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THE PROGRAMME OF IBPGR AND FAO/IBPGR COOPERATIVE AGREEMENTS

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I. INTRODUCTION

1 In 1971 FAO elaborated proposals for expanding international cooperation in the field of plant genetic resources. .After further discussions in the framework of the United Nations Conference on the Human Environment in 1972 and then in the Technical Advisory Committee (TAC) of the Consultative Group on International Agricultural Research (CGIAR), the International Board for Plant Genetic Resources (IBPGR) was established in 1974 as one of the international institutes financed by the CGIAR, which is jointly sponsored by FAO, United Nations Development Programme (UNDP) and the World Bank. With FAO providing the Secretariat to the Board, the IBPGR first met in June 1974. FAO, as an intergovernmental organization, provided the necessary institutional framework for IBPGR's work in the field. For the first twelve years, FAO and IBPGR activities were carried out jointly. The Chief of the FAO Crop Genetic Resources Centre also served as the Executive Secretary of IBPGR. With the growth of the IBPGR programme, the Board of Trustees felt the need to give IBPGR a new status to permit it to evolve into a fully autonomous institution.

2 The Third Session of the Commission on Plant Genetic Resources considered a paper on IBPGR Activities and on FAO's Relationship with IBPGR. The Commission noted the proposed change (just announced by the IBPGR Board) in IBPGR's status and its decision to separate from FAO and to relocate its headquarters to a Nordic country. The Commission considered the implications of this and "recommended that every effort be made to carefully develop proper arrangements for continued effective cooperation between IBPGR and FAO, and for ensuring effective complementarity between the two organizations". The Commission "stressed that much of IBPGR's success depended on its relationship with FAO, and therefore encouraged IBPGR to remain either within FAO Headquarters, or in Rome, which would also favour continued links between developed and developing countries in work". The Commission further recommended that a Memorandum of Understanding be prepared "taking into account the objectives of the International Undertaking on Plant Genetic Resources." The Commission also "proposed that its Working Group assist FAO in these matters, and monitor progress."

3 Following the Third Session of CPGR, a CGIAR committee on IBPGR was asked to assist in developing a better definition of the programme relationship between IBPGR and FAO as well as in determining an appropriate location for IBPGR. The committee recommended the establishment of IBPGR as an international institution, independently managed and located preferably near FAO Headquarters in Italy. The CGIAR endorsed this recommendation at its October, 1990, meeting.

4 On the basis of the guidance provided by the Commission and the CGIAR in their discussions, FAO and IBPGR developed two Memoranda of Understanding, one on Programme Cooperation and the other on Interim Financial and Administrative Arrangements, both signed on 21st September 1990. Whereas the latter will govern the FAO/IBPGR administrative relationship until IBPGR separates from FAO, the former is of more lasting nature, and concerns FAO/IBPGR programme cooperation both before and after IBPGR's administrative separation from FAO. In the MOU on Programme Cooperation IBPGR "recognizes the intergovernmental authority of the Commission on Plant Genetic Resources." and "subscribes to the principles of the International Undertaking and will collaborate with FAO in its implementation". Under the terms of the memorandum, IBPGR will report to the Commission on its overall work programme.

5 The purpose of the second part of this paper is to present a report on the programme of IBPGR which includes the activities that were carried out during 1989 and 1990, and the new developments related to the IBPGR Strategic Plan, the External Programme and Management Review, and the new directions for IBPGR. This second part has been prepared by IBPGR. The third part of the paper deals 'with the FAO and IBPGR cooperative arrangements and their joint activities.

6 The paper seeks the guidance of the Commission in the further development of this cooperation and the relationship of FAO and IBPGR and of the Commission and IBPGR.

II. IBPGR'S SCIENTIFIC PROGRAMME IN 1989/90

7 IBPGR's activities are currently divided into three programmes: Field, Research, and Communications and Library Services. Throughout 1989 and 1990, efforts were made to integrate these programmes - described below - and these efforts are reflected in IBPGR's new Strategic Plan, which will give direction to the organization in the 1990's (see para. 23). However, for the sake of simplicity, IBPGR's 1989 and 1990 activities are described below within the currently existing programme structure.

Field Programme

8 IBPGR's outposted offices, staffed by regional coordinators, are primarily concerned with the development and maintenance of direct contacts with "national genetic resources programmes". These contacts may involve providing assistance to "national programmes" in the formulation of projects for institution-building, transmission of proposals to and from Headquarters staff and practical hands-on training of scientists and technicians in national and regional genebanks.

9 By 1989, IBPGR had established a system of regional offices strategically located in 7 countries throughout the world (Mexico, Colombia, Italy, Niger, Kenya, India and China). For economic reasons, the office in Washington DC was closed last year and the duties of that office were transferred to the regional office in Mexico. In addition to the regional offices, IBPGR maintains three seed handling units, each with a specific geographic responsibility. The offices are located in Singapore, Wakehurst (UK) and Turrialba (Costa Rica). Two full-time plant collectors are based in Cyprus and one in Zimbabwe.

10 A total of 9,758 germplasm samples from 28 countries was collected in 1989/90, either directly by IBPGR collectors or on a contract basis. This germplasm has been deposited in genebanks world-wide, in many cases with the help of the IBPGR Seed Handling Units which processed 4,048 samples in 1989/90.

11 The IBPGR documentation and characterization programme was internally reviewed in 1989. The review highlighted the importance of central crop databases to the global _genetic resources effort and recommended their further development in cooperative programmes and/or crop networks. IBPGR published 6 descriptor lists in 1989/90 and supported 7 national programmes in the purchase of computer equipment. Twenty characterization projects were carried out in 15 countries. IBPGR also updated earlier versions of directories on cereals, vegetables, forages and tropical fruits.

12 An international crop networks programme initiated by IBPGR brings together germplasm collectors, curators, researchers, breeders and users into networks based on crop genepools. It is anticipated that crop networks will ensure better conservation of the existing diversity, a wider use of underexploited germplasm collections, provide better support to crop improvement programmes, and involve developing countries more closely in genetic resources activities. The crop networks programme, launched in 1988, is thus far promoting the creation of networks for it crops: barley, maize, groundnut, medics, banana, sweet potato, okra, beet, rice, buckwheat and coconut. Eight meetings have been held to set up networks covering okra, rice, barley, groundnut, beet, Musa, medics and sweet potato and 7 international crop databases have been established or strengthened. It is anticipated that eventually crop networks will be established for all of the world's major crops and many of the minor ones as well.

13 Implementation of the 1988 internal training review began in 1989 with special attention to the needs of national genebanks. IBPGR supported training for 201 scientists and technicians in 1989/90 through post graduate fellowships, short specialized technical courses and individual programmes. In December 1989, 11 MSc alumni participated in a refresher course, held at the University of Birmingham, UK and at IBPGR Headquarters to celebrate both the 20th anniversary of Birmingham's MSc Course on Plant Genetic Resources and the 15th anniversary of IBPGR.

Research Programme

14 The main purpose for establishing a Research Programme in IBPGR was to give a stronger scientific basis to the organization's work. Close integration with other activities of IBPGR was therefore an important goal. Significant progress has already been made in developing a Research Programme that both complements the well-established Field Programme and is an integral part of the total IBPGR programme.

15 IBPGR-sponsored research projects on ultra-dry seed storage yielded promising results in 1989/90. Other seed conservation projects studied the effects of moisture and temperature on seed longevity, preservation techniques for recalcitrant seeds, genetic stability during storage and regeneration, and problems of seed dormancy.

16 In 1989/90, IBPGR continued the development of techniques for in vitro collecting, and for storage of germplasm in vitro by slow growth and cryopreservation. Investigations were also carried out into the stability of stored in vitro cultures. The IBPGR-Centro Internacional de Agricultura Tropical (CIAT) Pilot In Vitro Active Genebank completed its three-year test of model standards of operation. A visiting scientist joined the latter project to develop DNA fingerprinting techniques for cassava.

17 In the area of plant pathology and quarantine, IBPGR and FAO have worked together since 1988 on technical guidelines governing the safe movement of germplasm (see Part III, para 39). Other projects in this area have included the development of a diagnostic probe for banana bunchy top virus and non-destructive seed health testing.

18 A number of genetic diversity projects continued in 1989/90. New initiatives included an investigation of genetic diversity in Vigna and an ecogeographical survey of wild relatives of citrus and mango in Indonesia. Other projects surveyed current information on breeding systems and reviewed the scientific basis for regeneration.

Communications and Library Services Programme

19 During 1989/90, IBPGR produced over 40 publications, including issues of the FAO/IBPGR Plant Genetic Resources Newsletter and several numbers of the IBPGR Regional Newsletters. IBPGR continued to distribute its publications free of charge and concerned itself during this period with revising its mailing list as a means to maximize the impact of its publications. At the end of 1990, a 60% return had been received on mailing list questionnaires. This impressive figure shows the interest in IBPGR publications throughout the plant genetic resources community.

20 Over the past two years, the Public Affairs Office has been involved in the planning and development of a public awareness

project on genetic resources in Latin America. The project seeks to educate journalists from influential Latin American journals and newspapers - the so-called "gatekeepers" - as a means to reach the project's target audience - policy makers and those who influence them. Carried out in collaboration with the International Potato Centre (CIP), CIAT, International Centre for the Improvement of Maize and Wheat (CIMMYT), Diversity Magazine and Interpress Services, the project consists of training exercises and visits to the Latin American CGIAR centres by journalists as well as the production of specifically tailored information materials. A further example of inter-centre collaboration in the area of public awareness was the publication in 1989 of "Partners in Conservation", a booklet describing the plant genetic resources activities of each of the CGIAR centres. Another important public affairs initiative in 1989/90 was the publication of the first two issues of "Geneflow", a magazine targeted to policy makers and non-governmental organizations and concerned with the Earth's plant genetic resources.

21 Just over a year ago, a Librarian was appointed to set up a library and information service to support IBPGR's programme activities and to meet the needs of the plant genetic resources community. The Library aims to provide information, primary documents and bibliographic data on plant genetic resources and to store, preserve and disseminate IBPGR project documents. The Library serves the immediate information needs of IBPGR staff through the provision of basic services: a current awareness service, a bibliographic research service, document supply and reference services.

European Cooperative Programme (ECP/GR)

22 From 1980 FAO operated a European programme on plant genetic resources with funding from the UNDP. From 1983 this programme has been the responsibility of IBPGR. At its fourth meeting in 1989, the Technical Consultative Committee of the ECP/GR recommended extending the programme through 1992 as a means to strengthen its activities within the framework of the crop network system. IBPGR has been requested and has agreed to execute Phase IV of ECP/GR, which has been renamed the European Cooperative Programme on Crop Genetic Resources Networks to more accurately reflect the new focus of the programme. Nearly all European countries actively participate in ECP/GR, including the U.S.S.R., following the signature of a Memorandum of Understanding between IBPGR and the Vavilov Institute in June 1990.

CHARTING A NEW COURSE

Strategic Plan

23 An important activity commenced in 1990 was the development of a new strategic plan for IBPGR. It was considered crucial during this process to receive extensive feedback from national

programmes, CGIAR Commodity Centres and others on the perception of IBPGR's performance and the role that they would like to see the organization play in the future.

24 In the three month period from March to June 1990, six meetings were held in the regions specifically for the purpose of consulting with national programme representatives. These meetings were organized by the IBPGR regional coordinators in New Delhi (for the South Asia region), Los Baños, Philippines (for East and Southeast Asia), Bouake, Côte d'Ivoire (for West, East and Southern Africa), Turrialba, Costa Rica (for North and Central America and the Caribbean), La Paz, Bolivia (for South America), and Rome (for North Africa, South West Asia and Europe). IBPGR management was represented at each meeting and IBPGR Trustees from the respective regions were also involved. The consultation process was an enormous success, with more than 80 scientists from 40 countries taking part. The meetings resulted in widespread approval of the general strategic principles proposed by the IBPGR, and generated both new and very positive suggestions, and uninhibited discussions conducted in a cooperative and cordial atmosphere.

25 The draft Strategic Plan is currently under review by TAC and the CGIAR and some of the proposed major elements are described in paras 29-33 of this paper.

External Programme and Management Review

26 The Third External Programme and Management Review of IBPGR took place during September 1990 - January 1991. The review process, instituted by CGIAR, is undertaken every 5 years as a means to assure Group members that the Centres carry out their objectives in accordance with declared policies and under accepted international standards. The external reviews therefore reinforce accountability within the system. The External Review of IBPGR considered such matters as the organization's mandate, strategy and programme, values and culture, management and programme organization, resources, facilities and their management, external relationships and impact.

27 The review panel interacted with nearly all outposted staff and with regional and national programme personnel during their visits to a number of countries (Brazil, China, Costa Rica, Ethiopia, India, Kenya, Mexico, Philippines, Singapore, Switzerland, Thailand, the United Kingdom and Zambia) in the period September - December 1990. The main phase of the review took place in Rome from 7 to 25 January 1991.

28 The report of the review has been considered by IBPGR and by TAC and will be submitted to the CGIAR in May 1991 for its endorsement. Thereafter the report will be available for wider circulation.

New Directions

29 IBPGR's plan for the coming decade is to further decentralize its activities by strengthening the existing regional offices and possibly opening an eighth office in Europe. To meet the need for stronger and more regular contact with the national programmes - considered by IBPGR to be the building blocks for any truly global genetic resources effort - the regional offices will assume greater responsibilities and will have access to more of the organization's resources, eventually taking on full responsibility for coordinating all activities within the regions. The structural arrangement of the 1980's, which subdivided IBPGR's programme on the basis of scientific disciplines and thematic activities, will be broken down to promote a holistic approach to problem-solving and to ensure that the transfer of technology and the dissemination of information in appropriate ways are integral parts of every activity. The demarcation between the Field and Research Programmes, for example, will be eliminated and all information and skills available in IBPGR will be drawn upon, as appropriate, to address problems from an interdisciplinary perspective.

30 IBPGR will seek to promote the formation of international crop genetic resources networks and to encourage and assist all countries with an interest in a particular crop to join the relevant network. Arrangements for international collaboration and sharing of data and responsibilities for germplasm and data management will be made through the networks with IBPGR taking a guiding role when necessary.

31 IBPGR intends, upon request, to assist with the design of national plant genetic resources programmes and activities and so to transfer the benefits of experience. It will also seek to strengthen the research capacity of national programmes by undertaking a greater proportion of IBPGR-funded research in developing countries and by enabling a two-way exchange of visits between scientists from developed and developing countries. To ensure that the direction of change is towards building a global. genetic resources effort based on national activities and needs, IBPGR will be required to strengthen its catalytic role in all aspects of genetic resources work, but especially in research and the application of the results of research. The research focus is likely to shift more towards addressing generic issues, leaving crop-specific issues to be taken up by the national programmes as recommended by crop networks.

32 In the area of training, responsibility for some courses will be progressively devolved to national programmes - or to groups of programmes with common interests and needs. IBPGR will assist the national programmes in this activity where necessary, but is likely to give more of its own attention to in-service training of professional officers already employed in national programmes and institutions as a means to strengthen the training capacity and the level of professional performance within the country. IBPGR furthermore intends to promote the inclusion of

plant genetic resources in the syllabi of students in agriculture and natural resources programmes worldwide as a means of increasing general awareness of the role that plant genetic resources can play in national development, while increasing the level of knowledge among the professional agricultural community and stimulating interest in research.

33 IBPGR will no longer base its activities on a list of priority crops. The major responsibility for the genetic resources of the commodity crops of other CGIAR centres will be addressed by the Genetic Resources Units of those centres with IBPGR's collaboration when appropriate. Although IBPGR will continue its collecting programme, there is likely to be a shift towards assisting national programmes and international crop networks to develop collecting expertise, plan collecting strategies and to process collected material.

34 Most of the changes envisaged here could and should not be introduced overnight. The aim will be to phase them in as quickly as possible and the goal will be to have them in place within ten years. IBPGR is confident that its contribution to the global genetic resources effort will continue to grow throughout this period and that, together with its partners in conservation, IBPGR will- be able to make a real difference in the conservation and use of biodiversity for the welfare of mankind.

III. FAO AND IBPGR COOPERATIVE AGREEMENTS

35 Following the recommendation of the third session of the Commission, FAO and IBPGR worked together to develop a MOU on Programme Cooperation which formalizes the existing and future working relationships between the two organizations. The agreement was signed on 21 September 1990.

Programme Cooperation

36 The purpose of this MOU is to establish a framework for programme cooperation between IBPGR and FAO defining the main areas for collaboration within their respective mandates, with a view to achieving full complementarity of functions, avoiding overlaps and duplication of effort and ensuring effective cooperation in joint activities for the benefit of both Parties and for the ultimate benefit of all countries, with particular reference to developing nations.

37 The MOU on programme cooperation also covers:

(i) Policy and Legal matters: FAO will have leading responsibility; technical advice from IBPGR will be sought.

(ii) Information: FAO and IBPGR have agreed to provide each other with free access to their respective data bases

on subjects of common interest and to guarantee an adequate flow of information between them.

(iii) Ex situ Conservation: FAO and IBPGR recognize the necessity of achieving maximum complementarity between the FAO network of base collections and the IBPGR register of base collections.

(iv) In situ Conservation: FAO will be a focal point for information and technical expertise on in situ conservation of plant genetic resources and will provide leadership in assisting countries to determine priorities and action programmes, taking into account technical, legal, social and economic factors. IBPGR will support FAO in these activities when called upon.

(v) Governance mechanisms: The Chairman of IBPGR or his representative, will continue to be invited to participate in the CPGR meetings as an observer. The Chairman of CPGR will be invited to attend the meetings of the Board of IBPGR as observer. FAO will continue to have a representative as a non-voting member of the Board of Trustees of IBPGR.

38 The Working Group of the Commission at its Fifth Meeting in December 1990, considered the MOU between FAO and IBPGR on Programme Cooperation and congratulated both organizations for developing and signing the cooperative agreement. This agreement was also welcomed by the Consultative Group on International Agricultural Research (CGIAR) at its meeting held in Washington, D.C. from 29 October - 2 November 1990.

Joint FAO/IBPGR Activities

39 The collaborative activities between FAO and IBPGR are detailed below:

i) Information and Publications:

FAO and IBPGR have initiated the preparation of a framework for the establishment of a Global Information and Early Warning System. Document CPGR/91/7 provides the details of the various proposals. IBPGR provided substantial inputs in the preparation of this document. As part of this initiative, a questionnaire is being drawn up, which will help the Member Nations, in line with Article 11 of the Undertaking, to provide annual reports to FAO, and the information thus compiled will help in the preparation of the State of the World's Plant Genetic Resources. FAO and IBPGR have continued to publish the quarterly FAO/IBPGR. Plant Genetic Resources Newsletter. There are plans to upgrade this newsletter to a refereed technical journal. During 1990, a joint Editorial Committee for the Newsletter was established. Besides this, FAO and IBPGR have initiated

exchange of their respective databases on plant genetic resources, including the databases jointly developed during 1974-87, and have cooperated in the dissemination of information. In addition, FAO and IBPGR, together with IUCN (World Conservation Union) have agreed to collaborate in the preparation of a handbook on Germplasm Collecting.

(ii) Ex-Situ Conservation:

Both FAO and IBPGR are working towards a merger between the FAO network of base collections and the IBPGR register of base collections (see CPGR/91/14). IBPGR provided technical inputs in the preparation of this document. FAO and IBPGR are jointly investigating the possibility of establishing a permafrost facility - the Svalbard International Seedbank - as an additional security storage. A joint FAO/IBPGR Expert Consultation on this subject was held in December 1990. The Government of Norway is considering the provision of the necessary funding for establishing this facility (also CPGR/91/14).

(iii) Forest genetic resources:

FAO's Forestry Department plays a leading role in forest genetic resources which are not covered by the MOU on programme cooperation. Consultations were held between IBPGR and FAO regarding a possible expansion of IBPGR activities into forest genetic resources. If IBPGR is mandated by the CGIAR to include forest genetic resources in its programmes, then further consultations will be required to ensure complementarity and to determine respective areas of competence and activity. FAO also serves as a global focal point for in situ conservation.

(iv) Strengthening of National and Regional Capabilities:

FAO has a constitutional responsibility to provide technical assistance to its Member Nations in the area of plant genetic resources and more specifically to formulate, operate and supervise specific projects and other activities aimed at strengthening national and regional capacities and/or developing national and regional strategies or programmes. IBPGR has cooperated with FAO both in project formulation for technical assistance and also in providing consultancy services for the implementation of field projects, including advisory services for the establishment of in vitro conservation facilities in some countries.

(v) Training:

FAO and IBPGR have agreed to develop their training programmes in full consultation and cooperation. As an example, FAO and IBPGR, in collaboration with the National Bureau of Plant Genetic Resources (NBPGR) of India, have plans to organize a Regional Training Workshop on

"Conservation, Evaluation and Utilization of Crops of Local Importance in South Asia" in September 1991.

(vi) Safe Movement of Plant Genetic Resources:

FAO and IBPGR have agreed to pursue and develop their cooperative programme aimed at facilitating the safe and expeditious transfer of germplasm, through the preparation of a series of crop-specific protocols and guidelines, describing disease indexing and other procedures for use by quarantine officials and scientists involved in the exchange of plant germplasm. During 1989 and 1990, guidelines were prepared and published for Musa, cocoa, sweet potato, yam, edible aroids, and legumes. Meetings covering citrus, cassava and grape were held in 1989/90, and guidelines are under preparation for these crops.

(vii) Joint Programming:

In order to pursue the cooperation and to discuss matters of common interest, FAO and IBPGR have agreed to hold an annual joint programming meeting to consider and discuss their achievements and the current status, prospects and conditions for their cooperation as well as all aspects of their respective work programmes. During 1990 and early 1991, some ad hoc meetings were held between the staff of both organizations to discuss the framework for a cooperative programme as well as the technical issues.

(viii)FAO Assistance to IBPGR:

Facilitating IBPGR Activities: FAO is providing assistance to IBPGR in the implementation of its work programme, particularly in facilitating its activities in FAO Member Nations.

Selection of the new Director of IBPGR: FAO was fully associated with the selection process and the proposed selection was submitted to the Director-General for approval.

External Review of IBPGR: The Review Team had extensive consultations with FAO, and FAO was invited to comment on the Report of the Review Team.

40 Where appropriate, FAO and IBPGR have invited each other to participate in Technical Meetings, Reviews, Workshops, Seminars, viz. Technical Consultative Committee (TCC) Meeting of the European Cooperative Programme, crop Networks, CGIAR Inter-Centre Working Group on Plant Genetic Resources, IBPGR Regional Meetings and FAO Working Group on Biological Diversity. In addition, IBPGR assisted the CPGR Secretariat in the preparation of documentation for this Commission and its Working Group meetings.