



POLICY RECOMMENDATIONS

ON

***AGROECOLOGICAL AND OTHER INNOVATIVE APPROACHES FOR SUSTAINABLE
FOOD SYSTEMS THAT ENSURE FOOD SECURITY AND NUTRITION***

ZERO DRAFT

This Zero Draft, prepared with the support of a Technical Consultant and the Technical Focal Points nominated by FAO, IFAD, WFP and the Alliance Bioversity-CIAT, incorporates:

- i) feedback on the Rapporteur's Note discussed in an Open Meeting on 27 January 2020;
- ii) written comments received in early February 2020;
- iii) written inputs received through an open call launched in November 2019, and:
- iv) the outcomes of Plenary discussion during CFS 46 in October 2019.

Relevant documents are available at <http://www.fao.org/cfs/workingspace/workstreams/agapp/en/>

CFS stakeholders are invited to submit written inputs on the Zero Draft to cfs@fao.org, focusing on the substance of the document and concrete proposals for improvement **by 18 March 2020**.

- 1) The 2030 Agenda for Sustainable Development calls for “bold and transformative steps which are urgently needed to shift the world on to a sustainable and resilient path.”¹ Agriculture (crop and livestock production, aquaculture, fisheries and forestry) and food systems² are key to this transformation. Globally, 820 million people are undernourished and two billion people are overweight. At the current pace, it is likely that targets in relation to SDG 2 will not be achieved in many parts of the world.³ Many producers and food systems workers face unsatisfactory labour conditions and compensation. An estimated one third of all food produced globally is lost or goes to waste. **Unsustainable agricultural production practices and climate change** are increasing the pressure on natural resources and biodiversity, while productive land continues to be lost to degradation.⁴
- 2) There is a diversity of food systems which exist on a continuum, can be considered at different scales, and often co-exist within the same country.⁵ The Committee on World Food Security (CFS) has recognized as a general guide three broad food system types⁶ each facing particular opportunities and challenges, notably in relation to labour availability and ecological conditions. All food systems have the potential to contribute further to sustainability and food security and nutrition. Achieving this potential requires embarking on **transition** pathways that respond to their conditions. Three intertwined operational principles define **transition pathways toward** sustainable food systems for food security and nutrition: (i) improving resource efficiency; (ii) strengthening resilience; and (iii) securing social equity/responsibility.⁷
- 3) Innovative approaches are required to bring about food system transformations. Innovations include changes in practices, norms, markets and institutional arrangements, which may foster new networks of food production, processing, distribution and consumption that may challenge the status quo.⁸ Innovative approaches for sustainable food systems that enhance food security and nutrition must contribute to the three dimensions of sustainability (economic, social and environmental) in such a way that they strengthen the four pillars of food security and nutrition (availability, access, stability and utilization). Innovations, which include but are not limited to technologies, must be appropriate to the context, affordable, accessible and respond to the needs of family farmers. Harnessing innovative approaches with this aim will not happen without major shifts in policies at international, national and local levels.
- 4) Numerous innovative approaches exist which can be characterized along an axis from increasing efficiency of input use toward re-designing multiple aspects of agriculture and food systems, including markets and governance. They include, for example, the following approaches and technologies:

¹ UN (2015) Transforming our world: the 2030 Agenda for Sustainable Development

² HLPE (2014) defines a food system as “the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes”.

³ UN General Assembly Resolution on Agriculture development, food security and nutrition. 2019. A/RES/74/242.

⁴ A number of global assessments provide evidence of these challenges, including: FAO. 2019. The State of The World’s Biodiversity for Food and Agriculture; IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services; IPBES. 2018. Assessment report on Land Degradation and Restoration; IPCC. 2019. Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

⁵ HLPE. 2017. Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

⁶ Final report, 44th Session of the Committee on World Food Security.

⁷ HLPE. 2016. Sustainable agricultural development for food security and nutrition: what roles for livestock? A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome.

⁸ HLPE. 2019. Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

agroecology,⁹ biotechnology, digitalization, agroforestry, permaculture, precision agriculture, mariculture, climate-smart agriculture, organic agriculture, protected agriculture and sustainable food value chains.

- 5) A given innovative approach may be more or less relevant to a specific context as a function of the nature of the challenge and context faced.¹⁰ Specific and distinct transition pathways toward sustainable food systems should be implemented for different types of agriculture and food systems, adapted to their contexts and to local needs and expectations. There is a spectrum of different pathways and approaches, which include agroecological approaches and sustainable intensification approaches.
- 6) Among the most critical and far-reaching current innovative approaches is digitalization, presenting a new paradigm of innovation. Digital technologies, services, products, and skills are fundamentally transforming modern economies and entire systems of production, management, and governance at a rapid pace. Digitalization clearly has the potential to play an increasingly important role in achieving global food security and improving livelihoods especially in rural areas, provided that access to such technologies exists. Digitalization can support smallholders in improving their resource management and competitiveness. It can also lead to stronger inclusion of youth by creating more appealing jobs in rural areas, and preventing the migration of rural youth to cities.
- 7) However, digitalization can also create risks, particularly for the vast majority of farmers who are smallholders. These include deepening structural inequalities through the digital divide, and compromising data ownership and privacy when accumulating big data, especially for those less able to defend their interests such as smallholder farmers. Lack of transparency and trustworthiness around issues such as data ownership, privacy and liability contribute to a range of challenges, which could be addressed by a strong regulatory policy framework to create a safe and level playing field for the sector.¹¹
- 8) While there are no one-size-fits-all solutions, all governments must make efforts to enhance the environmental, social and economic sustainability of food systems in accordance with national and international obligations. Key among these is the right to food, which can serve to guide efforts to achieve food security and nutrition for all. Impact assessments are crucial for understanding the impacts of innovative approaches on food system sustainability, food security and nutrition and the right to food.
- 9) The following recommendations have been elaborated building on the main findings of the High Level Panel of Experts on Food Security and Nutrition (HLPE) report on “Agroecological and other innovative approaches for sustainable food systems that ensure food security and nutrition”. The recommendations also build upon, and complement in a synergistic manner existing CFS policies and instruments,¹² as well as relevant global instruments and processes such as the UN Decade on Family Farming (UNFFF), the UN Decade on Ecosystem Restoration, the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP), and the upcoming Global Plan of Action on Biodiversity for Food and

⁹ The FAO Council has characterized agroecology through ten elements (FAO. 2019. The Ten Elements of Agroecology – CL 163/13 Rev. 1).

¹⁰ See, for example, FAO Conference Resolution 7/2019, Further integration of sustainable agricultural approaches, including agroecology, in the future planning activities of FAO.

¹¹ FAO. 2020. Realizing the potential of digitalization to improve the agri-food system: Proposing a new International Digital Council for Food and Agriculture. A concept note. Rome.

¹² In particular, the Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of the national food security, the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT), the Framework for Action for Food Security and Nutrition in Protracted Crises, and the Principles for Responsible Investment in Agriculture and Food Systems.

Agriculture and the UN Food Systems Summit.

POLICY RECOMMENDATIONS

I. Lay policy foundations for transforming food systems to ensure sustainability and enhance food security and nutrition through agroecological and other innovative approaches

States should:

- 10) **Ensure** that public policies, budgets and **incentives** support sustainable food systems in a coherent manner, adapting policies and re-directing budgets and incentives based on impact assessment findings.
- 11) Ensure that policies promote innovations that are appropriate, affordable and acceptable and contribute to the three dimensions of sustainability – economic, social and environmental – in such a way that they strengthen the four pillars of food security and nutrition (availability, access, stability and utilization).
- 12) Strengthen the role of the public sector in monitoring and regulating **innovative approaches**, including technologies, which impact sustainable food systems, food security and nutrition and the right to food.
- 13) Develop strategies to **support transitions towards** sustainable food systems that ensure food security and nutrition through agroecological and other **innovative approaches**, including through the definition of long-term goals at national and regional levels, ensuring policy coherence across sectors, with the participation of public administrations and relevant stakeholders involved in agriculture, forestry, health, gender, education, finance, trade, energy and environment.
- 14) Promote inclusive and participatory governance arrangements of food systems, cross-sectoral involvement and the participation of all relevant stakeholders in accordance with their roles, rights and responsibilities.

Area-based planning for diversified and resilient food systems

- 15) Support the use of participatory and inclusive territorial management planning to identify and foster locally sustainable practices to protect common natural resources at different levels (landscape and community, national, regional and global), and to strengthen local, **national and regional** markets.
- 16) Build social capital and inclusive public bodies at landscape-scale so that policy processes are implemented at a scale where it is possible to govern and manage the provision of, and the trade-offs among, key ecosystem services (provisioning, regulating, supporting and cultural).
- 17) Where rural employment opportunities are needed, consider the potential of agroecological approaches to preserve existing jobs and promote decent job creation.
- 18) **Ensure** legal protection of customary access and tenure rights for small-scale food producers, including women, youth, the landless, indigenous peoples and food insecure people, in line with the CFS's Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT).

II. Support transitions to diversified and resilient food systems

States should:

Biodiversity and ecosystem approach¹³ mainstreaming for the conservation and sustainable use of biodiversity

- 19) Promote diverse and resilient agroecosystems that assemble soil, water, genetic resources (crops, livestock, trees and aquatic species), and other elements in spatially and temporally diversified schemes, favoring natural processes and biological interactions that optimize synergies so that diversified production units are able to sponsor their own soil fertility, soil water, crop protection, animal health and welfare, and productivity.
- 20) Optimize the use of agrochemicals and promote innovative systems that reduce over-usage and dependency. Strengthen and enforce regulations on the use of agrochemicals in order to protect and improve human and environmental health.
- 21) Support the enormous contribution that family farmers have made and continue to make for the conservation and development of genetic resources by promoting Farmers' Rights and benefit-sharing, as acknowledged in the texts of the International Treaty on Plant Genetic Resources for Food and Agriculture and the Convention on Biological Diversity and by protecting Farmers' Rights to save, use and exchange their seeds.
- 22) Encourage sustainable consumption patterns that maintain or enhance, rather than deplete, natural resources and support circular economies.
- 23) Promote innovative approaches to the reduction of food loss and waste (FLW) with the support of the private sector and civil society.

Sustainable healthy diets

- 24) Promote sustainable healthy diets¹⁴ through enhanced diversification of production and food and nutrition education, bearing in mind local context and culture, including indigenous and traditional food systems.
- 25) Support low-income consumers and family farmers through public procurement policies (including for school feeding programmes, other safety nets, food assistance and public regulatory and preparedness mechanisms) based on locally and sustainably produced food, and integration of social protection programmes with capacity development for sustainable agricultural production.
- 26) Promote appropriate food labelling, in line with applicable national and international standards, to enable conscious and informed consumer choices leading to sustainable healthy diets.

Markets for sustainable food systems

- 27) Support innovative approaches in short food supply chains, including adequate infrastructure, participatory guarantee systems (in compliance with public policy and safety standards), and digital technologies with appropriate safeguards.
- 28) Support small and medium sized enterprises that provide goods and services for diversified and resilient food systems.

¹³ The ecosystem approach was officially endorsed in May 2000 at the fifth meeting of the Conference of the Parties to the Convention on Biological Diversity, through Decision V/6. It has been further implemented through Decision VII/11.

¹⁴ FAO and WHO. 2019. Sustainable healthy diets – Guiding principles. Rome. Definition currently being discussed in the context of the CFS policy convergence process on the development of Voluntary Guidelines on Food Systems and Nutrition.

- 29) Promote local, regional and global markets that contribute to sustainable food systems that ensure food security and nutrition.

III. Strengthen comprehensive monitoring and impact assessments to ensure that innovative approaches support sustainable food systems that enhance food security and nutrition

States should:

- 30) Apply system-wide assessment frameworks to assess the performance of food systems and their economic, social and environmental impacts, including on food security and nutrition and the right to food, while considering the following principles that shape transitions to sustainable food systems for food security and nutrition: regenerative production, recycling and efficiency, animal health, synergy, diversity, integration, climate change adaptation and mitigation, knowledge production and dissemination, cultural coherence, human and social values, connectivity, governance, empowerment and participation.¹⁵
- 31) Assess the impacts of innovative approaches on the sustainability of food systems, food security and nutrition, and the right to food.
- 32) Assess the impacts of public incentives on the sustainability of food systems and food security and nutrition for all.
- 33) Assess the environmental and social (including public health) externalities, both positive and negative, of agriculture and food systems, for example using true cost accounting.

IV. Strengthen support for research, training and education and reconfigure knowledge generation and sharing to foster co-learning

Transdisciplinary research

Public research institutions should:

- 34) Encourage integration of transdisciplinary science, integrating global scientific knowledge and local, traditional and indigenous knowledge, including producers' and traders' knowledge, in participatory innovation processes that support transitions toward sustainable food systems.
- 35) Develop and support transdisciplinary and participatory action research that fosters co-learning between practitioners and researchers, and horizontal dissemination of experience among practitioners, such as farmer-to-farmer networks and communities of practice, taking advantage of appropriate digital technologies to facilitate wider networking.

Co-learning for innovation

- 36) Strengthen co-creation and sharing of knowledge, including local and indigenous knowledge, in participatory innovation processes to develop and implement agroecological and other innovative practices to transition to sustainable food systems.
- 37) Strengthen exchanges and networking between actors with long-term knowledge and experience of living in specific climatic conditions with those actors who need to learn to adapt to those conditions.
- 38) Protect and promote food and agricultural heritage systems as an important source in the

¹⁵ HLPE. 2019. Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

reconfiguration of knowledge generation and research and recognize the role of women in such knowledge accumulation.

- 39) Identify knowledge gaps and, in particular, support research in climate change adaptation and mitigation, biodiversity, nutritional quality and nutrient content of different food products, creating and maintaining knowledge and know-how at the territorial level, strengthening agency of family farmers, and financial literacy and business management skills for farmers.
- 40) Strengthen public research to assess the impact of the use of agrochemicals on human, animal and environmental health.
- 41) Develop and apply research protocols to address power imbalances and conflicts of interest in relation to the generation, validation and communication of knowledge about food production and processing, by valuing different sources of knowledge and bridging gaps between knowledge generated and transmitted through social movements on the one hand, and research on the other.

Capacity development

- 42) Encourage explicit coverage of “transitions to sustainable food systems” in school and university curricula, integrating hands-on, experiential learning.
- 43) Strengthen training programmes for agricultural extension and public health workers, including on the contribution of agroecological and other innovative approaches to nutrition and human, animal and environmental health.

Investment in research, training and education that supports transitions to sustainable food systems

- 44) Increase responsible investment in research, formal and informal training and education at all levels to support agroecological and other innovative approaches, ensuring that context-specific needs and capacities and the needs of agricultural producers, including women and youth, are prioritized.
- 45) Redirect current investments in research and development towards enhancing diversification and resilience of sustainable food systems.
- 46) Prioritize and strengthen public research to address the needs of family farmers, including women and youth.

V. Strengthen stakeholder engagement, empower vulnerable and marginalized groups and address power inequalities in food systems

States should:

Inclusive and democratic decision-making

- 47) Support inclusive and democratic decision-making mechanisms at all levels in food systems and take specific measures to ensure the participation of rights holders, including marginalized and vulnerable groups most at risk of food insecurity and malnutrition, and other stakeholders.
- 48) Support the role of smallholder, peasant, indigenous, and family farmers, including women and youth, as central agents in transitions to sustainable food systems that ensure food security and nutrition, including through the progressive realization of the right to food.

Women and youth

- 49) Invest in training programmes and horizontal training platforms on agroecological and other innovative approaches which are knowledge intensive, including digital technologies with appropriate safeguards.
- 50) Strengthen responsible investment and provide incentives for women and youth in community-led

small and medium sized enterprises that support sustainable food systems.

- 51) Promote youth engagement in production, processing and marketing activities, including **green jobs**, as a desirable decent employment opportunity for youth.
- 52) Invest in rural infrastructure and services to reduce gaps between rural and urban areas and to make rural life attractive for youth.
- 53) Ensure adequate attention to the needs of young women and girls.
- 54) In line with the UN Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), support gender transformative policies, programmes and actions that support women's autonomy and self-determination, challenge the underlying causes of gender inequality within food systems with respect to norms, relationships and institutional structures, in particular by ensuring that laws and policies ensure equal participation between men and women, equal income, shared power and access to resources and public services, and ending gender violence and sexism.

Agency, power imbalances and conflicts of interest

- 55) Strengthen food producers' and consumers' associations, organizations and cooperatives that build capacities, create and exchange knowledge to facilitate the adoption of agroecological approaches to foster **transitions toward** sustainable food systems.
- 56) Establish mechanisms to address power imbalances and conflicts of interest in relation to food production, processing and marketing, ensuring appropriate consultation mechanisms.
- 57) Assess impacts of concentration of market control in the agriculture and food sectors on the agency of food system actors and the impacts on their right to food.

Next steps

In order to operationalize recommendations, the following actions are addressed at relevant inter-governmental institutions.

CFS should:

- 58) Transmit for information to the UN Secretary General and the UN Food System Summit Advisory Committee, the CFS policy recommendations and the HLPE report on Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition.
- 59) **Request** the HLPE to examine how existing comprehensive assessments of food systems,¹⁶ including metrics and indicators, can best guide **food system transitions** and present its findings as a contribution to the UN Food Systems Summit.
- 60) Taking into account that the global biodiversity framework is being renewed in 2020 by the Convention on Biological Diversity (and 2020 is also the International Year of Plant Health), organize a high-level dialogue on the contributions of biodiversity to sustainable food systems as a contribution to the UN Food Systems Summit; invite the cooperation of FAO and specifically its Commission on Genetic Resources for Food and Agriculture, the International Treaty on Plant Genetic Resources for Food and Agriculture, the FAO Technical Committees and the Convention on Biological Diversity.
- 61) Support national governments in reviewing the impacts of policies and **incentives** on the sustainability of food systems by organizing a special event to share national experiences and draw lessons.

¹⁶ These include SDG monitoring efforts, the TEEB-AgriFood framework, and the FAO Tool for Agroecology Performance Evaluation (TAPE).

- 62) Ensure that the CFS work stream on Data Collection and Analysis Tools considers data needs in relation to economic, environmental and social dimensions of food systems, considering the principles that shape **transitions to** sustainable food systems for food security and nutrition (paragraph 16).

CFS, in collaboration with the RBAs, should:

- 63) **Invite the World Trade Organization (WTO) to co-organize a dialogue** during the CFS plenary in 2021 on how trade agreements can better support **transitions to** sustainable food systems that ensure food security and nutrition.

FAO is invited to:

- 64) Support at national level data collection on sustainable food systems and documentation of lessons learned.
- 65) Assess and document the contribution of agroecological and other innovative approaches to sustainable food systems that enhance food security and nutrition in collaboration with member countries.
- 66) Consider and develop options for promoting digitalization for sustainable food systems and enhanced food security and nutrition while mitigating risks by developing appropriate safeguards.
- 67) Explore options for developing mechanisms to assess the system-wide impacts (economic, social and environmental) of new innovations, including digitalization, on the sustainability of food systems and on their capacity to deliver food security and nutrition and the right to food.

FAO and IFAD are invited to:

- 68) Organize a special event to consider opportunities and challenges in promoting agroecological and other innovative approaches for family farmers within the framework of the UN Decade on Family Farming.