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PROGRESS REPORT ON THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION ON PLANT GENETIC RESOURCES

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PROGRESS REPORT ON THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION ON PLANT GENETIC RESOURCES

1. INTRODUCTION

1. The *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture* was adopted at the International Technical Conference on Plant Genetic Resources (Leipzig, Germany, June 1996), which agreed that:

“follow-up processes called for action at local, national, regional and international levels and should involve all parties which were associated with the preparation of the International Technical Conference: the national governments, local and regional authorities, regional and international organizations, both inter-governmental and non-governmental, the scientific community, the private sector, local communities and farmers and other agricultural producers and their associations”;

and 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”.

2. The Commission, at its Seventh Session, “noted that most countries were now taking measures to implement the *Global Plan of Action*, according to their capacities”, and requested the Secretariat to prepare an overview report on the implementation of the *Plan* for the present session. This report, as an overview, which is not exhaustive, responds to that request, and is intended to aid the Commission in its role of guiding and monitoring implementation. It reviews the role of the *Plan* as a framework and catalyst for action; surveys the implementation of its 20 priority activities; draws general conclusions and discusses cross-cutting issues; and seeks the guidance of the Commission on various matters.

2. THE GLOBAL PLAN OF ACTION AS A FRAMEWORK AND CATALYST FOR ACTION

3. At the Leipzig Conference, 150 countries committed themselves to taking the necessary steps to implement the *Global Plan of Action* in accordance with their national capacities.¹ The *Plan* was subsequently endorsed, welcomed or supported by the FAO Council and Conference,² the Conference of the Parties (CoP) to the Convention on Biological Diversity (CBD),³ and the World Food Summit.⁴ Both the World Food Summit and the CoP/CBD have urged countries to implement the *Plan*, according to their national capacities. Many non-governmental organizations, including private sector organizations, have also supported the *Plan*. It can therefore be regarded as the main normative framework for activities related to the conservation and sustainable use of plant genetic

¹ Leipzig Declaration, 23 June, 1996.

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

³ CBD Decision III/11, November 1996.

⁴ Objective 3.2 of the World Food Summit Plan of Action, Rome, November 1996.

resources for food and agriculture, at national and international levels, and a strategy to guide international cooperation on plant genetic resources for food and agriculture, in coming years.⁵

4. The *Global Plan of Action* is important as a framework and catalyst for action. The *Leipzig Declaration* states that it:

“provides a coherent framework for activities in the field of *in situ* and *ex situ* conservation, in sustainable utilization of plant genetic resources, as well as in institution- and capacity-building. It will contribute to creating synergies among on-going activities, as well as more efficient use of available resources”.⁶

5. Many organizations have adopted the *Plan*, as a basis for their planning and priority-setting, and aligned their work with its priorities and activities. For example, in its last report to the Commission, the Consultative Group on International Agricultural Research (CGIAR) acknowledged “the significant and valuable role the *Global Plan of Action* will play, both now and in the future, in giving guidance and direction to the SGRP and to the work of the individual Centres”, and stated that “the CGIAR willingly accepts that implementation of the *Plan* will necessitate some changes, adjustments and improvements in existing programmes”.⁷ Several Centres have developed their strategies or medium-term plans in the light of the *Plan*.

6. Several regional and sub-regional plant genetic resources networks, and crop-related networks, use the *Plan* as the main framework for their activities.

7. The *Plan*, and its country-driven preparatory process also catalyzed the establishment of a number of national programmes and regional networks, and increased awareness of the importance of farmers and farmer communities in managing plant genetic resources for food and agriculture, which has led to a number of on-farm conservation and improvement initiatives.

8. Current activities to implement the *Plan* are funded by a variety of sources: domestic, bilateral and multilateral: document CGRFA-8/99/4 examines this subject. At the Commission’s Seventh Session, “a number of donor countries announced that they were taking measures, through bilateral and other channels, to support international and regional implementation of some of the priority activities in the *Global Plan of Action*”.⁸ The *Leipzig Declaration* foresaw that the *Plan* would facilitate more efficient resource use.⁹ According to the *Plan* itself, “despite the existence of a variety of sources of financing for the conservation and sustainable use of plant genetic resources for food and agriculture, there are still gaps, overlaps, inefficiencies and unnecessary redundancies in the activities financed”.¹⁰ Reassessment of programmes, in the light of the *Plan*, helps rationalize overall resource-use, and the Commission itself, through its monitoring and guiding role, facilitates this process.

9. At its Seventh Session, the Commission noted that the CoP/CBD, in Decision III/11, had requested its interim financing mechanism, the Global Environment Facility (GEF), to give priority to supporting the conservation and sustainable use of agricultural biodiversity, in accordance with Decision III/5, which endorsed the priorities and policy recommendations of the *Plan*.¹¹ GEF has now issued a framework for funding of agricultural biological diversity activities, which to some extent draws upon the priority activities of the *Plan*. In its guidelines for enabling activities in support of National Biodiversity Strategy and Action Plans, GEF specifically mentions the *Plan*.

⁵ *Plan*, para. 8.

⁶ Para. 10.

⁷ CGRFA-7/97/7.2 para. 6, 56, 57.

⁸ CGRFA-7/97/REP para. 16.

⁹ Leipzig Declaration, para. 10.

¹⁰ *Plan*, para. 7 (g).

¹¹ CGRFA-7/97/REP para. 17.

10. The *Plan* also facilitates integrated consideration of plant genetic resources for food and agriculture, both within the broader agricultural sector, and within biological diversity generally. The Commission's Seventh Session, noted that various national planning exercises related to the implementation of the *Plan* could contribute significantly to the development of the National Biodiversity Strategies and Action Plans, required under the CBD.¹²

11. In order to further publicize results of the Leipzig Conference, and make its many outputs widely available, FAO has put the *Plan* itself, the 158 Country Reports and 15 regional reports, and the *Report on the State of the World's Plant Genetic Resources for Food and Agriculture*, on the internet,¹³ and made the same information available on CD-ROM. As the Commission requested, the comprehensive *State of the World's Plant Genetic Resources* has been published in English, and resources are being sought to publish it in all the Organization's languages.

3. IMPLEMENTATION OF THE TWENTY PRIORITY ACTIVITIES OF THE GLOBAL PLAN OF ACTION

12. This section of the report is largely based on a preliminary analysis of country implementation reports provided by country focal points in 1998, in preparation for a series of regional meetings to promote implementation of the *Plan*, listed below. Information was provided according to a simple questionnaire covering each of the twenty priority activities of the *Plan*, with *Activity 15: Building strong national programmes* treated in more detail.¹⁴ It represents work in progress, since these reports are still being analyzed. This report also draws upon and complements FAO's report on its policies programmes and activities,¹⁵ similar reports from other organizations,¹⁶ as well as the reports of the regional meetings themselves.¹⁷

West and Central Africa	February Cotonou, Benin	co-sponsored by the Conference of Authorities for Agricultural Research in West and Central Africa (CORAF).
East and Southern Africa	May Gaborone, Botswana	co-sponsored by the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) and the Southern African Centre for Cooperation in Agricultural Research (SACCAR).
West and Central Asia and North Africa	June Aleppo, Syria	with the participation of the Association of Agricultural Research Institutes in the Near East and North Africa (AARINENA).
Europe	June/July Braunschweig, Germany	organized by IPGRI in the framework of the European Cooperative Programme on Genetic Resources (ECP/GR)
Latin America and the Caribbean	September Cali, Colombia	co-sponsored by the Inter-American Institute for Cooperation on Agriculture (IICA)
Asia-Pacific	December Los Baños, Philippines	co-sponsored by the Asia Pacific Association for Agricultural Research Institutes (APAARI)

13. The regional meetings were co-organized by FAO, the International Plant Genetic Resources Institute (IPGRI), on behalf of the System-wide Genetic Resources Programme (SGRP) of the

¹² CGRFA-7/97/REP para. 18.

¹³ At <http://web.icppgr.fao.org>.

¹⁴ See Document CGRFA-8/99/5, part 3.

¹⁵ CGRFA-8/99/10.1 and 10.2.

¹⁶ CGRFA-8/99/11.1, 11.2 and 11.3.

¹⁷ The Reports of these meetings will be made available to the Commission for information.

CGIAR, and host countries and institutions, and co-sponsored by relevant regional agricultural research organizations. They were aimed at promoting and facilitating implementation of the *Plan* by countries and major stakeholders. At the meetings, implementation reports by country and region were reviewed; case studies were presented and experiences exchanged; regional networks and cooperation mechanisms were established or strengthened; and priority projects and activities were identified.

14. With the caveats made in para. 12 in mind, *Table 1* provides a synoptic picture of the state of implementation of each priority activity. An attempt has been made, for each activity, to estimate progress towards meeting the needs identified in the *Plan*, the impact of the *Plan*, achievements since 1995 (the date of preparation of the Country Reports for the Leipzig Conference), and remaining substantial needs and gaps.

15. Countries and institutions report many activities related to implementation of the *Plan*. While some are a continuation of earlier activities (in particular under *Activities 1, 4, 5, 7 and 9*), others have been initiated or adjusted in response to the *Plan*. In particular, there has been substantial progress in strengthening national programmes (*Activity 15*) and regional networks (*Activity 16*), and a large number of initiatives have been launched to promote on-farm conservation and development (*Activity 2*), though these are largely isolated projects. Important work is underway in respect of seed security (*Activity 13*), but the needs are also very large. There has been little progress with *in situ* conservation (*Activity 4*), *ex situ* conservation of species with non-orthodox seeds and minor species (*Activity 8*), regeneration (*Activity 6*), genetic enhancement and base-broadening (*Activity 10*), and early warning systems (*Activity 18*). The following paragraphs comment further on *Table 1*.

In Situ Conservation and Development (Activities 1-4)

16. Many countries, especially the larger countries of Asia and Latin America, report activities under *Activity 1: Surveying and inventorying plant genetic resources for food and agriculture*. China, for example, is undertaking a large scale inventory in the Three Gorges Area. Surveys of local crops are underway as part of the Southern African Biodiversity Network project (SABONET). Because surveying and inventorying are the basis for many other activities, much further work is probably needed in all regions.

17. Before 1995, few national programmes - including Ethiopia, Nepal, Peru, and Vietnam - supported *in situ* management, involving farmers and their communities. Many new initiatives have been launched under *Activity 2: Supporting on-farm management and improvement of plant genetic resources for food and agriculture*. For example, Zambia has surveyed farmers with a view to integrating on-farm conservation into the national conservation strategy. Burkina Faso, Hungary, Morocco, Mali, Mexico, Turkey, Zimbabwe and others are developing on-farm conservation programmes, with the support of FAO, IFAD (the International Fund for Agricultural Development) or IPGRI. The CGIAR's SGRP now supports many participatory plant breeding activities, through its system-wide programme for participatory research and gender analysis. In Southeast Asia, NGOs such as SEARICE (the South East Asia Regional Institute for Community Education), are using "Farmer Field Schools", pioneered by FAO to promote IPM, to strengthen community plant genetic resources management. NGOs generally play a key role in supporting farmer and local community management activities, for example, through the Community Biodiversity Development and Conservation Programme.

18. Many of the new projects and programmes are small-scale or primarily research, and there is a need to address the issues of scale and sustainability. Increased national awareness of the role played by farmers and their communities, and strengthened community-level institutions, are needed, if the full potential of on-farm management envisaged in the *Plan* is to be reached.

19. The many climate-related and natural disasters, as well as conflict situations, in many countries have increased the significance of *Activity 3: Assisting farmers in disaster situations to restore agricultural systems*, but few countries report relevant activities. The CGIAR Centres have supplied adapted crop varieties to Rwanda, Somali and - following Hurricane Mitch in November 1998 - Central America. Following the mandate given in the *Plan*, FAO held a meeting in 1997, in Florence, Italy, on seed security, and in 1998, held an international workshop to develop appropriate agreements and the institutional capacity to provide appropriate planting materials to assist farmers rehabilitate their farming systems after disasters. Both meetings recommended that FAO develop guidelines and provide appropriate strategy assistance for seed security and relief operations. The report will be available for the Session.¹⁸

20. Progress in *Activity 4: Promoting in situ conservation of wild crop relatives and wild plants for food production* is limited. Turkey is establishing "gene management zones" for conserving crop wild relatives in protected areas or forests. The conservation of wild plants, relevant to food and agriculture, interests a wide range of organizations, involved both in nature conservation and agricultural development. To promote synergy among them, FAO, UNESCO, the CBD Secretariat and IPGRI supported an initiative of the DIVERSITAS programme to identify gaps, and opportunities for collaborative action. A first consultation was held in February 1998, and a second is planned for May 1999.

Ex Situ Conservation (Activities 5-8)

21. Many *ex situ* conservation activities existed before the adoption of the *Global Plan of Action*, and have continued, influenced to a greater or lesser extent by the *Plan's* recommendations.

22. In relation to *Activity 5: Sustaining existing ex situ collections*, India inaugurated a new genebank in 1997, with over 300,000 accessions and room for one million, greatly increasing global capacity. The International Centre for the Improvement of Maize and Wheat (CIMMYT) has also opened a new genebank. Most efforts, especially at international level, have focused on ensuring the sustainability of existing collections. In association with FAO, the CGIAR's SGRP commissioned an external review of the International Agricultural Research Centres' (IARCs) operations of their genebanks holding collections in trust within the International Network of *Ex Situ* Collections under the Auspices of FAO.¹⁹ While generally positive, it identified various problems and constraints, which the Centres are now addressing, both individually, and through the development of a system-wide strategy. COGENT's *ex situ* coconut collections have been brought into the International Network,²⁰ and discussions are underway regarding the collections of the South Pacific Community. Within the ECP/GR, the sharing of *ex situ* conservation costs and efforts have been discussed.

23. There has been limited progress in implementing *Activity 6: Regenerating threatened ex situ accession*, although the *State of the World's Plant Genetic Resources* identified a large regeneration backlog as a major factor threatening collection security. IPGRI and FAO developed a decision-guide, and many IARCs have major regeneration programmes, but, apart from cooperative efforts in Europe and the Americas, few national efforts are reported.

24. Collecting efforts peaked many years ago, and the *Plan* recommends a shift to *Supporting planned and targeted collecting of plant genetic resources for food and agriculture (Activity 7)*,

¹⁸ International Workshop on Developing Institutional Agreements and Capacity to Assist Farmers in Disaster Situations to Restore Agricultural Systems and Seed Security Activities, Rome, 3-5 November 1998.

¹⁹ The Report of the Internally Commissioned - External Review of the CGIAR Genebank Operations, which was available to the Commission at its Seventh Session.

²⁰ See document CGRFA-8/99/7.

focusing on, for example, filling gaps in major crop collections, and collecting in disaster-prone areas, which is reflected in most of the IARCs' current approach. Some countries and institutions report a decline in collecting, because of uncertainty over the terms of access to plant genetic resources, pending completion of the negotiations for the revision of the International Undertaking.

25. Despite substantial needs, there has been limited progress under *Activity 8, Expanding ex situ conservation activities* for non-orthodox seeds and minor crops, including many tropical crops. The new Indian genebank has *in vitro* conservation, cryopreservation and pollen culture facilities, as well as field genebanks, and the IARCs support research on alternative storage methods, but broad progress has been minimal. Botanical gardens have a significant role to play.

Utilization of Plant Genetic Resources (Activities 9-14)

26. Largely in continuation of earlier efforts, significant progress has been made in characterization and evaluation, under *Activity 9: Expanding the characterization, evaluation and number of core collections to facilitate use*. For example, China has characterized 25,000 of its accessions; India 30,000. Increasingly, countries are using molecular techniques in such work (several South American countries for example). Some countries, particularly in Europe, the Americas and Asia are developing core collections, often in collaborative efforts. However, despite wide interest, few core collections have been established to date.

27. Programmes relevant to *Activity 10: Increasing genetic enhancement and base-broadening efforts* have continued, but this area is still under-resourced, and largely limited to the introgression of particular traits into breeders' elite material. FAO and IPGRI have launched an initiative to promote crop genetic base-broadening, and help identify priority crops, as the *Plan* recommends. An informal workshop in 1997 will be followed up by an expert workshop in 1999. Recent examples of genetic enhancement include the West African Rice Development Association's (WARDA) interspecific rice hybridization programme, with the first genetically stable and fully fertile hybrids currently under adaptation and yield evaluation in twelve West African countries.

28. Many countries report activities under *Activity 11: Promoting sustainable agriculture through diversification of crop production and broader diversity in crops*, but in little detail. It is therefore difficult to assess progress against the *Plan's* specific recommendations. Much remains to be done, in particular, focussing on using functional diversity in production systems. This activity is very important in the context of the CBD's programme of work on agrobiodiversity, under Decision III/11.

29. Awareness has grown in recent years of the importance and potential for local and regional food security and income generation of *Activity 12: Promoting development and commercialization of under-utilised crops and species*. Several Latin American countries report activities to develop indigenous fruits, and Andean root and tuber crops. China and India have commercialized a few minor crops. In Africa, crops, minor at a global level, are often particularly important for food security. A number of networks have been established, promoted by the International Centre for Under-utilized Crops. However, while many countries report some activities, much remains to be done.

30. In recognition of the importance of small-scale seed production and exchange, more countries report work under *Activity 13: Supporting seed production and distribution*. FAO has re-oriented its seed programme accordingly. The potential demand for improvement in the informal mechanisms on which most farmers rely for their own seed supply area is very large. There has recently been substantial research by FAO and other organizations (including the Overseas Development Institute, and the Netherlands Plant Breeding Institute) on seed policy. FAO has initiated a series of regional meetings on seed policy and programme issues, including seed

regulatory frameworks (seed certification, variety release systems, *etc.*), in order to assist countries in building up their capacity to overcome seed-related agricultural production constraints. As a result of the first of these meetings, held in Abidjan in 1998 for Sub-Saharan Africa, the Africa Seeds Network was established, and a regional seed programme developed, in collaboration with the World Bank. Similar meetings in other regions are planned in 1999, with a view to developing a global approach to seed policy.

31. Few activities have been reported in *Activity 14: Developing new markets for local varieties and “diversity-rich” products*.

Institutions and Capacity-Building (Activities 15-20)

32. The *Plan* emphasizes the importance of *Activity 15, Building strong national programmes* and, at its Seventh Session, the Commission agreed that the development and strengthening of national programmes, involving all stakeholders, was a key to its implementation. The 1998 regional meetings also highlighted this area, and were an opportunity for countries to exchange experiences and identify best practices in national programmes and planning.

33. There has been much progress in this area, in many countries, despite national agricultural research systems having been weakened by reductions in funding. Several countries have held national workshops on plant genetic resources for food and agriculture, which has helped further define national priorities, and stimulate the formation of national committees. The number of countries with national committees (or similar coordinating mechanisms) has roughly doubled since 1995. Countries report an increasing involvement of a wider range of stakeholder groups (farmers, breeders, NGOs, universities and the private sector) in such committees, and national programmes generally. Some national committees have been involved in preparing national plans or strategies for plant genetic resources for food and agriculture conservation and use, usually as components of National Biodiversity Strategies and Action Plans.

34. Many countries report changes since 1995 in legislation on matters such as plant breeders' rights and other relevant intellectual property rights, and access legislation. Many countries indicate a continuing need for policy capacity-building.²¹ In particular, the need for members of the World Trade Organization to develop legislation consistent with Article 27.3(b) of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement were highlighted during the 1998 regional meetings.

35. There has been substantial progress in *Activity 16: Promoting networks for plant genetic resources for food and agriculture*, for both regional and sub-regional networks. In line with the specific recommendations of the *Plan*, networks are being established for the following regions or sub-regions:²²

- Central Asia (CAN/PGR²³ was established in October 1996);
- East Africa and the Indian Ocean Islands (EAPGREN²⁴ was established in November 1997, and meetings of the interim steering committee were held in 1998);
- West and Central Africa (GRENEWCA²⁵ was established at the 1998 regional meeting, and a meeting of the Steering Committee was held in February 1999);

²¹ In para. 237, the *Plan* noted that national programmes are increasingly confronted with policy, legal and institutional issues.

²² Para. 254.

²³ The Central Asian Plant Genetic Resources Network.

²⁴ The Eastern Africa Plant Genetic Resources Network.

- The Caribbean (CAPGERNET²⁶ was established under Proci-Caribe in 1998, facilitated by IICA and others);
- The Pacific (a workshop was scheduled for March 1999, with a view to establishing a network).

EAPGREN and GRENEWCA were established under the umbrella of the relevant sub-regional agricultural research organizations, ASARECA and CORAF respectively, and APAARI provides a regional umbrella for Asia and the Pacific sub-regional networks. In Latin America and the Caribbean, the 1998 regional meeting developed a regional mechanism to promote implementation of the *Plan*.

36. International organizations, in particular the IARCs (for their mandate crops), and FAO (for other crops, including under-utilized species),²⁷ support international and regional crop networks. Some concern specifically plant genetic resources for food and agriculture. Others have a wider mandate. Since the adoption of the *Plan*, efforts have been made to increase the latter's activities of relevance to plant genetic resources for food and agriculture, and to strengthen the links between conservation and use. Several network earlier initiated by FAO on a regional basis have expanded to a global level, to provide a more comprehensive framework for international information exchange and cooperation. Some countries (including France, the Philippines and Tunisia) have also established effective national networks to support and promote national activities.

37. The 1998 regional meetings made recommendations to strengthen the functioning of networks, and the issue of sustainability was specifically addressed during the meeting to establish EAPGREN. There remains a clear need for improved government support for participation by their national institutions in networks.

38. Many countries, often facilitated by regional networks, continue to strengthen plant genetic resources information systems, and, in particular, to document genetic resource collections, under *Activity 17: Constructing comprehensive information systems for plant genetic resources for food and agriculture*. For example, the Southern African Development Community (SADC) plant genetic resources programme, has a programme to strengthen national and sub-regional documentation systems, and various ECP/GR crop working groups are developing several "common crop databases". A network of country correspondents established to provide data for the World Information and Early Warning System on Plant Genetic Resources' (WIEWS) databases, is also facilitating the development of national information systems, and training in the use of WIEWS software is also provided. WIEWS is now available on the internet, and links with the CGIAR's System-wide Information Network on Genetic Resources (SINGER) and other crop information systems are being strengthened. The second phase of SINGER, now underway, will focus on improving services to users.

39. There has been much less progress under *Activity 18: Developing monitoring and early warning systems for loss of plant genetic resources for food and agriculture*. Genetic erosion remains a major concern, but there are few objective assessments of its extent, and few established early warning mechanisms. The efficiency, purpose and value of WIEWS was reviewed in 1996, and adjustments were made accordingly.²⁸ FAO will convene an expert meeting in June 1999 to identify possible methodologies for assessing genetic diversity and its loss, develop indicators, and propose monitoring mechanisms, including through the WIEWS country correspondent network.

²⁵ The Genetic Resources Network for Western and Central Africa.

²⁶ The Caribbean Plant Genetic Resources Network.

²⁷ See document CGRFA-8/99/Inf. 7.

²⁸ See Document CGRFA-8/99/6.

40. As recognized in *Activity 19: Expanding and improving education and training*, training remains a pressing need, despite the many activities that continue to be carried out, often with the support of regional and international organizations. Universities in several countries have initiated components of graduate courses on plant genetic resources.

41. The importance of *Activity 20: Promoting public awareness of the value of plant genetic resources for food and agriculture conservation and use* is widely recognized by those responsible for national plant genetic resources programmes, as well as the important role that non-governmental organizations can play. Many countries have taken advantage of national workshops to promote wider public awareness, through the press and television.

4. CROSS-CUTTING ISSUES

42. The International Technical Conference agreed that follow-up processes called for action at all levels, and should involve all stakeholders. The review of current activities in part 3 of the present document shows the wide range of actors currently involved, at local, national, regional and international levels. Ways of facilitating stakeholder involvement at each of these levels may need to be further developed, including possible mechanisms to allow stakeholders to meet and agree on collaborative activities, to develop proposals for projects and programmes, and to facilitate the identification of funding and the exchange of information and experiences.

43. Well constituted national programmes can fulfil many of these functions at national level. Networks can play a similar role at regional and international level. Support of regional or sub-regional cooperation in the implementation of the *Plan* is one of the activities of the work programme of the Global Forum for Agricultural Research, and the recommendations of the 1998 regional meetings are being followed up in the respective regional and sub-regional research forums.

44. At international level, the Commission requested that FAO play a proactive and creative role in facilitating and monitoring implementation of the *Plan*, and provide assistance and guidance to countries upon request, including, where appropriate, help to identify possible new, additional and innovative sources of funding. The 1998 regional meetings, identified the need for FAO and other international organizations to support implementation by countries of the *Plan*, through, *inter alia*, the identification of funding sources; preparation of guidelines and development of project proposals; dissemination of best practice case studies; and supporting and strengthening forums at regional, national, and local community levels. FAO is currently examining possible ways to facilitate further implementation of the *Plan* in collaboration with other international organizations, and the Commission may wish to provide guidance.²⁹

45. The *Plan* stresses the important role of farmers and local communities in managing plant genetic resources for food and agriculture, and there may accordingly be a need to strengthen forums or institutions at the community level. This could contribute, in a practical way, to the realization of Farmers' Rights, and would be consistent with the recommendation of the CoP/CBD that "countries should be encouraged to set up and maintain local level forums for farmers, researchers, extension workers and other stakeholders to evolve genuine partnerships"³⁰. The absence of such mechanisms at present may constitute a constraint to the full implementation of the *Plan*.

²⁹ See document CGRFA-8/99/5.

³⁰ Decision III/11 para. 15(i), of the CoP/CBD.

5. GUIDANCE REQUESTED FROM THE COMMISSION

46. The International Technical Conference agreed that “overall progress in the implementation of the *Global Plan of Action* and of 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”. Document CGRFA-8/99/5 deals with the process of monitoring.

47. The Commission is invited to review the current state of implementation of the *Plan*, as presented in this document, and summarized in *Table 1*, and on:

- Gaps, imbalances and insufficient coordination of activities under the *Plan*, and how these may be rectified, as well as any new initiatives or activities;
- Areas that may need further and deeper analysis by the Secretariat, or consideration by its Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture;
- Issues with policy implications that should be brought to the attention of FAO Council and Conference, and possibly the CoP/CBD and the Commission for Sustainable Development.

Table 1

GPA Priority Activity		Progress towards meeting needs	Impact of GPA in focusing activities	Achievements since 1995	Gaps and needs
1	<i>Surveying and inventorying PGRFA</i>	Moderate	Moderate	Many individual activities, often building on pre-GPA activities	High needs: basis for many other activities
2	<i>Supporting on-farm management and improvement of PGRFA</i>	Moderate	High	Large number of projects initiated	Scaling up, integration in national programmes, ensuring sustainability
3	<i>Assisting farmers in disaster situations to restore agricultural systems</i>	Limited	High	Few countries indicate activities; FAO convened meeting to develop agreements and institutional capacity	Disaster preparedness, needs likely to increase;
4	<i>Promoting in situ conservation of wild crop relatives and wild plants for food production</i>	Little	Low	Many countries report activities, but largely limited to conventional protected area management	Integrating PGRFA measures in conservation plans; securing involvement of local people; improving coordination between organizations
5	<i>Sustaining existing ex situ collections</i>	Moderate	Moderate	Some new genebank facilities, otherwise focus on sustaining existing collections; COGENT joined International <i>Ex Situ</i> Network	Further rationalization and priority-setting
6	<i>Regenerating threatened ex situ accessions</i>	Little	Low	Action by cooperative programmes in Europe and Americas, and by IARCs; few other activities;	High needs reflecting large backlog
7	<i>Supporting planned and targeted collecting of PGRFA</i>	Moderate	Moderate	Some ongoing activities; IARCs increasingly focusing efforts	Further targeting and priority-setting
8	<i>Expanding ex situ conservation activities (for non-orthodox seeded, and minor crops)</i>	Little	Low	Few countries report activities; some research on alternative storage methods	High: many important tropical crops fall into this category; links with botanic gardens
9	<i>Expanding the characterization, evaluation and no. of core collections to facilitate use</i>	Moderate	Moderate	Many individual activities, often building on pre-GPA activities; some core collections established	Very large scale needs requiring prioritization
10	<i>Increasing genetic enhancement and base-broadening efforts</i>	Little	Moderate	Continuing genetic enhancement through introgression; FAO/IPGRI initiative on base-broadening	Identification of priority crops; base-broadening programmes
11	<i>Promoting sustainable agriculture through diversification of crop production and broader diversity in crops</i>	Limited	Low	Many activities reported, but situation difficult to assess	Much remains to be done, focusing on use of functional diversity in production systems
12	<i>Promoting development and commercialization of under-utilised crops and species</i>	Moderate	Moderate	Several new activities initiated; networks established	Large potential remains for developing under-utilized crops
13	<i>Supporting seed production and distribution</i>	Moderate	High	Some country initiatives reported; FAO programme reoriented	High needs in informal sector where most farmers source seeds
14	<i>Developing new markets for local varieties and "diversity-rich" products</i>	Little	Low	Few activities reported	Models and case studies needed
15	<i>Building strong national programmes</i>	Substantial	High	More national committees and coordination mechanisms, wider stakeholder involvement	Continued capacity-building, particularly on policy issues
16	<i>Promoting networks for plant genetic resources for food and agriculture</i>	Substantial	High	(Sub)regional networks established for all areas; crop-related networks increased	Sustainability needs greater consideration; synergy between networks
17	<i>Constructing comprehensive information systems for PGRFA</i>	Moderate	Moderate	Ongoing efforts in many countries, facilitated by networks; WIEWS and SINGER improved	Basic documentation still needed in many countries
18	<i>Developing monitoring and early warning systems for loss of PGRFA</i>	Little	Low	Few countries report activities; review of WIEWS	Indicators of genetic diversity and erosion; effective early warning mechanisms still needed
19	<i>Expanding and improving education and training</i>	Moderate	Moderate	Many activities	Training continues to be a pressing need
20	<i>Promoting public awareness of the value of PGRFA</i>	Moderate	Moderate	Increased recognition of importance by PGR focal points; role of NGOs; use of national workshops	Need remains to mobilize public support for PGRFA activities

