

## Global food security in times of war

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The war in Ukraine has had a tremendous humanitarian impact. Thousands of people have died, millions have been displaced, and just as many Ukrainians remaining in the country could face [food insecurities](#) soon. The end of the war is still not in sight, and indirectly, millions of people outside of Ukraine will be impacted by the conflict as well – most notably in the area of food security.

Agricultural supplies are now endangered in different parts of the world, food prices have reached an [all-time high](#) in March 2022, and farmers around the globe are facing substantially increasing fertiliser prices. All this leaves millions at risk of malnutrition.

### Export problems in Ukraine

Russia and Ukraine take up a crucial role in the international food chain as significant exporters of agricultural products. Together these states [supply](#) up to 6 per cent of the available food calories available on the international market. Russia and Ukraine are particularly big exporters of certain produce: last year, either country was among the three [largest exporters](#) of sunflower seed products (80%), wheat (30%) and maize (15%) globally. And in 2021, Ukraine was the [largest](#) supplier of food aid provided through World Food Programme (WFP).

The protracted war in Ukraine has a dire impact on these exports. First, the Russian aggression directly impacts Ukrainian farmers capabilities to continue agricultural work. As a considerable amount of farmers have joined in the war, crops are not being harvested. Where farmers are available, it can be dangerous to work the land where fighting persists. Second, transporting the produce proves to be a challenge as large parts of south-eastern Ukraine are under Russian occupation and roads and other vital infrastructure have been damaged throughout Ukraine. Because of this, supply chains have been significantly [disrupted](#).

Third, even when produce can be moved within Ukraine, the next challenge is to export it. The Russian control over port cities such as Mariupol makes it impossible to operate these harbours, which Ukraine has now formally [closed](#). Combined with the Russian naval blockade of other Ukrainian ports, such as Odesa, it has become largely impossible for Ukraine to export any goods by sea. The Russian blockade has a huge impact to Black Sea flows: the vast majority (90 per cent) of Ukrainian agricultural exports were [shipped](#) out of Black Sea ports before the war.

As a result, Ukraine now relies on alternative options for exporting, such as the railway system. However, the railway network has a limited [capacity](#), both in Ukraine as well as on the eight railway connection points on the border. And there are [limits](#) to the volumes that can be transported as well: it takes ten trains to transport the same amount of grain as a single vessel could have carried. Countries like Germany seek to support Ukraine to still export its food despite the blockage of the harbours.

### Impact on global food security

The impact of these export difficulties are particularly being felt in the Middle East and North Africa (MENA). Various states in the region [import](#) a large share of their cereals from Ukraine and Russia, which is especially the case for Libya (55%), Lebanon (47%) and Yemen (31%).

As these countries rely heavily on imports to keep up their cereal levels, they are positioned amongst the states most vulnerable to food security risks. Lebanon is especially vulnerable to rising insecurity, where these rising risks [endangers endangering](#) the social and political stability in the country.

Governments in the Arab world often subsidise the basic necessities of life, such as food. Their vulnerability to the price fluctuations of these goods has driven people to the streets on multiple occasions. This has happened in 2008 and 2009 when people in Tunis protested the high bread prices, caused by export restrictions from Ukraine and Russia due to a drought. Moreover, food prices played an important role in the Arab Spring as well, when rising prices [intensified](#) already present tensions.

Because Ukraine is such an important supplier of food aid provided through the WFP, which [buys](#) almost half of its grain from Ukraine, it becomes increasingly challenging and costly to provide this food aid to countries in need. The case of Yemen is exemplary, where the WFP [warns](#) that its operational costs have increased significantly while only a tenth of its required funding to continue for the next six months is remaining.

In other parts of the world, these supply problems due to the war in Ukraine might be worsened even further due to weather conditions. Over the past weeks an extreme heatwave has scorched South Asia, which could [endanger](#) Indian intentions to increase its exports to make up for global food shortages. Drought in Europe also is a factor to take into account: farmers in the Netherlands have already [warned](#) that harvests may fail due to a lack of rain.

### **Fertilizer deficit**

Beyond the availability of agricultural products, the war also has a large impact on the price and availability of fertilizers. Russia is a [major exporter](#) of fertilizers and [provides](#) 20% of the worldwide supply, together with Belarus. Last year (2021), Russia was the [largest](#) supplier of nitrogen fertilizers, the second biggest exporter of potassium fertilizers, and came third regarding phosphorous fertilizers.

Now, however, a significant amount of these fertilizers are [stuck](#) in Russia and Belarus due to [sanctions](#) imposed by the West. Although the Russian government tries to compensate for this by [easing export](#) quotas, the availability of fertilizers is limited and prices of it have increased on the global market. Rising energy prices are playing in to this as well, as gas is one of the key ingredients in the production of fertilizer.

As all of the transoceanic shipments of fertilizer have already been completed for the upcoming spring season in the northern hemisphere, the shortage and increased prices of fertilizer [might not](#) have an immediate impact on the price and production of food. On the longer term, however, farmers are left with a dilemma.

While farmers could opt to increase their production of cereals to fill the gaps in the global markets and profit from higher pricing, these efforts might be rendered futile due to the increased fertilizer prices. Opting for alternative crops that require less nutrition could be a more reasonable option. Alternatively, farmers will either have to pass on the increased fertilizer prices to their buyers, use less fertilizer on their crops, or cultivate less land altogether – either option resulting in further increased food prices.

## Implications for the Netherlands and the EU

The food security effects of the war in Ukraine will also be felt in the Netherlands and the European Union (EU), primarily due to the higher fertilizer prices. These prices have a direct impact on farmers' business models and the subsequent pricing of their produce.

But while prices of certain products might go up, Dutch food security is not under threat as of yet. Agricultural goods from Ukraine [make up](#) only 2,1% of the total imports to the Netherlands, although the share of cereals (19% of the total), and animal and vegetable fats and oils (8%) is more substantial. Only a small percentage of Dutch meat (2,4%) and fodder (1%) comes from Ukraine.

For the Dutch organic sector, the consequences might be more severe, as Ukraine is the [most important](#) country of origin for imported organic agrarian goods in the Netherlands. In particular, the availability of organic fodder could come under pressure, potentially leading to higher prices of biological meat further up the food chain.

However, since the Netherlands currently produces mostly 'luxury goods' for export, such as flowers, meats and cheeses, which are not necessities of life, the situation is not as dire here as in other parts of the world. This is also the case for other European countries. Nevertheless, the combination of both food and fuel becoming more expensive is a worrisome development, as this can have a severe impact on people and lead to considerable unrest in society.

In Europe, the situation has prompted a renewed debate on what President Macron labelled "food sovereignty", a concept that was [introduced](#) at the World Food Summit in 1996. Because of global food security concerns, farmers in Europe are called upon to produce more grains. The EU's Farm to Fork policy goal to set aside agricultural land for nature is temporarily [put on hold](#).

Within the EU traditional agricultural countries, including France, Romania and Poland, as well as by the Commissioner for Agriculture Janusz Wojciechowski, the need for enhanced food self-sufficiency and exports to the vulnerable ring around Europe are [emphasised](#). To the contrary, environmental NGOs and Commission vice-President Frans Timmermans [argue](#) not to exaggerate the situation. Sustainable agriculture with less use of fertiliser and lower meat consumption would be the best way forward.

For the Netherlands as big agricultural exporter it is important to take a position in the EU debate on food sovereignty. More pressure will be placed on the use of land and glasshouses; are these for the production of fodder and luxury goods, or rather the staple foods that all people need on a daily basis? Moreover, not setting agricultural land aside for nature in the Netherlands might hinder the desire to end the nitrate crisis, implying less recovery of vulnerable nature area and hindrance of permits for new houses and infrastructure.