I. The urgency

The magnitude of the challenges affecting global food security, especially in the poorest countries and among vulnerable populations, are alarming. In 2021, there were as many as 828 million hungry people in the world - an increase of 150 million since the outbreak of the COVID-19 pandemic. Over three billion people were unable to afford healthy diets.

While the world is severely off track to achieve SDG2 – Zero Hunger – by 2030, there is still time to reverse the situation. However, this cannot be done in isolation. Ending hunger requires a systemic approach, seizing synergistic opportunities and recognizing and addressing the intersecting challenges and trade-offs that exist in agrifood systems.

We need to urgently transform global agrifood systems to make them more efficient, inclusive, resilient, and sustainable. Agrifood systems can play an important role in rescuing and accelerating progress towards the SDGs, reducing poverty, hunger and malnutrition, empowering women and youth, ensuring sustainable consumption and production, creating decent jobs and livelihoods, reducing inequalities and rural-urban disparities, and combating the impacts of the climate crisis.

The challenges

**Those left furthest behind.** The ongoing crisis is complex and multidimensional, and those who are already poor or marginalized are the most affected and vulnerable to environmental, social and economic shocks. They include rural and coastal communities, small-scale and family farmers, fishers, aquaculture producers, Indigenous Peoples, forest-dependent people, and agrifood system workers, especially women, and rural youth.

**Currently, agrifood systems are contributing negatively** to the degradation of natural resources and ecosystems and greenhouse gas emissions, as they are largely based on non-renewable energy, inefficient technologies and the overuse of fertilizers.

**Agrifood systems are becoming less and less resilient.** They are among the first and most heavily impacted by the interconnected and cascading effects of the climate crisis, pollution and biodiversity loss.
Agrifood systems are fragile and destabilized. They are unable to anticipate, absorb and adapt to shocks and stresses that are becoming more frequent, severe and unpredictable, with severe consequences for people and the planet, and threatening global food security.

II. The responses

Empowering all actors and the sustainable use of natural resources

Accelerate the transition to more efficient, inclusive, resilient and sustainable agrifood systems to bring about a healthier and equitable future, including achieving Zero Hunger, reversing ecosystem degradation and adapting to and mitigating the impacts of the climate crisis. Improving agrifood systems will require integrated actions at all levels to promote healthy diets and consumption practices and to recognize the important contribution of land and aquatic foods, small-scale and family farmers, fishers, aquaculture producers, forest-dependent people and agrifood system workers, especially rural women, in ensuring food security and nutrition. Such transformation requires government-led actions that are driven by science-based evidence and the adoption of new technologies and innovations, while building on indigenous and traditional knowledge.

Ensure national ownership, commitment and leadership. Countries should lead long-term structural transformation of agrifood systems through the identified national pathways, matching political commitment with concrete actions and adequate funding. Transformative actions require a systemic approach aimed at connecting producers – especially small-scale producers, family farmers, fishers and aquaculture producers – to markets and food trade, as well as to consumers, particularly the most affected and vulnerable. Agrifood systems must respond to specific country needs and contexts, especially for SIDS, LDCs and LLDCs. Furthermore, ensuring open markets and trade for the movement of food, fuel, fertilizer and other agricultural inputs and outputs is an important catalyst to transform agrifood systems and achieve the SDGs.

Provide timely response and adequate social protection, safeguard livelihoods and build resilience to address short-term needs and take the necessary steps towards inclusive rural transformation and longer-term sustainable development.

Use climate-smart approaches, nature-based solutions, bioeconomy innovations and agroecological measures. Agrifood systems can improve their capacity to mitigate and adapt to the impacts of the climate crisis, enhance biodiversity, store carbon and reduce emissions, food loss and waste in order to increase sustainable productivity. Agrifood systems need to work for people and the planet, delivering food security and nutrition for all, creating livelihood opportunities, keeping within the 1.5 degree Celsius global climate target and ensuring the sustainable use of natural resources.

Manage natural resources sustainably and restore ecosystems. One third of the world’s agricultural land is degraded. Making production systems...
Promote gender transformative actions to address the structural barriers women face in agrifood systems. This will require not only addressing gendered resource constraints in work, productivity, assets, and services during shocks, such as extreme climate conditions, conflicts, and the COVID-19 pandemic, but also addressing informal discriminatory norms and formal policies and laws that perpetuate gender inequality. Tackling gender inequalities in agrifood systems and empowering women is essential for women’s well-being and has a positive impact on agricultural production, food security and healthy diets.

Empower youth to accelerate the sustainable transformation of agrifood systems. Facilitating access to resources and capacity development opportunities is vital for enhancing the potential of youth to lead innovation. Creating new, decent jobs in agriculture and enabling policies at the local, national, and global levels are also crucial to empowering rural youth. Providing these opportunities can help the next generation of leaders transform agrifood systems towards a more sustainable and equitable future.

Increase participation of vulnerable people and communities. Youth, women, Indigenous Peoples, rural farmers and other vulnerable groups must be involved at all stages of identifying and implementing measures to transform agrifood systems in order to achieve the SDGs.

Strengthen transformative partnerships. Partnerships are key to agrifood transformation. Collaborations across sectors, partners, and geographies are necessary to address complex global challenges. By working with governments, science and research institutions, extension services, cooperatives, producer organizations, civil society and marginalized communities and building on the momentum of global processes such as the Food Systems Summit+2 Stocktaking Moment, SDG Summit and the Summit of the Future, partnerships can create opportunities for all to participate in agrifood systems, support sustainable agriculture and rural transformation and improve livelihoods while addressing social inequalities across agrifood systems.

Leveraging means of implementation

Promote a more ambitious and interlinked science-policy-society interface for evidence-based analysis and policy recommendations to support agrifood systems transformation. Recognize the entry points (human wellbeing and capabilities, sustainable and equitable economies, agrifood systems and healthy diets, energy decarbonization with universal access, urban and peri-urban development, and global environmental commons) identified by the Global Sustainable Development Report to accelerate progress towards the realization of the 2030 Agenda, as well as the levers to bring about transformation in these entry points (governance,
Harness science, technology and innovation. Facilitating an enabling policy environment that considers the needs, priorities, knowledge and contributions of small-scale and family farmers, fishers, aquaculture producers, Indigenous Peoples and forest-dependent people is essential to unleash the potential of science, technology and innovation, as well as to facilitate transformative partnerships among agricultural innovation system actors.

Enhance the collection of and access to open statistics/data to monitor SDG progress, and collaborate on alternative/Big Data sources. Call for collective and strengthened collaboration between countries and non-state actors to identify and build national capabilities for collecting and publishing statistics/data, especially those that monitor progress towards the SDGs. Additionally, encourage the use of alternative data sources, such as the FAO Hand in Hand Geospatial system, for producing timely statistical indicators.

Repurpose and amplify financial support to transform agrifood systems. Countries should explore ways to repurpose agriculture, forestry and fisheries producer support by optimizing the use of scarce public resources and redirecting it towards investments in public goods and services for sustainable agrifood systems, and building on existing agrifood systems investment and finance plans, compacts and processes. Working in partnership for innovative blended finance, and ensuring synergies with vertical funds is essential to accelerating action and increasing access for the poorest and most vulnerable countries and people.

Promote longer-term structural, predictable, accessible and affordable financing. Call on countries to establish a Food Finance Architecture to meet the challenges of agrifood systems transformation, both as additional investments as well as curbing financial resources lost in environmental, social and economic costs due to the way current agrifood systems operate.

Address the public debt-crisis and its impact on agrifood systems by providing financing to support country responses to the global food crisis and helping them transform their agrifood systems.

Make more use of UN financial mechanisms. Enlarging the Joint SDG Trust Fund window on agrifood systems, ensuring scaled-up investments in sustainable agrifood systems under the UN Secretary-General’s SDG Stimulus and reforming the global financial and debt architecture to increase investments and avert cost-of-living crises driven partially by hiking food prices.
FAO Key Messages
SDGs under Review

SDG 6: Clean Water and Sanitation
Integrated water resource management and inclusive water governance are critical priorities for transformative change towards sustainable agriculture. They are needed to address the impacts of water scarcity, droughts and floods and to enhance incomes, while protecting natural resources. They require political will, adaptive policymaking, and investment.

Meaningful engagement with farmers, pastoralists, foresters and smallholders, who are directly involved in the management and conservation of water in agricultural landscapes, is essential to promote adaption and the uptake of innovation.

With current trends in natural resource depletion indicating that production from rainfed and irrigated agriculture is operating at or over the limit of sustainability, urgent action is necessary.

SDG 7: Affordable and Clean Energy
By 2050, feeding a global population of almost 10 billion will require a radical transformation in how food is produced, processed, traded and consumed. Access to energy for all, at every stage of agrifood system, is a critical dimension of this transformation.

Energy and agrifood systems are deeply intertwined: 30 percent of all energy is consumed within agrifood systems and 33 percent of emissions from agrifood systems are the result of energy use. Both systems must be transformed in a fair, sustainable, and inclusive manner to meet current and future needs.

Almost 70 percent of energy consumed by agrifood systems occurs in transport, processing, packaging, shipping, storage and marketing. With an estimated one-third of food lost or wasted during these processes, 38 percent of the energy used in the sector is equally wasted.
Promoting investment in clean energy solutions and adopting new holistic approaches such as integrated food-energy systems and the Water-Energy-Food nexus, which minimize competition and leverage synergies in water and land use, can directly advance energy and food security, while also contributing to job creation, gender equality and climate resilience and adaptation. Additional solutions include improving access to stable, affordable and clean energy services, strengthening linkages between energy and agrifood systems, as well as with health, while promoting innovation and new technologies for energy and resources efficiency.

**SDG 9: Industry, Innovation and Infrastructure**

Global agricultural production must increase by at least 40 percent by 2050 to meet food needs with limited resources. Yet, current agricultural production systems lack integration, optimization and diversification and rely on the intensive use of inputs and natural resources.

To address these challenges, it is critical to implement evidence-based policy dialogue and governance analysis that incentivize the uptake of green innovations, set sustainability standards and develop markets for sustainable products. This includes creating enabling environments for innovators to access knowledge, financial services, markets and opportunities for value addition and investments.

If applied systematically, technological innovation in breeding, genetics and the optimized use of inputs can scale up productivity while enhancing sustainability. Digital technologies also provides real-time information to farmers, ensuring product quality and reducing carbon footprint. Realizing this requires investment in infrastructure for rural broadband and database management, as well as in e-skills among the rural population.

**SDG 11: Sustainable Cities and Communities**

More efficient, inclusive, resilient, and sustainable urban and peri-urban agrifood systems are needed to address urban poverty, food insecurity and malnutrition, enable healthy diets and catalyse inclusive and sustainable rural transformation.

Achieving this goal requires national and local partners to implement enabling policies and programs and scale-up actions and investments. It also requires strengthened capacity within local and national governments to mainstream urban agrifood systems development and nutrition within legislative and planning frameworks. Many factors shaping agrifood systems operate beyond the urban scale and decisions made by cities and local governments, and have wide reaching implications.

The integration of agrifood systems in urban and territorial planning is a crucial strategy to ensure an integrated sustainable urban development that takes into account challenges such as food insecurity and all forms of malnutrition.
Engaging with urban populations and letting their voices be heard is also a key part of a sustainable urban food systems transformation centered on people. Consumers need to be informed so they can make sustainable food choices and decisions, including for prevention of food waste.

Gender equality plays an important role in urban food security and nutrition. Understanding causes and forms of gender inequalities in urban agrifood systems and their governance mechanisms, and identifying adequate ways of overcoming them, is crucial to ensuring food security and improved nutrition for all. Limited rural employment opportunities, particularly among young people and women, is one of the main drivers of migration to urban areas, contributing to the decline of skilled labour and an aging population in rural areas.

**SDG 17: Partnerships for the Goals**
Partnerships are key to transforming agrifood systems to be more sustainable, equitable and resilient. Collaboration across sectors, stakeholders, and geographies are necessary to address the complex challenges facing our global agrifood systems. Harnessing science, technology and innovation and creating an enabling policy environment for unleashing the potential of innovations and facilitating transformative partnerships among agricultural actors is critical for accelerating sustainable and inclusive agrifood systems transformation. Transformative partnerships are sustainable, systemic, long-term and catalyse impact at scale.

The current public debt-crisis and its impact on agrifood systems in many countries must be addressed through the provision of financing to support the management of the global food crisis and facilitate investment in local agrifood systems transformation. Additionally, working in partnerships for innovative blended finance and ensuring synergies with vertical funds is essential to increase access for the poorest and most vulnerable countries and people.

There is a need to repurpose support to small-scale producers at country level, by optimizing the use of scarce public resources and redirecting it towards investments in public goods and services for sustainable agrifood systems. Small-scale farms are providing hope, with innovative, tailored and locally-adapted solutions that can address global challenges and help the transition to resilient and inclusive agrifood systems, that leave no one behind.

Trade can also be a tool to support the transformation of agrifood systems and to achieve the SDGs.

Enabling longer-term structural, predictable, accessible and affordable financing is crucial. Establishing a Food Finance Architecture could assist countries tackling the challenges of agrifood systems transformation, both through securing additional investments as well as curbing lost financial resources caused by the environmental, social and economic costs of current agrifood systems operations.