price) per annum in the 2015/16 household income, consumption, and expenditure survey (HCES).

## **Food Poverty incidence, gap, and severity**

Like the effects on household welfare, the Russian-Ukraine crisis has a marginal impact on poverty incidence, gap, and severity in both countries. In urban areas, food poverty incidence and severity increased by one percentage point only (from 56% to 57%-incidence and severity from 11% to 12%). The two food poverty measures (incidence and severity) remained the same in rural areas, with the food poverty gap widening by only one percentage point (from 13% to 14%). Similarly, the food poverty in Ethiopia has not increased because of the wheat-related war effect. In a worst-case scenario, we found it might have led only to one percentage point change in food poverty, as in Kenya.

In Kenya, the evidence further shows that at most 1% and 0.8% of households in urban and rural areas fell into food poverty, respectively. Unlike the welfare loss that primarily affected the high-income quintiles, food poverty effects were more pronounced in the middle-income quintiles - middle-class households suffer more from changes in wheat and wheat product prices. This was attributed to the fact that the majority in the middle-income quintiles are crowded within the poverty lines and easily fall into poverty in case of any disruptions that raise prices.

## Recommendations

The trade dependence of Kenya and Ethiopia on Ukraine and the Russian Federation on some imports and the effect of the shock witnesses offers opportunities for strengthening trade between the two African countries.

- The heavy dependence of Kenya on wheat imports in these countries could be an opportunity for Ethiopia to export to Kenya and vice versa. As Ethiopia is not as dependent as many countries on imports of wheat from these two countries in war and that it is working aggressively on wheat production, in a long shot, this could be an opportunity for Ethiopia to exploit the Kenyan market by stepping up its current small-irrigation based wheat production program through modern farming and boost its intra-Africa trade on wheat through the African Continental Free Trade Area (AfCFTA) – turning the crisis into opportunity.
- On the other hand, Ethiopian dependence on iron ore, dairy products, processed food, etc., on these countries in war could be an opportunity for Kenya to export such commodities to Ethiopia. The implication is that Kenya can step up its efforts in food manufacturing to feed the growing Ethiopian market.
- For this to happen, the two countries must work closely on addressing potential bottlenecks, including trade logistics and trade facilitation. A joint working group to deliberate on these issues and develop a strategic engagement could bring a win-win outcome for both, and hence, is highly recommended.
- For the trade between the two countries to expand, there is also a need to invest in infrastructure that connects the two countries, especially roads and rail that traverse the arid Northern Kenya frontier.

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