



**Food and Agriculture
Organization of the
United Nations**



The International Treaty
**ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE**

Item 13 of the Provisional Agenda

SEVENTH SESSION OF THE GOVERNING BODY

Kigali, Rwanda, 30 October – 3 November 2017

Report of the First Meeting of the Scientific Advisory Committee

Note by the Secretary

At its Sixth Session, the Governing Body established the Scientific Advisory Committee on the Global Information System (SAC-GLIS) to advise the Secretary on the implementation of the Programme of Work on the Global Information System.

During the biennium, the Committee met twice in Rome, Italy, in November 2016 and in June 2017. The documents and Reports of both meetings are available on the website of the International Treaty as well as the list of participants.

This document contains the previously published Report of the first meeting of the Scientific Advisory Committee on the Global Information System (SAC-GLIS-1) for the information of the Governing Body.

*This document can be accessed using the Quick Response Code on this page;
an FAO initiative to minimize its environmental impact and promote greener communications.
Other documents can be consulted at [http://www.fao.org/plant-treaty/meetings/meetings-
detail/en/c/888771/](http://www.fao.org/plant-treaty/meetings/meetings-detail/en/c/888771/)*



I. OPENING OF THE MEETING

1. The Secretary, *ad interim*, of the International Treaty on Plant Genetic Resources for Food and Agriculture, Mr Kent Nnadozie, opened the session and welcomed the participants to the first meeting of the Scientific Advisory Committee. The list of participants is contained in *Appendix 2*.
2. In his opening statement, the Secretary recalled the fundamental role of plant genetic resources for food and agriculture (PGRFA) information sharing in achieving the objectives of the Treaty and noted the role of PGRFA information in adding value to PGRFA and facilitating their use for research and breeding. He indicated that the development of the Global Information System (GLIS), based on existing systems, was fundamental to helping breeders and farmers develop new varieties and to rendering the conservation of crop diversity more efficient and integrated into sustainable use. He further noted that the successful implementation of the GLIS would rely on the capacity of its stakeholders, with the Secretariat playing a facilitation role.
3. Recalling the Committee's mandate to advise the Secretary on the development and deployment of the GLIS, Mr. Nnadozie thanked all the participants for their attendance and expressed his confidence that their contributions would enhance the technical profile and implementation of Programme of Work (PoW). He also added that the Secretariat would keep Contracting Parties informed of all relevant intersessional process and initiatives, in preparation for the Seventh Session of the Governing Body.

II. ADOPTION OF THE AGENDA

4. The Committee adopted its Agenda as contained in *Appendix 1*.

III. ELECTION OF THE CO-CHAIRPERSONS

5. The Committee elected Mr Axel Diederichsen (Canada) and Mr Kuldeep Singh (India) as co-chairpersons.

IV. OPERATIONS AND IMPLEMENTATION OF THE PROGRAMME OF WORK

6. The Secretariat presented document IT/GB7/SAC-1/16/2, which provided an overview of the progress of the operations of the System for all of the seven objectives of the GLIS Programme of Work (GLIS-PoW). The document also contained information on the status of financial contributions for the implementation of the GLIS-PoW.
7. The Committee commended the extensive amount of work delivered by the Secretariat in the intersessional period and requested the Secretary to continue providing information to the Committee members on a regular basis.
8. The Committee considered the voluntary, demand-driven nature of the Digital Object Identifier (DOI) system being put in place, and addressed the importance of making the system attractive to the users of genetic resources and related information. In that regard, it underscored the Global Open-source Breeding Informatics Initiative (GOBII) and the Research Programmes (CRPs) and Platforms of the Consultative Group on International Agricultural Research (CGIAR) as potential partners for the deployment of the DOI system.

9. The Committee also advised exploring how GLIS can build further on existing information systems like Genesys, the World Information and Early Warning System (WIEWS) and GRIN-Global and other similar systems. In addition, the Committee had a brief discussion on how GLIS could create a system for recipients to make available associated non-confidential information generated through research and breeding. This, however, will require further discussions.

V. DESIGN OF THE GLOBAL PORTAL

10. The Secretariat made a presentation on the design of the Global Information Portal together with the adoption of DOIs and reported on the new collaboration with the Information Technology Division of FAO for the development of the web-based platform for GLIS.

11. The Committee was of the view that the web-based platform should be a global entry point for users to get access to existing PGRFA information systems and resources. It should be robust, secure, and consistent and add only functionalities not provided by other systems. In particular, the relationship with WIEWS is worth exploring further.

VI. STANDARDS AND COMMON DATA FORMATS: IMPLEMENTING DIGITAL OBJECT IDENTIFIERS (DOIs)

12. The Secretariat introduced document IT/GB7/SAC-1/16/3 highlighting the major steps of the consultation process for the development of DOIs. The Secretariat presented two further documents made available online: *Data required for the assignation of Digital Object Identifiers in the Global Information System - v.1.*¹; and *Guidelines for the optimal use of Digital Object Identifiers as permanent unique identifiers for germplasm samples - v.1.*²

13. The Committee welcomed the publication of the first version of the descriptors as an important first step. It noted that the voluntary DOIs are not replacing local identifiers like accession numbers and recommended to continue testing and improving the guidelines with users, in particular with genebanks and plant breeders bearing in mind the need to avoid double data entry obligations.

14. The Committee positively noted that the DOI system allows Providers and Recipients of PGRFA with the necessary flexibility to adjust the associated descriptors or to assign a new DOI in cases of changes to the status of the identified object. GLIS should present relationships among DOIs as a way to make information associated to upstream and downstream DOIs accessible. The Committee advised to review and possibly revise the guidelines to avoid any unnecessary proliferation of DOIs.

15. The Committee further positively noted that DOIs become a useful tool for the transferred material and its associated information. The discovery of PGRFA through searches of passport or other PGRFA related data could, however, be done by the systems such as Genesys and other systems where the information is stored. The systems should be encouraged to allow linking via DOIs. The Committee noted that DOIs could become a simple cost effective way for recipients to disclose non-confidential information from research and breeding.

¹ Available at: <http://www.fao.org/3/a-bp767e.pdf>.

² Available at: <http://www.fao.org/3/a-bq549e.pdf>.

16. The Committee further positively noted that DOIs become a useful tool to discover the MLS status of the transferred germplasm and the associated information. GLIS will also make available the associated non-confidential information generated through research and breeding by the Recipient by pointing to the systems where the information is stored.

17. The Committee considered the need to prioritize improving quality of the data and information available in existing genebank information systems and advised the Secretariat to prepare a landscape analysis of the database systems used in genebanks. The Committee further recommended pursuing simplicity and inclusiveness of the DOI system. For the purpose of inclusiveness, the Committee recommended careful assessment of the actual differences in capacity among stakeholders to render the DOI system as accessible as possible.

18. The Committee noted the Benefit-sharing Fund project led by Indonesia as the first application of DOIs and the GLIS workflow transactions with breeders in a real-world scenario.

19. In the future, as the Treaty and the International Union for the Protection of New Varieties of Plants (UPOV) define points of collaboration, they could discuss the application of DOIs to varieties included in Distinctness, Uniformity and Stability (DUS) tests of UPOV member states. As one example, this could enable national variety trial data to become accessible and more broadly utilized.

VII. TRANSPARENCY ON THE RIGHTS AND OBLIGATIONS OF GLIS USERS

20. The Secretariat introduced document IT/GB7/SAC-1/16/4 with a presentation outlining some of the major findings of the Background Study Paper n. 10 as the basis to develop this area of the GLIS Vision and PoW³.

21. The Committee commended the Secretariat for the quality of the analysis provided in the Background Study Paper and considered further advances of this component of the PoW, and subject to the availability of financial resources, to:

- i) Facilitate a dialogue between the Scientific Advisory Committee and the *Ad Hoc* Open-ended Working Group to Enhance the Functioning of the Multilateral System of Access and Benefit-sharing, on issues regarding genetic information associated with the material accessed from the Multilateral System.
- ii) Continue monitoring relevant international fora and processes where the issue of access to, sharing and utilization of data and information extracted from genetic resources is being discussed, in particular as it relates to GLIS as described in Article 17 of the Treaty, and to keep the members of the Committee informed.

22. The Committee considered issues regarding the impact of information management on access on the one side and benefit sharing on the other, but specific suggestions must await further analysis.

³IT/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>.

VIII. PARTNERSHIPS, COLLABORATION AND CAPACITY DEVELOPMENT

23. The Secretariat introduced the document IT/GB7/SAC-1/16/5, which identified potential partnerships and joint opportunities for capacity development activities, with a focus on developing countries.

24. The Committee advised to elaborate further on the existing sources of information and to analyse their value for PGRFA related uses. It welcomed the target themes, tools and beneficiaries identified in the document and suggested to prioritise future partnerships with a strategic approach that would include preferential partnerships. Also, further analysis and prioritization is needed.

25. In particular, the Committee suggested exploring in detail synergies with Genesys, DivSeek, the CGIAR's platforms, WIEWS and the Access and Benefit-sharing Clearing-House (ABSCH) Portal of the Nagoya Protocol, and the Global Biodiversity Information Facility (GBIF). In addition, there is the need to ensure that GLIS is compatible and suitable to meet the needs and requirements of groups operating in developing countries.

26. The Committee advised the Secretariat to explore collaboration with the CBD Secretariat to raise awareness of the importance of documenting traditional knowledge relevant to PGRFA in accordance with Article 17 of the Treaty and the ongoing work under the Nagoya Protocol.

27. Regarding the capacity development component of the PoW, the Committee noted the approaches outlined in the documentation. The Committee also welcomed the plans to establish regional hubs on capacity development for the implementation of GLIS in the Near East and North Africa Region (NENA) and in the South African Development Community (SADC) with the generous support of the Government of Germany.

28. The Committee recommended the Secretariat to explore options and identify potential financial resources to extend similar collaborative models for capacity development on PGRFA documentation and information management to other regions and countries.

29. The Committee also suggested exploring partnerships with key universities, existing global and regional training programmes on PGRFA and foundations to support and increase research, and the training opportunities for staff involved in areas related to the PoW.

IX. DRAFT MONITORING AND ASSESSMENT MECHANISM

30. The Secretariat introduced the document IT/GB7/SAC-1/16/6 containing elements for the development of a monitoring and assessment mechanism for GLIS, including a feedback system and statistics.

31. The Committee advised to keep the three major methods described in the document to gather information and monitor the GLIS portal, as outlined in Figure 1 of document IT/GB7/SAC-1/16/6: a questionnaire, web generated statistics, and interviews and email communications from experts. Regarding the questionnaire to get feedback from users on the web-based portal, the Committee advised to reduce the number of questions and to make the questionnaire online. The Committee also recommended the inclusion of more questions related to the relevance of the information and, subject to the availability of resources, to get feedback through the organization of one-on-one interviews.

32. Regarding the frequency of the reports, the Committee advised the Secretariat to produce reports every two years, on the occasion of the Governing Body meetings.

X. OTHER BUSINESS

33. Under this agenda item, the Secretary of the European Cooperative Programme for Plant Genetic Resources (ECPGR), Mr Lorenzo Maggioni, was invited to give a presentation on EURISCO. The Committee welcomed the presentation and took note of the development of a memorandum of understanding with the Treaty Secretariat.

XI. ADOPTION OF THE REPORT

34. The Committee adopted this report.

**FIRST MEETING OF THE SCIENTIFIC ADVISORY COMMITTEE ON THE
GLOBAL INFORMATION SYSTEM OF ARTICLE 17 OF THE TREATY****Rome, Italy, 24 – 25 November 2016****AGENDA**

1. Election of the Co-Chairpersons
2. Adoption of the Agenda
3. Operations and Implementation of the Programme of Work
4. Design of the Global Portal
5. Standards and Common Data Formats: Implementing Digital Object Identifiers (DOIs)
6. Transparency on the Rights and Obligations of GLIS Users
7. Partnerships, Collaboration and Capacity Development
8. Draft Monitoring and Assessment Mechanism
9. Other Business
10. Adoption of the Report

Appendix 2

LIST OF PARTICIPANTS

| EXPERTS NOMINATED BY THE VICE-CHAIRPERSONS OF THE SEVENTH SESSION OF THE GOVERNING BODY | |
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