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**Jakarta, Indonesia**

***The CGIAR Research Agenda: Facing the Poverty Challenge***

**Report of the CGIAR Genetic Resources Policy Committee**

The CGIAR Genetic Resources Policy Committee (GRPC) met in Rolle, Switzerland in February 1996. Among the topics discussed were developments in relation to the Convention on Biological Diversity, the forthcoming negotiations of the FAO Commission on Genetic Resources, and the FAO Fourth Technical Conference to be held in Leipzig, Germany, in June 1996. Attached is a summary of the major conclusions of the GRPC meeting. Copies of the full report will be available in Jakarta.

The attached report is transmitted for information and should be considered as background to the agenda item "Report of the CGIAR Genetic Resources Policy Committee".

## CGIAR GENETIC RESOURCES POLICY COMMITTEE

Rolle, Switzerland, 14-16 February 1996

### REPORT TO THE CHAIR, CGIAR ON THE MAJOR CONCLUSIONS

The CGIAR Genetic Resources Policy Committee met in Rolle, Switzerland, from 14 to 16 February 1996. Very wide-ranging discussions were held on many complex and politically sensitive issues. The following summarizes the main items we wish to bring to your attention and that of the CGIAR members at this time. A full report of the meeting will be made available shortly.

#### 1. CGIAR and Convention on Biodiversity

The Committee noted that issues relating to agriculture and food security did not feature very prominently in the development of the CBD. However, there has been very positive progress in placing agro-biodiversity on the COP agenda and the Committee welcomes the higher profile now given to agricultural issues. The role of the Chair of CGIAR in this respect has been, and continues to be, significant. The articles of the CBD on access, the equitable sharing of benefits and prior informed consent, are being interpreted by some as promoting the exchange of genetic resources solely on the basis of bilateral negotiations. Such an interpretation could slow down the pace of progress in the breeding of new varieties of food crops at a time when the world needs accelerated progress in this area to meet the growing food needs of an expanding global population as well as the challenge of diminishing per capita arable land and irrigation water availability. CGIAR should therefore continue to promote the unrestricted availability of genetic resources of the major food crops. The development of a multilateral system for exchange, currently under discussion, should help to address this issue.

#### 2. CGIAR and major international conferences during 1996

CGIAR should have a strong and collective presence at the following major international conferences scheduled to be held during 1996. The Committee hopes

that CGIAR members will help to ensure that their national positions are harmonized among the various fora. The Committee discussed at length the work being done by IPGRI to study the implications of various options for access to plant genetic resources and sharing benefits. The ideas on multilateral systems contained in the study should be developed further since they could be of help in the negotiations on the International Undertaking and to the discussions on agrobiodiversity by the Parties to the Convention on Biological Diversity.

a. FAO Commission on Genetic Resources (April, 1996)

This meeting is important in the context of finalising the Global Plan of Action. CG Members are invited to use this opportunity for ensuring that the Global Plan of Action and the objectives and goals of CGIAR are mutually reinforcing.

b. Leipzig Conference on PGR (June 17-21, 1996)

The role of the CGIAR in implementing the Global Plan of Action should be highlighted, both during the preparation for the Conference and at Leipzig. CGIAR's position regarding practical ways in which it can help to implement the Global Plan of Action could be brought to the attention of Member Nations of FAO.

c. World Food Summit, Rome (November 13-16, 1996)

The chair of CGIAR should make a major presentation on Genetic Resources and Sustainable Food Security, on the basis of an analysis of the demand-supply projections in relation to foodgrains made in FAO's 2010 study, IFPRI's 2020 analysis and Lester Brown's 2030 projections. The importance of unrestricted access to germplasm in food crops and the need to step up investment in agricultural research relating to international and national public good will have to be explained. The Food Summit will provide an opportunity to convey CGIAR's viewpoint on the factors which will determine the future of world food security directly to Heads of State/Heads of Government. CGIAR Chair may also request the Heads of the agencies cosponsoring CGIAR namely IBRD, UNDP, FAO and UNEP to stress at the Food Summit the

need for stepping up research designed for public good in food crops.

d. Conference of Parties to CBD - 3rd Meeting. Buenos Aires (November 1996)

Particular stress should be placed in a statement to COP III by the CGIAR Chair on the need for greater emphasis on saving, studying, using and sharing agro-biodiversity and the role CGIAR, an organisation committed to research for the international public good, can play in this area. CGIAR through IPGRI and the Inter-Center Working Group on Genetic Resources should continue to assist actively the Subsidiary Body on Scientific, Technical and Technological Advice of the CBD, and its various working groups.

3. CGIAR Policies for IPR

A draft paper on guiding principles for the CGIAR Centres on IPR relating to genetic resources was circulated at the meeting and discussed at length. The Committee noted that CGIAR members should be informed on the complex issues involved in the Centres exercising their trusteeship responsibilities over pre- and post-CBD materials and on their derivatives. The material transfer system put in place to ensure compliance with the agreements signed with FAO appears to be working well. However, there is a need to reach a conclusion as to how best to handle Centre-improved materials and derivatives from all Centre-supplied germplasm. A basic principle is to ensure that the materials remain in the "public domain"; however, the issue is complex. On the one hand, if the Centres permit the taking out of IPP this will be seen by some constituencies as condoning exclusive use, or as an attempt to extend "ownership" by the CGIAR. On the other hand, not to permit any IPP on derivatives would certainly reduce its use by many potential recipients of the material. The status of the pre-Convention materials is under discussion and the Committee felt that an approach which is in the best interests of sustainable food security should be adopted, to the extent possible, prior to this issue being settled through international negotiation.

Based on its discussions, the Committee recommended that the CD Committee consider reviewing the draft guidelines, taking into account:

a. CGIAR decisions at the ICW94 and 95.

- b. Issues relating to pre-CBD and post-CBD ex situ collections.
- c. Policies relating to partnerships with developing countries, developed countries, private sector industry, and NGOs.
- d. The role of IARCs in assisting NARS in issues relating to Farmers' Rights. The CGIAR should regard the concept of Farmers' Rights as of equal importance to that of IPR.
- e. Policies relating to biotechnology research including the biosafety aspects and field testing of transgenic material.

The Policy guidelines relating to IPR should be articulated with clarity and precision, so that all the scientists of IARCs know how to respond and react to IPR issues during their contacts with scientists outside the CGIAR.

Dr.T. Reeves, Chair, Centre Directors' Committee on Intellectual Property Rights, has agreed to review the draft guidelines, taking into account the above suggestions.

#### 4. Report of Inter-Center Working Group and Review of CG Genebanks

It was reported that the review of Centre genebanks has been completed. Both generic and center-specific issues have been identified, and there is a need to take speedy action on the recommendations. It was noted that excellent progress is being made in linking Centre databases through the Systemwide Information Network on Genetic Resources (SINGER), using a common format for each IARC's mandate crops. The Committee noted with satisfaction the effective role of the Inter-Center Working Group in promoting a Common Platform for Action among IARCs in matters relating to genetic resources.

#### 5. Madras Technical Consultation on an Implementation Framework for Farmers' Rights

The Committee considered that the report of the Technical consultation organised by the M.S. Swaminathan Research Foundation at Madras from January 15 to 18, 1996. Madras meeting merits the attention of all those concerned with the equitable sharing of benefits, Farmers' Rights and the conservation and use of plant genetic resources.

The Committee noted that considerable progress has been made in evolving national legislation for plant variety protection incorporating provisions for according recognition to Farmers' Rights. The Indian case provides a very interesting example of what might be done in this respect. At the international level, acceptable indicators for assessment of contributions to germplasm and information by different countries are yet to be developed. The question of establishing an International Community Gene Fund for supporting National Community Gene Funds designed to reward, support and revitalise the in situ and ex situ conservation efforts of tribal and rural families, is yet to be debated and agreed to. Pending decisions on such issues, IARCs could contribute to Farmers' Rights in many ways, such as:

- a. Participatory breeding to improve and develop locally adapted cultivars.
- b. Assistance to farming communities in collaboration with NARS, to undertake breeding and seed production.
- c. Capacity building with reference to breeding and selection as well as in situ conservation of agro-biodiversity by rural communities.
- d. Training Programmes in seed technology and pathology, particularly for women, and
- e. Promoting the principles of equity in the sharing of benefits arising from the Centres' work.

The Committee is of the view that the concept of Farmers' Rights is important both for strengthening community efforts in the in situ conservation of agro-biodiversity and for according to informal innovations the social prestige essential for attracting and retaining youth in farming.

Several IARCs are already involved in such work. Hence, a paper on Farmers' Rights dealing with issues such as participatory breeding, on-farm conservation and capacity building could be prepared, recognizing that to a considerable extent the implementation of the concept of Farmers' Rights is a national issue. The Centre Directors' Committee on IPR has been requested to prepare such a paper, as a first step towards developing Policy Guidelines for the CGIAR on Farmers' Rights.

## 6. Workshop on the ethical and equity aspects of utilisation of genetic resources

It was decided to hold a workshop in April 1997 at a suitable location in Brazil to discuss the ethical and equity aspects of genetic resources collection, conservation and utilisation. It might be titled "Workshop on equity, ethics and values in relation to the use of agrobiodiversity for the improvement of the mandate crops of IARCs".

IUCN has expressed an interest in co-hosting the workshop. Gratitude was expressed to the Governments of Switzerland and Sweden (SIDA) for their indication of financial support. Dr. Maria Zimmerman has kindly agreed to serve as the local convenor of the workshop.

The desired output of the workshop is a set of well defined guidelines for dealing with the ethical and equity aspects of research on genetic resources in IARCs.

In this context, it was noted that the work of IARCs has so far had a striking impact on keeping food grain prices stable thereby conferring important nutritional benefits to low income consumers. The workshop will discuss issues such as the following, in relation to research methodologies and approaches:

- a. indicators for recognition and reward for informal innovations
- b. implementation of the concept of prior informed consent
- c. gender dimension, with particular reference to the Beijing Platform for Action
- d. collaboration with private sector industry and NGOs, and
- e. issues relating to Farmers' Rights relevant to the work of IARCs.

A suitable list of participants will be developed. A Steering Committee will be constituted with the following composition.

Chair	M.S. Swaminathan
Convenors	M. Zimmerman G. Hawtin
Members	J. Benz

T. Reeves  
 N. Olembo.  
 J. McNeeley (IUCN)

The Steering Committee will develop a detailed programme and circulate it among members for suggestions on potential participants.

#### 7. UPOV and WTO

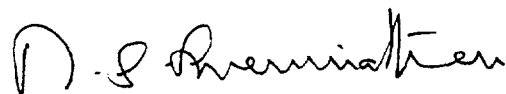
Mr. Barry Greengrass (UPOV) and Mr. Matthijf Geuze (WTO) informed the Committee about recent developments relevant to the work of CGIAR. A WTO Ministerial level conference which will, inter alia, deal with Trade and Environment issues will be held in Singapore in December 1996. UPOV will be holding a meeting in Rome in April 1996 to brief the Members of the FAO Commission on Genetic Resources on the 1978 and 1991 UPOV conventions on Plant Variety Protection. IPGRI will be keeping in touch with these meetings.

#### 8. Follow-up on ICW95 recommendations

The Committee noted that the proposed CGIAR Genetic Resources Policy Unit, approved at ICW95, has not yet been established and that funding has not yet been made available. The Committee urges a rapid implementation.

#### 9. Distribution of this report

A detailed report containing as annexes the papers considered at the meeting will be prepared and distributed shortly. Given the complexities of the issues addressed, the Committee intends to continue to monitor events and advise the CGIAR on issues it feels should be brought to its attention. It is proposed to report more fully to the MTM in Jakarta, but meanwhile, the Committee would appreciate it if this report could be circulated immediately among all CG Members.



M.S. Swaminathan  
 Chair, CGIAR Policy Committee on Genetic Resources



**CGIAR Genetic Resources Policy Committee Meeting**  
**3rd Meeting**  
**Rolle, Switzerland, 14-16 February 1996**

**SUMMARY**

**Introduction**

The global policy environment for genetic resources is rapidly evolving. CGIAR, at its 1995 mid-term meeting (MTM95), requested the Genetic Resources Policy Committee (hereafter referred to as the Committee) to monitor developments and advise it of relevant issues and policy options.

In its last report to CGIAR at International Centers Week (ICW95), the Committee provided an overview of discussions in the four main fora where international negotiations related to genetic resources are taking place. These are the:

- 1) Conference of the Parties (COP) to the Convention on Biological Diversity (CBD);
- 2) FAO Commission on Genetic Resources for Food and Agriculture (CGRFA) and related discussions in the context of the FAO International Technical Conference on Plant Genetic Resources;
- 3) World Trade Organization (WTO), and in particular the forum on Trade Related Aspects of Intellectual Property (TRIPS); and
- 4) Union for the Protection of New Varieties of Plants (UPOV).

The Committee stressed the urgent need for CGIAR to play a proactive role in this ongoing policy dialogue to ensure that the international community's efforts to achieve sustainable food security are not jeopardized. Development of appropriate regulatory frameworks is critical. For the CGIAR, an important step is to agree on guiding principles on intellectual property (IP) related to genetic resources that can be used by the centers as a basis for developing individual policies and implementation procedures. Another important initiative is the creation of a multilateral system for germplasm exchange that will assure access to plant genetic resources and an equitable sharing of benefits. In this connection, the Committee also alerted CGIAR to the need to develop appropriate policies and procedures for the recognition of Farmers' Rights at the international and national level, though recognizing that it is but one component in a complex web of ethical concerns related to the conservation and use of genetic resources.

At its third meeting, the Committee considered recent developments on all these fronts. The question of ownership, access to genetic resources and an equitable sharing of benefits derived from their use remains a highly sensitive and politicized matter. The issues are complex and misinformation is abundant. It is essential that CGIAR members and constituents inform themselves so that they are aware of the issues at stake and potential consequences for the CGIAR, and can reflect these in national and international debates.

**I. Developments in Policy-Making Fora and Implications for CGIAR**

In its report to CGIAR at ICW95, the Committee indicated that it planned to issue a standing invitation to appropriate representatives of FAO, the CBD Secretariat, UPOV and WTO as well as the chair of the CGIAR Center Directors Committee on IPR to its meetings. Representatives from the CBD Secretariat and FAO were unable to attend.

## COP2

The Committee discussed a report by IPGRI Director General G. Hawtin about the COP2 meeting in Jakarta, Indonesia, in November 1995. A more positive tone toward the special needs of agriculture was apparent at COP2. Agrobiodiversity and in particular access to genetic resources and equitable sharing of benefits will be major agenda items at COP3 at the end of 1996. At ICW95 the CGIAR Chairman I. Serageldin had been urged by the Committee to play an active and visible role on behalf of CGIAR at COP2. Appreciation for his presentation was expressed and it was agreed that he should be requested to continue to take a proactive stance at COP3 in Buenos Aires.

## FAO Commission on Genetic Resources for Food and Agriculture / International Technical Conference

Hawtin provided an update on recent developments in the Commission and preparations for the International Technical Conference in Leipzig, Germany, June 1996. The FAO Commission has been largely preoccupied with plans for Leipzig. This includes completion of two documents: 1) The State of the World's Plant Genetic Resources; and 2) Global Plan of Action for the Conservation and Sustainable Utilisation of Plant Genetic Resources for Food and Agriculture. IPGRI and other Centres have made a significant input to both documents. There is every expectation that the Global Plan and CGIAR's programs will be mutually reinforcing. The Committee agreed that CGIAR should take the initiative in detailing what it is doing in relation to activities outlined in the Global Plan and in proposing steps to be taken after Leipzig. CGIAR should have a strong presence at the next Commission meeting in April and at the Technical Conference. The latter will be a technical meeting with political dimensions. CGIAR's strategy should be to promote broad agreement for the Plan and to stress CGIAR's technical role. Balanced support for such a role for the CGIAR is essential from both developing and developed countries. CGIAR members should be alerted at MTM96 in May. FAO is hosting a World Food Summit in November 1996. The CGIAR Chairman will make a major presentation, which could draw attention to the importance of access to genetic resources for sustainable food security.

## Policy Work at the International Union for the Conservation of Nature and Natural Resources

J. McNeely, Chief Biodiversity Officer of IUCN, made a presentation about IUCN's work and indicated areas of potential collaboration with CGIAR. IUCN's membership is broad-based, encompassing some 70 governments, 120 government agencies and 700 NGOs in developing and developed countries. Although it tends to focus on the nature end of biodiversity, IUCN is presently developing a policy on conservation and agriculture, and would welcome input from CGIAR. McNeely noted that CBD is not well-adapted to the needs of agriculture. Since specific articles cannot be modified, the challenge is to focus on implementation and how to interpret wording of the Convention to be supportive of what organizations such as CGIAR and IUCN are trying to achieve. In this connection, IUCN is seeking help from the agricultural sector in interpreting implementation of CBD, particularly in terms of access to genetic resources. IUCN already works together with CIFOR and IPGRI and would be pleased to collaborate with other centers as well.

## Developments in Intellectual Property Protection in Relation to UPOV

UPOV Vice-Secretary General B. Greengrass participated actively during two days of the meeting. UPOV is an intergovernmental organization set up to ensure that member states

acknowledge achievements of breeders of new plant varieties by making available to them an exclusive property right on the basis of a set of uniform and clearly defined principles. Greengrass provided a brief overview of the differences between the 1978 and 1991 acts of the UPOV Convention. The Convention was revised in 1991 to provide incentives for classical breeders and biotechnologists alike. The 1991 act, by extending the coverage and term of protection, can also be interpreted to encourage breeding in under-utilized crops and marginal areas. Greengrass pointed out that the 1991 act has much to offer developing countries. UPOV is working to improve understanding of the differences between the two acts. A meeting is being held in conjunction with the FAO Commission expressly to inform Commission members.

#### Developments in Intellectual Property Rights in Relation to WTO-TRIPS

M. Geuze, Secretary to the TRIPS Council of the WTO, joined the Committee for an afternoon and made a brief presentation. Depending on their level of development, countries have been given 1, 5 or 11 years to meet their obligations as TRIPS members. Despite transitional periods, many countries are implementing TRIPS obligations swiftly, recognizing that high levels of intellectual property protection could encourage foreign investment. Article 27 of TRIPS stipulates that "Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by combination thereof." The TRIPS Council will begin examining members' laws for compliance in 1997. Discussion is likely to center on what constitutes an "effective *sui generis* system." Although the opinion has been expressed by former WTO Director General Peter Sutherland that conformity with the 1978 Act of UPOV would suffice, only the WTO's General Council has the authority to adopt interpretations of the Agreement. Member countries rather than WTO itself will make the assessment. The WTO Committee on Trade and Environment is looking at compatibility between TRIPS and CBD and will report to the first WTO meeting in Singapore, December 1996. The Committee asked IPGRI to keep a watching brief on issues of relevance for CGIAR.

#### CGIAR Inter-Center Working Group on Genetic Resources

G. Hawtin informed the Committee about issues arising out of the CGIAR Inter-Center Working Group on Genetic Resources, which met at CIP, Lima, in January 1996. Major agenda items included consideration of the report of the systemwide review of centers' genebanks and implementation of SINGER (Systemwide Information Network on Genetic Resources). The latter is expected to be operational within a year, and will include a core set of data on all accessions, encompassing passport data, characterization and some evaluation data. The genebank review, carried out in close collaboration with FAO, was perceived as thorough and useful by the centers, and the Inter-Center Working Group generally agreed with the review's recommendations. Issues related to the legal status of some centers' genebanks and the status of safety duplication may require the Committee's attention in the future.

## **II. Guiding Principles for the CGIAR Centers on Intellectual Property Protection and Genetic Resources**

In his capacity as chair of the Center Directors Subcommittee on IPR, CIMMYT Director General T. Reeves tabled draft Guiding Principles for the CGIAR Centers on Intellectual Property Protection and Genetic Resources. The Principles are a set of internal policy guidelines to orient centers as they develop their own policies and procedures. The guidelines were requested by the Committee at its last meeting. Committee members felt that all important elements were included but clarity and organization needed to be

improved. While some ambiguity is necessary so that centers can adapt the policy to their unique circumstances, the guidelines should not permit conflicting interpretations. Thus, the Principles should refer to a process for ensuring some standard of uniformity in implementation. It was decided that the Guiding Principles should go through another iteration.

### **III. IPGRI Multilateral Study**

In June 1995, the FAO Commission asked IPGRI to study the feasibility of various options for access to plant genetic resources for food and agriculture and the equitable sharing of benefits. Committee members considered a draft of the summary of the study, although some members had seen an earlier draft of the full study. The study highlights a range of options for regulating access and develops one option in some detail: MUSE (MULTilateral System for Exchange). The Committee found the study a good basis for further discussion. There was a feeling, though, that the study was biased towards MUSE, and could go further in objectively presenting a series of options. The study could also indicate the implications for various actors like the CGIAR of adopting various options, particularly in terms of governance and bureaucracy. There was a feeling that the focus of the system could be to insulate food security crops from restriction to access. This might also make the system more attractive to countries in the South, where food security depends to a considerable extent on South-South collaboration in germplasm exchange. Thus mutuality of interest would be the principal motive for an agreement regulating access to genetic resources. In conclusion, the Committee urged that the revised study should: be neutral in presenting a range of options; build on the strengths of the current situation; and stress the importance of a multilateral arrangement especially for major food crops. An effective system should involve the minimum necessary bureaucracy.

### **IV. Madras Technical Consultation on Agrobiodiversity and Farmers' Rights**

M.S. Swaminathan summarized the outcome of a technical consultation in Madras, India (January 15-18, 1996), to develop a framework for implementing Farmers' Rights at national and international levels. The Committee commended India for its leadership in evolving plant variety protection legislation incorporating provisions for recognition of Farmers' Rights. Farmers' Rights are important for strengthening community efforts in *in situ* conservation of agrobiodiversity and for according informal innovations the social prestige essential for attracting and retaining youth in farming. In terms of implications for the CGIAR, it was felt that points 1-8 under "Global Issues" in the report of the Madras meeting represent useful entry points for centers to make a contribution to Farmers' Rights. These include such activities as: participatory breeding; training programs in seed technology and pathology; and assistance to farming communities in collaboration with NARS to undertake breeding and seed production. Centers will be requested to indicate briefly what they are doing in relation to these points. The Committee eventually may wish to develop guidelines to support the implementation of the principles of Farmers' Rights in centers' programs.

### **V. Ethics and Equity in Genetic Resources Conservation and Use**

A workshop on ethical and equity aspects of genetic resources conservation and use in agricultural research for the public good will be held in Brazil, April 1997. It will be cosponsored by IUCN, and financed with support from Sweden and Switzerland. A more detailed terms of reference will be developed. The desired output is a guidelines for dealing with relevant ethical and equity issues. The meeting will involve about 55 participants and include: Committee members, a representative from each CGIAR center,

strong representation from NARS and NGOs, some private sector experts, and one or two people from institutions who have operationalized ethics policies. A balanced gender representation will also be sought. A steering committee was formed.

## **VI. Other Business**

### Policy Unit at IPGRI

One Committee member noted that CGIAR, at ICW95, endorsed the creation of a genetic resources policy unit at IPGRI to strengthen CGIAR's capacity to undertake analytical, information, coordination and representational functions related to genetic resources policies. Asked about the status of this unit, G. Hawtin pointed out that IPGRI's request for funding could not be approved by TAC due to lack of funds.

### Committee Meetings

The next Committee meeting will be 2-4 October 1996 in Rome.

**Policy Committee Meeting  
3rd Meeting  
Rolle, Switzerland, 14-16 February 1996**

**MINUTES OF THE MEETING**

**Participants**

Committee Members: M.S. Swaminathan (Chairman)  
A. El Beltagy (ICARDA)  
B. Bengtsson (CIFOR/Sweden)  
J. Benz (Switzerland)  
R. Bertram (USAID)  
G. Hawtin (IPGRI)  
N. Olembo (Kenya)  
S. Sastrapradja (Indonesia)  
M. Zimmermann (TAC/Brazil)

Observers and Invited Speakers:

T. Reeves (CIMMYT)  
F. Begemann (ZADI)  
B. Greengrass and N. Urquia (UPOV)  
J. McNeely (IUCN)  
M. Geuze (WTO-TRIPS)

Unable to Attend: G. Persley (World Bank)  
C. Fowler (FAO)

**Welcome**

M.S. Swaminathan chaired the meeting. He welcomed N. Olembo and S. Sastrapradja as new members on the Committee attending for the first time. He regretted the absence of G. Persley and asked that the record reflect the Committee's appreciation for her significant contribution to its work. The agenda was adopted and slightly reorganized. Reports of a more informational nature were grouped together, and discussion of the Multilateral study was scheduled for Thursday so that Committee members would have ample time to read the summary report. There was also some preliminary discussion of what the output of the meeting should be. It was agreed that in addition to the summary report to CGIAR Chairman I. Serageldin, there should be more detailed minutes that captured the various views presented and could be used by CGIAR members to share with appropriate counterparts in other departments or ministries.

**I. Developments in Policy-Making Fora and Implications for CGIAR**

In its report to the CGIAR at ICW95, the Committee indicated that it planned to issue a standing invitation to appropriate representatives of FAO, the CBD Secretariat, UPOV and WTO as well as the chair of the CGIAR Center Directors Committee on Intellectual Property Rights to its meetings. Representatives from the CBD Secretariat and FAO were unable to attend this meeting.

Second Conference of the Parties (COP2) to the Convention on Biological Diversity (CBD)  
(G. Hawtin, IPGRI Director General: Background paper - "Summary of the Outcome and Recommendations of the Second Session of the Conference of the Parties to the Convention on Biological Diversity" by Dr. George Ayad, IPGRI)

## Background

COP2 was held in Jakarta, Indonesia, November 6-17, 1995. G. Hawtin highlighted the following points:

- Montreal, Canada was selected as the permanent location of the CBD Secretariat.
- The Global Environmental Facility (GEF) will remain the interim funding mechanism until COP3.
- The COP Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and its working groups was expected to be CGIAR's main entry point to the COP and the forum for most substantive dialogue. However, SBSTTA is tending to become a smaller version of COP, with political as well as technical representation. Nonetheless it is expected to remain the primary pathway for CGIAR dialogue with COP.
- In consideration of a biosafety protocol for safe handling and transfer of living modified organisms, COP decided to undertake a negotiation process to resolve issues, and constituted an open-ended ad hoc working group comprising representatives and experts nominated by member governments. It will meet this spring.
- Coastal and marine biological diversity received a lot of attention. ICLARM played a prominent role and its technical input was very much appreciated.
- There was substantial discussion at COP2 about FAO's development of a Global Plan of Action for genetic resources. There was good support and approval for the bottom-up, country-driven approach adopted by FAO.
- Access to genetic resources and equitable sharing of benefits was discussed in a preliminary way. Both will be major agenda items at COP3 and at SBSTTA prior to that. It was recognized that these issues are being addressed by FAO in the context of revisions to the FAO International Undertaking on Plant Genetic Resources (IUPGR). Negotiations to harmonize IUPGR articles 3 (Scope), 11 (Access) and 12 (Farmers' Rights) with the CBD are to be considered by the FAO Commission at its two meetings in 1996. G. Hawtin noted that progress has been slow due to the complexity of the issues and the Commission's preoccupation with plans for the Technical Conference.

## Discussion Highlights

It was observed by Committee members that COP is beginning to recognize that food and agriculture need to be given special attention. This is reflected in the fact that agricultural topics will be main topics for COP3. This may also influence the composition of delegations. Many national delegations are likely to include agricultural specialists. This could be an occasion to address a number of fundamental issues. It was also noted that COP2 reflected a strong consensus that the FAO Commission should play a key role in

agrobiodiversity. IPGRI was congratulated for organizing a very informative session at COP2, and was urged to repeat this at COP3. Appreciation was expressed for the role of the CGIAR Chairman at COP2. Regarding COP's consideration of biosafety issues, it was noted that the centers were represented at the two international meetings on the subject in Cairo and Madrid in 1995.

#### Action Required

CGIAR should be alerted that issues of agrobiodiversity will be main topics for discussion at COP3. The CGIAR Chairman should continue to play an active and visible role at COP3. IPGRI will coordinate Centres' attendance.

#### FAO Commission on Genetic Resources for Food and Agriculture/International Technical Conference

(G. Hawtin on behalf of C. Fowler, FAO)

#### Background

The 1983 FAO Conference established the FAO Commission as a permanent intergovernmental forum on plant genetic resources, and adopted the IUPGR as a voluntary framework to guide action in this field. The Commission coordinates and monitors the Global System for the Conservation and Utilisation of Plant Genetic Resources. One element of this system is the International Network of Ex Situ Collections, which includes the CGIAR in-trust collections.

At its meeting in April, the FAO Commission will consider two key documents being prepared for the June 1996 International Technical Conference on the Conservation and Utilisation of Plant Genetic Resources in Leipzig, Germany. IPGRI had major input into both reports. They are the: 1) State of the World's Plant Genetic Resources; and 2) Global Plan of Action for the Conservation and Sustainable Utilisation of Plant Genetic Resources for Food and Agriculture.

The State of the World report builds on individual country studies and subregional meetings. IPGRI was present at all subregional meetings and organized several. Scientists from other international centers attended half of the meetings. The subregional meetings identified the state of genetic resources in that region, both on a commodity and institutional basis, and articulated collective recommendations for future action.

The Global Plan of Action is a costed plan arising from the country studies and subregional meetings. The draft Plan and CGIAR's program appear to be mutually reinforcing; CGIAR is recognized as a key player. The final version of the Global Plan will be aimed at politicians, and will be put forward for adoption in Leipzig.

The draft Plan identifies four major areas for action, with some 20 groups of activities, most of which are highly linked to others, including:

***In situ***: survey and inventory; on-farm management of genetic diversity; restoration of diversity in war-torn and disrupted areas; *in situ* conservation of wild relatives (in reserves or farmed areas).

***Ex situ***: securing existing collections (facilities, completeness of coverage); regeneration; collecting; botanical gardens.



**Utilization:** evaluation and core collections; genetic enhancement and prebreeding; greater diversity of crops (among and within crops); under-utilized crops; seed production; new markets for diversity-rich products.

**Institution and capacity building:** NARS; networking; information systems; monitoring and early warning system; education and training; public awareness.

Costing activities was difficult and in cases almost impossible. To the extent that an estimate was possible, the Plan will cost US \$135-300 million a year. The hope is for perhaps US \$190 million in funding. Funding would not necessarily be new money. It might come from redirecting, linking or reorienting existing resources to address priority activities.

The Global Plan suggests general principles for mechanisms of implementation that would be non-bureaucratic and allow a coherent overview. There was concern that proposing a specific institutional model might detract attention from what the Plan is trying to achieve.

Hawtin noted that not much discussion was possible until both documents are made widely available in March, and can be analyzed for implications for the CGIAR. He urged a strong CGIAR presence at both the FAO Commission meeting in April and in Leipzig.

#### Discussion Highlights

##### The Global Plan

The CGIAR needs to be proactive in interpreting the implications of the Global Plan of Action for the CGIAR and CGIAR's role in its implementation. The Committee stressed that there is unlikely to be much new or additional money available to fund the Global Plan. Many donors have already made it clear that they do not wish to see a financing component in the Plan. Money to fund specified activities will have to come from a variety of sources. There was some question whether it would be possible to earmark funds in the Global Environmental Facility (GEF). Some Committee members thought this was unlikely.

##### Next Steps - Strategy for Commission Meeting and Leipzig

The Committee was informed that Germany's Secretary of State for Agriculture will chair the Leipzig meeting. In Germany the meeting is seen as technical with a political dimension. The Committee fully appreciated the political nature of the meeting. While recognizing that it is vital to proceed in a sensitive manner, it was also felt CGIAR should take advantage of the opportunities. It was agreed that the CGIAR should have a strong, collective presence at Leipzig, though it is unknown just how many centers will be invited. Similar to COP2, centers should group themselves together under a CGIAR label.

It was felt that CGIAR needs to move expeditiously both in detailing what it is doing in relation to the activity areas outlined in the Global Plan, and in terms of proposing steps to be taken after Leipzig. CGIAR's role in technical implementation should be stressed. Any CGIAR position developed for Leipzig should include mention of how CGIAR sees collaboration with the private sector and in the field of biotechnology. It was suggested that IPGRI consider preparing a strategy paper to show how CGIAR can be involved in terms of the emerging Global Plan.

It was regarded as critical that any support expressed at Leipzig for CGIAR's contribution and future role be balanced and not come only from the North. Furthermore, while it is hoped that the CGIAR will be acknowledged as a key player, it should not adopt too high a profile. This could backfire. The CGIAR should be, and should be seen to be, supportive of the Plan.

## Action Required

The Committee recommends that the CGIAR have a strong presence at the FAO Commission meeting in April and at the Technical Conference in Leipzig in June. CGIAR representatives should reflect broad agreement for the Plan and stress CGIAR's technical role. IPGRI will consider preparing a strategy paper to show how CGIAR can be involved in implementation of the Global Plan.

### Policy Work at IUCN

(J. McNeely, Chief Biodiversity Officer, IUCN)

## Background

The International Union for Conservation of Nature and Natural Resources (IUCN) is a membership organization. It includes: 70 governments (all of European Union members and many developing countries); 120 government agencies; and 700 NGOs in developed and developing countries. Its annual budget of about 50 million Swiss francs is funded largely by governments. IUCN maintains regional offices in many parts of the world.

IUCN focuses on the nature end of biodiversity. However, it is currently examining the fit between agriculture and conservation. McNeely queried the adequacy of CBD as it relates to agriculture. From his perspective the first green revolution was driven by idealism, to alleviate hunger. The second green - or gene - revolution is being driven much more by a profit motive. This motive is to some extent built into CBD because when it was drafted the debate over genetic resources was dominated by pharmaceuticals rather than agriculture.

Most loss of biodiversity is not deliberate but due to increasing consumption and demand on shrinking resources. Slowing the loss of biodiversity requires greater understanding of its role in ecosystems and its importance for human life. IUCN advocates a model of "study, save and use" for biodiversity conservation. This requires action at all levels, from international and governmental to the farm, forest and laboratory. Simple, non bureaucratic approaches are essential.

McNeely indicated that he feels the CGIAR has an important role to play by promoting unrestricted exchange of genetic resources - at least in crops related to food security - based on the current system of scientist-to-scientist exchange. The CGIAR can also promote biodiversity by stressing self-reliance at the country level and on farm.

## Discussion Highlights

Committee members agreed that CBD needs further interpretation in relation to the needs of agriculture. Since actual articles cannot be changed, the challenge is to focus on implementation, and how to interpret the various Articles of the Convention to be supportive of what organizations like IUCN and CGIAR want to achieve. It was noted that a proposed protocol on plant genetic resources is expected to be annexed to CBD; this is expected to be based on the actual IUPGR as revised by the FAO Commission.

### Improving Communication and Building Alliances

In discussing CBD, it was pointed out that genetic resources issues are often handled by several different government agencies. In the case of Indonesia, the ministries for environment, forestry and agriculture each have their own acts regarding genetic resources. This triggered a general debate on the problems of communication and the need for dialogue between the CGIAR and its partners. While agreeing that the CGIAR

should promote the current system of ready exchange, one developing country committee member stressed the importance of fostering an atmosphere of mutual understanding between CGIAR and developing countries, particularly concerning the issues of access and equitable sharing of benefits. More dialogue and cooperation is necessary if centers and developing countries are to agree. The inner feelings of developing countries as expressed in the context of CBD cannot be ignored. There was a question whether the CGIAR regional fora of NARS would be an appropriate place to table these issues.

Asked how the CGIAR and IUCN might build a stronger alliance in practical terms, McNeely cited several areas. IUCN is presently developing a policy on conservation and agriculture and would welcome input from CGIAR. IUCN is also seeking help from the agricultural sector in interpreting the implementation of CBD, particularly in terms of access. Collaboration is possible at the level of regional and field offices as well. IUCN is already working with some centers, like CIFOR and IPGRI.

#### Other Points Raised

- There is very little real interaction between agriculture (CGIAR) and the environmental movements at the policy or operational levels.
- Countries need to be made aware of the dangers of shifting agricultural policies to invest more in food for export rather than food for local consumption.
- Calculating the value of biodiversity is critically important.
- There is a disturbing trend in declining budgets and research related to genebanks.
- A large number of heads of states will be attending the World Food Summit in November 1996. It would be useful for the CGIAR Chairman to make a presentation linking biodiversity and agriculture, stressing the importance of genetic resources as a public good for food security, and describing the impact on agriculture if exchange of genetic resources is restricted. The CGIAR Chairman may also wish to request the heads of agencies cosponsoring CGIAR (FAO, UNDP, UNEP and World Bank) to stress the need to step up food crop research for the public good.

#### Action Required

The Committee invited J. McNeely's input into the proposed ethics and equity workshop (see below), and encouraged him to forward proposals for CGIAR and IUCN collaboration.

#### Developments in Intellectual Property Rights in Relation to UPOV (B. Greengrass, Vice-Secretary General, UPOV)

##### Background

The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization set up to ensure that member states acknowledge achievements of breeders of new plant varieties by making available to them an exclusive property right on the basis of a set of uniform and clearly defined principles. UPOV is an agricultural institution. Agricultural policy involves a balance between social and economic interests; such a balance underlies the provisions of the UPOV Convention. The UPOV Convention was revised in 1972, 1978 and 1991. The 1978 act remains in force until enough countries ratify the 1991 act; this is expected to occur in 1996. Both 1978 and 1991 acts set out a minimum scope of protection and offer members states the possibility of taking national circumstances into account in their legislation. The 1991 act is more detailed concerning propagating material in relation to which the holders' authorization is

required. The 1991 act creates a fresh framework with the concept of "essential derivation" and is intended to provide incentives for classical breeders and biotechnologists alike.

Greengrass indicated that he feels the 1991 act offers a lot to developing countries, especially those with large plant breeding communities. Unfortunately, a serious perception problem exists, in part due to misrepresentation by political interest groups, and proliferation of inaccurate information. UPOV is currently trying to explain the significance of the 1991 act to developing countries. It is holding a meeting on 19 April in Rome just prior to the FAO Commission to brief Commission members on the 1978 and 1991 acts. Thirty countries are presently members of UPOV and many others have plant protection legislation pending. All Latin American countries will soon have related laws. Asia is also making good progress in drafting laws and joining UPOV.

#### Discussion Highlights

UPOV's efforts to explain differences between the 1978 and 1991 conventions are bearing fruit. The major difference seems to be related to length of coverage. It was felt that longer coverage might encourage breeding not only for the major commercial crops but also for under-utilized crops and marginal areas.

How the concept of "essential derivation" is functioning in practice was discussed. Greengrass noted that the scientists seem to understand the parameters clearly and are taking it into consideration in developing their programs. An essentially derived variety is a variety resulting, for example, from the substitution of a single gene in a protected variety. Such essentially derived materials can be protected, but cannot be exploited without the permission of the breeder of the existing variety. However, it is not altogether clear how much genetic distance is required between the original source material and a new variety before essential derivation provisions no longer apply.

#### Action Required

Greengrass was asked to provide an overview of the differences between the 1978 and 1991 UPOV acts for the Committee's records. (See Appendix 1.)

#### Developments in Intellectual Property Rights in Relation to WTO-TRIPS (M. Geuze, Secretary, TRIPS Council)

##### Background

Geuze welcomed the opportunity to be present at the Committee's meeting. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is the third pillar in the system of Multilateral Trade Agreements, made operational through the World Trade Organization (WTO). The others relate to trade and goods and trade and services. Countries must comply in all three areas. Failure to live up to obligations on intellectual property could result in sanctions in other areas such as textiles or agriculture. The objective is to remove disincentives to develop new products of improved quality. Disputes are subject to WTO settlement rather than unilateral action. All governments have the same substantive obligation under WTO, though they are subject to transitional periods for meeting these obligations. This is 1, 5 or 11 years for developed to developing countries. Despite the transitional periods, many countries are implementing TRIPS obligations swiftly. They recognize that a high level of protection for IP could encourage foreign investment in their countries. Article 27 deals with patentable subject matter in terms of plants and animals. Certain products can be excluded from patentability though. This includes:

"Plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by combination thereof."

Provisions of Article 27 will be reviewed in 1999. Meanwhile, the TRIPS Council will begin to examine members' laws for compliance with the current provisions in mid-1997.

The WTO Committee on Trade and Environment is looking at trade agreements and their environmental effects and will report to a ministerial conference at the first WTO meeting in Singapore in December 1996. Aspects the committee is looking at include compatibility between TRIPS and CBD. The focus seems to be on how IPR can best promote environmentally sound technologies. The committee will provide a status report but not make recommendations.

#### Discussion Highlights

The Committee's discussion centered on the 1997 review of laws related to Article 27 and in particular the criteria that will be used for determining what constitutes an "effective *sui generis* system". Geuze noted the provision does not specifically require countries to join UPOV or to introduce plant variety protection consistent with UPOV. Although Peter Sutherland, former WTO Director General, suggested that conformity with the 1978 Act of UPOV would suffice, only the WTO's General Council has the authority to adopt interpretations of the Agreement. Ultimately, an interpretation will be based on whether the law meets the spirit of TRIPS, which is to promote innovation. Member countries will make the assessment rather than WTO itself. Difficulties in interpretation were highlighted by the recognition that there is not even a common definition of "plant" or "animal."

#### Action Required

IPGRI will keep a watching brief on the WTO Committee on Trade and Environment and the meeting scheduled for Singapore.

#### CGIAR Inter-Center Working Group on Genetic Resources (G. Hawtin)

##### Background

The CGIAR Inter-Center Working Group on Genetic Resources met 23-27 January 1996, in Lima, Peru. Major agenda items included: the external review of center genebank operations and management commissioned by the CGIAR Systemwide Genetic Resources Program in close collaboration with FAO; and progress in implementing SINGER.

##### Genebanks Review

The study was led by Lindsay Innes, who participated in all the missions. Each team included an FAO representative, a regional representative, and as necessary a subject-matter expert. The teams visited each center and produced individual center reports that were synthesized to develop 27 overall recommendations for the system. The report covers areas such as facilities, host country agreements, regeneration, linkages with NARS, training, and duplication. The Inter-Center Working Group generally agreed with the report's recommendations. Resources the centers will need to implement the

recommendations are being estimated. They might require additional funds and could be phased over several years. Issues arising out of the review, and on which the Committee needs to maintain a watching brief, are the continuing problem of the legal status of some centers' genebanks, and the status of safety duplication.

#### SINGER

Implementation of SINGER (Systemwide Information Network on Genetic Resources) is proceeding well. There is now full agreement on the system design, format for data, common elements such as standardization of terminology, and mechanisms for interacting with Internet and other channels. Contracts have been concluded with all centers for entering into SINGER, and the system is expected to be operating within the next 12 months. It will include a core set of data on all accessions, encompassing passport data, characterization, and some evaluation data. Phase 2 will look at other genetic resources data bases in the CGIAR and link these to the SINGER system.

#### Other Issues

In 1995 there was a very successful meeting at CIFOR to consider *in situ* conservation. There were also planning meetings on livestock and aquatic genetic resources, and a meeting at IFPRI on socio-economic issues. A next step will be to formulate strategies for information and training. Strategy development in these areas will continue in 1996. In addition, there were three meetings with FAO to develop guidelines on *in vitro* genebanks, field genebanks and regeneration. These will be presented at the FAO Commission. On the policy side, implementation of the agreed material transfer system, using a standard request form, seems to be going well.

The Committee was advised on an issue of potential concern. Hawtin noted that the coordination and collaborative activities component of the CGIAR Systemwide Genetic Resources Program, totalling US\$1.6 million, was included in IPGRI's 1996 budget under unrestricted core funding. IPGRI is currently estimating a US\$1 million shortfall. As no donor specifically tied funds to the Systemwide Program, this puts IPGRI in the position of having to decide whether to allocate funds to its own program or to other centers to implement components of the Systemwide Program.

#### Discussion Highlights

The study on genebanks was considered thorough and useful. There was general approval that centers are moving towards better cohesion in the area of genetic resources. Hawtin was asked for clarification regarding the Systemwide Program. He explained that the Program is comprised of the sum of centers' activities, a coordinating unit and collaborative activities such as SINGER. The latter two are funded through IPGRI's core budget. Thus, if there is a shortfall it is not clear how funding is to be allocated. In the short-term, IPGRI will guarantee the coordination unit even at the expense of its own core programme. However, the effectiveness of systemwide collaborative activities could be crippled if some centers cannot participate due to lack of funds.

#### Action Required

None.

## **II. Guiding Principles for the CGIAR Centers on Intellectual Property Protection and Genetic Resources**

(T. Reeves, CIMMYT Director General and chair of the Center Directors Committee on Intellectual Property Rights (IPR): Background paper - "Draft Guiding Principles for the CGIAR Centers on Intellectual Property Protection and Genetic Resources")

### **Background**

Centers have been evolving guidelines on intellectual property protection since 1991 to reflect emerging global changes. At ICW95 the Committee urged the Center Directors Committee on IPR to develop for the Committee's consideration guidelines that include IPR on enhanced germplasm and products of biotechnology. It is intended that these principles will be endorsed by CGIAR as a whole either at MTM96 or ICW96.

The Guiding Principles are a set of general guidelines within which centers can develop their own policies and procedures. Therefore, while the guidelines set boundaries, they allow centers enough flexibility to develop policies and procedures tailored to their unique circumstances. For this reason the document does not cover specific mechanisms for implementation. It was pointed out that the Principles are the result of a vast amount of consultation among centers, center board members and CGIAR members. The guidelines build on statements on intellectual property protection endorsed by CGIAR in 1994 and 1995, and are intended to be used as an internal document by centers.

### **Discussion Highlights**

#### **General Points**

The Committee debated the Guiding Principles at length. It was acknowledged that the fact that the current draft was essentially agreed on by all centers was indeed an achievement. Nonetheless, many questions arose concerning definition, clarity and organization. While it was appreciated that some ambiguity was necessary to give each center adequate freedom to adapt the policy to its unique circumstances, neither could wording not be so ambiguous as to allow conflicting interpretations. It was felt that all the elements were present but needed to be made clearer. As drafted the guidelines are organized in terms of the origin of material handled by the centers: whether it pre- or post-dates CBD; whether it is passing through the centers; or it is the product of centers' own breeding activities. It was suggested the document would be easier to understand if the organizing principle was CGIAR's position in terms of: patenting; plant breeders' rights; and the concept of Farmers' Rights.

#### **Farmers' Rights, Principle 6 and Other Points**

There was considerable discussion related to the Draft Principles' reference to Farmers' Rights. Some Committee members felt it did not reflect adequate recognition; others felt it was too open-ended. It was queried whether the CGIAR eventually would want a separate set of guidelines covering Farmers' Rights. It was agreed that the guidelines should reflect full support for the concept of Farmers' Rights as embedded in the spirit of CBD, though recognizing that international and national consensus on the implementation of Farmers' Rights has yet to emerge. The suggestion was made that in the preamble to the Guiding Principles there could be a statement to the effect that the CGIAR should regard the concept of Farmers' Rights as of equal importance as that of intellectual property rights.

There was also substantial debate concerning the implications of principle 6, which stipulates that "cells, organelles, genes or molecular constructs" isolated from designated germplasm (material in centers' in-trust collections held under the auspices of FAO, i.e.

designated prior to CBD ) or the products of the centers' own breeding activities may be protected by recipients only with the agreement of the supplying center. It was argued that this pre-empts negotiations currently underway concerning the status of the CGIAR's *ex situ* collections as a key aspect of revisions to the International Undertaking. CGIAR could be criticized for taking this step before consultations concerning the IU are resolved. It might be better advised to wait until legal and political ramifications are clear. From the centers' perspective, it was pointed out that to remain silent on the issue would leave the centers exposed. If patents were to be taken out, which is to be expected, there would be a strong negative response from many groups. On the other hand, it was cautioned that a backlash from agro-industry if the possibility of taking out patents were to be denied could also have serious ramifications.

Several Committee members pressed for the need to ensure some standard of uniformity in implementing the principles. Therefore the document should refer to a process for developing procedures (such as through the Inter-Center Working Group on Genetic Resources) and to a process for reviewing the principles. It was also pointed out that thought should be given to the date the paper goes into effect. Once it is endorsed, it needs to be immediately followed up administratively.

It was reiterated that the Draft Principles are intended to be an internal document for use by centers. Several versions may be necessary, though, to explain the policy in more detail to various audiences, in which case it should be more explicit about the CGIAR's relationship with developing and developed countries, the private sector and NGOs. The document should make clear that developing countries are the primary beneficiaries and targets of CGIAR work, though there is a large spill-over benefit for developed countries. One of the Committee's developing country members pointed out that developing countries could benefit from a strong plant variety protection system. CGIAR, rather than shying away from a strong system, should look at the advantages. In Kenya, for example, farmers are pushing for plant breeders' rights. They not only want the improved varieties but they too are improving varieties and welcome protection.

It was requested that the Principles be clear on how they build on CGIAR's 1994 and 1995 statements and which elements are new and why.

#### Action Required

Committee members decided that they should try to reach a general consensus rather than total agreement on wording in order to move the issue forward. Reeves will incorporate views raised in the discussion, share these with centers and boards, and a revised version will be sent to Committee members for consideration.

### III. IPGRI Study on a Multilateral Framework for Germplasm Exchange

(G. Hawtin: Background paper - "Access to Plant Genetic Resources and the Equitable Sharing of Benefits: Options for a New System for the Exchange of Germplasm")

#### Background

In June 1995, the FAO Commission asked IPGRI to study the feasibility of different options for access to plant genetic resources for food and agriculture and the equitable sharing of benefits. Four consultants were engaged. Following a very wide series of consultations, a draft document was prepared and circulated to about 25 individuals in developing and industrialized countries. Responses are being incorporated. It is hoped that a draft will be



ready for the FAO Commission meeting in April. The document could also be considered at SBSTTA in September.

The study, which is still only in draft form, highlighted a range of options for regulating access, from the current multilateral, unregulated and informal system without distinction between countries and institutions, to the extreme of total regulation through bilateral agreements. It concluded that the latter route was not viable for agricultural genetic resources. Global debate is tending to move away from purely bilateral approaches. However, the status quo is also not feasible, due to issues of sovereignty and sharing of benefits. The study looks at several possible options for multilateral approaches that would build on strengths of the present system and take advantages of new challenges and opportunities.

One option, referred to as MUSE (Multilateral System for Exchange of germplasm), is developed in some detail. It would be a regulated system, but with a minimum of rules and bureaucracy, designed to be transparent and with clear rights and obligations for all participants. It would operate very flexibly - largely through existing networks, etc. There could be a "fund" associated with the System, and one option would be to allow bilateral negotiations, under certain conditions, within the overall MUSE framework.

Hawtin reported that feedback on the draft study was mixed. However, he sensed a hope among those who had read it that a solution can be found within the spectrum of options outlined in the study.

## Discussion Highlights

### General Comments

The paper considered by the Committee was a summary of the draft study and did not reflect the second round of comments. Some Committee members, however, had seen the full study and were able to convey initial reactions from colleagues. It was noted that some criticized the study as not adequately addressing the possibility of continuing the present system of free exchange with such instruments as the Material Transfer Agreements (MTAs) to prevent misappropriation. In general, the Committee regarded the study as a good basis for further discussions. It was suggested that it should indicate implications for various actors like the CGIAR of adopting various options, in terms of governance and degree of bureaucracy. There is a growing realization that it is probably impossible to escape more bureaucracy and the question is how to keep it to the necessary minimum. Conversely, what are the implications for the CGIAR if some agreement is not reached.

In this connection, it was argued that it is critical to make clear the tremendous value of CGIAR's work and of an unrestricted exchange of germplasm to developing countries. In some countries, inadequate understanding of the issues is creating a protectionist attitude towards genetic resources. There is a misperception on the part of many about money to be made through bilateral agreements, which is likely to be very little in reality.

For this reason, there was a strong feeling that the thrust of the study should be the imperative of sustainable food security. In terms of food security, it is South-South collaboration in germplasm exchange that is particularly essential. Thus food security and mutuality of interest would be the principal motive rather than the profit element. It was felt by some that if a resolution was passed at the World Food Summit to insulate food security crops from restriction to access, it would be easier to operationalize through the revised International Undertaking.

Much discussion focused on the specific option of MUSE. It was suggested that ultimately MUSE should not appear to be a framework for bilateral arrangements but a truly multilateral approach. There was also some feeling that it might be overly bureaucratic. There were also questions raised regarding commercialization and when and how that might occur, and what was meant by equitable sharing of benefits and how that would be implemented.

One possible element of MUSE, though not essential for its operation, would be a multilateral fund as a mechanism to better recognize the role of farmers and communities. Mechanisms for making such a fund operational would have to be worked out if and when the concept was defined and accepted. Several Committee members said they sensed that there was support for the concept of a fund. This seemed to be the general feeling at the European Union's meeting on biodiversity that had just met in London. It would take pressure from the need for high-transaction cost bilateral negotiations. There was also a sense that private industry would be willing to support such a fund. A minimum of bureaucracy, though, would be essential. It was very doubtful, however, that any significant amount of development assistance monies would be available for such a fund, given the global decline in development assistance. There was also concern expressed about the possible impact of a fund on financial support for the CGIAR. It was felt that the more CGIAR activities that support international agricultural research are portrayed as having a cash value, the more likely that development assistance to underwrite them will be cut.

#### Action Required

The Committee recommended that the revised study should: be neutral in presenting a range of options; continue to build on the strengths of the current situation; and stress the importance of multilateral arrangements especially for major food crops. An effective system should involve a minimum of bureaucracy.

#### **IV. Madras Technical Consultation on Agrobiodiversity and Farmers' Rights**

(M.S. Swaminathan: Background paper - "Agrobiodiversity and Farmers' Rights")

##### Background

A technical consultation was held 15-18 January 1996, in Madras, India, to develop an implementation framework for Farmers' Rights, both at the national level in India and at the international level. The workshop was organized by the M.S. Swaminathan Research Foundation (MSSRF) and supported by the Government of India, FAO and Swedish International Development Authority. It was the second in a series organized by MSSRF to look at Farmers' Rights. The meeting was attended by some 75 people representing inter-governmental organizations such as UPOV and FAO, international centers, NARS, the private sector and NGOs from developed and developing countries, the Government of India, universities and the press.

Dr Swaminathan noted that a major cause of loss in biodiversity is due to inequity in ownership and access to natural resources, including the benefits and use of resources. Thus Farmers' Rights is a critical issue for developed countries as well as developing countries. Farmers' Rights is important both for strengthening community efforts in the *in situ* conservation of agrobiodiversity and for according informal innovations the social prestige essential for attracting and retaining youth in farming. In 1989, more than 160 countries adopted the concept of Farmers' Rights in the International Undertaking but little was done to implement the concept. Many countries, as members of the World Trade

Agreement, are now developing *sui generis* systems of plant variety protection (Article 27 of TRIPS). Thus the time is right to build in protection for farmers as well as breeders.

The national dimension of the workshop dealt with proposed legislation addressing Breeders' and Farmers' Rights in India. It is hoped this will serve as a model for other countries who are developing *sui generis* systems, to help them incorporate principles of equity in sharing economic benefits from plant breeding and biotechnology. A major feature of the proposed Indian legislation is the establishment of a National Community Gene Fund. The cost of administering the Fund would be met by the Government of India. The Fund's resources would be generated by a 2 percent levy on the sale of seed. It is proposed that an International Community Gene Fund be established to support the efforts of National Community Gene Funds to reward, support and revitalise *in situ* and *ex situ* conservation efforts of tribal and rural families. Recommendations for the international community also include preparation of a set of well-defined indicators for the purpose of "identifying donor countries of germplasm and information, which have played a critical role in the development and release of crop varieties eligible for receipt of royalties under Plant Variety Protection Acts."

#### Discussion Highlights

Appreciation for the Madras Workshop was expressed. It represents a positive step forward. It was queried how the Community Gene Fund would link funds with farmers' innovations. Also, in cases where genes are pyramided and varieties have complex pedigrees it will be difficult to trace the sources. It was recognized that modalities will have to be worked out and such issues tie in with the development of criteria for assessing contributions of germplasm and information by different countries. The purpose of the Gene Fund is expressly to compensate communities when the origin of innovation is not always obvious. It was noted that the Indian Government's leadership in this area serves as an excellent example and may lead to other countries adopting similar approaches. Such a bottom-up adoption is desirable. One member observed that the tax on seeds to fund the National Gene Fund taxed farmers for Farmers' Rights and not breeders. In this connection, it was stressed that Farmers' and Breeders' Rights are not incompatible, and that any legislation should seek to strengthen the partnership between breeders and farmer-conservors and innovators. It was suggested that mechanisms for encouraging farmers in their role as innovators need to be addressed creatively. There was some concern that as public sector activities diminish, plant breeding will be concentrated in areas where farmers can afford to buy seeds. This might skew research. Small farmers and social priorities must not be neglected.

One Committee member felt it would be useful to know which issues tended to have consensus and which were still open to debate. The point was also made that while most communities tend to share information, many have a tradition of secrecy. This needs to be respected, and raises the larger question of what information lies in the public domain.

In terms of implications for the CGIAR, it was felt that points 1-8 under "Global Issues" in the report of the Madras meeting represent important entry points for centers to make a contribution to Farmers' Rights. These deal with issues such as participatory breeding, on-farm conservation and capacity building. It was suggested that the Committee may eventually wish to make recommendations concerning activities in these areas. Perhaps in the future guidelines should be developed to support the implementation of the concept of farmers' rights in centers' programs.

#### Action Required

T. Reeves, as chair of the Center Directors Committee on IPR, will circulate the report of the Madras Workshop to centers, requesting them to indicate briefly (3-4 pages) what they are doing in relation to items listed under "Global Issues." The purpose is to provide CGIAR with an overview at one of its future meetings.

## **V. Ethics and Equity in Genetic Resources Conservation and Use**

(M.S. Swaminathan and G. Hawtin: Background paper - "IPGRI's contribution to the discussion on ethics and plant genetic resources")

### **Background**

The first meeting of the Committee recommended that a workshop be convened to explore ethical dimensions related to genetic resources conservation and use. The broad purpose would be to contribute towards the development of a sound ethical basis for the work of the CGIAR in its relationships with farmers, communities, private companies and national and international agencies. Due to the heavy schedule of international meetings in 1996, it was proposed to convene the workshop in April 1997. M. Zimmermann indicated her willingness to host the meeting in Brazil.

### **Discussion Highlights**

The Committee discussed the content of the workshop, its organization, and the kinds of people that should be invited to participate. There was strong support for keeping the meeting well focused. Objectives should be realistic and the outcome practical. The desired result is a set of guidelines related to ethical and equity issues in the CGIAR's research for the public good. Thus, this workshop might represent the first in a series addressing ethical issues related to agricultural research. Possible topics for inclusion might be: indicators for recognition and reward for informal innovators, in particular as this relates to contribution to biodiversity and genetic enhancement; implementation of the concept of Prior Informed Consent (PIC) and the ethics of knowledge, collection and sale of genetic resources; ethical aspects of transgenic material; the traditional role of women as conservers of seed and relevant gender dimensions with reference to the Beijing Platform for Action; collaboration with private sector industry and NGOs; and issues related to Farmers' Rights. It was suggested that there could be a paper on the CGIAR's contribution to equity.

Involvement of NARS in the workshop was considered essential, although there was a feeling that the workshop should have broad participation and not merely encompass like-minded people. It was noted that the CGIAR operates on a utilitarian ethic - feeding more people. NARS tend to reflect this view as well. However, this utilitarian ethic is not necessarily shared by large portions of the communities NARS serve. The question is how to reconcile these views to best meet the objectives of all. It was noted that many issues do not only relate to indigenous peoples but also to scientists at the operational level. It would be useful to invite one or two people from organizations who have actually operationalized procedures for addressing ethical issues. It was proposed that IUCN be approached as a possible cosponsor, given its experience in this field.

### **Action Required**

IPGRI, together with M. Zimmermann, will develop a more detailed terms of reference for the workshop. A possible title might be: Ethics, equity and values in the conservation and use of plant genetic resources for agricultural research. The meeting should involve

around 50-55 participants and include: Committee members, a representative from each CGIAR center, representation from NARS and national NGOs, the private sector, and people from institutions who have internalized ethics policies. A balanced gender representation should also be invited. IUCN confirmed its willingness to cosponsor the meeting. Sweden and Switzerland have offered to provide funding support. A steering committee was formed and includes: M.S. Swaminathan, G. Hawtin, M. Zimmermann, J. Benz, N. Olembo and J. McNeely.

## **Other Business**

### Policy Unit at IPGRI

One Committee member noted that CGIAR, at ICW95, endorsed the creation of a genetic resources policy unit at IPGRI and asked about the status of this unit. Its purpose was to strengthen CGIAR's capacity to undertake analytical, information, coordination and representational functions related to genetic resources policies. Hawtin pointed out that IPGRI's request for additional funding could not be approved by TAC due to lack of funds.

### Next Committee Meeting

The Committee's next meeting will be held in Rome from 2-4 October 1996.

## Overview of Differences between 1978 and 1991 UPOV Acts

	UPOV 1978 Act	UPOV 1991 Act	Typical Patent Law
Subject Matter of Protection	<p>"largest possible number of botanical genera and species"</p> <p>minimum of five species when first becoming a UPOV member increasing to a minimum of twenty-four after eight years</p> <p>(Article 4)</p>	<p>"all plant genera and species" within five years of accession for existing member States or ten years for new member States</p> <p>minimum of fifteen species when first becoming a UPOV member</p> <p>(Article 3)</p>	<p>inventions (products or processes)</p> <p>[many patent laws exclude plant varieties from patent protection]</p>
Criteria for Grant of Protection	<p>Commercial Novelty Distinctness Uniformity Stability</p> <p>(Article 6)</p>	<p>Commercial Novelty Distinctness Uniformity Stability</p> <p>(Articles 5 - 9)</p>	<p>Novelty (i.e. the invention must not be known or published)</p> <p>Non-obviousness (i.e. an inventive step is required)</p> <p>Industrial applicability (i.e. must be "useful")</p> <p>An enabling disclosure</p>
<p>Scope of Protection [in the case of UPOV defined by reference to specified "acts" carried out with specified "material" of specified "varieties"]</p> <p>The specified "Acts"</p>	<p>Production for purposes of commercial marketing</p> <p>Offering for sale</p> <p>Marketing</p> <p>Repeated use of protected variety to produce another variety, i.e. a hybrid</p> <p>(Article 5)</p>	<p>Production</p> <p>Offering for sale</p> <p>Sale or other marketing</p> <p>Conditioning for purposes of propagation</p> <p>Exporting</p> <p>Importing</p> <p>Stocking</p> <p>(Article 14(1))</p>	<p>Making, using or selling the invention</p>

	UPOV 1978 Act	UPOV 1991 Act	Typical Patent Law
<b>Scope of Protection (continued)</b>  <b>The specified "Material"</b>	Reproductive or propagating material (Article 5(1))  if member State wishes, the marketed product (Article 5(4))	Propagating material (Article 14(1))  Harvested material IF (i) obtained through unauthorized use of propagating material  (ii) holder of right had no reasonable opportunity to exercise his right in relation to the propagating material (Article 14(2))  If member State wishes, similar extension to product made directly from harvested material (Article 14(3))	Limited only by the claims of the patent
<b>The specified "Varieties"</b>	The protected variety (Article 5)	The protected variety (includes varieties that cannot be clearly distinguished from the protected variety)  Varieties (i.e. hybrids) produced by repeated use of the protected variety  "Essentially derived" varieties (Article 14(5))	Limited only by the claims of the patent
<b>Compulsory exceptions to the breeder's right</b>	Use of the protected variety as an initial source of variation for the purpose of creating other varieties and the marketing of such varieties, i.e. the "breeder's exemption" Article 5(3)	Acts done for the purpose of breeding other varieties and the marketing of such varieties (unless they are essentially derived from the protected variety) i.e. the "breeder's exemption" (Article 15(1)(iii))  Acts done privately and for non-commercial purposes (e.g. acts of subsistence farmers) (Article 15(1)(i))  Acts done for experimental purposes (Article 15(1)(ii))	No "breeder's exemption," as such, in patent laws  Acts done privately and for non- commercial purposes  Acts done for experimental purposes

	UPOV 1978 Act	UPOV 1991 Act	Typical Patent Law
Optional exception to breeders' rights (farmer's privilege)	No express exception to the breeder's right in the 1978 Act. The farmer's privilege arises implicitly from limitation of the breeder's exclusive right to the production of propagating material for the "purposes of commercial marketing" [of the propagating material] (Article 5(1))	Each member State has option to grant to farmers a right to save seed "within reasonable limits and subject to safeguarding the legitimate interests of the breeder" (farmer's privilege) (Article 15(2))	No farmer's privilege in patent laws
Minimum duration of protection	18 years from grant for trees and vines. 15 years for other plants (Article 8)	25 years from grant for trees and vines 20 years for other plants (Article 19)	20 years from application (TRIPS Agreement)
Prohibition of double protection	Varieties of species for which protection is granted by plant variety protection cannot be patented and <i>vice versa</i> (Article 2(1))	The 1991 Act is silent on this question. Accordingly, States are free to decide the question at the national level	Many patent laws, but not all, exclude plant varieties, as such, from patenting. Generic claims relating to plants may still be permitted, however.