



## INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## FOURTH MEETING OF THE SCIENTIFIC ADVISORY COMMITTEE ON THE GLOBAL INFORMATION SYSTEM

20-21 April 2021

# DESCRIPTORS FOR CROP WILD RELATIVES CONSERVED IN SITU

#### I. INTRODUCTION

- 1. At the Eighth Session, the Secretary provided information to the Governing Body on the activities under the project, "Development of a Globally Agreed List of Descriptors for *in situ* Crop Wild Relatives Documentation". The projet is designed to directly support objective 3 of the Programme of Work on the Global Information System (GLIS).
- 2. The project, made possible by the generous financial support of the Government of Germany, addresses gaps in documentation methods for plant genetic resources for food and agriculture (PGRFA), in particular, for *in situ* crop wild relatives (CWR). Those gaps represent a barrier for the sharing and exchange of information in the scientific community and the development of added-value services for plant breeders and other agro-biodiversity stakeholders.
- 3. In its first phase, the project aimed at consolidating work previously undertaken on CWR descriptors by several initiatives at the national and international levels.
- 4. At its Eighth Session, the Governing Body took note of the work under the project and "encouraged the participation of experts in the consultation process" for developing the descriptors.<sup>1</sup>
- 5. This document describes the major outcomes of the project in the biennium, including the results of the consultation and the further analysis undertaken in two regions under the second phase of the project.

### II. DOCUMENTATION ACTIVITIES

6. During the first phase, the project took as a starting point the 'Core Descriptors for *in situ* conservation of CWR v.1' published by Bioversity International. An online consultation was organized from February to April 2020, involving more than 107 experts from 87 institutions in 48 countries. The profile of the participants in the consultation included conservationists, researchers, and National Focal Points of the International Treaty amongst others, as shown in *Figure 1* below. A Core Advisory Group (CAG), composed of respected international experts, was established. The CAG endorsed a revised strategic short list of descriptors, which was published online.

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<sup>&</sup>lt;sup>1</sup> Resolution 4/2019, paragraph 6.

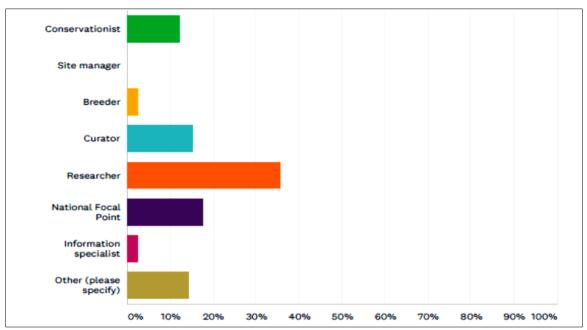


Figure 1. Profile of the participants in the CWRI consultation undertaken in 2020.

- 7. Thanks to the additional financial support provided by the Government of Germany in the second half of 2020 for the second phase of the project, the project conducted a pilot testing of the descriptors against available data sets in selected countries of Latin America and the Caribbean (GRULAC) and Africa, which are two regions endowed with significant CWR diversity. The project countries were Guatemala, Cuba, and Bolivia in GRULAC, and Zambia, Benin, and Malawi in Africa.
- 8. Desk studies produced feasibility assessments of national inventories on *in situ* CWR, applying the globally validated descriptors.
- 9. The desk study conducted in GRULAC showed that there are datasets available in global platforms and projects with poor quality in geographical coordinates. Those datasets are of different nature and origin and, in some cases, not usable at the national level.
- 10. In the Africa Region, the *in situ* CWR descriptors were mapped against available datasets and capacity building activities promoted use of the descriptors.
- 11. The project identified important *in situ* CWR datasets to conduct the testing, despite logistical limitations related to the COVID-19 pandemic. The main challenges are related to the weak situation of national inventories in all of the countries that the project has targeted so far. Records are not available online, and administrative limitations to sharing data have also been experienced. Most of the datasets used for the testing had been generated through the support of past projects that had not managed to publish them.
- 12. After the testing phase in GRULAC and Africa, changes resulting from the inputs received were incorporated in the publication, which is available in English, Spanish, French, and Arabic (see *Figure 2* below).



Figure 2. Covers of the latest version of the publication.

#### III. ON-GOING COLLABORATIONS AND NEXT STEPS

- 13. The project established collaborations with other projects such as the "Bridging Agriculture and Environment: The Southern African Crop Wild Relative regional network", funded by the Darwin Initiative and implemented by the Alliance of Biodiversity International and CIAT. The project also built on the outcomes of the project "Adapting Agriculture to Climate Change: Collecting, Protecting and Preparing Crop Wild Relatives", being managed by the Global Crop Diversity Trust.
- 14. The project also established collaboration with the Global Biodiversity Information Facility in order to track recent research at the country level and compare and exchange data gathered from different sources.
- 15. The National Focal Points of the International Treaty actively supported the project in identifying and contacting responsible experts, data custodians, and in providing available data.
- 16. The documentation and exchange of *in situ* CWR has been one of the cross-cutting themes discussed at the recent two-day multi-stakeholder symposium on PGRFA, which FAO, the International Treaty and the Global Crop Diversity Trust co-organised.<sup>2</sup>
- 17. The research conducted indicates that the project would benefit from additional testing in Asia and Europe, where countries focus on different data types and document species differently. The extension of the testing to other regions would allow to better identify the information exchange gaps and users' preferences to increase the use of CWR. For this reason, it is foreseen to strengthen collaboration with European networks and projects working on CWRs.
- 18. The Secretariat is planning a webinar in the second quarter of 2021 to present the publications currently available online,<sup>3</sup> and the ongoing collaboration with relevant partners and projects.
- 19. Under the project, a final report will be prepared in 2021, which will analyse the most significant limitations and challenges that need to be addressed to make available CWR datasets inventories. The report will also analyse data availability in various online databases and in offline data repositories. In addition to the report, the preparation of a white paper outlining options for continuing *in situ* CWR documentation is also envisaged. The process for a white paper will start with an online workshop with CAG members, representatives of the FAO Commission on Genetic Resources for Food and Agriculture, selected National Focal Points of the International Treaty, and other invited experts.

<sup>3</sup> English: <a href="http://www.fao.org/3/cb3256en/cb3256en.pdf">http://www.fao.org/3/cb3256es/cb3256es.pdf</a> Spanish: <a href="http://www.fao.org/3/cb3256es/cb3256es.pdf">http://www.fao.org/3/cb3256es/cb3256es.pdf</a> Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256es/cb3256er/cb3256er.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256es/cb3256er/cb3256er.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256er/cb3256er/cb3256er.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256ar/cb3256ar.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256ar/cb3256ar.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256ar/cb3256ar.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256ar/cb3256ar.pdf</a> and Arabic: <a href="http://www.fao.org/3/cb3256ar/cb3256ar.pdf">http://www.fao.org/3/cb3256ar/cb3256ar/cb3256ar.pdf</a>

<sup>&</sup>lt;sup>2</sup> The pre-recorded presentations of the event are available online at http://www.fao.org/about/meetings/multi-stakeholder-symposium-on-pgrfa/pre-recorded-session2/en/

#### IV. ADVICE SOUGHT

### 20. The Committee is invited to:

- i. Take note of the progress made by the project and in particular the publication, in four languages, of the Descriptors for CWRI conserved *in situ*;
- ii. Provide advice for the setting up of an inclusive process to produce a white paper in 2021;
- iii. Provide any additional advice or suggestions related to this work track that could be brought before the Ninth Session of Governing Body for its consideration.