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IMPLICATIONS OF UNCED FOR THE GLOBAL SYSTEM ON PGR

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IMPLICATIONS OF UNCED FOR THE GLOBAL SYSTEM ON THE CONSERVATION AND SUSTAINABLE US OF PLANT GENETIC RESOURCES.

I. INTRODUCTION

1. The 26th session of the FAO Conference in 1991 noted that crucial decisions on conservation and sustainable utilization of plant genetic resources would be taken in UNCED and in the context of the Convention on Biological Diversity, and that there would be a need for FAO to review the outcome of UNCED in order to implement its decisions. In fact, the issue of Plant Genetic Resources for Food and Agriculture (PGRFA) was dealt with in a number of chapters in Agenda 21 - the programme of action agreed at UNCED in June 1992 - and also in the Convention on Biological Diversity ("the Convention") which was opened for signature at the UNCED in Rio de Janeiro. Many of the recommendations of UNCED will be followed up through the International Conference on Plant Genetic Resources (ICPGR, see CPGR/93/10) and its preparatory process. This document provides information on the other implications of UNCED to aid the Commission on Plant Genetic Resources (CPGR, "the Commission") in addressing the international aspects of the relevant parts of UNCED Agenda 21 and the Convention on Biological Diversity.

2. The Working Group of the Commission, at its seventh session in October 1992, reviewed document CPGR/WG/92/4, on which the present document is based. The Working Group recognized that there were many complex issues under this item and that further discussion by the Commission would be required. However there was general agreement on some issues in principle, *inter alia* on the need to strengthen the Global System, that the International Undertaking might be revised, and that the Commission should maintain its leading role on discussions related to PGRFA. It was agreed that any revision or re-negotiation of the Undertaking should be a step by step process. The Working Group agreed that the issues identified as outstanding by Resolution 3 of the Nairobi Final Act (see para 14, below) should be discussed by the Commission (see CPGR/93/3).

3. The FAO Council reviewed FAO activities related to Environment and Sustainable Development, particularly in the follow-up of UNCED, at its 102nd Session in November 1992. The Council proposed the reinforcement of FAO activities related to climate change, biodiversity and environmental monitoring, and endorsed the priority to be given to FAO activities related to the chapters of Agenda 21 concerned with, *inter alia*, conservation and sustainable use of genetic resources and biotechnologies. The Council requested that FAO assume a lead role in facilitating inter-agency coordination for the UNCED follow-up in the mandate areas of FAO.

4. The attention of the Commission is drawn in particular to the Convention and those chapters of Agenda 21 relevant to PGRFA: Chapter 14 on "Sustainable Agriculture and Rural Development", which includes a programme area on PGRFA; Chapter 15 on "Conservation of Biological Diversity" and Chapter 16 on "the Environmentally Sound Management of Biotechnology". The Commission may wish to give special attention to: (i) the Resolution on the "Interrelationship between the Convention on Biodiversity and the promotion of

Sustainable Agriculture", which was approved as part of the Final Act of the negotiating process for a Convention on Biological Diversity; and (ii) the programme element "Conservation and sustainable utilization of PGR for food and sustainable agriculture" of Chapter 14 of Agenda 21. These two documents are provided to the Commission as annexes to this document.

5. Guidance of the Commissionis sought particularly on the following areas:

(a) the best ways to respond to the specific requests of UNCED *inter alia*:
   - -- for strengthening the Global System including the World Information and Early Warning System on Plant Genetic Resources (PGR/WIS)[1]; *in situ* network; preparation of the report on the State of the World's Plant Genetic Resources (PGR/SW) and a Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources (PGR/GPA); taking further steps to realize Farmers' Rights; and promoting the Fourth International Technical Conference for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture (ICPGR);
   - -- adjusting the Global System on PGR, in line with the Convention on Biological Diversity.

(b) addressing policy issues identified as outstanding by the Nairobi resolution by seeking solutions within the Global System to the following:
   - -- access to pre-existing *ex situ* collections;
   - -- Farmers' Rights.

(c) the role the CPGR should play vis-a-vis the Conference of the Parties to the Convention, the interim Intergovernmental Committee on Biodiversity and the Global Environment Facility (GEF);

(d) the possible revision of the International Undertaking, and/or the development of protocols to the Convention.

II. BACKGROUND: DECISIONS OF UNCED AND THE CONVENTION ON BIOLOGICAL DIVERSITY AND THE GLOBAL SYSTEM ON PGR.

II.A. The Convention on Biological Diversity and Complementary Resolutions

6. The Convention on Biological Diversity was adopted in Nairobi on 22nd May 1992 together with a number of complementary resolutions (see paras 14 to 18 below). The Convention was opened for signature, and signed during the UNCED by over 150 countries.

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1. The term and acronym "World Information and Early Warning System for Plant Genetic Resources (PGR/WIS)" is proposed rather than the previously used term and acronym of "Global Information and Early Warning System for Plant Genetic Resources (PGR/GIEWS)" to avoid confusion with either the "Global System" itself or the "Global Information and Early Warning System" on food security (GIEWS).

The Convention which is legally binding and provides a framework for further agreements on a bilateral base is unlikely to enter into force before 1994 or 1995 (see para 15 below).

7. The objectives of the Convention on Biological Diversity (as set out in Article 1) are:

(i) the conservation of biological diversity;
(ii) the sustainable utilization of its components; and
(iii) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The objectives are to be realized *(inter alia)*:

(a) by appropriate access to genetic resources, and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to those technologies, and
(b) by appropriate funding.

8. Three major technical aspects covered by the Convention are *ex situ* conservation, *in situ* conservation (including on-farm conservation of indigenous landraces), and sustainable utilization of biodiversity. The Convention requires Contracting Parties to develop national strategies for the conservation and sustainable use of biological diversity and for these to be integrated into relevant national programmes and policies. It also considers trans-boundary effects and related liability, including reports, restoration and compensation for damage to biodiversity.

9. The articles on access to and transfer of genetic resources, biotechnology and information are the outcome of intensive negotiations. The Convention recognizes the "sovereign rights of states over natural resources"; acknowledges that States have the authority to determine access to genetic resources and requires the contracting Parties to create conditions to facilitate access to them. Contracting Parties are also to facilitate access to technologies, including biotechnology. The Convention includes provisions designed to channel benefits to the countries that provide genetic resources, in particular developing countries:

> "Each Contracting Party shall take legislative, administrative or policy measures, as appropriate, and in accordance with Articles 16 and 19 and where necessary through the financial mechanism established by Articles 20 and 21 with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms." (Art 15.7).

These benefits are to include:

- access to and transfer of technology which makes use of those genetic resources (Art 16.3);
- participation in biotechnological research based upon such genetic resources (Art 19.1);
- priority access to the results and benefits arising from such biotechnological research (Art 19.2).

10. However Articles 15, 16 and 19 which deal respectively with "access to genetic resources", "access to and transfer of technology" and "handling of biotechnology and distribution of its benefits" are not applicable to *ex situ* collections of genetic resources collected before the entry into force of the Convention. In fact, Article 15, paragraph 3 of the Convention, states:

> "For the purpose of this Convention, the genetic resources being provided by a Contracting Party, as referred to in this Article and Articles 16 and 19, are only those that are provided by Contracting Parties that are countries of origin of such resources or by Parties that have acquired the genetic resources in accordance with this Convention."

This means that the provisions on sharing the benefits, and for prior informed consent to access, do not apply to *ex situ* collections which are located outside the country of origin and have been acquired prior to the entry into force of the Convention.

11. The Convention addresses the issue of intellectual property rights (IPRs) in respect of access to and transfer of technologies in Article 16. On the one hand the Convention states that "such access and transfer shall be provided on terms which recognize and are consistent with the adequate and effective protection of IPRs" (Art. 16.2). On the other hand the Contracting Parties which provide genetic resources are to be "provided access to and transfer of technology which makes use of those resources (...) including technology protected by patents and other IPRs" (Art. 16.3). Thus while IPRs may be recognized, mechanisms might be developed to ensure that they do not provide a barrier to technology transfer. Article 16 paragraph 3 suggests that the multilateral fund may be used, presumably to pay for IPR royalties. The Convention further calls for cooperation to ensure that IPRs are supportive of and do not run counter to the objectives of the Convention (Art. 16.5). The Convention does not specifically refer to plant breeders' rights.

12. The Convention does not address the issue of intellectual property rights with respect to access to genetic resources themselves. However, it does require Contracting Parties "to create conditions to facilitate access to genetic resources" and "not to impose restrictions that run counter to the objectives of the Convention" (Art. 15.2).

13. The Convention establishes that developed country parties will provide new and additional financial resources to enable developing country parties to meet the "agreed full incremental costs" necessary for implementation of the Convention (Art. 20.2) and that a financial mechanism will operate within a "democratic and transparent system of governance" (Art. 21.1). The financial mechanism "shall function under the authority and guidance of, and be accountable to, the Conference of the Parties" (Art.21.1). A number of important matters have been left open for decision by the first meeting of the Conference of the Parties, including to "determine the policy, strategy and programme priorities, as well as detailed criteria and guidelines for eligibility for access to and utilization of financial resources" (Art.21.2) and decision on the institutional structure that will operate the financial mechanism (Art. 21.1). Provided that it is restructured to satisfy the provision laid out in Article 21

including the criteria of democracy and transparency, the GEF (para 27) is invited to be the interim financial structure (Art. 39).

14. A Resolution on the "Interrelationship between the Convention on Biodiversity and the Promotion of Sustainable Agriculture", was approved by the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity as part of the Final Act of the Conference in Nairobi on 22nd May, 1992 (referred to hereafter as Resolution 3 of the Nairobi Final Act). This resolution recognizes the importance of plant and animal genetic resources for sustainable agriculture and notes that UNCED had agreed on a number of measures as part of Agenda 21 including the strengthening of the Global System for the Conservation and Sustainable Use of PGRFA and its adjustment in line with the outcome of the negotiations of a convention on biological diversity. Resolution 3 of the Nairobi Final Act also "urges that ways and means be explored to develop complementarity and cooperation between the Convention on Biological Diversity and the Global System (...)". The resolution also noted the "need to seek solutions to outstanding matters concerning plant genetic resources within the Global System for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture, in particular:

- access to *ex situ* collections not acquired in accordance with this Convention; and
- the question of farmers' rights."

15. Other resolutions cover matters related to the provisional implementation of the Convention prior to its formal entry into force. The Convention will enter into force once it has been ratified by 30 countries. This is unlikely to be before late 1994. The first meeting of the Conference of the Parties must be held within one year of entry into force and is therefore likely to take place in 1995. A Resolution on "International Cooperation for the conservation of biological diversity and the sustainable use of its components pending the entry into force of the Convention on Biological Diversity" (referred to as Resolution 2 of the Nairobi Final Act) provides for an "Intergovernmental Committee on the Convention on Biological Diversity" (ICBD) to provide policy guidance on the implementation of the Convention prior to its coming into force and the first meeting of the Conference of the Parties. The designation of the permanent secretariat "from amongst those existing competent international organizations" is left to the first meeting of the Conference of the Parties. The interim secretariat will be provided by UNEP which is requested "to seek the full and active involvement of FAO and UNESCO in the establishment and operations of the interim secretariat". Resolution 2 also invites (in point 8) the secretariats of major international and regional environmental conventions, agreements and organizations to provide information to the ICBD on their activities.

16. Resolution 2 of the Nairobi Final Act also suggests that the ICBD should consider *inter alia*:

(a) assistance to governments in the preparation of country studies: (i) to identify components of biological diversity of importance for its conservation and (...) sustainable use (..); (ii) to identify processes and activities which have or are likely to have an adverse impact on biological diversity; (iii) to evaluate the potential economic implications of the conservation of biological diversity and of the

sustainable use of biological diversity and genetic resources, and to ascribe values to biological diversity and genetic resources; (iv) to review and, where appropriate, suggest revision of the draft guidelines for country studies on biological diversity; (v) to identify modalities for providing support to countries (..) undertaking studies.

(b) (...) preparation of an agenda for scientific and technological research including possible institutional arrangements *ad interim* (...).

17. With reference to biotechnology, Resolution 2 of the Nairobi Final Act also suggests that the ICBD should consider *inter alia*:

(c) the need for and modalities of a protocol setting out appropriate procedures including (..) advanced informed agreement, in the field of safe transfer, handling and use of any living modified organism resulting from biotechnology that may have adverse effect on the conservation and sustainable use of biological diversity;

(d) modalities for the transfer of technologies, in particular to developing countries, relevant to the conservation of biological diversity and the sustainable use of its components, as well as technical cooperation in support of national capacity-building in those areas.

18. Another Resolution agreed as part of the Nairobi Final Act, Resolution 1, on "Interim Financial arrangements" invites the GEF to undertake the operation of the financial mechanism for the Convention prior to its entry into force (and until the first meeting of the Conference of the Parties) and calls upon international financial institutions and UN agencies to provide financial and other resources for the provisional implementation of the Convention.

II.B. Decisions of UNCED, including Agenda 21

19. Agenda 21 -- a comprehensive set of programmes of action to promote sustainable development -- was agreed at UNCED. While non-binding, Agenda 21 is an important document representing a consensus of the world's governments. Intergovernmental and non-governmental bodies were also involved in the preparatory process leading to UNCED, including the elaboration of Agenda 21. It is likely, therefore, that Agenda 21 will form the basis for action on sustainable development into the 21st Century, and a plan for the work of the UN agencies in this area. The main parts of Agenda 21 which deal with PGRFA are: Chapter 14 on "Sustainable Agriculture and Rural Development"; Chapter 15 on "Conservation of Biological Diversity" and Chapter 16 on "the Environmentally Sound Management of Biotechnology". At UNCED it was agreed to set up a "Sustainable Development Commission" to monitor the implementation of Agenda 21 (see para 26, below).

20. Chapter 14 on "Sustainable Agriculture and Rural Development" (SARD) includes programme areas on plant and animal genetic resources. The Programme Area on "Conservation and sustainable utilization of plant genetic resources for food and sustainable agriculture" contains programmes of action at national and international levels. At the

national level, Agenda 21 promotes the objective, not later than 2000, of adopting policies and of strengthening or establishing programmes for *in situ*, on-farm, and *ex situ* conservation and sustainable use of PGRFA, integrated into strategies and programmes for sustainable agriculture including crop diversification. At the international level, Agenda 21 indicates that the appropriate United Nations agencies and regional organizations should strengthen the Global System on the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture (PGRFA) by *inter alia*: accelerating the development of the World Information and Early Warning System on PGR (PGR/WIS) to facilitate the exchange of information; developing ways to promote the transfer of environmentally sound technologies in particular to developing countries; and taking further steps to realize Farmers' Rights; developing networks of PGRFA in *in situ* protected areas; preparing periodic State of the World Reports on PGRFA and a rolling global cooperative plan of action on PGRFA; promoting the fourth International Technical Conference on PGR to adopt the first PGR/SW and PGR/GPA, and adjusting the global system to bring it into line with the Convention on Biological Diversity.

21. Chapter 15 on "the Conservation of Biological Diversity" is an outline of a plan of action on overall biodiversity which complements the Convention and has cross-references to the more detailed programmes on genetic resources in Chapter 14. Included in the list of objectives of the programme area are: sharing of the benefits derived from biodiversity; recognition of traditional methods and knowledge; and implementation of methods for the safe use of biotechnology.

22. Chapter 16 on "Environmentally Safe Management of Biotechnology" outlines objectives and activities in five programme areas, one of which is "Increasing the availability of food, feed and renewable materials". The text includes a recommendation for international cooperation on matters related to "rights associated with intellectual property and informal innovations, including farmers' and breeders' rights; access to the benefits of biotechnology; and biosafety". With reference to the latter, the text states that "there is a need for further development of internationally agreed principles on risk assessment and management of all aspects of biotechnology, which should build upon those developed at the national level". Chapter 34 also emphasizes the importance of access to and transfer of environmentally sound technology and the need to explore the concept of assured access for developing countries of such technology in its relation to proprietary rights.

23. Chapter 11 on "Combatting Deforestation" calls for measures to ensure the conservation, *in situ* and *ex situ*, of forest resources and the sustainable utilization of forest biological diversity. It contains recommendations to promote research on forest biodiversity, including on the traditional uses of forests by local populations and indigenous peoples, to consolidate information on forest genetic resources and related biotechnology, to survey local and indigenous knowledge, and to increase the value derived from forests by the managed supply of genetic materials.

24. Agenda 21 also mentions conservation of genetic resources or of biological diversity in the context of food and agriculture in the programme areas dealing with combatting land degradation in arid areas (Chapter 12) and in mountain areas (Chapter 13). It recognizes the latter areas as an important source of biological diversity and calls for the protection of genetic resources *in situ* by maintaining and establishing protected areas and improving traditional farming activities, as well as establishing programmes for evaluating the potential value of the resources.

25. According to Chapter 23, the commitment and genuine involvement of all social groups will be critical to the effective implementation of Agenda 21. The importance of the knowledge of women in natural resource management is singled out in Chapter 24. Chapter 3 on "Combatting Poverty" calls for the empowerment of local communities in managing resources. It recognizes that environmental policies for the conservation of resources must also take due account of those who depend on the resources for their livelihoods. It proposes that governments should take measures to support research on the integration of traditional methods of production, and to integrate informal sector activities into the economy. Chapter 35 promotes the integration of "traditional" and "advanced" science. Chapter 32 emphasizes the need for a "farmer-centred approach" as "the key to the attainment of sustainability", and Chapter 26 stresses the role of indigenous populations.

Institutional Matters.

26. At UNCED it was agreed that the UN Secretary-General would set up a high-level "Sustainable Development Commission" which would report to the General Assembly and to the Economic and Social Council. Countries would report to the UN Sustainable Development Commission on progress and limits to progress on the implementation of Agenda 21.

Funding Mechanisms

27. No new funding mechanisms were agreed at UNCED, although developed countries did declare an intention to increase development assistance. Several developed countries also pledged that they would contribute to the replenishment of the Global Environment Facility. A modified GEF might become the permanent funding mechanism for the Convention on Biological Diversity (see para 18, above).

28. The Global Environment Facility, currently in a pilot phase, provides financial resources, additional to regular official development assistance, to developing countries for projects and programmes which generate global environmental benefits in four areas: biological diversity conservation; combatting pollution of international waters; combatting global warming; and, through the interim fund for the Montreal Protocol, protection of the ozone layer. It is managed by the World Bank in association with UNDP and UNEP -- the three implementing agencies, and guided by a Participant's Meeting of donor countries. The pilot phase ends at the end of 1993 .

29. The GEF is currently being restructured so that it can become the funding mechanism to cover the agreed incremental costs of meeting global environmental objectives as envisaged in Agenda 21, Chapter 33. It is forseen that the restructured GEF will be governed by a Participant's Assembly of country representatives, open to universal membership, with a decision making system which reflects the interests of both developing countries and donor countries. Further discussion will be needed on the relationship between the GEF and the Conference of Parties to the Convention on Biological Diversity. It has been agreed that other relevant agencies, which includes FAO, would be increasingly involved as cooperating or executing agencies in GEF activities.

II.C. The Global System for the conservation and utilization of PGR

30. In recent years a broad intergovernmental consensus on plant genetic resources has emerged. This is due largely to the work of the Commission on Plant Genetic Resources (CPGR), successive sessions of which have contributed to building a Global System on Plant Genetic Resources and to facilitating its operation. The objectives of the Global System are to ensure the safe conservation and promote the unrestricted 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 the conservation (*ex situ* and *in situ*) and utilization of plant genetic resources. The basic institutional components of the system are (i) a flexible framework, the International Undertaking, and (ii) a unique intergovernmental forum, the Commission. A financial mechanism is also envisaged to facilitate the implementation of an agreed Global Plan of Action. Until such a mechanism is established, a small fund (the International Fund for Plant Genetic Resources) is operated by the FAO. Other elements of the Global System, some of them under development, include a World Information and Early Warning System (PGR/WIS), Networks of *Ex situ* Base Collections and *In situ* Conservation Areas, periodic publication on the State of the World's PGR (PGR/SW) and the preparation and periodic updating of a rolling Global Plan of Action on PGR (PGR/GPA).

Previous Discussions of the CPGR on Biodiversity.

31. At its fourth session, the FAO Commission on PGR considered the document "Biological Diversity and Plant Genetic Resources" (CPGR/91/9) including the possibility of (i) transforming the International Undertaking into a legally binding instrument and (ii) widening the mandate of the Commission to become a "Commission on Biological Diversity for Food and Agriculture". The Commission (and subsequently, the FAO Council, both meeting prior to UNCED) agreed that it was premature to transform the International Undertaking on PGR into a binding legal agreement. The Commission, however, considered that it might be appropriate for the Undertaking to become a protocol to the Convention on Biological Diversity in due time and after appropriate modifications had been made. The Commission (and subsequently the FAO Council) agreed that the widening of its mandate to include (i) livestock genetic resources; (ii) all genetic resources for food and agriculture including aquatic resources; or (iii) all biodiversity might make the Commission's task less manageable and dilute its effectiveness. Therefore, it was decided not to widen its mandate for the time being.

III. MAJOR IMPLICATIONS OF UNCED FOR THE GLOBAL SYSTEM IN GENERAL

32. Agenda 21 is a programme of action for the 21st Century agreed by consensus by about 180 countries, though not legally-binding. It recognizes the identity and special character of PGRFA, giving them the status of a comprehensive "programme area". Agenda 21 not only recognizes the existence of the Global System, but recommends its strengthening, and has suggested the adjustment of its components where necessary. Agenda 21 proposes actions at the national and international level and makes specific reference to a number of components of the Global System, such as the World Information and Early Warning System, the *in situ* network, the State of the World's PGR report and the Global Plan of Action, and supports the convening of the Fourth International Technical Conference on PGR. Thus the present and proposed programmes, projects and activities of the Global System are fully consistent with Chapter 14 of Agenda 21, and indeed fully supported by Agenda 21.

33. The Convention on Biological Diversity, on the other hand is a legally binding agreement with its own Governing Body which will play a significant role in determining policy on PGR in the future. It treats PGRFA not as a separate entity, but as a part of biological diversity. It is not a comprehensive programme of action, though some of its principles provide a framework for actions to conserve and to utilize biological diversity. The main implications of the Convention are at the policy, legal and institutional levels. Here the issues which need to be addressed within the Global System include not only those already covered by the Convention, but also those identified as outstanding matters by the complementary Resolution. At the practical level, however, the Commission should also consider how the Global System can assist countries in fulfilling their commitments under the Convention.

34. Thus three major implications of UNCED for the Global System may be distinguished. Firstly UNCED, in particular Agenda 21 Chapter 14, calls for the development and implementation of programmes of action for the conservation and sustainable utilization of PGRFA. Secondly, policy areas in need of development are identified, particularly on the questions of access to existing *ex situ* collections and Farmers' Rights. Thirdly, there is a need for the Commission on Plant Genetic Resources to look at the institutional and legal implications of UNCED, particularly how the International Undertaking relates to the Convention, and the relationship of the CPGR to the Conference of the Parties to the Convention. In this section, the implications of UNCED for the Global System are examined under these three headings.

III.A. Programme, Projects and Activities

35. The main implications of UNCED at the level of programmes, projects and activities are (i) to proceed with the development of the Global System as previously agreed by the CPGR and as outlined in Agenda 21, Chapter 14, and (ii) to assist countries in meeting their commitments under the Convention in areas relevant to Food and Agriculture. Some of the relevant activities of the Global System are reviewed in this sub-section.

National Level

36. In the programme area on PGRFA of Agenda 21 (Chapter 14) the regeneration and duplication of existing *ex situ* collections and the collection and study of useful plants are listed amongst the objectives (para 14.57(a,b)) and promoting utilization including crop diversification are amongst the proposed activities (14.58-59). A number of activities under the Global System contribute to these objectives and activities particularly the development of *in situ* networks of conservation areas (including the on farm conservation and improvement of traditional landraces and the on farm conservation of their wild relatives, especially in the Vavilov centres of diversity) and of *ex situ* networks of genebanks. Through its regular programme and field projects, FAO assists developing countries mainly through collaboration with national and sub-regional institutes and networks. Technical standards for genebanks, intended to minimize loss of genetic integrity in seed accessions during storage and regeneration, have been produced by IBPGR and FAO. Revised standards are being presented to the Commission. The standards will be updated from time to time to reflect the availability of new techniques in seed storage.

37. Both Agenda 21 and the Convention give great importance to developing and strengthening institutional capacity, particularly in developing countries, and to training and human resource development. Genetic Resources are useful mainly for those countries and institutions which have the technical, economic and human capability to utilize them through plant breeding and seed production, including through farmer-improvement and the new biotechnologies. It is therefore a basic objective of the Global System to strengthen both conservation and utilization capabilities in developing countries. FAO collaborates with various institutions as appropriate: IBPGR for conservation, IARCs and NARs for management and utilization; and UNEP, UNESCO and IUCN in work related to *in situ* conservation and ecosystem management.

38. The Fourth International Technical Conference on the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture (ICPGR) requested by Agenda 21 of UNCED will be convened in 1995 by FAO, and will provide for the development into programmes, projects and activities of many of the recommendations at the national level contained in Agenda 21 and the Convention on Biodiversity on matters related to PGRFA.

International Level

39. Agenda 21 calls for the strengthening of the Global System, *inter alia* by the development of PGR/WIS. FAO is reorganizing the FAO Seed Laboratory as the Plant Genetic Resources Information and Exchange Unit, and expanding the Seed Information System into the World Information and Early Warning System on PGR in accordance with the International Undertaking (Art.7.1(e)(f)). This Unit will draw upon information from the FAO Forestry Department and IBPGR amongst others. PGR/WIS is intended to be a dynamic, constantly updated database of databases. Not all information will be held centrally by FAO; instead FAO will enter into collaborative agreements with other appropriate organizations holding relevant information. The Early Warning System will form part of the PGR/WIS will draw rapid attention to hazards threatening the operation of genebanks holding

base collections, and to the loss of plant genetic diversity throughout the world from both natural phenomena and human activity, including economic development.

40. In accordance with the decisions of the CPGR and in support of the request in Agenda 21 to "develop subregional, regional, and global networks of PGRFA in *in situ* protected areas", a pilot network of *in situ* conservation areas is being set up, including on-farm conservation of semi-domesticated crops and primitive cultivars nurtured in farmers' fields and used by local communities. This complements *ex situ* collections and existing *in situ* protected areas. The priority of this approach is to maintain genetic variability of target species within a mosaic of economically and socially acceptable land use options. Pilot studies are also under way on the compatibility of sustainable forest management and *in situ* conservation of species being harvested.

41. In accordance with the International Undertaking (Art.11) the Commission agreed at its Third Session in 1989 that FAO should prepare a periodic report on the State of the World's PGR (PGR/SW) as the basis on which it might make reasoned policy decisions. The first PGR/SW will be produced as part of the preparatory process of the Fourth International Technical Conference on PGR . This will be the basis for the development of a global plan of action for the conservation and sustainable utilization of PGRFA (PGR/GPA) which will be updated regularly. The convening of the International Technical Conference and the preparation of PGR/SW and PGR/GPA are all called for in Agenda 21.

III.B. Policy issues.

42. The Convention attaches much importance to the question of access to genetic resources, but does not include provisions governing access to existing *ex situ* collections. It provides for sharing the benefits derived from genetic resources but does not mention the concept of Farmers' Rights. These two issues were identified by Resolution 3 of the Nairobi Final Act as "outstanding matters" to which solutions should be sought within the Global System (see para 14). These two related policy issues are examined in this sub-section.

Access to Genetic Resources

43. On the subject of access to genetic resources, the Convention reaffirms "the sovereign rights of States over their natural resources" and states that "the authority to determine access to genetic resources rests with the national governments and is subject to national legislation" (Art.15.1). However the Convention elaborates on this basic point of departure in three important ways. Firstly, it states that Parties "shall endeavour to create conditions to facilitate access to genetic resources" and "not to impose restrictions which run counter to the objectives of this Convention" (Art.15.2). Secondly, it strengthens the power of Parties to implement their sovereign rights to determine access by requiring that access "shall be subject to prior informed consent" of the country providing the resources (Art.15.5) and that "access, where granted, shall be on mutually agreed terms" (Art.15.4). Thirdly, the

Convention provides for the sharing of benefits derived from genetic resources with the country of origin, or the country providing such resources where they have been acquired in accordance with the Convention (Arts. 15.7, 16.3, 19.1, 19.2).

44. The right to determine access to *ex situ* collections (other than those in countries of origin) -- depends upon whether or not the resources were acquired in accordance with the Convention. It appears that sovereign rights over "natural resources" (Art.15.1) do not include resources which are "natural" to other Parties. For countries holding pre-existing *ex situ* collections and others which have not been acquired in accordance with the Convention , the Convention does not provide for access to be controlled by prior informed consent, nor for a share of the benefits derived from such resources. Resolution 3 of the Nairobi Final Act (see para 14) considered that "access to *ex situ* collections not acquired in accordance with this Convention" is an "outstanding matter" for which solutions need to be sought within the FAO Global System.

45. This exclusion of pre-existing *ex situ* collections could be interpreted in a number of ways including:

(i) that these genetic resources are outside the Convention and since most of them were collected on the general understanding that PGR were the heritage of mankind, these resources should continue to be freely available, with or without a global compensatory mechanism;

(ii) that these genetic resources are outside the Convention and therefore the host country can legislate on ownership and conditions of access;

(iii) that since Parties to the Convention can provide only those genetic resources originating in their own countries or acquired under the terms of the Convention, that permission of the country of origin is required for the release of genetic resources from pre-existing collections.

46. There are difficulties with each of these interpretations. The first interpretation has the advantage of promoting free exchange of genetic material. However, if no provision is made for benefits to be shared with the countries of origin (e.g. collectively in case they cannot be identified) this would permit "free riding", not consistent with the spirit of the Convention; during the negotiations access to the benefits derived from genetic resources was seen as a reciprocal benefit to access to genetic resources. The second interpretation would give all rights over the genetic material in genebanks to the countries holding them regardless of where and how these resources have been collected/obtained, which is also against the spirit of the Convention. The third interpretation has three major difficulties: the Convention is not retroactive (international law is not retroactive unless explicitly so stated); it is impossible, in many cases, to identify individual countries of origin; and it would lead to major restrictions on the flow of germplasm.

47. In considering solutions to the issue of access to existing *ex situ* collections, three points should be borne in mind. Firstly, whilst most of the world's large genebanks are either located in the industrialized countries or are part of the CGIAR network of IARCs, the

material in them has been collected from all parts of the world with most of the accessions originating from developing countries.

48. Secondly, that while in most cases there is an absence of clearly defined international legal agreements governing access to pre-existing *ex situ* collections, the concept of "heritage of mankind" formally laid down in the International Undertaking agreed in 1983, was the prevailing principle. Article I includes the following: "This undertaking is based on the universally accepted principle that plant genetic resources are a heritage of mankind and consequently should be available without restriction". Furthermore, many of the IARCs of the CGIAR system have emphasized that genetic materials in their genebanks are held in trust for the benefit of the world community, and/or of their clients.

49. The third point to be borne in mind is the practical difficulty of identifying countries of origin. In many cases, it is impossible to do so. In other cases resources can be found in more than one country, and so none can effectively control access or derive benefits through bilateral agreements. Further, the presence of a large number of genetic resources in pre-existing *ex situ* collections effectively undermines control on access by countries possessing them in *in situ* conditions.

50. There is a need to develop solutions to the issue of access to *ex situ* collections, as well as to the related issue of sharing the benefits and realization of Farmers' Rights. Such solutions should be compatible with the objectives of the Convention and of the Global System, that is they should be equitable, contribute to the conservation and sustainable use of plant genetic resources, facilitate access (in a way which is as free of restrictions as reasonably possible) and provide for sharing of the benefits derived from the genetic resources with the countries of origin. Any proposed mechanisms should also be efficient.

51. A number of options within the Global System might be explored. They are not mutually exclusive. Actions which could contribute to the aims above fall into two types:

(1): practical steps, such as:
- facilitation of bilateral agreements between countries of origin, where they can be identified, and countries holding *ex situ* collections for the sharing of benefits (see para 52 below);
- establishment of agreements between FAO and the owners of genebanks, including on access, along the lines of the "Basic agreements" (see para 53 below);

(2): facilitation of a comprehensive agreement concerning access to *ex situ* collections, possibly including mechanisms to compensate countries of origin (see para 54 below).

52. The Convention makes provision for bilateral agreements between countries of origin and holders of genebanks concerning future collection of genetic resources. Similar agreements might be reached, by mutual agreement, for pre-existing collections, where a unique country

of origin can be identified. Such agreements, for which the Global System might provide assistance, could include provisions which *inter alia*:

- guarantee access by the country of origin to the genetic resource in the genebank;
- facilitate possible arrangements through which the country of origin gets a share of the benefits derived from the eventual utilization of the genetic resources, either directly, or via the country or institution holding the genetic resource *ex situ*.

The "germplasm transfer agreements" proposed by the CGIAR might be explored as a possible useful model for these agreements. However, the problems identified above (para 49), including difficulties in identifying unique countries of origin should be recognized. The potential proliferation of bureaucratic regulations which could result in severe restrictions on access, should be borne in mind.

53. Access to genetic resources in *ex situ* collections might be further promoted through "Basic Agreements" or similar agreements, under the umbrella of the Undertaking. FAO has begun communications with countries to set up an international network of base collections in genebanks under the auspices or jurisdiction of FAO. Around 30 countries have indicated a willingness to place "designated germplasm" within their genebank collections under the auspices of FAO, usually while retaining ownership of them. "Draft Basic Agreements" have been drawn up which recognize the International Undertaking and include the provision that the country concerned "undertakes to make the designated germplasm available when necessary for the purpose of scientific research, plant breeding or genetic resource conservation, without restriction (...) either on mutually agreed terms or free of cost." Similar agreements are being discussed with some of the IARCs of the CGIAR. Such agreements could contribute to formalizing the "trusteeship" status governing many of the IARCs' collections.

54. A comprehensive agreement on access might be reached by the Commission in consultation with the Conference of the Parties to the Convention. It would guarantee free access to genetic resources in pre-existing *ex situ* collections in return for a compensation mechanism to provide a share of the benefits on a collective basis, especially to developing countries, considering that most of these genetic resources have their origin in them. An international fund, yet to be established, such as the one envisaged in FAO Resolution 3/91 might provide a suitable mechanism.

55. To place these measures within a more comprehensive framework the International Undertaking could be revised to include a new agreement on access as well as the development of a compensation mechanism to implement Farmers' Rights as envisaged in FAO's Resolution 3/91 (annex 3 of the Undertaking). To ensure compatibility, the revised Undertaking could become a protocol of the Convention. This, together with greater institutional cooperation, would facilitate efficient and coordinated use of funding mechanisms.

Farmers' Rights

56. The concept of Farmers' Rights is defined in FAO Resolution 5/89 (the second annex to the Undertaking) as "rights arising from the past, present and future contributions of farmers in conserving, improving and making available plant genetic resources (...)). The agreed interpretation of the Undertaking (Resolution 4/89, first annex to the Undertaking) states that the best way to implement Farmers' Rights is to ensure the conservation, management and use of PGR for the benefit of present and future generations of farmers.

57. The 1991 FAO Conference agreed with the recommendation of the Fourth Session of the CPGR that: "Farmers' Rights will be implemented through an international fund on plant genetic resources which will support PGR conservation and utilization programmes, particularly, but not exclusively, in the developing countries;" and 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" (Resolution 3/91). The Conference also agreed that the nature and size of the fund needed to be further discussed in the light of the decisions of UNCED (C91/Rep para 103).

58. Chapter 14 of Agenda 21 recommends that one way by which the Global System should be strengthened is by "taking further steps to realize farmers' rights". Chapter 16 on "the Environmentally Safe Management of Biotechnology" includes a recommendation for international cooperation on matters related to "rights associated with intellectual property and informal innovations, including farmers' and breeders' rights".

59. The Convention does not contain any explicit reference to Farmers' Rights, though it does contain provisions for the sharing of the benefits derived from PGR. It also calls on Parties to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices" (Art. 8(j)). Complementary Resolution 3, agreed alongside the text of the Convention at Nairobi, identified the question of Farmers' Rights as an outstanding issue to which solutions should be sought within the FAO Global System.

60. Implementation of Resolution 3/91 will contribute to the realization of Farmers' Rights. By providing funds for the conservation and utilization of PGR in countries of origin, it could also contribute to realizing a comprehensive agreement on access to existing *ex situ* collections which would maintain free access to these collections.

61. In light of the decisions of UNCED and the Nairobi Final Act, and in line with FAO Resolution 3/91, the Commission may wish to consider:

-- what measures need to be taken to implement Resolution 3/91;
-- what further action should be taken.

III.C. Institutional and Legal

62. The UNCED process has led to the establishment or elaboration of a set of new institutions and institutional mechanisms. The Commission should consider how best the Commission can advise and assist these new bodies and facilitate their functioning while avoiding wasteful duplication of effort. The main inter-governmental institutions relevant to the conservation and sustainable use of plant genetic resources are listed in the following table.

Body	Function: oversee and monitor the implementation of:	Status	Subsidiary Bodies
Sustainable Development Commission	Agenda 21	Will be set up in 1992 -- High level reporting to UNGA/ECOSOC	To be defined
Conference of the Parties, CBD	Convention on Biological Diversity	First meeting in 94/95, ICBD will operate in interim	Scientific and Technical Advisory Committee (STAC)
Participant's Assembly, GEF	Global Environmental Facility	Being formalized	Scientific and Technical Advisory Panel (STAP)
CPGR	International Undertaking & Global System PGR	Operational; Subsidiary to FAO Council & Conference	Working Group.

63. Cooperation is required in programme development; financing; and legal areas drawing upon the comparative advantages of the relevant institutions. All these will have institutional implications. In some cases, it will be some years before some institutions come into full operation, and interim arrangements will be used initially; modes of cooperation will need to be flexible in order to adapt to this changing situation. In all forms of cooperation the special role of FAO and of the CPGR in plant genetic resources of relevance to food and agriculture should be stressed. Given that the Convention is a legally binding instrument which encompasses all biological diversity including PGRFA, cooperation with the Conference of the Parties of the Convention on Biological Diversity and with the interim intergovernmental Committee on the Convention on Biological Diversity (ICBD), will be particularly relevant to the CPGR. In the follow up to Resolution 2 of the Nairobi Final Act (see para 15), FAO has indicated that it is willing to assist in the follow-up and implementation of the Convention and to particiapte in the interim secretariat, within the context of its mandate and within the limits of its available resources. The Commission may wish to give special attention to this matter.

64. In terms of *programme development*, the CPGR will take the lead role in elaborating a Global Plan of Action on PGRFA, based on the relevant programme area of Agenda 21, and consistent with the objectives of the Convention. New arrangements for *funding* will be required to finance the PGR/GPA as well as to implement farmers' rights. The options of using a new "window" in the GEF, or part of the fund for the Convention (which itself will

probably be a "window" within GEF) could be explored . A common *legal framework* might be established by integrating the International Undertaking and related agreements into the Convention. The Commission may wish to consider the option of transforming the Undertaking into a protocol of the Convention.

65. At the institutional level, the Commission could provide policy advice to the Conference of the Parties of the Convention on matters related to PGRFA, and to the Participants' Assembly of the GEF on funding of PGRFA projects. These processes would be facilitated once the PGR/GPA has been agreed. The Commission might report to the UN Sustainable Development Commission (through the FAO Conference) on the elaboration and implementation of PGR/GPA -- as the relevant part of Agenda 21.

66. In considering the role of the CPGR in the post-UNCED environment, the Commission may wish to bear in mind the following points:

- that while the CPGR is a subsidiary body of FAO, the Conference of the Parties of the Convention on Biological Diversity will be a fully independent body with its own secretariat;
- that while the CPGR is an open body of which all FAO member states may become members (regardless of whether or not they are signatories to the Undertaking), membership of the Conference of the Parties will be limited to those countries which will have ratified the Convention. However, membership of the interim arrangement (i.e. ICBD) will be open to all countries.

IV. IMPLICATIONS FOR THE COMPONENTS OF THE GLOBAL SYSTEM.

IV.A. Implications for the Commission on PGR

67. The 26th Session of the FAO Conference in 1991 "recognized that the Commission on Plant Genetic Resources was the only intergovernmental body in the United Nations System addressing a large portion of the world's biological diversity".

68.The implementation of Agenda 21 and of the Convention on Biological Diversity are likely to require greater and more frequent cooperation between the Commission on Plant Genetic Resources and other relevant intergovernmental bodies. This may require a strengthening of the role of the Working Group which represents the Commission between its biennial meetings, including development of mechanisms to facilitate technical participation from member countries.

69. The relationship between the CPGR and the Conference of the Parties of the Convention on Biological Diversity, and its interim precursor, the ICBD require particular attention. Resolution 2 of the Nairobi Final Act calls on the secretariats of bodies like the Commission

to report on their activities to the ICBD, and for FAO to be involved in its interim secretariat (see para 15 above) and Resolution 3 urges that ways and means be explored to develop complementarity and cooperation between the Convention and the Global System (see para 14 above). The Conference of the Parties of the Convention may wish to delegate some of the work on PGRFA to the Commission.

70. Much of the detailed work related to UNCED -- specifically the elaboration of the relevant part of Agenda 21 as a Global plan of Action will be carried out as part of the preparatory process for the Fourth International Technical Conference on PGR with the technical and scientific advice of a Group of Experts and under the direction of the Commission and its Working Group.

71. The role of the Commission as a coordinating body for international action relevant to the conservation and use of PGRFA is increasingly evident, particularly from the growing number of international bodies which are reporting to the Commission on their activities. The elaboration of the periodic PGR/SW and PGR/GPA will also facilitate this. This will aid the Commission in its potential role of reporting to the UN Sustainable Development Commission on the implementation of the relevant parts of Agenda 21.

IV.B. Implications for the International Undertaking

72. The Commission might wish to consider the possibility of revising the International Undertaking on PGR in view of:

- the need to ensure its consistency, synergy and complementarity with the Convention and facilitate its possible conversion to a protocol of the Convention on Biological Diversity;
- the need to address areas left outstanding by the Convention, especially on the issue of access to *ex situ* collections, and on the question of farmers' rights;
- the need to ensure consistency with the evolving objectives and priorities of the Commission including those developed from PGR/SW and PGR/GPA as part of the preparatory process of the ICPGR, as well as with Agenda 21;
- the need for a rationalization of the core Undertaking and its three annexes to improve internal self-consistency.

73. The process for revision of the Undertaking might have three major stages:

- (i) rationalization and consolidation of the present Undertaking and its annexes;
- (ii) review of the principles and scope of the undertaking, including studies of "outstanding issues" of access and farmers' rights; and
- (iii) the conversion of the undertaking into a protocol to the Convention including consideration of the institutional implications and prerequisites.

74. As reported to the Fourth Session of the Commission, there would appear to be no major difficulties in converting the Undertaking into a legally binding instrument. However, the process would need to involve consultation between the Commission and the Conference of

the Parties to the Convention, and in the interim, the ICBD. A major problem is likely to be the difference in emphasis between the Convention on Biological Diversity on bilateral approaches and the global focus of the International Undertaking.

75. Consistency between the Convention and the Undertaking might be obtained by means of adjustments to the latter and agreed interpretations of the former. In this respect it is noted that clarification of many points may be provided by the Conference of the Parties at its first meeting and by discussions which might take place in the meantime by the ICBD which will have its first meeting in September 1993. The Nairobi Resolution on PGR is an important statement in this respect. The conclusions of the Commission could be provided to the ICBD in September.

IV.C. Implications for the envisaged International Fund and the realization of Farmers' Rights

76. The proposed Global Plan of Action, which will build upon the proposals of Agenda 21 (Chapter 14, programme G), will be costed as part of the preparatory process leading to the International Technical Conference on the Conservation and Sustainable use of PGR. Preliminary estimations of the cost of the PGR/GPA, elaborated during the UNCED preparatory process were about $600 million per year, of which $300 million would be required as international financing on a concessional basis. This estimate is similar to those elaborated during the Keystone Dialogue Series on PGR and by the Stockholm Conference on the Security and Sustainable Use of PGR.

77. The FAO Conference in 1991 approved a resolution (3/91; annex 3 to the Undertaking) which states "that farmers' rights will be implemented through an international fund on plant genetic resources which will support plant genetic conservation and utilization (...)" and "that (...) resources for the international fund as well as for other funding mechanisms should be substantial, sustainable and based on principles of equity and transparency". Resolution 3/91 also stated that donors of genetic resources, funds and technologies will determine and oversee policies, programmes and priorities of the fund and other funding mechanism "through the Commission on Plant Genetic Resources". Thus the fund is viewed as an essential part of the Global System on PGR, and the CPGR should oversee its functioning. However, the fund should not necessarily be located in FAO.

78. It should be noted that Resolution 3/91 (annex 3 of the Undertaking) does not refer to the "international fund for plant genetic resources" established by FAO in 1988, on an interim basis, pursuant to Article 6 of the Undertaking, to provide a channel for countries, inter-governmental and non-governmental organizations, private industry and individuals to support activities for the conservation and utilization of plant genetic resources.

79. Following UNCED, it is possible that separate "windows" may be established under the umbrella of the GEF for biological diversity or for PGRFA. The Commission could explore

possible modalities which would allow it to provide policy guidance for the use of such funds, in cooperation with other appropriate bodies. The Commission should also explore its potential role in the oversight of multifaceted projects, where only part of the funding is directed towards PGRFA. Integration of the Global System with the institutions established by UNCED (as considered in section V) would facilitate the Commission in undertaking this role.

IV.D Implications for the Codes of Conduct and other agreements.

80. The draft Code of Conduct for Plant Germplasm Collecting and Transfer provides for comprehensive guidelines including those requiring prospective collectors to inform national authorities of their plans. Bringing the Code into force quickly will contribute to the objectives of the Convention and of Agenda 21 (Chapter 14). A draft, revised to take into account the comments of members of the Commission and to ensure consistency with the Convention, is presented to the Commission for adoption (CPGR/93/8).

81. The draft Code of Conduct for Biotechnology as it affects PGR conservation and use, requested by the last session of the Commission, is under preparation and will take into account the conclusions and recommendations of UNCED, in particular Chapter 16 of Agenda 21 (see para 22 above), and Resolution 2 of the Nairobi Final Act (see para 17 above) (see CPGR/93/9).

82. The Commission may wish to give higher priority to the elaboration of "Basic Agreements" between FAO and the holders of genebanks (see para 53).

IV.E Implications for the World Information System and Conservation Networks.

83. Work to establish the World Information and Early Warning System on Plant Genetic Resources, and to develop the *ex situ* network of base collections and the *in situ* network of conservation areas is already under way as part of the ongoing development of the Global System (see sub-section II.A). These activities contribute to Agenda 21 and are compatible with the objectives of the Convention.

84. It would be most logical for FAO/IBPGR cooperation to continue on these matters as part of the work of the Global System which is contributing to the Convention's objectives, with the Global System focusing especially/specifically on PGRFA. The Commission should also continue to develop the legal and policy aspects including those identified as outstanding by the Nairobi Resolution and on the trusteeship concept. The Early Warning System of the Global System has a particular role to play in assessing the danger of erosion of PGRFA, including through plant introductions.

IV.F Implications for the State of the World report, the Global Plan of Action and the International Technical Conference.

85. The convening to the Fourth Technical Conference on PGR, and the elaboration of PGR/SW and PGR/GPA are specifically mentioned in Agenda 21, giving new impetus to their implementation.

86. The elaboration of the PGR/GPA will play the major role in the implementation and development of Agenda 21 (Chapter 14, programme area G) into programmes, projects and activities for the conservation and sustainable use of PGRFA.

V. SUMMARY AND CONCLUSIONS.

87. In conclusion, the UNCED process has a number of implications for the Global System. It has:

- given considerable momentum to the development of the Global System and support for its objectives, particularly the elaboration of a Global Plan of Action;
- highlighted policy areas which need to be addressed within the global system, particularly (i) access to existing *ex situ* collections, and (ii) the question of Farmers' Rights; and
- provided a challenge to the Commission to reorganize its institutional arrangements and to modify the International Undertaking.

In this final section, a summary of the major implications which the Commission may like to consider are presented for each of the three areas analyzed above: programme development, policy and institutional.

Programme development.

88. Most of the technical and practical aspects of the Agenda 21 programme on PGRFA (Chapter 14 G) at an international level will be carried foreword either as routine work of FAO in cooperation with IBPGR and other relevant organizations and/or as part of the preparatory process for the International Technical Conference on PGR. The development of the World Information and Early Warning System on PGR (PGR/WIS), and of the networks of *in situ* conservation areas and of *ex situ* base collections will be important activities (see para 39) and will be promoted through the ICPGR. The advice of the Commission is sought on further ways by which FAO could assist countries in supporting the PGRFA aspects of the Convention on Biological Diversity and Agenda 21, and in contributing to the implementaion of the Country studies referred to in Resolution 2 of the Nairobi Final Act (see para 16).

89. As part of the International Technical Confernce and its preparatory process the following will be included:

- the development of the first State of the World Report;
- the development of the draft Global Plan of Action;
- the convening of the ICPGR itself;
- a review of financial resources and needs drawing upon PGR/GPA.

A detailed plan for the preparatory process of the is available in document CPGR/93/10 for the consideration of the Commission.

Policy aspects.

90. The Commission might wish to consider what action should be taken with regard to:

-- the issue of access to genetic resources in existing *ex situ* collections (see paras 43ff);
-- promotion of agreements between FAO and genebank holders (see para 53);
-- the realization of farmers' rights, *inter alia* the implementation of Resolution 3/91 (see paras 56-61);

91. The Commission might also consider what steps could be taken to secure a comprehensive agreement on access to genetic resources to facilitate access to germplasm, information, funds and technologies in a way which is equitable and efficient (see para 54).

Institutional and legal aspects.

92. The Commission might wish to give urgent attention to the implications of UNCED for its own work and its relationship to other relevant bodies. In particular the Commission might address the following issues:

-- ways and means to ensure cooperation with the interim intergovernmental Committee on the Convention on Biological Diversity and when established with the Conference of the Parties to the Convention (see paras 63, 65 and 69);
-- the role of the Working Group and ways of strengthening it (see para 68);
-- the revision of the Undertaking based on the existing text and annexes and the Convention (see paras 64 and 72-75).