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**PROGRESS REPORTS FROM FAO ON ITS POLICIES, PROGRAMMES
AND ACTIVITIES ON AGRICULTURAL BIODIVERSITY (Part I)
AND
PROGRESS REPORT ON THE GLOBAL SYSTEM FOR THE
CONSERVATION AND SUSTAINABLE USE OF PLANT GENETIC
RESOURCES FOR FOOD AND AGRICULTURE (Part II)**

These reports have been submitted to the Secretariat of the Convention on Biological Diversity (CBD) by the Food and Agriculture Organization of the United Nations (FAO) as an information document to the Third Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA).

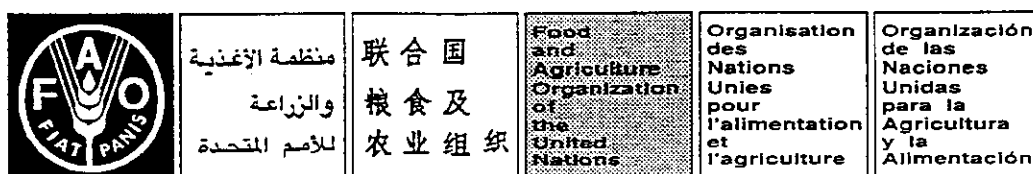
Part I contains information on:

- Crop and forest Genetic resources (CGRFA-7/97/8.1)
- Other sectors of agricultural biological diversity (CGRFA-7/97/8.2)

Part II contains information on progress regarding the different components of the Global system for the conservation and sustainable use of plant genetic resources for food and agriculture (CGRFA-7/97/3)

They were prepared for and presented to the Seventh Session of the Commission on Genetic Resources for Food and Agriculture, (May 1997) as CGRFA/7/97/8.1, 8.2 and CGRFA-7/97/3 (They are posted on the Internet at <<http://www.fao.org/waicent/FaoInfo/Agricult/AGP/AGPS/PGR/CGRFA.htm>> in English, French & Spanish)

Attention is drawn to this information document under Item 6 of the Provisional Agenda of the Third Meeting of the Subsidiary Body of Scientific, Technical and Technological Advice (SBSTTA).



Item 7 of the Provisional Agenda
COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE
Seventh Session
Rome, 15-23 May 1997
REPORT FROM FAO ON ITS POLICIES, PROGRAMMES AND ACTIVITIES ON AGRICULTURAL BIOLOGICAL DIVERSITY: (1) PLANT GENETIC RESOURCES

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**REPORT FROM FAO ON ITS POLICIES, PROGRAMMES AND ACTIVITIES
ON AGRICULTURAL BIOLOGICAL DIVERSITY:
(1) PLANT GENETIC RESOURCES**

I. INTRODUCTION

1. The Commission regularly receives reports from international organizations, including FAO, on their policies, programmes and activities for the conservation and use of plant genetic resources. The Commission considers such reports to be of value, both to it and to the organizations, which are able to acquaint countries with their objectives and programmes, and benefit from their comments.
2. The Commission considered that the report on FAO's activities submitted to the Sixth Session "should serve as a model for future reports, which should be provided to the Commission at each regular session". As in the previous report, the present document covers FAO's work in the field of plant genetic resources for food and agriculture, supported by the Agriculture Department and, in particular, the Plant Production and Protection Division, for crop genetic resources, and by the Forestry Department, for the genetic resources of forest plant species. They collaborate in regard to *in situ* conservation, particularly of wild crop relatives. FAO's ongoing projects in the field of plant genetic resources are listed in document CGRFA-7/97/Inf. 4.
3. Following the broadening of the mandate of the Commission, FAO is also reporting on its activities in other sectors of agro-biodiversity (farm animal genetic resources and fishery genetic resources), in the companion document, CGRFA-7/97/8.2. The Legal Office's substantial support to agro-biological diversity programmes, as well as the supporting activities of other departments, such as the Economic and Social Department, and the Sustainable Development Department, are also covered there.
4. Other international organizations have also been requested to report on their activities not only in the field of plant genetic resources, but also in other sectors of agro-biodiversity. Reports submitted by such organizations are given in document CGRFA-7/97/7, to be considered under agenda item 6.

II. FAO ACTIVITIES IN 1995 AND 1996, AND FUTURE PROGRAMME

1. Crop genetic resources

Regular programme activities

5. *Table 1* shows 1996-1997 Regular Programme budgetary allocations to the Agriculture Department, under which substantial crop genetic resource conservation and utilization activities take place. (These include staff salaries.) For each programme element, the degree of involvement in plant genetic resources activities is estimated. Under these budgetary allocations, a number of components of the FAO Global System on the Conservation and Sustainable Utilization of Plant Genetic Resources (document CGRFA-7/97/3) are operationally supported, including by the provision of the Secretariat for, and the servicing of, the Commission and its Working Group.
6. In 1995 and 1996, substantial Regular Programme staff and non-staff resources supported the preparation of the Fourth International Technical Conference on Plant Genetic Resources (Leipzig, Germany, June 1996), including the preparation of the first *Report on the State of the World's Plant Genetic Resources* and the first *Global Plan of Action on Plant Genetic Resources* (see

CGRFA-7/97/3). The World Information and Early Warning System (WIEWS) was a major source of information in this task.

Table 1: 1995/96 budget allocations to Regular Programme elements with components relevant to plant genetic resources, and estimated weight of these components

Programme element	Budget (US \$ 000)	Estimated weight of PGR components
Commission on Plant Genetic Resources	1837	high
<i>Ex situ</i> and <i>in situ</i> conservation and networking	452	high
Evaluation/monitoring of use of plant genetic resources for sustainable agricultural development	441	high
World Information System on Plant Genetic Resources	729	high
Maintenance of biodiversity for difficult ecologies	320	high
Optimization of diversified food crops production system	1162	medium
Support to the International Rice Commission	522	medium
Intensification and Diversification of Horticultural Crops Production	902	medium
Industrial crops promotion for sustainable development	552	medium
Seed and planting material information and exchange	612	medium
Strengthening of national seed programmes	726	medium
Improved on-farm seed production	344	medium
Implementation of International Plant Protection Convention	1402	low
Integrated Pest Management	1978	low

7. *Ex Situ and In Situ Conservation and Networking* has supported the development of the International Network of *Ex Situ* Collections under the Auspices of FAO. In 1996, FAO participated in the CGIAR centres' external assessment of their genebank operations (twelve centres having formally joined the Network in October 1994). The Review Panel's recommendations will assist in improving genebank facilities and operations, including the safety duplication of accessions. In 1995 and 1996, FAO (in cooperation with IPGRI and other institutions) supported various technical consultations to develop guidelines for seed crop germplasm regeneration, and field genebank and *in vitro* genebank management: such technical consultations are listed in *Appendix 1*. FAO will be convening an Expert Consultation on Ecosystem Conservation and Sustainable Rural Development, planned for 1998, which will link conservation and sustainable rural development and training.

8. *Crop-related Networks*: FAO reported extensively to the Sixth Session on activities concerning such networks (document CPGR-6/95/5.1 *Appendix 1*), which, the Commission noted, were "a useful approach to integrating activities on plant genetic resources". It "suggested that such networks be regarded as part of the Global System, in order to strengthen practical linkages between the conservation and sustainable utilization of crop genetic resources". The *Global Plan of Action* identified the promotion of crop networks as a priority area. During 1995 and 1996, FAO has supported various global, inter-regional and regional crop-related networks (established in close collaboration with FAO Regional Offices and relevant scientific organizations), with the aim of strengthening collections, preserving genetic diversity (including that of wild relatives), and integrating conservation and utilization. Computerized databases have been or are being developed for such networks. The activities of individual networks are summarized in *Appendix 2*.

9. Under *Evaluation/Monitoring of the Use of Plant Genetic Resources for Sustainable Agricultural Development*, with financial support from FAO, the Indian National Bureau of Plant Genetic Resources collected tea germplasm and established the first base collection of a crop with recalcitrant seeds. Similar support was provided to the Xixia Kiwi Fruit Research Institute of China for the collection and conservation of kiwi fruit germplasm, and to the Beijing Vegetable Research Centre, in order to multiply and characterize 500 vegetable crop accessions. A catalogue of this material was published, to facilitate international germplasm exchange. A basic study on cacao germplasm in rural areas by the National University of Honduras was initiated in 1996.
10. In 1995 and 1996, Regular Programme activities also gave technical support to development projects implemented with extra-budgetary funds, for the strengthening of regional and national programmes for plant genetic resources conservation and utilization. For example, a global project proposal for "Coconut Germplasm Utilization and Conservation to Promote Sustainable Coconut Production" was developed, for likely support by the Common Fund for Commodities (CFC) and the Asian Development Bank, and execution by the International Coconut Genetic Resources Network (COGENT) of IPGRI. A project for the "Development of Strategies for *In Situ* Conservation and Utilization of Plant Genetic Resources in Desert-prone Areas of Africa" will become operational in 1997, with funding from IFAD (the International Fund for Agricultural Development). FAO and IPGRI are collaborating in this project.
11. In 1995 and 1996, FAO supported the Global Programme on *Prosopis* spp., and promoted an awareness of the value of *Prosopis* spp. for the sustainable development of agro-sylvo-pastoral production systems in arid and semi-arid regions. A further focus was the use of plant genetic material suited to difficult ecologies, including germplasm exchange, and research on fast-growing pasture crop selection. Activities in support of the local production of forage crop seed was carried out in several regions (East Africa; the Chaco, Campos and Patagonia agro-ecological zones of South America; the Himalayas; and South East Asia) with similar ecological and social conditions and production systems.
12. *Optimization of Diversified Food Crops Production Systems* focuses on crop improvement, including through plant breeding, and on cropping systems optimization in developing countries, with emphasis on cereals and legumes. Activities have included support to the Tropical Asian Maize Network and to the Global Grain Legumes Drought Research Network; the development of breeding programmes for enhanced phosphorus uptake; and the preparation of books on maize and barley-breeding in the tropics. Plant Breeding News (a new electronic newsletter) will be launched in May 1997.
13. FAO provides the secretariat of the *International Rice Commission*, and has assisted in promoting the collaborative development and use of hybrid rice and rainfed lowland/swamp rice, and compiling and disseminating information on rice and production factors in various agro-ecologies. The Commission will hold its nineteenth session in Egypt in September 1998.
14. *Intensification and Diversification of Horticultural Crops Production* supports the utilization of fruit, vegetable, and root and tuber crop genetic resources, by promoting plant improvement programmes (selection and breeding), and initiatives to enhance plant multiplication systems and encourage the wider use of adapted and productive varieties, for better nutrition and increased income. Much of this work is carried out through crop-related networks.
15. *Industrial Crops Promotion for Sustainable Development* supports "new" crops or cultivars suitable for marginal ecosystems (such as salt-tolerant samphire, drought-tolerant new sweet sorghums and cold-tolerant oil-palm) and promotes the sustainable integration of under-utilized and wild species in production systems. FAO supports the International Council for Medicinal and Aromatic Plants, and activities related to the conservation and utilization of their genetic resources.

16. *Seed and Planting Material Information and Exchange* supports the Seed Exchange Unit, which, in 1995 and 1996, distributed 11,034 seed samples for experimental purposes.

17. *Strengthening of National Seed Programmes* assists governments in formulating and implementing their national seed policies, and smallholders - particularly in poor or remote regions - in adopting appropriate technologies for seed and planting material processing, quality control, storage and distribution.

18. *Improved On-farm Seed Production* helps farmers produce good quality seeds from their own cultivars, and promotes their conservation and continued development.

19. *Implementation of the International Plant Protection Convention* covers regulatory aspects of safe international germplasm movement, and is presently under revision to bring it into line with the WTO Sanitary and Phytosanitary Measures Agreement. Safe germplasm introduction requires effective plant quarantine: this is particularly important in many developing countries, where dependence on introduced and improved crops is high. Relevant publications include *Technical guidelines for the safe movement of germplasm* (prepared jointly with IPGRI); *International standards for phytosanitary measures*, to facilitate implementation of the Convention; and the *Code of conduct for the import and release of exotic biological control agents*.

20. *Integrated Pest Management (IPM)* is a general framework, with broad implications for crop genetic resilience, because it makes farmers the direct managers of diversity promotion and conservation processes. IPM promotes the use of crop varieties resistant to diseases, with a broad genetic base, and mitigates inappropriate pest-driven selection: farmers can continue using a range of varieties that would be discarded if high pest pressure generated by inappropriate strategies overcame their inbred resistance. Biological control through the conservation of pests' natural enemies is an important factor. IPM promotes weed management through new methods that exploit the capacity of some crop varieties to inhibit the growth of some weed species, the plant health concept, and the use of cover crops and other sources of organic materials, in combination with other strategies to improve overall plant vigour.

21. *Training*: a wide variety of individual and group training activities were supported during 1995 and 1996, in close collaboration with national programmes and international organizations. A list of training courses and workshops is in *Appendix 3*.

Field programme activities

22. Many technical assistance field projects involve plant genetic resources activities, although it is difficult to determine the relative weight of plant genetic resources activities in individual projects. Selected projects will be described briefly here to illustrate their plant genetic resources component. A fuller list is given in document CGRFA-7/97/Inf. 4.

23. The Fourth International Technical Conference on Plant Genetic Resources was financially supported by a number of donors, including through field projects.

24. Examples of a direct focus on crop genetic resources include the FAO Technical Programme projects, TCP/CPR/6613, "Conservation of Chinese Crop Germplasm Resources" and TCP/DRK/4555, "Crop Germplasm". The former supported the emergency collection and conservation of crop germplasm in the Three Gorge area in China, before a huge reservoir under construction flooded part or all of nineteen counties. The latter provided equipment and training to the national genebank, which was facing an emergency situation threatening the germplasm collection. Project UNTS/RAB/001/GEF, "Conservation des plantes du Maghreb", prepared a feasibility study for a regional three-to-five-year project, for GEF funding, on the conservation and utilization of plant genetic resources in Algeria, Morocco and Tunisia.

25. Another focus is on seed production and security, through projects such as GCP/RAF/319/AUS, "Promotion of Regional Network for On-farm Seed Production and Seed Security in the SADC Countries", TCP/KYR/6611, "Seed Legislation and Quality Control", and GCP/RAF/319/AUS, which promotes an African regional network for improving on-farm seed production and storage, and the establishment of an efficient seed security mechanism.

2. Forest genetic resources

Regular programme activities

26. Table 2 lists the programme elements in the 1996-97 Forestry Department Regular Programme, in which substantial forest genetic resources activities are involved.

Table 2 : 1995/96 budget allocations to Regular Programme elements with components relevant to forest genetic resources, and estimated weight of these components

Programme Element	Budget (US\$ 000)	Estimated weight of FoGR components
Conservation of forest genetic resources	557	Large
Plantation development, protection and tree improvement	985	Large

27. FAO provides technical and scientific support to member countries' national institutes in the conservation, management, sustainable use and development of forest genetic resources. The focus, in coordination with FAO's international partners, is on the transfer of information, know-how and technologies through networking and twinning mechanisms. Activities on various aspects of forest genetic resources are outlined below.

28. *Exploration, collection, evaluation of forest genetic resources:* FAO, in collaboration with national institutes and international organizations, such as the International Union of Forestry Research Organizations (IUFRO), relevant CGIAR Centres and other international partners, continues pioneering work started over fifty years ago, aimed at exploring, conserving and better utilizing forest tree genetic variation, focusing on socio-economically important species for the dry and humid tropics. Recent activities have concentrated mainly on the genera *Acacia*, *Azadirachta*, *Prosopis* and *Swietenia*.

29. *Conservation of genetic resources:* FAO has actively advanced methodologies for forest genetic resources conservation, including *ex situ*, as seed, pollen, tissue and in live collections. Since the early 1980s, *in situ* conservation has been emphasized.² Collaboration with national institutes has continued in research and pilot activities, and studies underpinning genetic conservation, including in Bangladesh, Brazil, India, Mexico, Morocco, Myanmar, Peru, Senegal, Sri Lanka and Thailand. In collaboration with IPGRI and other relevant CGIAR Centres, IUFRO and the DANIDA Forest Seed Centre (Denmark), FAO is currently developing a practical forest genetic resources *in situ* conservation guide, to complement earlier documents, such as *Plant genetic resources - their genetic*

¹ Other programme elements, not listed here, including for wild-life protection and protected areas, such as natural parks, also have important forest genetic resources activities.

² A major advantage of *in situ* conservation of forest genetic resources is that, with appropriate management, conservation will normally be compatible with the continued economic utilization of forests, including the harvesting of wood and non-wood products. Genetic conservation can also be combined with the management of environmental services provided by forests, such as soil and water conservation.

conservation in situ for human use (FAO 1989), and Forestry Paper 107, *Conservation of genetic resources in tropical forest management: principles and concepts* (FAO 1993).

30. *Information activities*: FAO has continued developing the World-wide Information System on Forest Genetic Resources (REFORGEN), in close collaboration with national institutes and relevant international organizations, which will support policy and technical decisions for genetic conservation at national, regional and international levels. It contains information provided by countries through a questionnaire, complemented by three international workshops on forest genetic resources, and data assembled in preparation for the Leipzig Conference. It is planned to complement and regularly update information.

31. FAO annually publishes *Forest Genetic Resources* (in 3,800 copies) with new findings and national experiences and programmes. The bulletin and other relevant information have recently been posted on the Internet, and an FAO forest genetic resources home page established.

32. *International collaboration*: FAO works closely with bilateral agencies and regional and international organizations, notably UNESCO, UNEP and IUCN: contacts have also been established with the Convention on Biological Diversity Secretariat.

33. FAO collaborates closely with IUFRO, some CGIAR centres (notably IPGRI, CIFOR and ICRAF) and universities and national forest research institutes in research. FAO with IUFRO (Division 2) are planning an international tree breeding conference, probably in September 1998.

34. FAO collaborated in three international forest genetic resources workshops held in 1995, in preparation for the Leipzig Conference: (i) Boreal Zone Forest Genetic Resources (main organizer, the Canadian Forest Service); (ii) North American Temperate Forest Genetic Resources (main organizer, the US Forest Service, within the framework of the North American Forest Commission); and (iii) European Forest Genetic Resources (main organizer, IPGRI, within the framework of the European Forest Genetic Resources Network, EUFORGEN). The workshops provided information on regional forest genetic resources activities and priorities, and could serve as models for similar discussions in other ecological regions, planned for 1998.

35. At its Thirteenth Session in March 1997, the Committee on Forestry (COFO) reviewed a number of major forest policy issues (extracts from the Report of the Session are in document CGRFA-7/97/Inf. 3). In particular, COFO "recommended that efforts to explore, conserve, evaluate and better utilize forest genetic resources be continued and further strengthened in collaboration with national institutes and international governmental and non-governmental partners" (para. 24). The Committee further "agreed that there was a need to strengthen national, regional and international activities in the conservation and sustainable use of forest genetic resources, to help enhance country capabilities and to support the exchange of information, and know-how" (para. 28). "There was no consensus concerning a global plan of action on forest genetic resources. Some delegations were of the opinion that efforts to consider a global plan of action on conservation and sustainable utilization of forest genetic resources were premature. Other delegations suggested that FAO should pursue efforts to develop regional plans of action for the conservation and sustainable use of forest genetic resources as a first step to develop a global plan of action" (para. 27). COFO also noted that "FAO, in conjunction with Regional Forestry Commissions and countries that request it, could convene regional and sub regional forest genetic workshops complementary to those already held in 1995 for boreal and temperate zones" (para. 30). In connection with the broadening of the Commission's mandate, COFO "recommended that the Panel of Experts on Forest Gene Resources continue to provide advice to the CGRFA in its fields of competence. Some delegations suggested that the Panel review the institutional options and Terms of Reference of a possible inter-governmental technical working group on forest genetic resources, if established" (para. 26).

Panel of Experts on Forest Gene Resources:

36. The Ninth Session of the Panel of Experts on Forest Gene Resources, which guides FAO activities in this sphere, met from 3 to 5 October 1995,³ and made recommendations regarding the exploration, collection, testing and evaluation, exchange, conservation *in* and *ex situ*, and use of forest genetic resources (including breeding and the role of new biotechnologies in forest tree improvement). It stressed the need for:

- (i) continued support and technical assistance to national institutes in developing and executing forest genetic resources programmes, and to TCDC activities and networking;
- (ii) the further development of methodologies, and pilot activities, for the *in situ* conservation of forest genetic resources, coupled with forest management and sustainable resource use, to meet present and future needs;
- (iii) facilitating contacts and the exchange of information, know-how and genetic materials for testing and conservation; and
- (iv) international coordination, and awareness-raising, through targeted information, and up-to-date information on the state of forest genetic resources, notably through the continued development of REFORGEN. At scientific and technical levels, the annual newsletter, *Forest Genetic Resources*, was considered especially useful.

37. The Panel up-dated its list of priority species, which constitutes the only truly global list of forest genetic resources priorities, by region and activity, and prepared another list of species to receive maximum attention in activities supported or coordinated by FAO. As recommended, action is underway to establish a mahogany genetic resources network in the Neotropics.

Field programme activities

38. FAO's forestry technical assistance projects include seed-collection, production, handling and exchange; tree-improvement and breeding; ecosystem and forest genetic resource conservation, *in* and *ex situ*; and the integration of genetic conservation into forest management practice and protected area management. The total delivery costs, in the 1994/95 biennium, were US\$124,100,000. The 1995 Panel of Experts on Forest Gene Resources reviewed the 219 on-going forestry field projects supported by the Forestry Department and, as necessary, by other FAO units, many with forest genetic resource components. They can be broadly classified as in *Table 3*.

Table 3: FAO forestry field projects reviewed by the 1995 session of the FAO Panel of Experts on Forest Gene Resources

Main category *	Number of projects	% of projects	% of expenditure
Forest Resources and the Environment	152	69	62
Forestry Institutions	58	27	33
Forest Products	9	4	5
TOTAL	219	100	100

* Most projects cover several categories. The classification is approximate, and is based on the criterion that at least 50% of activities are related to the category specified.

39. All the 219 field projects coordinated by the Forestry Department contain biological and genetic conservation elements, to a varying degree, and most projects also contain strong institutional strengthening and training components. In recent years, many projects have focused on, or emphasized, genetic resources and biological diversity in forest ecosystems. In line with government priorities, projects have focused largely on seed-procurement, tree-improvement and research, in the Asia Pacific Region, and, on *in situ* conservation and the conservation and sustainable use of forests and forest ecosystems, in Africa and Latin America. Most projects were in the tropics or semi-tropics, with a few in temperate zone developing countries. In the tropics, projects divided fairly evenly between dry and humid areas. A wide range of national projects are complemented by important regional and sub-regional projects, such as the FAO/UNDP project, RAS/91/004, "Improved Productivity of Man-made Forests through Application of Technological Advances in Tree-Breeding and Propagation", and project GCP/RAS/134/AsDB, "Forest Research Support Programme for Asia/Pacific".

Table 4: Number of forest biological diversity/genetic resources projects and their main activities (at October 1995)

	Africa	Asia and Pacific	Latin America/ Caribbean	Near East/ Europe	TOTAL
Support to national institutions	7	11	2	3	23
Regional coordination	4	5	3	0	12
Gathering/exchange of information	7	7	2	3	19
Training	5	6	3	4	18
Seed collection, production, storage and exchange	7	8	1	4	20
Testing/breeding	6	7	-	2	15
<i>In situ</i> conservation of FoGR and forest management	13	14	7	5	39
Protected area management and ecosystem conservation	5	10	5	4	24

 APPENDIX 1

 TECHNICAL CONSULTATIONS RELATED TO PLANT GENETIC RESOURCES,
 SUPPORTED BY FAO (1995 AND 1996)
Global

FAO/IPGRI/ICRISAT: Expert Consultation on Regeneration of Seed Crops; ICRISAT, Hyderabad, India, 4-7 December, 1995.

FAO/IPGRI/CIAT: Expert Consultation on the Management of Field Genebanks; CIAT, Cali, Colombia, 15-18 January 1996.

FAO/IPGRI/CIAT: Expert Consultation on the Management of *In Vitro* Genebanks; CIAT, Cali, Colombia, 18-20 January 1996.

Regional

FAO/Swaminathan Research Foundation: Technical Consultation on an Implementation Framework for Farmers' Rights; Madras, India, 15-18 January 1996.

FAO/APAARI: Expert Consultation on Research Priority Setting by NARS in the Asia-Pacific Region; IARI; New Delhi, India, 25/26 November 1996.

FAO/IPGRI/ICAR/IRRI: Asia-Pacific Regional Consultation on Plant Genetic Resources; IARI; New Delhi, 27-29 November, 1996.

Abbreviations used :

APAARI	Asia-Pacific Association of Agricultural Research Institutions
CIAT	Centro Internacional de Agricultura Tropical
IARI	Indian Agriculture Research Institute
ICAR	Indian Council of Agricultural Research
ICRISAT	International Crop Research Institute for the Semi-Arid Tropics
IPGRI	International Plant Genetic Resources Institute
IRRI	International Rice Research Institute

 APPENDIX 2

 SELECTED PLANT GENETIC RESOURCE ACTIVITIES
 OF CROP-RELATED NETWORKS, SUPPORTED BY FAO

Global networks
International Network on Cactus Pear (CACTUSNET)

1995-96: Third Network Meeting in Midrand, South Africa, 30 January-1 February 1996. Preparation of cactus pear descriptor list; identification of sites for germplasm collection, based on plant-use; Genetic Resources Working Group in November 1995; technical meeting on collaborative research on biotechnologies in 1996.

1997: Publication of cactus pear descriptor list; *Opuntia* genetic resources survey in member countries; collaborative projects, within the framework of national programmes, on *Opuntia* germplasm characterization.

Global Mushroom Germplasm Conservation Network

An inter-country workshop on mushroom genetic resources management and mushroom cultivation held in Harare, Zimbabwe, 23-26 September 1996, led to the decision to establish a regional system to promote and coordinate mushroom germplasm management in Africa - involving development of methodologies for collection, characterization, conservation and utilization of mushroom genetic resources - and improve mushroom spawn multiplication capabilities, within the activities of the Global Network.

A planned general meeting of the Global Network in Bordeaux in early 1998 will review the mushroom genetic resources situation in different regions, and refine a policy and strategy, particularly for Africa.

Specific technical activities promoted under the Network include:

1995-96: Collection, characterization and utilization studies on edible mushroom and related fungi species and strains; establishment of stored mushroom strains database.

1997: Development of mushroom germplasm conservation methodologies to protect against degradation or mutation; marker development for mushroom strain classification and certification.

Inter-regional networks
Mediterranean Selected Fruit Inter-country Network (MESFIN)

1995-96: Meeting on Tropical and Subtropical Fruit Germplasm Conservation, Tenerife, Spain, 2-4 October 1995. Preparation of document, *Capacity of developing countries of the Mediterranean basin to identify, evaluate and preserve tropical and subtropical fruit germplasm*; Plant Biodiversity and Conservation Training Course; Chania, Greece. 29 April-2 May 1996.

1997: Plant Genetic Resources Meeting, Madeira, Portugal, 5-8 August 1997. Development of conservation and utilization priorities and an action plan for the promotion of a global cooperative mechanism among national institutions.

Network on Identification, Conservation and Use of Wild Plants of the Mediterranean Region (MEDUSA)

1995-96: Meeting to establish the MEDUSA Network; Crete, Greece, June 1996.

1997: Steering Committee Meeting; Leiden, Holland, January 1997. Development of a plant genetic resources utilization database; MEDUSA Workshop, Tunisia 1-3 May 1997.

Inter-American Citrus Network (IACNET)

1995-96: Steering Committee Meeting in 1996; survey of current citrus genetic resources situation in member countries; project proposal for exchange and evaluation of genetic resources prepared.

1997: Preparation of a project on the identification, conservation, cleaning and utilization of germplasm for the Common Fund on Commodities; promotion of propagation material certification programme in member countries.

Mediterranean Citrus Network (MECINET)

1995-96: Working Group on Citrus Germplasm Conservation Meeting, March 1995; collaboration between MECINET and MEDIA (Mediterranean Array) explored.

1997: Linkages with the Inter-American Citrus Network established; global activities on citrus genetic resources strengthened; global action programme on germplasm conservation and citrus production revised; database on conservation and use of germplasm established in collaboration with the WIEWS.

In 1996, at an FAO Workshop in Sun City, South Africa, it was agreed to develop a **global network on the conservation of genetic resources of *Citrus* and its relatives**: this was to be further discussed in May 1997, during a MECINET meeting in Catania, Italy.

Regional networks : Africa

Southern and Eastern African Network for Underutilized Species (SEANUC): in collaboration with ICUC and CSC.

1995-96: Third Meeting of SEANUC, Pretoria, South Africa, 11-12 December 1996; SEANUC Steering Committee established.

1997: Information gathering on ten selected species; exploration and collection, conservation, utilization and exchange of genetic resources; collaborative research on prioritized topics promoted.

A sub-regional network for the promotion of on-farm seed production and seed security in the SADC Countries is being established in 1997.

Regional networks : Near East

West Asia and North Africa Network on Plant Genetic Resources (WANANET)

1995-96: Second Working Group Meeting on Range, Pasture and Forage, Rabat, Morocco, 15-17 May 1995. Study on the conservation and propagation of range plant genetic resources in North African countries.

1997: Joint FAO/ICARDA/IPGRI monograph of important pasture and forage species in the region; development of a forage, pasture and range species genetic erosion monitoring programme.

Regional networks : Asia and Pacific

Underutilized Tropical Fruits in Asia Network (UFTANET) in collaboration with ICUC and CSC.

1995-96: Collaborative research plan on genetic diversity, propagation, pollination and fruit-setting, and in-farm research developed; and national priority species determined by a survey.

1997: Jackfruit Consultation Meeting held; newsletter and other documents published; information distributed in electronic format; cooperative research activities on pummelo genetic resources in seven member countries.

A new **network on *Citrus* and its relatives** is proposed for the Asia Pacific region, in 1997, in collaboration with IPGRI.

Asian Network for Improvement of Food Legumes (FLCGNET)

1995-96: Workshop proceedings and a bimonthly Newsletter published; 200 germplasm accessions exchanged among 14 FLCGNET members; meetings, study tours and short-term training sponsored or organized.

Asian Network on Medicinal and Aromatic Plants (ANMAP)

1995-96: First ANMAP Regional Expert Consultation, Bangkok, Thailand, 7-9 November 1996.
 1997: Expansion into the upstream and downstream research and development on medicinal and aromatic plants, including utilization and technology transfer.

Tropical Asia Maize Network (TAMNET)

1995-96: First TAMNET Meeting, Cha-am and Bangkok, Thailand, 18-19 October 1995; regional maize trials.

*Regional networks : Europe***European System of Cooperative Research Networks in Agriculture (ESCORENA)****Soybean**

1995-96: Network Meeting in Toulouse, France, 2-4 July 1996; studies on genetic adaptation and symbiotic nitrogen fixation.
 1997: Joint Workshop on Genetic Studies and Methodology, Warsaw, Poland, 10-14 June 1997.

Nuts (Covers Europe and Near East.)

1995-96: First Sub-network Meeting on Walnut Germplasm Resources, Alcobaca, Portugal, 16 June 1995. FAO/IPGRI Workshop on *Pistachio* Germplasm Resources, Palermo, Italy, June 1995. Sub-network meetings on Hazelnut and on Genetic Resources, Ordu, Turkey, 30 July-1 August 1996. Nut Network Technical Consultation, Meknes, Morocco, 17-19 October 1996. Catalogues of genetic resources under preparation, in collaboration with IPGRI for several species. A transversal working group on nut crop genetic resources with a global profile proposed.

Rice

1995-96: Selection and Biotechnology of Rice Workshop, Montpellier, France, 14-17 May, 1996. Pipeline projects on Genetic Resources in Europe and on Wild Rice. Second Technical Consultation, Arles, France, 4-7 September 1996.
 1997: varietal exchanges continued; three or four varieties added for electrophoresis and germination tests; accumulated knowledge on pest races gathered; study of seedling performance under anaerobic conditions established.

Flax (Covers Europe and Near East).

1995-96: Third Meeting of the International Flax Breeding Research Group, St. Valéry-en-Caux, France, 7/8 November 1995.
 1997: Breeding and Plant Genetic Resources Working Group Workshop; strengthening of germplasm characterization and documentation efforts.

Olives

1995-96: Plant Genetic Resources Workshop, Córdoba, Spain, June 1996.
 1997: Studies on olive genetic resources in Argentina, Brazil, Chile and Peru; establishment of duplication of the field collection; descriptor list for the Portuguese olive collections prepared; global conservation and utilization policy developed and variety characterization and cold-resistance strengthened. A global olive genetic resources network constituted.

Cotton

1995-96: Technical Consultation, Montpellier, France, 2-5 October 1995. Exchange of germplasm and modern breeding methods; a common collection established.
 1997: Preparation of the list of important cotton lines; joint Working Group meetings for exchanging new methodologies convened.

Sunflower

1995-96: Eighth Technical Consultation, Bucharest, Romania, 25-28 July 1995. Experimentation with new sunflower hybrids; identification of new cytoplasmic male sterility sources; and collection of 61 additional *Helianthus* spp. in Canada.

1997: Wild *Helianthus* spp. collecting mission in Mexico; collected wild species maintenance and characterization; studies on breaking seed dormancy.

Regional Networks : Latin America

Technical Cooperation Network on Plant Biotechnology (REDBIO)

1995-96: Meeting, Iguazu Falls, Argentina, 4-9 June 1995. Identification of limiting factors and status of biotechnology in the region; membership increased to 27 Latin American and Caribbean countries; "policies related to sustainable conservation and utilization of PGR and biosafety of the environment" established as one of its three main areas.

Manihot Genetic Resources Network (MGRN)

1997: CENARGEN/EMBRAPA are working on developing and funding a much-needed Pan-American initiative to characterize and rationalize national *Manihot* collections.

APPENDIX 3

**TRAINING COURSES AND WORKSHOPS ON CROP GENETIC RESOURCES
WHICH INCLUDE ELEMENTS ON THE CONSERVATION AND UTILIZATION
OF PLANT GENETIC RESOURCES, SUPPORTED BY FAO (1995 AND 1996)**

- IPGRI/FAO/CATIE Training Course on Plant Biotechnology and its Application for the Conservation and Use of Genetic Resources; Turrialba, Costa Rica. 23 April-6 May 1995: 15 participants from Latin America
- IPGRI/FAO/CATIE Training Workshop on Field Genebank Management; Mayaguez, Puerto Rico. 12-18 November 1995: 23 participants from Latin America.
- FAO/IPGRI/NPGRI Training Course on the Conservation of Vegetatively Propagated Crops; Los Baños, Philippines. 6-24 November 1995: 18 participants from Asia.
- Workshop to establish a Working Group on Onion Genetic Resources, CFACT/EMBRAPA; Pelotas, Rio Grande do Sul, Brazil. 30 May-2 June 1995: 10 Participants from Latin America.
- COGENT Coconut Regional Planning Meeting; Rian, Indonesia. 16-28 February 1996: 18 participants world-wide.
- FAO/MAICH-CIHEAM Training Course on Plant Biodiversity and Conservation; Chania, Greece. 29 April-17 May 1996: nine participants from the Mediterranean region.
- Third Meeting of the Mediterranean Selected Fruit Inter-country Network (MESFIN); Tel Aviv, Israel. 28-30 August 1996: eight representatives from Mediterranean countries.
- FAO/IPGRI Working Group Meeting on Incorporating Gender-sensitive Approaches into Plant Genetic Resources Conservation and Use; Rome, Italy. 1-4 October 1996: 21 participants world-wide.
- FAO/RNE/ICARDA/CIHEAM Training Workshop on Native and Exotic Fodder Shrubs in Mediterranean and Arid Zones; Tunisia. 27 October-2 November 1996: 106 participants from around the world.
- FAO/IPGRI/NBPGR Training Course on Seed Genebank Planning; Delhi, India. 8-22 December 1996: 25 participants from Asia.

Abbreviations used :

CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CIHEAM	International Centre for Advanced Mediterranean Agronomic Studies
CFACT	Centro de Pesquisas Agropecuária de Clima Temperado
COGENT	International Coconut Genetic Resources Network
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária
INGEBI	Instituto de Investigaciones en Ingeniería Genética y Biología Molecular
IPGRI	International Plant Genetic Resources Institute
MAICH	Mediterranean Agronomic Institute of Chania
NBPGR	National Bureau of Plant Genetic Resources
NPGRI	National Plant Genetic Resources Institute

April 1997



Item 7 of the Provisional Agenda
COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE
Seventh Session
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REPORT FROM FAO ON ITS POLICIES, PROGRAMMES AND ACTIVITIES ON AGRICULTURAL BIOLOGICAL DIVERSITY: (2) OTHER SECTORS OF AGRICULTURAL BIOLOGICAL DIVERSITY

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**REPORT FROM FAO ON ITS POLICIES, PROGRAMMES
AND ACTIVITIES ON AGRICULTURAL BIOLOGICAL DIVERSITY:
(2) OTHER SECTORS OF AGRICULTURAL BIOLOGICAL DIVERSITY**

I. INTRODUCTION

1. The Commission regularly receives reports from international organizations, including FAO, on the policies, programmes and activities for the conservation and use of plant genetic resources. The Commission considers such reports to be of value, both to it and to the organizations, which are able to acquaint countries with the objectives and programmes, and benefit from their comments.
2. As in past years, FAO has reported on its policies, programmes and activities in the field of plant genetic resources, in document CGRFA-7/97/8.1. Following the broadening of the mandate of the Commission to also cover other components of biological diversity of interest to agriculture, the present document complements that report, and provides the Commission with complementary information regarding FAO's role in other fields of agro-biological diversity, and on supporting activities in the legal, economic and social, and gender issues, fields.

II. FARM ANIMAL GENETIC RESOURCES

3. Table 1 lists the major budgetary allocations within FAO's 1996-97 Regular Programme budget for the Animal Health and Production Division, in which substantial animal genetic resources activities are pursued. FAO staff salaries are included. A number of other programme elements, not listed here, also support activities of importance to animal genetic resources, such as work on animal disease resistance.

Table 1: 1996/97 Programme of Work and Budget allocations to regular programme elements with components relevant to animal genetic resources, and estimated weight of these components

Programme element	Budget (US \$ 000)	Estimated weight of AnGR components
Coordinating the country-base structure	952	high
Sustainable utilization and conservation (<i>in situ</i> and <i>ex situ</i>)	881	high
Characterization and early warning	448	high
DAD-IS development and maintenance	416	high

4. Regular Programme resources partially support the essential core activities that provide the global focus for the country-based Global Strategy for the Management of Farm Animal Genetic Resources, whereby FAO seeks to lead, coordinate and facilitate the step-by-step development of the Global Strategy, on the basis of broad stakeholder involvement, the development of the necessary modalities, and reporting on developments, including on long-term in-kind and financial support needs. Extra-budgetary funding is required to complement the Regular Programme provisions for the global focus. Extra-budgetary resources are also being sought to develop country and regional field activities within the Global Strategy.

5. A comprehensive and coherent *framework for the Global Strategy for the Management of Farm Animal Genetic Resources* was considered by the Committee on Agriculture (COAG), and received the support of Council, in 1995. The importance of developing and conserving animal genetic resources was further stressed in the *World Food Summit Plan of Action*, in 1996. Decision III/11 of the Conference of the Parties to the Convention on Biological Diversity, again in 1996, "appreciates the importance of the country-based Global Strategy for the Management of Farm Animal Genetic Resources under the Food and Agriculture Organization of the United Nations and strongly supports its further development" (para. 20, in document UNEP/CBD/COP/3/REP).
6. The Global Strategy framework includes a set of key actions that aim, in particular, at:
- developing and making better use of animal genetic resources adapted to the world's major medium-input and low-input production environments, so as to sustainably intensify their agricultural systems; and
 - overcoming the serious threat of genetic erosion in the remaining 5,000 or so breed resources of the fourteen main farm animal species; preliminary survey results show that about 30% of these resources are currently at high risk of loss.
7. The Global Strategy framework contains four basic components:
- A global, country-based structure with three elements: (i) focal points and networks, (ii) stakeholders, and (iii) the Domestic Animal Diversity Information System (DAD-IS).
 - A technical activities programme with six elements: (i) characterization; (ii) *in situ* utilization and conservation; (iii) *ex situ* conservation; (iv) the development of guidelines and action plans; (v) the development of communications and information systems, and relevant training; and; (vi) coordination.
 - Expert cadres to guide development of the strategy, and maximize the cost-effectiveness of country participation.
 - An inter-governmental mechanism whereby governments can directly guide international policy development: the Commission on Genetic Resources for Food and Agriculture.
8. The components of the Global Strategy are inter-dependent, and, in order to be cost-effective, maintain momentum and achieve long-term success, must be implemented concurrently. Once the basic guidelines and framework are in place, activities need to be developed in a coherent manner, as the necessary human and financial resources become available. The implementation of the Global Strategy is based on the collaboration of all stakeholders, through the Initiative for Domestic Animal Diversity (iDAD).
9. This programme, which began in 1995, has already achieved the following:
- The *technical rationale* on which the framework for the Global Strategy is based was evaluated and endorsed by an Informal Panel of Experts, representing a broad range of disciplines.
 - The *basic structure* at country level is being established: National Focal Point Institutions, as well as National Coordinators for Farm Animal Genetic Resources, are being identified by governments in 73 countries in Africa, Asia, the Americas and Europe, although most are not yet fully active.
 - A pilot *regional focus* has been introduced in Asia, funded by the Government of Japan. A mid-term evaluation mission reported favourably on this pilot regional focus and stressed the need for local and regional coordination and assistance to countries, to allow them to make the substantial efforts required for the effective management of animal genetic resources. Preparations are under way to initiate Regional Focuses for

Africa, the Americas, Europe and the Near East, making use, wherever possible, of existing sub-regional country-based structures, such as the Southern African Development Community (SADC) and the Inter-American Institute for Cooperation in Agriculture (IICA).

- The *Domestic Animal Diversity Information System (DAD-IS)* was designed to be implemented in four stages, and the first of these stages has been developed, tested and partially implemented on the Internet. DAD-IS now provides an advanced, country-secure communications and information tool, which is flexible, and able to cover all areas of animal genetic resources management, as a “virtual structure” for the implementation of the Global Strategy. There are currently about 1,000 regular users, but there is not yet adequate day-to-day global focus support to assist users and fully enable the System. A considerable further investment of human resources is still needed.
- The first steps have been taken towards developing *mechanisms for stakeholder consultation*, whereby a broad range of stakeholders involved in animal genetic resources may contribute actively to the development of the Global Strategy. An informal *Ad Hoc* Meeting of Donors and Other Stakeholders resolved to support the Global Strategy, and to “mainstream” it in discussions with countries and in their collaborative livestock activities. They also agreed on the need to meet regularly to exchange information on progress.
- Development of an *Early Warning System* has been initiated, through global surveys of twenty-eight species of farm animals, and the development of the Global Databank for Animal Genetic Resources. The *World Watch List for Domestic Animal Diversity* was published in English and French, and the Spanish version is ready for printing: it has proved very popular.
- Four of nine planned *project identification missions* have taken place. Their aim is to better understand which activities, if implemented, would accelerate the improvement of animal genetic resources management in each region.
- *Primary country-level guidelines* for developing and implementing sound action plans for each farm animal species, and the range of primary agro-ecosystems incorporating livestock, are under development.
- A comprehensive *communications strategy* has been prepared, which focuses on the target audiences’ information needs: it exploits all major communication opportunities, and aims at maximum cost-effectiveness. Key elements are: DAD-IS, the *World Watch List on Domestic Animal Diversity*, the *Animal Genetics Resources Information Bulletin*, a stakeholders’ newsletter, and a briefing kit.
- The initial consideration, by the Commission, of animal genetic resources, at this session, has been prepared through the *Ad Hoc Working Group of Experts on Animal Genetic Resources* (its Report is document CGRFA-7/97/10), and subsequent discussions during the Fourteenth Session of COAG (relevant extracts of its Report are in document CGRFA-7/97/Inf. 2). A broad range of technical and policy issues concerning the better management of this sector of agro-biodiversity that need to be addressed have been identified in this process.

III. FISHERY GENETIC RESOURCES

Regular Programme

10. Table 2 lists the major budgetary allocations to programme elements within FAO’s 1996-97 Regular Programme budget for the Fisheries Department, in which substantial fishery genetic resources activities are pursued. The figures given reflect only those parts of the element directly

related to fishery genetic resources. Non-staff human resources allocations are included, but FAO staff salaries are not.

Table 2: 1995-96 budget allocations to regular programme elements with components relevant to fishery genetic resources, and estimated weight of these components

Programme element	Budget (US \$ 000)	Estimated weight of FiGR components
Improvement of biological data on exploited resources	525	Medium
Development of tools for planning inland fisheries and aquaculture/Publication of the <i>Code of Conduct for Responsible Fisheries</i>	67	low
Conservation and management of inland water fisheries	18	low
Monitoring and reporting on the status and trends in inland fisheries and aquaculture	11	low
Technologies for the practice and enhancement of inland fisheries and aquaculture	78	Medium-Low
Interagency and interdepartmental environment activities	8	Medium

11. Most activities dealing with fishery genetic resources take place within the Inland Water Resources and Aquaculture Service (FIRI) of the Fishery Resources Division (FIR). There is one full-time Fishery Resources Officer responsible for fishery genetic resources matters. However, because fishery genetic resources utilization and conservation are involved in many aspects of the work of the division, other services, notably Marine Resources (FIRM) make significant contributions. No formal structure has been created to deal specifically with fishery genetic resources.
12. FAO's programme in fishery genetic resources for food and agriculture covers two broad, and very different, matters: (i) the sustainable use of genetic diversity in aquaculture, for example, through the genetic improvement of farmed aquatic species, and (ii) the management and conservation of genetic diversity in the wild. In contrast to the situation with crops and livestock, very few fish species have been domesticated, and the majority of fishery genetic resources are to be found in wild populations of fish, shellfish, crustaceans, and plants. Many of FAO's activities in fishery management relate to the conservation and sustainable use of aquatic diversity, through the promotion of responsible fishing practices and the correction of harmful practices, such as the deployment of over-capacity, and the use of explosives or poisons.
13. Accurate data on the types of aquatic species harvested and farmed, stock composition and stock assessment, are required for conservation and sustainable utilization and much of the necessary basic information remains unavailable. In this context, although they do not specifically cover genetic diversity, FAO Fishery statistics on capture fisheries and aquaculture, and the species identification programme are a valuable source of information on biological diversity.
14. *Improvement of Biological Data on Exploited Resources*: The Species Identification and Data Programme promotes the upgrading of fisheries data, and reliable species identification, through the development of a worldwide biotaxonomic system that includes species inventories, species diagnosis, reference illustrations, and a readily accessible information system.
15. *Development of tools for planning inland fisheries and aquaculture*: The *Code of Conduct for Responsible Fisheries* was finalized and adopted by the Twenty-eighth Session of the FAO

Conference. The articles on responsible aquaculture and fisheries management have a bearing on fishery genetic resources, and technical guidelines have been drafted to support their implementation. There are ongoing activities to document the genetic diversity of aquaculture species, in both their domesticated and wild forms. Guidelines for the responsible use and trans-boundary movement of introduced species have been formulated, were presented at the Nineteenth Session of European Inland Fisheries Advisory Commission, and are being promoted for implementation in developing areas.

16. *Conservation and management of inland water fisheries*: An extensive database documenting the international movement of exotic species in marine and fresh waters was prepared and distributed in 1995, as part of the ICLARM (International Centre for Living Aquatic Resources Management)/FAO relational database, FishBase. This has recently been expanded and a version is being prepared for FAO's Internet site. A regional aquaculture project in Southern Africa, "Aquaculture for local community development" (GCP/INT/555/SWE and GCP/RAF/227/BEL), has supported regional workshops on, and environmental impact assessment of fisheries and aquaculture development, with the goal of protecting local fishery genetic resources.

17. *Monitoring and reporting on the status and trends in inland fisheries and aquaculture*: A large number of articles and publications have been prepared to document the increasing number of aquatic species being farmed, their origin, and their genetic basis. *The FAO Aquaculture Newsletter* is a widely distributed outlet for such documentation, and has published other information on FAO's activities in the use and conservation of fishery genetic resources. A document on *The State of World Fisheries and Aquaculture - 1996*, covering aquaculture and fisheries at global and regional levels was made available to the 1997 Commission on Fisheries (COFI).

18. *Technologies for the practice and enhancement of inland fisheries and aquaculture*: Intensified marine and fresh-water management involve a variety of methods that may affect fishery genetic resources. Guidelines for responsible intensification of fishery management are being developed through an FAO/ODA (British Overseas Development Agency) Expert Consultation on Inland Fishery Enhancements (Bangladesh, 7-11 April, 1997), and publication of a *Framework for the development and management of inland fisheries*. Genetic concerns for ocean-ranching and stock-enhancement are addressed in *Marine and coastal area hatchery enhancement programmes: food security and conservation of biological diversity* (Kyoto Conference publication KC/FI/95/TECH/5), and in follow-up activities to the FAO/Japan Kyoto Conference on Fisheries and Food Security, sponsored in part by a Japanese unilateral trust fund project (GCP/INT/643/JPN). Genetic technologies to increase aquaculture production - for example, through selective breeding programmes - are also being assessed, partly in the same context.

19. *Participation in Inter-agency and Inter-departmental Environment Activities* - FAO supports a number of regional and national fishery bodies in promoting the responsible conservation and utilization of fishery genetic resources. FAO cooperates with ICLARM (the Consultative Group on International Agricultural Research centre that deals with aquatic resources), on the International Network of Genetics in Aquaculture, general issues of genetic resource use and conservation, and fishery genetic resource policy formulation. In the field of Fishery Genetic Resources, FAO is committed to the follow-up to UNCED, and has participated and will continue to participate in the Convention on Biological Diversity forums, including the Conference of the Parties, its Subsidiary Body on Scientific, Technical and Technological Advice, and relevant Expert Groups.

20. The responsible use and conservation of fishery genetic resources will be essential for future fishery development and in promoting food security. The technologies for genetic manipulation and genetic characterization are advancing much more quickly than the knowledge on how to apply them in a sustainable and responsible manner throughout the world. The expanded

Commission on Genetic Resources for Food and Agriculture will provide a valuable inter-governmental forum for the exchange of ideas and the development of appropriate policy, recommendations and guidelines.

Field Programme

21. Relevant current field projects are listed in Table 3. FAO is promoting the inclusion of fishery genetic resources issues in field projects.

Table 3: FAO Field projects that have a significant component on fishery genetic resources

Project	Budget (US \$ 000)* dates	Estimated weight of FiGR component
Genetic Improvement of Coho Salmon - Chile (TCP/CHI/2354A)	225 1993-95	Very High
Genetic Improvement of Tilapia - Venezuela (TCP/VEN/6611)	225 1997-98	Very High
Pollution Control and Other Measures to Protect Biodiversity of Lake Tanganyika (UNTS/RAF/007/GEF)	925 1996-97	Medium
FISHAID Project - Papua New Guinea (PNG/93/007)	668 1993-97	Medium
Research for the Management of the Fisheries of Lake Tanganyika (GCP/RAF/271/FIN)	6886 1991-97	Low
Aquaculture for local community development - Southern Africa (GCP/INT/555/SWE & GCP/RAF/227/BEL)	5813 1993-96	Low
Regional Aquaculture Development for the South Pacific (GCP/RAS/116/JPN)	3400 1994-96	Low

* Total project budget

IV. LEGAL ACTIVITIES RELATED TO PLANT GENETIC RESOURCES

22. Under the Major Programme 1.2.4, *Legal Services*, the Legal Office undertakes significant activities in the area of genetic resources for food and agriculture, especially through the provision of direct support to inter-governmental negotiations, such as those currently underway for the revision of the International Undertaking on Plant Genetic Resources. The Legal Office also provides support in areas such as the development of the International Network of *Ex Situ* Collections under the Auspices of FAO, the implementation of the Convention on Biodiversity and its implications for the International Undertaking on Plant Genetic Resources, the legal aspects of the development of FAO's programme on animal genetic resources and the development and follow-up of codes of conduct and agreements, such as the Code of Conduct on Plant Germplasm Collecting and Transfer, the Code of Conduct on Responsible Fisheries, and the FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas. The Legal Office also supports a variety of other negotiations relevant to fisheries resource conservation and management at the global and regional levels.

23. Under Major Programme 3.1.3, *Legal Assistance to Member Nations*, the Legal Office, through the Regular and Field Programmes, continues to provide technical assistance, at regional and national level, in the formulation of policies, strategies and legislation in the field of genetic resources for food and agriculture and related matters.

24. During 1996 and 1997, the Legal Office assisted Belize in drafting legislation regulating the Certification Scheme for Citrus under the Technical Cooperation Programme project, TCP/BEZ/6611, "Establishment of a Mandatory Certification Scheme for Citrus". Similar assistance was provided to Jamaica under TCP/JAM/6611, "Citrus Production and Certification Strategy". These two projects were undertaken in parallel to a regional project funded by an Italian trust fund, GCP/RLA/108/ITA, "Harmonizing Seed Legislation in the CARICOM Region". Similarly, Georgia (TCP/GEO/6711) and Kyrgyzstan (TCP/KYR/6611) were assisted in the preparation of their national seed legislation and quality control schemes.

V. ECONOMIC AND SOCIAL ASPECTS OF AGRICULTURAL BIOLOGICAL DIVERSITY

25. The Economic and Social Department (ES) is undertaking a number of activities of relevance to agro-biological diversity, in cooperation with the technical units involved, with the aim of developing and deploying analytical tools for the economic valuation of genetic resources and conservation and utilization strategies.

26. The programme element, *Economics of the valuation and conservation of genetic resources in agriculture* addresses a number of related questions:

- *The valuation of genetic resource*: Linkages between valuation and strategies for the conservation and sustainable development of genetic resources for food and agriculture (including questions of intellectual property, and Farmers' Rights) were addressed at an international symposium organized by the University of Tor Vergata in Rome, with the sponsorship of FAO (May 13-15, 1996). The symposium was attended by high-level researchers from around the world, and is the first such attempt specifically to consider methodologies for the valuation of agro-biodiversity. The university and FAO will jointly publish the proceedings of this symposium in late 1997.
- *Economically optimal public investment in agro-biodiversity* is being addressed through the development of a dynamic bio-economic model, to estimate the net present value of genetic resources for food and agriculture (measured as economic gains to agriculture less the cost of investment in agro-biodiversity) on the basis of assumptions of the impact of conservation programmes (in particular of changes in the number of plant genetic resources accessions) on plant breeding and agricultural production. This study, *Public investment in reducing the erosion of agro-biodiversity*, is being developed for mid-1997. When the general model has been developed and undergone peer-review, individual case-studies are programmed.

27. *Biodiversity and trade*: FAO regularly studies the interaction between environmental policies and commodity trade, including aspects of relevance to agro-biodiversity. In particular, a paper, *Impact of biotechnology development on trade of agricultural commodities*, (document CCP 97/17) was presented to the Committee on Commodity Problems in February 1997. It provided a tentative assessment of the qualitative impact of biotechnological developments on competitive changes in the world market, between commodities, and between commodity-exporting countries, and developed a framework for a quantitative analysis of these factors, so that future work may, *inter alia*, address the impact of environmental and biotechnology regulations on trade in a quantitative way.

28. FAO has also published the report of a joint FAO/WHO Expert Consultation on Biotechnology and Food Safety (30 September to 4 October 1996). There are also continuing discussions within the Codex Alimentarius Commission on the food safety and labelling aspects of foods produced using genetically modified organisms and related technologies.

29. *Biodiversity Indicators*: Work is also underway to establish a system of statistical environmental indicators for monitoring the development of the state of the natural resource base, both globally and at country level. This could eventually be expanded, to include indicators of the state of genetic resources of interest to agriculture, and their change over time.

30. *Agro-biodiversity in home gardens*: The programme activity, *Improving nutrition through home gardening*, emphasizes the improvement of diets through more intensive and diversified home gardens in developing countries. It encourages farmers, in particular women, to make appropriate use of both local plants and improved seed resources, and contributes to the *in situ* conservation of agro-biological diversity and nutritionally valuable food plants. It also helps preserve indigenous knowledge about cultivation practices.

VI. AGRICULTURAL BIOLOGICAL DIVERSITY AND GENDER QUESTIONS

31. The Department of Sustainable Development, through the Women in Development Service, maintains a focus on the inter-relationship between agricultural biological diversity and gender questions.

32. In 1995 and 1996, a Southern Africa regional project on "Gender, biodiversity and local knowledge systems to strengthen agricultural and rural development" was formulated, with Norwegian funds in trust. Within the context of the project, agro-biodiversity covers "the diversity within and between the species of agro-ecosystems (including crops, 'wild foods', livestock, forests and fisheries), the diversity of agro-ecosystems themselves, and the diversity of species (varieties, landraces, breeds, natural populations) that interact with agro-ecosystems or contribute directly to food security." The Intermediate Technology Development Group (Zimbabwe and United Kingdom), NORAGRIC (Norway), Commutech (Zimbabwe), and CIKSAP (the Centre for Indigenous Systems and By-Products, University of Nairobi, Kenya) participated in the formulation exercise. Fact-finding missions visited Zimbabwe, Tanzania, Mozambique and Swaziland. A formulation wrap-up workshop was held in Harare, Zimbabwe in November 1995, attended by representatives of several regional and national projects, non-governmental organizations, governmental bodies, and international agencies. The US\$ 1.5 million project was approved in late 1996 (GCP/RAF/338/NOR), and will start up in 1997.

33. In April 1996, at the Commission's Second Extraordinary Session, a conference for delegates was held on *Farmers' Rights in the conservation and use of plant genetic resources: a gender perspective*, with the aim of promoting the incorporation of gender issues in the *Global Plan of Action*, then under discussion. During the Fourth International Technical Conference on Plant Genetic Resources, a further presentation was made of FAO's priority programme area in *Gender, biodiversity and technology*. The *Global Plan of Action*, as adopted, highlights gender issues. In October 1996, an Expert Working Group on Incorporating Gender-sensitive Approaches into Plant Genetic Resources Conservation and Use was held, in collaboration with IPGRI, to discuss possible guidelines, a methodology, and a programme strategy for promoting the consideration of gender and other socio-economic issues in the implementation of the *Global Plan of Action*, through gender-responsive national programmes.

34. A Letter of Agreement has been signed with the Plan de Acción Forestal in Guatemala for action-oriented research on *The role of women in the conservation of genetic resources - maize in Huehuetenango*. The aim is to document the role of women in plant-domestication and plant genetic resource conservation, to highlight the contribution of local knowledge systems and practices in the management of agrobiodiversity, and to foster an increased awareness among communities, Government institutions and development workers of the importance of gender considerations in the conservation and management of genetic resources, as part of a more integrated approach to agricultural development. Field work began in early 1997, with a process of consulting six communities in Huehuetenango.

March 1997



منظمة الأغذية
والزراعة
للأمم المتحدة

联合国
粮食及
农业组织

Food
and
Agriculture
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pour
l'alimentation
et
l'agriculture

Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

Item 5 of the Provisional Agenda
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PROGRESS REPORT ON THE GLOBAL SYSTEM FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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**PROGRESS REPORT ON THE GLOBAL SYSTEM FOR THE CONSERVATION
AND SUSTAINABLE UTILIZATION OF PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE**

Introduction

1. Since 1991, the Commission has considered progress reports on its Global System at all its regular sessions. This document gives particular attention to ongoing efforts to strengthen and adjust the Global System, in harmony with the Convention on Biological Diversity (CBD), as requested by Agenda 21, and in line with Resolution 3 of the Convention's Nairobi Final Act.

Background

2. From its establishment, by the 1983 FAO Conference, as the first permanent inter-governmental forum in the United Nations system dealing with an important part of biological diversity, the Commission on Genetic Resources for Food and Agriculture,¹ has coordinated, overseen and monitored the development of a Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture. Its terms of reference, as revised by the FAO Council in 1995 (Resolution CL 1/110),² specify that one of the tasks of the Commission is "to recommend such measures as may be necessary or desirable to ensure the development, as appropriate, of a comprehensive global system or systems on genetic resources of relevance to food and agriculture and to monitor the operation of its/their components, in harmony, where applicable, with the Convention on Biological Diversity and other relevant international instruments".

3. The objectives of the Global System are to ensure the safe conservation and promote the availability and sustainable utilization of plant genetic resources, for present and future generations, by providing a flexible framework for sharing the benefits and burdens. The System covers both the conservation of plant genetic resources (*ex situ* and *in situ*, including on-farm) and their sustainable utilization.

4. A total of 171 countries and the European Community now participate in the Global System (see *Appendix I*).

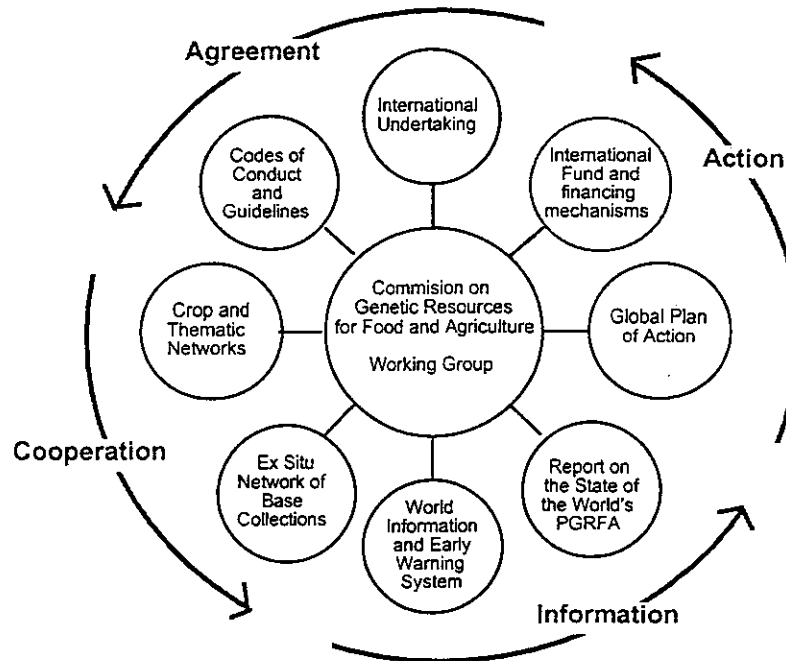
The Global System and the Convention on Biological Diversity

5. One task of the Commission, stated in its terms of reference is "to facilitate and oversee cooperation between FAO and [...] in particular with the Conference of the Parties to the Convention on Biological Diversity and the UN Commission on Sustainable Development, and to seek to develop appropriate mechanisms for cooperation and coordination in consultation with such bodies". The terms of reference also provide for the Commission, "subject to approval by the Governing Bodies of FAO, as appropriate, to respond to requests from the Conference of the Parties to the Convention on Biological Diversity in the specific area of genetic resources of relevance to food and agriculture, [...] in particular, and as appropriate, through the Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture".

¹ The Commission was originally established as the Commission on Plant Genetic Resources. In 1995, its mandate was broadened to cover all genetic resources for food and agriculture.

² Document CGRFA-7/97/Inf. 1.

**THE GLOBAL SYSTEM
ON THE CONSERVATION AND SUSTAINABLE UTILIZATION
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6. Since the Commission's last regular Session, the Conference of the Parties to the Convention on Biological Diversity (CoP/CBD) has held its Second and Third Meetings. The Second CoP, in November 1995, considered a report on the FAO Global System, and adopted Decision II/15, *FAO Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture*, which recognized "the special nature of agricultural biodiversity, its distinctive features and problems needing distinctive solutions", and declared its support for the processes underway: the revision of the International Undertaking, in harmony with the Convention, and the preparation of the Fourth International Technical Conference on Plant Genetic Resources (*Appendix 2*).

7. FAO again reported to the Third CoP, in November 1996,³ on progress under the FAO Global System, including on the outcome of the International Technical Conference, held in Leipzig in 1996. As the CoP had requested, the *Report on the State of the World's Plant Genetic Resources* and the *Global Plan of Action for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture*, finalized by the Leipzig Conference, were also made available.

8. The Third CoP considered agricultural biological diversity as a major agenda item, and made important recommendations of direct relevance to the work of the Commission and the Global System, in Decision III/11, *Conservation and Sustainable Use of Agricultural Biological Diversity*.⁴ The Decision *inter alia* calls for the strengthening of the FAO Global System. It "recognizes that several issues require further work in the context of the FAO Global System for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture, in

³ UNEP/CBD/COP/3/15.

⁴ The Decision is available to the Commission, in the *Report* of the Third CoP (document UNEP/CBD/COP/3/REP).

particular: financing; the realization of Farmers' Rights as discussed in the Global Plan of Action; as well as terms of technology transfer to developing countries and access and benefit-sharing arrangements, in accordance with relevant provisions of the Convention". These matters, and other matters of interest to the Global System arising from the Decision, are discussed below in more detail under the relevant elements of the Global System.

9. The Decision also "welcomes the offer by the Food and Agriculture Organization of the United Nations to continue serving countries in implementing the Convention on Biological Diversity in the area of agricultural biological diversity and, referring to its earlier decisions, underlines the necessity of avoiding any duplication of work with respect to the activities being undertaken by the Food and Agriculture Organization of the United Nations in this programme of work".

10. Cooperation between the FAO and the CBD Secretariat is being strengthened, particularly in the light of the Third CoP's decision to establish a multi-year programme of activities on agricultural biological diversity. From 1997, FAO has seconded a full-time professional officer to the Convention Secretariat, with special responsibility for agricultural biological diversity and development of a joint programme of work. A Letter of Agreement between FAO and the CBD Secretariat is under negotiation.

The Commission on Genetic Resources for Food and Agriculture

11. The Commission is a permanent inter-governmental forum, where countries that are donors and users of germplasm, funds and technology can discuss, on an equal footing, matters related to genetic resources for food and agriculture, and can monitor the implementation of the principles contained in the Undertaking. The Commission aims to reach international consensus in areas of global interest. Relevant technical assistance agencies, inter-governmental organizations, development banks, non-governmental organizations and private foundations also attend the sessions of the Commission and report to it on their programmes and activities on genetic resources for food and agriculture.

12. In 1985, the Commission established a subsidiary inter-governmental Working Group to "consider the progress made in implementing the Commission's programme of work and in other matters referred to it by the Commission".

Progress since the Sixth Session and matters for consideration

13. Between June 1995 and March 1997, a further twenty countries joined the Commission (Antigua and Barbuda, Armenia, Azerbaijan, Bosnia and Herzegovina, Burundi, Côte d'Ivoire, Eritrea, Georgia, Jamaica, Malawi, Mongolia, Mozambique, Papua New Guinea, Paraguay, Slovenia, Solomon Islands, South Africa, Swaziland, Tonga and Vietnam) bringing membership to 151 (including the European Community).

14. During this period, the Commission held two further extraordinary sessions; the Second Extraordinary Session in April 1996, to act as an inter-governmental preparatory committee for the Fourth International Technical Conference (Leipzig, June 1996), and the Third Extraordinary Session in December 1996, to further negotiations for the revision of the International Undertaking.⁵ The Working Group held its Eleventh Session in December 1996, preceding the Commission's Third Extraordinary Session.⁶

⁵ The reports of these two sessions (CGRFA-Ex2/96/REP and CGRFA-Ex3/96/REP) and of the International Technical Conference (ITCPGR/96/REP) are available as information documents.

⁶ Its Report is an annex to the Commission's Report (CGRFA-Ex3/96/REP, Appendix D).

15. In November 1995, the FAO Conference adopted Resolution 3/95, broadening the Commission's mandate to cover all components of biodiversity of relevance to food and agriculture, and changing its name to the "Commission on Genetic Resources for Food and Agriculture". Conference considered that this "would facilitate an integrated approach to agrobiodiversity and coordination with governments, which are increasingly dealing with policy issues regarding biological diversity in an integrated manner". The new statutes of the Commission provide for cooperation between FAO and other international governmental and non-governmental bodies, in particular the CoP/CBD. The Conference agreed that the broadening of the mandate should be implemented on a step-by-step basis, beginning with farm animal genetic resources, and progressively extending to other sectors of food and agriculture, and that the broadening should not interfere with the ongoing negotiations for the revision of the Undertaking. Actions to be taken on farm-animal and forest genetic resources were discussed by COAG in April 1997 and COFO in March 1997: their recommendations are presented to the Commission as information documents.⁷

16. The statutes of the broadened Commission state that it may establish inter-governmental sectoral technical working groups to assist it in the areas of plant, animal, forestry and fisheries genetic resources. Draft terms of reference for the possible establishment of a sectoral working group on animal genetic resources and the transformation of the current Working Group into a sectoral working group on plant genetic resources will be discussed under Agenda item 3.

17. Twenty-three international organizations submitted reports on their policies, programmes and activities in the field of plant genetic resources to the Sixth Session: these and a further thirty organizations have been invited to report to the current session. In line with the Commission's broadened mandate, their reports to this session will, for the first time, cover all genetic resources of importance to food and agriculture. Reports received⁸ will be considered under agenda item 6.

Revision of the International Undertaking on Plant Genetic Resources for Food and Agriculture

18. The International Undertaking on Plant Genetic Resources was adopted by Resolution 8/83 of the 1983 FAO Conference, and interpreted and complemented by three Conference Resolutions (4/89, 5/89 and 3/91).

19. The Twenty-seventh Session of the FAO Conference in 1993 unanimously adopted Resolution 7/93, in response to the requests made in Agenda 21 and the Final Act of the Nairobi Conference which adopted the CBD, which requested FAO to provide a forum for negotiations among governments, through regular and extraordinary sessions of the Commission:⁹

"for the adaptation of the International Undertaking on Plant Genetic Resources, in harmony with the Convention on Biological Diversity;¹⁰

for consideration of the issue of access on mutually agreed terms to plant genetic resources, including *ex situ* collections not addressed by the Convention;¹¹ as well as

for the issue of realization of Farmers' Rights".

⁷ CGRFA-7/97/Inf. 2 and CGRFA-7/97/Inf. 3.

⁸ CGRFA-7/97/7.

⁹ While still the Commission on Plant Genetic Resources.

¹⁰ While the Convention on Biological Diversity covers all kinds of biological diversity, the scope of the Undertaking is limited to plant genetic resources for food and agriculture.

¹¹ It should be noted that this formulation, adopted after careful negotiations, although limited to plant genetic resources for food and agriculture, is not limited only to *ex situ* collections not addressed by the Convention.

20. Negotiations began at the Commission's First Extraordinary Session (7-11 November 1994), and continued during the Sixth Regular Session (19-30 June 1995).

Progress since the Sixth Session and matters for consideration

21. The 150 countries that attended the Fourth International Technical Conference, in adopting the *Leipzig Declaration*, emphasized the importance of completing the revision of the Undertaking and the adjustment of the Global System, in line with the CBD.

22. Progress was reported to the Second and Third Meetings of the CoP/CBD. The Second CoP declared its support for this process, through Decision II/15 (*Appendix 2*). Decision III/11 calls for the effective and speedy completion of the revision of the International Undertaking, and "notes that the various options for the legal status of a revised International Undertaking on Plant Genetic Resources, which include a voluntary agreement, binding agreement, or protocol to the Convention on Biological Diversity, have not been decided upon by the Food and Agriculture Organization of the United Nations, requests the Food and Agriculture Organization of the United Nations to inform the Conference of the Parties of its deliberations, affirms its willingness to consider a decision by the Conference of the Food and Agriculture Organization of the United Nations that the International Undertaking should take the form of a protocol to this Convention once revised in harmony with this Convention and further requests the Executive Secretary to inform the Commission on Genetic Resources for Food and Agriculture accordingly". The Commission was so informed at its Third Extraordinary Session.

23. The Third Extraordinary Session (9-13 December 1996) was devoted to the continuation of negotiations. A Fourth Negotiating Draft (document CGRFA/IUND/4), which includes the proposals made by Commission Members at that session, will be considered by the present Session under item 8. At the request of the Third Extraordinary Session, FAO invited members to make further submissions regarding the Negotiating Draft, by a *Note Verbale* of 24 February 1997: any submissions received will be made available as document CGRFA/IUND/4 Add. 1. As requested, IPGRI and FAO have also prepared, through a process of consultation with members, a characterization and notional assessment of the "pros and cons" of various options for access and benefit-sharing, to assist in the negotiations (document CGRFA-7/97/9).

The International Fund and other funding mechanisms for plant genetic resources

24. The FAO Conference in 1991 adopted Resolution 3/91, stating "that Farmers' Rights will be implemented through an international fund on plant genetic resources, which will support plant genetic conservation and utilization programmes", and agreeing that the "resources for the international fund as well as for other funding mechanisms should be substantial, sustainable and based on the principles of equity and transparency", and "that through the Commission on Plant Genetic Resources, the donors of genetic resources, funds and technology will determine and oversee the policies, programmes and priorities of the fund and other funding mechanisms, with the advice of the appropriate bodies". It has also been noted that funding could take the form of a window of an existing fund.

25. The Fourth Session of the Commission "agreed that the practical expression of Farmers' Rights, through the International Fund, and a scientifically well-founded Global Plan of Action, would make it possible to consolidate the Global System and achieve its objectives". It also agreed that the *Plan's* priority programmes and projects should be financed through the International Fund.

26. The Sixth Session, in deciding that the *Global Plan of Action* should include "cost estimates, identification of possible sources of financial resources, and priorities and criteria for the

allocation of resources", recalled its recommendation, at its Fourth Session, "that the Technical Conference be followed by a meeting to define the financial commitments needed for the implementation of the *Global Plan of Action*, and the terms and conditions of financing."

Progress since the Sixth Session and matters for consideration

27. The *Global Plan of Action* has now been adopted by the International Technical Conference, which noted the *Plan's* "estimate of the cost of implementing the *Global Plan of Action*, and of its identification of existing sources of financing and of possible new sources of financing". Given the changes introduced by the Conference in many of the priority activities, it requested the Secretariat to refine these cost estimates. The revised estimates are contained in document CGRFA-7/97/4 Annex.

28. The fund has not yet been established, and matters related to legal status, policies and priorities are now under discussion, as part of the negotiations for the revision of the International Undertaking, and, in particular, the realization of Farmers' Rights (Agenda Item 8).

The Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources

29. In 1991, the Commission requested the development of a rolling *Global Plan of Action on 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.

30. The Commission agreed that the *Plan* was "to be financed, on a step by step basis, through the International Fund for Plant Genetic Resources, and to be implemented by appropriate agencies and organizations, under the supervision of the Commission". In 1993, the Fifth Session of the Commission considered that "by financing the *Plan*, through the International Fund and other funding mechanisms, as foreseen in Resolution 3/91, the international community would contribute to the practical realization of Farmers' Rights".

Progress since the Sixth Session and matters for consideration

31. The first *Global Plan of Action* was developed under the guidance of the Commission, through the country-driven preparatory process of the Fourth International Technical Conference: the Second CoP described the process as "exemplary" and "an innovative model". At twelve regional and sub-regional meetings, governments discussed regional problems and opportunities and made recommendations for the *Plan*, which helped catalyze the formation of, and strengthen national programmes and regional networks and promote scientific cooperation. The *Plan*, as adopted by the International Technical Conference, comprises twenty priority activities, covering *in situ* and *ex situ* conservation, plant genetic resources utilization and institutions and capacity-building. The rolling *Plan* will be reviewed and updated after four years. In the *Leipzig Declaration*,¹² governments committed themselves to taking the necessary steps to implement the *Global Plan of Action*.

32. The International Technical Conference stressed the need to enlist the widest possible participation in its implementation and requested that the outcome of the Conference be reported to a wide range of forums dealing with food and agriculture and biodiversity, including the CoP.

¹² The *Leipzig Declaration* is contained in the *Report of the International Technical Conference on Plant Genetic Resources* (document ITCPR/96/REP).

The FAO Council, in endorsing the outcome of the International Technical Conference,¹³ invited national, regional and international funding organizations to consider the priorities of the *Global Plan of Action* as policy guidance for their funding programmes. FAO is inviting financial and funding organizations to examine ways and means of supporting its implementation and is itself examining the possible role of its technical programmes.

33. Decision III/11 of the Third CoP “welcomes the contribution that the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture, as adopted by the fourth International Technical Conference on Plant Genetic Resources, provides to the implementation of the Convention on Biological Diversity in the field of plant genetic resources for food and agriculture and encourages Parties actively to implement the Global Plan of Action, in accordance with their national capacities, and endorses its priorities and policy recommendations”. It also “*encourages* Parties to develop national strategies, programmes and plans, which should focus on, *inter alia* [...] the key elements of the Global Plan of Action”.

34. The Decision also “*draws the attention* of international funding agencies to the urgent need to support the conservation and sustainable use of biological diversity important to agriculture and invites these agencies to provide information and feedback in this respect to the Conference of the Parties and in this context, requests the interim financial mechanism to give priority to supporting efforts for the conservation and sustainable use of biological diversity important to agriculture”.

35. The International Technical Conference agreed that the *Global Plan of Action* should be implemented as an integral part of the Global System, and in harmony with the CBD, and that governments would monitor and guide overall progress, through the Commission. Document CGRFA-6/97/5, which will be considered under item 5, is intended to facilitate the Commission’s work in this regard.

The Report on the State of the World’s Plant Genetic Resources for Food and Agriculture

36. 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 Commission also agreed that the needs, emergencies and priorities identified in the *Report on the State of the World’s Plant Genetic Resources* would provide the basis for the operation and periodic updating of the *Global Plan of Action*.

Progress since the Sixth Session and matters for consideration

37. In the country-driven preparatory process of the Fourth International Technical Conference, under the guidance of the Commission, Country Reports were prepared by 158 governments, assessing the status of their plant genetic resources, and their capacity to conserve and utilize them: the first *Report on the State of the World’s Plant Genetic Resources* is largely based on this information, supplemented by information from the WIEWS. The *Report* assesses the state of plant genetic diversity and capacities at local, national, regional and global levels, for *in situ* management, *ex situ* conservation, and sustainable utilization. It identifies current gaps and needs and the priorities which are addressed in the *Global Plan of Action*. The International Technical Conference welcomed the *Report* as the first comprehensive world-wide assessment of the state of plant genetic resources conservation and use.

¹³ Resolution CL 111/1.

38. The Conference asked for the *Report on the State of the World's Plant Genetic Resources* submitted to it (the "short" version) and its associated background documentation (the "long" version) to be issued as FAO information documents, and made widely available. The "short version" has been issued in all languages in an attractive set of documents, which also includes an introductory booklet and the *Global Plan of Action*: this has been very widely distributed, including to the Third CoP/CBD, the World Food Summit, and to many regional and international forums. Copies were also sent to all participants in the International Technical Conference and its preparatory process. The *Report* has been posted on the Internet, and a CD-ROM including these and other documents is being prepared. The "long version" has undergone a technical peer review and is being finalized for publication in English. Additional extra-budgetary resources will be sought for publication in other languages. Proposals for updating the *Report* are described in document CGRFA-7/97/5.

39. The International Technical Conference confirmed that the *Report on the State of the World's Plant Genetic Resources* should be periodically updated. Before the preparation of the next *Report*, the Commission may wish to review its scope, in light of its broadened mandate. The *Global Plan of Action* recommended that governments periodically review and report on the situation of their plant genetic resources for food and agriculture, and for this purpose designate a focal point (or reconfirm the existing focal point) to convey such information to FAO, the CoP/CBD and other appropriate bodies.

The World Information and Early Warning System on Plant Genetic Resources.

40. The World Information and Early Warning System on Plant Genetic Resources (WIEWS) collects, disseminates and facilitates the exchange of information that governments provide on plant genetic resources collections and related technologies. The WIEWS is an important tool for the periodic updating of the *Report on the State of the World's Plant Genetic Resources*. Its databases 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 and on how to obtain information from them. The Early Warning Mechanism is being developed to draw rapid attention to hazards threatening the operation of *ex situ* collections, and to the danger of the extinction of plant species and the loss of genetic diversity of crops for food and agriculture.

41. Other FAO databases on genetic resources of importance to food and agriculture include the Domestic Animal Diversity Information System (DAD-is), which covers key areas of country-secure, regional and global information required for the management of farm animal genetic resources, and serves as the virtual structure for implementing the FAO Global Strategy for the Management of Farm Animal Genetic Resources. A Global Information System on Forest Genetic Resources (REFORGEN) is also currently being developed, with information on conservation and sustainable utilization of forest genetic resources at the country level. It is planned that it will eventually be linked to the WIEWS.

Progress since the Sixth Session and matters for consideration

42. During the preparatory process for the Fourth International Technical Conference on Plant Genetic Resources, the WIEWS provided essential data and up-to-date statistics on *ex situ* collections and national programmes for the preparation of the first *Report on the State of the World's Plant Genetic Resources*. The WIEWS is now being expanded and updated with information from the 158 Country Reports prepared for the Conference.

43. The Second CoP, in its Decision II/16, welcomed FAO's offer to link its information mechanisms to the Convention's Clearing House Mechanism. FAO is prepared to be an active

partner in the implementation of the Clearing House Mechanism's pilot phase. Internet access to the WIEWS for searching and reporting data is being established to facilitate access, including in the context of the Clearing House Mechanism. An Internet interface was demonstrated during the International Technical Conference, the Montreal meeting of the Subsidiary Body on Scientific, Technological and Technical Advice (SBSTTA) in September 1996, and the Third CoP, together with FAO's Domestic Animal Genetic Resources Information System (DAD-is). A stand-alone version of WIEWS, with data on countries' plant genetic resources programmes and on *ex situ* collections, is distributed upon request.

44. The *Global Plan of Action* also recommended that the efficiency, purpose and value of the WIEWS be evaluated, and that it be improved in the light of the results of the review. This evaluation will be undertaken in June 1997. In preparation, a Technical Consultation involving users of the WIEWS from all regions was organized in September 1996 in Poland. The meeting recommended the establishment of a network of government focal points to supply information for the WIEWS and cooperate in its development. FAO is currently contacting countries to identify such government focal points.

45. Following the decision of the Sixth Session of the Commission that the crop-related networks be regarded as part of the Global System, the WIEWS is establishing an inventory of networks involved in plant genetic resources activities and inviting coordinators, chairs or secretariats to cooperate with WIEWS. The development of crop databases is already being harmonized with the WIEWS' structure and information needs.

46. A reporting format is being developed to present current data (including those provided in the Country Reports for the International Technical Conference) and governments are being requested to confirm and update them, and fill in any gaps. An option for electronic and direct updating by countries themselves will also be available. As recommended in the *Global Plan of Action*, relevant technical experts, national programme representatives, international organizations and the private sector will be invited to help elaborate an efficient methodology for monitoring genetic erosion.

Codes of Conduct and Guidelines

47. The **International Code of Conduct for Plant Germplasm Collecting and Transfer** adopted by the FAO Conference in 1993, as Resolution 8/93, provides a guide which governments may use until they develop their own national regulations. The Sixth Session of the Commission recognized that the Code might require updating in the light, in particular, of the revised International Undertaking, and requested the Secretariat to prepare questionnaires to facilitate its monitoring function, and allow any necessary development, modification and updating.

48. A draft **Code of Conduct for Biotechnology**, as it affects the conservation and use of plant genetic resources for food and agriculture, was prepared at the request of the Commission and considered at its Fifth Session in 1993. The draft Code includes provisions to maximize the positive effects of biotechnology and minimize potentially negative effects, as well as to promote access to relevant agro-biotechnologies. As recommended, FAO transmitted the biosafety component of the draft Code to the CBD Secretariat as an input to its work. The Sixth Session agreed to postpone further development of other elements of the draft Code until after the revision of the International Undertaking.

49. FAO and IPGRI have, since 1989, jointly published *Technical Guidelines for the Safe Movement of Plant Germplasm*. By the time of the Sixth Session, the following guidelines had been published: cocoa, edible aroids, *Musa* spp., sweet potato, yam, legumes, cassava, citrus, grapevine, vanilla, coconut, sugarcane, small fruits, and small grain temperate cereals.

50. The Sixth Session agreed a set of *Genebank standards*, jointly prepared by FAO and the International Plant Genetic Resources Institute (IPGRI), and requested that standards for *in vitro* collections and for field genebanks, as well as guidelines for regeneration, be submitted to it for consideration.

Progress since the Sixth Session and matters for consideration

51. Further progress on the two Codes of Conduct is pending completion of the revision of the International Undertaking.

52. The *Genebank standards* have now been published and are being widely used. Since the Sixth Session, further Technical Guidelines for the Safe Movement of Plant Germplasm have been published, for *Musa* spp. (second edition), stone fruits, and *Eucalyptus* spp. Guidelines are in preparation for *Pinus* spp., *Allium* spp., and potato. On the advice of expert consultations organized by IPGRI at ICRISAT and CIAT, *Regeneration of accessions in seed collections: a decision guide* is currently being finalized and *Guidelines for the management of field and in vitro genebanks* are under development: if these documents are ready by the time the session meets, they will be made available.

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

53. The Commission called for the development of the International Network in 1989, in line with Article 7.1(a) of the International Undertaking, because of the uncertainty of the legal situation of *ex situ* germplasm in genebanks, and of the lack of appropriate agreements to ensure its safe conservation. Because the provisions regarding access to genetic resources in the CBD (Article 15) do not apply to *ex situ* collections assembled prior to its entry into force, Resolution 3 of the Nairobi Conference recognized the need to resolve this issue within the context of the FAO Global System.

54. Twelve Centres of the Consultative Group on International Agricultural Research signed agreements with FAO in 1994, placing most of their collections (some 500,000 accessions) in the International Network. Through these agreements, the Centres accept, in particular, to hold 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".

Progress since the Sixth Session¹⁴ and matters for consideration

55. The Sixth Session of the Commission considered revised model agreements for adherence to the Network, harmonized with the provisions of the CBD, and agreed that negotiations with the 32 countries that had expressed their willingness to join the Network should continue, using the revised agreements as appropriate. It noted that the final form of such agreements would depend upon the outcome of the negotiations for the revision of the International Undertaking.

56. During the preparatory process of the International Technical Conference, several more expressed interest in joining the International Network. A number of relevant recommendations were made in the inter-governmental sub-regional meetings, particularly that institutions which

¹⁴ The first *Report on the State of the World's Plant Genetic Resources*, provides the most up-to-date and comprehensive survey of *ex situ* collections throughout the world. Document CPGR-6/95/INF. 10, presented to the Sixth Session of the Commission outlined the preliminary results of a survey of *ex situ* plant genetic resources in botanical gardens, which focused on those of interest for food and agriculture; the completed survey is now available as Background Study Paper No. 5, *Información sobre las Colecciones Ex Situ Conservadas en Jardines Botánicos*.

had, prior to the entry into force of the Convention, made commitments for the availability and long-term conservation of their collections, within the former IBPGR Register of Base Collections, should now place those collections in the International Network. These collections from all over the world, many of which were made with IBPGR support, account - with those of the CGIAR - for about a quarter of the world's collections of plant genetic resources for food and agriculture (and undoubtedly a much higher proportion of the world's unique accessions).

57. Since the Sixth Session, the CGIAR's System-wide Programme on Genetic Resources has reviewed the Centres' genebank operations, with FAO's participation: this showed that most of the genebanks are satisfactorily operated and generally well managed, though under-funded. The Review is available for the information of the Session.

58. The 1994 agreements with the twelve CGIAR Centres come up for renewal in 1998. Subject to guidance of the Commission, the Secretariat would propose to extend the life of the present agreements, pending the completion of the revision of the International Undertaking.

59. Consultations have been held between the Commission's Secretariat, the FAO Legal Office, and IPGRI on behalf of the International Coconut Genetic Resources Network, regarding the placing of coconut genetic resource collections held by the host countries on behalf of their respective regions and forming part of the network, into the International Network under the auspices of FAO. If a satisfactory draft Agreement is ready in time, it will be brought to the attention of the Commission for its guidance at this session.

Other Networks

60. In recent years, the complementarity of *in situ* and *ex situ* strategies has been recognized. The Commission has called for the establishment of **networks of *in situ* conservation areas**, which would include "on-farm" conservation of crops and *in situ* conservation of crop wild relatives. The *Global Plan of Action* contains a set of specific priority activities for *in situ* conservation, with an increased allocation of resources, especially in developing countries, and now provides an agreed general framework for *in situ* conservation of crop genetic resources. *In situ* conservation is the main strategy for managing the genetic resources of perennial, largely wild and highly diverse forest tree species. The need to incorporate aspects of genetic resource conservation into protected area management strategies is among the stated criteria of most on-going international sustainable forest management initiatives. As the Commission recommended, the 1998 FAO World-wide International Expert Consultation on Ecosystem Conservation and Sustainable Rural Development is planned to include a review of the role of protected areas in *in situ* conservation.

61. The Sixth Session of the Commission recognized **Crop-related networks** as a useful approach to integrating activities on plant genetic resources within the Global System and strengthening practical linkages between the conservation and sustainable utilization of crop genetic resources. FAO has therefore continued to support the establishment of global and regional crop-related networks, covering a large variety of cultivated species, in close collaboration with relevant scientific organizations. Current information concerning such crop-related networks is given in document CGRFA-7/97/8.1. The *Global Plan of Action* stated that the Commission should be regularly informed of the state of diversity in collections and breeding populations of major crops of significance to world food security. In the context of the preparatory process of the International Technical Conference, it was suggested that crop-specific networks could report to the Commission on such matters.

Regional cooperation

62. The Commission, at its Fourth Session, took note of collaborative regional efforts on plant genetic resources for food and agriculture and suggested "that FAO, through its regional

conferences, should promote and strengthen inter-governmental and regional cooperation and structures in this field, and that the matter should be an agenda item at FAO Regional Conferences.” The inter-governmental Latin America and the Caribbean Regional Meeting of the preparatory process of the International Technical Conference recalled this recommendation and developed a proposal for the region.¹⁵ Preparatory meetings in other regions also emphasized the importance of strengthening sub-regional and regional coordination. In 1997, FAO and IICA (the Inter-American Institute for Agricultural Cooperation) signed an agreement to cooperate in strengthening the Global System, at a regional level, in Latin America and the Caribbean.

Guidance expected from the Commission

63. In the context of the broadened mandate of the Commission and in line with para. 2(iv) and 2(v) of its terms of reference,¹⁶ the Commission may wish to consider how it, and FAO, may cooperate most effectively with the CBD and the Commission on Sustainable Development, in the area of agrobiodiversity (see para. 5, 6, 9 and 15), *inter alia* through:

- appropriate mechanisms for cooperation and coordination, in order to avoid duplication, and ensure coordination, synergy, and, to the extent possible, integrated approaches between the agriculture and the environment sectors, both at national and international level (see para. 5);
- the development of appropriate strategies and plans (see para. 8, 32 and 33);
- the definition of policies and priorities including criteria for funding (see para. 8, 33 and 34); and
- harmonization of national reporting on agrobiodiversity in the various forums (see para. 39, 41 and 44; see also document CGRFA-7/97/5).

Guidance regarding such coordination may need to cover cooperation with both the governing bodies and their Secretariats. In this respect the Commission’s attention is drawn to para. 5-10 of this document and to Decision III/11 in the report of the Third CoP (in document UNEP/CBD/COP/3/REP).

64. The Commission may wish to provide guidance on how its broadened mandate might affect the further development of the various components of the Global System, and make recommendations in this regard, in line with para. 2(ii) of the terms of reference (see para. 2 and 39).

65. In the context of the Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources, the Commission may also wish to consider the following issues:

- Monitoring of progress in the implementation of the *Global Plan of Action* and how future review or adjustments of the *Global Plan of Action* will be facilitated (see para. 35; see also document CGRFA-7/97/5).
- Funding and/or financing mechanisms for the implementation of the *Global Plan of Action* (para. 8, 24-28, 30 and 31-35; see also document CGRFA-7/97/4 Annex).
- The proposed process for the updating of the *Report on the State of the World’s Plant Genetic Resources* (see para. 39; see also document CGRFA-7/97/5).
- Further collaborative development, improvement and review of the WIEWS, in particular the elaboration of the early warning component (para. 40-46).
- Designation (or re-confirmation) by countries of national focal points (see para. 39 and 44).
- Extension of existing agreements with the twelve CGIAR Centres, and the possible agreement with the International Coconut Genetic Resources Network, in the context of

¹⁵ Report of the Regional Preparatory Meeting for Latin America and the Caribbean; para. 24 and Annex 13.

¹⁶ Document CGRFA-7/97/Inf. 1.

the International Network of *Ex Situ* Collection under the auspices of FAO (para. 58 and 59).

- How crop-specific and regional plant genetic resources network might contribute to the implementation of the *Global Plan of Action* and possibly report to the Commission, on matters such as the state of diversity of particular crops (para. 61).
- How regional collaboration may be strengthened at inter-governmental level (para. 62).

APPENDIX 1
**COUNTRIES' PARTICIPATION IN THE DEVELOPMENT OF MAJOR COMPONENTS
 OF THE GLOBAL SYSTEM FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION
 OF PLANT GENETIC RESOURCES (February 1997)**

AFRICA	ASIA & THE SOUTH WEST PACIFIC	EUROPE	LATIN AMERICA AND THE CARIBBEAN
Algeria 1/2	Australia 1/2/3	Albania 1/3	Antigua and Barbuda 1/2/3
Angola 1/2/3	Bangladesh 1/2/3/4	Armenia 1/3	Argentina 1/2/3/4
Benin 1/2/3	Bhutan 3	Austria 1/2/3	Bahamas 1/2/3
Botswana 1/3	Cambodia 3	Belarus 3	Barbados 1/2/3
Burkina Faso 1/2/3	China 1/3/4	Belgium 1/2/3	Belize 1/2
Burundi 1/3	Cook Islands 3	Bosnia and Herzegovina 1	Bolivia 1/2/3
Cameroon 1/2/3	Democratic People's Republic of Korea 1/2/3	Bulgaria 1/2/3	Brazil 1/3/4
Cape Verde 1/2/3	Fiji 2	Croatia 1/3	Chile 1/2/3/4
Central African Republic 1/2/3	India 1/2/3/4	Cyprus 1/2/3	Colombia 1/2/3/4
Chad 1/2	Indonesia 1/3	Czech Republic 1/2/3/4	Costa Rica 1/2/3/4
Congo 1/2/3	Japan 1/3	Denmark 1/2/3/4	Cuba 1/2/3
Côte d'Ivoire 1/2/3	Korea, Republic of 1/2/3	Estonia 1/3	Dominica 1/2/3
Equatorial Guinea 1/2/3	Malaysia 1/3	European Community 1	Dominican Republic 1/2/3
Eritrea 1/3	Maldives 1/3	Finland 1/2/3/4	Ecuador 1/2/3/4
Ethiopia 1/2/3/4	Mongolia 1/3	France 1/2/3/4	El Salvador 1/2/3
Gabon 1/2/3	Myanmar 1/3	Georgia 1	Grenada 1/2/3
Gambia 1/3	Nepal 1/2/3	Germany 1/2/3/4	Guatemala 1/3
Ghana 1/2/3	Niue 3	Greece 1/2/3	Guyana 1/3
Guinea 1/2/3	New Zealand 1/2/3	Hungary 1/2/3	Haiti 1/2/3
Guinea-Bissau 1	Pakistan 1/3/4	Iceland 1/2/3	Honduras 1/2/3
Kenya 1/2/3/4	Papua New Guinea 1/2/3	Ireland 1/2/3	Jamaica 1/2/3
Lesotho 1/3	Philippines 1/2/3/4	Israel 1/2/3	Mexico 1/2/3/4
Liberia 1/2	Samoa 1/2/3	Italy 1/2/3/4	Nicaragua 1/2/3
Madagascar 1/2/3/4	Solomon Islands 1/2/3	Latvia 1/3	Panama 1/2/3
Malawi 1/2/3	Sri Lanka 1/2/3	Liechtenstein 2	Paraguay 1/2/3
Mali 1/2/3	Thailand 1/3	Lithuania 1/3	Peru 1/2/3
Mauritania 1/2/3	Tonga 1/2/3	Malta 1/3	Saint Christopher and Nevis 1/3
Mauritius 1/2/3	Vanuatu 1	Moldova 3	Saint Lucia 1/3
Morocco 1/2/3/4	Vietnam 1/3	Netherlands 1/2/3	Saint Vincent and the Grenadines 1/3
Mozambique 1/2/3		Norway 1/2/3/4	Suriname 1/3
Namibia 3	NEAR EAST	Poland 1/2/3	Trinidad and Tobago 1/2/3
Niger 1/2/3	Afghanistan 1	Portugal 1/2/3	Uruguay 1/3/4
Nigeria 3	Azerbaijan 1/3	Romania 1/2/3	Venezuela 1/3
Rwanda 1/2/3	Bahrain 2	Russia 2/3	
Senegal 1/2/3/4	Egypt 1/2/3	Slovak Republic 1/3	NORTH AMERICA
Seychelles 3	Iran 1/2/3/4	Slovenia 1/3	Canada 1/3/4
Sierra Leone 1/2/3	Iraq 1/2/3/4	Spain 1/2/3/4	United States of America 1/3/4
South Africa 1/2/3	Jordan 1/3	Sweden 1/2/3/4	
Sudan 1/2/3	Kazakhstan 3	Switzerland 1/2/3/4	
Swaziland 1/3	Kuwait 2/3	Turkey 1/2/3/4	
Tanzania 1/2/3	Lebanon 1/2/3	Ukraine 3	
Togo 1/2/3/4	Libya 1/2/3	United Kingdom 1/2/3/4	
Uganda 1/3	Oman 2/3	Yugoslavia 1/2/3	
Zaire 1/3	Qatar 3		
Zambia 1/2/3	Saudi Arabia 3		
Zimbabwe 1/2/3	Syria 1/2/3/4		
	Tunisia 1/2/3/4		
	Turkmenistan 3/4		
	Uzbekistan 3/4		
	Yemen 1/2/3/4		

* 171 countries and the European Community are participating actively in the development of major components of the Global System. Other elements of the System, such as the Code of Conduct for Plant Germplasm Collecting and Transfer and the WIEWS, which do not have individual memberships, are not listed here

1/ Membership of the Commission on Genetic Resources for Food and Agriculture (150 countries and the European Community).

2/ Adherence to the International Undertaking on Plant Genetic Resources (111 countries).

3/ Countries that have actively contributed to the preparation of the *Global Plan of Action* and the *Report on the State of the World's Plant Genetic Resources*, by presenting national reports and participating in the inter-governmental meetings that culminated in formal adoption, by governments in the Fourth International Technical Conference of the *Global Plan of Action* (159 countries).

4/ Countries that have expressed the wish to put national *ex situ* collections under the auspices of FAO, and/or to store international collections in their genebanks (40 countries).

APPENDIX 2

DECISION II/15: *FAO GLOBAL SYSTEM FOR THE CONSERVATION AND UTILIZATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE**The Conference of the Parties:*

“Recognizing the special nature of agricultural biodiversity, its distinctive features and problems needing distinctive solutions;

“Taking note of the Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture developed by member countries of the Food and Agriculture Organization of the United Nations (FAO) through the FAO Commission on Plant Genetic Resources, and the recommendation for strengthening it expressed in chapter 14 of Agenda 21;

“Recalling that Resolution 3 of the Nairobi Final Act of the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity recognized ‘the need to seek solutions to outstanding matters concerning plant genetic resources within the Global System for the Conservation and Use of Plant Genetic Resources for Food and Sustainable Agriculture, in particular (a) access to *ex situ* collections not acquired in accordance with this Convention; and (b) the question of farmers’ rights’;

“1. Considers that the outstanding matters should be resolved as soon as possible;

“2. Declares its support for the process engaged in the FAO Commission on Plant Genetic Resources to comply with these recommendations, especially through:

“(1) The implementation of FAO Conference Resolution 7/93 for the adaptation of the International Undertaking on Plant Genetic Resources, in harmony with the Convention on Biological Diversity;

“(2) Convening the Fourth International Technical Conference on Plant Genetic Resources for Food and Agriculture through which two important elements of the Global System, the first State of the World report on Plant Genetic Resources for Food and Agriculture and the first Global Plan of Action for Plant Genetic Resources for Food and Agriculture, are being developed through a country-driven process.”

