Introduction

The intensification of the Ukraine-Russia conflict in February 2022 has disrupted the global supply chains of agricultural and food commodities which had only just started recovering from COVID-19 induced shocks. Russia and Ukraine are major global players in several agricultural and food markets. The two countries are responsible for 53% of global trade in sunflower oil and seed, wheat (27%), barley (23%), colza seed (16%), and maize (14%). As net importers, African countries are exposed either directly (i.e., importing from Ukraine and Russia) or indirectly (i.e., importing from other countries) to the effects of the Ukraine-Russia conflict on the global trade of these agri-food commodities. This brief gives an overview of the level of exposure of African countries to the disruption in global wheat trade and markets.

Presented here is a compilation of the preliminary, high-level findings of the analysis of the impact of the Ukraine war on African countries. This part of the analysis focuses on the extent of exposure and vulnerability to global market trade shocks among African countries, starting with the wheat and fertilizer sectors, to be followed by the vegetable oils sector. The analysis also looks at the impact on commodity trade by African countries, covering not just agriculture and fertilizers but also energy and minerals. This instalment of the research is the first step in assessing the impact of the trade shock on the economies of individual countries. It focuses on how changes in global prices are transmitted to national economies based on the composition of their respective import and export baskets. Finally, this first set of analyses examines the scope of expansion of trade in the cereals and vegetable oils sectors within the main Regional Economic Communities (RECs).

In the next phase, we will expand the analysis to include:

i. The exposure and vulnerability analysis to cover vegetable oils and rice.
ii. The transmission of global price shocks to local markets for main staples such as maize, millet, and rice.
iii. The evaluation of the agricultural sector and economy-wide effects.
iv. The effects on income levels and distribution, as well as poverty.
v. The competitiveness of the cereals and vegetable oils sectors in regional markets.

The preliminary findings from the analysis that has been carried out so far are summarized below:

1. **Exposure and Vulnerability to Wheat and Fertilizer Trade Shocks**

African countries rely heavily on imports of cereals such as wheat and fertilizers to meet domestic needs. This exposes them to major shocks affecting global trade in these commodity markets. Regarding the current crisis, the level of exposure can be much higher or more direct in the case of countries trading significantly with Ukraine, Russia, or Belarus (URB).

As of 2019, around 60 percent of African countries (30 countries) imported wheat products directly from URB. This direct exposure is slightly higher for fertilizers, with 36 African countries importing from URB. The level of exposure is indicated by the share of URB in total country imports. For wheat, URB accounted for at least 25 percent of imports by as many as 20 African countries, creating a significant level of exposure, particularly in the short run. For fertilizers, the corresponding share exceeded 15 percent for 16 out of 36 African countries importing from the URB region. The effects of the war on wheat and fertilizer imports by these countries are relatively immediate.

**Policy implications:** Urgent measures need to be adopted to dampen the effects on consumer prices for wheat products and fertilizers. Furthermore, it is essential to anticipate some degree of transmission to local staples prices as consumers gradually turn to them as substitutes for wheat products. That would not only create a risk of contagion across staples food markets, but it would also spread the effects beyond major towns into the rural areas.

2. **Re-export Activity and Contagion**

Countries do not need to be trading with URB or engaged in global trade to be exposed to the effects of the war in the wheat and fertilizer sectors. The reason is the extensive network of re-exports by many African countries. In 2019, more than 40 percent of African countries imported more wheat than their domestic consumption. In all these cases, the
excess quantities are destined for cross-border markets and, in some instances, countries in other faraway regions of the continent.

**Policy implications:** There is a need for neighbouring countries to coordinate their response to the crisis or at least allow cross-border trade to continue without major disruption. The more borders remain open, the more the shocks spread wider, are absorbed over a larger market area, and thus less intense.

### 3. Country Trading Patterns and Trade Shocks

The effects of the war on global markets are spread over a wide range of imported and exported commodities. While African countries are net importers of cereals, vegetable oils, and fertilizers, some are major exporters of energy and minerals. The combination of changes in various markets, as captured by changes in country import and export price indices, will determine the ultimate effects on individual economies. Our preliminary estimates of changes in import and export price indices for respective African countries indicate that most countries are faced with a more substantial rise in the prices they pay for imports than they receive for exports. While nearly all African countries face a more than 5 percentage points (pp) increase in the overall import price index, the change in the export price index is below the 5 pp mark for as many as 50 percent of African countries.

**Policy implications:** Many countries are likely to face growing balance of payment and foreign reserves pressure in the coming months. Likelier is a drying up of imports, leading to significant shortages at local levels, not just for wheat, vegetable oils, and fertilizers, but also for many other imported goods competing for scarcer foreign exchange resources. Access to external financing through multilateral and bilateral sources will be needed to avert major disruption. Countries with the highest ratio of import/export price index changes and lower foreign exchange reserves will be under stronger financial duress.

### 4. Trade Shocks under COVID and the Ukraine War

There is an interesting and significant difference in the behavior of global commodity prices between the current crisis and during the first few months of the COVID crisis. COVID had led to relatively higher increases in country export price indices, meaning a greater opportunity to compensate for higher import prices, at least for countries that avoided hard lockdowns and were able to continue trading. Meanwhile, in the current situation, countries face fewer trade restrictions linked to extensive disruption of port and airport operations and the shipping industry, with the scope for export price compensation seemingly much less, at least at this stage of the current crisis.

**Policy implications:** Although there are significant differences between the two crises, the burden of trade disruptions carries more similarities. Hence, policy responses that have worked under COVID should provide some guidance in terms of dealing with the effects of the current war. For instance, the financial and social protection interventions deployed under COVID will be relevant in the Ukraine crisis. The fact that countries are starting with a higher debt burden from COVID will make this a heavier lift this time, but the needs will be the same.

### 5. Regional Trade Expansion Opportunities

The first step in assessing the potential for regional trade expansion is carried out using two indicators. The first is the Trade Overlap Indicator (TOI), which measures the share of overall trade by a REC or country that is accounted for by overlapping trade flows,
meaning commodities exported and imported to and from the rest of the world. The second, the Trade Expansion Indicator (TEI), measures the same pattern of overlapping regional or country trade flows but at the level of individual commodities. The TOI and TEI are measures of the potential for redirecting existing trade flows with global markets in favor of countries in the same region. This would typically not require changes in major production and trading patterns and can happen in the shorter run, given proper trade facilitation. The results obtained suggest that opportunities to expand regional trade in the short term through redirecting current flows exist but appear to be limited. It is higher in ECOWAS than in COMESA and SADC2.

**Policy implications:** The expansion of regional trade will require more than trade facilitation to exploit the potential based on current trade flows. It will require investments to boost the competitiveness of domestic sectors and align the national policy environments to encourage specialization in production and trade – this is more of a longer-term option that can be incorporated into future strategies to raise regional capacity to absorb shocks. However, it is worth noting that global markets give access to broader, more stable sources of supplies than regional markets would. Thus, while expanded regional trade raises local capacities to absorb shocks originating from global markets, it also increases the exposure to more volatile regional sources of supply.

---

2 Usually, one would complement the TOI and TEI estimates with evaluation of the comparative advantage in producing the products with highest overlap and expansion indicators. This will be done here in the second phase but given the range of normalized TOI and TEI values, the overall conclusion is unlikely to change.
This work was funded by a grant from the Alliance for a Green Revolution in Africa (AGRA). AKADEMIYA2063 is supported financially by the African Development Bank (AfDB), the German Federal Ministry for Economic Cooperation and Development (BMZ), the Bill and Melinda Gates Foundation (BMGF), and the United States Agency for International Development (USAID) Feed the Future Policy LINK program under Cooperative Agreement 7200AA19CA00019. The views expressed in this publication do not necessarily reflect those of the funders.