



UNITED NATIONS

# TRANSFORMING FOOD SYSTEMS

Regional policy brief

Sustainable  
Resilient  
Healthy  
Inclusive



Introduction  
on food systems



Pathways  
and actions



Regional priorities:  
highlights from regional  
processes and dialogues



Translating global  
momentum to  
regional development



ECA . ECLAC . ESCAP . ESCWA . ECE

# 1 Introduction on food systems

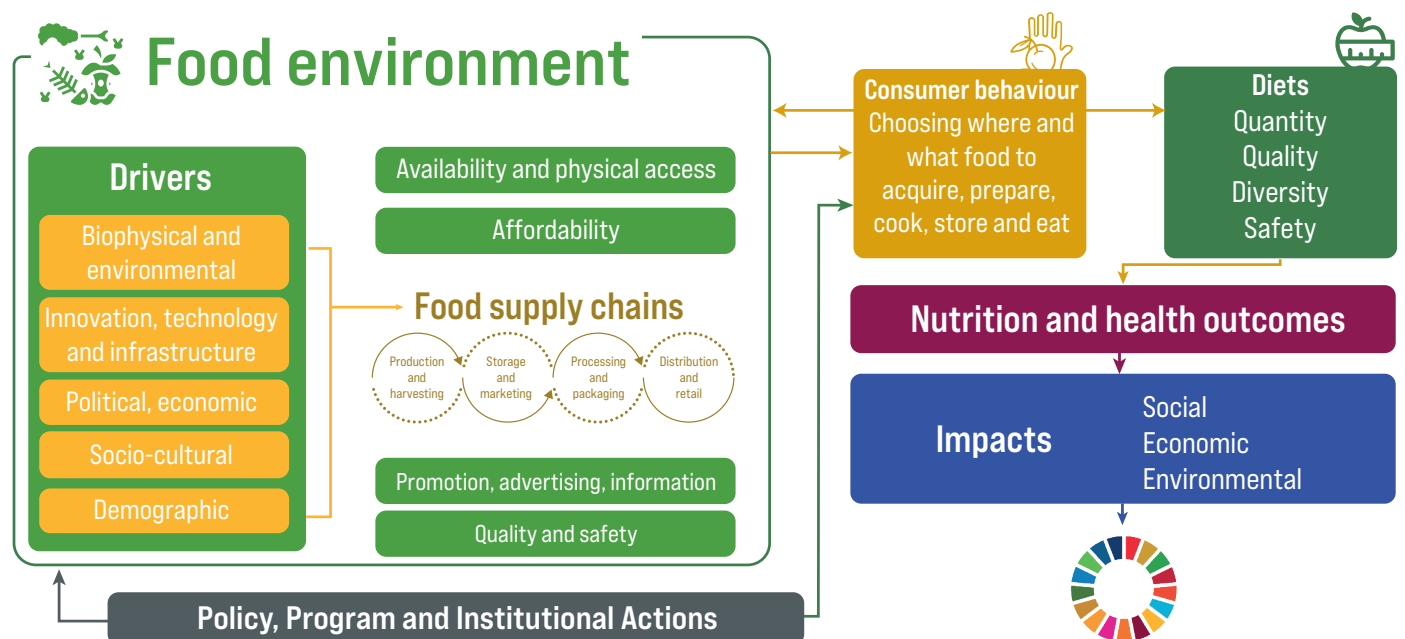


**“In a world of plenty, it is a grave affront that hundreds of millions go to bed hungry each night.”  
Secretary-General of the United Nations, António Guterres, World Food Day 2020.**

Estimates in 2020 showed that the number of hungry has been on the rise again, and is currently estimated at 690 million people.<sup>1</sup> Obesity is also rising in all regions, reflecting a food system that produces unbalanced results. The forces yielding such simultaneous increase in hunger and obesity are directly related to the food system itself or broader developmental drivers/issues, including poverty, political instability and economic crisis, along with limited societal awareness regarding healthy diets. The COVID-19 pandemic has further exposed the world’s fragilities and reemphasized the food system’s weaknesses. The pandemic has intensified inequities in accessing safe and nutritious food at affordable prices, and further highlighted the vulnerability of workers across the food system value chain.<sup>2</sup>

The complexity of the food system arises from the fact that it encompasses a wide range of actors and stakeholders and it integrates socio-cultural, economic, political, biophysical, environmental, infrastructure and technical drivers that interact at different levels along the entire food supply chain to deliver outcomes for human beings and the planet (figure 1).

**Figure 1.** The food system



Source: DESA, Policy brief: The impact of COVID-19 on food security and nutrition, 2020.

The debate of whether the food system is broken or just uncoordinated, highlights the need to realign efforts to go beyond ending hunger towards sustainable consumption and production, providing healthy and safe nutritious food, and promoting equitable livelihoods to ensure a transition towards inclusive, healthy, sustainable and resilient systems. To achieve food security while balancing between nutrition, health and enhanced economic, social and environmental outcomes, it is imperative to propose “game changing” solutions and identify actors and stakeholders that can implement them.

### The Food Systems Summit, to be held in September 2021, comes at a time when the world has recognized the “surplus of multilateral challenges and the deficit of multilateral solutions”.<sup>3</sup>

This people’s Summit is an action summit that has activated more than 500 dialogues so far in relation to various topics across the five identified action tracks,<sup>4</sup> or in regard to a special issue of major concern such as climate change, conflict, water, health, gender, and young people. The dialogues have been organized across the world to gather game changing actions and accelerate multi-stakeholder actions and commitments that could transform existing food systems to become more inclusive, healthy, sustainable, and resilient. The Summit also aims to promote actions that deliver progress globally across all the Sustainable Development Goals (SDGs).

The five regional commissions<sup>5</sup> of the United Nations have organized regional dialogues<sup>6</sup> to identify game changers in their respective regions (Africa, the Arab region, Asia and the Pacific, Europe and North America, and Latin America and the Caribbean). This generated momentum in support of national and independent dialogues, and enabled identifying issues at the regional level that require collaboration and partnerships between countries.

Based on the five regional dialogues, chapter 2 of the present policy brief provides harmonized pathways to overcome challenges that limit the transformation of the food system into an inclusive, healthy, sustainable and resilient system. The section also clusters game changers that were discussed at the regional dialogues. Chapter 3 identifies regional priority actions based on regional food system consultations. Chapter 4 outlines how to translate the global momentum into tangible regional development.



## Food Systems Summit as an accelerator towards implementing the Decade of Action to achieve the SDGs by 2030

A properly functioning food system would be responsive to the 17 SDGs and not only the Goal of reducing hunger, improving nutrition and promoting sustainable agriculture (SDG 2). Within a food system approach, more Goals come into play, including those of reducing poverty (SDG 1), improving health (SDG 3), ensuring gender equality (SDG 5), managing water resources (SDG 6), ensuring economic growth (SDG 8), developing the necessary infrastructure, processing and innovating (SDG 9), reducing inequalities (SDG 10), moving towards sustainability (SDG 12), managing better natural resources (SDGs 14 and 15), ensuring peace and stability (SDG 16), and enhancing partnerships (SDG 17). These interlinked SDGs are part of key drivers and game changers that support the transformation of the food system.



# 2

## Pathways and actions



### A. Towards inclusive food systems for equitable livelihoods

Inclusiveness along the food system necessitates equitable livelihoods, including for farmers and other formal and informal food producers, businesses, labour forces and consumers. To ensure inclusivity, especially among the most marginalized groups (women, young people, older persons, rural dwellers), national and regional measures need to be adopted to address social and economic barriers preventing access to healthy and affordable food. Among the pressing issues to be addressed are income, productive assets and tenures, opportunities (education, training, financial), employment, access to markets, socio-political stability, and forced migration.

Addressing poverty is urgently needed by supporting decent employment opportunities within the food system, enhancing the income of small-scale producers and operators, reducing risks and challenges faced by food producers, and providing social security services. Furthermore, immediate action to end conflicts and promote peace ought to be a regional and global priority.

In the short to medium terms, countries need to adopt social and economic policies and programmes that ensure the expansion of social protection schemes for persons in vulnerable situations, notably those impacted by the COVID-19 pandemic and other shocks. Countries need to mobilize resources to build the capacity of small-scale producers and other food system actors, and develop the necessary infrastructure, especially in remote areas. This entails leveraging public and private investments into needed infrastructure including transport, storage and processing, and ensuring equitable access to clean water, energy and communication technologies.

Countries also need to facilitate access to finance for farmers and local small and medium enterprises (SMEs), with emphasis on supporting initiatives that serve women, young people, refugees, internally displaced persons (IDPs), and other vulnerable populations that are less integrated into the food supply chain and more prone to natural disasters.



#### Game changers

- ▶ Developing youth economic empowerment programmes in less advantaged areas, including in rural communities.
- ▶ Enforcing land registration systems to facilitate financial access and access to land ownership for young people and women.
- ▶ Ensuring the provision of social protection systems, and refocusing social safety programmes to better cover the most vulnerable.
- ▶ Supporting rural cooperatives technically and financially to assist in expanding markets, facilitating the adoption of technologies, and promoting rural agri-business.
- ▶ Developing innovative and inclusive financing mechanisms to enhance investments in agricultural and rural development, and improve accessibility to financial services, including rural credits and micro credit to fund small agri-businesses.
- ▶ Developing and supporting food banks and other related community-based initiatives.

Countries can also support the sustainable localization of the food system, which requires a redesign in the functioning of public institutions to allow greater involvement of the private sector and civil society organizations. This approach can enhance local livelihoods and development, and ensure access and availability of food, while supporting sustainability and complementing global food systems.

In the medium to long terms, it is necessary to develop innovative legislations and policies that support small-scale farmers and their communities, and secure land and water rights and access. Tenures and rights in rural agricultural areas are also needed to improve equity and inequality among producers and food systems actors, and to enhance the livelihoods of marginalized and vulnerable groups.

- ▶ Building the capacity of small producers on the use of appropriate and affordable green technologies at the farm level and along the value chain.
- ▶ Strengthening the capacity of institutions and administrations to collect, analyse and share data.
- ▶ Encouraging inter-regional agricultural investment and inter-regional trade cooperation and integration.



## Challenges

Dietary inequalities increase with income inequality, geographical locations and human development in terms of education and awareness. Inequalities among countries are based on resource availability and productivity, and on human aspects in terms of population distribution and development. Extremely poor people tend to live in rural and conflict-afflicted areas and depend on agriculture for their livelihoods. Conflicts in many parts of the world are leading to an increase in the number of displaced populations, which live in precarious conditions unable to meet their food and dietary needs.



POVERTY  
100

- In **Africa**, the number of people living in **poverty** is expected to increase between 49 million and 161 million as a result of the pandemic, with **100 million** being the most likely estimate.<sup>7</sup> The number of conflicts increased by some 90 per cent in the fourth quarter of 2020, compared with the fourth quarter of 2019, further disrupting economic activity.<sup>8</sup>



29  
%

- In the **Arab region**, **poverty rates** affect **29 per cent** of the population, and almost half of people in conflict-affected countries and least developed countries. High unemployment, particularly among women (20 per cent) and young people (26.5 per cent) are at alarming levels. Inflation reached over 45 per cent in the Arab least developed countries (the Comoros, Djibouti, Mauritania, Somalia and the Sudan), with high household expenditure on food at 31 per cent.<sup>9</sup> In 2019, 40 per cent of the Syrian population was estimated to be living on less than \$1.90 per day.<sup>10</sup>



2  
%

- Many countries in the **Asia and Pacific region** spend less than **2 per cent** of GDP on **social protection**, way below the global average of 11 per cent.<sup>11</sup>



33.7  
%

- In **Latin American and the Caribbean**, it is estimated that in 2020, **poverty** rose to **33.7 per cent** of the total population, and the extreme poverty rate reached 12.5 per cent, levels not observed during the last 12 and 20 years, respectively. This means that about 209 million people were living in poverty at the end of 2020 (22 million more than in 2019), and 78 million in extreme poverty (8 million more than in 2019).<sup>12</sup>

## B. Towards nutritious and healthy food

Addressing malnutrition and ending hunger will require that enough food is produced, that the food is nutritious, and that supply chains work efficiently to deliver affordable food everywhere.

In the short term, countries need to raise awareness to promote the consumption of healthy and nutritious food, reduce access to unhealthy foods, especially among children and young people, and discourage unhealthy consumption habits. These programmes need to be accompanied by focused social protection interventions to reduce nutrition challenges, while promoting equitable access to food for the most vulnerable, including women and children, older persons, persons with disabilities, and the poorest in both urban and rural areas. Investments in food fortification programmes could prove a sustainable way to enhance the quality of diets.

In the medium term, improving supply chain infrastructure, including roads, storage, warehouses, cold chain, processing units and food-related SMEs, would help enhance food availability and access. It would also entail building a related food and agriculture information system, promoting clean and green energy and technologies, supporting innovation, and promoting sustainable financing. Countries need to ensure that appropriate support is provided to small-scale producers to access resources, and that they have access to both domestic and global markets.

It will be equally important to prioritize food safety to decrease the incidence and burden of food-borne diseases in low- and middle-income countries and among the most vulnerable. Enhancing food safety programmes and building the necessary knowledge will ensure that all stakeholders and actors are accountable and empowered to make the right decision with regards to the functioning of the food system and its capacity to deliver safe, adequate, healthy and nutritious foods.

In the medium to long terms, revamping the working of the food environment should be a focus in all regions to allow people to make informed decisions with regard to acquiring and consuming healthy and culturally appropriate foods. The inclusion of the diverse actors of the food system would ensure that eating healthy is supported by all, including shops, markets, restaurants, workplaces, school cafeterias, neighbourhood food distributions, and online shopping.

Similarly to universal health coverage or free primary and secondary public education, which are increasingly the norm, universal access to minimum dietary energy requirement should also be the norm and be supported by public, civic or market mechanisms that build on the availability of social safety nets, income guarantee schemes, public or civic feeding programmes, public procurement of food, food banks, food assistance or a combination of these to ensure access to food for the most vulnerable.



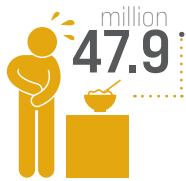
### Game changers

- Revising food security policies, food subsidies and nutrition guidelines to promote healthy diets.
- Implementing nutrition-sensitive social protection programmes that are people-centred and gender-responsive to address the needs of marginalized and vulnerable people.
- Raising awareness on healthy diets through messages targeting children, pregnant and breastfeeding women, and older persons, and addressing misleading and false nutritional information.
- Targeting young people and school-aged children through school health programmes, and providing guidance on the importance of safe and healthy diets, hygiene and physical activity.
- Implementing existing international food quality and safety standards.
- Exploring expansion of healthy food public procurement policies to support local food systems, and promoting food banks and universal food access.
- Promoting open trade, rule-based, predictable and non-discriminatory multilateral trading systems, while strengthening diversified local and regional value chains for fresh and nutritious food.
- Improving intra- and inter-regional logistics and distribution systems.
- Encouraging the use of digital platforms to provide advanced and up-to-date database on food and nutritional information.



## Challenges

Hunger and undernourishment are highly prevalent in low-income countries, leading to stunting and wasting among children and a high prevalence of nutrient deficiencies. Among the most vulnerable are women, children and adolescents, refugees and displaced people, smallholders in rural areas, and the urban poor. Other forms of malnutrition exist, including the consumption of unbalanced diets, which lead to overweight and obesity or micronutrient deficiencies.



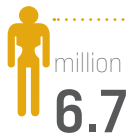
47.9 million

In **Africa**, the number of **hungry people** has risen by **47.9 million** since 2014 to reach 250.3 million, or nearly one fifth of the population. While the prevalence of stunting in Africa is declining, 40 per cent of all stunted children in the world live in Africa, a significant rise from the 18 per cent observed in 1990.<sup>13</sup> Preliminary estimates indicate that an additional 25 million to 42 million people may be undernourished in 2020 due to the economic recession caused by the pandemic.<sup>14</sup> In addition, the number of overweight children under five has increased by nearly 24 per cent since 2000.



116 million

The **Arab region** suffers from a high prevalence of **child stunting** (22 per cent), **wasting** (8.2 per cent), and **anaemia** among women of reproductive age (35.5 per cent), with about **116 million** people being **food insecure** and 43 million **undernourished**, notably in conflict-affected countries such as the Syrian Arab Republic and Yemen.<sup>15</sup> In the Arab region, there are 115 million obese people, with obesity rates higher in Gulf Cooperation Council countries and middle-income countries.<sup>16</sup>



6.7 million

In the **Asia and Pacific region**, 350.6 million people are estimated to have been undernourished in 2019, nearly 51 per cent of the global total. An estimated 74.5 million children under five were stunted, and a total of 31.5 million were wasted. The majority of these children in the region live in Southern Asia, with 55.9 million stunted and 25.2 million wasted children.<sup>17</sup> Furthermore, the COVID-19 pandemic is estimated to have pushed an additional 24 million people into acute food insecurity in Asia and the Pacific, and contributed to a 14.3 per cent increase globally in the prevalence of moderate or severe wasting among children under five, equal to an additional **6.7 million** children acutely **malnourished**.<sup>18</sup>



40.4 million

In **Latin America and the Caribbean**, between 2015 and 2019, the prevalence of undernourishment increased from 6.2 to 7.4 per cent of the population (38.3 million versus 47.7 million people), and the prevalence of moderate or severe food insecurity increased from 25.1 to 31.7 per cent (156.8 million versus 205.3 million people).<sup>19</sup> In 2020, despite policies to support income and food access, it is estimated that the incidence of moderate or severe **food insecurity** reached **40.4 per cent** of the population, an additional 44 million people.<sup>20</sup> In Latin America and the Caribbean, child **overweight** has increased in all subregions, especially the Caribbean.<sup>21</sup>

## C. Towards a healthy planet and sustainable food systems

Sustainably managing and enhancing food production systems within existing environmental constraints is a priority. It requires enhancing input efficiency and the adoption of appropriate agro-ecological and good practices to reduce the pressure on local environmental systems.

Regional actions tailored to context-specific environments while embracing new technologies are needed. These could include farm-focused ICTs that help mix indigenous and modern knowledge for more efficient and responsive results. It will be equally important to provide services, technology, and infrastructure to support nature-friendly production, particularly for marginalized rural groups. Collecting adequate data and gender mainstreaming should not be overlooked.

Removing harmful subsidies and support programmes could safeguard natural ecosystems both on land and in water bodies, and halt deforestation, land degradation or overfishing. In parallel, it is essential to develop incentive schemes, entrepreneurial programmes, and capacity-building programmes on nature-friendly production systems.

In the medium to long terms, many regions need to focus on restoring degraded ecosystems, reversing biodiversity loss, and rehabilitating functions for sustainable food production to regenerate ecosystem benefits. This could halt encroachment on untouched ecosystems. Providing financial incentives to restore abandoned and degraded farmland could improve productivity and food availability at the local and national levels. An innovative governance mechanism is needed that includes appropriate policies and adequate financing for increased sustainability.

Applying measures and targets for better monitoring the movement of food throughout the food supply chain would encourage food system participants to act and change behaviours. Improving food handling, storage, processing, and preservation would enhance supply chain efficiency and resilience, and reduce post-harvest losses and food waste. Raising awareness and encouraging initiatives on reuse and recycling of products, especially for women as prime handlers of domestic waste, is also necessary. In the long term, applying a water-energy-food nexus approach will offer opportunities to identify and promote integrated natural resource planning, management, and governance.



### Game changers

- Enhancing cross sectoral coordination and adopting sustainable water allocation systems to reduce conflicts and minimize trade-offs between sectors.
- Enacting policies that optimize water use through water-saving technologies, non-conventional water, water harvesting and water use efficiency in farming.
- Adopting good agriculture practices and agroecological practices to improve soil management.
- Improving pasture and livestock feeding practices.
- Promoting the adoption of bio-based agricultural inputs (bioinoculants, bio-fertilizers, bio-pesticides, bio-remediators) and the valorisation of residual-biomass from food crops and by-products through circular bioeconomy alternatives (bioenergy, biomaterials, recovery of proteins).
- Investing in appropriate technologies throughout the value chain to enhance farming operations, increase food shelf-life, and reduce waste within the overall transitioning to circular economies/green growth plans.
- Strengthening legislation and measures aimed at reducing food losses and waste, and incentivizing programmes and initiatives that reduce food waste at the market and consumer levels.
- Reviewing food subsidies to ensure they target vulnerable groups, promote nutritious food and reduce food waste.





## Challenges

Unsustainable intensification of agriculture production exerts undue stress on the natural resource base, increasing its degradation rate. Current production practices have led to increased pressure on water resources (e.g., falling groundwater tables on the Arabian Peninsula), land degradation, deforestation and biodiversity loss (e.g., rainforest degradation in Brazil and Indonesia), and increased greenhouse gas emissions.



The need to feed a growing population combined with irregular rainfall patterns and inefficient irrigation management, infrastructure, and operations have led to the overexploitation of **freshwater resources** for agricultural production. Use of freshwater resources is highest in the agricultural sector, reaching around 56.6 per cent in the Arab region,<sup>22</sup> 68 per cent in Latin America and the Caribbean,<sup>23</sup> and 91 per cent in South Asia.<sup>24</sup> However, pesticides and fertilizer use in agriculture have degraded water quality.



Cultivated land per person has declined to less than 0.25 hectares per capita over the last 50 years.<sup>25</sup> Agriculture is responsible for around 80 per cent of worldwide **deforestation**. In Africa, about 33 per cent of the land is moderate to highly degraded, and conditions are getting worse in far more cases than improving. The regional extent of wetlands is estimated to have declined by 64-71 per cent in the twentieth century, and wetland losses and degradation continue Africa-wide.<sup>26</sup> In the Arab region, over 90 per cent of the land is classified as arid or hyper-arid with limited rainfall, while 73 per cent of arable land is being affected by **land degradation**.<sup>27</sup> Around 17 per cent of the total land area in Central Asia is expected to be unsuitable for agriculture by 2080 owing to unproductive soils.<sup>28</sup> In the European Union, **desertification** affects 8 per cent of land, totalling around 14 million hectares in Southern, Eastern and Central Europe.<sup>29</sup>



**Biodiversity** is in strong decline as 42 per cent of all terrestrial animals and plant species have declined in size in the last decade.<sup>30</sup> In Africa, of the approximately 917 local breeds, more than 80 per cent have no risk assessment. For the small proportion of breeds with an assessment, most can be considered at risk of extinction.<sup>31</sup> The Asia-Pacific region shows severe decline in biodiversity as 25 per cent of the region's endemic species are at high risk of extinction, and 37 per cent of aquatic and semi-aquatic species are threatened by pollution, commercial agriculture, and overfishing.<sup>32</sup>



A third of the food produced is estimated to be lost or wasted throughout the entire supply chain, from post-harvest to distribution. In North America and Europe, **food loss and waste** are at around 16 per cent, rising to 21 per cent in Central and Southern Asia.<sup>33</sup> In the European Union, 88 million tons of food is wasted annually, the majority from households and retail where the annual per capita food waste is between 95 and 115 kg each year.<sup>34</sup> Initial estimates of the Food Loss Index<sup>35</sup> suggest that around 14 per cent of the world's food is lost post-harvest.<sup>36</sup> In sub-Saharan Africa, around 14 per cent of total food production is lost.<sup>37</sup> In some Arab countries, annual per capita food waste reaches 427 kg per capita per year.<sup>38</sup>

## D. Towards resilient food systems

Enhancing the resilience of food systems is imperative, and implies the need for better forecasting of potential shocks and stresses, and the design of alternate plans and strategies to ensure that food systems continue to function during emergencies, recover rapidly after a shock or stress, and develop over time.

This will require identifying existing and potential vulnerabilities and inherent fragilities. Particular attention should be given to food systems in vulnerable countries, including developing, in conflict, landlocked and small countries, and to remote areas within individual countries as these tend to be the weakest links within the food system.

Immediate actions in cases of conflicts include resolving and settling their causes through political debate and negotiation to reduce the impact on the population, including by decreasing cases of forced migration and the negative impact of armed conflict on farming systems. In cases of pandemics and sudden shocks leading to disruption of food supply chains, it is necessary to ensure that supply chains are monitored and supported to withstand potential disruptions, provide direct support to crisis-affected households, and reduce risks and vulnerability by enacting appropriate social protection schemes.

Medium- to long-term key initiatives could include greater integration of production, distribution and consumption processes, with emphasis on systems that benefit human health and livelihoods. Increasing investments in digital platforms, innovative climate change-related technologies and, agricultural scientific research have shown to increase resilience, in addition to sharing good lessons of such technologies used and applied in different areas.

The regionalization and/or localization of food production and consumption could lessen dependence on elongated supply chains and risks associated with them as they are susceptible to sudden shocks and stresses. The adoption of more integrated agro-ecological systems for food production would also be a focus as they would lessen the impact on the environment while ensuring that production is adapted to prevailing local conditions.

Leveraging and strengthening regional and international partnerships and integration based on comparative advantage between countries enhances food system resilience. Creating regional food security centres or integrated inter-regional departments to ensure strategic food storage that are not associated with political interests and that support food access and diverse diets for all. In addition, increasing storage capacity, and implementing food import strategies that facilitate efficiencies in the food chains would reduce vulnerabilities of import dependent countries to trade shocks.



### Game changers

- ▶ Committing to resolving and settling local and regional conflicts, and enhancing civic space.
- ▶ Linking humanitarian aid and emergency responses to long-term recovery, and providing direct support to crisis-affected households.
- ▶ Adopting climate-smart technologies that reduce vulnerability to climate change, reduce emission from agriculture and enhance local productivity, and strengthen early warning systems, risk analysis, forecasting capacity, and active monitoring.
- ▶ Increasing product diversification and local value addition to agricultural commodities.
- ▶ Redesigning finance and investment systems to become climate action compatible, and increasing investments in innovative technologies.
- ▶ Adopting drought resistant varieties, smart crop management, mixed farming systems, blue and green water management, efficient farm operations and mechanization, and bridging yield gaps.
- ▶ Developing digital platforms to support agri-environmental management, enhance the sustainable marketing of agriculture products, provide timely agri-meteorological and market information, and strengthen data collection and disaggregation, monitoring and evaluation.
- ▶ Implementing food import strategies to enhance efficiencies in food chains and increase storage capacity and diversification of trade partners.
- ▶ Participating and committing to global action and processes to drive transformation in agricultural and food systems, and address the synergies and trade-offs between adaptation, mitigation, and agricultural productivity.



## Challenges

Climate change in terms of changing precipitation patterns and minimum and maximum temperatures, and frequent extremes, impacts food systems. This could be through crop failures, delayed planting, decreased yields and productivity, and effects on fish stocks, among other issues. Climate change also affects the food supply chain (logistics, infrastructure, processing, retail) and increases costs and prices throughout the food system.



As **Africa's** agriculture stands to experience a **significant rise in temperature** and extreme weather conditions, smallholder farmers in most African countries are the most at risk, as their sensitivity to extreme events is usually low.<sup>39</sup>



In the **Arab region**, **droughts** affected over 44 million people between 1990 and 2019.<sup>40</sup> Agricultural yields in rainfed areas in the Arab region are affected by yearly variations in temperature and precipitation, whereby simulations have shown that a 1.5-2.5 °C increase in temperature may reduce yields by 30 per cent, whereas a 3-4 °C increase may reduce yields by 60 per cent without considering adaptation measures.<sup>41</sup>



In the **ECE region**, the loss of **mountain glaciers** is expected to adversely impact agricultural productivity in regions dependent upon snow melt to provide water supplies during periods of drought.



In **Latin America and the Caribbean**, floods are the most common disaster, droughts affect the highest number of people, and storms impact more countries. These three types of natural disaster have significant impacts on agriculture. In the period 2000–2021, the region was affected by 548 **floods**, 74 **droughts**, and 330 **storms**. The Caribbean and Central America are particularly vulnerable, especially to storms, with extreme events becoming more frequent.<sup>42</sup>

The advent of shocks, such as the COVID-19 pandemic, further exacerbate the situation by affecting both the supply and demand for food.<sup>43</sup> Early worldwide measures to combat the pandemic led to fears of global food supply disruptions. The loss of livelihoods owing to the pandemic has been widespread throughout the region and directly impacts the purchasing power of households, particularly the most vulnerable, to access adequate and nutritious food.



In the **Arab region**, which imports 50 per cent of calories consumed and with a few countries **importing** more than 90 per cent of their food, the pandemic reduced agricultural and food processing exports by an estimated 8 per cent and imports by 14 per cent in 2020. Furthermore, an estimated quarter of the Arab population, or more than 124 million people, were pulled below poverty lines in 2020.



In the **Asia-Pacific region**, there is an increased vulnerability of the food system, with almost three quarters of 74 staple food and agriculture commodity trade networks showing signs of weakening resilience between 1986 and 2013, as countries become reliant on a narrower number of trading partners.<sup>44</sup> Most recent projections in the Asia-Pacific indicate that the COVID-19 pandemic has pushed an additional **89 million people into extreme poverty**.



The pandemic has affected **Latin American and the Caribbean** both in sanitary and economic terms. The retraction of more than 7 per cent in regional GDP in 2020 was the largest **fall in economic activity** in 120 years.<sup>45</sup> The most vulnerable situation is faced in the Caribbean subregion, where all countries except Guyana are net food importers and markets of origin are scarcely diversified.<sup>46</sup>

# 3

## Regional priorities: highlights from regional processes and dialogues



In preparation for the 2021 Food Systems Summit, the five United Nations regional commissions discussed their respective systems in many regional processes and consultations, including the 2021 regional forums for sustainable development that followed up and reviewed the implementation of the 2030 Agenda and the transformation of regional food systems, and provided key messages on opportunities and implementation challenges. Furthermore, the regional commissions organized regional dialogues on food systems aimed at a diverse range of stakeholders. These consultations incentivized the organization of national and local dialogues that promoted detailed conversations amongst food supply chain stakeholders to identify priority and game-changing actions that would support the implementation of the SDGs within the context of current realities, and the identification of national action areas and commitments in other regions. Identified propositions for action, when implemented, would potentially reverse the current performance of food systems, improve outcomes, and support the achievement of the associated SDGs. Region-specific actions are discussed in the present section for each of the five regions.

## Africa



**Investing in nutrition-oriented food systems to address affordability of nutritious foods, especially for children and young people** by providing subsidies for healthy and sustainable foods; expanding social protection programmes; imposing taxes on unhealthy foods; formulating procurement policies for healthy school meals; repositioning the vulnerable at the forefront of adapted policies and interventions; and improving agricultural productivity.

**Encouraging investment in digitalization infrastructure, capacity-building, traceability systems and market access to enhance food safety** and support value chain actors and cluster agribusinesses with assured food safety infrastructure and access to output and input markets.

**Promoting intra-Africa trade in agricultural goods and services** by fostering the adoption of national Africa Continental Free Trade Agreement (AfCFTA) strategies and African Union-endorsed guidelines to develop regional agricultural value chains, reduce non-tariff measures and other regulatory and administrative barriers, develop regional value chains, and improve infrastructure and trade services and agro-industry.

**Facilitating private investment in agriculture, agribusiness and agro-industries** to ensure efficient and safe nutrient content and quality of food by implementing appropriately designed long-term inclusive strategies and good governance, establishing innovative public-private partnerships and a conducive business environment, and committing to financing the Comprehensive Africa Agriculture Development Programme (CAADP).

**Ensuring sustainability of food value chains**, as small-scale farmers and SMEs are key to advancing African food system transformation, and guaranteeing affordable access to inputs, know-how, capital, insurance options, appropriate market infrastructure, and storage options for small-scale farmers and agri-SMEs along food value chains.

**Enhancing tenure security**, especially for women and marginalized groups, by reforming policies and legislative frameworks, collecting sex-disaggregated data to guide actions/monitor progress, mapping land with potential for agricultural development, and enhancing knowledge sharing and advocacy to promote policy, legal and institutional reforms; and increasing budgetary resources and innovations for land rights adoption.

# Arab region



**Promoting the integrated management of scarce natural resources** by improving land and water-use efficiency, fostering platforms for intersectoral coordination and collaboration, focusing on the water-food-energy nexus and appropriate technologies.

**Reducing vulnerability to the effects of climate change** by assessing the impact of climate change through localized projections, strengthening early warning systems, risk analysis and capacity-building, and encouraging investment in agricultural scientific research and technologies suitable for arid regions and resilient to climate change.

**Promoting intersectoral coordination and cooperation** by enhancing the role of intersectoral regional committees, such as the Joint Ministerial Committee for Water and Agriculture, as greater coordination is needed across water, agricultural and other ministries to ensure policy coherence across national strategies and plans.

**Supporting humanitarian action for vulnerable countries and countries affected by conflict** by ensuring access of IDPs and host communities to sufficient and healthy food, guaranteeing the suitability of food aid modalities to the regional context, and ensuring the resilience of humanitarian corridors to disruption from shocks such as pandemics that might limit their outreach and services.

**Addressing the impact of food import dependency** through the mitigation of fluctuations in global food prices by diversifying trade partners, hedging against price fluctuations, augmenting storage facilities, and improving inter-regional trade and integration of agriculture in preferential trading agreements.

**Addressing inequality issues associated with gender and age**, including equal pay for equal jobs, guaranteeing access and ownership of resources, eliminating forced child labour, ensuring social protection for vulnerable individuals and households, and building capacity on the use of modern agricultural systems, organic farming, entrepreneurship and ICT.

**Ensuring food safety by reducing risks** of food-borne illness and enforcing the Arab Food Safety Initiative for Trade Facilitation (SAFE) to promote food safety, enhance traceability by applying good agriculture practices, and facilitate access to healthy foods in public areas.

**Facilitating access to finance and providing incentives** for adopting nature-friendly technologies in food system value chains, such as modern and appropriate technologies and climate smart agriculture, and providing marketing platforms for sustainable foods that economically drive eco-friendly production.



# Asia and the Pacific



**Increasing food access and utilization** by providing incentives to steer food consumption towards more diverse, healthy, and balanced diets for populations, especially women, children and the urban poor; and by improving food marketing and raising awareness.

**Expansion of agro-ecological practices** towards restoring critical ecosystem functions and promoting resilient food systems that produce healthy food, while supporting climate action in line with the increasing net-zero carbon pledges emanating from the region.

**Shifting consumption patterns and production processes** by improving waste management systems, digitalizing the farm and rural economy, and transitioning towards a more circular economy approach.

**Engaging women in policymaking processes** and understanding the challenges that women face, such as a lack of access and opportunities, and tackling women's vulnerabilities in agriculture, including gender-based violence and a lack of access to related services in rural areas, in addition to providing space for production and marketing opportunities through inclusive procurement.

**Investing in cost-effective technologies for data collection** and improved surveillance to monitor nutrition, food security, and livelihood indicators, and implementing surveys for sex-, age- and disability-disaggregated data to craft more focused and gender-responsive policies.

**Steering food consumption towards more diverse, healthy and balanced diets**, especially for women, children and the urban poor, by encouraging concerted public and private action to increase food access and utilization.

**Leveraging social protection systems to enhance food security and nutrition outcomes** by expanding investments in social protection systems that take food security and the nutritional needs of vulnerable populations into consideration, including those of nutritionally vulnerable groups such as women and children.

**Strengthening urban agriculture and local food production** can improve nutrition and access to food among the urban poor, but requires policies, regulations and infrastructure support for sustainable urban food development protective of the environment and human health.



# ECE region

**Adopting a multi-pronged approach to sustainable food systems**, covering, e.g. agricultural quality standards, supporting market access of fresh fruits, vegetables, dry and dried fruits, nuts, and trade facilitation recommendations and standards, as well as other substantive areas like innovation, public-private partnerships (PPPs), and circular economy.

**Enhancing digitalization and developing innovative solutions** in support of SDG 12, including sustainable food systems, as a part of transition towards circular economy. There is an important role for national capacity building support to raise productivity and reduce food waste and environmental impacts, by promoting innovation in the agri-food sector and compliance with international norms and standards. Targeted national support includes UNECE Innovation for Sustainable Development Reviews, Environmental Performance Reviews, and Studies on Regulatory and Procedural Barriers to Trade.

**Reducing food loss and waste** as part of the region's new commitment to circularity and COVID-19 response which supports the use of FeedUp@UN – a digital blockchain-powered solution for identifying, quantifying, and tracing the food otherwise lost or wasted (launched in November 2020). It also supports the use of UNECE's Food Loss and Waste Measuring Methodology and Code of Good Practice. The methodology and code of good practice are available for free for use by any stakeholders in any country.

**Raising awareness and supporting food markets in their COVID-19 response** with the #saveinvisiblefood campaign, which encourages all actors of the food supply chain to redistribute, repurpose and add value to the food which we are not selling, buying or consuming – the lost or invisible food. Although awareness of food loss and waste has increased in recent years, COVID-19 has brought this lost food to the forefront and to our attention. Water use should also be reduced, for example, by improving irrigation efficiency.

**Providing a forum for the development of norms and standards** to governments, producers, traders, importers, exporters and international organizations. E.g. UNECE's agricultural quality standards cover a wide spectrum of agricultural products: fresh fruit and vegetables (FFV), dry and dried produce (DDP), seed potatoes, meat, cut flowers, eggs and egg products; UN/CEFACT e-business standards cover digital food quality and safety certificates.

**Assisting countries in the implementation of norms and standards** by providing capacity building in the areas of agri-food supply chains, trade facilitation, electronic business aimed at improving sustainable food systems. In addition, supporting SMEs and small-scale suppliers in the process of implementation of standards is essential for creating more sustainable and resilient agri-food supply chains.

**Ensuring more sustainable regional food systems through sustainably managed forests and food production:** millions of hectares of forests are converted into agricultural land to meet the growing food demand or cleared to make room for expanding cities, with significant consequences for climate change, biodiversity and increasingly scarce resources like water. More sustainably managed forests promote optimized land use and modern agroforestry systems that boost nature-positive food production. This, paired with ecosystem restoration at the national and city levels, increases the benefits from forest ecosystem services and food, and improves the livelihoods of local communities.

**Growing more food forests in cities and their peripheries:** planting land by mixing trees and arable crops contributes to more viable food systems with better access to healthy and nutritious food, particularly for vulnerable populations. Such inclusive close-proximity ecosystems connect urban dwellers with more sustainable production and consumption practices, and result in shorter local and regional production and supply chains, while improving the food loss and waste footprint, biodiversity and air quality.

# Latin America and the Caribbean



**Enhancing the knowledge and sustainable use of biological natural resources** to address the adaptation of agriculture to climate change, provide alternatives for rural livelihoods, and diversify diets with more agronomic, socio-anthropological, and market research on the traits that are relevant for adaptation strategies, their nutritional content and use in traditional culinary cultures.

**Ensuring international food trade and strengthening local diversified value chains** for fresh and nutritious food is crucial; international trade should be rule-based and predictable, and unilateral trade-distorting measures should be avoided, especially in the face of global and regional shocks caused by pandemics, conflict, natural disaster, and climate change.

**Transitioning to agroecological-related production systems and practices** to address greenhouse gas emissions and the environmental impacts of agriculture, and to enhance the carbon dioxide sink services provided by soils and forests by devoting more resources to research, development and innovation, and by providing incentives to farmers.

**Ensuring full valorisation of biomass through circular bioeconomy-related biorefining processes** to allow the production of bioenergy and develop other value-added activities, such as the production of biomaterials, the recovery of proteins for humans and animal consumption, and the extraction of enzymes for applications in the food industry.

**Ensuring access to new technologies** to small and medium family-farm operations by adopting policies related to digital and ICT agriculture-related technologies to improve farming practices and farm-related environmental performance, enhance market access, and bring producers closer to consumers, nature-based solutions and agro-ecological farming practices to bring resiliency to agricultural production, improve soil health and recovering poor soils, and reduce dependency on fossil-based agricultural inputs.

**Increasing investments in food systems** to enhance the resilience of food distribution chains to foster intra-regional food trade, improve logistics and distributional systems, enhance rural-urban physical and digital connectivity, strengthen the resilience of local agricultural economies to external shocks, improve handling, storage, processing and preservation of food, and reduce post-harvest losses and food waste.

**Providing information to consumers through labelling** on sugar fats, and salt content in processed food, taxing nutrition-related food externalities to address malnutrition, especially that related to overweight, and restricting child-oriented advertisements of ultra-processed food.





# 4 Translating global momentum to regional development



The Decade of Action calls for accelerating sustainable responses to the world's challenges, including poverty, hunger, climate change and inequality, and providing means of implementation.<sup>47</sup> Holding the Food Systems Summit during the Decade of Action along with other ongoing global decades (figure 2) offers a global momentum to act, and provides an opportunity to achieve the SDGs through a food system lens while ensuring that all people are able to enjoy their right to a decent and safe life.

Radical changes in the way food is produced, processed and consumed, especially in the aftermath of the pandemic, are vital to transform food systems, and achieve positive outcomes in relation to food security and nutrition. The changes will be in line with the Secretary-General's call to build back better and to leave no one behind, while at the same time transforming how we manage resources, restore ecosystems, and promote family farming. The regional propositions in the present report address regional barriers, and are influenced by national and local practices and by global initiatives and programmes.

**Figure 2.** Ongoing global decades



**Consequently, translating global momentum into regional development will necessitate the following:**

- Reviewing regional policy platforms and strategies where regional entities would be entrusted to update/review or develop regional policies and regulatory frameworks for a better functioning food system. The coordination of the food system approach in its entirety or for selected aspects would be devolved to regional organizations/institutions dealing with specific or closely related issues, such as agriculture, land, governance, trade, technology, capacity-building or financing.
- Providing an enabling environment and mobilizing resources that allow food systems to respond to regional needs, while adapting to rapidly changing economic, social and environmental conditions at all levels.
- Encouraging regional solidarity, forging partnerships and enhancing collaboration, since regional institutions can support South-South cooperation by facilitating cross-border issues, including food production and agriculture, water, energy, health, trade and transport. In addition, South-South cooperation would work alongside North-South cooperation through the numerous mutually beneficial trade agreements and technology transfer. These trade relationships would be strengthened along existing bilateral and multilateral agreements for technical and financial assistance and cooperation, which would be geared and refocused to support the development and strengthening of food systems.
- Identifying regional institutions to follow up, monitor and collect data, since regional institutions, including civil society organizations, must take the lead to champion the issue, organize required consultations, raise awareness and build capacity to encourage Governments and other food system actors to become proactive.
- Documenting and sharing successes and other best practices, scaling up promising initiatives and successful programmes, and developing regional roadmaps for implementation across key actors and sectors within food systems.
- Increasing intra-regional trade in food can play a significant role in reducing volatility in food markets. However, significant efforts may be needed to increase intra-regional confidence and the development of market-based regional trade instruments that can support regional food systems. To this end, there is a need to identify, promote and strengthen regional advocates, facilitate regional dialogue, support public-private partnerships for investments, and reduce costs across the board, while improving access to regional information, strengthening the regulatory framework and building the necessary capacity.



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  - Asia-Pacific Forum on Sustainable Development 2021:**  
[www.unescap.org/sites/default/d8files/event-documents/SDG2%20Roundtable%20report%20APFSD8.pdf](http://www.unescap.org/sites/default/d8files/event-documents/SDG2%20Roundtable%20report%20APFSD8.pdf);
  - Arab Regional Food Systems Dialogue:**  
[www.unescwa.org/sites/www.unescwa.org/files/events/files/report\\_meeting\\_29\\_march\\_2021-final.pdf](http://www.unescwa.org/sites/www.unescwa.org/files/events/files/report_meeting_29_march_2021-final.pdf).
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