



## EDITORIAL

### **The Conflict in Ukraine and Disruptions in Global Agriculture**

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As the world began to emerge from the Covid-19 pandemic and the socio-economic crisis that it induced, new shocks affecting food, fertilizer, and fuel hit the global economy. Developing economies have been hit hard by the worsening shortage of food and fertilizer.

Many parts of the world were on the verge of a food crisis prior to the war in Ukraine. The conflict made a bad situation worse. During the Covid-19 pandemic, even though supply chains were disrupted and levels of demand were depressed, food was in adequate supply globally. With the conflict in Ukraine, the supply of food itself is an area of concern.

Russia and Ukraine account for about 30 per cent of the wheat, 20 per cent of the maize and 70 per cent of the sunflower that is traded globally. When the conflict in Ukraine began in February 2022, ports in the Black Sea region were shut down, and grain, vegetable oil, and other food items produced in Ukraine and Russia faced supply chain disruptions. The World Food Programme (WFP) estimates that monthly exports of grain from Ukraine fell from six million metric tonnes before the war to 1.5 million metric tonnes after the war began. While the “Black Sea Grain Initiative” of the United Nations has met with some success, movement of grain remains disrupted.

WFP data show that 60 million children were acutely malnourished in 2022 and 49 million people across 49 countries faced the threat of famines. The threat of famines is acute in the global hunger hotspots: Afghanistan, Ethiopia, Somalia, South Sudan, and Yemen.

The threat of extreme climate events in 2022 exacerbated the crisis of food supply. The La Niña weather events raised fears of acute food insecurity in the Horn of

Africa, which has had four consecutive rainfall failures, as well as parts of Asia and the Caribbean. Floods occurred in Pakistan, Nepal, and West Africa; storms were reported in southern Africa; there was drought in Syria and Angola; and two hurricanes hit Cuba and the Dominican Republic. Summer temperatures across Europe were at record highs.

The shortage of fertilizer is an important dimension of the contemporary crisis. As was the case with food prices, fertilizer prices had risen significantly before the conflict in Ukraine began. The conflict in Ukraine has worsened the situation.

Russia is a major exporter of fertilizer. Russia, Belarus, and Ukraine are centres of mining and production of potash. Russia is a major producer of natural gas, which is a raw material in the production of nitrogenous fertilizer. Russian production of NPK fertilizer is estimated to account for 13 per cent of the global production of NPK fertilizer. Russia exported 5.5 million metric tonnes of NPK fertilizer in 2020, accounting for 30 per cent of the global exports of NPK fertilizer. About 36 per cent of these exports went to China, India, and Brazil while another 44 per cent went to Hong Kong SAR, Romania, Latvia, Poland, Lithuania, Benin, Thailand, Ireland, Finland, and Spain.

With the onset of the conflict in Ukraine, global sanctions against Russia prevented many nation states from trading with Russia. The European Union limited its fertilizer trade with Russia and Belarus; imports from Russia became difficult with the removal of Russia from the Society for Worldwide Interbank Financial Telecommunications (SWIFT) international payment systems; multinational shipping companies suspended services to and from Russian ports; and insurance costs of shipping commodities operating from the region rose. Further, given the impending winter crunch in energy supply, European fertilizer producers cut the domestic production of fertilizer in 2022. As a result, fertilizer prices rose sharply across the globe. Between May 2020 and the end of 2022, average global fertilizer prices rose by about 200 per cent.

On account of both high prices and supply shortages, farmers across the importing world have been forced to cut fertilizer use on farms, which has led to new fears of a fall in production and productivity. According to the WFP, the global shortage of fertilizer could lead to a global fall in production of staple crops of 66 million metric tonnes. Africa has been affected badly. In Africa, where levels of crop productivity are low, the African Development Bank estimated a shortage of two million metric tonnes of fertilizer in mid-2022, which was expected to lead to a more than 20 per cent fall in annual production. Combined with high fuel costs, which have also led to a rise in the prices of weedicides and pesticides, the rise in fertilizer prices has led to a rise in costs of production and a decline of profitability for farmers.

An end to the conflict in Ukraine appears critical to ensuring food security and ameliorating the suffering of people in large parts of the developing world. It is imperative that a global effort is initiated to begin negotiations between the North Atlantic Treaty Organization (NATO) and Russia, and that the present armed conflict be brought to an end.