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Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## Item 2 of the Draft Provisional Agenda

### COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

#### WORKING GROUP ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

First Session

Rome, 2 - 4 July 2001

#### PROGRESS REPORT ON THE IMPLEMENTATION OF THE *GLOBAL PLAN OF ACTION FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE*

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

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**1. INTRODUCTION**

1. The *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture* was formally adopted by 150 countries during the Fourth International Technical Conference on Plant Genetic Resources (Leipzig, Germany, June 1996). The Conference agreed that “overall progress in the implementation of the *Global Plan of Action* and of the related follow-up processes would be monitored and guided by the national governments and other members of FAO, through the Commission on Genetic Resources for Food and Agriculture”.<sup>1</sup>
2. The *Plan* has been subsequently endorsed, welcomed or supported by the FAO Council and Conference,<sup>2</sup> the Conference of the Parties to the Convention on Biological Diversity (CBD),<sup>3</sup> and the World Food Summit.<sup>4</sup> The Consultative Group on International Agricultural Research (CGIAR), as well as many non-governmental organizations, including private sector organizations, have also supported the *Plan*.
3. At its Seventh Regular Session, the Commission requested that for its next session the Secretariat prepare an overview report on implementation of the *Plan*. That report was considered by the Commission at its Eighth Session, which noted that “while there had been significant progress, much remains to be done at local, national and international levels”,<sup>5</sup> and stressed the importance of facilitating and monitoring implementation of the *Plan*, recognizing the central role of FAO in this regard.<sup>6</sup>
4. The Commission also agreed that the Working Group on Plant Genetic Resources for Food and Agriculture should meet during this biennium to guide the implementation and review of the *Plan*.<sup>7</sup> This document reports on progress made in the implementation of the *Plan* in member countries, based on a questionnaire circulated to National Focal Points, discusses several issues for possible consideration by the Working Group and seeks the Working Group’s guidance on various matters. It includes information on relevant activities of FAO and other international organizations and stakeholders, as reported by countries.

**2. IMPLEMENTATION OF THE TWENTY  
PRIORITY ACTIVITY AREAS OF THE PLAN**

*The survey*

5. To assess progress in implementation of the *Plan*, a questionnaire was circulated to 177 National Focal Points, that had in 2000 been nominated or reconfirmed by 151 countries.<sup>8</sup> To minimize the burden on countries and to facilitate data analysis, the questionnaire included

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<sup>1</sup> ITC-PGR/96/REP para 21.

<sup>2</sup> Council Resolution 1/111, October 1996; Conference Resolution 1/97, November 1997.

<sup>3</sup> COP Decision III/11, November 1996.

<sup>4</sup> Objective 3.2 of the World Food Summit Plan of Action, Rome, November 1996.

<sup>5</sup> CGRFA-8/99/REP para. 15.

<sup>6</sup> CGRFA-8/99/REP para. 29.

<sup>7</sup> CGRFA-8/99/REP para. 32.

<sup>8</sup> Some countries appointed more than one National Focal Point for the implementation of the *Plan*.

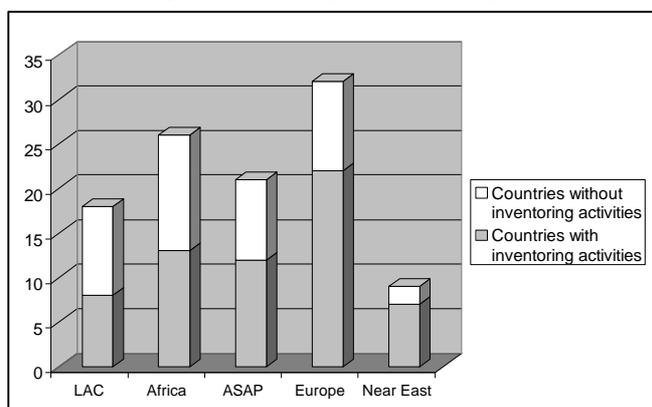
extensive yes/no and multiple-choice questions, with on average less than five questions per activity area. Additional information was requested in tabular form for Activity area 15 – *Building strong national programmes* – in order to monitor which activity areas of the *Plan* were being prioritized by countries in their national strategies and plans. A standard tabular approach was also used to gather information on existing projects related to plant genetic resources for food and agriculture in each country, including budgets and funding sources. Additional information regarding this survey is provided in document CGRFA/WG-PGR-1/01/3.

6. The *Plan* has 20 priority activity areas, organized in four thematic groups: *in situ* conservation and development; *ex situ* conservation; utilization of plant genetic resources for food and agriculture; and institutions and capacity-building. This report reflects that structure.

#### ***In situ conservation and development (Activity areas 1 – 4)***

7. *Activity area 1 – Surveying and inventorying plant genetic resources for food and agriculture.* Countries confirm the high priority of this area within their national programmes. The total number of activities reported has substantially increased since 1998, with more than 518 surveys and inventories carried out in this period, although over half of those were in only four countries (India, 225 surveys; Uzbekistan, 32; Iraq, 21; Uruguay, 10), so much work remains to be done. As can be seen in figure 1, countries in Europe and Near East are quite active in this area, while in Africa, Asia and Latin America and the Caribbean, some 50% of surveyed countries have reported no activities. These surveys identified some 4 000 threatened species, with more than half located in Europe.

**Figure 1: Surveying and inventorying PGRFA**



8. *Activity area 2 – Supporting on-farm management and improvement of plant genetic resources for food and agriculture.* Progress at national level is still modest, since only 14 per cent of the countries reported activities in this area. Argentina, Azerbaijan, Bolivia, Bulgaria, Cuba, Czech Republic, Germany, Peru, Portugal, Sierra Leone and Sweden are currently developing on-farm management and conservation projects that include support to farmer communities.

9. International organizations and donor agencies are also providing increasing support for this activity area. The International Fund for Agricultural Development (IFAD), FAO and the International Plant Genetic Resources Institute (IPGRI) are supporting a project developing *in situ* strategies for plant genetic resources conservation in Mali and Zimbabwe. Morocco, with support from the United Nations Development Programme (UNDP) and the Global Environmental Facility (GEF), is implementing a project in support of participatory management of genetic resources of date palm in the oases, and GEF has funded projects in support of on-farm conservation in Jordan, Peru, Poland and Syria.

10. *Activity area 3 – Assisting farmers in disaster situations to restore agricultural systems.* There has been some progress in this area since 1998, with 20 projects currently ongoing in support of farmers following disaster situations. However, only 30 countries have an operative plan for assisting farmers to restore local genetic diversity after disasters, and only 25 of the 30 have an information system in place to identify appropriate germplasm for re-introduction. At international level, FAO has supported the establishment of Seed Security Consultative Groups in eastern Africa, in response to droughts, and in southern Africa, in response to floods, and

technical support has been offered to several field projects for the restoration of agricultural systems in Angola, Burundi, Cameroon, Congo, Ethiopia, Liberia and Mozambique.

11. *Activity area 4 – Promoting in situ conservation of wild crop relatives and wild plants for food production.* The progress in drawing up plans for the *in situ* conservation and utilization of wild plants and wild relatives of crop plants is worth noting: 62 countries indicate that plans to conserve such resources have been included in their national programme. The level of activities aimed at identifying wild plants and wild relatives of crop plants for food production as part of *in situ* conservation has also increased significantly since 1998, with 57 projects reported. In 42 countries, local communities are involved in the identification process. Progress has also been achieved in arrangements to place threatened diversity of wild relatives of crop species and wild plants into *ex situ* collections, with 66 per cent of replies positive.

12. As examples of ongoing activities, Cuba is currently implementing three projects on *in situ* conservation of wild relatives, one of them including forestry species. The Czech Republic has an ongoing project for the mapping, collection and conservation of endangered landraces and wild relatives of agricultural crops, and there are currently two ongoing projects for the study of local farms for *in situ* conservation in Guatemala. A pilot project for the *in situ* conservation of wild relatives of crop plants is currently being developed in Armenia, Bolivia, Madagascar, Sri Lanka and Uzbekistan with the support of IPGRI, FAO, GEF and the United Nations Environmental Programme (UNEP). Since 1998, FAO, UNESCO, IPGRI, The International Programme of Biodiversity Science (DIVERSITAS), Botanical Gardens Conservation International (BGCI), CBD, International Centre for Under-utilized Crops (ICUC), the World Conservation Union (IUCN) and others have been collaborating to develop projects for conservation and sustainable use of wild plants of importance for food and agriculture.

#### **Ex situ conservation (Activity areas 5 – 8)**

13. Activity areas of the *Plan* related to *ex situ* conservation received the highest priority by countries, with more than 100 projects addressing some or all of the four priority activity areas of this category.

14. *Activity area 5 – Sustaining ex situ collections.* This activity area continues to be accorded highest priority. Countries reported 108 projects, 42 of which were in Latin America. Argentina has eight projects for the establishment and sustainability of *ex situ* collections of several staple crops, including potato and maize. Four African countries (Madagascar, Niger, South Africa and Swaziland) reported projects for sustaining their *ex situ* collections. Bangladesh reported a project for strengthening the genebank of the Bangladesh Sugar Cane Research Institute. It is noteworthy that most of the projects have been funded from national resources, although some countries indicated that *ex situ* conservation is being undertaken in cooperation with regional or international organizations, including the Asian Vegetable Research and Development Center (AVRDC), Centro Internacional de la Papa (CIP), FAO, IPGRI, the International Rice Research Institute (IRRI), or through relevant networks, like the Plant Genetic Resources Network for the Southern African Development Community (SADC). Within the European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR), countries are in the process of developing the concept of European collections of plant genetic resources, as well as Material Transfer Agreements, and are currently developing a European catalogue of *ex situ* collections.

15. Reports showed that in more than 60 countries the budget and staff for *ex situ* collections and genebanks had increased or been maintained since 1998, and in 67 countries the number of accessions in store had increased. However, more than 20 countries reported a reduction in both budget and staff, and 6 countries even reported a reduction in the number of accessions stored. Two-thirds of the countries reported that training in *ex situ* conservation had been provided for genebank staff since 1998.

16. *Activity area 6 – Regenerating threatened ex situ collections.* Countries reported 88 projects covering this activity area. However, only few had regenerating threatened accessions as the main focus. Uzbekistan is currently regenerating specific accessions in collaboration with the N.I. Vavilov Institute of Plant Industry (VIR) and the Uzbek Research Institute of Plant Industry (UzRIPI). Togo is currently regenerating its yam (*Dioscorea* spp.) collection, with support from IPGRI. The Nordic Genebank is currently implementing a seed regeneration project for accessions from its member countries. Multi-year plans for regenerating priority accessions are in place in 66 countries: 25 in Europe; 14 in Asia and the Pacific; 13 in Africa; 10 in Latin America and the Caribbean; 3 in the Near East and in Canada. Priorities for regeneration have been determined in 74 countries, with 52 including elimination of unnecessary duplicates, as recommended in the *Plan*. Increases in the number of accessions in need of urgent regeneration were reported from 46 countries, in all five regions. While this increase is in itself cause for concern, the reporting of these figures could also indicate that countries have taken seriously the task of identifying accessions at risk. Countries also reported regular monitoring of not only the viability but also the genetic diversity of the collections in genebanks. Unfortunately, for the sake of simplicity, information could not be requested regarding the species involved. More detailed monitoring would be necessary to assess the real impact of the *Plan* and progress achieved in this area.

17. Half of the countries reported that regeneration activities had been carried out through linkages to international organizations and networks, such as the World *Beta* Network. India, in collaboration with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), is currently engaged in regeneration of pigeon pea germplasm.

18. *Activity area 7 – Supporting planned and targeted collecting of plant genetic resources for food and agriculture.* A high level of activity is observed in collecting plant genetic resources, with a total of 813 collecting missions fielded, half of them in the Asia and Pacific Region. Long-term conservation of the collected material had been secured in 68 per cent of the countries reporting. However, no information is available regarding how much of this collecting activities responds to planned and targeted collecting of local species, ecotypes and landraces and other endangered varieties and their associated knowledge, as recommended by the *Plan*.

19. Only half of the reporting countries indicated that training had been provided for staff involved in collecting. Training of technical staff needs a particular focus for this activity area since, as the *Plan* notes, past collecting missions, employing inadequate methodology, may not have successfully sampled diversity.

20. *Activity area 8 – Expanding ex situ conservation activities.* Some 155 botanical gardens, arboreta and field genebanks have been established since 1998, almost half of them in the Asia and Pacific Region. The *Plan* has highlighted how establishing such units on a low-cost basis in universities and schools could promote education and public awareness, but only 33 such units are reported to have been established since 1998, the majority in Latin America and the Caribbean, Africa and Europe. Some 40 countries have in the reporting period devised or implemented innovative management strategies and improved methodologies for *ex situ* conservation of recalcitrant-seeded plants, vegetatively propagated plants and neglected species. The same number of countries reported that publications on such methodologies have been made available since 1998.

#### *Utilization of plant genetic resources (Activity areas 9 – 14)*

21. *Activity area 9 – Expanding characterization, evaluation and number of core collections to facilitate use.* Holdings of plant genetic resources were reported as ca. 200 000 accessions in African genebanks, 1 800 000 in Asia and the Pacific Region, 28 500 in the Near East, 1 300 000 in Europe, 245 000 in Latin America and the Caribbean, and 100 000 in Canada. New technologies, including biotechnologies, for germplasm characterization are already in use in 38 of the reporting countries. Some progress can be seen in the number of core collections for

globally or nationally important crops, with a total of 81 new collections since 1998, although most are in Asia and the Pacific Region and in Europe. This activity area saw the highest number of projects reported, but the projects refer to characterization of accessions in *ex situ* collections in general, without detailed information on the characterization of existing core collections.

22. *Activity area 10 – Increasing genetic enhancement and base-broadening efforts.* 31 countries reported substantial progress in the number of projects implemented since 1998. Cuba currently has 24 ongoing projects for the improvement and base broadening of most of the species of interest for the country, such as coffee, maize, tomato, melon, cucumber and pepper. Togo is implementing a project to improve the genetic base of their local varieties of tomato. Portugal is carrying out a programme for the development of cold-tolerant varieties of coffee, in cooperation with the International Centre for Tropical Agriculture (CIAT). Azerbaijan is involved in a study of agrobiological peculiarities of aboriginal and introduced cultivars of wild grapes to be used for enrichment of the genetic stock in the country. While the number of countries reporting activities in this activity area increased by 50 per cent compared to 1998, there are still 23 countries reporting no activities carried out in this period. Three-quarters of the countries reported involvement in international crop-related networks that support genetic enhancement and base-broadening efforts.

23. International organizations, including FAO, IPGRI and the International Centre for Agricultural Research in Dry Areas (ICARDA), have been involved in joint initiatives in this area. In Syria, several activities related to genetic enhancement through the promotion of participatory breeding in order to safeguard and use local germplasm have taken place in cooperation with FAO and ICARDA for the West Asia and North Africa (WANA) region. In 1999, a Workshop was organized by FAO with the University of Edinburgh on *Broadening the genetic base of crops*. As a follow-up, a forum on the same topic was organized on 17 August 2000 in Hamburg, Germany, as a pre-congress event for the International Crop Science Conference (ICSC), and FAO and IPGRI have just published a joint book on base-broadening strategies.

24. *Activity area 11 – Promoting sustainable agriculture through diversification of crop production and broader diversity of crops.* Countries reported 95 projects that included this activity area in their objectives. A number of European countries are currently participating in projects to broaden diversity of several species, including barley, *Brassica*, *Beta*, aubergine, garlic, grape, lentil, maize, potato and *Prunus*, through regional plant genetic resources networks. Guatemala is currently working on a project to increase diversity and use of *Annona* in Central America. FAO organized an expert consultation on crop diversification in Asia and the Pacific Region in 1999, and in 2000 prepared an annotated bibliography and draft guidelines on “understanding farm diversification”, to characterize diversification trends, driving factors, analytical approaches and policy responses.

25. Although only 11 out of 97 countries confirm that assessments have been made of the genetic uniformity and vulnerability of crop production, it is encouraging to note that measures are being taken by 73 countries to encourage diversification of crop production and favour broader diversity of crops. Their aim is to promote sustainable agriculture and reduce genetic erosion and vulnerability, as recommended by the *Plan*. More detailed information would be needed to assess the scope and impact of such measures.

26. *Activity area 12 – Promoting development and commercialization of under-utilized crops and species.* Despite growing awareness of the value of under-utilized crops for agricultural diversification and food security, the level of progress achieved since 1998 remains modest. Countries reported some progress in developing and implementing sustainable management practices and crop improvement for selected under-utilized species as part of their current programmes for conservation, research and development. Guatemala is currently implementing six projects for the collection, characterization and promotion of local under-utilized species for food, including fruits, vegetables and forestry species, with the active involvement of local farmer communities. Bangladesh has initiated the identification of under-utilized indigenous

vegetables and fruits with potential for food. Most countries reported efforts to coordinate their activities at regional level through networks, such as the Under-utilized Tropical Fruits in Asia Network (UTFANET) and the Under-utilized Traditional Vegetables for Asia and the Pacific Network (UTVAPNET), both also supported by IPGRI, ICUC and FAO. Half of the reporting countries indicated that particular emphasis is given to the role of women in this area.

27. More efforts are needed to promote marketing of under-utilized crop products; the number of countries reporting progress in this area was as low as in the previous survey, particularly in Africa, Near East and Latin America. The Global Forum for Agricultural Research (GFAR), together with FAO, IPGRI, ICUC and others, is currently developing proposals for the conservation and use of under-utilized crops.

28. *Activity area 13 – Supporting seed production and distribution.* Few activities have been initiated in this biennium under this activity area. The Czech Republic is currently implementing a project to assess seed viability and to develop technologies for genebank management. Madagascar reported the establishment of a new seed production centre. Niger is implementing a national project to promote seed production and distribution.

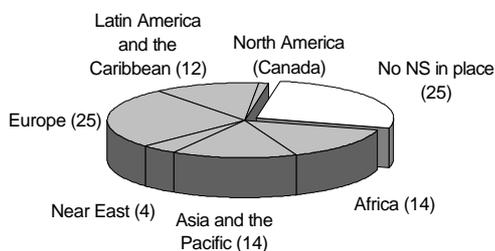
29. It is encouraging to note that most countries have launched training activities intended to strengthen capacity in seed technology. However, only 30 per cent of the reporting countries indicate that incentives like credit schemes have been provided to encourage seed enterprises to meet their needs, and those of women and of vulnerable or marginalized groups. This activity area is accorded a very high priority by countries of the Africa Region. At international level, several community-level seed and planting material production and management activities are supported by FAO, *inter alia* in Angola, Ethiopia, Mozambique, Sudan and Uganda, through its Technical Cooperation Programme. At policy level, FAO has finalized a series of regional and sub-regional meetings on seed policies and programmes in Africa, Asia and the Pacific, Near East, North America, Latin America and the Caribbean, and eastern European countries. As a result of these meetings, regional networks and consultative forums have been established, with the aim of developing coordinated seed policies and programmes.

30. *Activity area 14 – Developing markets for local varieties and “diversity-rich” products.* Very little progress is reported regarding the range of local crop varieties available in local markets, although, in almost half of the reporting countries, initial attempts to develop new markets for such varieties have occurred. Tonga has an ongoing project supported by Japan to identify and promote useful indigenous plants in the country. Uruguay is also implementing a project for *in situ* conservation and promotion of the use of local species of *Butia*. More efforts will be needed if the *Plan* objective of stimulating stronger demand and more reliable market mechanisms for landraces and farmers’ varieties, and related agricultural products, is to be realized.

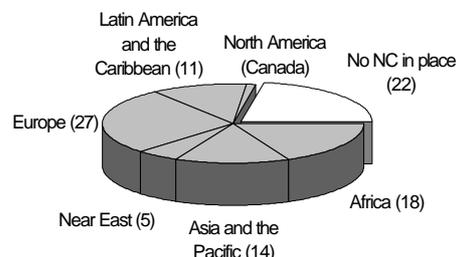
#### ***Institutions and Capacity-building (Activity areas 15 – 20)***

31. *Activity area 15 – Building strong national programmes.* The Leipzig process triggered a high level of activity in the planning process at national level. Since then, countries have been actively involved in the development or re-structuring of national strategies to manage their plant genetic resources, in line with the objectives of the *Plan*. Figure 2 shows that 70 of 95 countries reported having in place a national strategy for conservation and sustainable use of plant genetic resources, 18 of them having established it after 1998. In most countries, the strategy incorporates *Plan* priorities and, in half of them, coordinates initiatives of agronomy, livestock and forestry sectors. National programmes provide the basis for developing a national plant genetic resources strategy, balancing activities in *in situ* and *ex situ* conservation and use; conditions of access; safe movement of germplasm; benefit-sharing; and technology transfer. Coordinated efforts at national and international level are needed to promote institutional development in countries where national programmes have not yet been established. FAO and IPGRI recently produced training materials on *Strengthening National Genetic Resources Programmes*, together with 10 fact sheets on *Issues and Options for National Genetic Resources Programmes*.

**Figure 2:** Number of countries with National Strategies (NS) on PGR



**Figure 3:** Number of countries with National Committees (NC) on PGR



32. Entities for planning and coordinating plant genetic resources activities at national level have been set up in roughly 80 per cent of the reporting countries, as shown in figure 3, of which 19 per cent have been set up since 1998. In most cases, the participation of national stakeholders has been ensured, including farmers, plant breeders, the private sector, NGOs and universities.

33. During the 1999-2000 biennium, the development of a legislative framework for the management of plant genetic resources has been a priority in many countries. Plant protection legislation, including aspects of biosafety, has been adopted in several countries in Asia and the Pacific Region. New seed legislation has been approved in 13 countries, five of them in Africa; 25 countries have enacted new legislation allowing for the granting of plant breeder's rights; and 13 countries have adopted legislation regulating access to plant genetic resources. It is expected that this number will increase rapidly subsequent to successful conclusion of the current negotiations on revision of the International Undertaking on Plant Genetic Resources for Food and Agriculture, and countries make provision for its implementation, including for the Multilateral System for Facilitated Access and Benefit-sharing.

34. *Activity area 16 – Promoting networks for plant genetic resources for food and agriculture.* Countries appear to appreciate the vital role of networks for the conservation and use of plant genetic resources, since all countries participating in the survey reported membership of relevant crop-related or regional networks, with 70 per cent of them contributing to network funding. International organizations, particularly FAO and the CGIAR centres, particularly IPGRI, provide active support to network activities. A number of regional network meetings took place during the biennium, many with IPGRI support, including the Regional Integrating Mechanism for the Implementation of the *Plan* in Latin America, which held its second meeting in Costa Rica in September 2000, with the participation of sub-regional country representatives, regional networks related to plant genetic resources for food and agriculture, and regional research institutions. The meeting was supported by FAO, IPGRI and the Inter-American Institute for Cooperation on Agriculture (IICA). A new network for temperate fruits in the tropics and subtropics has been established by FAO, to promote and develop conservation strategies for local varieties. An initiative to form a Date Palm Global Network – to include a sub-network on date palm genetic resources – has also been launched. In view of the financial constraints that constantly limit network activities, some rationalization of their objectives and scope could be considered.

35. *Activity area 17 – Constructing comprehensive information systems for plant genetic resources for food and agriculture.* Although 63 countries reported having information systems for data management of plant genetic resources or seed stock, or both, only 31 reported having such a system at national level.

36. Some coordinated efforts to strengthen cooperation among countries have been reported. Germany and the Russian Federation are currently involved in a cooperative project to strengthen a documentation and information system at VIR, St. Petersburg. The European Union is supporting the establishment of a European Plant Genetic Resources Information Infra-Structure (EPGRIS). The Lusophone Initiative – a collaboration between Portugal and the lusophone countries of Africa – was launched this biennium with support from IPGRI. Human resources development is still a component that needs to be strengthened, since 45 of 98 countries reported no staff training since 1998 in information management.

37. *Activity area 18 – Developing monitoring and early warning systems for loss of plant genetic resources for food and agriculture.* The attention of the Working Group is drawn to the little progress achieved so far at national level. Although 64 countries currently have active monitoring systems to assess, at least partially, genetic erosion in *ex situ* collections, only four of them have been established in the last two years, and the number of countries with no system in place has even increased, to 25. Initiatives toward starting monitoring of genetic erosion *in situ* have taken place in nine countries, bringing to 51 the number of countries that have monitoring systems allowing at least partial monitoring and consequent preventive action. The initiatives taken in Democratic Republic of Congo and in the Republic of Korea to establish national information systems for early warning for plant genetic resources are encouraging examples. However, 34 countries report having no such monitoring system.

38. Almost all (98 per cent) would consider the World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture (WIEWS) as appropriate for hosting a system to monitor loss of plant genetic resources for food and agriculture at international level, even though, at present, only 79 per cent of them would be able to provide information on genetic erosion. In June 1999, FAO organized a meeting in Prague, Czech Republic, to discuss methodological approaches for such an early warning system under WIEWS, and to foster the global network of WIEWS correspondents. It is recommended that countries that have not done so nominate a focal point to participate in this network. Additional information on WIEWS developments are included in document CGRFA/WG-PGR-1/01/6 – *Progress Report on the World Information and Early Warning System on Plant Genetic Resources for Food and Agriculture*.

39. *Activity area 19 – Expanding and improving education and training.* The importance of training in achieving sustainable improvement in conservation and utilization of plant genetic resources for food and agriculture is widely accepted. Yet, in many developing countries, the level of availability of advanced-level training opportunities, or even short-term training, is still low, and 17 countries reported that neither advanced-level nor short-term training were available. However, according to 61 replies, some attempts have been made since 1998 to include plant genetic resources aspects in existing courses and educational programmes within each region, although this is recognized as insufficient. In order to improve this situation, some countries have started developing new training strategies: 12 countries reported the establishment since 1998 of an education and training strategy in line with the *Plan*. International institutions, particularly the CGIAR centres, FAO, UNDP and UNEP, have been supporting training activities as part of their regular programmes. Still more efforts are necessary to foster access to external training in countries lacking national capacity.

40. *Activity area 20 – Promoting public awareness of the value of plant genetic resources conservation and use.* While some progress has been achieved in building awareness, incorporating this component into plant genetic resources conservation projects, only four respondents reported satisfactory levels of public awareness nationally, with 79 countries reporting having initiated some activities to increase public awareness. These activities are coordinated generally either by the National Committee on Plant Genetic Resources for Food and Agriculture, or the National Programme, although in 30 per cent of the countries a national research institute is responsible.

### Conclusions

41. *Status of implementation of the Plan.* An overall analysis of the information gathered shows that national priorities continue to concentrate on *ex situ* conservation activities (Activity areas 5 to 8), inventorying and surveying plant genetic resources (Activity area 1), and on building strong national programmes (Activity area 15). While progress can be seen, particular attention needs to be paid to the increasing requirement for regeneration of accessions and the need for more planned and targeted collection missions, as recommended by the *Plan*. A large number of new activities were reported by Latin American and European countries regarding activity areas related to the utilization of plant genetic resources for food and agriculture (Activity areas 9 to 14).

42. The need to support seed production and distribution (Activity area 13) continues to be given high priority in most African countries. Activity areas 2 to 4, on *in situ* conservation, have not received enough attention by countries.

43. Since 1998, promoting networks for plant genetic resources for food and agriculture (Activity area 16) has gained importance in all regions. Stronger support by all stakeholders is still required in the field of capacity-building (Activity area 19) in all developing countries, particularly for training of technical staff in the various areas and still more efforts are needed to promote public awareness (Activity area 20).

44. *Strengths and drawbacks of this survey.* The high degree of participation in this exercise shows the importance given by countries to the *Plan* as the framework for the implementation of their national strategies for conservation and sustainable utilization of plant genetic resources for food and agriculture. The deliberately simple structure of the questionnaire, together with the ability and willingness of countries to follow the standard format provided, contributed to the survey's success. Inevitably, simplicity has limited the depth of the analysis and only general conclusions and recommendations could be drawn. Detailed quantitative information is missing throughout the activities reported. Examples of particular relevance include missing information on the scope and contents of the ongoing projects on plant genetic resources for food and agriculture; the particular accessions that need regeneration in each country; and stakeholders' involvement in the *Plan* implementation. If timely and concrete recommendations are expected as a result of a monitoring process, a more comprehensive and detailed survey mechanism would be needed. This would also provide a basis for more efficient management of limited financial resources at national, regional and international levels. A monitoring system, designed to strengthen national programmes and improve the efficiency and transparency of the *Plan* implementation process, is proposed in document CGRFA/WG-PGR-1/01/3 – *Monitoring the Implementation of the Global Plan of Action*.

45. *Need for additional efforts.* A significant number of activities are being undertaken to implement many activity areas of the *Plan*, as shown in the analysis above. Nevertheless, it is clear that additional work is required at all levels to further implement all activity areas, and in particular those related to *In situ* Conservation and Development, and to Institutions and Capacity-building. Despite the great efforts of international organizations (including FAO, CGIAR centres, UNEP, UNDP and the World Bank), national funding agencies, NGOs and the private sector in supporting implementation of the *Plan*, more than 70 per cent of the implementing activities of the *Plan* reported by countries for this biennium have been financed solely from national budgets. If the full implementation of the *Plan* is to be achieved, additional efforts are needed. Global arrangements, addressing both institutional and funding factors, may be needed to facilitate implementation of the *Plan*, and should be considered for this purpose. Concrete options for developing a facilitating mechanism for the implementation of the *Plan* are described in document CGRFA/WG-PGR-1/01/5 – *Facilitating the implementation of the Global Plan of Action*.

### 3. NEW DEVELOPMENTS OF RELEVANCE TO THE IMPLEMENTATION OF THE PLAN

46. *FAO's new operative framework.* The Commission, in its Eighth Regular Session, "underlined the need for FAO to allocate resources from its regular budget to support the tasks of monitoring and facilitating the implementation of the *Plan*".<sup>9</sup> FAO has consequently carried out a thorough planning exercise towards this objective, in the context of the wider Strategic Framework that has been approved by the FAO Conference last November 2000, and that will guide the work of the Organization until the year 2015.

47. The Strategic Framework establishes five Corporate Strategies on the basis of interdisciplinarity and partnership. It contains a results-oriented programme developed through successive Medium-Term Plans (MTPs) as bridges between the five Corporate Strategies in the Framework and the biennial proposals in PWB. The first MTP includes a new continuing programme activity (*Support to the FAO Global System on Plant Genetic Resources for Food and Agriculture*) to which six professional staff will be dedicated and for which US\$8 700 000 from the FAO regular budget have been allocated for the period 2002-2007. This programme activity is entirely devoted to the conservation and sustainable use of plant genetic resources for food and agriculture, through:

- the promotion, facilitation and monitoring of the implementation of the *Plan*, and its revision and updating;
- support to the further development of WIEWS;
- the *International Network of Ex Situ Collections Under the Auspices of FAO*, and other global, regional and crop-related networks;
- *in situ* conservation areas and community genebanks; and
- updating of the *State of the World's Plant Genetic Resources for Food and Agriculture*.

48. *Decisions of the Fifth Meeting of the Conference of the Parties to the Convention on Biological Diversity.*<sup>10</sup> The Conference of the Parties to the Convention on Biological Diversity renewed support to the *Global Plan of Action* at its fifth meeting, in May 2000. In particular, in decision V/5, the Conference of the Parties approved a programme of work on agricultural biological diversity "developed bearing in mind the need ... to build upon existing international plans of action, programmes and strategies that have been agreed by countries, in particular, the *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture*".<sup>11</sup> In Decision V/10 it was decided to consider a global strategy for plant conservation, for which "the important role of other existing initiatives, in particular the *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture*"<sup>12</sup> was recognized. The Conference of the Parties requested the Executive Secretary of the CBD "to solicit the views of Parties, and to liaise with relevant organizations, including, *inter alia*, the *Global Plan of Action of the Food and Agriculture Organization*"<sup>13</sup> to enable the "Subsidiary Body on Scientific, Technical and Technological Advice to make recommendations to the Conference of the Parties, for consideration at its Sixth Meeting, regarding the development of a global strategy for plant conservation".<sup>14</sup>

<sup>9</sup> CGRFA-8/99/REP para. 17.

<sup>10</sup> Relevant extracts from decisions taken by the Conference of the Parties are contained in document CGRFA/WG-PGR-1/01/Inf. 2.

<sup>11</sup> UNEP/CBD/COP/5/23, Decision V/5, page 90, Annex III, para. A.3.b.

<sup>12</sup> UNEP/CBD/COP/5/23, Decision V/10, page 123, para. 2.

<sup>13</sup> UNEP/CBD/COP/5/23, Decision V/10, page 123, para. 5.

<sup>14</sup> UNEP/CBD/COP/5/23, Decision V/10, page 123, para. 4.

49. *GEF operational programme.* The Global Environment Facility (GEF), as the financial mechanism of the Convention of Biological Diversity, was provided with additional guidance by the Convention in Decision V/13. It was requested to provide support as a priority, for projects which implement the Convention's programme of work on agricultural biodiversity, in accordance with decision V/5, through the timely finalization and implementation of its operational programme on agricultural biodiversity, and through the development and implementation of other relevant operational programmes. At its meeting in May, 2000, the GEF Council reviewed and approved the elements for the establishment of Operational Program 13 on Conservation and Sustainable Use of Biological Diversity Important to Agriculture.<sup>15</sup> The draft Operational Programme states that GEF will support eligible activities carried out under the framework of agreed action plans, such as the Global Plan of Action for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture, and the Global Strategy for the Management of Farm Animal Genetic Resources. It recognizes the role of the CGIAR, FAO and stakeholders in facilitating the implementation of such action plans, and states that "GEF will work in partnership with these institutions and stakeholders, building on existing strengths and comparative advantages thus avoiding duplication and overlap".<sup>16</sup> In addition, as decided by the GEF Council at its meeting in November 2000, FAO can act as an executing agency under expanded opportunities for implementing GEF projects.

50. *Dresden Declaration.* In May 2000, participants at the GFAR Conference (Dresden, Germany), representing national agricultural systems, regional and sub-regional organizations, universities, advanced research institutions, NGOs, the private sector, farmers' organizations, multilateral and donor agencies, and international agricultural research, declared unanimously their endorsement of the *Global Plan of Action* as the basic and comprehensive framework for undertaking activities essential for effective conservation, development and sustainable utilization of plant genetic resources for food and agriculture in the FAO Global System. While pleased to note that many countries and organizations were already implementing parts of the *Plan*, they expressed concern that "four years after the Leipzig International Technical Conference in 1996 at which the *Plan* was adopted by 150 countries, coordinated implementation and associated financing of the *Plan* have not been realized" and "urged effective implementation of the *Global Plan of Action* through the FAO Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture, together with agreed and adequate financial provisions".<sup>17</sup>

#### 4. GUIDANCE REQUESTED FROM THE WORKING GROUP

51. This document provides an analysis of the status of implementation of the *Global Plan of Action* and notes new developments that are relevant to the further implementation, monitoring and financing of the *Plan*. It provides information valuable as a tool for setting priorities for the implementation of the *Plan* by international and national stakeholders. In the light of the information provided, the Working Group may wish to consider making recommendations to the Commission, in particular on:

- (i) additional efforts required by all stakeholders in order to implement all activity areas of the *Plan*, and in particular those related to *In situ* Conservation and Development, and to Institutions and Capacity-building;

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<sup>15</sup> Joint Summary of the Chairs, GEF Council Meeting, 9-11 May 2000, para. 16.

<sup>16</sup> GEF/C.15/7, para. 18.

<sup>17</sup> Dresden Declaration on Plant Genetic Resources for Food and Agriculture endorsed at the Global Forum on Agricultural Research (GFAR) Meeting in Dresden, Germany, May 2000.

- (ii) areas that may need further and deeper analysis by the Commission Secretariat in relation to the Decisions of the Conference of the Parties to the Convention on Biological Diversity and other relevant matters; and
- (iii) other issues with policy implications.

52. In addition, the Working Group may consider the information provided in this document for its recommendations to the Commission proposed in documents CGRFA/WG-PGR-1/01/3; CGRFA/WG-PGR-1/01/5; and CGRFA/WG-PGR-1/01/6. See paras. 38, 44 and 45 of this document.