



Concept Note

FAO Global Conference on Sustainable Plant Production

Theme: Innovation, Efficiency and Resilience

(25 August 2022)

Proposal

The Food and Agriculture Organization of the United Nations (FAO) is organizing the **Global Conference on Sustainable Plant Production (GPC)** with the theme “*Innovation, Efficiency and Resilience*”, from 2 to 4 November 2022. The GPC will provide a neutral forum for FAO Members, farmers, scientists, development agencies, policy makers, extensionists, 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. Tomorrow’s agriculture will need to produce more food with less environmental footprints, and contribute to strong local and diversified agrifood systems that are more resilient to shocks and disruptions.

Rationale

Globally, in 2021, over two billion people lacked regular access to safe, nutritious and sufficient food, in keeping with the continuing trend of worsening food insecurity and malnutrition. More concerning still, the COVID-19 pandemic has coalesced with the effects of climate change and an ever-increasing global population to confound efforts to attain universal food security and nutrition, thereby jeopardizing the achievement of the Sustainable Development Goals (SDGs). The conflict in Ukraine has further exacerbated the situation, pushing the world closer to the brink of a global food crisis. Urgent action is therefore required to ensure that agrifood systems become more diverse, productive and resilient to shocks and stresses. It is particularly important to address food insecurity, malnutrition and climate-risk in the Least Developed Countries and in the Small Island Developing States. In these regions, land and natural resources are increasingly limited and degraded, while their rapidly growing populations are disproportionately vulnerable to the effects of climate change and global supply chain disruptions.

FAO seeks to reverse these trends through the implementation of its Strategic Framework 2022-31 to transform 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, thus contributing to achieving the SDGs, especially SDGs 1, 2 and 12. Additionally, the 170th session of the FAO Council endorsed two new thematic strategies – FAO Strategy on Climate Change 2022-2031 and FAO Science and Innovation Strategy 2022-25 - to guide FAO’s work over the next decade. These strategies will drive the implementation of FAO’s Strategic Framework 2022-31, which steers FAO’s efforts to transform agrifood systems as envisioned by the 2030 Agenda for Sustainable Development.

The promotion of sustainable plant production will enable more food to be produced to meet increasing demand, without exerting further pressure on the environment, such as through the application of more fertilizers and pesticides and/or converting more land to agriculture. Sustainable plant production systems must also promote greater resilience to climate change and protect biodiversity through integrated approaches (such as agroecology). Sustainable plant production systems must be farmer-centric, placing the farmer’s needs, knowledge and constraints at the core of the solution and acknowledging the need for a multiplicity of options to be available to respond to complex and heterogeneous production environments.

In 2021, the FAO Global Conference on Green Development of Seed Industries provided the organization with a means to synthesize validated evidence for enhancing farmers' access to quality seeds and planting materials of improved crop varieties that meet their needs and those of other end users. However, genetic gains, i.e. the improvements realized from the adoption of improved crop varieties, will only translate into sustainable crop production systems when combined with appropriate agronomic and plant health practices and supporting services. It is for this reason that FAO is organizing this follow-up conference with a broader focus to encompass all the aspects required for sustainable crop production systems. Just as with the Global Seed Conference in 2021, FAO will synthesize from the validated evidence presented and debated at the forthcoming GPC context, specific interventions that enable the optimization of production efficiencies combined with the minimization of the deleterious effects of crop production systems on the environment. These will feed into the realization of the aforementioned *four betters* of the FAO Strategic Framework 2022-31 – underscoring the operative word of the SDGs, 'sustainable': to generate incomes while protecting the environment and creating social equity.

For the proposed multi-theme conference, further evidence on how best to increase the use of quality seeds of superior crop varieties that are nutritious, pest and disease resistant, stress tolerant and input use efficient will be obtained through the seed systems theme. Similarly, through the theme of cropping systems management under field production and protected cultivation, evidence for requisite agronomic practices to improve crop productivity while diminishing the harmful over-use of agro-inputs will be identified, as will be the need to promote more holistic and integrated production systems. In a similar manner, the natural resource management theme will be a means to identify the practices leading to an optimal use of soil, water and nutrients to maintain productive and diverse ecosystems and when necessary, restore those that are degraded. The eventual dissemination of the evidence gleaned from the integrated plant pest management theme will result in the two-pronged effects of minimized crop yield losses and risk of pesticides. The mechanization and digitalization theme will generate evidence for the promotion of precision agriculture as a means to both increase production efficiencies and create decent jobs. Most importantly, the farmers and policies theme will discuss measures for improving governance and enabling environments while increasing farmers' access to extension and advisory services, inputs and technologies. To integrate these themes, farmers' perspectives will be maintained as a continuous thread across all sessions, elevating voices of producers from the Global South. Finally, each theme will place a common emphasis on systems, practices and technologies that create resilience to climate change, promote food and nutritional and security, and conserve biodiversity.

Objectives

The GPC will convene a wide spectrum of relevant stakeholders to debate and synthesize evidence on innovations that confer efficiency and resilience on the various components of sustainable plant production systems for possible scaling and adoption, in particular in food insecure countries, the core of FAO's work, with **four** objectives:

- i) **Raise** awareness of the contribution of sustainable plant production to implementing the FAO Strategic Framework 2022-31, to attain the SDGs at global, regional and national levels.
- ii) **Share** information and knowledge on the strategic direction and technical developments in sustainable plant production worldwide.
- iii) **Demonstrate** FAO's technical leadership and convening power to support its Members for sustainable plant production.
- iv) **Provide** a neutral platform and technical networks on sustainable plant production for demand-driven and context-specific multistakeholder dialogues.

Expected Outputs

The GPC will bring about **four** expected outcomes as follows:

- i) **Priorities established** for the targeted mobilization and pooling of scientific, technical and financial resources to achieve global sustainable plant production systems.
- ii) **Evidence debated and knowledge shared** through the creation and management of functional technical networks.
- iii) **A global knowledge product published** as an evidence-based guide to promote Sustainable Plant Production through the adoption of appropriate practices, partnerships and policies.
- iv) **A set of recommendations proposed** to guide active innovation for sustainable plant production worldwide.

Priority Actions

There are **four** actions to be taken in the lead-up to the GPC:

- i) **Establish** the governance structures for the GPC, envisaged to consist of a Steering Committee, Technical Advisory Panel (TAP) and the Conference Secretariat.
- ii) **Develop** an innovative and inspiring programme of keynote speakers and panelists, for opening plenary and thematic sessions, concluded with a high-level ministerial segment.
- iii) **Enhance** an engaging communication and outreach strategy for the GPC, including development of the website and brochure.
- iv) **Manage** the necessary logistical issues, including participation and the envisaged hosting of the GPC in a hybrid virtual/physical format.

There are **four** actions following the GPC:

- i) **Issue** a set of recommendations with a focus on innovation, efficiency and resilience of sustainable plant production to inform Members and global stakeholders.
- ii) **Publish** the GPC proceedings as a global knowledge product, to include a synthesis of keynote presentations, thematic session and discussions.
- iii) **Identify** the priority interventions and partnerships where FAO can support countries and regions to strengthen their sustainable plant production systems.
- iv) **Scale up** context specific sustainable plant production systems through the promotion and adoption of appropriate practices, partnerships and policies.

Programme Layout

It is envisaged that the two and a half day GPC will take place as a hybrid virtual/physical meeting at FAO headquarters in Rome, consisting of plenary sessions with keynote speakers, a series of parallel sessions (with presentations and interactive sessions) and a high-level ministerial segment. GPC thematic sessions will focus on seed systems, cropping systems management for field production and under protected cultivation, natural resource management, integrated pest management, mechanization and digitalization, and farmers and policies. Across all thematic sessions, dialogue will focus on innovation that creates efficient and ecologically sound plant production systems with resilience to stresses, climate change and natural hazards, and which respond to both farmer needs and market demands.

The GPC will aim to convene 100 to 200 participants in person, and over 2000 virtual participants, comprising senior policy-makers, representatives from countries and regions, farmer organizations, the scientific community, national research and extension, development organizations, the private sector, international finance institutions, donor agencies, civil society, opinion leaders and grassroots organizations.