

# How Russia's Invasion of Ukraine Will Affect the Food Security Situation in Malawi: Implications for Malawian Policy Response William Chadza, William J. Burke, Thom S. Jayne & Milu Muyanga

# **Key Messages**

- The conflict between Russia and Ukraine is very likely to have an impact on Malawi, that could be detrimental, but steps can be taken now to soften the effects.
- The impact on markets for food, fuel and fertilizer will directly affect crop diversification opportunities for farmers, creating additional costs but possibly also new opportunities.
- Even before the war, food and fertilizer prices were near, and likely to surpass, historical highs.
- Global fuel prices will rise, putting upward pressure of fuel, food, and fertilizer costs in Malawi.
- Food prices will also rise on the global markets due to supply shocks, especially for wheat and sunflower. As staple grains and edible oils are highly substitutable and often inputs for other foods, this will raise global prices for most foods, which will further raise food costs in Malawi.
- Rising fuel and food prices will put upward pressure on fertilizer prices due to higher costs of production and increased demand for fertilizers.
- Fertilizer supply will also be directly impacted, as the countries involved in the conflict are major producers of chemical nitrogen, phosphorus and potassium used in agricultural production.
- Actions can be taken now to mitigate the effects on Malawian livelihoods, including changes to the Affordable Inputs Program, promoting alternatives for wheat and maize, and facilitating local production of edible oil crops, such as sunflower and soya.

#### Introduction

The Russian Federation invaded Ukraine on the 24th of February 2022. In response, several countries have imposed sanctions targeting Russian individuals and the broader economy. As of this writing, the future duration and scope of this conflict remains largely uncertain. However, the potential – even likely – detrimental impact on Malawian livelihoods will be massive, and steps could be taken now to soften the effects.

#### How the Invasion of Ukraine will affect Malawi

## Energy and transport costs

The most commonly anticipated impact on the world economy from the war comes in the form of oil and fuel prices. Russia produces over 10% of the

world's oil<sup>1</sup> and is the second largest global producer of natural gas - 17% of the global total.<sup>2</sup> The war will raise global oil and gas prices, which will affect Malawian fuel prices regardless of where Malawians procure their oil. Oil and related markets are quintessentially global - no country will be immune. According to the Chief Executive Officer for the Malawi Confederation of Chambers of Commerce and Industry, fuel prices may reach MK1,400 per litre because of the tension between Russia and Ukraine.<sup>3</sup> For people who do not travel by vehicle to acquire food, the immediate effect of rising fuel prices on food security may not seem obvious. However, even if a person does not travel to get food, a great deal of food travels to get to the customer. So, one way or another, rising fuel prices will put upward pressure on food prices

for all Malawians. Moreover, fuel price increases have ripple effects on many other sectors in Malawi. It is not just the cost of transport that will go up; but the prices of basic commodities and other services that require transportation will also go up. This will have a negative impact on people's livelihoods.

# Food prices

Fuel prices will increase the margins along the food value chain - whether that is between domestic and world prices, urban and rural prices, rural and farmgate prices, or all three - but there will also be more direct upward pressure on food prices because the countries involved in Russia's war produce a great deal of food. Russia is the world's third largest wheat producer, for example. Russia, Ukraine, and Belarus (Russia's ally in the war) produce about 4% of the world's maize, 15% of the world's wheat, and 55% of the world's sunflower oil.4 Either due to sanctions or war-hampered production, it is almost certain that a substantial share of this will be removed from global markets. Importantly, staple grains and edible oils are highly substitutable and inputs into prepared foods, meaning these production deficits will put upward pressure on all world prices for virtually all food. Again, whether a country imports from one of the countries at war will not determine whether price effects are felt at home - the global production decline will affect prices everywhere, including Malawi.

That said, Malawi is particularly vulnerable because Russia is one of the five countries where the bulk of Malawi's food imports originates. For example, in 2018, Malawi sourced about 17% of its total food imports (and most of its wheat) from the Russian Federation. Frices for bread and other food products that use wheat are already going up. Interviews with bakery owners in Lilongwe reveal that the retail price of a 50kg bag of wheat flour has risen 42% from MK45,000 to MK64,000 since the beginning of the war; the price of bread has

increased 50%, from roughly MK600 to MK900 per loaf.

Troublingly, this at a time when food prices were already high. For example, the average price for maize in February was nominally 65% greater in 2022 than during the same month in 2018. 6.7 There are numerous reasons for this, but the main driver is the rise in global prices associated with the Covid-19 pandemic. Moreover, according to the first round of the agriculture survey conducted by the Ministry of Agriculture, Malawi's own production is expected to be lower than average this year, in part due to late rains and flooding in the South. 3.9 million metric tons of maize will be produced in the 2022/2023 growing season, a decrease from 4.4 million metric tons realized last year.

#### Fertilizer Prices

Even in January 2022, prior to the Russian invasion, fertilizer prices in Malawi were near an all-time high -- 130-160% higher than in August 2020, driven primarily by rises in global prices. The crisis in Ukraine is likely to increase fertilizer prices even further. Russia is the 4th largest producer of chemical fertilizers in the world. Ukraine is also amongst the top 20, and Belarus is a major player too. Collectively, these three countries produce about 10% of the world's nitrogen (N) and phosphorus (P) fertilizers, and 35% of the world's potassium (K). Moreover, higher global food prices in 2022 will continue to drive up demand for (and thus prices of) fertilizer on global markets, while higher fuel costs will widen the gap between world and Malawian prices.

So, in addition to the other upward forces on food and fertilizer prices, the world is likely to see an 8-10% reduction in the supply of fertilizer on the global market in the coming year – perhaps more for those which include potassium – that will further add to the cost of fertilizer in Malawi, which have already risen. As of 10th March 2022, fertilizer FOB in the Middle East were between \$860/ton

and \$1000/ton. In Egypt, the prices were between \$925 and \$1,100/ton.<sup>8</sup> As the agricultural season in the European Union starts now, fertilizer prices will continue to rise.

Importantly, while high food prices will drive up fertilizer prices, the reverse is also true: high fertilizer prices will result in higher food prices later. This inflationary cycle will be slowed when production of food, fertilizers, and food outside of the conflict zone responds to global price signals, but this will take time. For example, deciding to produce more seed is not as simple as flipping a switch. Often seed production decisions are made with a horizon of two or more years, and of course it then takes another growing season to realize the additional food production. 9,10 The shocks from this war will be felt in these agricultural markets for multiple years, at least.

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The situation in Europe is extremely volatile, so few predictions about food and fertilizer prices, even in the near future, can be made with confidence. All uncertainty acknowledged, fuel, farm input, and food prices have already risen, and it is very likely they will be substantially higher in the coming year than they are now. It is therefore prudent to consider steps that could be taken to ease the forthcoming burden.

#### Options to consider include:

- 1. Agree on Affordable Inputs Program (AIP) reforms as soon as possible to improve land, labor and fertilizer productivity for locally produced maize and legumes (see Nyondo et al., 2022 for details).
- 2. Avoid delays in the procurement and delivery of AIP inputs for the 2022/23 season, given that fertilizers are likely to be in short supply on the world market.
- 3. Support Dimba/winter cropping in the areas affected by Cyclone Ana. Interviewed farmers

have explained how floods are usually followed by a bumper Dimba harvests - fertilizer swept from the uplands by the floods get deposited in Dimba areas (Nyirenda et al., forthcoming). Ensuring access to seeds (and perhaps pesticides) will ensure Malawi can take full advantage.

- 4. The Government can contract commercial farmers for irrigated winter maize in a timely way to secure needed maize supplies later in the year.
- 5. Farm households may need to diversify their diets by increasing reliance on other foods such as cassava, sorghum, rice and potatoes in order to reduce their expenditures on maize and wheat products.
- 6. The Government can explore working with the large millers to blend sorghum or other locally produced grains with wheat for bread products.
- 7. Invest in increased productivity of commodities which are typically imported but which could be produced locally, such as wheat and wheat substitutes.

Finally, the change in the global economic outlook also presents opportunities. Specifically, the increase in food prices and reduction in oilseed production is likely to significantly increase demand for crops that Malawians can produce, such as groundnuts, sunflower, and soya. Although the domestic capacity to process into oil is low, there is still enormous potential to benefit from producing oilseeds in the coming year(s).

Government and donor actions that can move Malawians into oilseed (especially sunflower) production will have high returns. A shift from narrowly focusing on maize production to facilitate farmers' entrance into these markets could help lessen the impact of forthcoming shocks and provide opportunities for growth. There is some urgency, though, as other actors in the region (and globally) will see similar opportunities. First movers

will benefit much more than others. Ramping up seed production locally requires multiple years; latecomers will have difficulty acquiring seeds.

In summary, it is almost certain that the Russian invasion of Ukraine will adversely affect food security in Malawi. There will be direct and substantial negative impacts on global production of energy, staples, edible oils, and fertilizers. Moreover, the effects on energy and food prices will have later knock-on effects, putting further upward pressure on the prices of fertilizer.

Some of the options laid out here might cost more than importing from world markets in the short-term. However, recent events add weight to the argument for improving the local production base for agricultural products to ensure stability of supplies and to capture the employment and non-farm multipliers from expanded local farm production. Raising the value of farm production – either with investments on the farm to improve productivity or off the farm to increase the farmgate value of production –leads to expanded private investment at the various stages of the agrifood system and long-term economic growth. Recent geo-political events add to the urgency of long-needed improvements.

- 1- www.eia.gov/tools/faqs/faq.php?id=709&t=6
- 2-https://www.nsenergybusiness.com/features/

## natural-gas-producing-countries/

3-Blantyre Newspapers Limited, The Sunday Times of 27th March 2022

## 4- https://www.fao.org/faostat/en/#data

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6-IFPRI (International Food Policy Research Institute), 2019. "IFPRI Monthly Maize Market Report, March 2019." IFPRI Malawi Strategy Support Program.

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9-Lubungu, M., W.J. Burke & N.J. Sitko. 2013. "Analysis of the Soya Bean Value Chain in Zambia's Eastern Province." Indaba Agricultural Policy Research Institute (IAPRI) Working Paper 74. Lusaka, Zambia.

10-Lubungu, M., W.J. Burke & N.J. Sitko. 2013. "Analysis of the Sunflower Value Chain in Zambia's Eastern Province." IAPRI Working Paper 85. Lusaka, Zambia.



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