

Expert stakeholder meeting information, agenda and participants

The plants that feed the world: Baseline information to underpin the conservation and use of plant genetic resources

Expert workshop 24–25 July 2019

It has been estimated that there are between 300 000 and 500 000 species of higher plants (i.e. flowering and cone-bearing plants), of which approximately 250 000 have been identified or described. About 30 000 are edible and about 7 000 have been cultivated or collected by humans for food at one time or another.

Although several thousand species may be considered to contribute to food security at local level, only a few hundred cultivated plants play a considerable role in food and agriculture at a global level. While the number of *plant species that feed the world* is relatively small, the genetic diversity within such species is often immense.

Investment in the conservation and improvement of these plants will be key to achieving the Sustainable Development Goals, including to achieve food security and sustainable diets, adapt agriculture to climate change, or reduce the impact of farming on nature. The provision of baseline data and indicators on the genetic diversity of these plants is essential for decision-makers at global, regional and national levels in order to develop strategies to ensure the adequate conservation and use of these plant genetic resources.

Information on the plants that feed the world and of their genetic diversity is increasingly available, but is scattered through a number of information systems, databases and the scientific literature. The publication *The plants that feed the world: Baseline information to underpin strategies for their conservation and use* intends to bring together, for the first time, all the information available from these different sources to provide baseline data and indicators for the conservation and availability for use of plant genetic resources for food and agriculture (PGRFA). The Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture, the Global Crop Diversity Trust and International Center for Tropical Agriculture (CIAT) are working together to prepare and publish this analysis jointly, with the hope that it will become a flagship publication for the PGRFA community across the world.

The aim of the publication is to develop a reproducible set of indicators that provide an evidence base to prioritize conservation and availability for use among crops, including: interdependence at global level; demand; supply and risk/resilience. These indicators would be used in a standardized manner for around 350 plants that are being used in food and agriculture. The methodologies will allow these indicators to be reproducible, in order to enable the identification of change in status and trends for PGRFA in the future.

The Secretariat of the International Treaty is organizing a technical consultation from 24 to 25 July 2019 at FAO Headquarters (Rome) with key experts on plant genetic resources and information systems and big data for agriculture to discuss the methodologies used to develop the draft indicator for all crops and enable participants to provide suggestions on how to finalize the analysis.

Programme

Wednesday, 24 July

- 9 – 9:15 **Welcome** - Kent Nnadozie, Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture
- 9:15 – 9:30 **Introductions by participants**
- 9:30 – 9:45 **Introduction to the Treaty and background on Crop Indicator project** – Alvaro Toledo, International Treaty Secretariat
- 9:45 – 10:30 **Overview of Indicator: What is this indicator for, exactly? What data should be in the indicator, and on what species?**
– Colin Khoury, CIAT
- 10:30 – 11:00 *Coffee and tea break*
- 11:00 – 11:30 **Scope of the indicator: The Crop List**
- 11:30 – 12:30 **Analysis of crop importance: definition, data sources, data management and processing strategy, data shortcomings (Indicator domain 1)**
- 12:30 - 13:30 *Lunch*
- 13:30 – 14:30 **Assessing the global interdependence with respect to crops (Indicator domain 2)**
- 14:30 – 15:30 **Improving our understanding of the demand by users of crop genetic resources (Indicator domain 3)**
- 15:30 – 16:00 *Coffee and tea break*
- 16:00 – 16:45 **Progress towards analysing the supply of crop genetic resources (Indicator domain 4)**
- 16:45 – 17:30 **Determining Crop Genetic Resources Risk/Resilience (Indicator domain 5)**

Thursday, 25 July

- 9 – 9:15 **Summary and reflections on first day** – Luigi Guarino, the Global Crop Diversity Trust
- 9:15 – 10:30 **From individual data domains to a combined indicator for each crop** – Colin Khoury and Steven Sotelo (CIAT)
- 10:30 – 11:00 *Coffee and tea break*
- 11:00 – 12:30 **Discussion: Is the indicator fit for purpose? What's good about it?** - Alvaro Toledo (International Treaty Secretariat)

12:30 – 13:30 *Lunch*

13:30 – 15:00 **Discussion: Is the indicator fit for purpose? What's bad about it?** – Luigi Guarino, Global Crop Diversity Trust

15:00 – 15:30 *Coffee Break*

15:30 – 16:00 **Discussion: How best to present the improved indicator** – Colin Khoury and Steven Sotelo (CIAT)

16:00 – 16:30 **Wrap up** – Alvaro Toledo (International Treaty Secretariat)

List of participants

Prof. Sayed Azam-Ali (Crops for the Future)

Jan Engels (Bioversity International)

Luigi Guarino (Global Crop Diversity Trust)

Michael Halewood (Bioversity International)

Coosje Hoogendoorn (Access to Seeds Index)

Colin Khoury (International Center for Tropical Agriculture)

Irina Kovrova (Food and Agriculture Organization of the United Nations (FAOSTAT))

Kudzai Kusena (Genetic Resources & Biotechnology Institute, Department of Research and Specialist Services, Zimbabwe)

Steven Sotelo (International Center for Tropical Agriculture)

Clive Stannard (PGRFA expert)

Alvaro Toledo (International Treaty on Plant Genetic Resources for Food and Agriculture)

Jose Valls (Cenargen)

Maarten van Zonneweld (World Vegetable Center)

Stinike Oenema (Food and Agriculture Organization of the United Nations (FAO nutrition))