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Impacts on Trade, Growth, Poverty, Food Security, and Employment: Summary of Findings and Policy Implications

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Introduction

This brief presents a compilation of key findings from an analysis of the impact of the Ukraine war on African countries. It covers the effects of global market disruptions on country terms of trade, the resulting impacts on economic growth and employment, as well as an analysis of the poverty and food security effects. The second part of the brief focuses on sectoral effects of the crisis, covering disruptions in the wheat and vegetable oils sectors and their effects on incomes, inflation, and food security. Particular attention is paid to differences between rural and urban areas and across income groups, from the lowest to the highest quintiles. The analysis then shifts to the transmission of global commodity price shocks to domestic markets and the opportunities to expand regional trade in food products in response to the crisis. The final section deals with the disruptions in the fertilizer sector and the impacts on productivity, agricultural value-added, incomes and food security.

In all the above cases, the work focuses on selected African countries, based on their direct dependency on wheat and fertilizer trade with Ukraine, Russia, and Belarus (URB) and the extent of import penetration or the ratio of imports to overall domestic consumption. The ten countries included in this study are Benin, Ghana, Kenya, Malawi, Mozambique, Nigeria, Senegal, South Africa, Tanzania, and Uganda. The discussion on price transmission also includes Burkina Faso, Rwanda, and Zimbabwe.

THE UKRAINE CRISIS
AND AFRICAN ECONOMIES

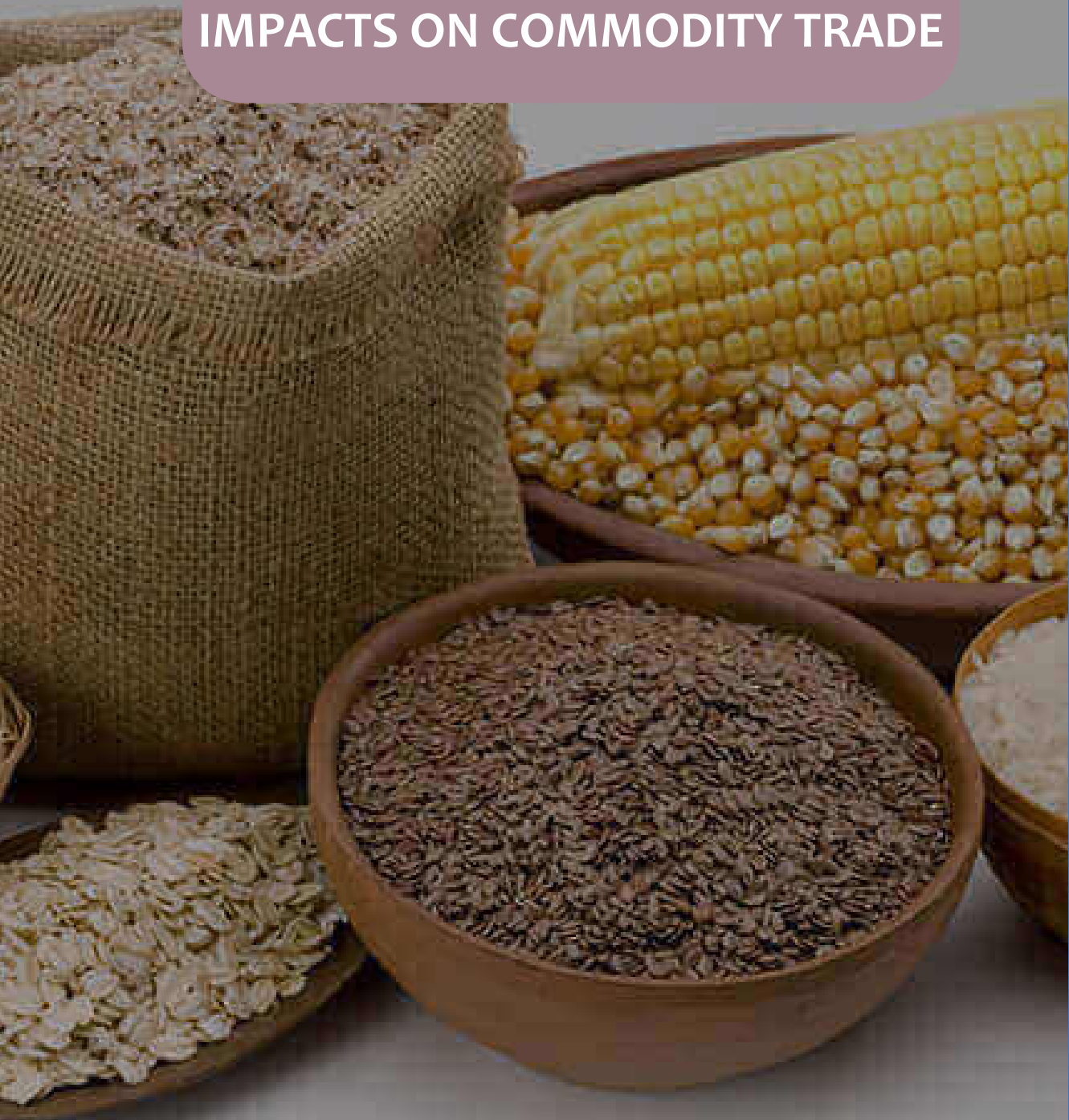


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COUNTRY EXPOSURE AND IMPACTS ON COMMODITY TRADE



Country Trading Patterns and Trade Shocks

The effects of the Ukraine war on global markets are spread over a wide range of commodities, both imported and exported. 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, for instance, by changes in country import and export price indices, will determine the ultimate economic effects on individual countries. Our preliminary estimates of changes in import and export price indices for individual African countries indicate that most countries are faced with a much more substantial rise in the prices they pay for imports than those they receive for exports. While nearly all African countries face an increase in the overall import price index of more than 5 percentage points (pp), the change in the export price index is below the 5 pp mark for as many as 50% of African countries.

Policy implications: Many countries will likely face growing pressures on their balance of payments and foreign reserves. Also likely is a drying up of imports, leading to significant shortages at the local level, not just for wheat, vegetable oils and fertilizers, but also for many other imported goods competing for diminished foreign exchange resources. Access to external financing through multilateral and bilateral sources will be needed to avert major disruptions. Countries with the highest ratio of import/export price index changes and lower foreign exchange reserves will experience greater financial stress. Existing high levels of debt may pose real constraints for some countries.

Trade Shocks under COVID-19 and the Ukraine War

There is an important difference between the behavior of global commodity prices during the current crisis and that seen in the first few months of the COVID-19 pandemic. The COVID-19 pandemic led to relatively higher increases in country export price indices, meaning there was a greater opportunity to compensate for higher import prices, especially for countries that avoided hard lockdowns and were able to continue trading. In the current situation, countries face fewer trade restrictions linked to extensive disruptions of port, airport, and shipping industry operations; however, the scope for export price compensation seems to be much less, at least at this stage of the Ukraine crisis.

Policy implications: Although major differences exist between the Ukraine and COVID crises, the burden of trade disruptions shows significant similarities. Hence, policy responses that have worked under COVID-19 should provide some guidance in dealing with the effects of the current war. For instance, the financial and social protection interventions deployed during the COVID-19 pandemic will be necessary during the current crisis. The fact that countries are starting with a tighter fiscal space from the COVID-19 pandemic will make provision of social and financial protections more difficult this time around, but the needs will remain the same.



**ECONOMYWIDE EFFECTS
AMONG SELECTED AFRICAN
COUNTRIES**

Patterns of Terms of Trade (TOT) Shocks and Macroeconomic Effects across African Countries

The combined effects of changes in a variety of commodity markets will define the ultimate impacts of the crisis on a particular economy. In general, the higher the prices increase for a country's commodity imports relative to its export prices, the more negatively its economy will be affected. The opposite is true for countries facing higher increases in export than import prices as these tend to be affected positively. Effects among countries also vary depending on how long changes in terms of trade and their effects are sustained as well as how quickly the economy recovers.

Analysis of the changes in TOT and their economywide impact across the ten countries reveals four categories of countries:

1. Countries with negative terms of trade effects, with early onset of recovery by 2024: Senegal, Tanzania;
2. Countries with negative terms of trade effects, with no recovery by 2024: Kenya, Malawi, Uganda;
3. Countries with positive terms of trade effects and positive poverty and food security effects: Benin, Ghana, Nigeria and South Africa;
4. Countries with positive terms of trade effects and negative poverty and food security effects: Mozambique.

Policy Implications: *The crisis affects different countries in different ways. It is therefore necessary to align responses in individual countries to the nature and patterns of disruptions affecting their economies. Untargeted, generic responses are likely to be ineffective, leading to wastage of scarce resources, or worse, counter-productive impacts.*

Growth Effects of Global Commodity Price Shocks

Among countries with negative terms of trade effects, all are projected to experience a steep decline in the rate of economic growth, with growth rates that are 50% lower than those expected in the absence of the crisis. Uganda sees the sharpest slowdown in economic growth and is the only country going into recession, i.e. with a negative Gross Domestic Product (GDP) growth rate, in 2022 due to the crisis. In contrast, countries with positive terms of trade effects will see a boost in economic growth, with the strongest seen in Nigeria and Mozambique. The trajectory of economic growth in the next few years is expected to be below the pre-crisis trends in the former group of countries, while the opposite is true for the latter group.

Policy implications: *Countries with negative terms of trade and growth effects need to look for short-term interventions to mitigate the immediate effects of slower growth on livelihoods while devising policies to boost growth in the medium-term and accelerate the rate of recovery. This includes providing productive safety nets to protect livelihoods and assets among vulnerable communities and extending support to the most affected sectors. Countries with positive terms of trade effects can enhance their gains by adopting policies that foster the responsiveness of domestic sectors to positive commodity market dynamics. This can be done through changes in policy and regulatory measures to boost export supplies and gain export market shares.*



Effects on Employment and Labor Markets

Deteriorating terms of trade and a slowdown in economic activities result in loss of employment in the short-term and a slower pace of employment creation in the medium-term among the first group of countries. This is particularly acute in Kenya and Malawi, where the rate of employment creation in 2022 falls by 33% and 70%, respectively. On the other hand, countries with positive terms of trade effects and stronger economic growth see employment gains, particularly in Nigeria and Mozambique.

Policy implications: Countries facing labor market contraction need policies to slow down the loss of employment and enhance creation of new job opportunities. Given the dearth of unemployment benefits schemes in these countries, public works programs are a possible option. These conditions could also provide opportunities to introduce skills development and upgrading programs to boost employability and job creation in the future.



A top-down view of a variety of fresh vegetables. In the upper left, there is a large pile of green bitter melons. To their right are several cucumbers. The lower half of the image is dominated by a large quantity of bright orange carrots with their green leafy tops. In the bottom left corner, a white woven basket is filled with small, bright red chili peppers. The background is a solid blue color with decorative geometric patterns in the corners.

**POVERTY AND FOOD SECURITY
EFFECTS AMONG SELECTED
AFRICAN COUNTRIES**



Income and Poverty Effects

The growth and employment effects resulting from the disruption of global commodity markets are projected to lead to changes in income levels and distribution as well as general cost of living. This, in turn, will drive poverty outcomes. In line with the slowdown in growth and loss of employment, higher poverty levels are observed in countries facing deteriorating terms of trade. Sharper increases in poverty are observed in Kenya and Tanzania. Positive growth and employment outcomes in countries with improved terms of trade will lead to lower poverty levels. The main exception here is Mozambique, where the concentration of growth and employment gains in a small number of low intensity sectors (energy and minerals) combined with strong and generalized inflationary pressures result in rising poverty rates.

Policy implications: *A combination of the policy choices proposed in the preceding section can help soften the poverty impact of the crises, i.e., provision of productive safety nets, public works schemes and skills development programs. These can be complemented with cash transfers for more immediate impacts in the short run.*

Economic Diversification and Poverty Impacts of Global Commodity Shocks

The differences in poverty outcomes observed among the two groups of countries are the result of differences in trading patterns which in turn determine the extent of the transmission of global price changes to national economies and how broadly these changes are distributed across the various domestic sectors. In general, countries with less diversified trading patterns and greater dominance of low labor intensity sectors will show more narrowly distributed employment and income effects and consequently lower impacts on poverty. This explains the negative poverty effects in Mozambique, where the terms of trade, growth and employment gains go exclusively to the energy and mining sectors, which are characterized by heavier geographical concentration, lower labor intensity and less extensive inter-sectoral connections. In this case, the income gains resulting from the positive growth and employment impacts do not spread widely enough to generate a substantial reduction in poverty, while rising inflationary pressures from deteriorating terms of trade further erode consumers' purchasing power and incomes in the rest of the economy.

Policy implications: *In Mozambique and other countries facing similar conditions, governments must carefully manage the inflow of foreign exchange and increase fiscal resources to minimize their inflationary effects. With the appropriate institutional environment, these countries can introduce windfall taxes to generate resources to finance programs that protect livelihoods in regions and sectors negatively affected by the crisis.*

Inflation and Food Security Effects

Rising global commodity prices expose countries to general inflationary pressures and higher food costs. This current crisis is no exception. Changes to income and adjustments in local prices for food and non-food items determine food affordability and, consequently, food demand and household consumption. These related effects shape the impact of the crisis on food security outcomes.


All country groups face inflationary pressures. Among countries with deteriorating terms of trade, Malawi, Uganda, and Tanzania see the highest increase in inflation, while Mozambique leads those countries with positive terms of trade shocks. Inflationary pressures vary between food and non-food sectors as well as between rural and urban areas.

Policy implications: *The rising cost of living - of food in particular - poses immediate threats to livelihoods, especially among vulnerable population groups. Options for policy responses in these cases include food distribution, subsidies for food and non-food products, and cash transfers. These interventions can be combined with public works programs.*

A background image of a wheat field with several stalks of wheat in the foreground, slightly out of focus. The sky is a pale, overcast blue.

**EFFECTS OF DISRUPTIONS
ON WHEAT AND VEGETABLE
OILS SECTORS**





Besides the combined effects of changes in global prices triggered by the Ukraine war at the macroeconomic level, changes in individual markets can have significant impacts at the sectoral and household levels. Two main commodities have been at the center of concern among the global community: wheat, and vegetable oils. The effects of disruptions in these sectors among the same sample of African countries are summarized below.

Exposure and Vulnerability to Wheat Trade Shocks

In general, African countries rely heavily on imports for cereals such as wheat to meet their domestic needs. This generally exposes them to any major shock affecting global trade in these commodity markets. In terms of the current crisis, the level of exposure would be much higher or more direct in the case of countries trading significantly with Ukraine, Russia, or Belarus (URB). The level of exposure is indicated by the share of URB in total country imports.

As of 2019, around 60% of African countries (30 countries) imported wheat products directly from URB. URB accounted for at least 25% of wheat imports by as many as 20 African countries, creating a significant level of exposure, especially in the short run. The effects of the war on wheat imports by these African countries are immediate.

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

Re-export Activity and Regional Contagion


Countries do not have to be trading with URB or even be engaged in global trade to be exposed to the effects of the war in the wheat and fertilizer sectors. This can be explained by the extensive network of re-exports among many African countries. In 2019, more than 40% of African countries imported more wheat than they used for domestic consumption. In all these cases, the surplus quantities were destined for cross-border markets and, in some instances, to countries in distant regions of the continent.

Policy implications: Neighboring countries need to coordinate responses to the crisis or at least allow cross-border trade to continue without major disruptions. The more borders remain open, the wider the shocks spread, allowing them to be absorbed over a larger market area and become less intense.

Income, Inflation and Food Security Effects of Wheat Trade Disruptions

Higher wheat prices are projected to persist through 2024. Given the small size of the wheat production sector in a limited number of countries, disruption of wheat trade is unlikely to have major macroeconomic ramifications. It is more likely that higher wheat prices will erode purchasing power among the poorest and also contribute to broader food price inflation. The results indicate negative income effects among both rural and urban households across all countries in the sample. Income effects tend to be greater among higher income households, while in rural areas, they are greater among farm households than non-farm households.

Higher wheat prices have also resulted in a generalized increase in food prices among urban and rural households alike across all the study countries. Unlike income effects, food inflationary pressures tend to be more pronounced for lower-income households. This explains the decline in food consumption among poor households in both rural and urban areas.



Policy implications: Lower-income households need to be protected from the inflationary pressures arising from higher global wheat prices and the expected effects on food consumption. Targeted food distribution and cash transfer programs are possible responses to dampen the short-term effects. Targeted subsidies or the removal and suspension of taxes can be additional options given the appropriate fiscal environment.

Exposure, Contagion, and Vulnerability to Vegetable Oils Industry Shocks

The direct dependency on Russia and Ukraine, as measured by the share of vegetable oils imports by African countries from the two countries, is much lower than for wheat or fertilizers. The share reaches 5% only in the case of one country, i.e. Sudan. However, 40 African countries depend on imported vegetable oils for more than 40% of their domestic needs. Moreover, 12 African countries have an import to domestic consumption ratio that exceeds 100%, indicating the existence of intraregional re-exports, although the quantities involved are only significant in West Africa. Shocks in global vegetable oils markets are therefore bound to be re-transmitted across regional borders, at least in West Africa.

Policy implications: Although the number of countries involved in regional re-exports is lower for vegetable oils than for wheat, the need for neighboring countries to coordinate responses to the crisis is equally important. Ensuring that cross-border trade continues unhindered is similarly important in order to spread the shocks over a larger geographical area and market while also enhancing the capacity to absorb these shocks.

Income, Food Inflation, and Consumption Effects

Only four countries in the study sample have disaggregated industry data that make it possible for the vegetable oils sector to be treated separately: Ghana, Malawi, Mozambique, and Uganda. Among these countries, the share of the vegetable oils sector is largest in Ghana, where it accounts for 3% of agricultural sector value-added. The share drops to 1.5% in Mozambique and Uganda and amounts to only 1% in Malawi.

Global prices of vegetable oils rose between 30% and 50% following the start of the Ukraine war. The income effects are strongest in Ghana and rather negligible in the other three countries (Malawi, Mozambique, and Uganda), in line with the greater weight of Ghana's vegetable oils sector. In Ghana, income effects are positive among rural households, particularly those on farms. They are positive but lower for urban households, and negative only for the top income quintile.

The effect on food price inflation is highest in Mozambique, followed by Ghana. It rises to noticeable levels in Malawi in 2023, among the top income brackets only. In contrast, Uganda sees low food price inflation effects among rural as well as urban households. In Ghana, negative income effects are expected to persist, primarily for the top income quintile among urban households, but are minimal in rural areas. Income effects in the other three countries are rather negligible.


Food consumption effects are negative and higher in Ghana, particularly for urban and rural non-farm households. They are negligible, in contrast, in Malawi as well as in Uganda. In Mozambique, there is a modest decline in food consumption, particularly among farm households.

Policy implications: For the countries covered here, the effects of disruptions in the vegetable oils sector are less pervasive than those observed for the wheat or fertilizer sectors. Nevertheless, the impacts can be serious for certain segments of the populations, particularly in Ghana, where vegetable oils play a relatively significant role in the agricultural sector.



**TRANSMISSION OF GLOBAL
PRICE CHANGES TO
DOMESTIC MARKETS**





The transmission of changes in global commodity prices varies across countries and within them, that is, across urban and rural markets. In general, global changes in prices of sugar and cereals (maize, rice, wheat, and related products) are more fully transmitted to local markets than are global changes in prices for energy (fuel and cooking gas) and vegetable oils. Government subsidies influence adjustments to the prices of fuel and cooking gas. Price adjustments in rural markets are more influenced by local production conditions and calendars than prices in urban markets.

Transmission of Changes in Cereal Prices

There are marked differences in price adjustments in the cereals sector across countries. Increases in global wheat prices are fully transmitted to domestic markets in Malawi and Rwanda. In contrast, changes in wheat prices are 50% higher in the urban areas of Mozambique than in global markets, but in rural areas, they are only about 10% higher than global price changes. In Zimbabwe and the rural markets of Burkina Faso, wheat price increases are 40% lower than global price changes, while in the urban markets of Burkina Faso, they reach less than 20% of global price changes. Significant changes in domestic maize prices are only observed in Malawi, where they match changes in global prices, as well as in some urban areas of Zimbabwe, where changes in maize prices are nearly three times higher than changes in global prices. The strongest increases in domestic cereal prices are seen in rice. In Malawi and rural Burkina Faso, changes in domestic rice prices are three times higher in some markets than global price changes. They are 50% higher in rural Zimbabwe and twice as high in some rural markets of Rwanda.

Transmission of Changes in Sugar and Vegetable Oils Prices

Changes in domestic sugar prices are equally strong, ranging from 100% of global price changes in Mozambique and urban Burkina Faso, to almost twice the global price change in some of Zimbabwe's urban markets and as much as five times more in Malawi and some rural markets within Rwanda and Burkina Faso. In contrast, increases in domestic vegetable oils prices are lower than changes in global prices across all countries and markets that are tracked. They are 40% lower in Malawi, 30%–60% lower in Zimbabwe and 50%–60% lower in Mozambique. No significant increases were observed in the remaining markets.

Transmission of Changes in Energy Prices

The magnitude of energy price changes shows much more variation across countries. Changes in energy prices in Malawi (fuel), Mozambique (cooking gas and diesel) and Rwanda (cooking gas) are similar to changes in global energy prices. On the other hand, changes in cooking gas prices are up to three times higher in Malawi and Zimbabwe, whereas no changes in fuel and cooking gas prices are observed in Burkina Faso.

Policy implications: *The behavior of domestic commodity prices is similar to what was observed during the first few months of the COVID-19 crisis. The general tendency is toward rising prices, with notable variations across products and markets. The current context is markedly different, given the absence of any need to interfere with the movement of goods and persons. Proper operation of domestic and cross-border markets is critical to mitigating changes to domestic prices of cereals, sugar, and vegetable oils, and this potential should be enhanced as much as possible. There would still be residual inflationary pressures, but these would be at lower levels, which would reduce the costs of necessary additional interventions. Energy prices, on the other hand, tend to be regulated and lend themselves to broader subsidies. The fiscal space for such interventions will need to be created.*



**OPPORTUNITIES FOR
REGIONAL TRADE EXPANSION
IN CEREALS AND VEGETABLE
OILS SECTORS**

The Potential for Regional Trade Expansion

The extent to which current trade flows can be redirected from third parties toward regional partners is a good measure of short- to medium-term opportunities to expand regional trade in response to global market disruptions. This can be captured by the Trade Overlap Indicator (TOI), which measures the share, in a given country's or region's total trade basket, of products that are exported and imported at the same time. It therefore defines the overall degree of overlapping trade flows that a given country or region can redirect toward regional markets. The TOI values obtained for countries across the main Regional Economic Communities (RECs) in Africa range between 8 and 10, meaning that 8%-10% of current trade flows could potentially be redirected. The scope for that is confirmed by the fact that, in the majority of cases, TOI values for individual countries are much lower than the TOI values for their respective RECs, meaning that most of the overlap at the regional level comes from different countries exporting and importing the same goods, to and from various third-party countries.

Commodities with Opportunities for Trade Expansion

The Trade Expansion Index (TEI) applies the same concept of overlapping flows but at commodity levels. Commodities with overlapping trade flows are best positioned to fill possible gaps created by rising global prices or supply shortages. Commodities for which a given region has TEI values closer to the maximum of 100 are the best candidates for boosting trade expansion in that region. Across all regions, 20% of cereals products have TEI values above 60, against 30% for vegetable oils and 60% for oilseed products. The opportunities to expand regional trade in the short run are therefore markedly greater for vegetable oils and vegetable oils to a lesser extent than for cereals. This is particularly so for the Economic Community of West African States (ECOWAS) and the Common Market for Eastern and Southern Africa (COMESA). The potential to expand regional trade in cereals is driven particularly by countries in the Southern African Development Community (SADC). The Economic Community of Central African States (ECCAS) has the least potential to expand regional trade.

Country Capacities to Seize Trade Expansion Opportunities

Countries with the highest level of competitiveness in trade of these commodities are best positioned to seize the opportunities for trade expansion. Based on the Revealed Comparative Advantage (RCA) Index as a measure of competitiveness, Guinea, Mali, and Togo are countries most likely to lead the regional trade expansion in the cereals sector within ECOWAS. Niger, Nigeria, and Togo are best placed to drive trade expansion in vegetable oils, while Benin, Gambia and Senegal are best positioned to lead trade expansion in vegetable oils. For COMESA and SADC, Ethiopia, the Democratic Republic of Congo (DRC), Mauritius, Rwanda, Uganda, and Zambia are the leading candidates in the cereals sector. The same countries, except Mauritius, are joined by Mozambique and Sudan in the vegetable oils sector. For vegetable oils, the leading countries are Angola, Seychelles, and Sudan.


Policy implications: *There are opportunities to respond to the disruptions in global markets by expanding regional trade for food commodities in the short- to medium-term. This highlights the need to keep cross-border markets open as countries seek to respond to the crisis. In addition, countries need to revisit and remove the many regulatory and administrative barriers hindering transborder trade flows. Finally, governments could work with the private sector to identify interventions to facilitate regional trade.*

It should be noted, however, that while expanded regional trade raises local capacities to absorb shocks originating from global markets, it also increases exposure to more volatile regional sources of supply.



**EXPOSURE AND VULNERABILITY
TO FERTILIZER SECTOR SHOCKS**





Average fertilizer use is low outside of North Africa and, to some extent Southern Africa. However, it is significant in some countries and sectors, at least as high as or higher than global averages. Two-thirds of African countries import fertilizers from Russia and Ukraine. Furthermore, 20 countries import more fertilizer than they use domestically, resulting in cross-border re-exports valued at more than 0.5 billion USD. The same phenomenon of regional contagion observed in the case of wheat is also at play here. The increase of global fertilizer prices to near record levels in March is likely to affect many more countries beyond those importing from the warring countries or global markets at large.

Policy implications: *As in the case of wheat sector disruptions, it will be necessary for neighboring countries to coordinate responses to rising fertilizer prices or at least allow cross-border trade to continue without major disruption. Again, ensuring that borders remain open would enable price shocks to be absorbed over a larger market area, and thus become less intense.*

Agricultural Productivity and Growth Effects of Fertilizer Sector Disruptions


The disruption of global fertilizer supply chains and the ensuing sharp increases in global fertilizer prices are certain to translate into higher domestic prices and supply shortages. This, in turn, would reduce fertilizer application rates, leading to lower agricultural productivity and reduced crop outputs. Effects will vary across countries as well as across sectors within countries, in line with the level and intensity of use and related changes. The decline in individual crop output levels would lower the agricultural sector's contribution to the overall economy, which in turn would depress growth of gross domestic product (GDP).

Fertilizer use is concentrated in just a few sectors. No more than two sectors account for at least half of total fertilizer use among the study countries. Top consuming sectors are industrial crops such as vegetable oils in Senegal, and coffee and cocoa in Uganda, Ghana, and Kenya. The vegetables sector is a large user of fertilizers in Nigeria, Senegal, Mozambique, and Kenya. For cereals, maize ranks among the top consuming sectors only in Malawi, Ghana, Tanzania, and Mozambique, while rice dominates in Senegal.

Policy implications: *The heavy concentration of fertilizer use in leading export sectors is likely to turn the fertilizer crisis into a foreign exchange and balance of trade crisis, worsening the terms of trade effects highlighted earlier. Fortunately, most of these are high-value crops embedded in more formal value chains, with opportunities for solutions based on market-friendly public-private partnerships. Solutions in the more traditional cereal and food sectors will require greater government intervention to facilitate access.*

Fertilizer Use Effects of Global Price Spikes

Fertilizer use is expected to decline by 20% to 45%, with Uganda and Kenya recording the highest decline. The reduction in fertilizer application is expected to worsen in 2023 across all countries, with only a partial recovery in 2024. Particularly large reductions are observed in the coffee and cocoa sectors in Ghana, Kenya, and Uganda; tea in Malawi; cotton and rice in Senegal; vegetable oils in Ghana; tobacco and fruits in Mozambique; and pulses in Tanzania. None of the countries or crops is projected to recover from the sharp decline in 2022 over the next three years.



Policy implications: It is clear from the list of hardest hit sectors above that the fertilizer crisis, if left unresolved, will likely have implications on food supplies and is certain to add to the balance of payment burden facing African countries over the next few years. All of these sectors are characterized by formal, well-organized value chains. There may be opportunities to organize fertilizer financing initiatives around individual value chains and across several countries, at least on a regional basis.

Agricultural Output and GDP Growth Effects

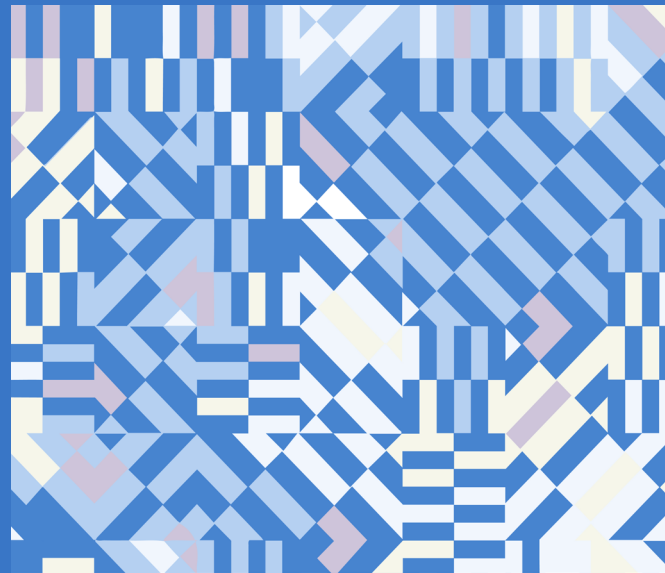
For all countries, the drop in crop output arising from the reduced application of fertilizers is expected to persist and even sharpen into 2024. Lower crop output levels lead to reduced agricultural value-added in all countries. The decline in agricultural sector output, which will continue through 2024, will result in lower GDP growth across all the study countries. More significantly, the rate of GDP decline in 2023 and 2024 exceeds the initial drop expected in 2022. In other words, the crisis is expected to intensify over the next three years, and it will take much longer for the study countries to fully recover from the effects of global fertilizer market disruptions.





Policy implications: Unless effective responses are found urgently this year, or in the next cycle of growing seasons at the latest, the fertilizer crisis is likely to trigger wider macroeconomic and balance of payment problems for many African countries. Constraints to boosting production would prevent countries from exploiting rising export prices and could thus erase any potential terms of trade benefits resulting from the rise in commodity prices. It is therefore critical to advance ongoing efforts to set up mechanisms for assistance in fertilizer financing.

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