



**SUMMARY OF THE FIRST SESSION OF THE  
INTERGOVERNMENTAL TECHNICAL  
WORKING GROUP ON PLANT GENETIC  
RESOURCES FOR FOOD AND AGRICULTURE  
2-4 JULY 2001**

The first session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture (ITWG-PGR) was held from 2-4 July 2001, at the Headquarters of the UN Food and Agriculture Organization (FAO) in Rome. The Working Group's task at this meeting was to provide technical advice to the Commission on Genetic Resources for Food and Agriculture (CGRFA) in guiding and reviewing the implementation of the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (GPA), to further develop a global system of plant genetic resources for food and agriculture (PGRFA). The session was attended by 21 Member delegations, seven observers from CGRFA Member Nations who are not Members of the Working Group, three representatives from intergovernmental organizations, one representative from a non-governmental organizations (NGO), one industry representative and representatives from two agricultural research centers.

Participants met over three days to consider papers prepared by the Secretariat regarding progress, monitoring and facilitation of the GPA's implementation, updating the Report on the State of the World's PGRFA, the World Information and Early Warning System (WIEWS), and a study on potential impacts of Genetic Use Restriction Technologies (GURTs) on agricultural biodiversity and production systems. Following discussions on each of these issues, the Working Group provided recommendations that were subsequently adopted in a report produced at the close of the meeting. These recommendations will be submitted to the CGRFA for consideration at its ninth Regular Session.

**BACKGROUND**

Established as a subsidiary body of the CGRFA during its seventh Regular Session held from 15-23 May 1997, the Working Group's mandate is to: review the situation of and issues related to agricultural biodiversity in the area of PGRFA; advise and make recommendations to the CGRFA on these matters; consider the progress made in implementing the CGRFA's programme of work on PGRFA as well as any other matters referred to the Working Group by the CGRFA; and report to the CGRFA on its activities. The CGRFA determines the

timing and duration of these sessions. The Working Group is comprised of a regionally balanced assemblage of technical experts from 27 Member Nations. It allows Members of the CRGFA that are not Members of the Working Group to participate as observers, and may invite other experts and representatives of specialized international organizations to attend its meetings.

**REPORT OF THE WORKING GROUP**

**OPENING PLENARY**

On Monday, 2 July, Louise Fresco, FAO Assistant Director-General for Agriculture, delivered a eulogy for Dr. Umberto Menini, former Chief of FAO's Seed and Plant Genetic Resources Service (AGPS). She highlighted his contributions to horticulture and tropical agriculture, and his love for teaching. After a moment of silence, she proceeded to welcome delegates to the first session of the ITWG-PGR. She observed that the successful completion of the negotiations of the International Undertaking on Plant Genetic Resources for Food and Agriculture (IU) would allow for additional development of priority activities in facilitating and monitoring the implementation of the GPA. After wishing delegates success in their work, she proceeded to the election of officers.

Delegates elected Eng Siang Lim (Malaysia) as the Chair of the Working Group, Brad Fraleigh (Canada) and Abebe Demissie (Ethiopia) as Vice-Chairs, and Åsmund Asdal (Norway) as Rapporteur. Chair Lim then took the floor. He recalled that paragraph 32 of the Report of the eighth Regular Session of the CGRFA indicated that this meeting would provide guidance on monitoring the state of PGRFA and the WIEWS for the GPA. He reminded the Working Group that their task over the next three days was to provide guidance to the next CGRFA meeting.

CGRFA Secretary José Esquinas-Alcázar highlighted the recently completed negotiations on the IU, which had concluded with the exception of a few remaining brackets just some days prior to this meeting. He discussed how the GPA, the WIEWS, the Report on the State of World's PGRFA, and the supporting networks of information and plant germplasm exchange would serve as the supporting mechanisms of the IU.

David Cooper, on behalf of the Executive Secretary of the Convention on Biological Diversity (CBD), stressed the contribution of the GPA and the Report on the State of the World's PGRFA to the

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CBD's implementation, and referenced relevant decisions of the CBD's Conference of the Parties (COP). Regarding the CBD programme of work on agricultural biodiversity, he said that the FAO has contributed to its development and assessment of on-going activities, and he invited the FAO to support its implementation. Regarding GURTs, he said the CBD COP has examined them, on the basis of a recommendation by its Subsidiary Body on Scientific, Technical and Technological Advice, and has invited the FAO, in collaboration with others, to further study their potential implications for the conservation and sustainable use of PGRFA.

Following these introductory remarks, Chair Lim then introduced the agenda of the meeting (CGRFA/WG-PGR-1/01/1), which was adopted. Delegates then proceeded to discuss the meeting's substantive agenda items, considering the relevant background documents and providing recommendations for the session's final report. These recommendations were reviewed and adopted in a closing plenary on Wednesday, 4 July.

### **PROGRESS REPORT ON THE IMPLEMENTATION OF THE GPA FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PGRFA**

On Monday, 2 July, Murthi Anishetty, FAO Plant Production and Protection Division, introduced the Progress Report on the Implementation of the GPA for the Conservation and Sustainable Utilization of PGRFA (CGRFA/WG-PGR-1/01/2). He said the report, based on a questionnaire circulated to GPA National Focal Points, follows the GPA's structure regarding 20 priority activity areas under four thematic groups: *in situ* conservation and development (activity areas 1-4); *ex situ* conservation (areas 5-8); utilization of PGRFA (areas 9-14); and institutions and capacity-building (areas 15-20). He said the simple structure of the questionnaire contributed to the survey's success, however, detailed quantitative information is missing throughout the activities reported. He highlighted the need for global arrangements to facilitate the GPA's implementation, addressing both institutional and funding factors. He said the Working Group could consider making recommendations on: additional efforts required by all stakeholders in order to implement all activity areas of the GPA; areas that may need further and deeper analysis by the CGRFA Secretariat in relation to CBD COP decisions; and other issues with policy implications.

Chair Lim then called for comments. Participants welcomed information provided in the background document. Ecuador noted that important collaborative activities in Latin America are missing, but that it was the countries' responsibility to report them. Germany suggested including more tables and graphics in the report and noted that a conclusive policy framework is needed to facilitate implementation. He said that research and development activities could be established among stakeholders, using existing networks. Canada, with Portugal, stressed the need for more information on linkages among the different activity areas and, with Angola, on activities supporting on-farm management and improvement of PGRFA. Canada said that providing information is important, but prioritization of activities rests with national authorities according to each country's needs.

Anishetty noted that the simple structure of the questionnaire did not allow for questions on linkages, but that this could be among the Working Group's proposals. Regarding a query by Canada on the availability of information provided by countries, he said that such information is generally reproduced on-line and can be made available to interested Members. CGRFA Secretary Esquinas-Alcázar underscored

that, if countries decide so, such information could be directly placed in the WIEWS database. India said that confidential information should remain confidential.

The Philippines suggested that the report highlight the problem of regeneration of *ex situ* collections. Ethiopia praised the report's focus on *ex situ* conservation and utilization of PGRFA in many regions, but stated that *in situ* conservation, capacity building and seed distribution are poorly addressed. He also questioned the nature of problems associated with national and international cooperation and interests. Mexico, supported by Iran, expressed concern that the report seemed partial due to lack of information, noting that at least 50% of countries had not provided information, and suggested prioritizing technical mechanisms to encourage other countries' participation in the survey. Angola noted that the programs had been supported largely from national budgets. She said that in the African region, more support is needed for seed production and distribution, *in situ* conservation and capacity building. She also highlighted the positive effects of the South African regional network and called for more support for regional and national networks. Colombia recommended a more coordinated system to: promote awareness of the GPA in academia; identify the best information resource persons; and clarify how data will be used for a good report. India underscored improvements in *in situ* and on-farm activities. Egypt agreed that good examples could be used to show how work can be done effectively.

A representative of the Intermediate Technology Development Group, on behalf of NGOs and civil society organizations, advocated more input from NGOs and farmers, noting their active participation in on-farm conservation of resources. He supported delegates' statements regarding on-farm conservation, capacity building and linkages. He said that conserving heritage varieties of seed through promotion of seed fairs is useful for maintaining the range of PGRFA. He welcomed the IU for its recognition of farmer's rights, noted the strong interrelationship between NGOs and farmers in conservation and utilization of PGRFA, and requested that future reports continue to reflect farmers' needs and concerns.

Chair Lim reviewed the points made thus far and stressed consideration of how to educate and involve the consumer in creating a market for *in situ* conservation and sustaining PGRFA.

A representative of the Consultative Group for International Agricultural Research (CGIAR) noted that the CGIAR cooperated with the FAO in the process of developing the GPA, expressed further willingness to collaborate and said that CGIAR Centres have used the GPA as a framework and planning tool. Highlighting indicative data, including an overall increase in recent requests for material held in gene banks, and noting that natural disasters would continue to happen, he warned that the state of the world's PGRFA was in danger. He expressed the CGIAR's interest in working with governments and the FAO to address this situation, and agreed with Colombia that research could be more focused, while stressing that countries advocating for more research should be willing to provide financial support.

On additional efforts required by all stakeholders to implement GPA activity areas, particularly those related to *in situ* conservation and development and to institutions and capacity building, Iran drew attention to the on-going drought in his region, which threatens *in situ* and on-farm material, and called for an international effort to combat the problem. He said that, while countries in the region lack the capacity to combat the drought, all of humanity has a responsibility to help. He also noted that the Near East region contributed the majority of crops on the

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list of crops accessible under the IU's Multilateral System. He then suggested recommendations on: action in disaster situations; facilitating emergency collections and activities in drought-affected areas; and preservation of farmers' varieties through stabilizing livelihoods in affected areas.

Canada stressed that the Working Group should not dictate national priorities, and suggested including a general qualifying phrase on different countries' priorities. He then said that another way to ensure international attention in such cases is to include the maximum number of crops and their gene pools in the IU's Multilateral System. Portugal also said that germplasm identification, which is necessary for reintroduction in disaster situations, is only possible if the germplasm can be accessed through the Multilateral System. India noted that sharing of germplasm and sharing of benefits had to be balanced. He added that there is no conflict between supporting *in situ* activities and whether or not material is included in the Multilateral System, and called for funding to support plant breeding. Colombia highlighted the case of civil strife and peoples' displacements. Mexico stressed that emphasis should be placed on countries' and not stakeholders' efforts. Angola suggested including raising awareness on the links between climate change and loss of PGRFA. Ethiopia proposed including elements on invasive alien species and GURTs, and on support of community genebanks, in the context of *in situ* conservation.

Chair Lim proposed to refer to disaster situations and climate change under the recommendation on areas that may need further and deeper analysis by the CGRFA Secretariat. It was also agreed to reference linkages among different activities, international commitment, contributions by international and civil society organizations and other stakeholders, and regeneration. Regarding recommendations on other issues with policy implications, the CBD representative noted that the Global Environment Facility had recently approved a new operational programme on agricultural biodiversity.

The closing plenary on Wednesday, 4 July, adopted the recommendations with minimal discussion.

**RECOMMENDATIONS:** The report of the Working Group on the progress report on the implementation of the GPA emphasizes, *inter alia*, that:

- \* there had been considerable progress in the GPA's implementation, largely through national efforts;
- \* the GPA's implementation is constrained, in many countries, by lack of adequate financial resources;
- \* priorities vary among countries;
- \* coordination between stakeholders within countries should be reinforced;
- \* global change phenomena, including climate change, the increased use of genetically modified crops and invasive species, should be taken into account; and
- \* future reports should give more attention to the activities of stakeholders, including NGOs and farmers' organizations, and to linkages between activities.

### **MONITORING THE IMPLEMENTATION OF THE GPA FOR THE CONSERVATION AND SUSTAINABLE USE OF PGRFA**

On Monday, 2 July, Stefano Diulgheroff, PGR Information Management Officer AGPS, introduced the background document on Monitoring the Implementation of the GPA for the Conservation and Sustainable Use of PGRFA (CGRFA/WG-PGR-1/01/3). He recalled

that the GPA was adopted at the fourth International Technical Conference on PGRFA, held in Leipzig in June 1996, and that the eighth Regular Session of the CGRFA requested that the Working Group guide the implementation and review of the GPA during the present biennium. Following consultation with the International Plant Genetic Resources Institute (IPGRI), the background document was developed to address the processes by which effective monitoring can best be attained, and a long-term monitoring system could be established. It reviews the monitoring processes used in the 1998 and 2000 surveys, including lessons learned; offers considerations for future monitoring efforts; seeks guidance from the Working Group for the further development of the monitoring process; and proposes indicators for monitoring the implementation of the GPA.

Chair Lim said monitoring depends on how countries organize their GPA National Focal Points, noted the complex process of involving stakeholders, and asked participants for suggestions on how to improve the provision of information and sharing of experiences at the national level. Portugal suggested that the proposed monitoring system be divided into two parts: one with a core set of questions that countries would be encouraged to answer, and another one that countries can answer if appropriate. Germany agreed that the burden on National Focal Points should be reduced and, with Ethiopia, India, Italy and Norway, supported collaboration with other relevant bodies. Canada and Germany proposed developing a common agreed set of indicators. Colombia called for a distinction between general and specific data, for better correlation between activities and indicators, and for focus on compliance indicators. Canada defined an approach to developing indicators, identifying the driving force (reason for monitoring the activity), status (current state of affairs) and response (what causes the driving force). He noted areas in the document where indicators are missing or unnecessary, and recommended that serious consideration be given to high-level indicators to provide for quantitative assessments. Nuria Urquia, AGPS Networking Officer, underscored that the list of indicators and the reporting format are focused on information that can actually be provided by stakeholders at the national level. She stressed that National Focal Points can be at the center of the process of gathering information from stakeholders, who pay attention to different issues related to PGRFA. Norway and Ethiopia stressed that indicators should be able to assess not only numbers but also trends or developments. Ethiopia also called for differentiation of core indicators as opposed to less quantitative indicators, noting that, given the amount of resources needed to reply to the questionnaires in a participatory manner, the non-core elements could be avoided.

Many stressed the importance of national and regional priorities. Mexico underscored the dilemma of funding monitoring or using the same resources to engage directly in a project. Iran stressed that a clearing-house mechanism is instrumental in the success of monitoring, and supported creation of national mechanisms to reflect national priorities, which would be followed by the creation of an information network. Mexico highlighted the need to examine the possibility of having global indicators for priority activities to standardize information. Italy called for consideration of activities initiated by governments in order to include NGOs in the GPA's implementation. Canada elaborated that higher-order indicators, such as those used to address genetic erosion and genetic vulnerability, should be developed and applied at both national and global levels. He noted that evaluation of progress and assessment of indicators can be better carried out globally under the GPA. Iran recommended that the Secretariat keep the GPA in mind

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when evaluating the questionnaire, and called for strengthening national committees. He noted the difference between genetic vulnerability, which is specific and refers to the weakening of one genotype or cultivar, and genetic erosion, which is a more generalized loss of genetic diversity. Angola called for flexibility in allowing countries to identify their priorities through the questionnaire, and emphasized the value of regional cooperation. A representative from the International Society for Plant Molecular Biology noted the lack of questions regarding use of technology, and advocated their inclusion to raise awareness on their availability. He highlighted a lack of awareness in the scientific community about the work of the FAO, specifically the CGRFA, and called for the creation of an interface between the FAO and the scientific community.

The Secretariat reminded delegates that this was a first attempt at creating such a questionnaire, noted selective reporting based on country priorities, and emphasized that the questionnaires were useful in developing national capacities, bringing together various national actors and helping define national priority areas. Acknowledging the costs to countries of answering the questionnaire and noting that the information will be used in the second Report on the State of the World's PGRFA, he concluded by saying that this exercise has and will benefit the countries themselves.

Portugal proposed that the Secretariat address the main priorities and activity areas, and structure the report accordingly. With Iran and Ethiopia, he also suggested the creation of a small working group to improve the questionnaire.

Chair Lim then turned the Working Group's attention to the proposed areas for recommendation and asked for their guidance on any action needed to improve the proposed indicators (CGRFA/WG-PGR-1/01/3 - Annex) and the Reporting Format for Monitoring the Implementation of the GPA (CGRFA/WG-PGR-1/01/Inf.1), in particular through pilot activities.

Portugal, with Canada, suggested selecting representative countries. Canada reiterated that the criteria for indicators should have a scientific basis, and suggested consideration of a higher-level synthesis of indicators of genetic erosion. Chair Lim reiterated the main points made by participants, including: identification and definition of core indicators for new areas such as genetic erosion and vulnerability; the relationship between indicators and reporting formats; trend analysis; consultation with international and regional organizations and stakeholders; and use of a single reporting format. The US clarified, and Chair Lim, Ethiopia and India agreed, that an expert group should revise the format before pilot projects are initiated. Portugal echoed Canada's earlier call for standardization of criteria. Ethiopia said the report should have a global dimension. Mexico supported identification of obstacles that countries might face in completing and submitting the questionnaire.

On recommendations for capacity-building needs, Italy and Canada supported use of a clearing-house mechanism. Iran said that capacity building should specifically address certain areas, since different countries have different priorities. Regarding consultations with stakeholders, the Working Group agreed to recommend consultations with international and regional organizations. Regarding mobilization of necessary extra-budgetary funds, the FAO Secretariat noted that pilot studies are not included in the FAO Regular Programme and donors should be approached. The Working Group agreed not to make any recommendations on funding.

Following participants' queries regarding the time-frame and the possibility of having results in a shorter period of time, the Working Group agreed that pilot activities should be carried out by the FAO, in collaboration with IPGRI, in selected countries during 2002, to evaluate the proposed indicators and reporting format. The survey conducted in 2002 would be presented at the tenth Regular Session of the CGRFA. Another survey, to take place in 2004, would include any lessons learned, and would contribute to the preparation of the second Report on the State of the World's PGRFA.

The closing plenary on Wednesday, 4 July, adopted the recommendations with minimal discussion.

**RECOMMENDATIONS:** The report of the Working Group on monitoring implementation of the GPA emphasizes, *inter alia*, that:

- \* monitoring and evaluation should be built into all GPA activities, but be kept as simple as possible;
- \* different national and regional priorities need to be accommodated; and
- \* global monitoring efforts should be based on monitoring by stakeholders at the national level, to be facilitated through a clearing-house or similar mechanism.

On indicators, the Working Group made the following suggestions:

- \* a conceptual framework should be developed;
- \* a core set of indicators should be identified;
- \* higher-order indicators should be developed;
- \* there is a need to establish benchmark data and assess trends; and
- \* the survey questions should be directly related to information required for the indicators.

It was also agreed that the indicators and reporting format should be further developed by an expert group.

### **UPDATING THE REPORT ON THE STATE OF THE WORLD'S PGRFA**

On Tuesday, 3 July, David Cooper, AGPS Policy Officer, introduced the background document on Updating the Report on the State of the World's PGRFA (CGRFA/WG-PGR-1/01/4). He recalled that the original report, which was prepared for the Leipzig Conference in 1996, constituted the first comprehensive worldwide assessment of the state of PGRFA. After endorsement by the FAO and the CBD, the extended report was published in 1998. He noted that at its eighth Regular Session, the CGRFA agreed that the FAO should periodically assess the Report on the State of the World's PGRFA, which could facilitate the analysis of changing needs and gaps and contribute to the preparation of the GPA.

He further noted that during the previous day's discussions on the timetable for the GPA, the Working Group suggested that the next report should be completed for the 11th Regular Session of the CGRFA in 2005. He highlighted possible thematic studies suggested during the second Extraordinary Session of the CGRFA that could supplement rather than simply update information in a number of areas, and called upon the Working Group to provide input on these suggested areas for study. Chair Lim said that the Working Group might want to suggest other international mechanisms for updating the report, and opened the floor for comments.

Mexico highlighted constraints of time and resources. Germany suggested the report be finalized along with the IU, and that common indicators should provide a basis for fair reporting. India and Canada said that in comparing the two State of the World Reports, it would be

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important to address possible directions for the future. During an extended discussion on the relative importance of the suggested thematic areas for study and the priority that should be given them, many agreed on the importance of indicators for measuring genetic erosion and methodologies for the use of PGRFA in crop improvement, including new approaches to plant breeding and new biotechnologies.

Canada, Mexico and others supported identification of trends. The US lodged reservations on the proposed theme of ecosystem services, while Canada supported its elaboration, including areas such as pest and disease control, nutrient cycling and soil fertility. India emphasized the impact of national, regional and global agricultural policies and agreements on conservation and use of PGRFA. Angola and Mexico highlighted the IU's potential role in this context. Ethiopia supported a study of lesser-known but potentially valuable crop plants, and, with Angola, India and Iran, supported study of biosecurity and biosafety issues. Canada suggested that these issues be addressed only in the general context of genetic erosion, and others agreed that they would particularly support studies on the impacts of invasive species, genetically modified organisms and transgenic plant breeding.

A representative of the CGIAR expressed concern about limited resources, noting that some points require input by consultants, and reiterated the CGIAR's willingness to assist in restoration of germplasm collections in the wake of natural disasters and civil strife. Cooper thanked the Working Group for their guidance, noting general agreement on the approach of updating of the report including in-depth studies on particular themes. He said that revised and more detailed proposals would be submitted during the next CGRFA meeting.

Chair Lim then requested guidance from the Working Group on actions to be taken by the Secretariat. Delegates agreed that the second Report on the State of the World's PGRFA should be prepared for consideration for adoption by the 12th Session of the CGRFA in 2007.

Regarding the proposed thematic areas for further study, Chair Lim suggested prioritizing the number and nature of areas to be addressed. Following a lengthy debate that yielded no consensus and revealed a range of priority preferences for different regions, the Working Group agreed to simply ask the Secretariat to prepare a more detailed scope and methodology for studies to be submitted to the CGRFA. In addition to the proposed list, the Working Group also agreed to include: lesser-known but potentially valuable crop plants; use of new methodologies and technologies for conservation and evaluation; and participatory plant breeding.

Regarding the integration of the monitoring process for the implementation of the GPA and the process of updating the Report on the State of the World's PGRFA, the Working Group agreed that this would be coordinated with other areas of GPA implementation and linked with reporting mechanisms under the CBD and other complementary processes. The Working Group agreed not to make any recommendation regarding the mobilization of necessary extra-budgetary funds.

During the closing plenary on Wednesday, 4 July, the Working Group agreed to omit references to proposed supplementary thematic studies on: crop improvement; ecosystem services; and impacts on PGRFA of climate change, invasive alien species and genetically modified organisms. They also agreed to insert, as discussed, reference to efforts made to develop common indicators.

**RECOMMENDATIONS:** The report of the Working Group on updating the Report on the State of the World's Plant Genetic Resources emphasizes that:

- \* the Report, to be considered by the 12th Session of the CGRFA in 2007, should include a comparison of the status of PGRFA, its conservation and use, and related knowledge, with their status at the time of the first Report, allowing trends to be identified;

- \* it should be supplemented by thematic studies;

- \* the extent to which specific areas could be addressed depends on resources available, and full use of existing information and the work of other bodies should be made; and

- \* the preparation of the second Report should be integrated with monitoring activities, and the further development of WIEWS.

### ***PROGRESS REPORT ON THE WORLD INFORMATION AND EARLY WARNING SYSTEM ON PGRFA (WIEWS)***

On Tuesday, 3 July, Stefano Diulgheroff, PGR Information Management Officer AGPS, introduced the background document (CGRFA/WG-PGR-1/01/6). He reviewed the development of the WIEWS on PGRFA, focusing on the release of a new web-based interface (accessible at: <http://apps3.fao.org/wiews>), which is flexible, directly responsive to government officials providing information and integrated with on-going national and international PGRFA information and knowledge exchange processes. He said that its development has focused on improving data content, data accessibility, data and system integration, data consistency and system sustainability. He also described WIEWS' role in updating the Report on the State of the World's PGRFA and in monitoring the GPA's implementation, and he referenced the Early Warning System on Plant Genetic Erosion.

Participants noted their appreciation for the substantial progress made. Germany, followed by an observer, supported the WIEWS' reconstruction to link with existing national, regional and other organizations' databases. Portugal prioritized the WIEWS' reliance on direct contributions from member countries, stressing that National Focal Points should collaborate more closely with the system. Regarding the role of WIEWS in the forthcoming assessment of the Report of the State of the World's PGRFA and the establishment of a web-based information system for monitoring the implementation of the GPA, Germany recommended restricting data to the minimum set of indicators, and with Canada, stressed the possibility of moving towards a distributed database model.

Regarding its role in providing support to national PGRFA programs for the establishment of a clearing-house mechanism on the implementation of the GPA, Canada advocated allowing countries to choose their optimal approach. Colombia and Mexico stressed that without such support WIEWS would collapse, as countries are the providers of information.

Regarding the possible further development of the Early Warning System on Plant Genetic Erosion, Iran noted that early warning is at the core of monitoring the status of PGRFA and stressed that, with the use of geographical information systems, WIEWS could be used as a diagnostic tool to identify problem areas and act appropriately in solving problems. Canada added that it could be used in emergency situations. The US noted that geographical information systems can only be useful if the database is as complete as possible.

The closing plenary on Wednesday, 4 July, adopted the recommendations with minimal discussion.

**RECOMMENDATIONS:** The report of the Working Group regarding the progress report on WIEWS emphasizes that:

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\* substantial progress was made on: the documentation of activities resulting from monitoring the GPA's implementation, the integration of Seed Information Systems, and the implementation of a multi-language function and a dynamic list of links;

\* WIEWS continue to be developed in a simple and cost-effective way, linked to national information systems on PGRFA;

\* the Secretariat should continue assisting member countries in building capacity for information management; and

\* early warning would be improved through the development and application of indicators and enhanced capacity at national and community levels.

### ***FACILITATING THE IMPLEMENTATION OF THE GPA FOR THE CONSERVATION AND SUSTAINABLE UTILIZATION OF PGRFA***

On Tuesday, 3 July, Nuria Urquia, AGPS Networking Officer, introduced the background document on Facilitating the Implementation of the GPA for the Conservation and Sustainable Utilization of PGRFA (CGRFA/WG-PGR-1/01/5). She stated that the Leipzig Conference called for involvement of parties associated with the Conference in follow-up processes, and recalled that the GPA's implementation is developed in cooperation with IPGRI, other CGIAR Centres, the UN Environment Programme, the UN Development Programme, the World Bank, other international organizations, NGOs, the private sector and funding agencies.

She outlined possible approaches for a proposed GPA facility, which would function within the broader framework of the FAO to provide an articulated and formal mechanism to facilitate the GPA's implementation, including the regular programme approach, the project model approach, the consultative forum approach and the facility approach. She then called for guidance from the Working Group regarding the most effective approach to developing such a facilitating mechanism.

A representative of the CGIAR, with Ethiopia, India and others, expressed preference for the facility approach, which is exemplified by the FAO Global Integrated Pest Management (IPM) Facility. A representative of the Global Forum for Agricultural Research (GFAR) spoke on behalf of stakeholders from the private and public sectors, who have expressed their interest in a facilitating mechanism that: integrates research at all levels, builds national capacities, enhances the role of regional research networks, and supports end-use by farmers and other stakeholders at the local level. A representative of the Intermediate Technology Development Group underscored civil society involvement in the implementation of the GPA, concurred with others on integrating project activities, noted participation in GFAR, supported strengthening farmers' voices, and agreed that the proposed facility approach is the most attractive. He also emphasized facilitation, focus, funding and farmers as essential elements in GPA implementation.

Peter Kenmore, Coordinator of the FAO Global IPM Facility, presented an overview of its institutional structure and operational methods, as an example of the facility approach. Stressing reliance on core donors, he explained that the objective of the IPM is to connect expertise with initiative, highlighting examples in program development for training and facilitation of community-based education on agro-ecosystems. He said that the IPM not only facilitates FAO projects, but can also facilitate national programs without the FAO being involved. He also noted that different donor agencies have different ideas on what good IPM might be, and advocated integration of stakeholder and donor views on the nature of required expertise.

Canada, with IPGRI, Ethiopia and Norway, said that proposals for all possible options should be developed equally and more thoroughly, so that governments could more easily understand the levels of commitment required. The Secretariat stressed that since project funding within the mechanism would be given by donors and not by participants, it would serve as a practical rather than a political mechanism. Portugal expressed concern that the facility would be too dependent on donors. Colombia stressed that countries cannot take the responsibility of implementing the GPA without sufficient financial support, noting that only projects reflecting donor interests would be implemented. Colombia, with Angola, highlighted the need to know from where financial resources would come.

The Secretariat explained that the facilitating mechanism should cooperate with outside institutions and thus needed to establish effective coordination mechanisms. He noted that the GPA was negotiated by governments, recognizing that they would supply the funding. Germany said that the GPA's implementation is a national responsibility. Norway said that it might be premature to decide how this will work, pending adoption of the IU and its financial mechanism. Canada recommended that during examination of each option, the Secretariat should take into account the degree of transparency, which would be useful in order to encourage funding from contributors.

Chair Lim summarized the discussion, noting that the CGRFA should consider all options, following further elaboration on each by the Secretariat.

During the closing plenary on Wednesday, 4 July, Portugal noted that the facility approach was described in detail, unlike the other options. Canada suggested stating, and the group agreed, that participants expressed various views about different options. Participants agreed to delete description of the Global IPM Facility, which was included with reference to the facility approach.

**RECOMMENDATIONS:** The Report of the Working Group on facilitating the GPA's implementation emphasizes that:

- \* a dynamic and flexible approach is needed to promote implementation of the GPA's activities as determined by countries' own priorities;
- \* various views were expressed about the different options; and
- \* all options need to be considered and further elaborated.

### ***POTENTIAL IMPACTS OF GENETIC USE RESTRICTION TECHNOLOGIES (GURTS) ON AGRICULTURAL BIODIVERSITY AND AGRICULTURAL PRODUCTION SYSTEMS***

Peter Kenmore, Coordinator of the Global IPM Facility, introduced the background document on GURTs (CGRFA/WG-PGR-1/01/7). The document references CBD COP Decision V/5 on agricultural biodiversity, which invites the FAO and CGRFA to inform the CBD's sixth COP of their initiatives in the area, and includes sections on:

- \* technical aspects of GURT technologies, including their functional mechanisms, state-of-the-art applications and their targets;
- \* potential impacts of GURT applications, including on agricultural biodiversity and biosecurity; potential socio-economic impacts of GURTs in farming systems;
- \* potential economic impacts of GURTs, including impacts on research and development, market power, agricultural input and output markets, intellectual property rights (IPR) considerations and other regulatory aspects; and
- \* issues for consideration of the Working Group.

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He also noted that GURT applications are expected to be in the field in five to ten years for crops and in the longer term for animals.

Chair Lim highlighted the importance of the issue and invited participants to share general views, which would be forwarded to the CGRFA. The US noted its position as both a Member of the Working Group and co-inventor of such technology, and, with an industry representative, expressed concern over the terms “biosecurity” and “terminator technology.” The US suggested use of either GURTs or “technology protection systems” as used by the inventors. He then made extensive comments on the document, noting, *inter alia*, that: the section on technical aspects is accurate and well balanced; farmers are pragmatic and may judge the technology’s value themselves; the section on potential impacts on agricultural biodiversity is not based on strong evidence as the technology is still in the laboratory; many arguments are based on hypotheses; and the ability to protect IPR would result in a greater number of seed suppliers, contrary to the document’s suggestion that the technology will narrow farmers’ choices.

Norway stressed the loss of a seed’s ability to adapt to local conditions and recognized that availability of seeds in emergency situations is linked to food security considerations. Ecuador supported principles of prevention and precaution for biotechnology applications, and supported a systematic case-by-case approach in considering GURTs’ possible impacts. Portugal, with many, underscored that reference to the green revolution in relation with GURTs should be more balanced in mentioning its positive, as well as negative, aspects.

Iran, with Angola, argued that GURTs are intended to increase profits for companies and not to benefit society. He stressed that the FAO should examine the technology from the small farmer’s point of view, and expressed ecological concerns regarding changes in the demography of populations, which could result in problems with invasive alien species. He highlighted the risk of dependency of all farmers on certain big companies and said that, although some arguments are based on hypotheses, the Working Group needs to project what the consequences would be, taking into account all issues mentioned. On the point raised by the US that IPR protection will result in a greater number of seed suppliers, he noted that all companies would be satellites of the inventing one, creating a monopoly, and food security would thus be very fragile.

India noted that the IPR system aims at protecting the technology rather than adding value. He said GURTs will have negative effects on farmers and participatory plant breeding, and expressed concerns over the possibility of cross-pollination. He noted that his country’s legislation does not allow imports to protect human and farmers’ rights. Germany suggested a better-balanced formulation, noting that since the document speculates, it could speculate in both directions. He supported a step-by-step approach in considering possible impacts and taking appropriate measures, and noted that the EU follows such a regulatory approach. Egypt also advocated further study before drawing conclusions. Angola, with Mexico, advocated the precautionary principle and recommended that decisions should be taken by the CGRFA. Indonesia noted that there are always pros and cons inherent in new technologies, and called for transparency and balanced information.

Canada stressed the importance of collaboration between the CBD and FAO in their respective work on agriculture and biodiversity, using the example of pollinators to illustrate such ties. He said that while the document was concise, a lack of data might suggest that research is not being done, noted that possible impacts are in fact speculative, and highlighted inconsistencies in several areas addressing leakage.

Speaking in a personal capacity, he likened IPRs to locks that could be used to protect the valuable contents of a warehouse; said that innovation, blocked by opposition to IPRs, had now emerged in the form of GURTs; and noted that innovators are more likely to put valuable things in the warehouse if they know there is a lock on the door protecting them from piracy. He added that innovation should be supported and encouraged in a market society. Iran, with India, responded that biotechnology and GURTs should not be confused, noting that the idea behind GURTs is to protect the interests of companies and inventors, and observed that the IU entails the opposite philosophy that allows access.

A representative of ASSINSEL deemed the document both speculative and balanced, noting areas of the text that could be modified. He argued that in cases of containment, variety use restriction technologies (V-GURTs) could provide direct added agronomic value and the creation of new varieties is not changed by development in farmers’ fields. He stated that in areas where the seed sector is developed and research is greater, more choices are offered leading to more competition and greater seed security. He said that all three potential uses of GURTs referenced in the background document (use restriction, environmental containment and agricultural productivity contributions) should be elaborated; stressed a cost-benefit approach; and preferred reference to “precautionary approach” over “precautionary principle.”

A representative of the CGIAR underscored its dedication to producing international public goods, and stated that while it would not employ GURTs in seed and plant material distributed to farmers, the CGIAR recognized that they may be useful in basic scientific research, and thus would not restrict scientists in their work. A representative of the Intermediate Technology Development Group recalled that 30 civil society organizations submitted a statement calling for a ban on GURTs at the CBD’s fifth COP, and supported strengthening links between the FAO and CBD. He said that the background document gives a cloak of respectability to GURTs, and that they would be rejected by consumers.

The Secretariat reminded the Working Group that their input would be sent to both the CGRFA and the CBD for consideration.

During the closing plenary on Wednesday, 4 July, delegates reviewing the draft report agreed to add language noting that: concerns were raised by some on the potential negative aspects of GURTs; attempts were made to improve the report’s balance; some Members highlighted the potential for innovation and investment; and the analyses and conclusions drawn from possible impacts required more information. They also agreed to include a note stating that the revised version of the document would be submitted to the ninth Regular Session of the CGRFA as well as to the CBD COP.

**RECOMMENDATIONS:** The Report of the Working Group on the Study on the Potential Impacts of GURTs notes that:

- \* the accuracy of the Report’s technical section is recognized;
- \* the analysis of potential impacts needs to be well-balanced;
- \* food security aspects should be introduced;
- \* the analysis requires more information; and
- \* a revised version of the report will be submitted to the ninth Regular Session of the CGRFA.

### CLOSING PLENARY

On Wednesday, 4 July, the Working Group met in the afternoon to adopt the Draft Report, which was presented by Rapporteur Åsmund Asdal (Norway). The report includes sections on: Introduction and Organizational matters; Progress Report on the Implementation of the

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GPA; Monitoring the Implementation of the GPA; Updating the Report on the State of the World's PGRFA; Progress Report on the WIEWS on PGRFA; Facilitating the Implementation of the GPA; and study on potential impacts of GURT on agricultural biodiversity and agricultural production systems, as a matter arising from the CBD's fifth COP.

Delegates discussed the proposed recommendations and, with some amendments, adopted the report. Chair Lim thanked the Working Group, the Secretariat, and all other participants, and adjourned the meeting at 6:00 pm.

### THINGS TO LOOK FOR

**OPEN-ENDED EXPERT MEETING ON THE IMPLEMENTATION OF CAPACITY BUILDING PROVISIONS OF THE CARTAGENA PROTOCOL ON BIOSAFETY:** This meeting will take place from 11-13 July 2001 in Havana, Cuba. For more information contact: CBD Secretariat, Montreal, Canada; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@biodiv.org](mailto:secretariat@biodiv.org); Internet: <http://www.biodiv.org>

**CONFERENCE ON SUSTAINABLE FOOD SECURITY FOR ALL BY 2020: FROM DIALOGUE TO ACTION:** The conference will meet from 4-6 September 2001 in Bonn, Germany. It is being organized by the International Food Policy Research Institute (IFPRI), in collaboration with the German Government. For more information contact: Simone Hill-Lee, IFPRI, Washington DC, USA; tel: +1-202-862-5600; fax: +1-202-467-4439; e-mail: [s.hill-lee@cgiar.org](mailto:s.hill-lee@cgiar.org); Internet: <http://www.ifpri.cgiar.org/2020conference/index.htm>

**WTO COUNCIL FOR TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS:** The TRIPS Council will meet from 20-21 September and 26-29 November 2001 in Geneva, Switzerland. For more information contact: Peter Ungphakorn, WTO, Geneva, Switzerland; tel: +41-22-739-5412; e-mail: [peter.ungphakorn@wto.org](mailto:peter.ungphakorn@wto.org); Internet: [http://www.wto.org/english/tratop\\_e/trips\\_e/trips\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/trips_e.htm)

**PACIFIC GLOBAL BIODIVERSITY FORUM:** The First Regional Session of the Global Biodiversity Forum for the Pacific (GBF-Pacific) will be held from 25-28 September 2001 in Honolulu, Hawaii. For more information contact: Charles Barber, GBF-Pacific Coordinator, World Resources Institute, Manila, Philippines; tel: +63-2-631-0421; fax: +63-2-631-0406; e-mail: [cvbarber@attglobal.net](mailto:cvbarber@attglobal.net); Internet: <http://www.gbfbf.org>

**WORLD CONGRESS ON CONSERVATION AGRICULTURE:** This congress will take place from 1-5 October 2001 in Madrid, Spain, and is organized by the FAO and the European Conservation Agriculture Federation. For more information contact: Armando Martinez, Institute for Sustainable Agriculture, Córdoba, Spain; tel: +34-957-760797; fax: +34-957-760797; e-mail: [conservation.agriculture@ecaf.org](mailto:conservation.agriculture@ecaf.org); Internet: [http://www.ecaf.org/Congress/Latest\\_news.htm](http://www.ecaf.org/Congress/Latest_news.htm)

**SECOND MEETING OF THE INTERGOVERNMENTAL COMMITTEE FOR THE CARTAGENA PROTOCOL ON BIOSAFETY (ICCP-2):** This meeting will be held from 1-5 October 2001 in Nairobi, Kenya. For more information contact: CBD Secretariat, Montreal, Canada; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@biodiv.org](mailto:secretariat@biodiv.org); Internet: <http://www.biodiv.org>

**INTERNATIONAL CONFERENCE ON BIOTECHNOLOGY AND SUSTAINABLE DEVELOPMENT:** This conference will be held from 15-17 October 2001 in Alexandria, Egypt. The conference will focus on scientific, ethical and safety issues, as well as the regulatory, IPR, trade and economic issues in the biotechnology debate, while highlighting a Southern perspective. For more information contact: Ismail Serageldin, International Centre for Agricultural Research in the Dry Areas (ICARDA), Cairo, Egypt; tel: +20-3-487-6024; fax: +20-3-487-6001; email: [icarda-cairo@cgiar.org](mailto:icarda-cairo@cgiar.org); Internet: <http://www.egyptbiotech2001.com>

**FIRST SESSION OF THE AD HOC OPEN-ENDED WORKING GROUP ON ACCESS AND BENEFIT-SHARING:** This meeting will be held from 22-26 October 2001 in Bonn, Germany, under the auspices of the CBD. For more information contact: CBD Secretariat, Montreal, Canada; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@biodiv.org](mailto:secretariat@biodiv.org); Internet: <http://www.biodiv.org>

**FAO GOVERNING BODIES:** Sessions of the FAO Council are scheduled from 30 October to 1 November and on 14 November 2001 in Rome, Italy. The 31st FAO Conference is tentatively scheduled for 2-13 November 2001. The Conference is expected to consider the outcome of the sixth Extraordinary Session of the CGRFA. For more information contact: Nora McKeon, FAO, Rome, Italy; tel: +39-06-5705-3852; fax: +39-06-5705-5175; e-mail: [Nmckeon@fao.org](mailto:Nmckeon@fao.org); Internet: <http://www.fao.org/events/index.asp>

**WORLD FOOD SUMMIT FIVE YEARS LATER:** This meeting will be held from 5-9 November 2001, at FAO Headquarters in Rome, Italy. For more information contact: Nora McKeon, FAO, Rome, Italy; tel: +39-06-5705-3852; fax: +39-06-5705-5175; e-mail: [Nmckeon@fao.org](mailto:Nmckeon@fao.org); Internet: <http://www.fao.org/news/2001/010304-e.htm>

**CONVENTION ON BIOLOGICAL DIVERSITY SBSTTA-7:** The seventh meeting of the CBD's Subsidiary Body on Scientific, Technical and Technological Advice will meet from 12-16 November 2001 in Montreal, Canada. This meeting will be followed by an Open-ended Intersessional Meeting on the Strategic Plan, National Reports and the implementation of the Convention, from 19-21 November 2001, also in Montreal. For more information contact: CBD Secretariat, Montreal, Canada; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@biodiv.org](mailto:secretariat@biodiv.org); Internet: <http://www.biodiv.org>

**MEETING OF THE AD HOC INTERSESSIONAL WORKING GROUP ON ARTICLE 8(j) OF THE CONVENTION ON BIOLOGICAL DIVERSITY:** This meeting is scheduled to take place from 4-8 February 2002 in Montreal, Canada. For more information contact: CBD Secretariat, Montreal, Canada; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@biodiv.org](mailto:secretariat@biodiv.org); Internet: <http://www.biodiv.org>

**CONVENTION ON BIOLOGICAL DIVERSITY COP-6/ CARTAGENA PROTOCOL ON BIOSAFETY MOP-1:** The CBD's sixth Conference of the Parties will take place from 8-26 April 2002 in The Hague, The Netherlands. This gathering is also expected to serve as the First Meeting of the Parties (MOP-1) to the Cartagena Protocol on Biosafety. For more information contact: CBD Secretariat, Montreal, Canada; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: [secretariat@biodiv.org](mailto:secretariat@biodiv.org); Internet: <http://www.biodiv.org>