COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Item 3.1 of the Provisional Agenda

INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Tenth Session

22 – 24 June 2021

TOWARDS A GLOBAL FRAMEWORK FOR IN SITU CONSERVATION AND ON-FARM MANAGEMENT OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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Documents can be consulted at [www.fao.org](http://www.fao.org)
I. INTRODUCTION

1. The Commission on Genetic Resources for Food and Agriculture (Commission), at its Seventeenth Regular Session, requested FAO to hold two international symposia on (i) in situ conservation of crop wild relatives and wild food plants and (ii) on-farm management and development of farmers’ varieties/landraces, in cooperation with the Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty). The FAO Conference, at its 41st Session, welcomed and endorsed the Commission’s report.

2. Upon consultation of the Bureau of the Commission, it was agreed that, due to thematic synergies, the need to optimize the use of resources and time, and to sustain interest and momentum, a single symposium would be organized. The First International Multi-stakeholder Symposium on Plant Genetic Resources for Food and Agriculture (Symposium), originally scheduled to be held at FAO Headquarters in Rome on 15 and 16 June 2020, was delayed due to the COVID-19 pandemic and eventually held on 29 and 30 March 2021 as a virtual event.


II. FIRST INTERNATIONAL MULTI-STAKEHOLDER SYMPOSIUM ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

4. In response to the Commission’s request, the Symposium was co-organized with the Treaty. In addition, the Global Crop Diversity Trust was invited to co-organize the Symposium.

5. In line with the Commission’s request, the Symposium addressed the two central topics of in situ conservation of crop wild relatives (CWR) and wild plants for food and the management of on-farm diversity of farmers’ varieties/landraces. To achieve this aim, the two-day event, comprised of plenary presentations by experts in the field and discussions between stakeholders, was structured around four broad themes:

   a. The challenges and opportunities for sustainably managing crop diversity;
   b. In situ conservation of crop wild relatives and wild food plants;
   c. On-farm management of farmers’ varieties/landraces; and,
   d. The way forward: creating communities of practice.

6. In the days leading up to the Symposium, presentations by the technical experts were made available as video recordings in all official United Nations languages on the Symposium webpage.

7. Over 800 people from a wide and diverse range of stakeholders, including national and international agricultural research organizations, academia and non-governmental organizations, participated in the Symposium. An additional 256 people watched via the live webcast available through FAO’s media website. The webcast recordings have been made available on the Symposium webpage.

8. The opening session of the Symposium included interventions by Ms Beth Bechdol, Deputy Director-General, FAO, Ms Irene Hoffmann, Secretary of the Commission, Mr Kent Nnadozie,

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1 C 2019/25, paragraph 62.
2 C 2019/REP, paragraph 58.
4 CGRFA/WG-PGR-10/21/2.1/Inf.1  
Secretary of the Treaty and Mr Stefan Schmitz, Executive Director of the Global Crop Diversity Trust. The recurring theme of their interventions was the importance of broadening intra- and inter-specific crop diversity as means to enhancing both the resilience of crop production systems and the nutritional status of people. The necessary adaptation of agricultural and food systems to climate change and the imperative of achieving the Sustainable Development Goals (SDGs) were identified as compelling reasons for both enhanced crop diversity on-farm and the conservation of PGRFA in situ. Speakers also invited the participants and stakeholders to consider modalities of information exchange and to articulate how FAO can use its facilitating and convening power to strengthen in situ conservation and on-farm management of PGRFA.

9. **Challenges and opportunities for sustainably managing crop diversity.** Three keynote addresses set the scene, highlighting the current approaches in in situ conservation and on-farm management of PGRFA. The issues presented ranged from bridging the gap between in situ and ex situ conservation, diversity assessments, prioritization, map-based collecting to increase PGRFA diversity in genebanks and value addition of farmers’ varieties. Speakers stressed the importance of genetic diversity for developing improved crop varieties, smallholder farmers’ involvement in participatory varietal selection, assessing the potential of farmers’ varieties/landraces for market development, seed production, distribution networks and research priorities. They also underscored the importance of integrating work across the agriculture, forestry, health and resource management sectors for the effective conservation and sustainable use of crop diversity. Balancing the needs of different stakeholders was highlighted as key consideration for the success and long-term sustainability of initiatives. Discussions focused on the need for good governance, sustainable financing and multi-stakeholder cooperation.

10. **In situ conservation of crop wild relatives and wild food plants.** Case studies highlighted context-specific best practices for conservation management in nature and in complementary ex situ programmes and the use of CWR in pre-breeding. The importance of wild food plants for the nutrition and food security of local communities during times of food scarcity was also stressed. Advances in science and technology were discussed in the context of mining novel alleles from CWR for use in crop improvement, as well as for identifying populations threatened by genetic erosion. Participants stressed the importance of mapping the locations of wild and cultivated PGRFA, using comparative threat assessments to prioritize conservation activities, and the need for developing capacities in the disciplines of taxonomy and plant breeding.

11. **On-farm management of farmers’ varieties/landraces.** Case studies discussed strategies and methods for mainstreaming the conservation and sustainable use of farmers’ varieties/landraces. Speakers addressed approaches for measuring on-farm diversity, explored complementary ex situ conservation strategies, discussed the use of on-farm diversity in crop improvement and presented local and regional community-based initiatives that strengthen the on-farm management of PGRFA diversity. Discussions underlined the need for dialogue between genebanks managers and farmers on the establishment of community seedbanks, the formal registration of farmers’ varieties/landraces and the development of value chains.

12. **The way forward: creating communities of practice.** Participants discussed the role of existing networks and communities of practice for conserving PGRFA outside of genebanks and for the sustainable use of crop diversity. Harmonized national and/or regional policies, including national plans, frameworks and regulatory systems were deemed important tools for enhancing the relevance of PGRFA to the efforts to achieve food security and nutrition. Overall, the interventions indicated that communities of practice are essential for sharing knowledge, including on the challenges identified and the success stories presented.

13. Following the presentation on communities of practices, a **final panel discussion** focused on the main challenges in situ conservation and on-farm management of PGRFA face and considered options how they may be overcome. Discussants identified as key challenges to the conservation of PGRFA outside of genebanks and to their sustainable use, inter alia, the lack of information on the taxonomy, reproductive biology and economically important traits of many CWR species. The use of
CWR in pre-breeding was identified as an area that needs greater attention than is currently the case. Similarly, it was stressed that the characterization and evaluation of farmers’ varieties/landraces, especially in the context of resilience and dietary diversity, should be enhanced. Taken all these challenges and needs together, harmonized national and/or regional policies and strategies were considered critical for exploiting the full potential of CWR and farmers’ varieties/landraces.

III. POSSIBLE NEXT STEPS

14. More regular dialogue among the agriculture, environment, forestry and health sectors was considered by many discussants as essential for promoting *in situ* conservation and on-farm management of PGRFA. Addressing issues of common concern could be a starting point for undertaking joint actions to the mutual benefit, e.g. fundraising, sharing lessons learnt and developing guidelines for best practices.

15. The Symposium highlighted a clear demand for sharing, on a more regular basis, experiences and best practices regarding *in situ* conservation and on-farm management of crop diversity, including in complementary *ex situ* programmes. FAO is well placed to convene stakeholder meetings, provide information and capacity development, and it provides with the Working Group and the Commission a governance structure that may facilitate the reflection of stakeholder experiences and best practice in global policies, work programmes and funding priorities.

IV. GUIDANCE SOUGHT

16. The Working Group may wish to recommend that the Commission request FAO to:

- Finalize, publish and distribute widely the report of the First International Multi-stakeholder Symposium on Plant Genetic Resources for Food and Agriculture;
- Organize, subject to the availability of the necessary extra-budgetary resources, symposia on *in situ* conservation and on-farm management of PGRFA at regular intervals in collaboration with the Treaty; and
- Organize a series of webinars in support of the implementation of the Second GPA and Articles 5 and 6 of the Treaty.