

April 2021



Food and Agriculture
Organization of the
United Nations



The International Treaty
ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

**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

**REVIEW AND UPDATE OF THE PROGRAM OF WORK ON THE
GLOBAL INFORMATION SYSTEM**

I. INTRODUCTION

1. The Eighth Session of the Governing Body reconvened the Scientific Advisory Committee and invited it to review, as may be required, the Programme of Work on the Global Information System (GLIS) for its consideration at the Ninth Session.
2. The review of the Programme is one of the preparatory activities reflected in the Multi-Year Programme of Work of the International Treaty adopted at the same Session.¹
3. In November 2020, the Secretariat organized a briefing for the Committee members and invited them to submit comments and suggestions for the review of the Programme of Work. The submissions received at the time of the preparation of this document were taking into account in the revision of the draft Programme of Work.
4. In revising the Programme of Work, the Secretariat also included relevant elements of advice provided by the Committee at its second and third meetings, as well as the guidance provided by the Governing Body at both its Seventh and Eighth Sessions.²
5. The draft revised Programme of Work is contained in the *Annex* to this document, with the revisions underlined, while Section II below annotates major suggestions and related revisions to the Programme of Work.

II. ANNOTATIONS TO THE PROGRAMME

6. The Programme of Work on Global Information System has been ongoing since 2015, and its operation and related activities have been funded through resources provided by the Governing Body and extra-budgetary contributions. Members of the Advisory Committee, as well as partners, have also been actively involved in providing technical advice and inputs on its implementation and further development.
7. One of the comments received suggests putting additional emphasis on translating the concepts of the GLIS Vision into structural elements of the GLIS Portal and assigning priority to

¹ Resolution 13/2019 <http://www.fao.org/3/nb791en/nb791en.pdf>

² Resolutions 5/2017 <http://www.fao.org/3/a-mv103e.pdf> and 4/2019 <http://www.fao.org/3/nb782en/nb782en.pdf>

the implementation of the Master Plan. This suggestion has been reflected under **item 1.a.** and **item 2.a**

8. At its second and third meetings, the Committee advised the Secretariat on the development of the GLIS links and the entry points for the *ex situ* sources of PGRFA. It also advised the Secretariat to continue working with FAO on strengthening the linkages with WIEWS, with the Global Crop Diversity Trust for Genesys, and with the Convention on Biological Diversity and its Nagoya Protocol on Access and Benefit-sharing for its Clearing House Mechanism (CHM), among other systems and initiatives. Accordingly, **item 1.b** has been updated, in particular to give clearer emphasis on the interface with the work of the Global Crop Diversity Trust.

9. The Committee had previously emphasised the importance of collecting feedback from users, and advised that this exercise should be undertaken on a regular. Accordingly, **item 1.c.** has been updated.

10. One of the submissions received suggests strengthening linkages between the GLIS Portal and Easy-SMTA to improve the services to the private breeding sector entities using material from the Multilateral System. Accordingly, **item 1.d** has been reformulated.

11. In connection with the comment received in relation to item 1.a, **item 2.a** has also been updated.

12. Based on the work already undertaken on Digital Object Identifiers for food crops and the previous advice received from the Committee, **item 3.a** has been updated, including the latest language from the Governing Body Resolution 4/2019, paragraph 8.

13. Based on the advice received at the third meeting of the Scientific Advisory Committee on the development and update of specific crop descriptors, **item 3.c** and **3.d** have been updated.

14. The name DivSeek has been updated to the new official name “Divseek International Network” under **item 4.b.**

15. The activity “*to encourage and guide users to link scientific publications and datasets to PGRFA material*”, contained in the Governing Body Resolution 4/2019, paragraph 9, has been inserted under the new **item 5.c.**

16. For two consecutive sessions, the Governing Body has requested the Scientific Advisory Committee to continue “*considering scientific and technical issues of relevance to DSI/GSD, and national legislation, as appropriate*”, for which the production of documentation has been included in the document as new **item 4.c.** The language used in the revised Programme of Work reflects Resolution 5/2017, paragraph 9, and Resolution 4/2019, paragraph 14.

17. The text “its Nagoya Protocol of Access and Benefit-sharing” has been inserted at the end of the **item 6.g.**

18. The text “implement” has been replaced with “maintain and update” under **item 7.a.**

III. ADVICE SOUGHT

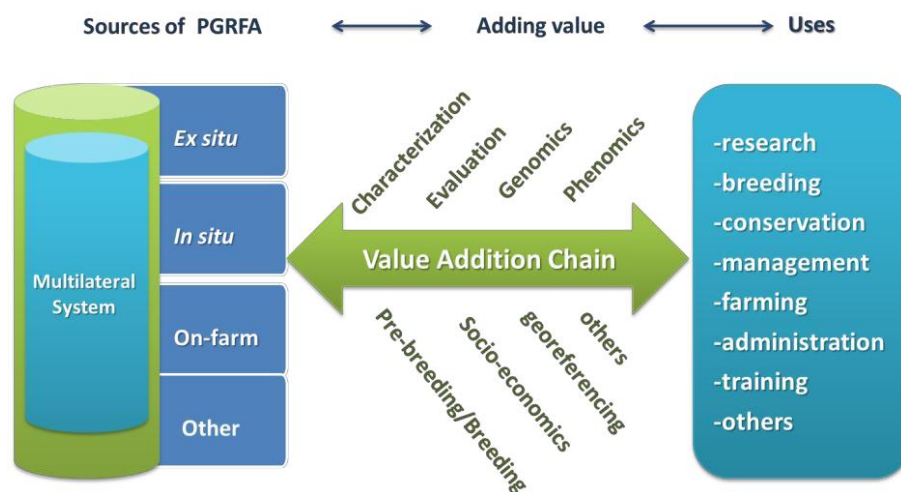
19. The Committee is invited to advise the Secretary on the review of the Programme of Work on the Global Information System, taking into account the proposal contained in the *Annex* to this document.

20. The Committee is also invited to provide any additional elements of advice or suggestions, as appropriate, for the consideration of the Governing Body at its Ninth Session.

Programme of Work on the Global Information System (2022-2027)

The Programme of Work will cover an initial period of six years. It will be implemented through a phased approach and funded through a combination of budgetary resources, as it may be determined by the Governing Body, and extra-budgetary contributions.

The value chain of PGRFA, illustrating the components of and linkages between the three elements of the value chain, namely the sources of PGRFA, adding value, and using PGRFA.



1. To create a web-based platform with use-oriented entry points to PGRFA information

- a. To set up the technical infrastructure needed for the development of the Platform, with priority to the development and consolidation of the structural elements of the Portal contained in the Master Plan;
- b. To engage with FAO, the Global Crop Diversity Trust, and the Convention on Biological Diversity and its Nagoya Protocol and other organizations to build on the experience accumulated on the development of global portals;
- c. To define use case scenarios for target groups and set up mechanisms to regularly collect and analyse feedback from users;
- d. To improve the linkages between the Global Information System and Easy-SMTA material.

2. To provide a comprehensive overview and facilitate access to sources of PGRFA and associated information

- a. To create an index of sources of information, knowledge and other materials with the categories identified in the Master Plan;
- b. To strengthen the capacity of genebanks and other providers to document their holdings using traditional and modern methods and to facilitate access to that information and to the genetic resources in accordance with the provisions of the Treaty;
- c. To enable recipients of PGRFA to make available to the MLS all non-confidential information according to applicable law that results from their research and development carried out on the material received, in compliance with their obligation under SMTA Art 6.9;

- d. To allow quick access to information on the material available in the Multilateral System of Access and Benefit-sharing (MLS) at ~~sample~~ accession level;
- e. To strengthen capacity to develop national and regional inventories and information systems and networks.

3. To promote and facilitate interoperability among existing systems by providing clear principles, technical standards and appropriate tools to support their operations in accordance ~~with~~ to the objectives, principles and rules of the Treaty;

- a. To ~~develop a common standard for Permanent Unique Identifiers applied to PGRFA and an operational mechanism to promote the adoption~~ and use of DOIs and the creation of linkages between phenotypic and passport data with genomics data;
- b. To develop further training and capacity development material, including e-learning material, in collaboration with other relevant organizations;
- c. To ~~recommend~~ develop and update common standards for data and metadata (e.g. for phenotypic data like crop-specific descriptors) based on existing experiences in other sectors;
- d. To establish functional connections with other initiatives relevant for the adoption of open data and standards to PGRFA;
- e. To develop the technical standards required for interoperability between different PGRFA information management systems, including crop ontologies.

4. To promote transparency on the rights and obligations of users for accessing, sharing and using PGRFA associated information and to establish ways to exercise those rights and obligations within the Global Information System;

- a. To analyse the institutional, organizational, policy and legal factors for PGRFA information access, sharing and use in the context of the Treaty's provisions, in particular Articles 12 and 13;
- b. To understand the applicability and impacts of models developed in other parts of the Treaty, such as the Multilateral System of Access and Benefit-sharing, and initiatives such as the DivSeek International Network;
- c. To analyse scientific and technical issues of relevance to DSI/GSD generated from the use of PGRFA, including by considering national legislation, in the context of Article 17.³

5. To create and enhance opportunities for communication, and international and multidisciplinary collaboration to increase knowledge about and add value to PGRFA

- a. To identify and create tools, mechanisms and opportunities for communication and collaboration with partners and users of the system (media, mailing lists, etc.);
- b. To conduct focused surveys with a wide range of users and validation methods;
- c. To encourage and guide users to link scientific publications and datasets to PGRFA material.

6. To provide capacity development and technology transfer opportunities for the conservation, management and use of PGRFA and associated information and knowledge, paying special attention to the needs of developing countries

- a. To convene and support regional meetings and scientific conferences related to new technologies and themes;
- b. To provide access to training materials for capacity development;
- c. To support the training of staff in areas such as taxonomy, information management and bioinformatics in collaboration with relevant partners;

³ The Governing Body has not yet decided on the official terminology for digital sequence information/genetic sequence data and therefore uses "DSI/GSD" until new terminology is agreed.

- d. To design mechanisms to promote training opportunities across institutions (training of trainers, match-making);
- e. To provide training for the genebank managers of the future;
- f. To facilitate [the](#) transfer of relevant technologies to developing countries;
- g. To raise awareness among stakeholders on the Global Information System, on traditional knowledge relevant to PGRFA in accordance with the Treaty's provisions and, in harmony with the Convention on Biological Diversity and [its Nagoya Protocol](#).

7. To create a mechanism to assess the progress and monitor the effectiveness of the Global Information System

- a. To [maintain and improve the](#) feedback system for the Portal in order to allow assessments of the usefulness and effectiveness of the Global Information System;
- b. To promote periodic consultations among Contracting Parties, and stakeholders, users and providers, about the usefulness and effectiveness of the Global Information System.