



The Ukraine War and Food Security: Consequences for Norway's Partner Countries

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Key take-aways

The war in Ukraine is causing disruptions in global food supplies, with grave consequences for many developing countries. Both Ukraine and Russia are significant food exporters and major producers of fertiliser ingredients. However, the effects of the war will vary significantly between different countries. Some countries rely on supplies from Russia and Ukraine. Others are less dependent on food imports but depend on Russian and Ukrainian import of fertilisers. Yet others will mainly be affected by general global price increases, especially in the long-term perspective (within the next three years).

However, most of Norway's partner countries are largely self-reliant in food. For them, the main problems caused by the war are the following:

- Increased prices for fertilizers
- Higher energy prices and higher interest rates
- Increased risk of political instability and conflict
- Cuts in aid

In this situation, Norway should do the following:

- Avoid cuts in aid to partner countries to fund support to Ukraine and Ukrainian refugees
- Increase food support to countries most affected by drought and conflict
- Support partner countries' supply of fertilisers
- Consider debt relief to countries negatively affected by price increases on energy and higher interest rates.

Introduction

One of the significant consequences of the war for low-income food-importing countries is that food prices rise from an already high level. A recent FAO-report projects a further increase in food prices of 8–22 per cent. Higher prices threaten food security and increase the risk of famine. At the same time, fertilisers, and oil and gas prices also surge. The war could also lead to further disruption to global supply chains, worsening already difficult conditions for international trade. This could also lead to an increased risk of social and political instability and conflict, increasing the risk of political violence.

This brief examines how Norwegian partner countries' food security is affected by the war. We map the form and degree of dependence on food and fertiliser imports and the likely effects of the war on food security. Distinguishing between direct and indirect effects of the war, we start by describing partner countries' import of wheat from Russia and Ukraine. We then assess the importance of this import for food security, by estimating the scale of wheat import in relation to domestic production and consumption patterns. The same assessment is made for fertilisers. Finally, we briefly discuss some potential indirect effects of the war for food security, including cuts in aid, higher energy prices and higher interest rates.

Direct effects of the war on food security

Wheat is the main food crop exported by Russia (20% of global wheat exports) and Ukraine (9%). In terms of the direct effects of the war, the most immediate impact could be on the availability of wheat from Russia and Ukraine. In the case of Ukraine, the war is likely to lead to significantly reduced food exports because of production disruptions. In the case of Russia, exports could be reduced either because Russia decides to reduce its exports or because of international sanctions (however, it is not clear whether partner countries will join such sanctions).

The following table shows the pattern of wheat imports for Norway's partner countries.

Table 1. Primary sources of wheat imports for Norway's partner countries Source <https://oec.world/en/profile/country/cod?yearlyTradeFlowSelector=flow1>

Colombia	Canada 70%	US 29%			
Ethiopia	US 61,2%	Argentina 16,6%	Ukraine 12,4%	Russia 4%	Bulgaria 2,6%
Ghana	Canada 53,6%	Russia 26,1%	Latvia 8,5%	France 6,3%	Lithuania 2,3%
Indonesia	Ukraine 26,2%	Canada 25%	Argentina 22%	US 13,9%	Australia 11,2%
Malawi	Russia 22,8%	Australia 14%	Canada 11,3%	US 11%	Mozambique 7.6%
Mozambique	Russia 31%	Canada 22%	Ukraine 8%	Latvia 5,5%	Argentina 4,2%
Myanmar	Australia 56,3%	US 26,5%	Ukraine 8,6%	Canada 6%	Romania 1,3%
Nepal	India 99,7%				
Tanzania	Russia 70,7%	Poland 10,3%	Lithuania 7,9%	Ukraine 3,7%	Germany 3,4%
Uganda	Russia 35,3%	Argentina 26,4%	Ukraine 12,8%	Germany 11,6%	Lithuania 4%
Afghanistan	Kazakhstan 83,7%	India 13,8%	Uzbekistan 1,7%		
Mali	France 62,3%	Russia 35,7%	Senegal 2%		
Niger	Nigeria 100%				
Palestine	Israel 51%	Russia 32,6%	Hungary 11,8%	Romania 4,6%	
Somalia	Ukraine 53,1%	Russia 36,7%	India 9,4%		
South Sudan	No data				
DRC	Russia 59,9%	France 15,6%	Germany 11,8%	Latvia 4,2%	Lithuania 4,1%

We see from this table that both Russia and Ukraine are important sources of wheat imports for several of Norad's partner countries, especially Tanzania, Ghana, Indonesia, Mozambique, Palestine, Mali, Somalia, and Uganda.

However, this must be seen in relation to domestic production (the degree of self-sufficiency) and the relative importance of wheat in total food consumption. The following table shows the relative importance of wheat compared to rice, maize, and cassava (as alternative cereal products) for all partner countries.

Table 2. Total production and imports of wheat, rice, maize, cassava and sunflower oil for Norway's partner countries (in 1000 tonnes), 2019. Source, FAOSTAT <https://www.fao.org/faostat/en/#data>

	Wheat prod.	wheat imp.	rice prod.	rice imp.	maize prod.	maize imp	cassava prod.	cassava imp.	sunflower prod.	sunflower imp.
Colombia	6	1991	3012	297	1395	6004	1027	61	1	34
Ethiopia	5315	1425	171	641	9636	68	0	0	0	13
Ghana	0	746	925	1383	2760	14	22448	3	0	13
Indonesia	0	11221	54604	726	30693	1729	16350	1574	7	8
Malawi	1	125	133	9	3030	6	5668	0	4	2
Mozambique	18	696	341	1456	2085	268	3550	0	5	18
Myanmar	111	578	26270	19	1986	16	392	2	67	25
Nepal	2016	177	5610	928	2653	347	1	0	0	95
Tanzania	63	955	3475	293	5652	104	8184	0	277	6

Uganda	20	472	255	125	3588	31	6983	11	84	1
Afghanistan	4890	2526	383	207	185	132	0	0	3	53
Mali	8	362	3196	153	3817	2	70	0	0	1
Niger	5	108	122	384	38	42	514	12	0	0
Palestine	NA	NA	NA	NA	NA	NA	NA	NA		
Somalia	NA	NA	NA	NA	NA	NA	NA	NA		
South Sudan	NA	NA	NA	NA	NA	NA	NA	NA		
DRC	11	393	1379	306	2139	125	40050	0	0	6

The table shows that in terms of wheat - the most important food export from Russia and Ukraine - total consumption levels are very low in most partner countries. Although all partner countries except Nepal and Afghanistan import most of the wheat they consume, wheat represents a tiny proportion of total cereal consumption for most partner countries – much smaller than rice, maize and cassava. This especially applies to partner countries in Africa. This reflects that wheat is not an essential part of the traditional diet in these countries.

In Colombia and the Asian partner countries (Afghanistan, Indonesia, Myanmar and Nepal), wheat consumption is higher. While Nepal is almost self-sufficient in wheat, the others rely mainly on imports. These countries will therefore be more affected by an increase in the price of wheat. Moreover, they are also somewhat less self-sufficient in food in general and therefore more exposed to international price increases. This especially applies to Afghanistan, the least self-sufficient country in food of all partner countries. As for sunflower oil, the table shows that most partner countries mainly rely on import. The only exceptions are Myanmar, Tanzania and Uganda and in part Indonesia and Malawi.

Table 3 shows the degree of import dependence for each cereal type and sunflower oil for each country:

Table 3. Imports as share of total consumption (Consumption = production + import – export) Source, FAOSTAT <https://www.fao.org/faostat/en/#data> (import shares of over 100% indicates that some imported wheat is re-exported)

	wheat	rice	maize	cassava	sunflower oil
Colombia	104%	9%	81%	5,6%	97%
Ethiopia	21%	79%	0,7%	0	100%
Ghana	123%	60%	0,5%	0	100%
Indonesia	104%	1,3%	5%	8,8%	51%
Malawi	100%	6%	0,2%	0	33%
Mozambique	106%	83%	11,3%	0	78%
Myanmar	100%	0,1%	1,4%	0,2%	27%
Nepal	1%	14%	11,5%	0	100%
Tanzania	98%	7,8%	1,9%	0	2%
Uganda	108%	34%	0,9%	0,2%	1%
Afghanistan	34%	21%	41,6%	0	95%
Mali	98%	5%	0,1%	0	100%
Niger	109%	80%	52%	0,2%	
Palestine					
Somalia					
South Sudan					
DRC	80%	12%	4%	0,1%	100%

The table shows that the overall picture is that Norway's partner countries are quite self-sufficient in cereals. The share of imports in total cereal consumption is quite low for almost all the 16 countries. Hence, although the proportion of wheat imports coming from Russia and Ukraine is high, this represents only a small fraction of total cereal consumption (wheat, rice, maize and cassava combined). For sunflower oil, the situation is different. Here, most countries are heavily dependent on imports. The exceptions are Tanzania and Uganda, which are almost self-sufficient, and Myanmar, which produces much more than it imports. This means that higher food prices on the world market as a result of the war will have limited impact on Norway's partner countries. High prices or reduction in supply of wheat does therefore not represent a serious threat to African countries' food security. The exceptions are Afghanistan, Indonesia and to some extent Colombia, where the share of imports in total cereal consumption is higher. However, with the exception of Afghanistan, these are also countries that are significantly richer than other partner countries, and therefore more capable of dealing with higher prices.

The following table shows the most important source countries of food imports for the partner countries. Neither Russia nor Ukraine are among the five most important sources of food imports for any partner country.

Table 4. Country of origin of total food imports for Norway's partner countries. Source, The Observatory of Economic Complexity <https://oec.world/en>

Main sources of food imports (total)

Colombia	US	Equador	Bolivia	Brazil	Mexico
Ethiopia	India	US	Belgium	Egypt	Turkey
Ghana	China	Brazil	Turkey	Morocco	India
Indonesia	Brazil	Thailand	China	US	Argentina
Malawi	Zambia	Mozambique	South Africa	Kenya	Egypt
Mozambique	South Africa	Zimbabwe	Portugal	Eswatini	China
Myanmar	Thailand	China	Singapore	Malaysia	Indonesia
Nepal	India	US	Singapore	China	Netherlands
Tanzania	UAE	India	South Africa	Turkey	Kenya
Uganda	Kenya	India	Egypt	Netherlands	Belgium
Afghanistan	UAE	India	Pakistan	Brazil	Turkey
Mali	Senegal	Ireland	France	Netherlands	China
Niger	Nigeria	Brazil	Cote d'Ivoire	US	Turkey
Palestine	Israel	Turkey	Egypt	Jordan	Saudi Arabia
Somalia	UAE	India	Turkey	Brazil	Kenya
South Sudan	Uganda	Kenya	India	France	US
DRC	Zambia	Uganda	Kenya	China	India

At least in the short term (2022-2023), therefore, the overall picture is that the war in Ukraine does not severely affect food security in Norway's partner countries, since imports represent such a small proportion of total food consumption.

However, food supply is uncertain in several partner countries for other reasons, such as droughts and armed conflict, which threaten to reduce domestic food production. This is especially the case for countries like Mali, Niger, Somalia, Ethiopia, South Sudan and Afghanistan. This is likely to be a much more significant risk for food security than the impact of the Ukraine war in the immediate future.

Fertilisers

However, in a somewhat longer perspective, the supply of fertilisers is crucial for domestic food production. According to FAO, of Norway's partner countries, only Colombia, Indonesia, Myanmar have registered domestic production of fertilizers since 2016 (FAOSTAT <https://www.fao.org/faostat/en/#data>), and even they rely on imports for a large part of their consumption. Some countries, including Ethiopia and Ghana, have announced that they plan to start production, but based on FAO data, production has not yet started. Hence, partner countries largely rely on imports. The following table shows the import bill for the main forms of fertilizers for partner countries (nitrogen, phosphates and potassium-based fertilizers).

Table 5. Fertiliser import in partner countries (in million USD) Source: The Observatory of Economic Complexity <https://oec.world/en>

Colombia	563	Uganda	34
Ethiopia	410	Afghanistan	26
Ghana	126	Mali	41
Indonesia	1196	Niger	NA
Malawi	214	Palestine	15
Mozambique	196	Somalia	NA
Myanmar	574	South Sudan	0,6
Nepal	42	DRC	63
Tanzania	132		

As for African partner countries, they have no production of fertilisers at all. Hence, all partner countries rely heavily on imports. All are therefore vulnerable to price increases for fertilisers. Price increases would also, if they last, lead to reduced food production in the longer term (1-3 years) and subsequently increased import dependence. This, therefore, is the main direct threat to food security caused by the Ukraine war for Norway's partner countries. FAO estimates that the price of fertilisers will increase by 13% in 2022 compared to 2021 due to the war and by 25% over the next five years if the conflict continues. (<https://www.fao.org/3/cb9236en/cb9236en.pdf>.)

Some countries, such as Ghana, Tanzania and Niger, receive a significant proportion of their fertiliser imports from Russia and Ukraine (see the table below). Whether this will make them especially vulnerable will depend on the availability of alternative suppliers.

However, it should also be noted that in Sub-Saharan Africa, the use of fertilisers is quite limited. According to the African Development Bank, the average application of fertiliser per hectare of cultivated land is 17 kg, compared to a global average of 135 kg. <https://www.afdb.org/en/news-and-events/africas-fertilizer-sector-and-banks-high-5s-36830>. This means that although higher prices will reduce the use of fertilisers, the effect on production capacity will be more limited than elsewhere.

Table 6. Main sources of fertiliser imports. Source: The Observatory of Economic Complexity <https://oec.world/e>

Colombia	US	Belarus	Trinidad	Russia	China
Ethiopia	Morocco	UAE	Egypt	Saudi Arabia	Netherlands
Ghana	Russia (27%)	Spain	Morocco	Belgium	Turkey
Indonesia	China	Canada	Belarus	Russia (8,3%)	Germany
Malawi	UAE	China	Saudi Arabia	Bahrain	Indonesia
Mozambique	Morocco	China	Saudi Arabia	India	Russia (4,9%)
Myanmar	China	Malaysia	Thailand	South Korea	Vietnam
Nepal	India	China			
Tanzania	Morocco	Saudi Arabia	Ukraine	China	Russia
Uganda	Kenya	Russia (13%)	China	Saudi Arabia	Qatar
Afghanistan	Uzbekistan	India	Kazakhstan	Turkey	China
Mali	Senegal	Belarus	Russia (4,3%)	Spain	Sweden
Niger	Russia (39,6)	Benin	India	Togo	Cote d'Ivoire
Palestine	Israel	China	Jordan	Italy	Turkey
Somalia	Egypt	Kenya	Turkey	Saudi Arabia	UAE
South Sudan	Kenya	Uganda	UAE	China	

Indirect effects

Although food security is generally not at risk for Norway's partner countries in the short term, the war is likely to have significant indirect effects. Among these are higher interest rates and higher energy prices. Both these factors will cause economic problems for all countries, but most of all for those most indebted and those dependent on energy imports (most partner countries). Higher energy costs will also spill over to food prices, as fertilisers and transport will become more expensive.

Economic problems are also likely to be reinforced by increased global interest rates, which will make it more challenging to handle international debt and higher import prices. However, countries like Ghana, Mozambique and Indonesia are net energy exporters and will benefit from high prices. Likewise, South Sudan and Tanzania have significant energy reserves, which is likely to make them benefit from higher prices in the longer term.

A further risk is that partner countries will not receive the aid they need to deal with the negative implications of the war. Donors may prioritise the provision of aid to Ukraine and Ukrainian refugees. If this aid is provided within existing aid budgets, it will mean that traditional aid partners receive less. And even if they do not receive less aid than before, they may not receive the increase in aid necessary to compensate for the extra expenses caused by the war.

Higher food prices will also affect donors' ability to provide emergency support to Africa. If world market prices rise significantly, organisations like the UN, Red Cross and others may be able to provide less food aid to countries facing droughts, conflicts or other emergencies.

For instance, about half of the grain distributed by the World Food Programme comes from Russia and Ukraine. If donors have to pay more for their provisions, it may hurt all countries needing food aid. Hence, states that rely on such aid could be facing an even more critical situation unless funding for food aid is increased.

There are also potential political implications of the war. For instance, higher energy prices may cause social and political unrest and violence. And while the war does not threaten food security in the short term, a shortage of fertilisers could reduce food security in the longer term and cause further unrest. Those partner countries classified as fragile are especially vulnerable in this regard.

Finally, two partner countries, Mali and Niger, face particular risks. Russia has played an important political and military role in these countries by providing military aid to the ruling regimes. If Russia decides to reduce this engagement, it may have unpredictable consequences for the security situation in these countries. On the one hand, it would remove a brutal set of actors and reduce the supply of arms. On the other hand, it could weaken ruling regimes and thereby destabilise an already fragile situation even further. This could lead to increased violence and the strengthening of militant Islamist groups.

Several third order effects could also emerge in the longer term. These may have far-reaching and long-lasting consequences, both politically and economically; foreign debt may become unmanageable because of higher interest rates and higher energy prices, and FDI inflows may take a hit, hampering growth. All these factors are likely to have adverse effects on long-term food security, growth, and political stability.

Conclusion

Many of Norway's partner countries face a critical situation regarding food security. However, in most cases, food supply problems are not directly caused by the war since they are largely self-sufficient in food. Moreover, the main crop exported by Ukraine and Russia, wheat, represents a relatively insignificant proportion of partner countries' total food consumption. Instead, food shortages are caused by drought (especially in the Horn of Africa), conflict (Afghanistan, the Horn of Africa, the Sahel) and possible aid cuts. Moreover, in the longer term, the increase in the price of fertilisers caused by the Ukraine war will affect domestic food production by making fertilisers less affordable. In addition, higher interest rates and high energy prices will limit their ability to pay for food imports even further.

Recommendations

Given the existing situation, Norway should do the following:

- Avoid cuts in aid to partner countries to fund support to Ukraine and Ukrainian refugees
- Increase food support to countries most affected by drought and conflict
- Support partner countries' supply of fertilisers
- Consider debt relief to countries negatively affected by price increases on energy and higher interest rates.

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