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Food and Agriculture Organization of the United Nations

Organisation des Nations et l'agriculture

Продовольственная и Unies pour l'alimentation сельскохозяйственная организация Объединенных Наций

Organización de las Naciones Unidas para la Alimentación y la Agricultura

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FAO's response to the multiple crises in Europe and Central Asia

Executive summary

This background document analyses the intricate factors contributing to crises in the food, energy and finance sectors in the Europe and Central Asia region during 2021 and 2022. It analyses the impacts of various shocks, both natural and artificial, outlines the challenges and details FAO's responses. The region has experienced a convergence of shocks that have affected food, energy and finance systems, and increased the cost of living for the most vulnerable. This document discusses global and regional efforts to mitigate consequences for food inflation, trade, agricultural production, food security and access to healthy diets for vulnerable populations. Recognizing the gravity of the situation, FAO has comprehensively understood how these shocks affect the agrifood system in real time, actively monitoring and intervening to enhance system resilience. This document presents challenges, details FAO's responses and shares recommendations for strengthening agrifood systems and supporting food security in the region. Members are encouraged to discuss and consider the information and policy recommendations provided here.

Suggested action by the Regional Conference

The Regional Conference is invited to:

- seek collective action to increase the resilience of agrifood trade and markets; a.
- provide humanitarian and social protection responses to vulnerable groups; h
- promote the affordability of healthy diets, with sustainability considerations, through a c. rapid and efficient agrifood systems transformation;
- d. refrain from imposing ad hoc export restrictions and diversify sources of imported foods;
- e. invest in trade infrastructure and logistics to improve inspection efficiency and promote transparency in trade operations;
- f. increase responsible investments in agriculture to enhance agrifood system productivity and resilience:

Documents can be consulted at <u>www.fao.org</u>

- g. invest in and promote the use of digital technologies in the agriculture sector to mitigate the adverse effects of war on the agriculture sector and food security;
- h. establish and strengthen veterinary services and livestock disease surveillance systems to effectively address animal health threats in the region;
- i. strengthen food security and nutrition information, assessment and analysis systems for timely responses and informed policy decisions, especially during market uncertainties;
- j. develop new or improve existing national food security strategies to address short-term shocks and ensure a resilient recovery; and
- k. promote regional cooperation in science and innovation to share knowledge and expertise, and develop innovative solutions to common challenges.

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I. Introduction

1. In Europe and Central Asia, several shocks – including the COVID-19 pandemic, the war in Ukraine, and adverse weather events and earthquakes – have significantly affected the food, energy and finance sectors. Sharp increases in food and energy prices, leading to inflation and financial strain at country level, were seen in 2021 and the first half of 2022. Factors such as depreciating currencies, food supply disruptions and higher food import costs compounded these challenges.

2. High energy prices impacted households, agrifood systems and food industries globally. The war in Ukraine led to large displacements of people, further straining the region.¹ Consumer prices for food, housing and energy rose sharply, resulting in historic annual inflation highs in 2022 (Figure 1). However, by 2023, inflation dropped significantly, with double-digit inflation prevailing in just five countries (Kazakhstan, Kyrgyzstan, Turkmenistan, Türkiye and Ukraine).

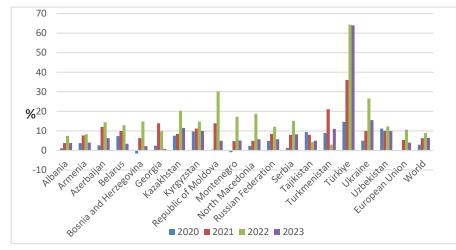


Figure 1. Inflation rate, end of period consumer prices (annual percent change, 2020–2023)

Source: International Monetary Fund. 2023. Inflation rate, end of period consumer prices. In: IMF Datamapper. <u>https://www.imf.org/external/datamapper/PCPIEPCH@WEO/OEMDC/ADVEC/WEOWORLD</u>

3. Inequalities deepened due to the disproportionate effects of the COVID-19 pandemic and the war in Ukraine on older women and single mothers. Vulnerable groups – including the Roma population, unaccompanied children, persons with disabilities and women in rural communities – faced increased risks, such as trafficking, labour exploitation and gender-based violence.

4. In 2022 and 2023, the region faced economic challenges, but hunger (below 2.5 percent) and moderate/severe food insecurity (11.9 percent) were relatively low, as were child stunting (4.9 percent) and wasting (1.4 percent) rates. However, overweight in children under 5 (7.1 percent) and obesity in adults (25.3 percent) exceeded global averages. Based on the latest estimates, 25.7 million people in the Europe and Central Asia (ECA) region were unable to afford a healthy diet in 2021.²

5. The multiple crises caused a widespread slowdown in global economic growth, which dropped from 6 percent in 2021 to 3.5 percent in 2022 and to 3 percent in 2023.³ In the ECA region, growth sharply decelerated from 7.1 percent in 2021 to 1.2 percent in 2022, reflecting contractions in

¹ UNHCR. 2023. Ukraine Refugee Situation. In: *Operational Data Portal*.

https://data.unhcr.org/en/situations/ukraine

² **FAO**. 2023. *Europe and Central Asia - Regional Overview of Food Security and Nutrition 2023*. FAO. https://doi.org/10.4060/cc8608en

³ International Monetary Fund. 2023. World Economic Outlook, October 2023: Navigating Global Divergences. In: *World Economic Outlook*. https://www.imf.org/en/Publications/WEO/Issues/2023/10/10/world-economic-outlook-october-2023

the Russian Federation, severe recession in Ukraine and a significant slowdown in Türkiye.⁴ The growth for the emerging market and developing economies across Europe and Central Asia was projected at 2.4 percent in 2023.⁵

6. In summary, the ECA region faced a complex interplay of shocks that affected various sectors and vulnerable groups and exacerbated existing inequalities. The economic slowdown underscored the need for comprehensive strategies to address the multifaceted issues in the region.

II. Impact of the multiple crises in Europe and Central Asia

A. Food market prices and trade

7. The ECA region faced significant challenges in food prices and agricultural inputs, due to the COVID-19 pandemic in 2020 and the war in Ukraine in 2022. Such essential items as grains, vegetable oils, feed, energy and fertilizers experienced sharp cost increases, causing inflation and credit issues for vulnerable groups. This has limited their purchasing power and further constrained their ability to access nutritious foods. Ukraine, a key global player in the trade of grains and oilseeds, encountered disruptions in the northern Black Sea region, contributing to food price spikes in 2022.

8. To address these issues, the Initiative on the Safe Transportation of Grain and Foodstuffs from Ukrainian Ports, the so-called Black Sea Grain Initiative, was launched in July 2022, involving the Russian Federation, Türkiye, Ukraine and the United Nations. It aimed to secure safe transport for grains and foodstuffs, easing export restrictions and facilitating fertilizer exports. However, the initiative expired in July 2023⁶. In response to the war in Ukraine, the EU–Ukraine Solidarity Lanes were established, providing crucial corridors for agricultural exports and suspending import duties for specific Ukrainian exports to the European Union⁷. These initiatives played a vital role in stabilizing global food prices.

9. In 2023, the overall value of the FAO Food Price Index⁸ (Figure 2) was lower than the average in 2022 and 2021, though still higher than in 2020.⁹

⁴ **Izvorski, I., Lokshin, M., Norfleet, J.R.R., Singer, D. & Torre, I.** 2023. Europe and Central Asia Economic Update, Spring 2023: Weak Growth, High Inflation, and a Cost-of-Living Crisis. The World Bank. https://doi.org/10.1596/978-1-4648-1982-7

⁵ World Bank. 2023. Europe and Central Asia Economic Update, Fall 2023: Sluggish Growth, Rising Risks. The World Bank. https://www.worldbank.org/en/region/eca/publication/europe-and-central-asia-economic-update

⁶ **United Nations.** 2023. Beacon on the Black Sea. In: *Black Sea Grain Initiative Joint Coordination Centre*. https://www.un.org/en/black-sea-grain-initiative

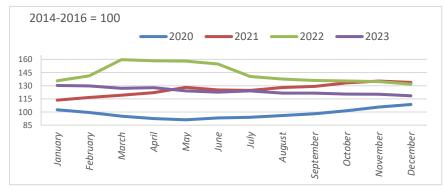
⁷ European Commission. 2023. EU-Ukraine Solidarity Lanes. In: *EU Solidarity with Ukraine*. https://eu-solidarity-ukraine.ec.europa.eu/eu-assistance-ukraine/eu-ukraine-solidarity-lanes_en

⁸ The FAO Food Price Index is a measure of the monthly change in the international prices of a basket of food commodities; it consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014–2016.

⁹ **FAO**. 2023. FAO Food Price Index. In: *World Food Situation*.

https://www.fao.org/worldfoodsituation/foodpricesindex/en/

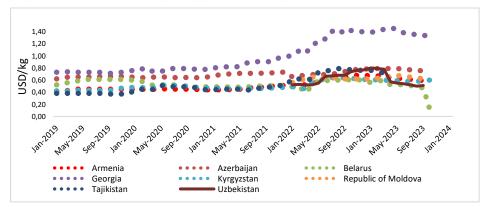
Figure 2. FAO food price index, 2020–2023



Source: FAO. 2024. FAO Food Price Index. In: World Food Situation. <u>https://www.fao.org/worldfoodsituation/foodpricesindex/en/</u>

10. In 2022, numerous countries in the region experienced substantial price increases, notably for wheat flour which is crucial to local diets. Food price inflation, hitting double digits during various months, affected several nations, including Azerbaijan, Georgia, Kyrgyzstan, Republic of Moldova and Ukraine, with some experiencing double-digit inflation since the post-pandemic period.¹⁰ Most other countries saw food inflation in the double digits from March 2022 onwards. However, import-dependent countries near the Russian Federation and Ukraine, relying heavily on imports for food and agricultural inputs, observed a decline in domestic food prices beginning in the second half of 2022 (Figure 3), aligning with the global trend.

Figure 3. Trends in wheat flour prices in Europe and Central Asia, 2019–2023



Source: FAO. 2023. Food Price Monitoring and Analysis (FPMA) Tool. In: Food and Agriculture Organization of the United Nations. <u>https://fpma.fao.org/giews/fpmat4/#/dashboard/tool/domestic</u>

Note: The graph portrays the national average prices of wheat flour in USD.

11. In 2022, to safeguard domestic food markets, several governments across the globe resorted to ad hoc trade restrictions, disrupting trade routes. Across 32 countries, 77 export restrictions were imposed, including licensing requirements, taxes, bans or a mix of measures. These restrictions primarily targeted commodities severely impacted by the war in Ukraine, including wheat, feed grains and vegetable oils.¹¹

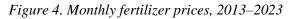
B. Impacts on crop production and livestock

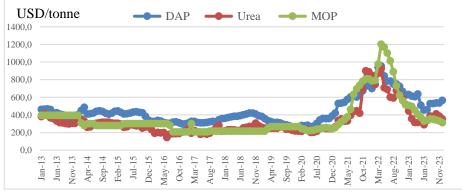
12. Since 2021, fertilizer and fuel prices, vital for crop farming, have consistently risen due to such factors as escalating wholesale gas prices, supply chain disruptions and increased demand.

¹⁰ **Trading Economics**. 2023. Food Inflation. In: *Trading Economics*. https://tradingeconomics.com/country-list/food-inflation

¹¹ **Glauber, J. & Laborde, D.** 2022. *How sanctions on Russia and Belarus are impacting exports of agricultural products and fertilizer*. In: International Food Policy Research Institute. https://www.ifpri.org/blog/how-sanctions-russia-and-belarus-are-impacting-exports-agricultural-products-and-fertilizer

Record high- fertilizer prices in 2021 and the first half of 2022 raised production costs, impacting farmers' profitability.¹² Although fertilizer costs dropped by 33 percent in 2023 from their 2022 highs, some remained significantly above pre-pandemic levels (Figure 4). The decline in fertilizer prices in 2023 aligned with the trend in energy prices, expected to further decrease by 15 percent in 2024 due to increased supply.¹³ Presently, China, Russian Federation, Ukraine and Viet Nam have various export restrictions on fertilizers.¹⁴





Source: World Bank. 2023. Monthly prices. In: Commodity Markets. https://www.worldbank.org/en/research/commodity-markets

Note: Urea, Diammonium phosphate (DAP) and Muriate of Potash (MOP) are the key products for, respectively, nitrogen, phosphorus and potassium fertilizer, considered as primary macronutrients in the agriculture industry. Monthly series are in nominal USD.

13. In 2022, the cereal harvest in the Republic of Moldova was severely impacted by drought, compounding challenges for farmers. The war in Ukraine caused USD 8.7 billion damage and USD 31.5 billion losses in agriculture in one year in Ukraine,¹⁵ with further damage and losses having occurred since then. The June 2023 Kakhovka Dam explosion in Kherson, Ukraine, heavily damaged the irrigation infrastructure in the region. Ongoing war challenges in Ukraine are expected to further reduce wheat cultivation areas.¹⁶ Some land was switched from cereals to more profitable oilseeds.¹⁷ Earthquakes in early 2023 in Türkiye led to significant casualties, infrastructure damage and billions of dollars in costs.^{18,19}

and Needs Assessment February 2022–February 2023. https://ukraine.un.org/sites/default/files/2023-03/P1801740d1177f03c0ab180057556615497.pdf

https://www.fao.org/3/cc8566en/cc8566en.pdf

¹² In 2021, the Russian Federation, a key exporter of fertilizers (nitrogen fertilizers, potassium and phosphorous), introduced restrictive measures on fertilizer exports (through export taxes, licensing requirements and actual bans). Sanctions on Belarus, one of the major global suppliers of potash, also contributed to increases in fertilizer prices. Increased demand in 2021 (due to higher crop prices), increases in bulk and container freight rates, caused by the COVID-19 pandemic, and weather-induced disruptions to renewable energy are among the other factors contributing to increased fertilizer prices (FAO, 2022b).

¹³ World Bank. 2023. Commodity Markets Outlook, October 2023: Under the Shadow of Geopolitical Risks. Washington, DC: World Bank. https://doi.org/10.1596/40363

 ¹⁴ International Food Policy Research Institute. 2024. Food & Fertilizer Export Restrictions Tracker. In: *Tableau Public*. https://public.tableau.com/app/profile/ifpri.food.security.portal/viz/shared/2CPYTB4G8
¹⁵ World Bank, Government of Ukraine, European Union, & United Nations. 2023. Ukraine Rapid Damage

¹⁶ FAO. 2023. Crop prospects and food situation. Triannual Global Report 3.

¹⁷ **FAO**. 2023. FAO GIEWS Country Brief on Ukraine. In: *GIEWS - Global Information and Early Warning System*. https://www.fao.org/giews/countrybrief/country.jsp?code=UKR&lang=en

¹⁸ The cost of damages was estimated at USD 1.3 billion, while losses were estimated at USD 5.1 billion (Government of Türkiye, 2023).

¹⁹ **Government of Türkiye**. 2023. *Türkiye earthquakes recovery and reconstruction assessment*.

https://www.sbb.gov.tr/wp-content/uploads/2023/03/Turkiye-Recovery-and-Reconstruction-Assessment.pdf

14. The region faces a significant risk of transboundary animal diseases, exacerbated by unregulated animal movement across borders, rising feed costs, climate change, overgrazing and inefficient livestock practices, and compounded by inadequate infrastructure and knowledge access.

C. Impacts on vulnerable households

15. Concurrent crises have strained household budgets, impacting the poorest who allocate the largest share of their incomes to essentials. In 2022, a surge in inflation, coupled with a credit crunch, hindered vulnerable people in the ECA region from accessing nutritious foods for healthy diets. In 2021, about 3.1 percent could not afford a healthy diet, significantly lower than the global estimate of 42.2 percent.²⁰ Central Asia had the highest unaffordability (24.4 percent) in 2021, followed by the Western Balkans (10.9 percent).

16. Despite concerns, remittance flows have increased from the Russian Federation to neighbouring countries due to elevated demand for migrant workers in 2022. Countries in Central Asia (Kyrgyzstan, Tajikistan and Uzbekistan), in particular, have benefitted from substantial remittances.²¹ On the other hand, an increased flow of freelancers and businesspeople from the Russian Federation to neighbouring countries has raised real estate rents and contributed to a higher cost of living in Armenia, Georgia, Kazakhstan and Uzbekistan.

D. Government responses

17. Governments in the region have addressed the heightened cost-of-living crisis through diverse measures, mainly focusing on expanding social assistance; providing subsidies for energy, electricity and natural gas; and regulating prices. Subsidies have targeted both households and businesses. During a virtual consultation, held in January 2023 and organized by the FAO Regional Office for Europe and Central Asia, many countries acknowledged food security challenges due to the increased cost of living. To safeguard food availability, most nations supported primary production through farm and market support measures. In addition to these steps, countries have implemented tax reductions, trade restrictions, export limitations, pension revisions, valorization schemes, cash compensations, direct support to farmers and expanded trade partnerships. Despite these efforts, countries have sought FAO assistance in collecting data and information, identified as a major bottleneck for timely and efficient evidence-based responses.

III. FAO's response to the multiple crises in Europe and Central Asia

18. The FAO work programme for Europe and Central Asia in 2022–2023 is aligned with broader FAO frameworks, focusing on four Regional Priorities: effective policy formulation, digital innovation and rural transformation; food system transformation, market exploration and trade alignment; sustainable natural resource management, agriculture resilience and climate change adaptation; and addressing food insecurity and reducing malnutrition.

19. The enduring socioeconomic effects of the COVID-19 pandemic and the war in Ukraine prompted adjustments to the programme that emphasized emergency responses, recovery assistance and resilience-building. Exceptional resource mobilization garnered USD 149 million in voluntary contributions in 2022, with USD 230 million through July 2023.

20. FAO is actively monitoring the evolving food security situation, collaborating with partners and initiating programmes to address crises, gender equality and urban food systems. Emergency projects in Armenia, Bosnia and Herzegovina and the Republic of Moldova assisted vulnerable groups,

²⁰ **FAO**. 2023. *Europe and Central Asia - Regional Overview of Food Security and Nutrition 2023*. FAO. https://doi.org/10.4060/cc8608en

²¹ Usov, A. 2022. Central Asia shows strong resilience to geopolitical turmoil. In: *European Bank for Reconstruction and Development*. [Cited 1 May 2023]. https://www.ebrd.com/news/2022/central-asia-shows-great-resilience-to-geopolitical-turmoil-.html

while post-earthquake interventions in Türkiye include a three-year plan valued at USD 112 million.²² FAO's forward-looking efforts include urban food system assessments in selected cities in 2024, emphasizing rural-urban linkages, local production, healthy food environments, reduced food loss and waste, and innovation.

21. In collaboration with the European Bank for Reconstruction and Development, FAO has sustained efforts to mitigate investment risks in the livestock sector. This includes addressing the spread of African swine fever through biosecurity audits and recommendations for pork farms in Ukraine, Republic of Moldova, Romania and Serbia in 2022 and 2023.

A. FAO's response in Ukraine

22. In response to the war in Ukraine, FAO promptly established a project office and initiated a rapid response programme and emergency operations. Given agriculture's pivotal role – particularly for the smallholder farmers who account for 41 percent of gross agricultural production – these interventions were crucial. From March to December 2022, FAO's rapid responses, having secured USD 118 million, aimed at meeting agricultural deadlines and ensuring food security.²³ In 2023, FAO's response programme, targeting USD 205 million in funding, focused on urgent rural community needs, demining agricultural land, restoring agricultural production and value chains, and supporting productive food systems.²⁴ In 2024, FAO's emergency support aims to secure spring and winter harvests, maintain healthy livestock, enhance food and income sources, and meet basic needs while restoring production. For 2024–2027, nine programmes are planned, focusing on improving competitiveness and sustainable agricultural production, and aligning agrifood systems with European Union standards.

23. FAO engages in investment programmes for the reconstruction and recovery of Ukraine in the agriculture sector, supporting the efforts of financial institutions, notably the World Bank and the European Bank for Reconstruction and Development. This involves analytical work, assistance in project preparation, technical support, and aiding the emergency operations of the Ukrainian agribusiness industry association. FAO played a key role in preparing project operational manuals for the World Bank's Ukraine Agriculture Recovery Inclusive Support Emergency (ARISE) Project, with a World Bank commitment of USD 550 million and a total project cost, including World Bank funding, reaching USD 2.2 billion. The project received approval from the World Bank's Board of Directors on 30 October 2023.

24. In partnership with industry and research institutions, FAO's work has resulted in halving antimicrobial use at a medium-sized poultry farm in Ukraine in 2023. FAO has supported the capacity building of Ukrainian veterinarians to enhance their preparedness and response to avian influenza. Additionally, FAO has provided support for emergency responses related to animal feed prompted by the escalating costs.

B. FAO assessments and studies

25. FAO has conducted extensive assessments and studies, and produced information to promote an understanding of the impacts of the multiple crises on agriculture, food systems, food security and nutrition in Europe and Central Asia.

26. FAO produced a real-time evaluation of its COVID-19 response and recovery programme assessing the FAO's contributions at country level. This was based on country case studies and self-assessments of contributions prepared by Regional Offices.²⁵

²² **FAO**. 2023. FAO initiates Türkiye earthquake response and recovery plan in partnership with MoAF. In: *FAO in Türkiye*. Cited 29 August 2023. https://www.fao.org/turkiye/news/detail-news/en/c/1642312/

 ²³ FAO. 2022. Ukraine: Rapid Response Plan, March–December 2022. FAO. https://doi.org/10.4060/cb9457en
²⁴ FAO. 2023. Ukraine: Response programme, January–December 2023. FAO.

https://doi.org/10.4060/cc4655en

²⁵ **FAO**. 2022. *Real-time evaluation of FAO's COVID-19 Response and Recovery Programme – Final Report.* Hundred and Thirty-fourth Session of the Programme Committee. FAO.

27. In response to the war in Ukraine and natural disasters, several assessments of impacts were done at country level:

- a. FAO Armenia analysed trade-related components and proposed recommendations for potential emergency interventions.
- b. FAO Georgia assessed the economic and social impacts, leading to recommendations for addressing potential food security risks.
- c. FAO Albania monitored the impact on the food and agricultural sector.
- d. The Republic of Moldova underwent crop and food supply assessments in response to the 2022 drought,²⁶ along with a study on the impacts of cereal imports on local agriculture competitiveness.
- e. In Ukraine, nationwide surveys revealed reduced agricultural and food production due to the war.²⁷ FAO also published the findings of a nationwide assessment (January–February 2023) in Ukraine of the impact of the war on agricultural enterprises.²⁸ FAO's ongoing assessments in Ukraine focus on the impacts of the war on agricultural production and livelihoods, and sectoral assessments of damages in aquaculture, fishery and forestry.
- f. FAO contributed to a regional rapid gender analysis on the war in Ukraine, developing a policy brief on refugees' access to livelihoods. Several gender-related knowledge products were also released in the context of multiple crises.
- *g.* In January 2024, the study "Consequences of the Current Food, Energy and Finance Crisis on Food Security in Vulnerable Countries of Europe and Central Asia Region", commissioned by FAO to Corvinus University, was finalized.
- h. As part of the FAO-World Bank Cooperative Programme, technical reports were prepared on the implications of the war on agrifood trade and food security in Central Asia and the South Caucasus.²⁹ A dedicated webpage presents updates on FAO's responses to global food security challenges, including the multiple crises.
- i. FAO supported Türkiye with the development of a supply chain analysis of the Turkish wheat sector³⁰ and with preliminary assessments and emergency response projects finalized after the tragic earthquakes in February 2023.

IV. Policy recommendations

28. Developing policy recommendations to address crises resulting from diverse shocks – social conflicts, inflation, natural disasters, climate change and the COVID-19 pandemic – is complex due to the interconnected nature of the crises. Identifying causality, predicting intervention impacts and considering unintended consequences pose challenges. Conflicting stakeholder interests further complicate the formulation of shared solutions. Evolving crises demand quick adaptations with limited information, adding complexity for decision-makers. Timely and accurate data and analytical tools

 ²⁶ FAO. 2022. Ukraine: Rapid Response Plan, March–December 2022. FAO. https://doi.org/10.4060/cb9457en
²⁷ FAO. 2023. Ukraine: Impact of the war on agricultural enterprises. FAO. https://doi.org/10.4060/cc5755en

 ²⁸ FAO. 2023. Ukraine: Impact of the war on agricultural enterprises. FAO. https://doi.org/10.4060/cc5755en
²⁹ World Bank. 2022. Agrifood trade and food security in Central Asia: Possible implications of the war in Ukraine.

https://documents1.worldbank.org/curated/en/099614301182328659/pdf/IDU099aa8f43031360476b0ba0e0c5517feb727f.pdf

³⁰ The project "Supply Chain Analysis for the Turkish Wheat Sector: A Resistant Food" (1 October 2022– 31 March 2023) was carried out under the coordination of the United Nations Resident Coordinator in Türkiye, in partnership with FAO, the International Fund for Agricultural Development (IFAD) and the World Food Programme (WFP) and in cooperation with the Ministry of Agriculture and Forestry. The project examined the effect of both internal market instabilities and external challenges (e.g. COVID–19 and the war in Ukraine) on the Turkish wheat sector.

revealing transmission channels are crucial for understanding crisis dynamics and formulating responses. FAO recommends several considerations for its Members.

- 29. It is recommended that Members:
 - 1) Seek collective action to increase the resilience of agrifood trade and markets: The consecutive crises have led countries to hesitate to rely on world food markets for their national food security, reigniting debates on the advantages and disadvantages of food self-sufficiency. It is widely agreed that self-sufficiency is not an optimal long-term strategy for welfare, and nations should collaboratively explore solutions to address shocks and crises. Policymakers must collectively ensure that, during crises, no one is left vulnerable, whether at home or abroad. This involves not only trade measures, but also domestic strategies such as diversifying food import sources, establishing strategic reserves and implementing efficient storage and distribution systems to minimize food loss and waste. Effective collective action is essential to ensure that domestic policies implemented in response to crises have no adverse welfare effects on countries within the sought trade alliance.
 - 2) Provide humanitarian and social protection responses to vulnerable groups: This is crucial especially for internally displaced individuals and refugees from ongoing wars, conflicts and natural disasters. Extending social protection programmes is essential for disadvantaged populations in urban and rural areas, encompassing those living close to the poverty line and facing food insecurity and nutrition vulnerability,³¹ smallholder farmers, contributing family workers, and at-risk women and youth. Implementing more adaptable social protection measures and fostering collaboration among authorities, responsible for social protection, food security, nutrition, rural development and agriculture, are vital for transitioning to sustainable and resilient practices. This approach can also provide opportunities for refugees to contribute as agricultural labourers in host countries, bolstering production and productivity.
 - **3) Promote the affordability of healthy diets, with sustainability considerations, through a rapid and efficient agrifood systems transformation:** A comprehensive set of policy measures must be put in place, and existing public support to food and agriculture repurposed, to enhance the affordability of a healthy diet. Provide subsidies to consumers to support healthy diets and take adequate measures to achieve environmental benefits and income equity. Multisectoral collaboration and coordination of policies in food systems will be necessary to make a healthy diet less costly and more affordable and mitigate any unintended consequences from repurposing support.
 - 4) Refrain from imposing ad hoc export restrictions and diversify sources of imported foods: Ad hoc export restrictions disrupt markets and harm economies. They elevate global commodity prices, worsening food insecurity (especially for vulnerable populations in food-importing nations). Diversifying import sources mitigates risks from reliance on a single supplier, improving food supply stability and fostering food security. Maintaining sufficient food stocks and diverse domestic production contributes to stability but must respect international commitments. Diverse sourcing of food through international trade will also help enhance the resilience of agrifood systems, because it buffers the food supply against shocks and stresses.
 - 5) Invest in trade infrastructure and logistics: The Black Sea ports blockade underscores the urgency of simplifying, modernizing and harmonizing export and import processes in the region. World Trade Organization Members should expedite the adoption of the Trade Facilitation Agreement, facilitating the movement and clearance of goods. Harnessing digital technologies including electronic documentation, online verification and real-time data sharing can enhance inspection efficiency. Achieving this requires investments in

³¹ The group of people living close to the poverty line and facing food insecurity and nutrition vulnerability often includes young children, schoolchildren and adolescents, pregnant and lactating women, older adults and individuals living with chronic diseases.

information technology infrastructure and substantial efforts in process digitalization, reducing administrative burdens, minimizing physical inspections and promoting transparency in trade operations.

- 6) Increase responsible investments in agriculture: Responsible investment is vital for enhancing agrifood system productivity and resilience especially in the Europe and Central Asia region, where most of the people facing acute food insecurity reside in rural areas. To effectively boost productivity and resilience, inclusive measures addressing vulnerable populations, including women and diverse socioeconomic groups, are essential. Targeted economic, agricultural and social protection policies should engage rural women and youth in diverse income-generating opportunities, reducing inequalities for sustainable agriculture, food security and poverty reduction. In regions with high concentrations of refugees, providing skill and language training facilitates their integration into national agrifood systems. Recognizing that many refugees are women with small children, offering day care services is crucial to facilitating their employment opportunities.
- 7) Invest in and promote the use of digital technologies in the agriculture sector: Digital technologies can play a critical role in mitigating the adverse effects of war on the agriculture sector and food security. By providing real-time and location-specific data, precision agriculture technologies can empower farmers to optimize their farming practices and reduce input costs. Moreover, digital platforms can help farmers access information on the prices of essential agricultural inputs and identify new market opportunities and distribution channels. These technologies also can aid in the delivery of social protection programmes to vulnerable agricultural stakeholders. The leveraging of decision support services can help the monitoring of farmland use efficiency and natural resource conditions, including climate variables, and play a pivotal role in the transformation of agrifood systems towards greater sustainability and resilience. Additionally, governments can leverage digital tools to monitor and analyse the impacts of war on agriculture and make informed decisions to enhance food security and agricultural production.
- 8) Establish and strengthen veterinary services and livestock disease surveillance systems: Veterinary services currently lack the necessary capacity to effectively address both new and existing animal health threats in the region. The potential rise in antimicrobial resistance poses a concern, but the true extent is unknown due to inadequate surveillance and management. Establishing surveillance systems is essential for early detection, rapid response and effective disease management. This entails investment in training, infrastructure and resources to enhance the capacities of veterinary professionals and improve disease monitoring and reporting. Additionally, promoting sustainable agricultural practices, including improved feed management and rangeland conservation, can mitigate challenges faced by livestock producers, and ensure the long-term viability of the sector. Addressing (prevention, detection and control) transboundary animal diseases, which can easily spread to new areas and regions irrespective of national borders, is highly encouraged.
- **9)** Strengthen food security and nutrition information, assessment and analysis systems: Ensure access to current information for timely responses and informed policy decisions, especially during market uncertainties; support market information systems, vital for coordinating stakeholders and safeguarding food security; strengthen the evidence base, including gender statistics, to address growing inequalities and discrimination; and expand Food Insecurity Experience Scale data collection, essential for reliable information on household and individual food insecurity in more countries. The frequent monitoring of key indicators, intersectoral coordination and the sharing of information enhance policy decision efficiency. Quantified data on individual food consumption bridge knowledge gaps for informed nutrition and food safety policies. Food-based dietary guidelines align policies across sectors with national health and sustainability objectives, guiding practices towards greater sustainability.

- **10) Develop new or improve existing national food security strategies:** Considering the above recommendations, countries should formulate national food security strategies that not only address the short-term consequences of shocks, but also ensure a resilient recovery, meeting both the practical and strategic needs of the most-affected people. Recent diverse shocks, spanning health, economic, social and environmental issues such as the COVID-19 pandemic, food price volatility, the war in Ukraine, drought, earthquakes and trade restrictive measures necessitate holistic approaches for long-term agrifood system resilience and affordable healthy diets. Collaboration and dialogue among stakeholders, including farmers, policymakers, civil society organizations and private-sector agro-industry associations, are crucial. Optimal solutions should prioritize leaving no one behind, with a focus on vulnerable groups.
- 11) Promote regional cooperation in science and innovation: Analysts find it difficult to assess the overall impacts of the crisis in the region because of the granular way research is being carried out by a broad range of research institutions. This calls for the promotion of regional cooperation in science and innovation to enhance the resilience of agrifood systems. Collaboration among research institutions, universities and the private sector should be fostered to share knowledge and expertise and develop innovative solutions to common challenges.