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Commission on
Genetic Resources
for Food and Agriculture

Rome, Italy
5-7 November 2003

**Working Group
on Plant Genetic
Resources
for Food and
Agriculture**

Second Session



Food and Agriculture Organization of the United Nations

CGRFA/WG-PGR-2/03/REPORT

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

REPORT OF THE SECOND SESSION

OF THE

WORKING GROUP ON

PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Rome, Italy, 5-7 November 2003

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2003

The documents prepared for the Second Session of the Working Group on Plant Genetic Resources for Food and Agriculture of the Commission on Genetic Resources for Food and Agriculture are available on the Internet at the following address:

<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPS/PGR/ITWG2nd/docsp1.htm>

They may also be obtained from:

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COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE**REPORT OF THE SECOND SESSION OF THE
INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON
PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

Rome, Italy 5-7 November 2003

I. INTRODUCTION

1. The Second Session of the Working Group on Plant Genetic Resources for Food and Agriculture (Working Group) met at FAO Headquarters in Rome. The list of delegates and observers is attached as *Appendix H*.

**II. OPENING OF THE SESSION AND ELECTION OF THE CHAIR AND
VICE-CHAIRS**

2. On behalf of Director-General, Mr Jacques Diouf, Ms Louise Fresco, Assistant Director-General, Agriculture Department, welcomed delegates and observers to the session. She stressed the importance of the session in assisting the Commission to advance efforts to achieve the sustainable use of plant genetic resources, and to combat genetic erosion in plants used for food and agriculture. Ms Fresco noted, in particular, the need to strengthen linkages between plant genetic resources and plant breeding and seed systems, emphasizing that the overall objective was food security, rural development and sustainable agriculture. She wished delegates a successful meeting.

3. The Working Group elected Mr Eng Siang Lim (Malaysia) as Chair, and Ms Elizabeth M. Matos (Angola) and Ms Grethe H. Evjen (Norway) as Vice Chairs. Mr Javad Mozafari (Islamic Republic of Iran) was elected *Rapporteur*.

4. The Working Group adopted the Agenda, as given in *Appendix A*.

5. Ms Lyndsey A. Withers, Assistant Director General, International Plant Genetic Resources Institute, on behalf of Mr Emile Frison, Director General, International Plant Genetic Resources Institute and the Directors of the CGIAR Centres, reaffirmed their support for and willingness to continue assisting the implementation and monitoring of the *Global Plan of Action*. She stressed their commitment to working with FAO in this regard, and to developing and implementing the Facilitating Mechanism for the *Global Plan of Action*. Ms Withers noted that the International Plant Genetic Resources Institute, on behalf of the CGIAR Centres' System-wide Genetic Resources Programme, is a partner with FAO in the creation of Global Crop Diversity Trust as an essential element of the funding strategy of the International Treaty on Plant Genetic Resources for Food and Agriculture.

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

6. The Working Group considered a *Progress Report on Certain Elements of the FAO Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and*

Agriculture.¹ The Progress Report addressed the preparation of the second *Report on the State of the World's Plant Genetic Resources for Food and Agriculture*; international plant genetic resources networks; and the *International Code of Conduct for Plant Germplasm Collecting and Transfer*. It also considered the verbal report of a technical workshop on integrating information gathering for plant genetic resources held at FAO on 4 November, 2003.

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

7. The Commission on Genetic Resources for Food and Agriculture (Commission) had requested the Working Group to guide preparation of the second *Report on the State of the World's Plant Genetic Resources*. Accordingly, the Working Group considered the structure of the second *Report*, noting that the Commission had agreed to an outline for the *Report* at its Ninth Regular Session. It confirmed that the outline should form the basis for preparing the second *Report*. It also noted that the outline provided for a chapter that had not been included in the first *Report* that would address the contribution of plant genetic resources to food security and sustainable development and stressed the important contribution this section would make to the second *Report*. The Working Group emphasized that an objective of the second *Report* was to assist national, regional and global efforts to enhance the utilization of plant genetic resources in support of efforts to achieve food security, rural development and sustainable agriculture.

8. The Working Group noted that the preparation of the second *Report on the State of the World's Plant Genetic Resources* will take place in the context of the expected entry into force of the International Treaty on Plant Genetic Resources for Food and Agriculture.

9. The Working Group reviewed in detail a multi-level process for preparing the second *Report*, stressing that the process must provide for national, regional and global analysis and perspectives. It agreed that the process should include the preparation of Country Reports and, to assist countries in this regard, recommended that FAO prepare guidelines that would draw forth information on changes in national status that have occurred since the first *Report*. The Working Group emphasized the importance of convening regional meetings, which, along with the Country Reports, would provide the basis for a global synthesis. It also stressed that the process for monitoring implementation of the *Global Plan of Action* was an essential element of the process for preparing the second *Report*.

10. The Working Group recommended the provisional steps and an indicative timeline for preparing the second *Report* shown in *Appendix D*.

11. The Working Group acknowledged that extra-budgetary resources will be required to undertake the tasks involved, including support for developing countries and countries with economies in transition to undertake preparation of their Country Reports, and to enable the convening of regional meetings, where they are needed, taking advantage of already planned meetings, when feasible. It reviewed the cost estimates for preparation of the second *Report* that was presented to the Commission in Annex 4 of document CGRFA-9/02/8, and is attached as *Appendix E*. The Working Group requested the Secretariat to adjust the budget in light of the process outlined in *Appendix D* and reiterated the appeal of the Commission at its Ninth Regular Session to donors to provide the necessary financial support.

12. The Working Group considered a list of potential thematic background studies that would be carried out as far as resources allowed, as part of the preparation of the second *Report*. It recommended that priority should be given to thematic studies that expanded on issues addressed in the first *Report*, and in this regard recommended that priority be given to undertaking studies in the following areas: A. The plant genetic resources of forage crops, pasture and rangelands; B. The

¹ CGRFA/WG-PGR-2/03/6

conservation of crop wild relatives; C. Indicators of genetic diversity, genetic erosion and genetic vulnerability; D. Methodologies and capacities for crop improvement; the use of plant genetic resources for food and agriculture in base-broadening and crop improvement, including new approaches to plant breeding and new biotechnologies; E. Seed security for food security: the management of plant genetic resources in seed systems; I. The impact of national, regional and global agricultural policies and agreements on conservation and use of plant genetic resources for food and agriculture; J. Biosafety and biosecurity issues related to the conservation and sustainable utilization of plant genetic resources for food and agriculture.

13. The Working Group noted that all of the topics shown in *Appendix F* could be addressed in the preparation of Country Reports and that this information should contribute to the thematic studies. The Working Group recommended the Commission consider thematic study H, as it addresses both plant genetic resources and animal genetic resources. It requested the Secretariat to reflect this guidance in preparation of the guidelines for Country Reports.

14. The Working Group recommended that Genetic Use Restriction Technologies (GURTs) be included in the scope of the thematic studies D, E and J. It also recommended that intellectual property issues should be addressed within the scope of the thematic studies E and I, and that the need for research should be emphasized within the thematic study B. The Working Group stressed that preparation of the thematic studies should make use of all available sources of authoritative and scientific data and information.

15. The revised Indicative List of thematic background studies is attached as *Appendix F*.

International Plant Genetic Resources Networks

16. The Working Group considered the criteria and characteristics of effective and efficient networks (crop, regional and thematic), as well as the process initiated by the Secretariat regarding the further contribution of networks in the implementation of the *Global Plan of Action*. It noted the importance of networks for, *inter alia*, capacity building, sharing information, facilitating access to germplasm, and in contributing to planning, and stressed that effective and efficient networks needed to be client-oriented and provide outputs. Member Countries were encouraged to provide information to the Secretariat on networks they participate in, and it was recommended that case studies on successful networks would be made available to the Commission at its next Regular Session, to advance understanding of the characteristics of successful networks, and to encourage greater collaboration.

17. The Working Group also indicated the need for FAO to identify options for enhancing collaboration among the existing networks, for consideration by the Commission. It provided suggestions for improving the Self-Assessment on Network – Questionnaire, to evaluate the outputs of the networks.

International Code of Conduct for Plant Germplasm Collecting and Transfer

18. The Working Group considered the possible need to update the *International Code of Conduct for Plant Germplasm Collecting and Transfer*. Members of the Working Group noted the continued usefulness of the various elements of the *Code of Conduct*, including in developing national legislation. The group recommended that in light of other priorities in the work of the Commission and in the development of the International Treaty, it is inappropriate to update the *Code of Conduct* at present.

IV. PROGRESS REPORT ON MONITORING THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

19. The Working Group considered a Progress Report on Monitoring the Implementation of the *Global Plan of Action* for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture², which included an outline of the new monitoring approach and status of the pilot testing programme. The Working Group recognised the importance of the monitoring process, assisting countries in planning, priority-setting and in achieving the mobilization of financial resources to support national plant genetic resources programmes.

20. Representatives of the Working Group from countries involved in the pilot testing programme noted with appreciation that the process had led to the establishment of national information sharing mechanisms in their own countries, and that the overall participatory country-led process had been beneficial. Benefits had included institutional capacity-development, enhanced data management and increased stakeholder commitment to the implementation of the *Global Plan of Action*. One Member noted that, based upon review of the documentation and the reporting format, it had submitted recommendations for adjusting the indicators, reporting format and the computer application to FAO. Some Members of the Working Group not currently engaged in the pilot testing programme expressed a desire to become involved.

21. The Working Group stressed that significant capacity-development would be required in some developing countries in order for them to implement the new monitoring approach, including training in the use of the software and provision of computer hardware for the national coordinator and participating stakeholders. Specific needs would vary from country to country. The Working Group requested that FAO and IPGRI provide training and other support necessary to respond to countries' expressed capacity-building needs.

22. The Working Group recommended that the National Focal Point be responsible for collecting data from national stakeholders, analysing the data, and sharing the results within the country, as well as providing the results to FAO.

23. Some members of the Working Group expressed concern that not all FAO regions are presently represented in the pilot phase, and recommended that FAO make every effort to capture the experiences of other regions, in the process of refining the indicators and reporting format.

24. The Working Group agreed that FAO should convene a Pilot Phase Evaluation meeting in March 2004, with representation of all regions and all participating pilot testing countries, to examine the lessons learned and, based on these experiences, refine the indicators and reporting format. Noting that the monitoring process had been identified as a fundamental component of the process for developing the Country Reports, as part of the process for preparing the second *Report on the State of the World's Plant Genetic Resources*, the Working Group recommended that FAO should apply the new monitoring approach to all countries, based on the lessons learned and revised indicators and reporting format.

25. The Working Group stressed that the monitoring process and the process for preparing the second *Report* should be integrated, and will require adequate extra-budgetary financial resources. It requested the Secretariat to present adjusted cost estimates for monitoring the implementation of the *Global Plan of Action* in respect of the resource requirements outlined in paragraph 21 above. The Working Group accordingly appealed to donors to make the necessary resources available rapidly in order to make possible the achievement of the revised timetable. If these resources were not made available in time, the Commission would need to consider a revised process and timeline for completing the second *Report* and the implementation of the new monitoring approach.

² CGRFA/WG-PGR-2/03/4

V. A FACILITATING MECHANISM FOR IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION

26. The Working Group considered document CGRFA/WG-PGR-2/03/05, *Facilitating Mechanism for Implementation of the Global Plan of Action*.

27. The Working Group reviewed the proposed objectives of the Facilitating Mechanism. Some countries stressed that the main objective should be to improve the mobilization of technical, financial or material resources to support the implementation by countries of the *Global Plan of Action*. Other countries stressed that the Facilitating Mechanism should aim to mobilize and provide such resources in order to build upon countries' national capabilities to implement the *Global Plan of Action*. Some countries stressed the need for financial resources from the international community and international organizations. The Working Group recommended that the Commission should decide on the wording of the objectives of the Facilitating Mechanism.

28. The Working Group focused upon and agreed the operational principles, activities and operational structure of the Facilitating Mechanism as given in *Appendix G*. It noted however that proposed additional activity (e) would still require discussion and decision by the Commission.

29. The Working Group recommended that the Facilitating Mechanism operate under the time frame of the FAO Medium Term Plan, and that FAO and IPGRI submit an operational plan to the next Regular Session of the Commission.

VI. STRENGTHENING SEED SYSTEMS

30. The Working Group considered document CGRFA/WG-PGR-2/03/3, which was prepared on the basis of a series of expert consultations on seed policy, seed relief and for updating the FAO Quality Declared Seed system. The Working Group was requested to provide guidance in regard to the conclusions and recommendations of those workshops, and FAO's work in seed systems.

31. The Working Group stressed that FAO's work on regulatory and policy issues in the seed area should not overlap with the work currently being undertaken in other fora, and expressed the need for further information on regulatory processes of relevance to the seed sector in Member Countries. Countries welcomed FAO's initiatives on seed relief. Some countries expressed their concern that government policies regarding genetically modified seeds needed to be respected in the context of seed relief. The opinion was expressed that the specific principles to guide seed relief operations indicated in the document were adequate to address this concern.

32. The Working Group requested the Secretariat to revise the document, prior to its submission to the Tenth Regular Session of the Commission, in order to incorporate information on the impact of seed systems on the conservation and sustainable use of plant genetic resources for food and agriculture, and identify gaps, and the implications of the entry into force of the Cartagena Protocol on seed systems. The document should also provide specific recommendations for action by FAO to strengthen seed systems, without duplicating action taken by other relevant organizations. Some countries referred to a Directive in preparation by the European Commission on the marketing of seed and seed potatoes in relation to the conservation of plant genetic resources *in situ*.

VII. TOWARD THE SUSTAINABLE USE OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE: STRENGTHENING PLANT BREEDING

33. The Working Group considered document CGRFA/WG-PGR-2/03/2, *Toward the Sustainable Use of Plant Genetic Resources for Food and Agriculture (PGRFA): Strengthening Plant Breeding*. It welcomed the importance now being given to the sustainable use of plant genetic resources through plant breeding, and stressed that the goal in conserving plant genetic resources was to contribute to food security and sustainable development. The Working Group felt the document

was an important step towards finding a better balance between plant genetic resources conservation and use within the FAO Global System.

34. The Working Group welcomed FAO's decision to initiate a comprehensive survey of national capacities and priorities in plant breeding in both public and private sectors, including associated capacities in biotechnologies. The Working Group noted that the pilot phase of the survey would be carried out under the FAO regular programme, and that extra-budgetary resources would be required for the subsequent global information collection and analysis, stressing that the survey should be integrated with the *Global Plan of Action* new monitoring approach. It accordingly recommended that donors support the overall process, and that diverse partnerships should be sought with organizations (e.g. crop and plant breeding networks and universities) which could provide relevant expertise.

35. In revising this document for submission to the Commission, the Secretariat was requested to take into account a number of considerations. The Working Group noted that national capacities in plant breeding varied greatly. In many countries there is an urgent need to improve capabilities in plant breeding. It noted the need to include locally adapted genetic resources in plant breeding programmes that improved adaptation to local stresses on crops, and met local consumer requirements. The Working Group felt that building capacity to use molecular techniques to enhance plant breeding should be considered. In regard to the use of genetic engineering, the survey should identify both benefits and potential risks, especially for countries that do not have appropriate regulatory frameworks in place.

36. While the Working Group endorsed the view that genetic base broadening and attention to neglected crops were important, several Member Countries noted that in many developing countries lack of capacity in breeding major crops remained significant. The Working Group recommended that FAO strengthen its programme activities in the utilization of plant genetic resources, taking advantage of both existing and emerging technologies and methodologies. It also noted that some countries have already undertaken national assessments in plant breeding capabilities and these should be shared with other countries.

VIII. PROGRESS REPORT ON THE GLOBAL CROP DIVERSITY TRUST

37. The Working Group considered a Progress Report on the Global Crop Diversity Trust, document CGRFA-WG-PGR-2/03/Inf.1. The Working Group welcomed the progress made since the Ninth Regular Session of the Commission and noted that the constitution of the Trust allowed it to function under the policy guidance of the International Treaty. It appealed to potential donors to support the Trust in this crucial phase of its establishment.

IX. OTHER BUSINESS

38. The Working Group noted that numerous organizations were engaged in various aspects of the use, development and conservation of these plant genetic resources, and an understanding of linkages among them was desirable. It recognized the need for FAO to review its own activities in light of this. The Working Group noted that FAO submits reports to regular sessions of the Commission about its own activities and invites other relevant organizations to present reports on their activities. It accordingly recommended that FAO prepare a summary document identifying its activities on plant genetic resources for food and agriculture, by FAO programme area, activities carried out in partnership with other organizations, and relevant activities in other organizations.

39. The Working Group paid tribute to Dr N Murthi Anishetty, Senior Officer, Plant Genetic Resources, FAO, who will retire in 2004. It acknowledged Dr Anishetty for his distinguished career, and thanked him for his devotion, and contribution to the work of FAO, the Commission, and its Working Group on Plant Genetic Resources.

APPENDIX A

**INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON
PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE****Second Session**

Rome, Italy, 5-7 November 2003

AGENDA

1. Election of the Chair and Vice-Chair(s)
2. Election of the Rapporteur
3. Adoption of the agenda and timetable
4. *The Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture*
 - 4.1 Implementing the *Global Plan of Action: Utilization of Plant Genetic Resources for Food and Agriculture*
 - a. Towards the Sustainable Use of Plant Genetic Resources for Food and Agriculture (PGRFA): Strengthening Plant Breeding
 - b. Strengthening Seed Systems
 - 4.2 Progress Report on Monitoring the Implementation of the *Global Plan of Action* for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture
 - 4.3 Facilitating Mechanism for the Implementation of the *Global Plan of Action*
5. Progress Report on Certain Elements of the FAO Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture
6. Other Business:
 - Progress Report on the Global Crop Diversity Trust
7. Adoption of the Report of the Working Group

APPENDIX B

LIST OF DOCUMENTS**WORKING DOCUMENTS**

CGRFA/WG-PGR-2/03/1/Rev.1	Provisional Agenda
CGRFA/WG-PGR-2/03/1 Add.1	Provisional Annotated Agenda and Timetable
CGRFA/WG-PGR-2/03/2	Towards the Sustainable Use of Plant Genetic Resources for Food and Agriculture (PGRFA): Strengthening Plant Breeding
CGRFA/WG-PGR-2/03/3	Strengthening Seed Systems
CGRFA/WG-PGR-2/03/4	Progress Report on Monitoring the Implementation of the Global Plan of Action for the Conservation and Sustainable Utilization Plant Genetic Resources for Food and Agriculture
CGRFA/WG-PGR-2/03/5	Facilitating Mechanism for the Implementation of the <i>Global Plan of Action</i>
CGRFA/WG-PGR-2/03/5/Annex	Facilitating Mechanism for the Implementation of the <i>Global Plan of Action</i> : Stakeholder Consultation
CGRFA/WG-PGR-2/03/6	Progress Report on Certain Elements of the Global System for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture

INFORMATION DOCUMENTS

CGRFA/WG-PGR-2/03/Inf.1	Progress Report on the Global Crop Diversity Trust
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APPENDIX C

**MEMBERS OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP
ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE
ELECTED AT THE NINTH REGULAR SESSION OF THE
COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

Rome, Italy, 14-18 October 2002

<i>Composition (no. of countries per region)</i>	<i>Country</i>
Africa (5)	Algeria Angola Burkina Faso Democratic Republic of Congo Ethiopia
Asia (5)	India Indonesia Japan Malaysia Thailand
Europe (5)	Germany Italy Norway Poland Portugal
Latin America and the Caribbean (5)	Cuba Ecuador Mexico Peru Venezuela
Near East (3)	Egypt Iran, Islamic Republic of Jordan
North America (2)	Canada United States of America
Southwest Pacific (2)	Australia Samoa

APPENDIX D

Provisional Steps and Timeline for preparing the second Report on the State of the World's Plant Genetic Resources for Food and Agriculture

- March 2004: FAO to convene a Pilot Phase Evaluation meeting to evaluate the *Global Plan of Action* pilot monitoring phase, and to provide advice for refining the Reporting Format;
- June 2004: initiation of the implementation of the refined “new monitoring approach” of the *Global Plan of Action*, to be applied in all participating countries;
- June – 2004: preparation of Guidelines for Country Reports;
- June – 2004 to October 2004: convening of regional meetings, to discuss the proposed Country Report Guidelines and the refined Reporting Format for monitoring implementation of the *Global Plan of Action*;
- October 2004: Report to the Tenth Regular Session of the Commission on Genetic Resources on progress in the preparation of the second *Report* and in monitoring implementation of the *Global Plan of Action*;
- Early 2005: completion of the implementation of the “new monitoring approach” of the *Global Plan of Action* in all participating countries;
- Early – Mid 2005: completion of Country Reports;
- Mid – End 2005: regional meetings to provide regional perspectives on gaps and needs, as an input to the second *Report*, and possibly to consider priorities for the adjustment of the rolling *Global Plan of Action*;
- Mid 2006: preparation of the first draft of the second *Report*;
- October 2006: submission of the first draft of the second *Report* to the Eleventh Regular Session of the Commission on Genetic Resources, for adoption;
- October 2008: if the second *Report* is not adopted in 2006, it would be available for adoption by the Commission at its Twelfth Regular Session.

APPENDIX E

The Second Report on the State of the World's PGRFA - Cost estimates for extra-budgetary resources required in support of the preparatory process (Annex 4 of document CGRFA-9/02/8)

Item	Cost (US\$)	Calculation	Purpose and notes
Staff costs	135 000	16 months General Service; plus 6 months P2/P3 level	To assist secretariat in contacting focal points and co-ordinating assistance to countries
Subregional consultants	270 000	9 subregions @ 30 000/subregion; each 2 – 3 months honorarium, plus travel	To provide advice and assistance to countries on the preparation of country reports, including identification and involvement of stakeholders
Support to national workshops and stakeholder consultations	200 000	c. 50 countries @ 4 000/country	To provide partial support to the convening of national workshops or consultations with stakeholders. Grants would be provided on request, with priority to (a) least developed and other low-income countries; (b) countries with demonstrated commitment to the process; (c) clear proposals for the workshop or consultation
Support for the development of national plant breeding strategies	200.000	c:50 countries @ 4 000/country	To support consultations with individual countries to assess national capacities and needs, and help develop national plant breeding strategies and programmes
Regional meetings	320 000	4 regions (Africa, CWANA, AP, LAC) @ 80 000 / region. For participation of developing countries and general organizational expenses	To review Country Reports; discuss regional issues related to the State of the World's PGRFA, and identify common needs for implementation and/or refinement of the Global Plan of Action.
Expert meetings	120 000	Three expert meetings @ 40 000 /meeting	To support the development of Thematic studies and other necessary background material for the Report.
Sub total	1 245 000		

Project Servicing Costs	161 850 @ 13%
Grand Total	1406 850

APPENDIX F

**The Second Report on the State of the World's PGRFA –
Indicative list of thematic background studies**

Study	Rationale	Scope	Sources & Linkages (<i>inter alia</i>)
A Plant genetic resources of forage crops, pasture and rangelands	Coverage of forage crops, pasture and rangeland species was very limited in the first Report. This study will seek to address this imbalance, and thereby improve the relevance of the report to agricultural systems dominated by livestock production, mixed farming and pastoralism. It will also provide information needed to update Annex 2 of the Report.	Value and role of forage crops, pasture and rangeland species. Special issues related to the management of plant genetic resources in pastures and rangelands.	Material assembled by the Crop and Grassland Service; Country Reports.
B The conservation of crop wild relatives	Crop wild relatives require specific approaches to conservation.	Value and role of crop wild relatives; Conservation status in protected areas and elsewhere; Country capacities for conservation (with detailed case studies in nine countries), and research needs.	This study will build upon work carried out in the framework of the proposed GEF-UNEP-IPGRI project: "Conservation of wild crop relatives"
C Indicators of genetic diversity, genetic erosion and genetic vulnerability	Indicators are useful tools to identify and monitor trends, and to convey summary information to policy makers and the public opinion. They are needed for application at global, national and local levels.	The "state of the art" of indicator development and use for genetic diversity, genetic erosion and genetic vulnerability, at various scales, including an evaluation of the feasibility of assessing genetic diversity/erosion at the national level, including through modern molecular	The study will build upon work carried out in the frameworks of the CBD, CSD, and OECD.

		techniques.	
D Methodologies and capacities for crop improvement; the use of PGRFA in base-broadening and crop improvement, including new approaches to plant breeding and new biotechnologies	There has been significant advancement in the available technologies and methodologies since the preparation of the first Report, but the application of these technologies and methodologies may be limited by plant breeding capacity in developing countries.	Applications of biotechnologies (including marker-assisted selection, and transformation) and genomics to the identification, conservation and use of PGRFA; Participatory and decentralized approaches to plant breeding; Population management; and Genetic Use Restriction Technologies.	Crop and Grassland Service and other FAO services; IPGRI and other IARCS.
E Seed security for food security: the management of plant genetic resources in seed systems	Seeds are the physical embodiment of PGRFA, and the main vehicle by which farmer management of PGRFA can be improved.	Analysis of formal and informal seed systems; ways of strengthening links between public, private and informal sectors; strengthening seed security through relief, rehabilitation, development and information services; Genetic Use Restriction Technologies; and Intellectual Property issues.	Country Reports; FAO's regional seed consultations and seed security networks.
F The contribution of plant genetic resources to health and dietary diversity	While just three crops dominate human energy intake, many more are required for a healthy diet. Some plants are especially important sources of nutrition for the poor. Yet they are often overlooked.	Plants important for human health and nutrition at global, national and sub-national scales. Inter- and Intra- species variation in nutrient content. Value of "minor" crops and other plants for vulnerable groups. Role of home and school gardens.	FAO Nutrition Division; IPGRI; Country Reports.
G Managing plant genetic resources in the agro-ecosystem; global change, crop-associated biodiversity and ecosystem services	PGRFA and associated biodiversity may provide multiple goods and services; they may need to be managed together to maximize these goods and services.	Ecosystem goods and services provided by PGRFA. Deployment of genetic resources in production systems; interactions with crop-associated biodiversity (pest and disease organisms; pollinators etc.).	FAO Interdepartmental Working Group on Biodiversity. The study will contribute to the CBD programme of work on agricultural biodiversity.

H Interactions between plant and animal genetic resources, and opportunities for synergy in their management	While FAO has established programmes for both plant and domestic animal genetic resources, there has been little attention to date given to the interactions between these sets of resources. Yet at the level of the production system, crops and livestock are managed together, and the required characteristics of particular breeds or varieties are strongly determined by other components on the farming system.	Interactions between the management of plant and livestock genetic resources in farming system – interactions of the plant and animal genetic resources with other components of the farming system – dependence of the required traits of plant varieties by the presence/absence, type of domestic animal genetic resources and dependence of the required traits of animal breeds by the available plant genetic resources – comparison of approaches of managing crop and livestock genetic resources; lessons learned from one, applicable to the other; opportunities for common institutions, etc.	This study will also be prepared jointly with the preparatory process for the first Report on the State of the World's Animal Genetic Resources.
I The impact of national, regional and global agricultural policies and agreements on conservation and use of PGRFA	Agricultural policies and the incentive structures they create have major impacts on the conservation and use of PGRFA. Understanding of such impacts is necessary in order to improve policies.	Survey of national, regional and global policies. Analysis of incentive structures and possible impacts on PGRFA conservation and use; and Intellectual Property issues.	Country Reports; Various services in FAO. Could be linked with CBD study on impacts of trade liberalization on agricultural biodiversity.
J Biosafety and biosecurity issues related to the conservation and sustainable utilization of PGRFA	The use of genetically modified organisms raises issues for the management of PGRFA. At the same time restrictions on transboundary movement of plants may impact on PGRFA conservation and use.	Genetic contamination in centres of origin and diversity; plant protection and quarantine issues; and Genetic Use Restriction Technologies.	Country Reports, IPPC and FAO Services.

APPENDIX G

Proposed operational principles, activities and operational structure of the Facilitating Mechanism***Operational principles***

The Facilitating Mechanism:

- a) must add value to existing activities by identifying new opportunities and avoiding duplication of efforts;
- b) should promote innovative partnerships and creative solutions to obstacles to *Global Plan of Action* implementation;
- c) should facilitate the engagement of more diverse interests in the implementation of the *Global Plan of Action* in order to catalyze the involvement and resources of new partners;
- d) should promote and assist collaboration and coordination of related activities among those engaged in the implementation of the ITPGRFA and other relevant international agreements such as the Convention on Biological Diversity;
- e) shall operate in accordance with national sovereignty, through National Focal Points where desired by governments, and encouraging national level ownership of implementation of the *Global Plan of Action*. It shall respond to requests from countries;
- f) should operate in such a manner that external resources are focused on a country's priority needs and complement a country's own investments in the implementation of the *Global Plan of Action* in accordance with national capacities;
- g) should utilize the results of monitoring the implementation of the *Global Plan of Action* to assist in identifying gaps and priorities in that implementation;
- h) must operate in a transparent manner;
- i) should assist in promoting linkages between plant genetic resources conservation and utilization and sustainable development; and
- j) should promote the involvement of stakeholders, including farmers, the plant breeding sector and the seed sector, in the implementation of the *Global Plan of Action*.

Activities of the Facilitating Mechanism

The Facilitating Mechanism should:

- a) provide information on:

- i. sources and availability of financial, technical, material and information resources;
 - ii. linkages among stakeholders;
 - iii. donor and recipient priorities, roles and conditions;
 - iv. best practices and standards and procedures;
 - v. success stories;
 - vi. networking;
 - vii. plans, commitments, targets and indicators; and
 - viii. any other information regarding resources necessary to implement the *Global Plan of Action*.
- b) facilitate and catalyze new partnerships to implement the *Global Plan of Action* by promoting meetings and dialogue to create opportunities among a wide-range of interests involving donors and recipients; international organizations; civil society organizations including farmers' organizations and foundations; plant breeders and the seed sector; and other private sector interests.
- c) facilitate awareness at all levels, of the roles and values of plant genetic resources in order to mainstream plant genetic resources. Target audiences should be carefully identified.
- d) develop options concerning the funding strategy of the International Treaty on Plant Genetic Resources for Food and Agriculture, to be submitted to the Treaty's Governing Body.
- e) assist stakeholders, upon request, to develop project proposals and package proposals to enhance their quality, including to facilitate action planning at the wider level (by crops, thematic areas, and/or regions) to:
- i. assess the status and implementation of the Global Plan of Action
 - ii. identify need and gaps;
 - iii. assist in setting milestones and targets; and
 - iv. engage a wide-range of stakeholders.

Operational Structure

- a) The Commission on Genetic Resources for Food and Agriculture and its Working Group on Plant Genetic Resources will provide overall guidance to the Facilitating Mechanism;
- b) The Facilitating Mechanism should be hosted by FAO and operated in partnership with IPGRI in a way that attracts and accommodates other international organizations to become partners, as agreed by the Commission on Genetic Resources for Food and Agriculture;
- c) The operational procedures should enable and encourage the direction of financial and other resources to support the implementation of the *Global Plan of Action*;

-
- d) The operational structure should be designed to enable the Facilitating Mechanism to take greatest advantage of the available technical capacity within FAO and IPGRI, as well as agreed partners;
 - e) The operational structure should encourage the participation of a wide range of stakeholders.

المرفق حاء

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