Food and Agriculture Organization of the United Nations

# THE WAR IN UKRAINE AND **ITS MULTIDIMENSIONAL IMPACT ON FOOD SECURITY** IN EUROPE AND CENTRAL ASIA

# THE WAR IN UKRAINE AND **ITS MULTIDIMENSIONAL IMPACT ON FOOD SECURITY** IN EUROPE AND CENTRAL ASIA

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# Acknowledgements

This report, *The War in Ukraine and its Multidimensional Impact on Food Security in Europe and Central Asia,* was prepared by Tamara Nanitashvili, Senior Policy Officer at the Food and Agriculture Organization of the United Nations (FAO) Regional Office for Europe and Central Asia, under the overall supervision and guidance of Viorel Gutu, Assistant Director-General and Regional Representative for Europe and Central Asia, and Raimund Jehle, FAO Regional Programme Leader. This report is based on FAO regional project TCP/RER/3902 to assess the impacts of the war in Ukraine on food security across Europe and Central Asia.

The report draws on the findings of the paper *FAO's Response to the Multiple Crises in Europe and Central Asia,* from the Thirty-fourth Session of the FAO Regional Conference for Europe, and includes updates on key parameters affecting food security in the region.

The report was reviewed internally at the FAO Regional Office for Europe and Central Asia.

Máximo Torero Cullen, FAO Chief Economist at FAO headquarters, provided valuable comments, inputs and overall clearance of the report. We also thank Matthew Anderson provided editing.

# Abbreviations

| | |
|---|---|
| **ARISE** | Agriculture Recovery Inclusive Support Emergency |
| **ECA** | Europe and Central Asia |
| **FAO** | Food and Agriculture Organization of the United Nations |
| **FSIN** | Food Security Information Network |
| **GDP** | gross domestic product |
| **GNAFC** | Global Network Against Food Crises |
| **GNI** | gross national income |
| **IFAD** | International Fund for Agricultural Development |
| **IFPRI** | International Food Policy Research Institute |
| **IMF** | International Monetary Fund |
| **ERC** | Regional Conference for Europe |
| **SDG** | Sustainable Development Goal |
| **UNDP** | United Nations Development Programme |
| **UNHCR** | United Nations High Commissioner for Refugees |
| **USD** | United States dollar |
| **USDA** | United States Department of Agriculture |
| **WEO** | World Economic Outlook |
| **WFP** | World Food Programme |
| **WHO** | World Health Organization |
| **WMO** | World Meteorological Organization |

# Executive summary

Although localized hunger persists in areas of Ukraine affected by active hostilities, the broader Europe and Central Asia (ECA) region is predominantly challenged by rising rates of overweight, obesity and other forms of malnutrition. The war in Ukraine has heightened food security concerns and other forms of malnutrition across the region, amplifying existing structural vulnerabilities and intensifying pressures related to climate change. Although the most visible impacts are centred in Ukraine, where conflict has directly impaired agricultural production, transport and rural livelihoods, the consequences have extended far beyond its borders. Countries from the Western Balkans through the Republic of Moldova and Eastern Europe, the South Caucasus and into Central Asia experienced a web of cascading effects, including food price spikes (cereal, oil, sugar) and increased fertilizer prices due to shortages of supplies at the start of the war. In addition, an uncontrolled influx of refugees from Ukraine further compounded the situation in neighbouring countries.

The region's interconnectedness – geographically, economically and politically – means that a disruption in one node reverberates widely. Ukraine and the Russian Federation serve as critical suppliers of wheat, sunflower oil and fertilizers to much of the ECA region and beyond. Their combined dominance in Black Sea trade routes ensured affordable and stable access to key commodities. With the sudden interruption of such supplies through the Black Sea ports in 2023, a shift was required towards alternative suppliers, which were both costly and logistically complex. Despite significant logistical challenges and infrastructure damage, Ukrainian grain exports recovered in 2022 and 2023 to pre-war levels, largely due to the effective functioning of the grain corridor. In 2022/23, the Russian Federation remained the world's leading wheat exporter, shipping 41.5 million tonnes – about 20.5 percent of global exports. A record 2022 harvest (104.2 million tonnes), large carryover stocks, no export limits, and competitive prices supported these high exports. Most shipments went to Central Asia, the Near East and North Africa. Together, the Russian Federation and Ukraine exported 24.2 percent of the world's wheat, maize and barley, on average, from 2022/23 to 2024/25 (Lucarelli and Tothova, 2025).

Within Ukraine, the impact has been both immediate and long-term. Agricultural production has declined significantly, particularly in conflict-affected oblasts where access to farmland is impeded by active hostilities and damaged irrigation networks. Essential infrastructure, such as grain silos, storage depots and transport hubs, has been destroyed or rendered inoperable. Farmers have struggled to access inputs such as fertilizer and fuel, labour shortages are acute due to displacements, and market access has been drastically curtailed. Despite temporary diplomatic solutions to facilitate grain exports via alternative routes, they remain insufficient and politically fragile.

In neighbouring countries, the effects have taken different forms. These countries have absorbed large numbers of displaced people while also contending growing demand for social support and with strained logistics infrastructure for the goods coming from Ukraine. Beyond the country's immediate neighbours, Central Asian states such as Kazakhstan, Kyrgyzstan and Tajikistan – though geographically distant from the conflict – have faced rising costs for food, fertilizer and energy as well as increased rents related to a large influx of workers from the Russian Federation seeking new opportunities and those using the region as a transit point to other destinations. In many of these countries, structural challenges such as limited arable land, dependency on imports and water scarcity create additional pressures.

Climate change further complicates the food security landscape. Many of the region's agricultural systems are not yet equipped with the climate-resilient technologies, infrastructure or practices necessary to withstand these shocks. Soil degradation, over-reliance on water-intensive crops, and inefficient irrigation systems make the challenge even more severe, especially in semi-arid areas.

The human cost of this convergence of crises is mounting, with millions of people across the region struggling to access affordable and nutritious food and the poorest households bearing the brunt. Women and children are disproportionately affected, especially where social protection systems are underfunded or unevenly distributed.

Despite these challenges, the crisis has spurred some important adaptive responses related to the events (e.g. increased food and energy prices and an influx of Ukrainian refugees and workers from the Russian Federation) following the war in Ukraine. Governments have acted swiftly to stabilize markets, support vulnerable households and bolster national food reserves following the disruptions as a result of the war. Many measures are largely still in place. The Food and Agriculture Organization (FAO), in collaboration with other United Nations agencies, national governments and regional bodies, is well positioned to lead and coordinate this response. By aligning short-term humanitarian actions with longer-term structural reforms, and by fostering collaborative international engagement, the region can move beyond crisis management towards a more sustainable and food-secure future.

International and regional actors should focus on restoring agricultural capacity where feasible, reinforcing food logistics and trade corridors, and strengthening national and regional food systems through climate-smart and inclusive approaches. Support for both emergency food aid and the rehabilitation of agricultural infrastructure must proceed in parallel. The role of data systems, regional coordination mechanisms and inclusive stakeholder engagement – including with farmers, civil society and local governments – is critical for success.

It also demands increased investment in agricultural infrastructure, climate adaptation and rural development and stronger alignment of national policies with regional goals. Above all, the crisis must be seen as a critical inflection point – an opportunity to redesign food systems that are more equitable, more sustainable and more resilient in the face of an increasingly volatile world.

This report calls on governments, international organizations and regional actors to seize this moment with vision and urgency. The future of food security in the ECA region depends not only on how the current crisis is managed, but on how the region prepares for what comes next.

# Background

In late 2022, the FAO Regional Office for Europe and Central Asia launched the TCP/RER/3902 project to assess the impacts of the war in Ukraine on food security across Europe and Central Asia. The project aimed to analyse the interconnected crises in food, energy and finance systems and to provide policy recommendations to address both immediate and long-term challenges, as requested at the Thirty-third FAO Regional Conference for Europe in 2022.

As part of this initiative, FAO partnered with Corvinus University of Budapest to study food security trends in 16 programme countries[1] near Ukraine. However, the report was not published due to some methodological inconsistencies with FAO approaches.

This report synthesizes the project results and provides an updated overview of the food security situation based on available data from the onset of the war in 2022 through the end of 2024. FAO interventions and government policy changes also are analysed, along with policy recommendations.

[1] These countries are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, North Macedonia, Republic of Moldova, Serbia, Tajikistan, Turkmenistan, Türkiye and Uzbekistan.

# Introduction

The war in Ukraine, which began in 2022, has profoundly disrupted food security, impacting agricultural production, supply chains and logistics at national, regional and global levels. The ECA region also has faced increasingly frequent weather or geological extremes, including a severe drought in the Republic of Moldova in 2022 and devastating earthquakes in Türkiye in early 2023. These challenges, combined with unfavourable weather conditions, have strained agrifood systems and complicated natural resource management.

The war has affected global commodity markets, trade, financial flows and market confidence, slowing regional and global growth. It also has displaced millions of people from Ukraine, causing long-term trauma. The displacement of populations due to conflict has placed further strain on local resources. Refugees and internally displaced persons generally increase demand for food, housing and services in host communities (FAO *et al.*, 2023). Today, 6.9 million people are recorded globally as refugees, of which 92 percent are in Europe, with Poland and Czechia having the highest concentrations. Additionally, 3.7 million people are internally displaced persons (UNHCR, 2025a).

Displacement and infrastructure damage in Ukraine have hindered planting and harvesting activities since 2022, and many farmers have abandoned their land (particularly those near front-line areas), leaving fields uncultivated (FAO, 2022a). Many producers, particularly in 2022, have struggled to access essential inputs and markets, leading to shortages of fertilizers, fuel and seeds. Rising production costs due to fertilizer shortages and high prices, declining incomes and increased vulnerability have forced many producers to adopt crisis coping strategies. After the outbreak of the war in Ukraine, production levels of major agricultural crops (wheat, maize and oilseeds) fell markedly in 2022 and 2023, largely because of reduced planted/harvested areas, damage to agricultural infrastructure, and war-related disruptions (FAO, 2025a). Rising energy prices also have affected households, agrifood systems and food industries. Energy retail prices began to fall by mid-2023 in countries such as the United Kingdom of Great Britain and Northern Ireland and across the European Union. This decline was driven by such factors as high gas storage levels, mild weather, increased liquified natural gas imports (mainly from the United States of America) to offset declining pipeline gas from the Russian Federation, and lower overall demand (Council of the European Union, 2025).

In 2022, surging food, housing and energy prices led to record inflation. By 2023, inflation had decreased significantly in most countries. In line with global trends, inflation in the Central Asia and Caucasus countries surged to a decades-high 13 percent in 2022 – driven by pandemic-related disruptions and the impacts on energy and food prices of the invasion of Ukraine by the Russian Federation – before easing to 9.8 percent in 2023 as these pressures subsided and domestic policies took effect (Atamanchuk *et al.*, 2025). Double-digit inflation continued in Kazakhstan, Kyrgyzstan, Türkiye and Ukraine, driven by a combination of global and domestic factors. Globally, rising food and energy prices and ongoing supply chain disruptions played a significant role. Each country also faced specific domestic challenges: Kazakhstan was adjusting after high inflation in 2022, and Kyrgyzstan remained heavily reliant on remittances (United Nations, 2023a). In Türkiye, factors such as currency depreciation and structural issues in agriculture, including large gaps between producer and retail prices and declining foreign reserves, were reasons for the persistent food inflation (FAO, 2025b). In Ukraine, double-digit inflation continued through 2023 and 2024 (Rakic, 2024).

[2] Despite inflation, remittances from the Russian Federation increased, benefiting countries like Kyrgyzstan and Tajikistan.

[3] Legally registered independent agricultural producers (including individual entrepreneurs) cultivating up to 250 hectares; they represent about 65 percent of all agricultural enterprises in Ukraine. Source: FAO, 2023a

In 2024, no country experienced double-digit inflation, apart from Ukraine and Türkiye, as prices – including the prices of fertilizers – have been reduced.

Increased inflation rates in 2022, disrupted trade flows, decreased remittances[2] and heightened migration pressures collectively challenged the stability and growth of affected economies. The war (destruction of irrigation systems, storage facilities and machinery) has further undermined agricultural recovery and the critical role played by Ukraine in global food systems and international food supply chains as a major global exporter of wheat, corn and sunflower oil. In June 2023, the destruction of the Kakhovka Dam in Ukraine significantly reduced or entirely halted irrigation in the arid regions of Kherson.

Agricultural enterprises[3] covered in this study contributed over 70 percent of the crop output of Ukraine in 2021, while the rest came from various other sources. A 2023 survey (FAO, 2023a) of 1 927 farms showed the war's major impact: Grain and oil crop areas dropped up to 20 percent in front-line regions. Rising costs and land contamination disrupted operations, creating urgent needs for fertilizers, fuel, seeds, electricity and market access.

The Fourth Rapid Damage and Needs Assessment (February 2022–December 2024), conducted by the Government of Ukraine, the World Bank Group, the European Commission and the United Nations, estimated billions of United States dollars in damage and losses in Ukraine due to the war (World Bank, 2025a).

[2] Despite inflation, remittances from the Russian Federation increased, benefiting such countries as Kyrgyzstan and Tajikistan.

[3] Legally registered independent agricultural producers (including individual entrepreneurs) cultivating up to 250 ha (the focus of the study). They represent about 65 percent of all agricultural enterprises in Ukraine (FAO, 2023a).


# Economic impact of the triple crisis on the Europe and Central Asia

The ongoing war in Ukraine has triggered a cascade of economic, social and political disruptions, profoundly affecting food security in post-socialist countries outside the European Union. Sixteen programme countries (see above) of FAO in the ECA region, which is a focus of this study, are characterized by transitional economies and often fragile governance structures. They are particularly vulnerable to shocks in food systems, energy markets and financial markets.

## ECONOMIC IMPACTS

The economies of post-socialist countries – such as Armenia, Georgia, Kyrgyzstan, the Republic of Moldova and Tajikistan – were deeply intertwined with regional trade networks and global commodity markets. The war in Ukraine disrupted these connections, leading to severe economic consequences. Inflation soared as energy and food prices spiked, eroding the purchasing power of households and exacerbating poverty. Food inflation trends from 2022 to 2024 in countries neighbouring Ukraine, including those in Central Asia, the Caucasus and the Western Balkans, alongside Belarus, the Republic of Moldova and Türkiye, have been markedly influenced by geopolitical tensions. These subregions and nations have faced significant food price increases, primarily due to supply chain interruptions, rising commodity prices and adverse weather conditions impacting agricultural yields. For instance, Türkiye has seen spikes in food inflation linked to currency depreciation and import dependencies. In general, high and persistent food inflation in Türkiye is a feature of its economy due to its underlying macroeconomic factors (World Bank, 2020). On the other hand, Belarus and the

Republic of Moldova have grappled with the direct consequences of the Ukraine conflict due to disrupted food supplies, rising import costs and higher food and energy prices. Heavily reliant on imports from the Russian Federation and Ukraine, the Republic of Moldova saw reduced staple availability and limited export routes, as well as a refugee inflow[4] and security concerns. Belarus experienced trade disruptions and higher input costs for food production, primarily due to its role as a major global fertilizer producer and exporter and its close ties with the Russian Federation. Remittance flows from the Russian Federation to Central Asia rose due to strong demand for migrant workers to fill labour shortages, driven by an ageing population and a need for workers in such sectors as construction, industry and services (Center for Eurasian, Russian and East European Studies, 2023). On the other hand, the influx of freelancers and businesspeople to countries such as Armenia, Georgia, Kazakhstan and Uzbekistan drove up real estate rents and living costs in 2022 and 2023 (FAO, 2025c). However, increased rents did not benefit vulnerable populations in the Caucasus and Central Asia, and the countries in these subregions needed to implement a full-scale targeted social safety net to the most vulnerable groups of the population.

Global economic growth surged from 3.0 percent in 2019 to 6.6 percent in 2021[5] and then slowed to 3.3 percent in 2024; it is projected to decrease to 3.2 percent in 2025 (International Monetary Fund, 2025). In the ECA region, real GDP growth plummeted from 2.7 percent in 2019 to 1.5 percent in 2021; it increased to 3.7 percent in 2024 but is projected to decrease to 2.4 percent in 2025[6](World Bank, 2025b).

# TRADE DISRUPTIONS

The Russian Federation and Ukraine and are key suppliers of wheat and maize, and the Russian Federation is also a main supplier of fertilizers in the region (USDA, 2025). The conflict has constrained the supply of these critical inputs. Post-socialist countries not in the European Union often lack diversified trade partners, making them particularly susceptible to such disruptions.

Before the war, Belarus was largely self-sufficient in wheat and barley, with minor imports from the Russian Federation and Ukraine. The Republic of Moldova relied heavily on Ukraine for grains and sunflower oil and on the Russian Federation for fertilizers. Türkiye acted as a re-export hub, importing large quantities of grains from both countries and then reexporting it to other countries in the form of flour and pasta. The Western Balkans, Central Asia and the Caucasus were heavily dependent on Russian and Ukrainian wheat, maize, sunflower oil and fertilizers, with few exceptions. For example, while Serbia was a net exporter of wheat, it occasionally imported wheat from the Russian Federation (FAO, 2023b).

The war has disrupted traditional trade routes and markets, particularly for countries reliant on agricultural exports or imports. Road, port and rail infrastructure are the major logistics for trade. In 2022, grain exports from Ukraine plummeted due to the Black Sea port blockades, exacerbating the crisis. Damage to ports, railways and roads has further hindered the movement of goods, causing delays, increased transportation costs and logistical bottlenecks.

The Initiative on the Safe Transportation of Grain and Foodstuffs from Ukrainian Ports (active from July 2022 to July 2023)[7] facilitated the safe export of nearly 33 million tonnes of Ukrainian grain and foodstuffs to 45 countries (United Nations, 2023b). The European Union–Ukraine Solidarity Lanes,[8] which provided export corridors and suspended certain import duties, helped stabilize global food prices. The European Union has implemented full trade liberalization for Ukraine through the Autonomous Trade Measures Regulation (enacted on 4 June 2022), which suspends import duties, quotas and trade defence measures on Ukrainian imports. This initiative significantly aids the economy of Ukraine by supporting its producers and exporters amid the ongoing challenges posed by the conflict. These measures remained in effect through 5 June 2025 (European Commission, 2025b). In 2024, Ukraine commodity exports rose significantly year-on-year, with the European Union remaining its top market. Since May 2022, the Solidarity Lanes have facilitated the export of approximately 179 million tonnes of Ukrainian goods, including about 85 million tonnes of grain, oilseeds and related products (European Commission, 2025a). However, the export volumes are still below the pre-war (2021) levels and are expected to stay that way through 2024/25 (FAO, 2025d).

[4] As of 2025, the Republic of Moldova is host to 135 080 Ukrainian refugees (UNHCR, 2025b).

[5] A significant portion of the growth represented recovery from previous losses due to COVID-19, rather than new expansion.

[6] The estimates for 2021, 2024 and 2025 do not include the Russian Federation.

[7] This is the so-called Black Sea Grain Initiative, which was jointly launched by the United Nations, Türkiye, Ukraine and the Russian Federation. It aimed to secure the transport of essential goods, including fertilizers, amid ongoing conflict.

[8] In May 2022, the European Commission launched the Solidarity Lanes Action Plan to create alternative logistics routes – by rail, road and inland waterways – known as Solidarity Lanes (European Commission, 2025a).


# Policies and measures affecting trade in the region and beyond

In 2022, many countries imposed export restrictions on key commodities such as wheat, feed grains and vegetable oils, driving up food prices (Glauber, Laborde and Mamun, 2023). Since 2022, the European Union has imposed broad sanctions on the Russian Federation after its invasion of Ukraine but deliberately excluded direct bans on food and fertilizer exports to avoid worsening global food insecurity. Nonetheless, financial and logistical constraints – such as banking and shipping restrictions – have indirectly disrupted agricultural trade. Although some restrictions were eased in 2023 as global markets began to stabilize, several countries maintained protective measures into 2024 due to ongoing uncertainties and volatility in the region. By 2024, the European Union proposed tariffs on fertilizers from the Russian Federation to reduce dependency and market distortions, even as the Russian Federation tightened its own export quotas, highlighting the ongoing tension between sanction policies and global food security. As of 1 July 2025, the European Union imposed new tariffs on agricultural products and certain fertilizers from Belarus and the Russian Federation (La Rocca, 2025). The new regulation extends tariffs to previously exempt goods, including certain nitrogen fertilizers from Moscow and Minsk. The Russian Federation extended its export quotas on fertilizers until 30 November 2025 as part of its strategy to manage domestic supply and prices amid international sanctions and trade restrictions (AK&M, 2025).

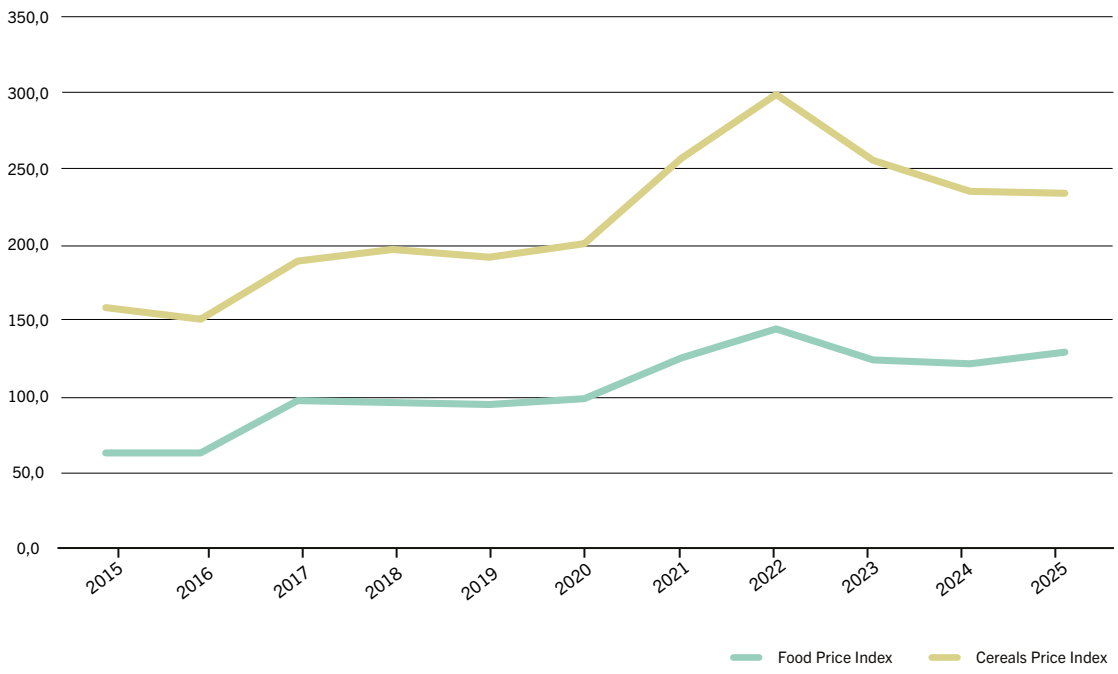
# Food prices

Price instability has emerged as a central determinant of food security. The trade disruptions have strained global food markets, driving up prices and worsening food insecurity in many regions. Prices peaked in March 2022 but began easing by August, helped by better harvests and reduced restrictions. Wheat flour prices in Azerbaijan, Georgia, Kyrgyzstan and Tajikistan rose sharply in 2022, reflecting the effects of the COVID-19 pandemic and the war in Ukraine. By December 2022, prices remained well above 2019 levels. In Western Europe, wholesale wheat prices rose significantly but declined 28–33 percent by March 2023 (FAO, 2025c). High grain, oil and fertilizer prices strained low-income households, especially in countries that depend heavily on imports. These include countries in the Caucasus and Central Asia subregions (minus Kazakhstan) as well as most of the Western Balkans (minus Serbia) and the Republic of Moldova (FAO, 2025a). Other countries covered in this report (Belarus, Türkiye and Ukraine) are good producers of cereals, and price transmission from international markets is limited.

Due to increased export restrictions on wheat, countries attempted to diversify their import sources. However, the Russian Federation remains the major source of wheat among Caucasus countries. Meanwhile, countries in Central Asia and the Western Balkans have diversified trading partners during the Ukraine war rather than relying on regional trade (FAO, 2025a).

The latest estimates for 2025 show gradual reductions in the global food price[9] index and the cereal price index (Figure 1).

**FIGURE 1.** Food price and cereal price index global trends up to September 2025




Source: **FAO**. 2025. FAO Food Price Index. In: *World Food Situation*. [Cited 4 December 2025]. https://www.fao.org/worldfoodsituation/foodpricesindex/en

[9] The food price index comprises five items: meat, dairy, vegetable oil, cereal and sugar. It is weighted with the average export shares of each item for 2014–2016 prices (FAO, 2025e).


# Challenges facing the agricultural and livestock sectors

The war has disrupted the availability and affordability of critical agricultural inputs such as seeds, fertilizers, pesticides, equipment and fuel, particularly in Ukraine (FAO, 2025c).

Rising fuel prices have increased the cost of mechanized farming, and logistical challenges have hindered the transport of agricultural goods to markets. While prices dropped in 2023, they remained above levels from before the COVID-19 pandemic. While the fertilizer price index remained relatively stable in 2024, it rose by 6 percent in the first quarter of 2025. This was mostly driven by strong urea demand amid production shortfalls and export restrictions (World Bank, 2024). Prices are expected to remain above 2015–2019 levels, driven by strong demand, rising input costs – especially for natural gas – and ongoing export restrictions, notably from China.

For example, Kyrgyzstan, where agriculture employs a significant portion of the population, has faced reduced agricultural yields and incomes due to indirect effects of the war in Ukraine (World Bank, 2022).[10] While the war's direct impact on farmland in these countries is minimal, indirect effects from soaring input costs (fertilizers and fuel) and altered market access have reduced farmer profitability. Water scarcity, exacerbated by climate change and inadequate infrastructure, has further compounded these challenges. The reduced productivity undermined both subsistence farming and the ability of these nations to participate in regional food trade.

The 2025 winter cereal planting in Ukraine, mainly wheat, finished with 5.98 million ha sown, surpassing the previous year (FAO, 2025d). However, poor soil moisture from low rainfall hindered sowing across regions. Demining progress in former combat zones helped, but unexploded ordnance still restricts farmers' access to some fields, posing ongoing challenges. In the Russian Federation, wheat output is expected to be lower year-on-year due to adverse weather conditions and a reduced sown area (FAO, 2025e).

Livestock systems were further strained by rising feed costs resulting from increased energy and transport costs, driven by global market pressures and regional supply constraints, making it increasingly difficult for both smallholders and commercial producers to ensure adequate animal health and nutrition.

[10] Kyrgyzstan, Tajikistan and Uzbekistan show relatively high import dependency ratios for wheat and its derived products (measured by weight), with Tajikistan displaying an import dependency ratio close to 60 percent and elevated net imports per capita


# State of food security and nutrition in the Europe and Central Asia region

*This chapter describes the food security situation in Europe and Central Asia, with FAO selected indices (secondary data) by country/region, covering the period 2000–2023.*

Analysing differences in undernourishment and overall food security across countries provides valuable insights into the key determinants of food security. The ECA region exhibits significant heterogeneity in these determinants, including production variability, import dependency and economic openness. While some nations demonstrate resilience, others remain highly vulnerable to external shocks and climate change impacts.

The determinants of food security in post-socialist countries outside the European Union are deeply influenced by economic instability, trade disruptions, price volatility, agricultural challenges, migration dynamics and household resource constraints. The war in Ukraine has exacerbated these vulnerabilities, creating complex and interrelated challenges.

## CHRONIC HUNGER AND FOOD INSECURITY

Despite recent challenges, including the COVID-19 pandemic and the war in Ukraine, hunger prevalence in the ECA region has remained low, at below 2.5 percent in 2022 and subsequent years. Moderate or severe food insecurity affected **11.5 percent** of the population, less than the world average (FAO *et al.*, 2025a). However, there are differences among countries and subregions.

Most ECA countries have met the goal of eradicating hunger. However, from 2022 to 2024, in seven countries – Albania, Georgia, Kyrgyzstan, Slovakia,

Tajikistan, Turkmenistan and Ukraine – the prevalence of undernourishment hunger indicator still exceeded 2.5 percent (FAO *et al.*, 2025b). In 2022 to 2024, Tajikistan recorded the highest undernourishment (8.4 percent), followed by Ukraine and Kyrgyzstan (Figure 2). In Ukraine, the war has worsened food security by disrupting the economy and driving up prices (FAO *et al.*, 2025a). However, rising living costs and economic challenges in the Commonwealth of Independent States Europe and Ukraine subregion from 2019 to 2024 reflect the compounded effects of the pandemic and war, exacerbating financial instability and limiting access to essential resources for many households (Figure 2).

As to the prevalence of moderate or severe food insecurity, the worst situation prevailed in Albania and Ukraine, where prevalences were the highest in 2022–2024 (over 30 percent, exceeding the world average or 28.3 percent). The prevalence has increased since the previous period (2014–2016) in Ukraine, but it has declined in Albania, which is less directly affected by the impact of the war, apart from inflation and insecurity in energy and food supplies (Figure 3).

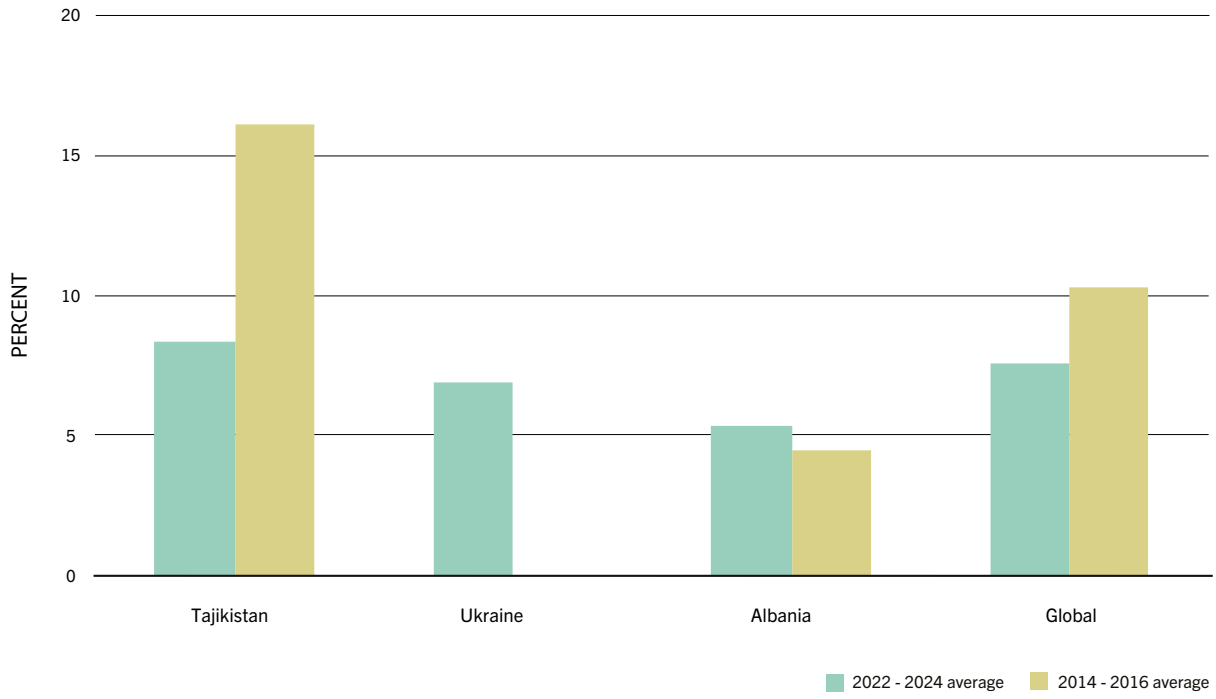
# NUTRITION AND ACCESS TO HEALTHY DIETS

While progress has been made in addressing malnutrition across the ECA region, the increasing prevalence of overweight among children younger than 5 and of obesity among adults underscores the need for comprehensive strategies to promote healthy eating and physical activity. These conditions pose significant health risks and place a growing burden on health care systems.

Based on a recently published report (FAO *et al.*, 2025a), stunting among children under 5 in the ECA region was 4.9 percent (2022 estimates), well below the global average of 22.9 percent. Three countries in the region – Kyrgyzstan, Tajikistan and Ukraine – had prevalences of stunting among children under 5 above 10 percent in 2024 (FAO *et al.*, 2025b).

The regional prevalence of wasting was at 1.4 percent, significantly lower than the global average of 6.8 percent and the 2030 target of 3 percent.

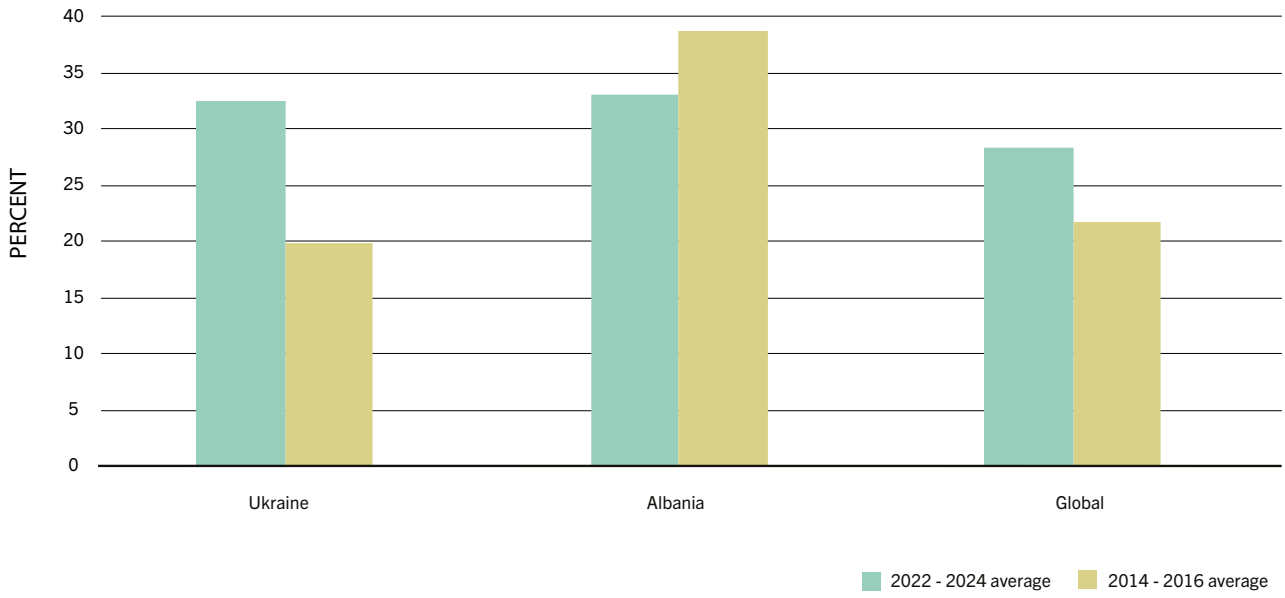
**FIGURE 2.** Highest prevalence of undernourishment in the Europe and Central Asia region




Sources: **FAO, IFAD, UNECE, UNICEF, WHO & WMO**. 2025. *Europe and Central Asia Regional Overview of Food Security and Nutrition 2024*. https://doi.org/10.4060/cd4739en

**FAO, IFAD, UNICEF, WFP & WHO**. 2025. *The State of Food Security and Nutrition in the World 2025*. Rome. https://doi.org/10.4060/cd6008en

**FIGURE 3.** Highest prevalence of moderate or severe food insecurity in the Europe and Central Asia region




Sources: **FAO, IFAD, UNECE, UNICEF, WHO & WMO**. 2025. *Europe and Central Asia Regional Overview of Food Security and Nutrition 2024*. https://doi.org/10.4060/cd4739en

**FAO, IFAD, UNICEF, WFP & WHO**. 2025. *The State of Food Security and Nutrition in the World 2025*. Rome. https://doi.org/10.4060/cd6008en

Overweight prevalence in children under 5 in the region was 7.1 percent, higher than the global average of 5.3 percent, which is similar to the estimates in 2012. In 2024, the highest overweight prevalence in children under 5 was detected in six programme countries: Albania (16.7 percent), Armenia (12.9 percent), Bosnia and Herzegovina (13.0 percent), North Macedonia (12.3 percent), Serbia (12.2 percent) and Ukraine (16.0 percent).

In 2022, **64.3 million people in the ECA region** could not afford a healthy diet. This is a slight improvement from the previous year, which may be attributed to increased incomes driven by the post-COVID-19 economic recovery. However, significant challenges remain in ensuring food security for all. Poor eating habits and limited public awareness further elevate food-related risks.

The Central Asia subregion has recorded the highest rate of unaffordability of healthy diets among the FAO programme countries throughout the years (since 2017) in the ECA region (FAO *et al.*, 2025a). The lack of targeted social protection measures further compounds the problem, leaving many families without adequate support.

# ACUTE FOOD INSECURITY AND NUTRITION

The Global Report on Food Crises (GRFC)[11] 2025 conducted in-depth analyses of food and nutrition crises at the global, regional and country level in 65 countries/territories, including Ukraine. The study examined acute food security[12] and malnutrition among residents and forcibly displaced populations. Based on the analysis, **15 percent (5 million people)** of the analysed population in Ukraine faced high levels of acute food insecurity in 2024 (FSIN and GNAFC, 2025).

Conflict/insecurity was identified as the primary driver in 20 countries/territories, with 139.8 million people facing high levels of acute food insecurity (FSIN and GNAFC, 2025). The other two drivers listed in the report were "weather extremes" and "economic shocks". Ukraine was not listed among the 26 countries/territories with a nutrition crisis.

[11] The GRFC is the result of collaborative effort among United Nations agencies, regional intergovernmental bodies, donors, technical organizations and clusters, working together to deliver consensus-based analysis that guides effective humanitarian and development interventions.

[12] Acute food security is severe state in which people lack access to sufficient food to sustain their lives or livelihoods.

# Support from governments and FAO

## GOVERNMENT RESPONSES

Governments throughout Europe and Central Asia have employed various measures to respond to the rising cost-of-living crisis, including expanding social assistance programmes, implementing price controls and subsidizing energy, electricity and natural gas. These subsidies, directed towards both households and businesses, largely remain in effect.

During a virtual consultation convened by the FAO Regional Office for Europe and Central Asia in January 2023, numerous countries highlighted ongoing food security concerns linked to the increased cost of living. To maintain food availability, most governments introduced support measures for primary production, including aid to farms and markets.

Beyond these core responses, additional actions included tax cuts, trade and export restrictions, adjustments to pension schemes, income valorization efforts, direct cash transfers, targeted support for farmers and the development of new trade partnerships.

Despite these comprehensive efforts, many governments indicated a continued need for FAO's support in gathering reliable data, noting the presence of data gaps as a critical obstacle to the delivery of timely, evidence-based responses.

## RESPONSES BY FAO

In response to the war in Ukraine, FAO acted swiftly by setting up a dedicated project office and launching a rapid response programme focused on emergency agricultural operations. Given that smallholder farmers contribute 41 percent of the total agricultural output in Ukraine, the agricultural sector was a strategic priority. Between March and December 2022, FAO mobilized USD 118 million to support timely agricultural activities and bolster food security amid the conflict (FAO, 2022b).

In 2023, FAO expanded its emergency response with a funding target of USD 205 million. This programme prioritized urgent rural needs, including demining agricultural land, reviving agricultural production, restoring value chains and supporting local food systems (FAO, 2023c). The emphasis remained on ensuring immediate food and income security, particularly for communities near active conflict zones.

In 2024, FAO continued to focus on securing both spring and winter harvests, maintaining livestock health and supporting income-generating activities for rural households. These efforts aim to meet urgent needs while laying the groundwork for longer-term recovery.

The 2024–2027 agenda includes nine major programmes aimed at enhancing competitiveness, ensuring sustainability and aligning agrifood systems in Ukraine with European Union standards. FAO assisted 45 724 rural families with cash, vouchers and drip irrigation kits to meet urgent needs and sustain agricultural production. Additionally, 4 741 farmers received spring crop seeds, generators, temporary storage, animal feed and financial aid. In the 2025–2026 Emergency and Early Recovery Response Plan, FAO is aiming to support 550 000 rural residents and small-scale farmers affected by the ongoing war with immediate relief and long-term agricultural recovery.

FAO also plays a significant role in broader investment programmes for the agricultural recovery of Ukraine. Collaborating with financial institutions such as the World Bank and the European Bank for Reconstruction and Development, FAO contributes analytical work, project planning and technical support. A major milestone was the preparation of operational manuals for the World Bank's Agriculture Recovery Inclusive Support Emergency (ARISE) Project, which was approved in October 2023 with a total project cost of USD 2.2 billion, including USD 550 million from the World Bank.

In addition to emergency and recovery projects, FAO has worked closely with Ukrainian industry and academic partners to build long-term resilience. Notably, the Organization helped reduce antimicrobial use by 50 percent at a poultry farm and strengthened veterinary capacities to manage avian influenza outbreaks. FAO also addressed rising feed costs by supporting emergency feed interventions.

**TABLE 1.** Summary of FAO's responses to Ukraine

| THEMATIC AREA | INITIATIVES AND FOCUS AREAS |
|---|---|
| **1. Restoring livelihoods and rural communities** | • Restoring livelihoods and rural communities affected by mines and explosive remnants of war<br>• PERAL Sumska: Community-based recovery in Sumska oblast |
| **2. Emergency support in agriculture and food security** | • Emergency food and nutrition support in front-line rural areas<br>• Winterization and agricultural recovery<br>• Spring crop production support in the south |
| **3. Energy and livelihood assistance** | • Emergency energy and livelihood aid for vulnerable farmers and small/medium agroprocessing enterprises |
| **4. Agricultural infrastructure and export support** | • Supply chain recovery for grain exports<br>• Grain storage support for Ukrainian farms |
| **5. Forestry sector resilience** | • Strengthening forest management planning through restoring the Ukrainian Forest Management Planning Association |
| **6. Specialized subsector support** | • Safeguarding livelihoods of smallholder wine producers |
| **7. Sustainable value chain development** | • Inclusive, competitive, and sustainable development of value chains in agriculture, fisheries, and forestry |

Beyond Ukraine, FAO has conducted extensive regional assessments to understand the broader impacts of the war and other crises on agriculture and food systems. These assessments help guide targeted interventions in countries across the ECA region:

- ➔ In Armenia, FAO analysed trade disruptions and outlined emergency response options.
- ➔ In Georgia, the Organization examined the economic and social effects of the war to develop food security measures.
- ➔ In Albania, FAO monitored impacts on agriculture and food systems.
- ➔ In the Republic of Moldova, assessments addressed drought impacts and cereal import pressures (FAO, 2022c).
- ➔ In Ukraine, ongoing nationwide surveys and impact studies continue to highlight reduced food and agricultural production. These efforts include sector-specific evaluations in aquaculture, fisheries and forestry.
- ➔ FAO supported a regional gender analysis, informed policy recommendations on refugee livelihoods, and contributed to the development of gender-sensitive knowledge products.

FAO's major regional study on the consequences of the war in Ukraine, outposted to Corvinus University, was finalized in January 2024. The study examined how the overlapping food, energy and financial crises affect food security in vulnerable countries in the ECA region.

As part of its cooperative programme with the World Bank, FAO prepared a technical report on the implications of the conflict for agrifood trade and food security in Central Asia (World Bank, 2022).

Furthermore, FAO supported Türkiye by conducting a supply chain analysis of the wheat sector and delivering emergency response projects following the devastating earthquakes of February 2023.

Overall, FAO's work in Ukraine and the broader region reflects a comprehensive strategy that blends emergency relief with long-term recovery and resilience building across agriculture, food systems and rural livelihoods.

# Policy recommendations

Recent crises have drawn attention to two significant weaknesses of food systems in the ECA region: the lack of diversity in markets and products, and weak governance (IFPRI, 2023). The most important policy lessons and recommendations learned from this report are as follows:

1. **Improve monitoring and rapid response.** A monitoring and evaluation framework continuously supplied with current data will assist countries in managing ongoing shocks and preparing for new ones. Local data gathering and analysis can help ensure the provision of accurate and up-to-date information on developments related to food security.

2. **Ensure crisis readiness and social protection.** Short-term, ad hoc solutions have proven ineffective in crises, highlighting the urgent need for a permanent, comprehensive framework for crisis preparedness and response. Expanding social protection is vital for displaced populations and vulnerable groups near the poverty line, including children, women, the elderly, the chronically ill, smallholder farmers and at-risk youth. Strengthening coordination across sectors and adopting flexible measures can improve food security.

3. **Build a long-term food security strategy.** Few countries have a strong plan for their agrifood systems – a vulnerability exacerbated by crisis situations to the detriment of household and community stability. Thus, it is necessary to create and implement a thoughtful long-term food security strategy that supports resilient recovery and meets both the urgent and long-term needs of the most-affected populations.

4. **Increase the resilience of agrifood trade and markets.** Building agrifood resilience requires collective action to manage trade disruptions, diversify imports and improve storage. Import-dependent countries need some self-sufficiency in key foodstuffs, but input reliance still threatens food security. Long-term sustainability demands more than self-sufficiency. Harmonizing food safety systems is vital, especially for countries aiming to join larger markets such as the European Union, to ensure competitiveness and access.

5. **Refrain from sudden export restrictions and ensure a diverse range of food import sources.** Unpredictable export restrictions disrupt markets, raise global prices and worsen food insecurity, especially in vulnerable, food-importing countries. Diversifying import sources and domestic production while maintaining food reserves strengthens supply stability. Respecting international commitments, global trade enhances agrifood system resilience by buffering against shocks and reducing reliance on single suppliers.

6. **Empower small-scale producers.** The prevalence of fragmented land structures leads to a dearth of competitive farms, hampering local agrifood production. To ensure food security in rural areas, family farms must have appropriate land rights and titles and a competitive amount of agricultural land. Support for family farms should include efforts to improve access to input and output markets, finance and investment.

7. **Strengthen veterinary capacities and establish effective systems for livestock disease monitoring and response.** Establishing strong livestock disease surveillance systems is vital for early detection, rapid response and effective outbreak control. This requires investment in infrastructure, training and veterinary capacity. Promoting sustainable practices – such as feed management and rangeland conservation – enhances sector resilience. Coordinated efforts to prevent and control transboundary animal diseases are critical, as they threaten regional health, food security and trade.

8. **Promote the affordability of healthy diets with sustainability considerations.** Comprehensive policy action and the repurposing of public support for food and agriculture are essential to improving the affordability of healthy diets. Redirecting subsidies from producers to consumers can promote healthy diets, provided that appropriate measures are in place to ensure environmental sustainability and income equity. Multisectoral coordination is key to lowering diet costs and minimizing the unintended impacts of the repurposing of support within food systems.

9. **Support investments in infrastructure and technology.** Responsible investment in modern infrastructure and technology will greatly benefit local food security and nutrition. Many countries would especially benefit from investment in efforts to lessen post-harvest losses and improve logistics, such as collection and processing centres, greenhouses and sustainable irrigation systems.

10. **Support processing and the creation of higher value addition in agriculture**. Producing and trading with low-value and fresh raw materials make countries especially vulnerable to crisis situations. Support for processing and value addition in agriculture enhances income opportunities, creates jobs and strengthens rural economies. Investing in infrastructure, technology and skills development enables farmers to move up the value chain, reduce post-harvest losses and access new markets, contributing to stable food security.

11. **Support and scale up the adoption of digital technologies in agriculture**. Digital technologies can help mitigate war's impact on agriculture and food security by providing real-time data, improving farm efficiency, reducing costs and expanding market access. These technologies also support social protection delivery, resource monitoring and informed policymaking, contributing to more sustainable, resilient agrifood systems and better responses to conflict-related disruptions.

12. **Manage resources sustainably and responsibly**. While the impacts of climate change vary among countries in the region, they are increasingly apparent everywhere. Adopting sustainable resource management, along with effective climate adaptation and mitigation strategies – such as modern land-use practices and climate-resilient species – is essential for future resilience.

13. **Invest in local people**. Education, training and knowledge sharing can help farmers grow more nutritious food and assist consumers in making healthier diet choices. Empowering women, youth, children and other vulnerable groups today will better set them up for success in the future.

14. **Promote regional cooperation in science and innovation**. Assessing the overall impacts of the crisis in the region is challenging due to the fragmented research efforts of a broad range of research institutions. This highlights the need to promote regional cooperation in science and innovation to strengthen the resilience of agrifood systems. Encouraging collaboration among research institutions, universities and the private sector will facilitate the exchange of knowledge and expertise, driving the development of innovative solutions to shared challenges.

15. **Create and maintain a solid institutional framework**. Most countries in the ECA region suffer from the presence of corrupt institutions. Institutional and human development and capacity building, including the creation of transparent and inclusive governance structures, can provide a stable framework for improving food security.

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