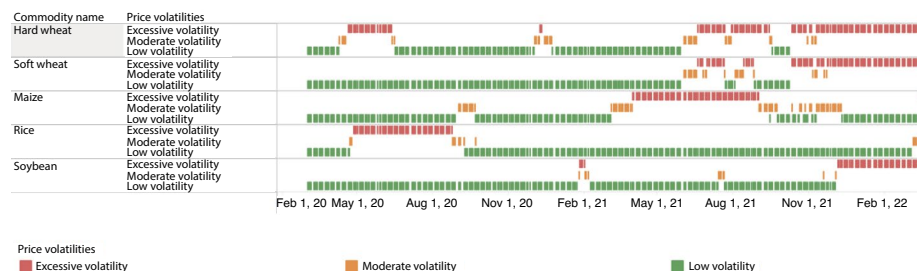


# Implications of the Russia–Ukraine war for global food security

**To the editor** — There is a positive link between food security and stability<sup>1</sup>. Conversely, especially in a globalized era, armed conflicts can be a key driver of food insecurity that affects regions beyond the battlefield; the food crises of the past decade have laid bare the systemic challenges in fending off food insecurity in conflict settings<sup>2</sup>. These crises reveal why governments or belligerents lack either the capacity or the will to address them, and why humanitarian aid struggles to reach people in need. The current Russia–Ukraine war has both created new food insecurity and highlighted existing systemic weaknesses in international food security.

Armed conflicts weaken the ability of nations, households and individuals to secure their food needs. These conflicts can impede activities that aim to grow and harvest, process and transport, and supply and market food. More specifically, conflicts can affect the capacity of food systems and supply chains to function appropriately: production declines owing to producers being engaged in war, unable to produce or fleeing the country; agricultural inputs are disrupted on foreign markets; or agricultural yields and water infrastructure are destroyed by military operations. Armed conflicts can also affect the capacity of consumers to access sufficient food, because of their declining purchasing power or the food availability problem. Such conflicts increase food prices on local and international markets with negative effects for food-importing, low-income countries; disrupt energy markets with negative effects on the energy and food purchasing power of importing countries; and affect the capacity of international food aid to meet growing food needs in times of crisis. Therefore, these food challenges currently present a key feature of armed conflicts, which should be considered in any approach used during the conflict management process.

The upheaval caused by the current Russia–Ukraine war, with all the human security implications this may entail, comes on the heels of preexisting challenges that have already put pressure on prices and supply chains; the COVID-19 pandemic, an energy crisis, shipping constraints and recent climate-induced extreme events<sup>3</sup>. After a decline during the past decade, global hunger is rising again<sup>1</sup> and the ongoing war is expected to increase this



**Fig. 1 | Price volatility of major food commodities according to the IFPRI Food Security Portal's 'Excessive Food Price Variability Early Warning System' (February 2020–February 2022).** Reproduced from ref.<sup>12</sup> with permission from the International Food Policy Research Institute (IFPRI), [www.ifpri.org](http://www.ifpri.org). The original figure is available online at <https://www.ifpri.org/blog/russia-ukraine-war-exacerbating-international-food-price-volatility>.

trend (experts estimate that 7.6 to 13.1 million people are threatened<sup>4</sup>). This will surely compromise the achievements made in the area of food security over the past decade, including through the Sustainable Development Goals.

Russia and Ukraine produce nearly 30% of the world's traded wheat and 12% of its calories<sup>5,6</sup>. However, the conflict has disrupted the export of wheat, corn and barley from these countries, and a large portion of the world's supply of fertilizers is caught up in Russia and Belarus. As a result, food and fertilizer prices have skyrocketed<sup>3</sup>, and this may affect every farmer on Earth this year, and into the foreseeable future<sup>5</sup>. The volatility of major food commodities and fertilizers (Fig. 1) poses a distinct threat as it induces greater market uncertainty, which may affect production decisions and spur speculative behaviours<sup>3</sup>. This is compounded by intensive competition on the global food market triggered by the circumstances of two key players (China and India), whose foreign food demand is on the rise<sup>3</sup>.

Grain scarcity is deeply affecting the ability of some vulnerable food-importing countries to meet the needs of their consumers, especially in the Middle East, North Africa and the Sahel. African countries import all of their wheat supply from Ukraine and Russia<sup>7</sup>. Countries such as Egypt, Lebanon and Tunisia have substantial wheat imports specifically from Ukraine — 85%, 81% and 50% of their total wheat imports, respectively<sup>7,8</sup>. In these regions, history has shown that food insecurity goes hand in hand with sociopolitical upheaval<sup>9,10</sup>,

and many countries provide food subsidies to avoid such problems<sup>3–7</sup>.

This war is also affecting the ability of international agencies to provide food aid to countries that are suffer from famine or other armed conflicts. For instance, the World Food Programme (which buys 50% of its grain from Ukraine) has to reduce provided rations because of rising costs, with the risk of excluding millions of people from the current food aid programme<sup>8</sup>.

Importantly, the focus on the current conflict per se may lead the global community to sideline challenges that are currently affecting food-insecure countries in the Global South. Combined with poverty, natural resource scarcity and climate change impacts, this could trigger additional human displacements and induce or amplify intra-state and geopolitical conflicts. Ending the current war is, therefore, synonymous with avoiding such plausible scenarios.

Scholars and practitioners have identified a number of key actions for ensuring food security during times of conflict. This includes the imperative to promote compliance with the obligation to respect human rights to food and water during armed conflicts; to ensure efficient implementation of food assistance, given its role in addressing the effects of conflict and promoting peace<sup>2</sup>; and to enhance food transfers in settings characterized by chronic food insecurity and conflict given their protective effect on food security of vulnerable populations<sup>11</sup>. In addition to this, deliberate conflict-induced food insecurity may constitute a basis for imposing targeted

sanctions in relation to future conflicts. This may prevent parties to a conflict directly and indirectly triggering food crises, either as a war tactic or as a consequence of the conflict itself. Sanctions may even cover acts that obstruct the delivery of food assistance to targeted groups during the conflict. Meanwhile, the international community may establish a strategic food reserve to face food crises triggered by armed conflicts or climate-induced disasters. This mechanism may facilitate reactive interventions that help to contain the human security implications of food crises, thus fostering peace. Also, new rules should be included in international humanitarian law that explicitly provide sufficient protection to food systems-related infrastructures and activities (agricultural land and water, farms, crops, livestock and fisheries, and so on) as non-military targets, with appropriate sanctions in case of violations. Finally, the governance of the armed conflict–food insecurity nexus will require the development of a robust multidisciplinary policy-oriented research programme with

the potential to guide both domestic and international actions in mitigating the food implications of such conflicts, while considering local specific settings. □

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#### Competing interests

The authors declare no competing interests.