



Food and Agriculture  
Organization of the  
United Nations



The International Treaty  
ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE

**Item 3 of the Provisional Agenda**

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

**FIRST MEETING OF THE SCIENTIFIC ADVISORY COMMITTEE ON THE  
GLOBAL INFORMATION SYSTEM OF ARTICLE 17 OF THE TREATY**

**Rome, Italy, 24 – 25 November 2016**

**REPORT ON THE OPERATIONS OF THE PROGRAMME OF WORK**

**I. INTRODUCTION**

1. This document summarises the major activities undertaken under the Programme of Work on the Global Information System (PoW-GLIS) since the Sixth Session of the Governing Body. Where significant developments have been achieved, reference is made to the relevant documents prepared for this first meeting of the Committee.

2. The Global Information System (GLIS) on Plant Genetic Resources for Food and Agriculture (PGRFA) is established by Article 17 of the International Treaty on Plant Genetic Resources for Food and Agriculture:

*“The Contracting Parties shall cooperate to develop and strengthen a global information system to facilitate the exchange of information [...] on scientific, technical and environmental matters related to plant genetic resources for food and agriculture.”*

3. At its Sixth Session, the Governing Body adopted Resolution 3/2015 containing a Vision and a Programme of Work for 2016-2022, structured into seven objectives. It also decided to establish the Scientific Advisory Committee on Article 17 with the terms of reference contained in *Annex 3* to the Resolution. According to these terms of reference, the Committee shall provide scientific advice to the Secretary, including on:

- i) general recommendations on the development and deployment of the Global Information System and its components as adopted by the Governing Body;
- ii) the discovery of new areas of work with potential impact on the System;
- iii) the selection of pilot activities for the Global Information System and, upon request of the Secretary, other initiatives and actions to sustain the operation of the Global Information System, and the further update of the Programme of Work.

4. In adopting the PoW-GLIS, the Governing Body did not make provision for its implementation in the Core Administrative Budget for the current biennium. Consequently, the Secretariat has adopted a two-pronged approach in carrying on the Programme of Work. On the one hand, it has prioritised the continuation of activities initiated in the previous biennium whose delay would have caused a significant negative impact on the early implementation of the PoW.

On the other, it has explored with potential donors options for the funding of selected activities of the PoW<sup>1</sup>.

## II. UPDATE ON THE OPERATIONS OF THE PoW-GLIS

5. For organizational purposes and ease of reference, this section provides an overview of recent developments following the same structure as the PoW, but it should be noted that some activities implement multiple objectives and could have been reported under more than one objective.

### II.1 Objective 1 - The web-based platform

6. The web-based platform will be the foundation for the System to deliver online services. The Platform, conceived as a global entry point to information and knowledge and as a connector of datasets from distributed systems, will have to:

- address different types of PGRFA datasets, including *ex situ*, *in situ* and on-farm;
- facilitate access to sources of PGRFA and associated information;
- promote interoperability among existing systems;

7. FAO has accumulated experience in the development of information systems as they relate to PGRFA, which are relevant to GLIS, such as World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture (WIEWS)<sup>2</sup> and Easy-SMTA.<sup>3</sup> In this context, the Secretariat of the International Treaty has already initiated discussions with the Information Technology Division of FAO (CIO) to consider various web-based framework platforms to respond to the business requirements of the project without compromising technical interoperability, security and sustainability.

8. The development of the first prototype required the consolidation and publication of the first version of the descriptors for the registration of material in GLIS as well as a service contract DOI registration agency.

9. Based on the GLIS descriptors published online in September 2016, the Secretariat has developed a “sandbox” DOI server to test the registration of DOIs with a selected group of stakeholders that have the capacity and have shown interest. Such work is a necessary step before the DOIs are consolidated and the first version of the system is developed for production. The Secretariat will also write a set of technical documents describing the registration messages between the GLIS Registry and the third-party systems.

10. Subject to the availability of resources, the Secretariat has planned to develop such first prototype for the Web-based Platform and report on progress to the Committee at its second meeting. The prototype will take into account the outcomes of these first experiences and on the technical recommendations from CIO, that will also provide the information technology infrastructure.

### II.2 Objective 2 – Access to sources of PGRFA and associated information

11. Among other activities, Objective 2 of the PoW-GLIS requests the development of a list of sources of information, knowledge and other materials. The Secretariat has started the compilation of the first version of an index containing such PGRFA sources of information based on the submissions received and on web-based research. The Secretariat intends to prepare such index according to various categories of data, for example, passport, environment and site, genomics and biochemical, among others.

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<sup>1</sup> The project proposal “Implementation of the pilot phase of the Global Information System on Plant Genetic Resources of Article 17 of the ITPGRFA” (GCP/GLO/685/GER) is in the latest stage of consultation at the time of drafting.

<sup>2</sup> Available at: <http://www.fao.org/wiews/en/>

<sup>3</sup> Available at: <https://mls.planttreaty.org/>

### **II.3 Objective 3 – Interoperability, scientific standards and tools**

12. The main developments related to Objective 3 of the PoW are contained in the document *Implementing Digital Object Identifiers (DOIs)*,<sup>4</sup> where the Secretariat describes the consultation processes carried out to develop the first version of the GLIS Descriptors<sup>5</sup> and the Guidelines<sup>6</sup> for their adoption.

13. The Secretariat invites the Committee to advise on opportunities to further validate and promote DOIs, particularly with genomics and breeding communities, on future work on controlled vocabularies, and on any additional standards and protocols for PGRFA documentation and data exchange relevant to GLIS.

### **II.4 Objective 4 – Transparency on the rights and obligations of users**

14. To advance on the implementation of Objective 4 of the PoW, the Secretariat commissioned a background study paper on the legal status of genomic information in the Treaty and the wider international framework for Access and Benefit-sharing (ABS).<sup>7</sup> The main findings and recommendations are contained in working document 4.<sup>8</sup>

15. The Committee is invited to advise on the development of GLIS use cases and any other steps or actions that could enhance transparency of rights and obligations of the GLIS users.

16. In connection with the setting up of the Web-based Portal, the Secretariat has also planned for the development of terms of use and will seek the advice of the Legal Office of FAO.

### **II.5 Objective 5 – Communication and multidisciplinary collaboration**

17. Since the Sixth Session of the Governing Body, the Secretariat has published on its new website, a list of key documents and links related to the Global Information System to make them more accessible to interested users.

18. It has also created an email distribution list of scientific experts and technical staff dealing with PGRFA documentation specialists, which has been used for the dissemination of the GLIS Descriptors. This list included respondents in recent surveys and consultations.

19. The Secretariat intends to issue regular direct communications with the Treaty Contracting Parties and stakeholders for the implementation of GLIS and to expand collaboration with additional networks for the dissemination of key messages.

### **II.6 Objective 6 – Capacity development and technology transfer**

20. The Secretariat reported on this objective in the document *Partnerships, Collaborations and Capacity Development*,<sup>9</sup> where it identified synergies with other programmes of work and activities of the Treaty and reported on other opportunities to develop collaboration with Contracting Parties and partnerships with international organizations, projects and initiatives.

21. To implement the capacity development activities, the Secretariat adopted the approach of the training of trainers and match-making, targeting and prioritizing the Near East and the

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<sup>4</sup> See IT/GB7/SAC-1/16/3, available at <http://www.fao.org/3/a-bq615e.pdf>

<sup>5</sup> Data required for the assignation of Digital Object Identifiers in the Global Information System - v.1, available at <http://www.fao.org/3/a-bp767e.pdf>

<sup>6</sup> Guidelines for the optimal use of Digital Object Identifiers as permanent unique identifiers for germplasm samples - v.1, available at <http://www.fao.org/3/a-bq549e.pdf>.

<sup>7</sup> See the background study paper 10 (IT/GB7/SAC-1/16/ BSP 10): The Global Information System and Genomic Information: transparency of Rights and Obligations, available at: <http://www.fao.org/3/a-bq620e.pdf>

<sup>8</sup> See IT/GB-7/SAC-1/16/4, Transparency of rights and obligations of users of the Global Information System, available at <http://www.fao.org/3/a-bq619e.pdf>

<sup>9</sup> IT/GB7/SAC-1/16/5.

Southern African Development Community (SADC) regions, according to the indications of one donor.<sup>10</sup> These training and capacity development activities will be supported upon the approval of a project proposal. To target other regions and increase the number of collections, further resources must be mobilized.

22. The Committee is invited to take into consideration the information presented in that document and advise on further opportunities and options for the effective implementation of the PoW-GLIS.

## **II.7 Objective 7 – Draft monitoring and assessment mechanism**

23. At its Sixth Session, the Governing Body requested the Secretary to design a monitoring and assessment mechanism on the usefulness and effectiveness of the Global Information System in accordance with Article 17.1 of the Treaty, subject to availability of resources, based on the recommendations of this Committee and present a draft to the next Session of the Governing Body.

24. To facilitate the formulation of such mechanism, the Secretariat has proposed elements and options for its design which are contained in document, *Draft Monitoring and Assessment Mechanism*.<sup>11</sup> These options include the setting up of an online questionnaire, the presentation of system-generated statistics and the aggregation of inputs received from other conventional channels of communication.

25. The Committee is invited to advise on the monitoring methods, the periodicity and format of the reports and on any other elements for the assessment of the utility and relevance of the Portal.

## **III. CURRENT STATUS OF FINANCIAL CONTRIBUTIONS**

26. The Governing Body did not make any financial provisions in the Core Administrative Budget (CAB) of the Treaty for the implementation of the PoW-GLIS. Since the last Session, the Secretariat has advanced on the negotiations with one donor Contracting Party to fund activities related to Objectives 1, 2 and 6. Regarding capacity development, as indicated in the document, *Draft Monitoring and Assessment Mechanism*, the main beneficiaries of such activities would be the Near East and the Southern African Development Community (SADC) regions.

27. The organization of the first meeting of this Committee was funded entirely through extra-budgetary resources. The approval of the project proposal referred to above will allow for the organization of a second meeting of the Committee in early 2017. No additional resources have been identified to organise subsequent meetings.

28. The successful implementation of the PoW-GLIS fully depends on the availability of sustainable and predictable funding to allow the continuation of the meetings of the Scientific Advisory Committee and the provision of support to Contracting Parties, particularly those that are developing countries, and to adopt standards and tools through training and capacity development activities.

29. The Committee is also invited to advise the Secretariat on any opportunities that could be explored to mobilize funds in support of the PoW-GLIS.

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<sup>10</sup> See footnote 1 and document IT/GB7/SAC-1/16/5, available at: <http://www.fao.org/plant-treaty/meetings/meetings-detail/en/c/414978/>

<sup>11</sup> See IT/GB7/SAC-1/16/6, available at: <http://www.fao.org/3/a-bq616e.pdf>

#### IV. ADVICE SOUGHT

30. The Committee is invited to take into consideration the information provided in this document and the other documentation prepared for this session and advise on the implementation of PoW-GLIS, in particular on:

- i) technical decisions regarding:
  - the promotion and adoption of DOIs with Contracting Parties and other holders of plant genetic resources for food and agriculture;
  - the development of the web-based platform;
  - the identification of synergies for the development of partnerships;
  - the modalities for the provision of training and capacity development;
  - the further research on the rights and obligations of the users; and
  - the draft monitoring mechanism of the GLIS Portal.
- ii) the setting up of priorities for the development of standards for PGRFA data curation and transfer, capacity development, and legal issues;
- iii) any funding opportunities to be explored in support of the PoW-GLIS; and
- iv) any other relevant advice it may consider appropriate.