

Policy Brief

Implications of Russia's invasion of Ukraine on wheat supplies to Africa

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"No man qualifies as a statesman who is entirely ignorant of the problems of wheat"
Socrates.

Russia's invasion of Ukraine, the Black Sea granary, severely impacts global wheat markets, and especially hits the two warring parties' primary importing countries/clients. This study examines impacts of this war on Africa, where bread is a basic staple. This brings us to start with a review of broad market data, with Russia and Ukraine respectively ranking first and fifth among global wheat exporters, and the European Union (EU) gaining an edge as an alternative to the U.S./Canada because of its proximity to countries directly impacted by the crisis. Further investigation of countries most dependent on Russian and Ukrainian wheat reveals the extent of Africa's dependence, with 16 countries, home to 40% of the continent's population, depending on it to the tune of 56% or more. In addition to these 16 countries, a few more are under 56% dependent. Algeria, Morocco and Nigeria. The latter three countries having managed to diversify supply sources.

However, irrespective of supply source, all countries have to cope with short-term crisis consequences, secure wheat supplies and absorb record high wheat prices, thereby exacerbating an upward trend starting before the war.



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INTRODUCTION

Russia's invasion of Ukraine, the breadbasket of the Black Sea, inevitably had a huge impact on world wheat markets, of which both warring parties are heavyweights. This study examines impacts of this war on Africa, a continent highly dependent on Russian and Ukrainian wheat exports, accounting together for 29% of global wheat exports in 2021. This brings us to review overall market production and export data (I), then identify those 26 countries most heavily reliant on Russian and Ukrainian wheat supplies, and which African countries among them are most impacted (II). In conclusion, we look at implications of this war for Africa in terms of both wheat production and prices.

I. OVERVIEW OF GLOBAL WHEAT MARKETS AND PRODUCTION

A. Main producing countries (2017-2021): data and analysis

1. Data

Table 1 hereunder lists the 12 leading wheat producing countries and/or communities of countries worldwide. Data is expressed in thousands of metric tons (Mt). Outputs are those prior to the invasion, and cover four crop years: 2017/2018; 2018/2019; 2019/2020 and 2020/2021. This provides a production average for each country for the years 2017-2021.

Table 1:

Major wheat producing countries (2017-2021).

COUNTRY	2017/2018	2018/2019	2019/2020	2020/2021	AVERAGE
China	129 770	133 590	133 590	134 250	132 800
European Union	136 681	123 124	138 741	126 930	131 369
India	98 510	99 870	103 600	107 860	102 460
Russia	84 992	71 685	73 610	85 354	78 910
USA	47 371	51 306	52 581	49 751	50 252
Canada	30 000	32 670	32 670	35 183	32 630
Ukraine	26 981	25 057	29 171	25 240	26 612
Pakistan	26 674	25 067	24 349	24 496	25 146
Australia	21 300	17 598	14 480	33 300	21 669
Turkey	21 000	19 000	17 500	18 250	18 937
Argentina	18 500	19 500	19 780	17 640	18 855
Iran	14 000	14 500	16 800	15 000	15 075

Source: Statistica Research Department. Output expressed in thousands of tons.

2. Data analysis

The data first confirms the irregularity of year-on-year production, mainly because of random and changing weather conditions. This irregularity does not, however, invalidate 2017/18 season's country rankings, which match arithmetic average rankings for country production over the four seasons of the study.

This ranking, based on arithmetic averages, reflects global production leadership by China, the EU and, to a lesser extent, India, with annual production ranging from 107 to 134 million tons. It also shows the substantial contribution of the United States, Canada, Australia, Ukraine, Pakistan, as well as Argentina, with a population roughly equal to that of Ukraine. This is not the case of Turkey and Iran, whose populations are around twice that of Ukraine.

Looking at the demographics of these twelve countries highlights countries with wheat exporting capacity from those without. These 7 are in order of importance: the European Union, Russia, the United States, Canada, Australia, Ukraine and Argentina.

B. Main wheat exporting countries in 2020

Table 2, below, lists the world's top eight wheat exporting countries in 2020, in order of importance.

The table confirms earlier conclusions, i.e., eight key players dominate wheat export markets. Three of these, namely Russia, the United States and Canada, export over 26 million tons, with Russia doing so with 37.3 million tons.

France and Ukraine are next, with 19.8 and 18.1 million tons respectively, followed by Australia, Argentina, with over 10 million tons, and Germany with 9.3 million tons.

The EU, with dual contributions from France and Germany, is in second place with 29.1 million tons, ahead of the United States and Canada.

Table 2:

COUNTRY	EXPORTS IN MILLION TONS
Russia	37.3
USA	26.1
Canada	26.1
France	19.8
Ukraine	18.1
Australia	10.4
Argentina	10.2
Germany	9.3

Source: UN Comtrade Database

Out of 157.3 million tons of wheat exported in 2020, 23.7% came from Russia, 11.5% from Ukraine and 19% from the EU. Russia and Ukraine therefore account for 35% of world wheat exports. And the EU two (France and Germany) account for 12.5%.¹

These figures illustrate Russia's and Ukraine's key place in global wheat markets, respectively first and fifth worldwide for such exports. In light of the crisis, the EU is a more reliable alternative than the US/Canada or Argentina/Australia, considering its proximity to countries directly impacted by consequences of Russia's invasion of Ukraine.

II. COUNTRIES MOST DEPENDENT ON RUSSIAN AND UKRAINIAN WHEAT IN 2021

A FAO (Food and Agriculture Organization of the United Nations) study, published before the Russian invasion of Ukraine, lists the 26 countries most heavily reliant on Russian and Ukrainian wheat. Our analysis of this data shows which African countries depend the most on Russian and Ukrainian wheat.

A. Twenty-six countries, of all continents, depend on Russia and Ukraine for over 55% of their wheat supply

Table 3 lists these countries, specifying respective population and degree of dependence on Russia and Ukraine for wheat.

Table 3:

Countries most dependent, in %, on Russian and Ukrainian wheat imports.

COUNTRY/ POPULATION	RUSSIAN DEPENDENCE	UKRAINIAN DEPENDENCE	TOTAL DEPENDENCE
Eritrea/3,6 millions.	60%	40%	100%
Kazakstan/19,2 millions.	98%		
Mongolia/ 3,3 millions.	98%		
Azerbaijan /10,3 millions.	95%		
Georgia/ 3,9 millions.	95%		
Somalia/16,8 millions.	40%	50%	90%
Seychelles/0,5 million.		90%	
Belarus/9,5 millions.	90%		
Kirghizstan/6,7 millions.	90%		

1. Considering all EU member countries, Union wheat exports in 2020 projected at 36 million tons, put the EU in second position internationally. Now, if 2021 is used as a reference year, the EU, with 37.5 million tons, is ahead of Russia (35 million tons).

Turkey/84 millions.	65%	20%	85%
DR Congo/86,8 millions.	80%	5%	85%
Finland/5,3 millions.	85%		
Egypt/106 millions.	55%	25%	80%
Lebanon/6,9 millions.	15%	60%	75%
Madagascar/29 millions.	50%	25%	75%
Benin/11,8 millions.	70%		
Albania/2,8 millions.	60%	5%	65%
Congo/5,5 millions.	65%		
Tanzania/60 millions.	60%		
Libya/6,8 millions.	20%	40%	60%
Pakistan/229 millions.	22%	38%	60%
Liberia/5,3 millions.	60%		
Rwanda/13 millions.	56%		
Namibia/13,6 millions.	56%		
Senegal/16,3 millions.	52%	4%	56%
Mauritania/4,9 millions.	8%	48%	56%

Source 2021 FAO Data.

A global breakdown of the table shows three groups of countries:

- Countries with total dependency ranging from 90% to 100%, i.e., 9 countries: Eritrea, Kazakstan, Mongolia, Azerbaijan, Georgia, Somalia, Seychelles, Belarus and Kirghizstan;
- Countries with total dependency ranging from 75% to 85%, i.e., 7 countries: Turkey, DR Congo, Finland, Egypt, Lebanon, Madagascar and Benin;
- Countries with total dependency ranging from 56% to 65%, i.e., ten countries: Albania, Congo, Tanzania, Libya, Pakistan, Liberia, Rwanda, Namibia, Senegal and Mauritania.

Six of these 26 countries have or have had direct historical links with Moscow, namely Kazakstan, Mongolia, Azerbaijan, Georgia, Belarus and Kirghizstan; three are European (Turkey, Finland and Albania); and one is Asian, the most populous, Pakistan. This leaves 16 states, all in Africa, that we now turn to in detail.

B. Twenty countries in Africa are dependent to varying degrees

A distinction is made between countries directly dependent on Russian and Ukrainian wheat, and those which, as Algeria, Morocco and Tunisia, are to be heavily impacted by consequences of the war.

1. Sixteen African countries most directly dependent on Russian and Ukrainian wheat

These countries are listed in Table 3. For each, we note population, degree of dependency and breakdown of dependence between Russia and Ukraine.

Eritrea, with a population of 3.6 million, is the only African country 100% dependent on Russian and Ukrainian wheat imports, with Russia contributing 60% and Ukraine 40%. Next are two countries with 90% dependence on Russian and Ukrainian wheat. Somalia and the Seychelles, with 16.8 million and 0.5 million inhabitants respectively, share a common dependency on Ukrainian wheat: 90% for the Seychelles and 50% for Somalia.

Five other African countries have dependency ratios ranging from 70 to 85%. Again by order of decreasing dependence, the DR Congo (86.6 million inhabitants) is 85% dependent on Russian wheat and 5% on Ukrainian wheat, and Egypt (106 million inhabitants) has overall dependency of 80%, i.e. 55% on Russian wheat and 25% on Ukrainian wheat. One other country is globally dependent for 75%: Madagascar (29 million inhabitants) at 50% for Russian wheat and 25% for Ukrainian wheat. Only one country, Benin (11.8 million inhabitants), depends solely on Russian wheat for 70% of its needs.

This leaves 8 countries with dependency ranging 65 to 56%. At 65%, only one country, Congo (5.5 million inhabitants), depends on Russian wheat alone. Three countries - Tanzania (60 million inhabitants), Libya (6.8 million) and Liberia (5.3 million) - are 60% dependent on either Russian or Ukrainian wheat. Tanzania is 60% dependent on Russian wheat alone; Libya is 20% dependent on Russian wheat and 40% on Ukrainian wheat; and Liberia is 60% dependent on Russian wheat alone. This leaves four countries: Rwanda (population-13 million); Namibia (13.6 million); Senegal (16.3 million) and Mauritania (4.9 million). All four countries are estimated to be 56% dependent on Russian and Ukrainian wheat, with Rwanda and Namibia at 52% Russian and 4% Ukrainian, Senegal and Mauritania at 8% Russian wheat and 48% Ukrainian.

Overall, 16 African countries accounting for 374 million inhabitants, i.e., nearly 40% of Africa's population, are 56% or more dependent on Russian and Ukrainian wheat. This is considerable. Particularly considerable in that other African countries, whose dependence on Russian and Ukrainian wheat is below 50%, are not included in the approach. This applies to Algeria, Morocco and Nigeria, respectively second, third and fourth largest wheat importers in Africa. Which now brings us to further explore wheat import dependence regardless of supplier origin.

2- Algeria, Morocco and Nigeria import over 17 million tons of wheat, most of which is neither Russian nor Ukrainian

Algeria is Africa's second largest importer of wheat, behind Egypt, with estimated imports of 7.7 million tons for the 2021/2022 season, along with 3.6 million tons produced in Algeria. Algerian production is down one million tons compared to 2020/2021, because of very unfavorable weather conditions. In 2021, Algeria's main suppliers came from Europe, mainly France and Germany. However in 2021, Algeria moved closer to Russia in an effort to drive out European exporters, particularly those from France. This will take time, and it is not certain the invasion of Ukraine will accelerate any rapprochement.

Morocco, the continent's third largest wheat importer, produces wheat in quantities that vary according to weather conditions. In 2021, favorable weather conditions enabled wheat imports to be cut down 0.7 Mt, dropping below five 5Mt, at an estimated 4.5 Mt. Moroccan imports stand out for the variety of suppliers. These include Ukraine (25%), Russia (11%), France (40%) and Canada for almost all imports of durum wheat.

In Nigeria, Africa's most populous country, wheat imports increased steadily in the last two years, now above 5 Mt, with 5.5 Mt estimated for the 2020/2021 crop year. As with Morocco, the diversity of suppliers deserves to be emphasized: of the total 5.5 Mt imported, 1 Mt came from the EU, 0.8 Mt from Russia, 0.7 Mt from Canada and just 0.6 Mt from the United States. Considering that US wheat imports constituted 90% of total imports in 2010/2011, the distance covered is considerable.

Crises invariably highlight an economy's weakness and amplify its consequences. In this case, not diversifying wheat supplies and restricting it to Russia and Ukraine, clearly has its limits. In contrast, supply diversification by Algeria, Morocco and Nigeria is to be highlighted. Overall, close to 700 million people will be directly impacted in their wheat consumption by dependence on Russian and/or Ukrainian wheat.

CONCLUSIONS

The war in Ukraine severely impacts world wheat market given the significance of Russian and Ukrainian exports, accounting for approximately 30% of global exports. The paralysis of major Sea of Azov and Black Sea ports, seriously disrupting global trade, adds nothing to the situation.

In fact, quite the opposite. As of this writing, we know not when and how the war will end. We do know, however, that this crisis will have a lasting impact on the supply and price of wheat. This is a two-part crisis: supply and price. A supply crisis, primarily, considering how many African countries depend on Russian and Ukrainian wheat, one in two according to UNCTAD (United Nations Conference on Trade and Development). Among these countries, those most likely to quickly feel the consequences on their supplies are, of course, Egypt, DR Congo and Tanzania, the most heavily populated. On the whole, however, given low stock levels leading up to the crisis, experts are concerned for all sub-Saharan countries. Two North African countries are particularly vulnerable to the crisis: Libya and Tunisia. Libya, who depends on Ukraine for 60% of supplies and Russia for 15%, needs urgent alternatives, as it is on the verge of running out of wheat, with stocks currently estimated at one month. The liquidity crisis facing the country, further complicates the situation.

In Tunisia, wheat imports are projected to rise 33%, hitting a record 2.5 Mt, because of considerable agricultural underperformance in the past crop year. Wheat imports in Tunisia account for 50% of national food imports, and stocks stand at 4 months, but as with Libya, the country's liquidity situation complicates financing this market.

On the price side, soft wheat prices rose from 230 euros in April 2021 to a record 376 euros in late March. The boom in wheat prices however started in August 2021, with prices hitting 270 euros, breaking 300 euros in December 2021, and then falling back to a range between 270 and 280 euros, until February 2022, to further accelerate. First, the Ukrainian crisis is not at the root of this price upswing, but has amplified it. As already experienced in the financial crisis of March 2008, when a ton of wheat hit 292 euros, or during the Arab Spring, when a ton of wheat shot up to 277 euros.

Supply and demand drive the wheat market. When supply is practically slashed by 30% and demand does not decrease, increases in price are consistent with market logic. In fact, all other things being equal, this increase is relatively limited compared to the surge in oil and gas prices. Compensating for reduced Russian and Ukrainian supply calls for better harvests and/or increased European, Canadian and American supply. This will take time, however, and also depends on how the conflict develops. On the demand side, two contradictory movements are underway: an increase, consecutive to the impoverishment of emerging countries impacted by the crisis, leading to greater consumption of bread. There also is a price point above which emerging countries no longer can buy. That is the worst-case scenario, but is not totally excluded considering the rise in wheat price as well as transport costs, also strongly impacted by the Ukrainian crisis, and which did not wait for the crisis to seriously escalate.

RECOMMENDATIONS

This crisis highlights the need to invariably diversify supplies and, if possible, preserve national sovereignty in matters as sensitive as food.

* Diversifying supplies is what Morocco and Nigeria have done, for example. Unfortunately, Egypt did not. No matter how good an alliance when entrusting food sovereignty, never forget this can change and deteriorate.

* Preserving food sovereignty means having an agriculture that favors food crops, wheat being one of them, when given the chance to do so. Algeria, at one point in its history the granary of Europe, has failed to do so in recent times.

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Author of sixteen books, of which the last few concerned Morocco and sovereign funds, hundreds of articles (of which some were translated in English, French, Arabic, Polish and Russian), Henri-Louis Védie was also a consultant for the European Council and a member of the Economic, Social and Environmental board in Paris.

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