

August 2004

E



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
United  
Nations

Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

Item 3.1 of the Draft Provisional Agenda

**COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

**Tenth Regular Session**

Rome, 8-12 November 2004

**OVERVIEW OF THE FAO *GLOBAL SYSTEM FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE* AND ITS POTENTIAL CONTRIBUTION TO THE IMPLEMENTATION OF THE *INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE***

## Table of Contents

	Paragraphs
I. Introduction	1 - 4
II. The FAO Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture	5 - 32
III. Guidance sought from the Commission	33 - 34

For reasons of economy, this document is produced in a limited number of copies. Delegates and observers are kindly requested to bring it to the meetings and to refrain from asking for additional copies, unless strictly indispensable.  
Most FAO meeting documents are available on Internet at [www.fao.org](http://www.fao.org)

W0000



## I. INTRODUCTION

1. From its establishment, by the 1983 FAO Conference, the Commission on Genetic Resources for Food and Agriculture<sup>1</sup>, has coordinated, overseen and monitored the development of an FAO Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture. Since 1991, the Commission has considered progress reports on the FAO Global System or its components at all its regular sessions. At its Ninth Regular Session the Commission suggested that, in future sessions of the Commission, a summary document be prepared, providing an overview of the various components of the FAO Global System, and their potential contribution to the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture, adopted by FAO Conference in 2001. This document responds to the request of the Commission.

2. Section II briefly describes the chief components of the FAO Global System, as shown in *Table 1*. The documents for the current Session in which progress that has been made since the Ninth Regular Session is described, are cross-referenced, in order to make it easier for delegations to address the FAO Global System in a coherent manner.

**Table 1: Components of the FAO Global System**

<b><i>International Agreements</i></b>
International Undertaking on Plant Genetic Resources
<b><i>Global Instruments</i></b>
<i>State of the World's Plant Genetic Resources</i>
<i>Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture</i>
<b><i>Global Mechanisms</i></b>
International Network of <i>Ex Situ</i> Collections under the auspices of FAO
International Networks on Plant Genetic Resources for Food and Agriculture
World Information and Early Warning System
<b><i>Codes of Conduct and International Standards</i></b>
Code of Conduct for Germplasm Collecting and Transfer
Gene Bank Standards and Guidelines

3. Where relevant, more specific information on the components of the FAO Global System that are relevant to Part V of the International Treaty, *Supporting Components*, and their potential contribution to the implementation of the International Treaty is considered. In Article 7.2, the Treaty states that “International cooperation shall, in particular, be directed to: [...] maintaining and strengthening the institutional arrangements provided for in part V”. *Table 2* shows these Supporting components.

---

<sup>1</sup> The Commission was originally established as the Commission on Plant Genetic Resources. In 1995, its mandate was broadened by the FAO Conference to cover all components of biodiversity of relevance to food and agriculture. It was then renamed the Commission on Genetic Resources for Food and Agriculture (CGRFA).

**Table 2: Supporting Components of the International Treaty (Part V)**

<i>Supporting Components</i>	<i>Articles</i>
<i>Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture</i>	Articles 14 and Art.17
<i>State of the World's Plant Genetic Resources for Food and Agriculture</i>	Article 17.3
<i>Ex Situ Collections of Plant Genetic Resources for Food and Agriculture held by the International Agricultural Research Centres of the Consultative Group on International Agricultural Research and other International Institutions</i>	Article 15
International Plant Genetic Resources Networks	Article 16
<i>Global Information System on Plant Genetic Resources for Food and Agriculture</i>	Article 17

4. In Section III, the guidance of the Commission is sought as to how the Commission might seek to establish a cooperative framework with the Governing Body of the *International Treaty*, in order to develop these components, as the *Treaty* foresees.

## **II. THE FAO GLOBAL SYSTEM FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

5. Since 1983, in the context of its overall work, the Commission has overseen the development of the FAO Global System, as a flexible framework to ensure the safe conservation and promote the availability and sustainable utilization of plant genetic resources for food and agriculture, for present and future generations. The FAO Global System comprises a series of international instruments and global mechanisms, to promote international cooperation and reach consensus on areas of mutual interest to the Commission members<sup>2</sup>. The Commission monitors the operation of the FAO Global System.

### **International Undertaking on Plant Genetic Resources**

6. The FAO Global System was built around the International Undertaking, the first comprehensive international agreement dealing with plant genetic resources for food and agriculture. It was adopted as a non-legally binding agreement by the FAO Conference in 1983<sup>3</sup>, to promote international harmony in matters regarding access to plant genetic resources for food and agriculture. A series of agreed interpretations, in the form of three FAO Conference Resolutions, were later annexed to it. The objective of the Undertaking is to “ensure that plant genetic resources of economic and/or social interest, particularly for agriculture, will be explored, preserved, evaluated and made available for plant breeding and scientific purposes”.

7. By Resolution 7/93, the 1993 FAO Conference initiated the revision of the International Undertaking on Plant Genetic Resources that culminated in the adoption of the International Treaty in November 2001.

<sup>2</sup> More information is available on the Internet at <http://www.fao.org/ag/cgrfa/PGR.htm#diagram>.

<sup>3</sup> Resolution 8/83, see <ftp://ext-ftp.fao.org/ag/cgrfa/Res/C8-83E.pdf>.

### Report on the State of the World's Plant Genetic Resources

8. In 1989, the Commission “recommended that the Secretariat should periodically prepare a report on the State of the World's Plant Genetic Resources, with the cooperation of other bodies concerned. The report should analyze the current plant genetic resources situation, and describe activities and programmes being carried out by regional, international and non-governmental organizations, with the aim of identifying gaps, constraints and emergency situations; this would allow the Commission to recommend priorities and ways of harmonizing the overall effort”. The first *Report*<sup>4</sup> was prepared for the Fourth International Technical Conference, held in Leipzig, Germany in 1996, which welcomed it as the first comprehensive worldwide assessment of the status and use of plant genetic resources for food and agriculture.

9. At its Ninth Session, the Commission agreed that its Intergovernmental Technical Working Group on Plant Genetic Resources should meet, *inter alia*, to guide the preparation of the second *Report*. The Working group met in its Second Session in November 2003. Its deliberations are contained in paragraphs 7-15 of its report<sup>5</sup>. The Working Group noted that the preparation of the second *Report* would take place in the context of the expected entry into force of the International Treaty, and recommended the provisional steps and an indicative timeline for preparing the second *Report* that are shown in *Appendix D* of its report. Progress since the meeting of the Working Group is reported, and the Commission's guidance is requested in the document, *Follow-up to Recommendations of the Commission on Genetic Resources for Food and Agriculture and its Working Group on Plant Genetic Resources for Food and Agriculture: (2) Preparation of the second Report on the State of the World's Plant Genetic Resources*<sup>6</sup>.

10. According to Article 17.3 of the International Treaty, “the Contracting Parties shall cooperate with the Commission ... in its periodic reassessment of the state of the world's plant genetic resources for food and agriculture in order to facilitate the updating of the rolling *Global Plan of Action*” (described below).

#### **Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture**

11. In 1991, the Commission requested the development of a rolling *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture*, with programmes and activities aimed at filling in gaps, overcoming constraints and facing emergency situations identified in the *Report on the State of the World's Plant Genetic Resources*. The periodically updated *Plan* would permit the Commission to recommend priorities and promote the rationalization and coordination of efforts. The first *Global Plan of Action* was developed under the guidance of the Commission, through a country-driven preparatory process. It was adopted in 1996 by 150 countries at the Fourth International Technical Conference in Leipzig<sup>7</sup>. The first *Plan* comprises twenty priority activity areas, covering *in situ* and *ex situ* conservation, plant genetic resources utilization, and institutions and capacity-building. The International Technical Conference agreed that the *Plan* should be implemented as an integral part of the FAO Global System, in harmony with the Convention on Biological Diversity, and that governments would monitor and guide overall progress, through the Commission.

12. At its Ninth Session, the Commission requested its Working Group to guide the process for monitoring the *Global Plan of Action*. The deliberations of the Working Group are given in its report, paragraphs 19-29. Further progress on implementation of the *Plan* is described in the document, *Country Progress Report on the Implementation of the Global Plan of Action for the*

---

<sup>4</sup> FAO, 1996. See [http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPS/Pgrfa/wrlmap\\_e.htm](http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPS/Pgrfa/wrlmap_e.htm).

<sup>5</sup> Document CGRFA-10/04/4 (CGRFA/WG-PGR-2/03/REPORT).

<sup>6</sup> Document CGRFA-10/04/5.2.

<sup>7</sup> See <http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPS/Pgrfa/gpaeng.htm>.

*Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture*<sup>8</sup>. In addition, the document, *Follow-up to the Recommendations of the Commission on Genetic Resources for Food and Agriculture and its Working Group on Plant Genetic Resources for Food and Agriculture: (1)*<sup>9</sup>, reports on progress in facilitating implementation of the *Plan*, paragraphs (12-19) and on monitoring implementation in paragraphs (20-34), and seeks guidance from the Commission.

13. The *Global Plan of Action* is mentioned in a number of places in the International Treaty. The Preamble notes that the *Plan* is “an internationally agreed framework for activities on plant genetic resources for food and agriculture”. In Article 13, *Benefit-sharing in the Multilateral System*, Contracting Parties agree that benefits arising from the use of plant genetic resources for food and agriculture from the Multilateral System shall be shared, “taking into account the priority activity areas in the rolling *Global Plan of Action*” (Article 13.2). “The Contracting Parties recognize that the ability to fully implement the *Plan*, in particular of developing countries and countries with economies in transition, will depend largely upon the effective implementation of Article 13 and of the funding strategy” (Article 13.5). Article 14 is devoted to the *Plan*:

“Recognizing that the rolling *Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture* is important to this Treaty, Contracting Parties should promote its effective implementation, including through national actions and, as appropriate, international cooperation to provide a coherent framework, *inter alia*, for capacity-building, technology transfer and exchange of information, taking into account the provisions of Article 13.”

14. In Article 18, *Financial Resources*, the “Contracting Parties undertake to implement a funding strategy for the implementation of this Treaty ...” (Article 18.1). “In order to mobilize funding for priority activities, plans and programmes, in particular in developing countries and countries with economies in transition, and taking the *Global Plan of Action* into account, the Governing Body shall periodically establish a target for such funding” (Article 18.3).

#### **International Network of *Ex Situ* Collections under the Auspices of FAO**

15. In 1989, the Commission called for the development of an International Network of *Ex Situ* Collections under the Auspices of FAO, in line with Article 7.1a of the International Undertaking, because of lack of clarity regarding the legal situation of the *ex situ* collections. Twelve International Agricultural Research Centres (IARCs) of the Consultative Group on International Agricultural Research (CGIAR) accordingly signed agreements with FAO in 1994, placing designated germplasm (some 500,000 accessions) in the International Network of *Ex Situ* Collections under the Auspices of FAO<sup>10</sup>. Through these agreements, the Centres recognised the “intergovernmental authority of FAO and its Commission in setting policies for the International Network”. They agreed to hold the designated germplasm “in trust for the benefit of the international community”, and “not to claim ownership, or seek intellectual property rights, over the designated germplasm and related information”. The collection of the International Coconut Genetic Resources Network (COGENT), held by the governments of India, Indonesia and Cote d’Ivoire was brought into the Network in 1998. The Commission monitors the implementation of these agreements and the holding institutions are invited to report to its biennial sessions. The Commission noted that these agreements provided an interim solution, until completion of the International Treaty.

16. At its Ninth Session, the Commission, in reviewing a report on the International Network of *Ex Situ* Collections, noted that the Agreements with the Twelve IARCs were to be automatically renewed for a period of four years, from 26 October 2002. It endorsed a revised

<sup>8</sup> Document CGRFA-10/04/inf.6.

<sup>9</sup> Document CGRFA-10/04/5.1.

<sup>10</sup> Available on the internet at <http://www.fao.org/ag/cgrfa/exsitu.htm>.

Material Transfer Agreement (MTA), and recommended that this be adopted by the Centres. This MTA was to be without prejudice to the development of any MTA to be adopted by the Governing Body of the Treaty. The Commission recommended that the IARCs should take appropriate measures, in accordance with their capacity, to maintain effective compliance with the conditions of the MTA, and report on such measures to the Commission at this session.

17. The Report of the IARCs is in *Reports from international organizations on their policies, programmes and activities on agricultural biological diversity (II): International Agricultural Research Centres of the Consultative Group on International Agricultural Research (CGIAR)*<sup>11</sup>.

18. The document, *Report on the International Network of Ex Situ Collections under the Auspices of FAO*<sup>12</sup>, provides an overall picture of developments since the last session. In 2004, the Tropical Agriculture Research and Higher Learning Centre (CATIE) brought materials of its *ex situ* collections into the Network<sup>13</sup>.

19. In Article 15, *Ex Situ Collections of Plant Genetic Resources for Food and Agriculture held by the International Agricultural Research Centres of the Consultative Group on International Agricultural Research and other International Institutions*, the International Treaty calls upon IARCs of the CGIAR and other international institutions to sign agreements with the Treaty's Governing Body with regard to their *ex situ* collections, bringing their materials under the Treaty.

20. At its First Meeting, the Interim Committee for the International Treaty decided to postpone consideration of the document, *Consultations with the International Agricultural Research Centres of the CGIAR and other relevant institutions on the agreements to be signed with the Governing Body*<sup>14</sup> until its Second Meeting.

#### **International Networks on Plant Genetic Resources for Food and Agriculture**

21. Article 16 of the International Treaty states that:

“Existing cooperation in international plant genetic resources for food and agriculture networks will be encouraged or developed on the basis of existing arrangements and consistent with the terms of this Treaty, so as to achieve as complete coverage as possible of plant genetic resources for food and agriculture” (Article 16.1).

“The Contracting Parties will encourage, as appropriate, all relevant institutions, including governmental, private, non-governmental, research, breeding and other institutions, to participate in the international networks” (Article 16.2).

22. The FAO Global System has also promoted the developments of networks. The *Global Plan of Action* lists, as Priority Activity Area 16, *Promoting networks for plant genetic resources for food and agriculture*. Networks form important platforms for scientific exchange, information sharing, technology transfer, research collaboration, and for the determination and sharing of responsibilities for such activities as collecting, conservation, distribution, evaluation, and genetic enhancement of plant genetic resources.

23. Crop, regional and thematic networks<sup>15</sup> assist in promoting exchange of materials, enhancing the utilization of germplasm, setting priorities for action, developing policies, and

---

<sup>11</sup> Document CGRFA-10/04/11.2.

<sup>12</sup> Document CGRFA-10/04/6.

<sup>13</sup> See documents CGRFA-10/04/6 and CGRFA-10/04/11.1 paras. 5-9.

<sup>14</sup> Document CGRFA/MIC-1/02/8.

<sup>15</sup> At its Sixth Session, in 1995, the Commission recognized that the crop-related networks were a useful approach to integrating activities on plant genetic resources, in order to strengthen practical linkages between the conservation and utilization of crop genetic resources, at field level.

providing a means whereby crop-specific, regional and thematic views can be conveyed to various organizations and institutions. These networks promote a coordinated approach to identifying, evaluating and conserving the genetic variability of selected crop species, with the aim of improving cultivars and their adaptation to farmers' needs. Thematic networks often address cross-cutting topics such as taxonomy, information management, *in situ* conservation<sup>16</sup>, agro-ecology, community development, and biotechnology.

24. The Commission's Working Group on Plant Genetic Resources discussed the characteristics and contributions of international plant genetic resources networks during its Second Session; its deliberations are given in its report<sup>17</sup>, paragraphs 16-17. Progress since that meeting is reported, and the Commission's guidance is requested, in the document, *Follow-up to Recommendations of the Commission on Genetic Resources for Food and Agriculture and its Working Group on Plant Genetic Resources for Food and Agriculture:(1)*<sup>18</sup>, para. 35-38.

#### **World Information and Early Warning System on Plant Genetic Resources (WIEWS)**

25. WIEWS was established by FAO as a world-wide dynamic mechanism<sup>19</sup> to facilitate the exchange of information that governments provide on plant genetic resources collections and related technologies. WIEWS collects and disseminates information on plant genetic resources for food and agriculture and serves as an important tool for the periodic updating of the Report on the *State of the World's Plant Genetic Resources*.

26. WIEWS also supports a network on management of information on plant genetic resources for food and agriculture, in view of enhancing visibility and accessibility to data at national genebanks and crop-related networks. An Early Warning Mechanism is being developed to draw rapid attention to hazards threatening the operation of *ex situ* collections, and to the loss of genetic diversity of crops for food and agriculture. The FAO Seed Information System (SIS) is currently being included under the new version of WIEWS. National Information-sharing Mechanisms on Plant Genetic Resources and for the implementation of the *Global Plan of Action*<sup>20</sup>, as they have been established in the countries that tested the new monitoring approach

---

<sup>16</sup> At its Third Regular Session, the Commission called for the establishment of networks of in situ conservation areas, which would include provisions for the "on-farm" conservation of crops, and in situ conservation of crop wild relatives and wild sources of food. The in situ conservation of plant genetic resources for food and agriculture is the object of four priority activity areas in the Global Plan of Action. The Commission has formulated a number of recommendations related to such activities: it has agreed that in situ conservation should be based on the efforts of local communities, non-governmental organizations and national institutions, working within an international framework. Progress in several in situ conservation projects has been regularly reported to the Commission.

<sup>17</sup> Document CGRFA-10/04/4 (CGRFA/WG-PGR-2/03/REPORT).

<sup>18</sup> Document CGRFA-10/04/5.

<sup>19</sup> WIEWS presently includes:

- a number of **relational databases**, resulting from direct contributions from member countries and data collating activities. These contain data on the location of over 5.5 million plant genetic resources accessions, in some 1410 *ex situ* collections around the world; the structure and activities of national plant genetic resources programmes in almost all countries; some 8000 seed-supplying institutions around the world; commercial crop varieties; and relevant non-FAO databases;
- a **Global Network** of country correspondents on the exchange on information on plant genetic resources for food and agriculture, who have been officially nominated by Governments;
- a **repository directory** of documents and proceedings, including country reports on the state of plant genetic resources for food and agriculture and of the implementation of the *Global Plan of Action*; and,
- a **list of indicators and a draft reporting format** on the implementation of the *Global Plan of Action*.

<sup>20</sup> Presently from Cuba, Czech Republic, Ecuador, Fiji, Ghana, Kenya, Papua New Guinea, including information provided by several national stakeholders on the 20 priority activity areas of the *Global Plan of Action* and on projects, institutions, professionals, cultivated varieties, laws and regulations.



for the *Global Plan of Action*<sup>21</sup>, can be accessed through a multilingual free text search engine under WIEWS.

27. The WIEWS web application, hosted under the FAO World Agricultural Information Centre (WAICENT), for remote on-line search, update and report, has been renewed and improved to allow friendlier access and utilisation of the information, as well as to ensure a more efficient flow of information between WIEWS and member countries.

28. Article 17.1 of the International Treaty, *The Global Information System on Plant Genetic Resources for Food and Agriculture*, states that:

“the Contracting Parties shall cooperate to develop and strengthen a global information system to facilitate the exchange of information, based on existing information systems, on scientific, technical and environmental matters related to plant genetic resources for food and agriculture, with the expectation that such exchange of information will contribute to the sharing of benefits by making information on plant genetic resources for food and agriculture available to all Contracting Parties” (Article 17.1).

“Based on notification by the Contracting Parties, early warning should be provided about hazards that threaten the efficient maintenance of plant genetic resources for food and agriculture, with a view to safeguarding the material” (Article 17.2).

29. At its Ninth Regular Session, “the Commission reaffirmed the important role of the WIEWS as a metadata information-provider, and welcomed proposals for its further development, to contribute to the Global Information System of the Treaty.”<sup>22</sup>

#### **International Code of Conduct for Plant Germplasm Collecting and Transfer**

30. This *International Code of Conduct for Plant Germplasm Collecting and Transfer*<sup>23</sup> was negotiated by the Commission and adopted by the 1993 FAO Conference, as a voluntary instrument. It provides a framework which governments may use in developing national regulations or formulating agreements for the collection of germplasm. The *Code* provides guidelines for the requesting of permits by collectors and for the issuance of such permits by state authorities, and it sets out minimum responsibilities of collectors, sponsors, curators and users of collected germplasm, covering both the collecting and transfer of germplasm.

31. The Commission’s Working Group on Plant Genetic Resources considered the *Code* during its Second Session (see para. 18 of its report)<sup>24</sup>. The Commission’s guidance is requested in the document, *Follow-up to the Recommendations of the Commission on Genetic Resources for Food and Agriculture and its Working Group on Plant Genetic Resources for Food and Agriculture: (1)*<sup>25</sup>, para. 39-41.

#### **Genebank standards and guidelines**

32. From time to time, the Commission considers and adopts scientific and technical standards or guidelines, in such areas as genebanks and regeneration of samples. The International Treaty specifically requires international organizations signing agreements in accordance with Article 15 to “undertake to manage and administer [their] *ex situ* collections in accordance with internationally accepted standards, in particular the Genebank Standards as endorsed by the FAO Commission on Genetic Resources for Food and Agriculture”<sup>26</sup>.

---

<sup>21</sup> CGRFA-10/04/5.1, section 2.1.3.

<sup>22</sup> *Report of the Ninth Session*, document CGRFA-9/02/REP, para.23.

<sup>23</sup> Available online at <http://www.fao.org/ag/AGP/AGPS/PGR/icc/icce.htm>, in English, French and Spanish.

<sup>24</sup> Document CGRFA-10/04/4 (CGRFA/WG-PGR-2/03/REPORT).

<sup>25</sup> Document CGRFA-10/04/5.1.

<sup>26</sup> Article 15.1d.

### **III. GUIDANCE SOUGHT FROM THE COMMISSION**

33. With the background given in this paper, the Commission may wish to provide guidance for the further development of the components of the FAO Global System, in the light of the coming into force of the International Treaty, and the potential contribution of its components to the Treaty, as foreseen in Part V.

34. It may also wish to invite the Governing Body of the International Treaty to propose ways in which the Governing Body and the Commission may establish a cooperative framework in order to develop the relevant components of the FAO Global System, as the Treaty foresees.