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# COMMITTEE ON AGRICULTURE

**Twenty-eighth Session**

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**Outcomes of the Global Conference on Green Development of Seed  
Industries (4-5 November 2021)**

*Queries on the substantive content of the document may be addressed to:*

Mr Jingyuan Xia  
Director  
Plant Production and Protection Division (NSP)  
Tel. (+39) 06 570 56988

## I. Introduction

1. The Global Conference on Green Development of Seed Industries<sup>1</sup> was held on 4 and 5 November 2021 in a virtual format. Its overall objective was to provide a neutral forum for FAO Members and thought leaders to discuss evidence-based solutions to the problems that constrain farmers' access to quality seeds and planting materials of preferred productive, nutritious and resilient crop varieties. Strategically, the event was a means to identify priority interventions to implement relevant aspects of FAO Strategic Framework 2022-31, aimed at the transformation to more efficient, inclusive, resilient and sustainable agrifood systems for *better production, better nutrition, a better environment* and a *better life*, thus contributing to the achievement of the 2030 Agenda and its Sustainable Development Goals (SDGs), especially SDGs 2 and 1.

2. A Steering Committee, chaired by FAO Deputy Director-General, Ms Beth Bechdol, provided strategic advice for the organization of the event. Additionally, a Scientific Advisory Panel, chaired by FAO Chief Scientist, Ms Ismahane Elouafi, assisted in the development of the conference programme in line with its key themes. NSP Director, Mr Jingyuan Xia, led the Conference Secretariat, which was responsible for the preparations for, and hosting of, the event.

3. About 2 200 people from 126 FAO Members participated in the Conference, which included an opening plenary session headlined by the FAO Director-General, a keynote plenary session and a closing High-Level Ministerial Segment. There were also eight parallel sessions, two for each of the four conference themes: advanced technologies; crop varietal development and adoption; conservation of plant genetic resources for food and agriculture; and seed systems. Speakers and panellists from a wide range of stakeholders, with diverse backgrounds and expertise, contributed to the event. Of the 100 speakers, co-chairs, panellists and moderators in the conference, 39 percent were from research or academic institutions, 22 percent from the private sector, 13 percent from intergovernmental organizations, 10 percent from civil society organizations, farmers' organizations or cooperatives, 10 percent from governments or governmental organizations, and 5 percent from international non-governmental organizations. Out of these, 41 percent were women.

## II. Recommendations from the Conference

4. The Steering Committee of the Conference identified the following ten recommendations on Strategic Actions for the Green Development of Global Seed Industries:

- *adopt* innovations that harness appropriate scientific and technological advancements, in particular through the convergence of institutions, infrastructures, policies and regulatory frameworks and partnerships along the seed value chain – from the conservation of plant genetic resources for food and agriculture, through their use in breeding progressively superior crop varieties, to the availability and use of affordable quality seeds – as means to develop and deliver context-specific solutions to farmers;
- *strengthen* institutional and human capacities for the judicious use of the advances in agricultural biotechnologies – in particular genetic modification, genome editing, induced mutagenesis, high-throughput screening, genomics-assisted breeding, systems biology, synthetic biology, next-generation sequencing and cell biology – and informatics and data analytics to enhance plant breeding and the conservation of crop diversity;
- *create* the enabling environment at national, regional and global level, through appropriate national policies, laws and regulations and regional and international agreements, for enhanced capacities to access and use advanced technologies safely for generating improved crop varieties and safeguarding crop diversity;
- *safeguard* crop genetic resources in their natural habitats, in gene banks and through enhanced on-farm diversity; characterize their heritable variations; evaluate them for

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<sup>1</sup> [www.fao.org/events/detail/global-conference-on-green-development-of-seed-industries/en](http://www.fao.org/events/detail/global-conference-on-green-development-of-seed-industries/en)

agronomic performance; and, improve associated documentation and data management systems;

- *enhance* access to, including through exchanges across national boundaries in keeping with appropriate phytosanitary measures, and use of, crop diversity, especially for research and for breeding progressively superior crop varieties, while enabling the fair and equitable sharing of their benefits;
- *breed* a diverse portfolio of well-adapted, progressively superior crop varieties, which are more nutritious, produce higher yields with fewer external inputs, are resistant to biotic and abiotic stresses, fit the farming systems and satisfy the needs of consumers and end-users under worsening climate change scenarios;
- *disseminate* information on improved crop varieties, create the enabling environment for effective information sharing – through effective policies, laws, regulations and incentives– and *strengthen* institutional and farmers’ capacities for the widespread adoption and use of these elite materials in cropping systems;
- *develop* capacities along the seed value chain – from production, through quality assurance, to marketing, via diversified seed enterprises and related service providers – so that farmers have timely access to enough quantities of affordable quality seeds and planting materials of the improved crop varieties that are most suited to their production systems, and end use;
- *enforce* effective national policies, laws and regulatory frameworks, and regional and international agreements, and *support* effective institutions, including in collaboration with relevant international organizations, to incentivize innovations along the seed value chain, in order to enhance the demand for, and supply of, quality seeds and planting materials of preferred crop varieties, including through regional and international trade; and
- *accord* high priority to the development and strengthening of the seed value chain, especially through the inclusion of sector-specific provisions, for instance “seed action”, which outlines strategic interventions in overarching national plans and policies and associated budgetary support, and *encourage* private sector investment across multiple sectors for the development of sustainable agricultural and food systems.

5. These ten recommendations will be published as part of the Conference proceedings in 2022. FAO calls upon governments, development partners and all stakeholders along the seed value chain to implement and publicize them widely through appropriate electronic and print media, use them for advocacy activities and to provide additional feedback and input to the Organization.