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CONFERENCE

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**THE FOURTH INTERNATIONAL TECHNICAL CONFERENCE ON PLANT
GENETIC RESOURCES. REPORT ON THE PREPARATORY PROCESS AND
THE EXPECTED OUTPUTS**

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I. INTRODUCTION

1. In line with decisions of FAO Conference, and with recommendations from the United Nations Conference on Environment and Development, FAO is organizing the Fourth International Technical Conference on Plant Genetic Resources in Leipzig, Germany, in June 1996. The Leipzig Conference is expected to adopt a first Report on the State of the World's Plant Genetic Resources for Food and Agriculture and a first Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources as part of the FAO Global System on Plant Genetic Resources.

II. AIMS OF THE FOURTH INTERNATIONAL TECHNICAL CONFERENCE

2. The Fourth International Technical Conference, with its preparatory process, aims to develop consensus and commitment from countries, and from all relevant sectors, for the conservation of plant genetic resources for food and agriculture, and their use in sustainable development, and, in particular:

- a) to catalyze action at the country level to promote capacity building, including increased communication and access to information, improved planning and evaluation, the identification of problems and emergency needs, the formulation of projects to address such needs, and the encouragement of regional cooperation and initiatives (see paras 7-10);
- b) to describe, through the Report on the State of the World's Plant Genetic Resources, the current situation of plant genetic resources, and identify gaps and needs and propose priorities for action (see paras 15-17); and
- c) To secure agreement on a Global Plan of Action for Plant Genetic Resources, as it emanates from the Report on the State of the World's Plant Genetic Resources, building upon the outline plan of action of Agenda 21 (see paras 18-19).

3. The Fourth International Technical Conference and its preparatory process will transform the relevant parts of Agenda 21 into a costed Global Plan of Action, contribute to the implementation of the Convention on Biological Diversity and help make the FAO Global System on Plant Genetic Resources fully operational.

4. In 1983, the FAO Conference decided on the establishment of a permanent intergovernmental forum on plant genetic resources: the FAO Commission on Plant Genetic Resources. It also adopted a formal framework: the International Undertaking on Plant Genetic Resources. The Commission has since coordinated, overseen and monitored the development of a Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture, within the framework of the Undertaking. Other components of the Global System include a World Information and Early Warning System and a Network of *Ex Situ* Germplasm Collections. The Report on the State of the World's Plant Genetic Resources for Food and Agriculture and the Global Plan of Action are two further components of the Global System. The first Report and the first Global Plan of Action, which are being elaborated through the preparatory process for the Fourth International Technical Conference on Plant Genetic Resources, will assist the Commission in exercising the coordinating and monitoring roles provided for in its mandate.

5. Agenda 21 of UNCED recommended in programme area G of Chapter 14, "Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Sustainable Agriculture", *inter alia*, to prepare periodic state of the world reports on plant genetic resources for food and agriculture, and a rolling global cooperative plan of action on plant genetic resources for food and agriculture; and to promote the Fourth International Technical Conference, which would consider the first Report on the State of the World's Plant Genetic Resources, and a Global Plan of Action.

Agenda 21 also calls for the realization of Farmers' Rights.¹ As noted by the Commission on Plant Genetic Resources at its Fifth Session, the Fourth International Technical Conference will "transform the relevant parts of Agenda 21 into a costed Global Plan of Action, based on the Report on the State of the World's Plant Genetic Resources".

6. Resolution 3 of the Nairobi Final Act, adopted together with the Convention on Biological Diversity, noted these recommendations and recognized the need for the provision of support to their implementation. It also called for some "outstanding issues", including the issues of access to samples of genetic material acquired not in accordance with the Convention, and the realization of Farmers' Rights, to be addressed in the context of the Global System. The FAO Conference subsequently called for negotiation by countries, through the Commission on Plant Genetic Resources, of the revision of the International Undertaking on Plant Genetic Resources, in harmony with the Convention, and to address, *inter alia*, the issues of access on mutually agreed terms to plant genetic material, and the realization of Farmers' Rights. A progress report on the revision of the International Undertaking will be presented to the International Technical Conference. The FAO Conference noted that the revision of the International Undertaking, and the development of a Report on the State of the World's Plant Genetic Resources and a Global Plan of Action, were major components of FAO's contribution to, and role in, implementing the Convention on Biological Diversity.

III. THE PREPARATORY PROCESS

7. The first Report on the State of the World's Plant Genetic Resources and the first Global Plan of Action are being elaborated through a participatory, country-driven preparatory process for the Fourth International Technical Conference. The process has been designed to offer a number of opportunities for specific country inputs:

- a) the preparation of Country Reports assessing the status of plant genetic resources in each country, focusing on needs, and gaps in institutional capacities for conserving and developing these resources. By 7 August, 1995, Country Reports had been received from 124 countries (84 as finals and 40 as draft), and
- b) a series of sub-regional and regional meetings, at which countries may present their reports, identify common problems and possible solutions; and discuss draft elements of the Report on the State of the World's Plant Genetic Resources and the Global Plan of Action. The meetings will discuss sub-regional synthesis reports. Eleven meetings were planned for the second semester of 1995 (Appendix 4).

8. The Commission on Plant Genetic Resources provides guidance on the process as a whole, and will review in detail drafts of the State of the World's Plant Genetic Resources and the Global Plan of Action, at its Second Extraordinary Session in April 1996.

9. Additional technical inputs are provided by scientific and other experts through individual contributions, workshops and an electronic bulletin board system. FAO is collaborating, in particular, with the International Plant Genetic Resources Institute (IPGRI) and other International Agricultural Research Centres of the Consultative Group on International Agricultural Research (CGIAR). These complement the existing background information, including that held in FAO's World Information and Early Warning System on Plant Genetic Resources.

10. Workshops in support of the process include:

- An International Workshop on the Genetic Resources of Boreal Zone Forest Species, supported by the Canadian Forest Service.

¹ As adopted and developed in a series of FAO Conference Resolutions (4/89, 5/89 and 3/91): "Farmers' Rights" mean rights arising from the past, present and future contribution of farmers in conserving, improving, and making available plant genetic resources, particularly those in the centres of origin/diversity."

- A Workshop on the Conservation of Forest Genetic Resources of the North American Temperate Zone, supported by the Forest Service of United States Department of Agriculture.
- A meeting on participatory plant breeding, co-sponsored by the International Development Research Centre (IDRC), International Plant Genetic Resources Institute, the Centre for Genetic Resources (the Netherlands) and FAO.
- A number of technical workshops on seed regeneration, germplasm health, *in vitro* genebanks, field genebanks and options for national programme organization, co-sponsored by IPGRI and FAO.
- Further inputs to the process are provided through informal channels, including through visits to countries, complementary activities undertaken by governments, institutions, non-governmental organizations, and others, in support of the preparatory process.

IV. ORGANIZATION FOR THE FOURTH INTERNATIONAL TECHNICAL CONFERENCE AND ASSOCIATED ACTIVITIES

11. FAO has finalized an agreement with the Government of Germany concerning the hosting of the Fourth International Technical Conference. Germany has established a National Committee to coordinate national preparatory activities. Invitations will be issued by FAO to all countries which are members of the United Nations, its specialized agencies or the International Atomic Energy Agency. UN agencies, the World Bank, Regional Development Banks, and other relevant international intergovernmental organizations, and relevant international non-governmental organizations, including from the private sector, may be invited as observers. The Commission at its Sixth Session also called for non-governmental organizations active in the field of plant genetic resources for food and agriculture, including national non-governmental organizations, to be invited as observers to the Fourth International Technical Conference, and to be able to participate as observers in the preparatory process. A draft provisional agenda for the International Technical Conference is provided in *Appendix 1*.

V. FUNDING SITUATION

12. The Fourth International Technical Conference is being prepared through a multi-donor Trust Fund project (GCP/INT/573/MUL), "The International Conference and Programme for Plant Genetic Resources" (ICPPGR). The budget for the ICPPGR project is US\$6 586 473. This budget covers only core costs of the preparatory process which are funded by direct donor contributions.² Contributions to the ICPPGR project budget to date total some US\$5.1 million, comprising contributions from nine countries (See Table 1). This leaves US\$1.5 million, or 23 percent of the budget, still to be committed. In addition to the project budget, France and Canada are each providing the ICPPGR Secretariat with the services of an Associate Professional Officer. France, Canada, Brazil, Iran and Slovakia are making financial contributions in support of sub-regional meetings in the preparatory process.

13. In addition to its contribution of US\$1 665 000 for the ICPPGR preparatory process, Germany is also contributing approximately US\$800 000 to the cost of hosting the Conference itself, and to project-related national activities, which makes Germany's total commitment approximately US\$2.5 million.

² This budget does not, for example, include provisions for Secretariat expenses after the end of June 1996, the month in which the Conference is to be held. Nor does the budget cover the cost of the Conference itself; travel and *per diem* costs of developing country participants in the Conference; contributions from the FAO Regular Programme, and from member countries, in the form of the provision of Associated Professional Officers; support to sub-regional meetings from host countries, and the costs of complementary activities which, while supportive of the ICPPGR, are not integral or core activities included in the project document and its budget.

TABLE 1
Level of current contributions to the ICPPGR (Project GCP/INT/573/MUL)

Donor	Amount provided or committed (US\$)
Germany	1 665 000
Sweden	961 894
Norway	136 705
Spain	100 000
Japan	247 773
France	300 000
Italy	200 000
United States	1 050 000
Netherlands	457 000*
Total committed	5 118 372
<i>Amount to be raised</i>	<i>1 468 101</i>
Total budget	6 586 473

Note: The figure marked * is an estimate based on a commitment and is subject to variation due to exchange rate fluctuations

14. Substantial additional resources might be required to finance the participation of developing countries in the Conference itself. The Commission on Plant Genetic Resources recommended that at least two delegates per country should attend the Conference, in order to ensure the presence of both technical experts and policy-makers. A preliminary budget of US\$800 000 has been prepared on the basis of estimated average travel and *per diem* costs of two delegates for each of 100 developing countries. To date about US\$150 000 has been committed for this purpose by one donor (the Netherlands).

VI. EXPECTED OUTPUTS OF THE FOURTH INTERNATIONAL TECHNICAL CONFERENCE ON PLANT GENETIC RESOURCES

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

15. The Report on the State of the World's Plant Genetic Resources will describe the current situation of plant genetic resources for food and agriculture at the global level, and identify the gaps and needs for their conservation and sustainable utilization, as well as emergency situations. The Report will focus on plants' importance to world food security and sustainable agriculture. In so far as the Report covers matters specifically related to forest genetic resources, it will concentrate on agroforestry and forestry for food production, as recommended by the Commission on Plant Genetic Resources at its sixth session. In particular, the Report will:

- assess the present state of genetic diversity, the degree of genetic erosion, the current coverage and status of *in situ* and *ex situ* conservation, and the utilization of plant genetic resources for food and agriculture. The Report will build upon assessments by country and by sub-region, and, to the extent feasible, by crop group;
- identify major constraints to plant genetic resources conservation, utilization and exchange;
- evaluate the extent to which collections are used and developed, and identify problems which hinder their full utilization for plant breeding;

- d) assess national and regional capabilities for the conservation and utilization of plant genetic resources for food and agriculture, in terms of human resources, institutional structures and legal mechanisms, and the methodologies employed;
- e) examine areas of special interest for the conservation and utilization of plant genetic resources for food and agriculture, such as informatics, new biotechnologies, local technologies, and issues such as on-farm conservation, and the scope for new approaches to plant breeding which would maintain diversity in production systems; and
- f) identify technologies appropriate for meeting the special needs of the developing countries, and assess the current state and pattern of technology transfer in plant genetic resources.

16. The report will be organized into four main parts:

Part I: "State of Diversity" - an assessment of the state of conservation, erosion and utilization of plant genetic resources; and an analysis of the underlying processes;

Part II: "State of the Art" - a brief survey of the state of scientific, technical, legal and other methodologies and tools for the conservation and utilization of plant genetic resources;

Part III: "State of Capacity" - a review of the state of human resources, institutional structures, and capacity to use relevant methodologies and tools, for the conservation and utilization of plant genetic resources, at the (sub-) regional, and global levels;

Part IV: "Summary and Conclusions" - a summary drawing together the main findings of the Report.

17. Each of the three main parts will include an assessment of the gaps and needs for improving the conservation and sustainable utilization of plant genetic resources, including an identification of the major constraints to conservation, utilization and exchange, and an evaluation of the extent to which plant genetic resources are used and developed, identifying in particular problems which hinder their full utilization for plant breeding. An executive summary will also be provided.

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

18. The Global Plan of Action for Plant Genetic Resources will complement and draw upon the Report on the State of the World's Plant Genetic Resources. Building upon the skeleton programme of action in Agenda 21, it will:

- a) propose policies and strategies for the conservation and utilization of plant genetic resources for food and agriculture at the national, regional and global levels, with particular attention to the linkages between conservation programmes, and utilization capabilities and programmes;
- b) assist countries in elaborating plans or programmes of priority action for conservation activities at the national level;
- c) assist countries in strengthening national capabilities for utilizing plant genetic resources, and their national plant breeding and seed production capacities;
- d) propose appropriate and feasible measures to make the Global System for Plant Genetic Resources more effective; and
- e) include costed programmes, projects and activities, to be financed by an international fund and other mechanisms.

Appendix 2 provides the structure of the Global Plan of Action.

19. The Global Plan of Action will provide details on activities, including the basis for action, and information regarding their implementation. *Appendix 3* provides an indicative list of the major activity areas for the Plan.

APPENDIX 1
**DRAFT PROVISIONAL AGENDA FOR THE FOURTH INTERNATIONAL
TECHNICAL CONFERENCE ON PLANT GENETIC RESOURCES**
Leipzig, Germany, 17-23 June, 1996

1. Opening of the Conference.
2. Election of the Officers.
3. Adoption of the Agenda and Organization of Work.
4. The Fourth International Technical Conference in the context of the FAO Global System for the Conservation and Utilization of Plant Genetic Resources, and the preparatory process.
5. Progress report on the revision of the International Undertaking on Plant Genetic Resources.
6. Review of the Report on the State of the World's Plant Genetic Resources.
7. Review of the Global Plan of Action.
8. Adoption of the Report on the State of the World's Plant Genetic Resources, [and] the Global Plan of Action [and recommendations for its implementation and financing].
9. [Review of possibilities for the implementation and financing of the Global Plan of Action].
10. [Adoption of the Leipzig Declaration].
11. Adoption of the Report of the Fourth International Technical Conference on Plant Genetic Resources.
12. Closing of the Conference.

APPENDIX 2

STRUCTURE OF THE GLOBAL PLAN OF ACTION³

A brief introduction providing the framework for action, including:

- a short statement of the context and basis for action, based on the Report on the State of the World's Plant Genetic Resources;
- a succinct statement of aims, referring to and drawing upon, as appropriate, the Convention on Biological Diversity and the International Undertaking on Plant Genetic Resources;
- an overall strategy for the Global Plan of Action as a whole.

The main body of the Plan providing recommendations of policies and priority activities for meeting the objectives of the Plan. In line with the wish that the Plan be "action-oriented", this will constitute the main body of the plan. This section would build upon the relevant parts of Agenda 21 for structure and content, and, in particular, programme area G of Chapter 14. Major areas for the Plan are given in Appendix 3.

For each of the major areas of activity, the following would be provided:

- Basis for the activity: statement of the problem including a summary of relevant conclusions from the Report on the State of the World's Plant Genetic Resources and relevant recommendations from Agenda 21, etc.;
- Activities, including specific objectives, approach, assumptions, expected benefits and level of priority;
- Implementation of the activity through capacity building, research, technology development and transfer, policy guidance, regional cooperation and international coordination.
- Identification of financial resource needs, and cost estimates. This section might also include possible sources of financing, including resource reallocation.

A concluding section proving preliminary cost estimates. It would refer to and summarize priorities and list basic criteria for the allocation of resources. The concluding section would also identify all possible sources of funding for the conservation and utilization of Plant Genetic Resources for Food and Agriculture.

It is understood that the above would not imply the negotiating of a financial mechanism for the funding of the Global Plan of Action, or the making of a binding commitment to the funding - at any level - of the Global Plan of Action.

An annex will provide a provisional project portfolio or illustrative examples of projects.

The Global Plan of Action might also include a "Leipzig Declaration" Alternatively, this might be included as a separate document.

³ In line with the decisions of the Commission on Plant Genetic Resources at its Sixth Session.

APPENDIX 3

MAJOR AREAS OF ACTIVITY FOR THE GLOBAL PLAN OF ACTION

- a) Monitor genetic diversity and erosion and establish an early warning system in order to mitigate loss of genetic resources, and identify sites for collecting or *in situ* conservation;
- b) explore and collect important and/or threatened plant genetic resources;
- c) ensure the long-term safety of existing germplasm collections through a programme of regeneration and safe duplication;
- d) establish and/or strengthen germplasm conservation facilities, technologies, and programmes as part of an integrated conservation and utilization strategy;
- e) characterize, evaluate and document germplasm collections;
- f) identify and strive to overcome the obstacles for the utilization of conserved genetic resources in order to promote their use;
- g) develop methodologies for and promote on-farm and community-level conservation and use of plant genetic resources as part of an integrated conservation and utilization strategy;
- h) promote the *in situ* conservation of wild plants as part of an integrated conservation strategy;
- i) strengthen plant breeding and pre-breeding capabilities, utilize greater diversity in plant breeding and promote approaches to plant breeding which promote the maintenance of diversity;
- j) improve the availability of good quality seeds and other planting material to farmers, including through the development of appropriate technologies;
- k) improve conservation and utilization of underutilized species and local crop and promote crop diversification;
- l) facilitate access to plant genetic resources, information and technologies;
- m) promote the development of legal and other mechanisms to protect the rights of providers of germplasm;
- n) develop methodologies for the economic valuation of plant genetic resources and for the realization of these values;
- o) promote national and regional planning for the conservation and sustainable utilization of plant genetic resources and integration with planning for sustainable agriculture;

Specific, concrete objectives would be developed for each area of activity. As far as possible, these would be formulated so that they could be used to monitor and assess the progress of the Plan. Details of the activities would be developed in Part II of the Global Plan of Action.

The major areas of activity could be implemented in various ways, including:

- a) National capacity-building and development, including training and other forms of human resource development, institutional development, and physical capacity building. In accordance with the Convention on Biological Diversity, and with recommendations of the Commission, the main level for implementation of the Global Plan of Action would be at the national level, including action taken at the level of the community, farm, etc. This modality would include material support to national programmes and technical assistance to countries. It might include a specific allocation for action at the Community level.
- b) Support to sub-regional and regional networks and cooperation. This modality would include material support and technical assistance provided on a regional or sub-regional basis, including the strengthening of networks and other cooperative arrangements.
- c) International cooperation and coordination. Whilst the emphasis of the Global Plan of Action would be at the local, national and regional levels, a certain amount of international coordination is required. This stems in part from factors such as the interdependence of countries for access to Plant Genetic Resources for Food and Agriculture. Such activity might include mechanisms to facilitate the exchange of germplasm, information and technologies, as well as activities such as global programmes to ensure regeneration and safe duplication of *ex situ* collections. The Global System for the Conservation and Utilization of Plant Genetic Resources will provide the framework for international coordination, including through its components such as the World Information and Early Warning System and the International Network of *ex situ* Collections.
- d) Policy formulation and implementation. Policies might need to be developed both for the national and international levels in order to promote conservation of genetic resources, transfer of technologies, etc.
- e) Scientific, socio-economic and legal research. The field of plant genetic resources for food and agriculture is advancing rapidly both in technical/scientific areas, and in policy/legal matters. Further research may be warranted as part of the Global Plan of Action in order to improve the tools available for the conservation and sustainable utilization of plant genetic resources for food and agriculture.

APPENDIX 4 SUB-REGIONAL MEETINGS

Preparatory to the Fourth International Technical Conference on Plant Genetic Resources
Leipzig, Germany, 17-23 June 1996

<u>Sub-region</u>	<u>Date</u> <u>(all meetings in 1995)</u>	<u>Host Country</u>
East Asia	July	China (Beijing)
Central America and the Caribbean	August	Costa Rica (San José)
South America	August - 1 September	Brazil (Brasilia)
Eastern Africa and Indian Ocean	September	Kenya (Nairobi)
Southern Africa	September	Zimbabwe (Harare)
Europe	September	Slovakia (Nitra)
South and Southeast Asia and Pacific	October	Thailand (Bangkok)
West and Central Asia	October	Iran (Teheran)
Mediterranean	October	Tunisia (Tunis)
Western and Central Africa	November	Senegal (Dakar)
North America	to be determined	to be determined