



UKRAINE CRISIS BRIEF SERIES Contagion and Exposure of African Countries to Global Wheat Trade Disruptions

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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. According to the United Nations Conference on Trade and Development (UNCTAD), 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%).¹ 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 global trade and market for wheat, a value chain that has been severely impacted by the crisis.

AND AFRICAN COUNTRIES

¹ UNCTAD (United Nations Conference on Trade and Development). 2022. The Impact on Trade and Development of the War in Ukraine. UNCTAD Rapid Assessment. Geneva, Switzerland.



Recent Trends in the International Price of Wheat

Since the intensification of the Ukraine-Russia conflict on February 24 2022, the international wheat price has surged as the commodity's supply chain has been severely disrupted. The international wheat price increased by 30% between February 18 and March 25, 2022 (Figure 1). On March 11, 2022, the price reached an all-time high of US \$520 per metric ton, surpassing the price of US \$510 recorded on February 11, 2008, during the Great Recession.



Figure 1: Weekly wheat export prices, US market, US Dollar/tonne

Source: Food and Agriculture Organization [FAO], 2022, Food Monitoring Price Analysis tool.

Direct Exposure of African Countries to Wheat Imports from Ukraine and Russia

Most African countries (41 out of 54) rely on imports to satisfy their domestic needs for wheat. Among these, 12 countries are greatly exposed due to their high dependence on wheat imports from Ukraine, Belarus and Russia – collectively referred to as UBR (Figure 2). Countries with high levels (over 50%) of wheat imports from Ukraine and Russia include Benin, Egypt, Congo, Tanzania, Cabo Verde, Togo, Namibia, D.R. Congo, Libya, Madagascar, and Senegal. Ten other African countries have considerable exposure with shares of wheat imports from Ukraine and Russia estimated to lie between 25% and 50%. Finally, 14 African countries have an average level of exposure as their shares of wheat imports from Ukraine and Russia are less than 25%.



Figure 2: Dependency on wheat imports from Ukraine, Belarus, and Russia (UBR) (% share in country wheat imports)



Source: FAO Detailed Trade Matrix data (2022).

Contagion through Regional Re-export Markets

Most African countries (45) are highly dependent on wheat imports to satisfy their domestic consumption needs as seen in import penetration rates of over 50%.² Furthermore, many countries (23) import more wheat than they need for their domestic consumption, as shown by the import penetration rates of over 100% in Figure 3. These countries are not using the excess quantities to constitute stock reserves but rather to re-export to neighboring countries. This raises the issue of contagion, as many countries are exposed to the crisis not through involvement in the global wheat market, but through re-exports by their neighbors (Tables 1-3).

2 The import penetration rate is measured by the ratio of imports to domestic demand for a given commodity.







Figure 3: Wheat import penetration rate (Imports/Domestic Consumption, %)

As shown in Figure 4, many African countries engage in wheat re-exportation to their regional neighbors, exposing the latter indirectly to global market shocks. For instance, Burkina Faso, Gambia, and Mali are indirectly exposed to wheat re-exports from Côte d'Ivoire and Senegal. Similarly, D.R. Congo, Eswatini, Lesotho, Namibia, Rwanda, Uganda, Zambia, and Zimbabwe are indirectly exposed to wheat exports and re-exports from South Africa and Kenya. The network of re-exports is particularly dense in West Africa (Figure 5).

Re-export flows are not confined within the boundaries of individual regions but span across them, from North to West Africa, between West and Southern Africa and from West to Central Africa. The overall ramifications of the crisis are therefore much more far-reaching than is immediately evident from the initial wave of shocks hitting countries that are directly involved in the global wheat market.



Source: FAO Food Balance Sheet data (2022).



Figure 4: Intra-regional wheat re-export flows



Source: Calculations from the Africa Agriculture Trade Monitor (AATM) 2022 database.

It is very likely that the burden of rising import prices and subsequent quantity adjustments will be felt more severely in re-export markets, as primary importing neighbors are likely to absorb the supply chain shocks by adjusting re-export flows and prices. The dense web of re-exports is an indication of the critical importance of keeping borders open and allowing cross-border trade to continue. It also highlights the need to coordinate responses among neighboring countries.



Figure 5: Intra-regional wheat re-export flows in West Africa

Source: Calculations from the Africa Agriculture Trade Monitor (AATM) 2022 database.



Conclusion

Direct engagement in the global wheat trade is the primary and most direct source of exposure to the effects of the Ukraine-Russia conflict. High rates of regional re-exports open another channel of transmission and constitute a source of indirect and significant exposure for a large number of countries that are not necessarily involved in global wheat markets. The global wheat crisis therefore has important regional trade dimensions. Consideration of the ramifications of this crisis should not just be confined to what is happening at international borders as the disruption of cross-border trade flows can create significant food security problems, especially in urban centers. It is therefore critical for neighboring countries to coordinate their response to the crisis or at least allow cross-border trade to continue without major disruptions. The more borders remain open, the wider the shocks are spread and absorbed over a larger market area, thereby moderating their intensity. In other words, all efforts should be made to limit the likelihood of turning a global market crisis into a regional one.

Table 1: Wheat re-exportation within the Economic Community of West African States (ECOWAS) in 2020, million USD

	ECOWAS Importer										
	Benin	Burkina Faso	Côte d'Ivoire	Gambia	Ghana	Liberia	Mali	Niger	Nigeria	Senegal	Togo
Exporter											
Benin					0,004			0,500			0,009
Cote d'Ivoire	0,113	10,287			0,086	0,394	0,029	0,470		3,750	
Ghana	0,065	11,214	0,002					11,705			15,869
Guinea				0,014							
Niger		0,002									
Senegal		0,057		0,102			4,120		0,035		
Тодо	1,558	0,523			0,001			3,199		0,072	

Source: AATM 2022 database.

Table 2: Wheat re-exportation within the Common Market for Eastern and Southern Africa (COMESA) in 2020, million USD

	COMESA Importer									
	Comoros	DR Congo	Eswatini	Kenya	Madagascar	Malawi	Mauritius	Rwanda	Seychelles	Zimbabwe
Exporter										
Burundi		10,702		0,094				0,039		
Botswana										0,038
Mozambique			0,394		0,143	0,427				0,686
Mauritius	1,330				0,563				0,989	
Malawi							0,021			0,180
Namibia		0,001								
Rwanda		29,399		0,161						
Uganda	0,011			1,502				0,002		

Source: AATM 2022 database.





Table 3: Wheat re-exportation within the Southern A	frican Development Communit	y (SADC) in 2020, million USD
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	SADC Importer												
	Angola	Botswana	Comoros	DR Congo	Eswatini	Madagascar	Malawi	Mauritius	Namibia	Seychelles	South Africa	Tanzania	Zimbabwe
Exporter													
Burundi				10,702									
Botswana									0,265		1,585		0,038
Lesotho											16,324		
Mozambique					0,394	0,143	0,427				11,238		0,686
Mauritius			1,330			0,563				0,989			
Malawi		0,068						0,021			1,309		0,180
Namibia	0,002			0,001							0,026		
Rwanda				29,399								0,010	
Eswatini											0,013		
Uganda			0,011										

Source: AATM 2022 database.



This work was funded by a grant from the Foreign, Commonwealth & Development Office (FCDO) through 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.



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