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Provisional
Agenda

COMMISSION ON PLANT GENETIC RESOURCES

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OVERALL REVIEW OF FAO'S ACTIVITIES IN PLANT GENETIC RESOURCES
AND PROGRESS REPORT ON THE ESTABLISHMENT OF THE INTERNATIONAL FUND
FOR PLANT GENETIC RESOURCES

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KEY TO ACRONYMS

CARFIT	Comité de Acción para la Cooperación y Concertación Latinoamericana en Materia de Germoplasma Vegetal (Recursos Fitogenéticos)
CEAO	Communauté Economique de l'Afrique de l'Ouest
CGIAR	Consultative Group on International Agricultural Research
CIAT	Centro Internacional de Agricultura Tropical
CILSS	Comité permanent inter-états de lutte contre la sécheresse dans le Sahel
CPGR	Commission on Plant Genetic Resources
EEC	European Economic Community
FAO	Food and Agriculture Organization of the United Nations
IARC	International Agricultural Research Centre
IBPGR	International Board for Plant Genetic Resources
ICDA	International Coalition for Development Action
IGADD	Inter-governmental Authority on Drought and Development
IUCN	International Union for the Conservation of Nature and Natural Resources
NGO	Non-governmental Organization
RAFI	Rural Advancement Fund International
SAARC	South Asian Association for Regional Cooperation
SADCC	Southern African Development Coordination Conference
SOLAGRAL	Solidarités agro-alimentaires
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
Unesco	United Nations Educational Scientific and Cultural Organization
WRI	World Resources Institute
WWF	World Wide Fund for Nature

I. INTRODUCTION

1. This document includes (i) an overall review of FAO's work on plant genetic resources; (ii) the basic elements for a programme of work for the Commission in the light of its mandate; (iii) a progress report on the establishment, early results and perspectives of the International Fund for Plant Genetic Resources; and (iv) a list of points which appear to be of particular interest, and which the Commission may wish to discuss. It should be noted that Sections II and IV cover two items of the draft agenda for the Third Session of the Commission as approved by its Second Session. The main purpose of Section III is to help systematize the work of the Commission.

II. OVERALL REVIEW OF FAO'S WORK IN PLANT GENETIC RESOURCES

Development of a Global Framework for Plant Genetic Resources

2. At the request of its member countries, FAO has been developing since 1983 a global framework to coordinate actions in the field of plant genetic resources. This framework, which draws on FAO's long experience, and is in line with its overall mandate, includes (i) a basic legal document, the International Undertaking on Plant Genetic Resources, (ii) an international forum, the Commission on Plant Genetic Resources, and (iii) a financial mechanism, the International Fund for Plant Genetic Resources.

3. The International Undertaking on Plant Genetic Resources (Resolution 8/83 of the twenty-second Session of the FAO Conference) is a formal arrangement, the objective of which is to ensure that plant genetic resources, especially species of present or future economic and social importance, will be explored, collected, preserved, evaluated and made available, without restriction, for plant breeding and other scientific purposes.

4. The Commission on Plant Genetic Resources (established at the request of the 1983 FAO Conference) is a unique international global forum, where countries which are donors or users of germplasm, or both, can discuss matters related to plant genetic resources on an equal footing, and monitor the implementation of the principles contained in the International Undertaking. Relevant technical assistance agencies, intergovernmental organizations, development banks, non-governmental organizations and private foundations also attend these meetings. Through its debates, the Commission aims to reach consensus on areas of global interest, and compromise in areas where there is disagreement. Activities can also be harmonized and responsibilities agreed upon.

5. The International Fund for Plant Genetic Resources (established by FAO pursuant to Article 6 of the Undertaking) is intended to help ensure the conservation, and promote the utilization of plant genetic resources on a sustainable basis at world level. The Fund provides the channel for countries, intergovernmental and non-governmental organizations, and private industries and individuals, to fulfill their common responsibility to maintain the world's plant genetic diversity.

6. To date, 116 countries have either joined the Commission (93) or have agreed to adhere to the International Undertaking (84), or taken both steps.

7. The International Undertaking, the Commission and the Fund on Plant Genetic Resources cover the conservation and use of ex situ and in situ biological diversity in plant genes, genotypes and gene pools at molecular, population, species and ecosystem level.

8. As mandated by the Undertaking, the Commission has taken steps to develop an International Network of Base Collections in genebanks under the auspices or jurisdiction of FAO ('Article 7.1(a)); and a Global Information System on Plant Genetic Resources (article 7.1(e)), to promote the free availability of germplasm and data on the samples.

9. The Commission's First Session also recommended setting up an International Network of In Situ Protected Areas, and requested proposals, including information on logistic needs. Work towards this end has continued (see CPGR/89/8), including research on conserving whole ecosystems in which plants, animals and, microorganisms are constantly interacting. The Tropical Forestry Action Plan, launched in 1985, and since adopted by a large number of countries, international agencies and donors, includes the conservation of tropical forest ecosystems as one of its main component programmes.

10. The global framework formed by the International Undertaking, the Commission, and the Fund on Plant Genetic Resources should be seen in the broader context of FAO's work on genetic resources and, generally, biological diversity and sustainable development. Under FAO's Sub-programme for Animal Genetic Resources, regional animal gene banks have been established in Africa, Asia and Latin America, and a global animal genetic data bank is now in operation. FAO and UNEP in 1983 established a joint expert panel on the conservation and management of animal genetic resources. FAO is also active in the conservation and utilization of fish genetic resources, in particular by promoting the establishment of reserve areas to maintain genetic diversity in stocks in both lakes and rivers, and by participating in the elaboration of a code of practice to reduce the risks involved in introducing aquatic species. In 1980, FAO convened an Expert Consultation on Fish Genetic Resources, in cooperation with UNEP. Various FAO inter-departmental and other multi-disciplinary working groups, including the Inter-departmental Working Group on Environment and Energy, contribute to coordinating FAO's activities in the above-mentioned fields.

11. FAO cooperates with other international organizations and non-governmental organizations concerned with various aspects of genetic resources and biological diversity, in particular through the Ecosystem Conservation Group (FAO, UNEP, Unesco, IUCN), the UN System-wide Medium-Term Environment Programme (SWMTEP) and the Designated Officials on Environmental Matters (DOEM).

Summary of FAO Activities

12. FAO, since 1947, has played a leading role in promoting the collection, conservation and sustainable utilization of plant genetic resources. It has served as a world clearing house for information on germplasm and, to facilitate the interchange of material and information, a specialized newsletter was initiated by FAO in 1957, which still exists

as the FAO/IBPGR Plant Genetic Resources Newsletter. A parallel and complementary newsletter covering forestry species, Forest Genetic Resources Information, has also been published since 1972. In 1961, FAO convened the first international meeting on plant genetic resources, which led to the establishment, in 1965, of a Panel of Experts on Plant Exploration and Introduction; the Panel was to advise FAO and to provide international guidelines for the collection, conservation and exchange of crop germplasm. In 1968 a similar Panel of Experts on Forest Gene Resources was established, and FAO also set up a Crop Ecology and Genetic Resources Unit. In response to technical problems that arose, FAO convened and co-sponsored three International Technical Conferences on Plant Genetic Resources in 1967, 1973 and 1981 respectively, and an FAO/UNEP Expert Consultation on Forest Genetic Resources in 1980.

13. Up to the early 1970s FAO promoted, organized and took part in numerous activities on plant genetic resources conservation and utilization. With the establishment of IBPGR at FAO headquarters in 1974, work on plant genetic resources became a joint activity; FAO provided IBPGR's Secretariat, and made funds available for individual consultancies and contracts, and for travel and equipment. FAO's offices throughout the world assist in the implementation of the IBPGR field programme.

14. From 1974 onwards, work on food crops was largely undertaken in cooperation with IBPGR. Moreover, FAO field officers in centres of diversity of plant genetic resources made extensive collections of the wild and primitive forms of various crops for use in crop improvement programmes of the countries in which they were working, and for distribution to specialists elsewhere. Similarly, FAO's Forestry Department has promoted the conservation and utilization of the genetic resources of woody species, through support to national institutes in a number of developing countries.

15. The FAO Plant Introduction Newsletter published the first world list of germplasm banks and their custodians. FAO has also published world catalogues of the genetic stocks of rice, wheat, barley, grain legumes and forage plants, as well as inventories of the major collections. In addition to the annual report on Forest Genetic Resources Information, FAO has published a large number of documents giving information on germplasm, including the Survey of Crop Genetic Resources in their Centres of Origin, the World List of Seed Sources, the periodical FAO Seed Reviews, papers on agricultural and horticultural seeds and seed legislation, papers on tree improvement and on forest seed handling, a guide to the in situ Conservation of the Genetic Resources of Tropical Woody Species, and many technical guidelines on specific crops, and tree and shrub species.

16. FAO was instrumental in establishing a postgraduate training course on the conservation and utilization of plant genetic resources at the University of Birmingham, in the United Kingdom. This is now a focal point for training at all levels, and is of great value to the IBPGR and FAO fellowship programmes. FAO has long concentrated on the development of human resources through specialized training courses at various levels, workshops and seminars, study tours, and in-service training. Most FAO projects have a strong training component. During the last decade alone, more than 100 professionals from Asia, Africa and Latin America have received FAO fellowships to attend postgraduate training courses at universities and to undertake research at specialized institutes. FAO also actively promotes contacts between individual countries and institutions, so as to increase international awareness of the need to conserve genetic

diversity in economically important plants.

17. FAO emphasizes the urgent need to collect and conserve major crop germplasm, in particular in threatened areas subject to rapid degradation. FAO has received support for this from other UN agencies. For example UNEP made funds available to FAO for emergency collecting in the Sahel in 1974 and 1975, and also for training personnel for the developing countries. UNEP also co-financed with FAO a project on forest genetic resources between 1981 and 1987.

18. In 1978 FAO, with the assistance of UNDP, prepared a project to promote the conservation and exchange of genetic resources for plant breeding in Europe. A series of preparatory meetings and workshops led to the establishment in 1980 of the FAO/UNDP European Cooperative Programme for the Conservation and Exchange of Genetic Resources for Plant Breeding; currently 26 governments in Europe are participating in this programme. In 1984 operation of the project was transferred from FAO to IBPGR. A project on forest genetic resources, carried out in close collaboration with CILSS and IGADD, is underway in the Sudano-Sahelian zone of Africa with French financial assistance; it involves twelve countries.

19. FAO also implements many projects specifically designed to strengthen national capabilities and programmes on plant genetic resources. For example, in cooperation with UNDP, FAO is establishing or strengthening genebank facilities in the Republic of Korea, Nigeria and Turkey and has strengthened or helped create forestry seedbank facilities in a number of countries, including Chile, Guatemala, Malaysia and Vietnam. With funding from UNDP, FAO is also setting up a microbial/cell bank in the Republic of Korea. With Italian Funds in Trust, FAO is initiating a genetic resources programme in the Yemen Arab Republic. The Technical Cooperation Programme is supporting coconut germplasm development in Indonesia, and field surveys in Vietnam. The first project of the recently established International Fund for Plant Genetic Resources is for the evaluation of teff germplasm in Ethiopia. FAO, through its Regular Programme, has strengthened national activities in the field of forest genetic resources in Argentina, Burkina Faso, Chile, China, India, Mexico, Pakistan, Papua New Guinea, Peru, Senegal, Sudan, Tunisia, Vietnam and the People's Democratic Republic of Yemen.

20. The FAO Seed Exchange Laboratory implements a practical programme to assist national, regional and international institutes in plant introduction and seed exchange. Since its inception, the Laboratory has distributed over one million lots of seeds; during 1987 alone more than 34,500 samples of seeds of cereals, grain legumes, oil crops, vegetables, forage crops, industrial crops and fruit crops were dispatched to over 100 countries for experimental purposes. In collaboration with national institutes which generally also store seed on behalf of FAO, seeds of dry-zone multipurpose tree species have also been collected and distributed for evaluation and conservation to more than twenty developing countries. Similar arrangements exist for tree species of the humid tropics.

21. For the sake of brevity this section has concentrated on clearly identifiable plant genetic resources activities and does not cover those that are components of the numerous FAO activities in the fields of agricultural and forestry research and development. An example of these is provided by the FAO Legal Office which has assisted Costa Rica, Nigeria, Pakistan, Sudan and the Yemen Arab Republic in developing draft seed

legislation. That Office also acts as a data bank, collecting national legislation on genetic resources, and has produced legislative studies on wildlife, protected areas and other subjects related to the conservation of biological diversity.

III. ELEMENTS FOR A PROGRAMME OF WORK FOR THE COMMISSION

The Commission's Mandate

22. In 1983, pursuant to resolution 9/83 of the Twenty-second Session of the FAO Conference, and Article 9.2 of the International Undertaking on Plant Genetic Resources, the Eighty-fifth Session of the FAO Council established the Commission on Plant Genetic Resources. The Commission's Terms of Reference are:

- (a) to monitor the operation of the arrangements referred to in Article 7 of "The International Undertaking on Plant Genetic Resources",
- (b) to recommend measures that are necessary or desirable in order to ensure the comprehensiveness of the global system and the efficiency of its operation in line with "the Undertaking"; and in particular,
- (c) to review all matters relating to the policy, programmes and activities of FAO in the field of plant genetic resources, and to give advice to the Committee on Agriculture or, where appropriate, to the Committee on Forestry.

23. The First and Second Sessions of the Commission, in 1985 and 1987, discussed and made recommendations on a number of specific and sometimes controversial questions in order to clarify important issues. It now seems appropriate for the Commission to systematize its tasks.

Monitoring the Implementation of the International Undertaking

24. The implementation of the principles and articles contained in the International Undertaking is primarily the task of the governments and institutions adhering to it. Article 11 of the Undertaking states that, "at yearly intervals (governments and institutions) will provide the Director-General of FAO with information on the measures they are taking or propose to take to achieve the objective of this Undertaking." To facilitate the flow of this valuable information, the Commission's Secretariat will prepare a reporting questionnaire. The information will be analyzed by the Commission as part of the report on the State of the World's Plant Genetic Resources referred to in para 28 below. This report will enable the Commission to monitor the implementation of the Undertaking including the operation of the arrangements referred to in Article 7. For the present Session of the Commission, the information that would be provided in the report is given in this document together with documents CPGR/89/4, CPGR/89/6, CPGR/89/7 and CPGR/89/8.

Ensuring the Comprehensiveness of the Global System and the Efficiency of its Operation

25. The Commission's central role is to review continually the overall plant genetic resources situation and to monitor progress in fulfilling the objectives of the Undertaking. Responsibility for action lies with a wide range of bodies, including national governments national and international non-governmental organizations, regional organizations, IBPGR and the IARCs, and FAO and other UN agencies-, the Commission could also consider encouraging the participation of private industry.

26. Thus the Commission has to take into account work on various aspects of genetic resources by a number of autonomous bodies, each with its own mandate and priorities. Because of this, there is the possibility of some overlap, and at times duplication, of actions underway or planned. For example, UNEP has passed a resolution requesting that the desirability and possible form of an umbrella convention on biological diversity be studied. This convention could overlap with the Undertaking, as could some of the articles in a proposed international treaty on biological diversity being discussed by IUCN. Both UNEP and IUCN include in their proposals the possible establishment of some sort of governing body and an international fund that could overlap with the FAO Commission and Fund.

27. The IUCN, WWF, WRI and the World Bank are formulating a Biological Diversity Action Plan which includes plant genetic resources. The World Resources Institute, in cooperation with UNDP, has embarked on an International Conservation Financing Project which also includes plant genetic resources. The CGIAR through the IBPGR and the IARCs as well as other NGOs (ICDA, RAFI, SOLAGRAL, etc.) in developed and developing countries support projects, programmes and activities on plant genetic resources at the national, regional and global levels. WWF is launching a three-year campaign on plant genetic resources in April 1989. The Seed Action Network International, which includes over 50 NGOs in the EEC, was established in 1985 to "prevent the erosion of genetic diversity and to promote popular control over genetic resources". All these initiatives indicate a growing interest in, and concern about plant genetic resources conservation and utilization, which further reinforce the need for coordination.

28. In view of this a report on the State of the World's Plant Genetic Resources will be prepared periodically by the FAO Secretariat, in cooperation with the various agencies concerned, for the Commission's review. In addition, a continuing dialogue is needed with the various organizations actively engaged in plant genetic resources and related activities, so as to harmonize the tasks referred to in Article 9 of the International Undertaking.

29. The implementation of the International Undertaking requires the development of certain support mechanisms: (i) an "internationally coordinated network of national, regional and international centres including an international network of base collections in genebanks under the auspices or the jurisdiction of FAO" as per Article 7.1(a) of the International Undertaking; (ii) a "global information system, under the coordination of FAO", as per Article 7.1(e) plus an early warning system as per Article 7.1(f); and (iii) "financial security" mechanisms as per Article 8. The implementation of the Undertaking also requires: (iv) expanded assistance to local, national, regional and global plant genetic resources programmes as per Articles 3, 4, 6 and 7,

(i) Development of an Internationally Coordinated Network of Centres

30. In October 1987 the Director-General of FAO sent to Member Nations and to various international institutions a Circular State Letter enquiring about their readiness to participate in the network of base collections under FAO auspices or jurisdiction. A progress report on this matter, including a detailed analysis of the replies and information on the possible financial and administrative implications that the arrangements might entail, is provided in CPGR/89/4.

31. A number of non-governmental organizations have already undertaken valuable work in establishing international networks of ex situ collections. These include IBPGR for genebanks containing major crops and their wild relatives, the crop-based IARCs for their specific crops, and the IUCN for botanical gardens. In all these cases, however, there is no intergovernmental body able to receive a legal commitment by a national government to place germplasm under international auspices as part of the observance of the Undertaking. It is proposed that FAO and the institutions promoting the existing informal networks collaborate fully, so as to reinforce the current bona fide commitments of these genebanks by agreements at governmental level. When countries agree to put all or part of the germplasm in their collections under the auspices or jurisdiction of FAO this would provide a legal and political umbrella, and institutions such as IBPGR, the IARCs and IUCN could provide their technical and managerial expertise, and propose standards for genebanks which the FAO Commission might endorse. Document CPGR/89/7 provides more detailed information on existing networks of base collections and document CPGR/89/6 explores ways in which FAO and IBPGR might collaborate in this matter.

32. A further element in the Commission's work programme will therefore be to promote consultations with these institutions, and to endorse methods of harmonizing responsibilities, perhaps through letters of understanding. A series of consultations could also be held to develop arrangements whereby FAO could be given early warning of hazards threatening the operation of institutions holding base collections. The availability of funds to meet such situations could also be discussed, pursuant to Articles 7.1(f), 8.2 and 8.3 of the Undertaking.

(ii) Development of Global Information System and an Early Warning System

33. Although the establishment of an international information system was discussed during the Commission's Second Session, and a number of recommendations made, their implementation has been postponed due to financial constraints. The Commission may now wish again to recommend the establishment of a flexible but comprehensive information system, in cooperation with those organizations already working in the field.

34. A number of organizations are working to develop plant genetic resources databases. These include IBPGR and the IARCs for crops, and the IUCN, the WWF and UNEP for wild species and ecosystems. FAO has also gathered a considerable amount of data through the Seed Information System, and its Cultivar Subsystem; other data are available through its information systems, CARIS and AGRIS. The WWF, the IUCN and UNEP have begun a most important initiative in creating a World Conservation Monitoring Centre as a global database for the documentation and

dissemination of information on the state of the planet's threatened species, habitats and living resources. It is necessary to link these various efforts. It is proposed that FAO collaborate closely with these and other bodies in establishing a Global Information System as requested in Article 7.1(e) of the Undertaking.

35. As part of the Global Information System, an Early Warning System must be established to inform FAO, or any institution designated by FAO, of any hazards that threaten the efficient maintenance and operation of a centre, with a view to prompt international action to safeguard the material maintained by the centre (Article 7.1(f)). The Commission could also consider the desirability of using such a system to cover the need for early information leading to emergency action against drastic genetic erosion or extinction in situ resulting from natural disaster or human activity (Articles 3.2, 4.2).

(iii) Development of Financial Security Mechanisms

36. Part IV of this paper reports on progress in the establishment of the International Fund for Plant Genetic Resources, but it is necessary to highlight the wider financial needs of plant genetic resources conservation generally, bearing in mind that the Undertaking requests adhering governments and financing agencies, individually and collectively, to consider adopting the necessary measures to place this work on a "firmer financial basis" (Article 8.1). It is important to realize that the Undertaking does not foresee that all funds devoted to plant genetic resources activities need pass through mechanisms such as the International Fund. Undoubtedly, the greatest financial commitment will have to be at national and regional level. The Commission, however, to be able to play its international coordinating role should have a full picture of all funds currently being deployed as well as an estimation of the total funds required over a given period.

(iv) Assistance to Local, National, Regional and Global Plant Genetic Resources Programmes

37. Pursuant to Articles 3, 4, 6 and 7, governments adhering to the Undertaking should promote and assist developing countries to carry out a very wide range of activities, including exploration and collection, conservation in situ and ex situ, the characterization and documentation of germplasm, plant introduction, evaluation and selection, germplasm enhancement and breeding, variety testing, and seed production and distribution. Policy, legislation, infrastructure and programme development, training and research, including in particular the development of biotechnology, are all needed.

38. In this area, the main task of the Commission is to promote action and to harmonize efforts and prevent duplication so that the best use is made of the funds, facilities and technical skills available. This implies working through a wide range of national and regional institutions, and collaboration with the IBPGR and other CGIAR institutes, with the IUCN, the WWF and other non-governmental organizations as well as with UNEP, Unesco and other intergovernmental organizations. FAO's field programme has a special role to play, particularly in filling important gaps and linking conservation with development, whether individual projects are funded by FAO, UNDP or other members of the United Nations family, by Trust Fund donors, or by the International Fund for Plant Genetic Resources.

39. It is a matter of priority to assist developing countries to establish national and regional coordinating bodies. The global strategy demands a scientifically capable and institutionally strong counterpart in each country. FAO will provide advice to countries for the formulation of national strategies and policy, with due recognition being given to the need to help developing countries prepare and enact the necessary legislation. Local efforts and the involvement of farming communities in genetic conservation is another key to success. It is important to enhance such efforts through an increased participation of the numerous NGOs active and competent in this field. Some countries have already established National Committees that are doing valuable work.

40. Promoting regional cooperation will also be a priority, as the task will often be beyond the resources of individual countries. FAO has already directly or indirectly supported the establishment and activities of CARFIT in Latin America, SAARC in South Asia, the Regional Committee for South East Asia, SADCC in Southern Africa, and the European Cooperative Programme on Plant Genetic Resources. Regional organizations could devote particular attention to the areas of diversity within their respective regions of the major food, feed and fibre crops, and other species of social and economic importance. These areas also provide the best agroecological systems for the effective evaluation and multiplication of such species.

41. At the global level, the approach adopted by the Tropical Forestry Action Plan has much to recommend it as an effective mechanism to deliver substantial aid from a variety of sources, according to scientifically valid principles, to where it is most needed. On a technical level, FAO will continue to put emphasis on the phytosanitary and quarantine aspects of plant genetic resources work. It will also be necessary to explore international agreements to regulate such matters as the financing of conservation of plant genetic resources, the testing and release of genetically engineered organisms, minimum standards for storage in international base collections, and a code of conduct on the application of biotechnology to plant genetic resources. The Commission will rely on FAO's legal expertise in advancing this work.

Reviewing FAO Policies, Programmes and Activities on Plant Genetic Resources

42. To facilitate the task of the Commission the FAO Secretariat will periodically present to the Commission (i) a technical review of FAO programmes and activities on matters related to plant genetic resources; and (ii) a review of FAO's current and proposed policies on matters related to plant genetic resources.

43. During 1988-89 FAO's plan of action for plant genetic resources concentrates on: (i) serving the Commission and its Working Group, and (ii) assisting member countries, in complementarity with the IBPGR programme, with special emphasis on the development and application of policies and strategies to strengthen plant genetic resources work; training activities on the practical aspects of plant breeding and the use of improved varieties; and support to the evaluation of genebank material and the collection and distribution of data.

44. The FAI programme will have a catalyzing and multiplying effect, by concentrating on institution building and human resources development in

order to increase self-sufficiency in developing countries; it will actively promote research and development programmes aimed at assisting small scale farmers. The FAO programme will also strengthen and develop infrastructures for the better conservation and sustainable use of plant genetic resources, including the upgrading of genebanks willing to be part of the FAO network of base collections, and developing national databases for germplasm conservation and utilization.

IV. PROGRESS REPORT ON THE INTERNATIONAL FUND FOR PLANT GENETIC RESOURCES

45. This part of the paper should be seen within the general context of the discussion of development of financial security mechanisms in paragraph 36 above.

Establishment

46. Article 6(d) of the Undertaking provides that international cooperation will be directed to "considering measures, such as the strengthening or establishment of funding mechanisms, to finance activities relating to plant genetic resources", that is, the activities proposed under Articles 6 and 7. At its Second Session the Commission considered a background study for the establishment of an International Fund for Plant Genetic Resources (document CPGR/87/10), and recommended that the Director-General take steps to carry out this proposal.

47. In October 1987, the Director-General addressed a Circular State Letter to all FAO Member Nations and some international institutions, announcing the "establishment of the International Fund for Plant Genetic Resources as, an FAO Trust Fund, and inviting contributions from governments, intergovernmental organizations, non-governmental organizations, industry and individuals. The Fund has been structured so that lump sum or regular contributions may either be earmarked for specific activities, or be for the Fund generally, that is, for the implementation of the principles contained in the International Undertaking. Donors will receive periodic reports of the activities financed by them.

48. Responses to this letter are still being received, and it is too early to analyse the replies exhaustively. There seem, however, to be four categories of reply: (i) those giving support to the Fund, by a contribution either for general purposes, or for specific activities in line with the Undertaking; (ii) those supporting the Fund in principle, but making no immediate financial commitment; (iii) those not wishing to directly support the Fund because of other commitments, either to an extensive national plant genetic resources programme, or to the provision of bilateral support in this field; and, (iv) those requesting further information on the Fund.

Contributions

49. Spain has offered US\$ 195,000 (of which US\$ 75,000 have already been received) for training activities in Latin America; UNEP has offered US\$ 25,000 for training activities in Africa and Latin America; CEAO has offered US\$ 70,500 for a regional project formulation mission to CEAO and CILSS member countries; and CS Fund, a private foundation in the United

States, has donated US\$ 7,500 to support work on plant genetic resources in developing countries. Certain non-governmental organizations, especially ICDA through its Seeds Campaign, have promoted the Fund through advertising or, fund-raising campaigns. As a result, small contributions have been received from numerous individuals for-grass-roots and rural community projects for the conservation and sustainable utilization of plant genetic resources in developing countries, and for maintaining genetic diversity. Pioneer, a private seed corporation in the United States of America, has offered up to US\$ 50,000 for training activities. Contributions in kind have been offered by Argentina, Spain and Ethiopia, through the provision of cold storage space to store germplasm under FAO jurisdiction without charge. Other contributions in kind, including germplasm, have been offered by Mexico, Panama and CIAT. It is worth noting that there are contributors to the Fund from each of the following categories: governments, United Nations organizations, inter-governmental organizations, international centres, NGOs, and private foundations, corporations and individuals.

Perspectives

50. The Secretariat will contact individual countries which have not yet replied, and attempt to encourage further contributions, or develop other measures of support. At the same time, the Secretariat will broaden its contacts with NGOs and industry, and seek potential donors.

51. The growing public interest in plant genetic resources is reflected in the number of NGOs already active in this field. The possibility of collaborating with bodies such as the ICDA Seeds Campaign to raise funds should be considered.

52. It will be necessary to define more clearly the role of the Fund, both in plant genetic resources work in support of the principles of the Undertaking generally, and in terms of the types of project to be carried out. The precise role of the Fund in relation to the FAO Network of Base Collections also requires definition. In this context, Articles 8.2 and 8.3 of the Undertaking specifically require the establishment of mechanisms whereby funds can immediately be mobilized to meet situations of the likely loss of germplasm through the breakdown of a genebank (Article 7.1(f)). The use of the Fund to mobilize resources in order to prevent the danger of germplasm extinction referred to in Articles 3.2 and 4.2 of the Undertaking also requires consideration.

53. Several forms of aid-in-kind provide ways in which developing countries, even the smallest ones, can contribute to the implementation of the Undertaking. Training programmes in national genebanks in the developing world for nationals of other countries would be a very useful form of technical cooperation. Other forms of direct support could include the donation of storage facilities, the donation of duplicate sets of germplasm samples, the provision of data already available or resulting from characterization and evaluation undertaken, and the provision of facilities for the multiplication of germplasm.

54. The ultimate role and scope of the Fund will depend in part upon the degree to which the Commission is able to generate support for plant genetic resources activities generally. The Fund should be used, above all, to assist important activities which for one reason or another are not being carried out through other means. It should concentrate on strengthening the capabilities of developing countries. Not all the

activities supported by the Fund need be implemented by FAO; national, regional and international technical organizations could also play an important role.

55. The Fund can be used to translate into action the common responsibility of mankind to preserve and promote the utilization of plant genetic resources on a sustainable basis. It can allow those that benefit from the use of germplasm to partially cover the cost of its conservation by farmers everywhere. At the request of the Commission, this is further discussed in document CPGR/89/3. The Fund can help ensure the equitability of the global system envisaged in the International Undertaking, in which some countries provide mainly germplasm, and others mainly funds and technology. The existence of the Fund provides a unique mechanism, administered under intergovernmental supervision, to channel regular, obligatory levies and taxes, to stimulate and support the collection, conservation, evaluation and sustainable utilization of germplasm throughout the world, for the benefit of present and future generations.

V. ITEMS FOR DISCUSSION

56. As requested by the Commission, this paper has provided a short historical review of FAO's activities on the field of plant genetic resources and a progress report on the establishment of the International Fund. In addition, this document has presented a number of proposals to systematize the Commission's work. The Commission may wish in particular to discuss and give its views on the following points:

- the desirability and characteristics of a report on the State of the World's Plant Genetic Resources to be prepared by the FAO Secretariat in cooperation with the various agencies concerned, and including information on the measures taken by Governments adhering to the Undertaking. This report would include the necessary information for the Commission to be able to monitor the implementation of the Undertaking and make recommendations to ensure the comprehensiveness of the Global System and the efficiency of its operation (paras 24, 28 and 36)
- ways and means to promote a continuing dialogue between FAO and other organizations/institutions concerned with plant genetic resources and to harmonize their responsibilities (paras 28 and 32)
- the establishment of a Global Information System on Plant Genetic Resources and the arrangements for linking it with other related information systems (paras 33, 34)
- the development of arrangements whereby FAO would be given early warning of hazards threatening the operation of institutions holding base collections and with the possibility of funds being made readily available to meet such situations (paras 32, 35 and 52)
- the desirability and possible form of an Action Plan on Plant Genetic Resources to deploy substantial aid to developing countries from a variety of sources along the model of the Tropical Forestry Action Plan (para 41)
- the precise objectives, priorities and operating methods of the International Fund in the light of the concept of "financial security" described in Article 8 of the Undertaking (paras 52 to 55)

57. In support to the Commission's work, this document proposes that the FAO Secretariat will!

- prepare questionnaires to facilitate the yearly reports by countries to the Director-General of FAO referred to in Article 11 of the Undertaking (para 24)
- periodically present to the Commission a technical review of FAO programmes and activities on matters related to plant genetic resources (para 42)
- present to the Commission a review of FAO's current and proposed policies on matters related to plant genetic resources (para 42)
- contact countries, organizations and industry to encourage further contributions to the Fund (para 50).

MEMBERS OF THE FAO COMMISSION ON PLANT GENETIC RESOURCES
AND/OR COUNTRIES WHICH HAVE ADHRED TO THE
INTERNATIONAL UNDERTAKING ON PLANT GENTIC RESOURCES

<u>AFRICA</u>	<u>ASIA AND THE SOUTH WEST PACIFIC</u>	<u>EUROPE</u>	<u>LATIN AMERICA AND THE CARIBBEAN</u>
BENIN 1/	AUSTRALIA 1/	AUSTRIA 1/2/	ANTIGUA AND BARBUDA 2/
BOTSWANA 1/	BANGLADESH 1/2/	BELGIUM 2/	ARGENTINA 1/2/
BURKINA FASO 1/2/	KOREA DPR 1/2/	BULGARIA 1/2/	BARBADOS 1/2/
CAMEROON 1/2/	FIJI 2/	CYPRUS 1/2	BELIZE 1/
CAPE VERDE 1/2/	INDIA 1/2/	CZECHOSLOVAKIA 1/	BOLIVIA 1/2/
CENTRAL AFRICAN REP. 1/2/	INDONESIA 1/	DENMARK 1/2/	BRAZIL 1/
CHAD 1/2/	KOREA, REP. OF 1/2/	FINLAND 1/2/	CHILE 1/2/
CONGO 1/2/	NEPAL 2/	FRANCE 1/2/	COLOMBIA 1/2/
COTE D'IVOIRE 2/	NEW ZEALAND 2/	GERMANY, F.R. 1/2/	COSTA RICA 1/2/
ETHIOPIA 1/2/	PAKISTAN 1/	GREECE 1/2/	CUBA 1/2/
GABON 2/	PHILIPPINES 1/2/	HUNGARY 1/2/	DOMINICA 1/2/
GAMBIA 1/	SOLOMON ISLANDS 2/	ICELAND 1/2/	DOMINICAN REP. 1/2/
GUINEA-BISSAU 1/	SRI LANKA 1/2/	IRELAND 1/2/	ECUADOR 1/
KENYA 1/2/	THAILAND 1/	ISRAEL 1/2/	EL SALVADOR 1/2/
LIBERIA 1/2/	TONGA 2/	ITALY 1/	GRENADA 2/
MADAGASCAR 1/2/		LIECHTENSTEIN 2/	GUATEMALA 1/
MALAWI 2/		NETHERLANDS 1/2/	GUYANA 1/
MALI 1/2/		NORWAY 1/2/	HAITI 1/2/
MAURITANIA 1/2/		POLAND 1/2/	HONDURAS 1/2/
MAURITIUS 1/2/		PORTUGAL 1/	JAMAICA 2/
MOROCCO 1/		SPAIN 1/2/	MEXICO 1/2/
MOZAMBIQUE 2/		SWEDEN 1/2/	NICARAGUA 2/
NIGER 1/		SWITZERLAND 1/2/	PANAMA 1/2/
RWANDA 1/		TURKEY 1/2/	PARAGUAY 2/
SENEGAL 1/2/		UNITED KINGDOM 1/2/	PERU 1/2/
SIERRA LEONE 1/		YUGOSLAVIA 1/	SAINT CHRISTOPHER AND NEVIS 1/
SUDAN 1/			SAINT LUCIA 1/
TOGO 1/			SAINT VINCENT AND THE GRENADINES 1/
UGANDA 1/			URUGUAY 1/
ZAMBIA 1/2/			VENEZUELA 1/2/
ZAIRE 1/			
ZIMBABWE 2/			
	<u>NEAR EAST</u>		
AFGHANISTAN 1/	LEBANON 2/		
BAHRAIN 2/	LIBYA 1/2/		
EGYPT 1/2/	OMAN 2/		
IRAN, ISLAMIC REPUBLIC OF 1/2/	SYRIA 1/2/		
IRAQ 2/	TUNISIA 1/2/		
KUWAIT 2/	YEMEN ARAB REP. 1/		
	YEMEN, P.D.R. 2/		

1/ Members of the Commission

2/ Countries which have adhered to the Undertaking

The above totals 116 countries which have become members of the Commission (93) or which have adhered to the Undertaking (84), or both.