

## II. Food systems and geopolitics

CAROLINE DELGADO

Food systems can be understood as encompassing every person and process involved in producing, distributing, consuming and disposing of food, as well as the broader environmental, political, social and environmental settings that embed these activities. The level of food security is the principal outcome of a food system. ‘Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.’<sup>1</sup> When food systems become stressed, food security deteriorates. Food insecurity is defined as the lack of regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. The Integrated Food Insecurity Phase Classification (IPC) initiative categorizes food insecurity into five levels, ranging from ICP 1 (minimal/none) to ICP 5 (catastrophic/famine).<sup>2</sup> This section focuses on food insecurity as both a consequence and trigger of armed conflict.

### **The intersecting drivers of food insecurity**

The undeniable link between food systems, violent conflict and peace is a critical global concern. The Food and Agriculture Organization of the United Nations (FAO) estimates that, in 2022, 2.4 billion people, or 30 per cent of the world’s population, experienced food insecurity.<sup>3</sup> This figure represents a threefold increase since 2014. The gravity of the situation is underscored in the 59 most impacted countries, where 282 million individuals in 2023—rising from 193 million in 2021—faced acute food insecurity that demanded immediate interventions to mitigate the risks of famine.<sup>4</sup> As at the end of 2023, nearly all of these countries were or had recently been embroiled in violent conflicts. Three conflicts in particular impacted global levels of food security in 2023: the Russia–Ukraine war, the Sudan civil war and the Israel–Hamas war. Despite increasing food insecurity globally, some countries and regions showed important improvements in 2023. Notably, South America

<sup>1</sup> World Food Summit, Rome, 13–17 Nov. 1996, Plan of Action, para. 1.

<sup>2</sup> Integrated Food Insecurity Phase Classification (IPC), ‘IPC overview and classification system’, [n.d.].

<sup>3</sup> Food and Agriculture Organization of the United Nations (FAO) et al., *The State of Food Security and Nutrition in the World 2023: Urbanization, Agrifood Systems Transformation and Healthy Diets Across the Rural–Urban Continuum* (FAO: Rome, 2023), p. vii. See also FAO, ‘Hunger and food insecurity’, [n.d.].

<sup>4</sup> Food Security Information Network (FSIN) and Global Network Against Food Crises, *Global Report on Food Crises 2024* (FSIN: Rome, 2024), p. 7.

was among few regions where food security indicators improved despite high and increasing levels of violence.<sup>5</sup>

Food insecurity is both a consequence and a driver of violent conflict. Underlying these dynamics are failing food systems. Armed conflicts have a detrimental effect on most elements and processes of food systems, especially food production as farmlands and surrounding rural areas are often conflict epicentres. In deteriorating and insecure operating environments, resources, government spending and private investment are frequently diverted or reduced, with lasting effects on food systems and food security. Armed conflict also negatively affects trade and distribution of food, which can pose significant threats to the functioning of markets and food supply to both rural and urban areas.

Conflict-driven food insecurity can exacerbate, and be exacerbated by, the impacts of climate change, environmental degradation and economic shocks. The 2023–24 El Niño, which peaked in intensity in the second half of 2023, led to droughts, wildfires, heatwaves, heavy rains and floods globally. Among other impacts that affected food security were severe droughts in Central America, northern South America, South East Asia and the Pacific, and flooding in East Africa.<sup>6</sup> In southern Africa, the full impact on food security will only be felt in late 2024, with harvests expected to be reduced, some severely so.<sup>7</sup> While El Niño events cause both adverse and favourable agricultural effects, historically they have resulted in global declines in staple crop production, leading to increased prices.<sup>8</sup>

Reduced supply and high prices disproportionately impact the food access of vulnerable households, particularly in emerging and developing economies and in countries heavily reliant on imports. According to the United States Department of Agriculture, food accounts for about 50 per cent of the household budget, on average, in many such countries.<sup>9</sup> Despite a 10.7 per cent decrease in the FAO Food Price Index in November 2023 compared to the previous year—attributed to global grain markets adjusting to the impacts of the Russia–Ukraine war and maintaining sufficient supply as of November—elevated domestic food price inflation persisted.<sup>10</sup> Globally, it

<sup>5</sup> FAO et al. (note 3), p. xix; and United Nations Office on Drugs and Crime (UNODC), *UNODC Global Study on Homicide 2023: Homicide and Organized Crime in Latin America and the Caribbean* (UNODC: Vienna, 12 Dec. 2023).

<sup>6</sup> ACAPS, 'El Niño overview: Anticipated humanitarian impact in 2024', 6 Feb. 2024, p. 3.

<sup>7</sup> FAO and World Food Programme, 'El Niño's impact on food and nutrition security in Southern Africa: Lesson learned for improved coordination and response', 13 Feb. 2024, pp. 1, 6.

<sup>8</sup> Iizumi, T. et al., 'Impacts of El Niño Southern Oscillation on the global yields of major crops', *Nature Communications*, vol. 5, 3712 (2014).

<sup>9</sup> Cited in FAO and The World Bank, *Food Data Collection in Household Consumption and Expenditure Surveys: Guidelines for Low- and Middle-Income Countries*, (FAO/World Bank: Rome, 2018), p. vii, p. 1.

<sup>10</sup> FAO, 'World food situation: FAO Food Price Index', [n.d.]; and Baffes, J. and Mekonnen, D., 'Falling food prices, yet much higher than pre-Covid', World Bank Data Blog, 16 Aug. 2023.

averaged 13 per cent in June 2023, with certain nations such as Lebanon and Venezuela experiencing inflation rates surpassing 100 per cent.<sup>11</sup>

At the same time, the compound effects of the Covid-19 pandemic and the Russia–Ukraine war on the availability and prices of food, feed and fertilizers have spurred a surge in export restrictions.<sup>12</sup> As of December 2023, ‘19 countries had implemented 27 food export bans, and 9 had implemented 17 export-limiting measures’.<sup>13</sup> Besides contributing to further supply uncertainty and price volatility, export bans can trigger political instability in import-dependent countries, with the UN particularly warning against such consequences following India’s export ban on rice in September.<sup>14</sup> The concentration of corporate control in the global food system also affects food security.<sup>15</sup> The top four food trading companies saw a significant profit surge in 2021–22.<sup>16</sup>

Food insecurity can also contribute to the emergence and duration of conflict. By some estimates, a 25 per cent increase in food insecurity ‘increases the risk of conflict by 36 per cent’.<sup>17</sup> The most common risk factors are ‘environmental degradation and climate-induced food shortages, production resource competition, and grievances related to social issues and food prices’.<sup>18</sup> For example, the worsening climate crisis and the ever-increasing demand for agricultural commodities are generating competing and violent claims for land and pathways for rural development. In 2022 at least 177 environmental defenders were killed worldwide for seeking to protect land.<sup>19</sup> In 2023 181 defenders were killed in Colombia alone.<sup>20</sup>

As a result of these interlinked crises, 110 million people, over 1 per cent of the world’s population, have now been forcibly displaced, with most stuck in temporary camps or dispersed into new communities in low- and

<sup>11</sup> Baffes and Mekonnen (note 10).

<sup>12</sup> World Trade Organization (WTO), ‘WTO members facilitate imports, reduce trade restrictions, but food export curbs persist’, WTO News, 27 July 2023.

<sup>13</sup> World Bank, Food Security Update, 14 Dec. 2023, p. 15.

<sup>14</sup> Peng, I., ‘High rice prices bring risk of social unrest, UN says’, Bloomberg, 22 Sep. 2023.

<sup>15</sup> Clapp, J., Noyes, I. and Grant, Z., ‘The Food Systems Summit’s failure to address corporate power’, *Development*, vol. 64 (2021).

<sup>16</sup> United Nations Conference on Trade and Development, ‘Food commodities, corporate profiteering and crises: Revisiting the international regulatory agenda, 2023’, *Trade and Development Report 2023—Growth, Debt and Climate: Realigning the Global Financial Architecture* (United Nations: Geneva, 2024), p. 73.

<sup>17</sup> Institute for Economics & Peace (IEP), *Ecological Threat Report 2023: Analysing Ecological Threats, Resilience & Peace* (IEP: Sydney, Nov. 2023), p. 3.

<sup>18</sup> Delgado, C., Murugani, V. and Tschunkert, K., *Food Systems in Conflict and Peacebuilding Settings: Pathways and Interconnections* (SIPRI: Stockholm, June 2021), p. 13.

<sup>19</sup> Global Witness, *Standing Firm: The Land and Environmental Defenders on the Frontlines of the Climate Crisis* (Global Witness: London, Sep. 2023), p. 9.

<sup>20</sup> Columbian Ombudsman’s Office, ‘Durante el 2023, en Colombia fueron asesinados 181 líderes sociales y defensores de derechos humanos’ [During 2023, 181 social leaders and human rights defenders were murdered in Colombia], Press release, 9 Jan. 2024.

middle-income countries.<sup>21</sup> Over 53 million people were internally displaced in 25 countries or territories identified as being in food crisis in 2022. Nearly 20 million refugees and asylum seekers were hosted in 55 food-crisis countries/territories.<sup>22</sup> Rising food insecurity, conflict, and climate change will only add to these figures, posing serious challenges for stability and slim prospects for peace.

## Food systems in conflict and peacebuilding settings in 2023

### Ukraine

Warfare in Ukraine continued to devastate agricultural production and supply in 2023.<sup>23</sup> Impacts included direct attacks on farmworkers, theft of agricultural equipment, forced sale of grain to occupying authorities, contamination of land with landmines and explosive remnants of war, occupation of key grain-producing regions and attacks on vital infrastructure. At the beginning of 2023, the overall damages and losses to the agriculture sector were estimated at over US\$9 billion.<sup>24</sup> The destruction in June of the Kakhovka Dam—which played an important role in supplying energy, water for both domestic and industrial uses, irrigation and river transport in southern Ukraine—caused flooding of approximately 1378 hectares of cultivated land and severe damage to irrigation systems, requiring over 306 500 hectares of cropland to switch to more unpredictable rainfed irrigation.<sup>25</sup> Yields are consequently expected to decrease by 70 per cent.<sup>26</sup>

Farmers across Ukraine struggled in 2023 to access production inputs, such as fuel, seeds, fertilizers and pesticides, because of high prices or these inputs being unavailable. Market access was restrained and output buyers operated at reduced capacity.<sup>27</sup> Ukraine's grain production dropped by 29 per cent for the market year 2022–23, and further declines are expected.<sup>28</sup> The 2023 grain harvest is forecast to be 50 per cent lower than the pre-war 2021 harvest.<sup>29</sup>

<sup>21</sup> United Nations High Commissioner for Refugees (UNHCR), Refugee Data Finder, Status at 24 Oct. 2023.

<sup>22</sup> FSIN and Global Network Against Food Crises, *Global Report on Food Crises 2023* (note 4), p. 9.

<sup>23</sup> On the Russia–Ukraine war see chapter 1, chapter 2, section I, and chapter 10, sections II and III, in this volume.

<sup>24</sup> World Bank et al., *Ukraine: Rapid Damage and Needs Assessment, February 2022–February 2023* (World Bank: Washington, DC, Mar. 2023), p. 19.

<sup>25</sup> Government of Ukraine and the United Nations, *Post-Disaster Needs Assessment: 2023 Kakhovka Dam Disaster, Ukraine* (Oct. 2023), pp. 55, 57–58.

<sup>26</sup> Government of Ukraine and the United Nations (note 25), p. 24.

<sup>27</sup> FAO, *Ukraine: Impact of the War on Agricultural Enterprises—Findings of a Nationwide Survey of Agricultural Enterprises with Land up to 250 hectares, January–February 2023* (FAO: Rome, 2023), pp. 18–22.

<sup>28</sup> European Council and Council of the European Union, 'How the Russian invasion of Ukraine has further aggravated the global food crisis', Infographic, Status at 23 Oct. 2023.

<sup>29</sup> FAO, 'The 2023 Ukraine Recovery Conference—FAO delivered its statement on the programme activities in Ukraine', FAO News, 28 June 2023.

The Russian Federation's decision in July 2023 not to renew the Black Sea Grain Initiative (BSGI) marked a further significant development. The BSGI was crucial for resuming Ukrainian grain exports. Over its one-year existence, it facilitated the transportation of around 33 million tonnes of grains and foodstuffs from Ukraine, contributing to a global reduction in staple food prices and sustaining global food supplies.<sup>30</sup> The BSGI's expiration resulted in the removal of security guarantees for navigation in the north-western Black Sea, with Russia considering vessels heading to Ukrainian ports to be potential military targets.<sup>31</sup>

In tandem with (and from July, instead of) the BSGI, Solidarity Lanes emerged as an alternative logistics network, linking Ukraine to European Union member states through Eastern Europe and the Danube River. These alternative routes facilitated the export of more than 58 million tonnes of agricultural products between March 2022 and November 2023.<sup>32</sup> Together with new, albeit highly insecure, humanitarian shipping corridors in the Black Sea announced by Ukraine in August, Solidarity Lanes enabled Ukrainian exports of agricultural products to reach near pre-invasion levels by the end of 2023.<sup>33</sup> However, following the conclusion of the BSGI, Russia intensified its attacks on key infrastructure such as port facilities, warehouses and silos in Izmail and Reni along the Danube River. These attacks destroyed over 270 000 tonnes of grain and significantly raised freight rates. Between July and September, rates from Izmail port increased by about 50 per cent, with ongoing strikes expected to worsen this trend.<sup>34</sup>

The repercussions of food supply restrictions originating from Ukraine have disproportionately impacted nations with low incomes that rely heavily on imports. Countries such as Egypt, Jordan, Lebanon, Morocco and Tunisia stand out as major global importers of grain, wheat and foodstuffs, making them particularly susceptible to the consequences of the ongoing conflict.<sup>35</sup>

As of July 2023, the UN World Food Programme (WFP), the world's largest humanitarian food aid agency, had procured 80 per cent of the year's purchases of wheat grain from Ukraine via the BSGI. This wheat was intended primarily to address food insecurity, including famine, in crisis-stricken countries like Afghanistan, Djibouti, Ethiopia, Kenya, Somalia, Sudan and

<sup>30</sup> United Nations, Black Sea Grain Initiative Joint Coordination Centre, 'The Black Sea Grain Initiative: What was achieved? Why was it important?', [n.d.].

<sup>31</sup> US Naval Institute (USNI), 'Russia lays mines in Black Sea to block Ukrainian ports, NSC says', USNI News, 19 July 2023.

<sup>32</sup> European Commission, 'EU-Ukraine Solidarity Lanes', [n.d.].

<sup>33</sup> FEWS NET, 'Ukrainian exports again reach pre-invasion levels in December 2023', Ukraine Key Message Update, Dec. 2023.

<sup>34</sup> FEWS NET, 'Impacts of the war on acute food insecurity remain highest near frontlines', Ukraine Targeted Analysis, Sep. 2023.

<sup>35</sup> Rauschendorfer, J. and Krivosos, E., *Implications of the War in Ukraine for Agrifood Trade and Food Security in the Southern and Eastern Mediterranean: Egypt, Jordan, Lebanon, Morocco and Tunisia* (FAO: Rome, Dec. 2022).

Yemen. The BSGI's expiry forced the WFP to source grain at higher costs from more distant ports.<sup>36</sup> Another challenge for the WFP in 2023 was a significant funding decline, forcing nearly half of WFP country operations to scale back food, cash and nutrition assistance by up to 50 per cent.<sup>37</sup>

The full-scale attacks on Ukrainian agricultural production and supply lines point to the deliberate weaponization by Russia of Ukrainian grain.<sup>38</sup> Russia's invasion of Ukraine is also associated with a range of starvation-related tactics, such as sieges, obstruction of humanitarian access, pillaging of agricultural machinery and shelling of objects indispensable to the survival of civilians. While evidence is not conclusive, these tactics have led to claims that Russia is deliberately trying to starve the population of Ukraine into submission.<sup>39</sup>

### *Sudan*

Sudan experienced a sharp rise in food insecurity in 2023, driven by armed conflict, economic decline and food price inflation, while also suffering a significant decrease in aid. Armed conflict broke out on 15 April in Khartoum between the Sudanese Armed Forces (SAF) and the Rapid Support Forces (RSF). What started as a power struggle among warlords escalated into a nationwide conflict, involving rebel factions, ethnic militias and foreign entities. The conflict quickly spread to Darfur and the Kordofans, and by the end of 2023 was impacting every region in the country.<sup>40</sup> As the conflict intensified, the humanitarian situation worsened. The conflict has displaced over 7.4 million people, exacerbating the pre-war displacement crisis of 4 million internally displaced persons (IDPs).<sup>41</sup> As a result, Sudan is experiencing the most extensive displacement crisis globally.<sup>42</sup>

From December 2022 to August 2023, acute food insecurity surged by 74 per cent, impacting around 20.3 million people, or over 42 per cent of the population.<sup>43</sup> Although projections suggested a temporary decrease in this number, to 15 million people facing acute food insecurity during the October 2023 to February 2024 harvest season, this still represents the highest

<sup>36</sup> Borger, J., 'Turning food into a weapon: How Russia resorted to one of the oldest forms of warfare', *The Guardian*, 9 Aug. 2023.

<sup>37</sup> World Food Programme, 'A global food crisis', [n.d.].

<sup>38</sup> Global Rights Compliance (GRC), Starvation Mobile Justice Team, *Agriculture Weaponised: The Illegal Seizure and Extraction of Ukrainian Grain by Russia* (GRC: The Hague, 2023).

<sup>39</sup> See e.g. Mykytenko, A. and Vishchuk, M., '“All our hope is in the famine”: Why an investigation into starvation crimes in Ukraine is urgently needed', *OpinioJuris*, 9 Aug. 2022.

<sup>40</sup> On the civil war in Sudan see chapter 2, section I, in this volume.

<sup>41</sup> United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 'Sudan: Nine months of conflict', Key Facts and Figures, 15 Jan. 2024.

<sup>42</sup> United Nations International Organization for Migration (IOM), Displacement Tracking Matrix (DTM) Sudan, 'Sudan's internally displaced persons: 2023 estimates', Jan. 2024, p. 1.

<sup>43</sup> IPC, 'Sudan: IPC acute food insecurity snapshot: June 2023–February 2024', 2 Aug. 2023, p. 1. See also FSIN and Global Network Against Food Crises, *2023 Global Report on Food Crises: Mid-Year Update* (FSIN: Rome, 2023).

recorded level for that period.<sup>44</sup> The prevailing escalation of food insecurity compounds an already existing food security crisis. Sudan has consistently ranked among the world's most severe food crises, with the roots of food insecurity extending from an overarching macroeconomic downturn since 2017, the civil unrest that commenced in 2018 and ongoing inter-communal conflicts, to the persistent challenges posed by extreme weather conditions.<sup>45</sup>

Although the armed conflict in 2023 was predominantly centred in urban areas, it substantially impaired the agricultural sector. Farmers encountered direct security threats during the planting season, while facing severe challenges to obtain essential inputs. Satellite imagery analysis indicated a marked reduction in vegetation levels, particularly in Khartoum state, signifying severe disruptions in agricultural activities.<sup>46</sup> The total planted area fell by 15 per cent compared to the last five-year average and harvests are anticipated to be below average.<sup>47</sup> The imagery also revealed lower-than-average vegetation levels in areas with large-scale industrial farms in White Nile and Al Jazirah states, possibly attributable to conflict-related fuel shortages and price shocks. Certain eastern regions also exhibited early signs of drought-like conditions, adding further agricultural stress.<sup>48</sup>

Markets and food factories throughout Sudan have been destroyed and looted, directly reducing food availability. Many of the destroyed or damaged markets in Khartoum and Darfur, on which many retailers and end-users depended, played a central role in Sudan's food distribution system.<sup>49</sup> Violence in Khartoum, the capital and economic hub of the nation, disrupted internal trade routes, posing a threat to imports and instigating a cash crunch.<sup>50</sup> In addition, the embedding of the RSF in local neighbourhoods as the conflict broke out led to looting and violence.<sup>51</sup>

As a consequence of the civil war in Sudan, the cost of essential food items has surged. For instance, at the end of December 2023, the average price of sorghum was 45 per cent higher than in December 2022 and 252 per cent above the five-year average. Likewise, the price of wheat was 65 per cent higher than in December 2022, and 250 per cent above the five-year average.<sup>52</sup> Pre-war escalation in food prices was largely a consequence of the Russia–

<sup>44</sup> IPC, 'Sudan: IPC acute food insecurity snapshot: June 2023 – February 2024' (note 43), p. 1.

<sup>45</sup> FSIN and Global Network Against Food Crises (note 4), pp. 138–39.

<sup>46</sup> Mercy Corps, 'Sudan crisis analysis: Remote sensing to monitor impact of conflict on agriculture', Aug. 2023.

<sup>47</sup> FAO, 'The Sudan: Rapid assessment on the summer season agricultural performance', Nov. 2023, p. v.

<sup>48</sup> Mercy Corps (note 46).

<sup>49</sup> Insecurity Insight, 'The Sudan crisis, conflict and food insecurity', July 2023, p. 9.

<sup>50</sup> World Food Programme, 'Sudan', [n.d.].

<sup>51</sup> Soliman, A. and Hassan, Y., 'Resolving Sudan's crisis means removing those fighting', Chatham House, 21 Apr. 2023.

<sup>52</sup> FEWS NET, 'Expanding conflict and displacement drive even higher needs during the harvest', Food Security Outlook Update—Sudan, Dec. 2023.

Ukraine war, as Sudan used to import up to 80 per cent of its wheat from both countries.<sup>53</sup> As of June 2023, 30 per cent of Sudan's population was unable to afford the local food basket.<sup>54</sup>

The continuation and spread of violence risks pushing millions more into hunger, while making it harder for farmers to produce key staple crops as prices of seeds, fertilizers and fuel soar, and supply chains and trade routes to transport goods are disrupted. Large-scale internal displacement risks increasing competition over resources. Fighting between the SAF and the RSF has aggravated long-standing disputes between farmers and pastoralists, such as the removal of indigenous Masalit farmers from their land in Western Darfur state by the RSF and militia drawn from nomadic tribes.<sup>55</sup> Unusual livestock movements have been attributed to both the conflict and changes in rainfall patterns.<sup>56</sup> In North Darfur, pastoralists have been denied access to pasturelands.

Despite the dire situation in Sudan, the WFP estimates that it reached 'over 6.5 million people since the start of the conflict', compared to 9.3 million in 2022.<sup>57</sup> Funding shortfalls, extreme levels of insecurity and the mass looting of food aid by the warring parties are among the reasons for the reduced capacity.<sup>58</sup>

The conflict's impact on food security extends beyond Sudan. Over its first six months, approximately 1.2 million people sought refuge in neighbouring states, many of which face their own conflicts and food crises.<sup>59</sup> For example, the influx of over 530 000 people into South Sudan strained an existing crisis where over 46 per cent of its 12.6 million people face severe food insecurity.<sup>60</sup> In June 2023 the UN warned that the 'ripple effects' of the conflict in Sudan threatened to disrupt the implementation of the South Sudan Revitalised Peace Agreement, as national and international resources and efforts were redirected towards responding to the refugee crisis. In key cross-border regions, such as Renk and Malakal, heightened competition for limited resources, economic hardship and existing communal tensions led to violent

<sup>53</sup> OCHA, 'Sudan's imports of wheat and wheat flour from Russia and Ukraine', Sudan Situation Report, 7 July 2022.

<sup>54</sup> OCHA, 'Seven months of conflict', Key Facts and Figures, 15 Nov. 2023, p. 2. The 'local food basket' is a measure referring to a suitably composed basket critical to maintaining the nutritional status of affected people. See World Food Programme, 'The WFP food basket', [n.d.].

<sup>55</sup> Insecurity Insight (note 49); Human Rights Watch, 'Violence in Darfur: Human Rights Watch February 2023 submission to the UK Parliament', News, 26 Nov. 2023; and Kohnert, D., 'On the impact of the 2023 Sudanese war on Africa and beyond', SSRN, 21 June 2023.

<sup>56</sup> FAO, 'The Sudan: Rapid assessment on the summer season agricultural performance' (note 47), p. 7.

<sup>57</sup> World Food Programme, 'Sudan' (note 50); and World Food Programme, 'Sudan Annual Country Report 2022', 2023.

<sup>58</sup> Insecurity Insight (note 49), p. 14.

<sup>59</sup> IOM, DTM Sudan, 'Weekly displacement snapshot 06', 10 Oct. 2023, p. 1.

<sup>60</sup> ICP, 'South Sudan: ICP acute food insecurity and malnutrition analysis, September 2023–July 2024', 6 Nov. 2023, pp. 2, 25.

confrontations involving armed youth groups.<sup>61</sup> These clashes exacerbated the complexity and volatility of the situation, presenting obstacles to establishing regional stability and security.

### *Palestine*

The outbreak in October 2023 of renewed violence in Palestine propelled an already dire humanitarian situation into a catastrophe. In addition to the killing and displacement of civilians, the war has caused widespread damage to food systems in the Occupied Palestinian Territories, with famine threatening to engulf Gaza. Even before the current Israel– Hamas war, food insecurity levels were high: in 2022, 53 per cent of the population faced acute food insecurity in Gaza, reaching 63 per cent among households headed by women, and 11 per cent in the West Bank.<sup>62</sup> By December 2023, the ICP initiative classified 93 per cent of Gaza’s population as being in acute food insecurity (ICP 3 or higher), with projections that this will reach 100 per cent by February 2024; about 80 per cent were already in emergency (ICP 4) or catastrophic (ICP 5) conditions. The latter group comprised at least ‘one in four households’ (over half a million people).<sup>63</sup> The initiative stated: ‘This is the highest share of people facing high levels of acute food insecurity that the ICP initiative has ever classified for any given area or country.’<sup>64</sup>

The damage to food systems has occurred on a number of fronts. Israel’s military actions have devastated Gaza’s agricultural sector. By late November 2023, over a third of agricultural land in northern Gaza had been damaged in the hostilities.<sup>65</sup> Power outages affected cooling and irrigation of crops, impacting more than 15 000 farmers, while 10 000 livestock keepers could not obtain sufficient feed, leading to the loss of animals.<sup>66</sup> The Israeli attacks have led to the collapse of almost all civilian infrastructure in large parts of Gaza, including the food infrastructure.<sup>67</sup> The destruction of all grain mills means locally produced flour will be unavailable in Gaza for the foreseeable future.<sup>68</sup> Local markets ‘shut down completely’, and the small quantities of food that could be found were sold at highly inflated prices and were of

<sup>61</sup> United Nations, ‘Sudan crisis threatens to hobble South Sudan’s transition, UN mission chief says’, UN News, 20 June 2023.

<sup>62</sup> FSIN and Global Network Against Food Crises, *Global Report on Food Crises 2023* (note 4), p. 128; see also World Food Programme, ‘Palestine’, [n.d.]. On the Israel– Hamas war see chapter 1, chapter 2, section I, and chapter 10, section II, in this volume.

<sup>63</sup> ICP, ‘Gaza Strip: ICP acute food insecurity, November 2023–February 2024’, 21 Dec. 2023, pp. 1–2; and IPC Famine Review Committee, *Gaza Strip: Famine Review of the IPC Analysis: Conclusions and Recommendations* (IPC: 21 Dec 2023), pp. 1–2.

<sup>64</sup> ICP, ‘Gaza Strip: ICP acute food insecurity, November 2023–February 2024’, (note 63), p. 1.

<sup>65</sup> Human Rights Watch, ‘Israel: Starvation used as weapon of war in Gaza’, News, 18 Dec. 2023.

<sup>66</sup> Euro-Med Human Rights Monitor, ‘Israel is waging an extensive war of starvation against Gaza’s civilian population’, 5 Nov. 2023.

<sup>67</sup> IPC Famine Review Committee (note 63).

<sup>68</sup> OCHA, ‘Hostilities in the Gaza Strip and Israel’, Flash Update No. 40, 15 Nov 2023.

little use without the ability to cook.<sup>69</sup> Other factors already exacerbating or likely to increase Gaza's acute food insecurity include import limitations, the private sector's inability to resume commercial activities, the high degree of urbanization, constraints on movement, and the lack of alternative food sources as existing food stocks are depleted.<sup>70</sup>

The scale of destruction has left the entire population of Gaza requiring urgent humanitarian assistance. Israel has allowed into Gaza only 2 per cent of the essential aid and food supplies.<sup>71</sup> Active fighting or partial besiegement prevented these items from reaching more than just a few limited areas.<sup>72</sup> By early December 2023, the ICP initiative estimated the following analysis groups to be in ICP 5 (famine) level of food insecurity: 25 per cent of the population in the Northern Governorates, and in the Southern Governorate, 15 per cent of IDPs and 10 per cent of residents, with figures expected to rise.<sup>73</sup> The initiative's Famine Review Committee concluded the risk of famine increases for each day that humanitarian access is restricted, and projected a risk of famine 'through May 2024, if the current situation persists or worsens', while noting that the famine threshold for catastrophe (IPC 5) 'has already been exceeded'.<sup>74</sup>

Israel's actions in deliberately blocking delivery of water, food and fuel, impeding humanitarian assistance, razing agricultural areas and depriving the civilian population of objects indispensable to their survival, have led to claims that the Israeli government is using starvation of civilians as a method of warfare.<sup>75</sup>

The current crisis comes on top of decades of political and economic turmoil in the West Bank and the 15-year blockade on Gaza. Even before the current war, both territories relied on imports to meet 90 per cent of their market needs and nearly all supply routes were controlled by Israel.<sup>76</sup> The Israeli military has restricted access and periodically cut off the water for Palestinian farmers, who are prohibited from constructing and managing water installations without military permits.<sup>77</sup> This dependency on Israel for water resources is compounded by increasing temperatures and desert-

<sup>69</sup> World Food Programme, 'Gaza faces widespread hunger as food systems collapse, warns WFP', News, 16 Nov. 2023.

<sup>70</sup> ICP, 'Gaza Strip: ICP acute food insecurity, November 2023–February 2024' (note 63), pp. 1–2.

<sup>71</sup> Euro-Med Human Rights Monitor (note 66).

<sup>72</sup> Griffiths, M., UN under-secretary-general for humanitarian affairs and emergency relief coordination, Briefing to the Security Council, 31 Jan. 2024; and UNOCHA, 'Hostilities in the Gaza Strip and Israel—reported impact, day 88', 3 Jan. 2024.

<sup>73</sup> IPC Famine Review Committee (note 63), p. 1.

<sup>74</sup> IPC Famine Review Committee (note 63), p. 2.

<sup>75</sup> Human Rights Watch, 'Israel: Starvation used as weapon of war in Gaza' (note 65).

<sup>76</sup> Barron, E. 'In focus: The interwoven roots of systemic food insecurity in Palestine', Center for Climate & Security, 21 Sep. 2022.

<sup>77</sup> Human Rights Watch, 'A threshold crossed: Israeli authorities and the crimes of apartheid and persecution', 27 Apr. 2023.

ification.<sup>78</sup> The economic impact of the Covid-19 pandemic and rapid price rises linked to the Russia–Ukraine war were already adding to protracted fiscal distress, with hopes of recovery shattered by the renewed conflict and collapsing food systems.<sup>79</sup>

### *Latin America*

Amid heightened global food insecurity in 2023, Latin America stands out with an overall decrease in the number of people facing food insecurity.<sup>80</sup> Despite worsening trends in some countries, such as Haiti, the region's improvement is credited to positive labour market development and effective social protection policies. While facing food price inflation from the Covid-19 pandemic and the Russia–Ukraine war, Latin America has also benefited from rising global prices of wheat, oil and gas. This has boosted revenue for several countries in the region, such as Argentina, Colombia, Peru and Brazil, enabling them to maintain subsidies and reduce consumption taxes on food and energy.<sup>81</sup>

Another consequence of the pandemic and the Russia–Ukraine war is Latin America's increased importance in enhancing global food security and meeting growing demand for food, feed and fuel. As the world's leading net exporter of food, the region has been instrumental in stabilizing global food supplies and prices.<sup>82</sup> With vast untapped arable land, Latin America is projected to experience a 14 per cent expansion in agricultural and fish production over the next decade.<sup>83</sup> The region is also well-positioned to address metal and energy shortages stemming from the Russia–Ukraine war. Latin America's abundant reserves of metals and minerals, including approximately 70 per cent of the world's lithium deposits, has seen it emerge as a key player on the global resource stage.<sup>84</sup> Substantial investments in large-scale mining projects are expected to further boost resource production in the region.<sup>85</sup>

However, industrial agriculture and extractive activities exert a severe toll on the quality of water, air and soil, and are emerging as the primary catalysts for deforestation and biodiversity decline. This not only imperils local food

<sup>78</sup> United Nations Palestine, 'Environment', Fact sheet, May 2022.

<sup>79</sup> Barron (note 76).

<sup>80</sup> FSIN and Global Network Against Food Crises, *2023 Global Report on Food Crisis: Mid-Year Update* (note 43), pp. 32–33; and FAO et al. (note 3), pp. 6–7.

<sup>81</sup> 'Some Latin American economies have benefited from the war in Ukraine', *The Economist*, 6 June 2023.

<sup>82</sup> Morris, M. et al., *Future Foodscapes: Re-imagining Agriculture in Latin America and the Caribbean* (World Bank: Washington, DC, 2020).

<sup>83</sup> Organisation for Economic and Co-operative Development (OECD) and FAO, 'Regional brief: Latin America and the Caribbean', OECD–FAO Agricultural Outlook 2021–2030, 2021, p. 2.

<sup>84</sup> OECD, *Responsible Business Conduct in the Extractive and Minerals Sector in Latin America and the Caribbean* (OECD Publishing: Paris, 2022), p. 10.

<sup>85</sup> OECD (note 84), p. 11.

security but also sets the stage for potential global ramifications in the long term.<sup>86</sup> These environmental impacts intricately intertwine with pre-existing social inequalities, political instability, and a deep-rooted history of conflicting land claims and illegal land-use practices. This complex web of factors has culminated in the escalation of violent conflicts and exacerbated food insecurity in the region. A stark illustration of this phenomenon was witnessed in Colombia in 2023.

Since 2017 non-state armed groups have incentivized coca production and disincentivized food production, resulting in record coca production levels and making marginalized farmers heavily reliant on coca cultivation. But an abrupt decline in prices of coca leaves in 2022–23 triggered a collapse in the coca market in 2023. There were far-reaching consequences in the coca-growing regions of Colombia, where entire communities saw their livelihoods disintegrate, creating a dire humanitarian emergency characterized by a lack of access to food and an inability to afford basic necessities. This alarming situation underscored a paradox: the collapse of an illegal economy, notorious for fuelling a long-standing and brutal conflict, exacerbated the food security crisis for communities already grappling with the enduring repercussions of the conflict.<sup>87</sup>

Also perpetuating the detrimental relationship between land, food and violence is the rapid expansion of cattle ranching by both non-state armed groups and large landowners seeking to capitalize on more favourable land policies and for speculative purposes. These actors drive deforestation by pressuring residents to fell trees, extorting farmers, promoting coca crops, or threatening environmental defenders.<sup>88</sup> Like cattle ranching, agro-industry and mining also frequently take place on contested land, including in marginalized and protected areas, and have strong historic links to protracted displacement and violent conflict in Colombia. Even when carried out by legal entities, these activities have in many cases benefited from alliances and actions of illegal actors.<sup>89</sup> Companies have managed to circumvent regulations intended to safeguard smallholders and prevent the concentration of land ownership.<sup>90</sup> These lucrative legal and illegal activities have propelled a wave of targeted

<sup>86</sup> OECD (note 84), p. 9.

<sup>87</sup> Isacson, A., 'Crisis and opportunity: Unraveling Colombia's collapsing coca markets', WOLA, 24 Aug 2023.

<sup>88</sup> Human Rights Watch, 'Colombia', *World Report 2024: Events of 2023* (Human Rights Watch: New York, 2024), p. 168.

<sup>89</sup> FAO, *Concentración y extranjerización de tierras productivas en Colombia* [Concentration and foreign ownership of productive lands in Colombia] (FAO: Bogota, 2017); OECD (note 84), p. 9; and World Bank, *Indigenous Latin America in the Twenty-first Century: The First Decade* (World Bank: Washington, DC, 2015).

<sup>90</sup> Guereña, A. and Burgos, S., 'Smallholders at risk: Monoculture expansion, land, food and livelihoods in Latin America', Oxfam Briefing Paper, 23 Apr. 2014; and Bratspies, R., "'Territory is everything": Afro-Colombian communities, human rights and illegal land grabs', *HLHR Online*, 27 May 2020.

violence against environmental and human rights defenders. The Colombia ombudsman's office reported that 181 rights activists and community leaders variously engaged in defending the 2016 peace agreement, restoring land, opposing megaprojects and resisting the non-state armed groups, were killed in 2023.<sup>91</sup>

### **The need for interlinked responses**

The imperative to tackle food security in conflict-affected countries is indisputable, given the intricate relationship between food systems, conflict and peace. In 2023, alongside the wars in Ukraine, Sudan and Palestine, organized violence and armed conflict were major drivers of food insecurity in Chad, Burkina Faso, Mali, the Democratic Republic of the Congo (DRC), Ethiopia, Haiti, Niger, Somalia, South Sudan and Yemen.<sup>92</sup> In the DRC, Mali and Somalia, the withdrawal or drawdown of international peacekeeping missions risks creating 'security vacuums' that may lead to increased activities and attacks by non-state armed groups against civilians and humanitarian operations, further exacerbating food insecurity.<sup>93</sup> The interconnected nature of food systems means the impact of conflict generates ripple effects far beyond conflict epicentres. In 2023 wheat supplies were impacted by both the war in Ukraine and Houthi forces in Yemen targeting container ships in the Red Sea. Countries reliant on wheat imports from Europe and the Black Sea, such as East African countries, Iran and Pakistan, are particularly vulnerable to the resulting trade reductions.<sup>94</sup>

The complexities inherent in food systems and conflict and peacebuilding environments pose challenges for organizations and actors, as they must navigate diverse stakeholders, multifaceted processes and intricate feedback loops.

### **Conclusions**

Armed conflict is the main driver of the increasing levels of global food security in 2023, particularly the wars in Ukraine, Sudan and Palestine, as well as the fragile post-conflict landscape in Colombia. However, these case studies demonstrate that conflict-induced food insecurity is compounded by factors

<sup>91</sup> Colombia Ombudsman's Office (note 20); see also Indepaz, *Violencia en Colombia: Informe annual 2023* [Violence in Colombia: Annual report 2023] (Indepaz: Bogotá, 29 Dec. 2023).

<sup>92</sup> World Food Programme and FAO, *Hunger Hotspots: FAO–WFP Early Warnings on Acute Food Insecurity, November 2023 to April 2024 Outlook* (FAO: Rome, 2023). See also chapter 2, section I, in this volume.

<sup>93</sup> World Food Programme and FAO (note 92), p. 3. On the drawdown of peacekeeping missions in those countries see chapter 3, sections I and II, in this volume.

<sup>94</sup> Glauber, J. and Mamum, A., 'Impacts of Red Sea shipping disruptions on global food security', International Food Policy Research Institute Blog, 17 Jan. 2024.

such as climate change, environmental degradation and economic shocks. The repercussions of these wars extend beyond their immediate geographical confines: the Russia–Ukraine war impacted global food supply chains, while refugees from the Sudanese war impacted food insecurity levels of other countries, such as South Sudan. Strengthening food systems—and making them more equitable and sustainable, including by reducing environmental degradation and taking action on climate change—is paramount for breaking the detrimental link between food insecurity and conflict. Doing so not only improves food security, but also serves as a catalyst for achieving broader societal change that contributes to peace and stability.