

DRAFT Recommendations from the Global Conference on Sustainable Plant Production

FAO HQ on 2 to 4 November 2022

(Updated 14 March 2023)

The Food and Agriculture Organization of the United Nations (FAO) hosted the first ever Global Conference on Sustainable Plant Production with theme “Innovation, Efficiency and Resilience” at the FAO Headquarters in hybrid format from 2 to 4 November 2022. The conference attracted over 4500 participants from FAO Members, stakeholders and partners.

The objective of the conference was to provide a neutral forum for FAO Members, farmers, scientists, development agencies, policy makers, extension agents, civil society, opinion leaders and the private sector to engage in dialogues on **innovation** that creates **efficient** plant production systems with **resilience** to biotic and abiotic stresses, climate change, natural hazards and geopolitical disruptions. Strategically, the event was intended, through the implementation of the FAO Strategic Framework 2022-31, to **support the 2030 Agenda** for the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for *better production, better nutrition, a better environment and a better life*, leaving no one behind, to contribute to achieving the SDGs, especially SDGs 1, 2, 8 and 12.

The opening speech of the Director General of FAO, Dr QU Dongyu preceded eight keynote addresses. The closing plenary session included a report on the conference recommendations and a high-level ministerial segment. In between these plenaries, there were twelve sub-sessions, two for each of the six themes: Seed Systems, Field Cropping Systems, Protected Cropping Systems, Natural Resource Management, Integrated Pest Management, Mechanization and Digitalization. The seventh theme, Farmers and Enabling Environment, was held as a plenary session.

To maintain momentum, consensus was reached on strategic priorities and action-orientated recommendations to develop and implement sustainable plant production systems towards 2031, to be adapted to local contexts. Based on submissions before, during and after discussions at the conference, the Steering Committee of the conference validated the following 20 recommendations:

Thematic Areas

Farmers and Enabling Environment

1. *Adopt* policies and investment mechanisms to implement recommendations formulated by the global conference on sustainable plant production, to transition to systems that are culturally appropriate, beneficial to local societies, economies and environments, leaving no one behind.
2. *Enhance* capacities of farmers to transition towards sustainable plant production, by increasing access for all to knowledge, technologies, inputs public and private services with particular focus on participatory extension benefitting small-scale farmers, women and youth.

Seed Systems

3. *Support* Governments, the private sector and civil society organizations to conserve and characterise genetic diversity and to develop productive and locally adapted plant varieties that can meet future demands for high-quality and plentiful food despite increased occurrence of pests and diseases, limited natural resources and unpredictable changes in weather and climates.
4. *Ensure* farmers' access to high quality and disease-free seed and planting materials for all types of farming systems, through the development of regulatory frameworks, public-private partnerships, stronger farmer and market representation, and effective assurance mechanisms.

Field Cropping Systems

5. *Innovate* cropping systems, based on traditional and new knowledge, use of adapted varieties of local and global crop species, to increase food production and better protect natural resources, biodiversity and the environment, while creating decent jobs both on and off-farm.
6. *Develop* solutions to enhance cropping system resilience to stresses caused by pests, diseases, climate fluctuations and socio-economic factors by engaging appropriate partnerships and markets to improve farmer livelihoods and incentivize protection of biodiversity and natural resources.

Protected Cropping Systems

7. *Develop* applicable business cases and *facilitate* local market development, to optimize protected cropping systems and ensure farmers' access to inputs, services and technologies that increase yields and climate resilience, while reducing demands for natural resources.
8. *Support* the transition to profitable and productive urban and peri-urban horticultural systems based on durable access to land and inputs, and efficient use and recycling of resources, to optimise provision of safe, fresh and nutritious foods.

Natural Resource Management

9. *Optimize* resource use efficiency by adopting integrated and collaborative approaches that leverage both local knowledge and scientific methods, to ensure soil health and sustainable management of water and nutrients.
10. *Develop* and *promote* sustainable cropping systems that harness (agro-) ecological processes and interactions, integrate local socio-cultural values, promote economic inclusion and environmental adaptation, to strengthen farmers' livelihoods, community resilience and ecosystem preservation.

Integrated Pest Management

11. *Reduce* risks from biotic threats by improving surveillance, diagnostics and modelling for better understanding of the effects of climate change and for more efficient tracking and

predicting of the movements of transboundary pests and pathogens; developing guidance on strategies for management, risk reduction and plant protection.

12. *Develop, scale up and promote biological and ecology-based methods, technology packages and digital tools to control critical pests and diseases while minimizing pollution risks.*

Mechanization and Digitalization

13. *Develop and promote innovative business models that give access to Sustainable Agricultural Mechanization and power sources, and that provide multiple services and commercial benefits to small-scale farmers, while offering climate-resilient solutions and empowering women and youth.*
14. *Create an equitable digital ecosystem that leverages big data and digital solutions to give farmers, regardless of their knowledge, skills, location and resources, access to a range of tools that respond to their needs and support them in achieving financial independence, environmental sustainability, and social inclusion.*

Crosscutting Themes, applicable to all recommendations.

15. *Empower farmers, women and youth to be co-innovators with academic institutions, research organizations and the private sector, of technologies, practices, policies and business models facilitating the science- and evidence-based transition to more beneficial, productive, sustainable, healthy, resilient and socially inclusive agrifood systems.*
16. *Address climate change by enhancing **resilience** of plant-based agriculture systems by improving adaptive capacity, reducing vulnerability and greenhouse gas emissions, avoiding deforestation and increasing carbon sequestration.*
17. *Improve the **efficiency** of plant production and agrifood systems to increase productivity and produce more and better plant-based nutritious food, with a smaller environmental footprint.*

Call to Action

18. *Design, refine and bring to scale integrated and inclusive development approaches by brokering partnerships involving farmers, the market, public and private sectors to build capacity through participatory learning and strong governance.*
19. *Establish synergistic technical networks that involve diverse actors with multi-disciplinary approaches to leverage their unique strengths and support the transition to sustainable plant production.*
20. *Facilitate coordination among key stakeholders to collaboratively establish priorities, mobilize resources to test, adapt and scale up innovative approaches.*

Governments, development partners and all stakeholders are encouraged to implement the strategic actions outlined above to support sustainable plant production. FAO encourages wide publication of these recommendations through appropriate electronic and print media and their incorporation into advocacy materials. FAO also requests feedback from stakeholders on the successes and failures of implementing these strategic actions.