Specific food system challenges and priorities in the Europe and Central Asia region to be considered when transforming food systems and improving sustainability

*WORKING DRAFT*

PREPARED BY THE ISSUE-BASED COALITION ON SUSTAINABLE FOOD SYSTEMS
*This is a “living” document. Reactions and feedback from readers are welcomed at UN-IBC-Sustainable-Food-Systems@fao.org and will be used to finalize the document in late 2021.

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**BACKGROUND**

Food systems must become more sustainable to deliver sufficient, safe, diversified and affordable food that meets the nutritional needs of all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised. These complex and diverse systems play a key role in achieving the Sustainable Development Goals (SDGs), in particular SDG2 (“end hunger, achieve food security and improved nutrition and promote sustainable agriculture”), SDG3 (“ensure healthy lives and promote well-being for all at all ages”) and SDG12 (“ensure sustainable consumption and production patterns”). Research, technology, digitalization and innovation are seen as central to the success of the 2030 Agenda for Sustainable Development. Additionally, all data improvements and access to scientific-based information contribute directly to monitoring the progress of the SDGs – for example, the Food Loss Index (SDG 12.3.1a) and the Food Waste Index (SDG 12.3.1b).

The COVID-19 pandemic has exposed certain fragilities but also highlighted opportunities and refocused attention on food systems. It has also reaffirmed the urgent need to develop robust and resilient systems capable of ensuring safe and healthy diets for all during crises. Innovations and digitalization can support specific action tracks and new initiatives. The development of an enabling environment for implementing the food systems transformation agenda should, preferably, consist of a national multisectoral coordinating mechanism with a broad mandate to use a food systems lens, with representation from relevant government and non-state actors, including the private sector. The United Nations Secretary-General’s Food Systems Summit (UNFSS) in 2021 provides a process through which the food systems transformative approach can be better articulated at national level – a global approach with localized implementation plans – so countries can improve the alignment of food system actors’ initiatives and views in support of more sustainable food systems and develop pathway plans to accelerate change.

**PURPOSE OF THIS DOCUMENT**

This document highlights some of the main challenges facing countries in Europe and Central Asia and priority areas to be addressed in the process of developing more resilient and sustainable food systems. Special focus has been placed on the Caucasus, Central Asia, Western Balkans and CIS (European Commonwealth of Independent States) subregions.

Ultimately, the document’s scope is to support all stakeholders – including policymakers, civil society, non-governmental organizations (NGOs), the private sector, academia, and such key groups as youth, women, farmers and indigenous communities – despite the differences in priorities among them, to generate sustainable new solutions and/or refine existing ones that have a strong track record in improving food systems but that have not been implemented widely for various political, institutional or capacity-related reasons. Proposed actions
(existing or new) should have a sound pathway to impact at scale and take both bio-physical (such as climate change and natural resource degradation) and socio-economic factors into account.

Region-specific challenges and priorities are presented according to the five UNFSS Action Tracks (ATs). It is important to note that, because ATs are closely interlinked, overlaps among them are highly possible or even inevitable.

**FOOD SYSTEM PRIORITY AREAS AND CHALLENGES IN THE REGION**

**Action Track 1** – objective: *All people, at all times, have access to sufficient quantities of affordable and safe food products that together comprise a healthy diet that is nutritionally balanced and provides adequate daily nutritional intake.*

Improving food security in population groups most affected by various forms of malnutrition, including undernutrition, overweight/obesity and micronutrient deficiencies:

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. It is a complex concept in which four main dimensions can be identified: availability, access, utilization and stability. According to the 2020 Regional Overview of Food Security and Nutrition, roughly 19 million people in the ECA-14 could not afford a healthy diet in 2017, with the ratio highest in Central Asia and the Caucasus (25.9 percent). Evidence from Armenia, Kyrgyzstan and Tajikistan shows that food cost and affordability vary within countries, by region, by population segment and by seasonality. In 2019, moderate or severe food insecurity, measured using the Food Insecurity Experience Scale, increased to 13.2 percent in Central Asia, 11.8 percent in CIS Europe and 19.7 percent in the Caucasus.

The situation must continue to be monitored, because despite the progress made in reducing the percentage of hungry people, as measured by the prevalence of undernourishment (PoU), the rate of reduction of the PoU since 2014 is slowing and even reversing. PoU values are above 5 percent in Georgia and Kyrgyzstan and show a growing trend in Georgia, Serbia and Ukraine.

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3 The ECA-14 includes 14 selected countries of the ECA region that are not European Union Member States and for which the required data were available. These countries are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Kazakhstan, Kyrgyzstan, Montenegro, North Macedonia, Republic of Moldova, Russian Federation, Serbia, Tajikistan and Turkey.
In 2012 – the baseline year regarding the SDG targets – the prevalence of adult obesity (body mass index of 30 kg/m² or more) in Europe and Central Asia as a whole was estimated to be 21.5 percent – a figure that amounts to roughly 152.6 million people. The rates were similar in the European Union (21.3 percent, on average) and the ECA-18⁴ (22.1 percent). Among the ECA-18 countries, the prevalence in ECA-15⁵ was much lower, at 17.2 percent, than in the three other countries (Turkey, Russian Federation and Ukraine). Turkey had the highest rate in the region, at 29.5 percent. Four countries in Central Asia had relatively low adult obesity rates: Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

The prevalence of overweight among children younger than 5 in the ECA-15 countries was more than double the global level in 2012. Albania, Armenia, Bosnia and Herzegovina and Georgia had the most severe situations, with a prevalence at three to four times the global level. Overall, it is estimated that the prevalence of overweight among children aged 6 to 9 has been much higher than among children younger than 5. The rates of anaemia among women aged 15 to 49 vary significantly among countries in the region, highest (above 30 percent) in Central Asia and the Caucasus.

To ensure access to sufficient quantities of affordable and safe food products in population groups that are affected by different forms of malnutrition, it is key to monitor the changing situation and develop partnerships with NGOs to support these groups in both rural and urban environments.

**Implementing policies or initiatives to promote healthy diets and better nutrition for all, especially targeting children and adolescents:**

Many vulnerable groups, including women, children and adolescents, do not receive the diets they need to survive, grow and develop to their full potential. While the nutritional status of young children has improved significantly during the past decades in the region, middle childhood and adolescence nutrition is too often overlooked. More and more school-age children are at risk of overweight and obesity due to unhealthy dietary practices and increasingly sedentary lifestyles. Major equity issues are observed for children from lower quantiles of wealth, especially when it comes to programmes in which parents need to pay for school meals.

To address the nutritional challenges of children, a range of tools can be used, including integrated school meals, nutrition education and food literacy, food reformulation and large-scale food fortification (to improve the nutritional value of food), and food labelling. Local procurement of food for school feeding programmes can generate employment locally through short value chains and may be combined with food education initiatives on food sources and local food systems. Most programmes were designed originally to prevent

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⁴ The ECA-18 includes all countries in the ECA-15 (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, North Macedonia, Republic of Moldova, Serbia, Tajikistan, Turkmenistan and Uzbekistan) plus Russian Federation, Turkey and Ukraine. These three countries together account for about 70 percent of the total population in the ECA-18.

⁵ The ECA-15 does not include Russian Federation, Turkey and Ukraine. These three countries together account for about 70 percent of the total population in the ECA-18.
undernutrition, while today’s problem is linked to growing rates of childhood obesity in the region. Another important tool is the regulation of advertising and marketing of certain foods not conducive to healthy diets. In both rural and urban settings, groups or food committees are emerging as a means to enable community action for shaping local food systems and actions that promote healthy diets for all.

**Promoting breastfeeding, reducing food marketing aimed at children and effectively regulating the advertising of unhealthy food products:**

The prevalence of exclusive breastfeeding during the first 6 months of life in many countries in the region is estimated to be well below the world average, especially in Azerbaijan, Belarus, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, Turkmenistan, Ukraine and Uzbekistan. Applying a child rights-based approach when restricting and controlling the marketing of food products aimed at children supports the effective development of policy, which should include a broad definition of marketing, prioritizing the best interest of the child, applying a comprehensive approach using the Convention on the Rights of the Child, World Health Organization (WHO) recommendations, and an implementation framework.

**Putting food safety policies and food control systems in place to prevent food-borne diseases and manage food safety risks effectively:**

Food safety is a fundamental element of good health and is essential for sustainable development. It is estimated that in the WHO European region every year, more than 23 million people fall ill and almost 5,000 people die from eating contaminated food. Food-borne illness is a significant public health issue in the region. Unsafe food also affects trade and market access and socio-economic development. Investment in strengthening official food safety control systems is necessary. Food safety awareness, knowledge and education also need to be enhanced at various levels, including through university curricula, school education, food safety training for food business operators, and consumer awareness campaigns. Food safety governance requires systems to respond to food safety incidents and emergencies. Addressing all aspects of health in the food system – including animal health, zoonotic diseases and plant pests and diseases, to minimize hazards entering the food chains – also needs to be prioritized. Multiple stakeholders across agriculture, veterinary, public health and the environment, from both public and private sectors, need to work together.

**Improving food-related databases and monitoring dietary patterns:**

There is a lack of updated food composition and food consumption data in the region; this information is key to analysing and evaluating changes in dietary patterns in various population groups. Conventional food classifications and data collection methods (such as

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food balance sheets) often group together foods that have different effects on health and disease. For example, “cereals and cereal products” groups whole grains together with sugared “breakfast cereals” and cookies. Collecting new data, with a focus on foods that are not part of sustainable healthy diets, such as high-sugar soft drinks, processed sweet and savoury packaged snacks, is needed.

**Action Track 1** focuses on finding systemic solutions to accelerate the reduction of hunger and inequality, tackle all forms of malnutrition that continue to be prominent in the region, make nutritious foods more available and affordable, and make food safer.

**Action Track 2** – objective: Creating and building demand for sustainably produced food products, strengthening shorter value chains, promoting the circular use of food resources, and helping to reduce waste and improve nutrition, especially among the most vulnerable.

**Developing initiatives and policies aimed at educating all consumers – especially youth, women and families with children – on issues related to sustainable choices:**

Healthy and sustainable diets should promote all dimensions of individuals’ health and well-being; have low environmental pressure and impact; be accessible, affordable, safe and equitable; and be culturally acceptable. There is a glaring lack of national food-based dietary guidelines (FBDGs) in some countries of the region. Hence, the first step in the formulation of national food and nutrition strategies should be the formulation of national food-based dietary guidelines, and those guidelines should account for negative externalities on climate change-related factors. The guidelines will provide a solid basis for the development of policies and tools (such as digital apps) aimed at educating all consumers on issues related to sustainable food practices, such as choosing local, seasonal and quality-certified foods, reducing food waste, and limiting the use of packaging. Empowering consumers in this way is critical in the region. The implementation of initiatives to increase food literacy and knowledge on the self-production and preservation of food, meal preparation and hygiene also is needed for vulnerable groups, such as low-income, urban and younger populations.

**Raising awareness and developing strategies/policies/practical tools on food loss and waste:**

Data on food losses (from production up to but excluding retail) and food waste (from retail to households) should be improved by the identification of critical loss and waste points through analyses of food supply chains operations, household food waste generation, and statistical surveys. Better availability and quality of food loss and waste data could support investment decisions that can generate significant returns and drive behavioural change for food systems actors, including consumers. Raising awareness through the use of these data should be accompanied by policy mechanisms to avoid loss and waste – for example, the implementation of obligatory agreements between food sellers and NGOs to distribute surplus.

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food among vulnerable population groups, consumer education campaigns on household food waste reduction, initiatives to support value chain operators in more efficient operations, and the employment of circular economy approaches. Research and technology are important to identifying effective ways to reduce food loss and waste along the supply chain, including at the household level.

**Promoting short value chains that respond to consumer demands, providing diverse foods at affordable prices:**

Improving local value chains in the region will entail overcoming a broad range of challenges due to weak logistics along the supply chain, inadequate technology and infrastructure to store surplus product and minimize food loss, insufficient knowledge or ability to comply with food safety and sanitary rules, and limited access to finance and credit. Critical in the region are strengthening connections between consumers and food producers, fostering the development of more robust short value chains where feasible, creating solid alliances between farmers and civil society, and harnessing the potential of food markets (including wet markets) to deliver safe, healthy and sustainable diets. As trade policies evolve and countries address COVID-19 impacts, including the effects of such restrictive measures as border closures and lockdowns, opportunities to drive longer-term transformation of food systems emerge. Innovation and the greening of local value chains should lead to more efficient use of resources in the agrifood sector, the use of climate-smart practices, the prevention of food loss and waste, and circular economy approaches. Under the evolving circumstances, value chain operators and the private sector depend on a supportive policy and enabling environment to produce quality local foods that are sold to consumers at affordable prices.

**Action Track 2** tackles the problem of unhealthy diets that have become a primary source of poor health and environmental degradation. In the ECA region, there is a need to reorient production and trade systems for prominent food items to move consumption within the optimal range of healthy diets. This may require, for example, the reallocation of resources to reduce the availability of such overconsumed foods as red meat and milk and to increase the availability and consumption of fruits and fish, among other foods, to achieve sustainable and healthy nutrition strategies in these countries.

**Action Track 3** – objective: *Improving the performance of food systems through the optimization of resource use and better governance that minimizes deforestation, food loss

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and waste and greenhouse gas emissions, avoiding chemicals that harm ecosystems and human health and curbing the further loss of biodiversity.

Developing fiscal incentives and policies to prevent land degradation and impacts on biodiversity, restore unused land, manage crop yields and promote nature-based solutions and the sustainable use of pastureland:

In many parts of the region, large areas of degraded land or otherwise unutilized land, outside of high conservation value areas, are available and can and should be restored and brought into production. Examples include peatlands in Ukraine, degraded pastures in Central Asia and the Caucasus, and degraded arable land in Central Asia, formerly under annual crops with the potential for conversion to perennial grasses. Bringing unutilized land into production, improving farm structures and enhancing advisory and extension services that target small farms would strengthen local food production.

In addition, the need for a national regulatory environment and fiscal instruments (subsidies) that explicitly prioritize the long-term carrying capacity of soils and focus on crop yields are especially needed in Central Asia. Some countries have, in recent years, adopted policies that are in line with land degradation neutrality principles (in Kazakhstan and Uzbekistan, including with United Nations Development Programme Global Environment Facility project support), but this has been sporadic and far from exhibiting a systemic pattern across the region. Securing land tenure rights (especially in Central Asia) and supporting well-functioning agricultural land markets also are priorities in the region.

**Investing in sustainable agricultural techniques and adopting measures to strengthen the sustainability of food supply chains, resource use efficiency and eco-friendly food packaging and to develop less rigid and more quickly responsive food supply chains:**

Responsible investment in sustainable agricultural techniques (e.g. organic cultivars, agroecological practices, climate-smart/regenerative agriculture) are very much needed in the region to advance equitable livelihoods. Such investments should come primarily from the farmers and industry itself, once a proper regulatory environment and a government subsidy scheme are there to drive such changes, by realigning public spending and greening private investment. Proper goal-setting at the level of a land plot/enterprise, within a concrete environmental and climatic context, is important.

**Improving the efficiency, connectivity, infrastructure and technologies of food value chains:**

Functioning value chains, including short supply chains, local markets and agroecological and other innovative approaches, are a significant segment in promoting sustainable food systems that are resilient to climate change and other shocks (such as those related to the pandemic) while contributing to the reduction of impacts on intact ecosystems and to the minimization of food loss and waste. A vibrant processing sector provides income for farmers, prevents food losses, preserves food for consumers to have access to diverse foods (out of season), and
enables food trade. Innovations are needed, and as food systems are strengthened in the region to be resilient to climate change and other shocks post-pandemic, there are opportunities to build in climate-smart practices, greening, decent employment and more. Farmers and value chain operators need access to finance and credit to reach their full potential. Governments can play a catalytic role and enable strides to be made through public and private finance, green investments and innovation, including such digital payment options as mobile banking.

To make these value chains work better and in a more nature- and climate-friendly fashion, analysis, better tracing of traded volumes and large investments are needed to improve infrastructure and facilities and address their compliance with net-zero impacts on climate (as stipulated by the Task Force on Climate-related Financial Disclosure, for example) or nature (as stipulated by the Task Force for Natural Disasters). One of the challenges is designing and developing faster-reacting food supply chains and/or using United Nations Centre for Trade Facilitation and Electronic Business international standards – real-time information sharing that allows for adaptation to disruptions in the supply chain.

Wider adoption of voluntary sustainability certification by producers operating in or sourcing produce from Europe and Central Asia, with guidance from the United Nations Forum on Sustainability Standards, is vital for greening the agricultural value chains.

**Regulating the sustainable and efficient use of water in irrigation and food processing; water quality assurance:**

Central Asia, a major landlocked region, is facing a shortage of water resources and inefficient water usage, which is worsened by the weak transboundary water management. Water supply in Central Asia is a complex issue due to the fact that the region’s major rivers are transboundary. Downstream countries are heavily dependent on the water resources of the upstream countries, such as Kyrgyzstan and Tajikistan, where the water shortage has become a potential threat. Central Asia is largely arid, and its agriculture is highly dependent on irrigation, particularly from surface waters, to maintain its current levels of agricultural production. The most significant irrigated crops in Central Asia are cotton and wheat, not only, but also fodder crops. A significant area of irrigated land in Central Asia is salinized and/or waterlogged. This is mainly due to non-efficient irrigation practices and inadequate maintenance of the extensive drainage network since independence. Soil salinization is one of the main threats to agriculture in the arid zones of Central Asia (Uzbekistan, southern Kazakhstan and Turkmenistan).

**Action Track 3** plans to optimize environmental resource use in food production, processing and distribution, thereby reducing biodiversity loss, pollution, water use, soil degradation and greenhouse gas emissions. Its goal is to deepen understandings of the constraints and opportunities facing smallholder farmers and small-scale enterprises along the food value chain. It also strives to support food system governance that realigns incentives to reduce food losses and other negative environmental impacts.
**Action Track 4** – objective: *Food systems developments are inclusive – leaving no one behind – and contribute to the elimination of poverty by creating jobs, raising incomes across the food value chain, reducing risks for the world’s poorest, and improving value distribution.*

**Introducing targeted support to small-scale, traditional producers and agri-enterprises to access viable markets:**

Central to advancing equitable livelihoods in food systems are the small-scale food producers who often work in fragile and vulnerable terrestrial and aquatic ecosystems. Their production choices, technologies, natural resource management and market links to value chains determine not only the sustainability and resilience of their livelihoods and their capacity to overcome poverty and food insecurity, but also the diversity of food that will be available to their communities and to consumers and the prices the latter pay. Rural development, both at policy and local community levels, is also very much needed in the Europe and Central Asia subregions. Deprioritizing large-scale agriculture and ensuring equal opportunities for smallholders as well as supporting small and medium enterprises is essential for improving the sustainability of food systems. This process requires designing respective state support measures and developing targeted trainings for small-scale producers to access national, regional and international markets as well as promoting short value chains, farm-to-fork approaches and inclusive and green trade.

**Regulating access and control of land, water and other productive resources, as well as access to decent work, agricultural inputs, knowledge and services, including finance and credit, especially for the most vulnerable population groups:**

Intersectional vulnerability, which recognizes that individuals or communities often face compound discrimination based on multiple and intersecting identity factors (such as ethnicity, gender, age and physical ability), is a challenge that requires more research and better practical and policy responses. Women, youth and indigenous peoples are population groups that face significant socially constructed and structural barriers in the region and whose livelihoods are impacted by inequity in food systems. Discriminatory social norms, practices and roles shape the gendered distribution of paid and unpaid work, limit women’s access to productive resources (such as land) and markets, and underpin unequal bargaining positions and the gendered division of labour within households that result in both time poverty and malnutrition for women. The rights and power of individuals can be increased through engagement in group action through cooperatives or associations. Digital technologies should be developed to support the control of land and access to knowledge, finance and credit.

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The Committee on World Food Security Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests\textsuperscript{12} promote secure tenure rights and equitable access to land, fisheries and forests, recommended as a means of eradicating hunger and poverty, supporting sustainable development and enhancing the environment in the region.

\textit{Action Track 4} aims at identifying solutions that contribute to the elimination of poverty by promoting full, productive and decent employment for all women and men along the food value chain, reducing risks for the world’s poorest, enabling entrepreneurship and addressing inequitable access to resources and the distribution of value. It also seeks to improve resilience through social protection and to ensure that food systems “leave no one behind.”

\textit{Action Track 5} – objective: \textit{Ensuring the continued functionality of sustainable food systems, not only in geographies subject to conflict and climatic and natural resource disasters but also globally, to mitigate the impacts of health-related pandemics on the food supply in systems at all levels of development.}

Developing measures to ensure that country food systems are prepared to avoid, mitigate and/or adapt to vulnerabilities, shocks and stresses:

Strengthening the resilience of food systems demands a comprehensive, holistic and intersectoral approach that integrates responses to climate, biodiversity loss, conflict, pandemics, economic crises, food insecurity and malnutrition, considering poverty, inequalities and poor land use and distribution as structural root causes of increased hunger. Consequently, there is no single sector or system response option. For this reason, it is necessary to prepare emergency and business continuity plans ready to be operationalized to address food safety, animal health and plant health threats and outbreaks and to establish climate watch and early warning systems. Putting in place risk transfer mechanisms (i.e. agricultural insurances) that promote disaster risk reduction and climate-smart agriculture is an example of a means to better manage disaster risk and help build resilience.

\textbf{Addressing biological threats to the food system}

Animal and plant diseases and pests reduce agricultural productivity, threaten livelihoods and lead to food insecurity. The COVID-19 pandemic has shown fragility in the food system and illustrates clearly that food systems are not sustainable if biological and chemical agents are not managed, prevented and controlled. Despite ongoing progress in the region, to strengthen sanitary and phytosanitary controls and protect animals, plants and humans, increased effort is needed by public and private sectors to apply “farm to final” consumer approaches. Many existing and emerging risks can be addressed through One Health approaches focusing on the interface of animal health, food, agriculture and human health to minimize possible or probable threats to humans within the region. This includes addressing antimicrobial

\textsuperscript{12} For more information on the Voluntary Guidelines, see http://www.fao.org/tenure/voluntary-guidelines/en/.
resistance (AMR), zoonotic diseases (e.g. food-borne diseases, rabies and influenza) and others.

**Action Track 5** works to ensure the continued functionality of sustainable food systems in areas that are prone to conflict or natural disasters. The solutions also should promote global action to protect food supplies from the impacts of pandemics. The key goal behind Action Track 5 is to ensure that all people within a food system are empowered to prepare for, withstand and recover from instability.

**FINAL REMARKS**

In the process of identifying priority areas and challenges for improving food systems in Europe and Central Asia, it is important to creatively address all three – environmental, economic and social – dimensions of sustainability. It is key to strengthen partnerships and communication networks; support innovation while preserving traditions; and build people-centred, nature-positive or nature-neutral systemic change. The Europe and Central Asia Food System Community Platform, launched in May 2021, seeks to provide stakeholders contributing to food systems in the region an inclusive and open digital space for sharing and exchanging information, ideas and knowledge on key regional policy areas related to food systems and sharing best practices and game-changing solutions for improving food systems and ensuring their sustainability for the future.\(^\text{13}\)

The outcome of any proposed solutions should have a positive or neutral impact on the natural environment, be profitable, and generate broad-based benefits for society. The levers of change should ultimately contribute to the health and well-being of all population groups and lead to the sustainable development of the region within the planetary boundaries.

A continued discussion on the challenges linked to protecting the natural environment, restoring and preventing biodiversity loss, mitigating climate change and improving the resilience of food systems will be a pathway to the development of economically viable and efficient value chains and, it is hoped, provide decent employment opportunities, prevent further food loss and waste, and support the vulnerable and marginalized in accessing affordable, safe and healthy diets. This is even more urgent during the waves of the COVID-19 pandemic, which can disrupt incomes and increase poverty levels in both rural and urban areas.

\(^{13}\) For more information, see the webpage for the Food Systems Summit 2021 Community at https://foodssystems.community/communities/food-systems-in-europe-and-central-asia/.