From: The Secretariat

October 5, 1994

ICW/94/17

International Centers’ Week
Washington, D.C.
October 24-28, 1994

Launching the CGIAR


The following connected meetings were held in August and September in preparation for ICW94: a Study Panel on governance and finance (August 22-24 and September 11-12), a Stakeholder Panel (September 13-14), a panel on Intellectual Property Rights (September 15), the Oversight and Finance Committees (September 15-16) and the Steering Committee (September 15-16).

The purpose of the meetings was to maintain the momentum for change that grew out of the 1994 Mid-Term Meeting by reviewing and analyzing major issues and distilling them for discussion and decision by the Group. Reports from all these meetings will be distributed as ICW94 documents and will form the background for discussion of agenda items under the rubric, "Launching the New CGIAR."

A report from the panel on Intellectual Property Rights, chaired by Dr. M.S. Swaminathan, is attached. The panel reviewed a range of issues pertaining to patents and plant variety protection as they relate to the centers’ research programs and their ex situ collections. The report should be helpful in discussing the CGIAR system’s future relationships with the institutions that are engaged in defining the future framework for genetic resources and their improvement. Dr. Swaminathan will present the report at ICW94.

Time has been provided for all reports and suggestions concerning the launch of the new CGIAR to be comprehensively discussed and to be re-visited on the final day of ICW94 before decisions are reached on the next steps to be taken.

Attachment

Distribution:

CGIAR Members
Center Board Chairs
Center Directors
TAC Chair, Members, Secretariat
Observers
REPORT TO THE CGIAR OF THE PANEL
ON INTELLECTUAL PROPERTY RIGHTS
(Washington, D.C., September 15, 1994)

Executive Summary

A Panel on Intellectual Property Rights met in Washington on September 15, 1994, at the invitation of Mr. Ismail Serageldin, Chair of the CGIAR, and under the Chairmanship of Dr. M.S. Swaminathan. The CGIAR has kept issues of IPR under review over the past decade. Two key steps have been:

- 1992: At the CGIAR meeting in Istanbul in May 1992, the CGIAR unanimously endorsed a document which reflected current CGIAR policy and practice. This statement recognized that the CGIAR centers were concerned with a broader range of IPR issues than those relating only to plant genetic resources.

Since 1992, there have been two major developments which will affect the management of publicly-funded research in the CGIAR centers and in national agricultural research systems. These are the completion of:

(a) the Convention on Biological Diversity, in effect since December 1993; and
(b) the World Trade Agreement which was signed on April 15, 1994.

The Panel considered that in the light of these new developments, four key issues required further consideration as they relate to the work of the CGIAR Centers:

(a) patents;
(b) plant variety protection in developing countries;
(c) germplasm collections, both ex-situ and in-situ; and
(d) publication of information.
The Panel reached the following conclusions:

(a) **On Patent Issues**

The Panel noted that in its 1992 statement in Istanbul, the CGIAR recognized that: *Modern biotechnology is becoming an important tool for the work of the centers and their collaborators. In a changing research environment, the centers need to collaborate with a wide range of agencies in both the public and private sectors which increasingly protect their inventions through holding intellectual property.*

The CGIAR agreed in Istanbul that centers: *should not seek intellectual property protection unless it is necessary to ensure access by developing countries to new technologies and products. The centers would not seek intellectual property protection for income-generating purposes or view potential returns from intellectual property protection as a source of operating funds.* The Panel endorsed this view as continuing to be an appropriate stance for the CGIAR and its centers.

The Panel then elaborated on instances where CGIAR centers may need to seek patent protection on their inventions.

- The reasons for seeking patent protection may be to:
  
  a. prevent appropriation by others;
  
  b. ensure further product development and its delivery to the farming community in developing countries; and
  
  c. use ownership of intellectual property to negotiate access to other proprietary technology for the benefit of developing countries.

- When the CGIAR centers obtain patent protection on an invention, they should be prepared to license such rights to developing countries on a no-cost basis.

- The choice of countries where a center would apply for patent protection will need to be considered on a case-by-case basis.
In regard to collaborative research agreements with advanced research institutes, cost-sharing arrangements and future sharing of IPR will need to be agreed on a case-by-case basis.

The CGIAR centers and their Boards of Trustees should become knowledgeable on IPR issues and monitor developments relevant to the management of their research programs. This may require some System-wide technical and legal common services to enable the CGIAR centers to become responsibly as to the implications of the IPR environment and to develop common operational approaches.

(h) On Plant Variety Protection

- The Panel recognized the requirement for countries to develop plant variety protection systems as one of their obligations as signatories to the World Trade Agreement. The Panel strongly supports the concept that such legislation should incorporate provisions for farmers' privilege to save and exchange seed, a research exemption as well as licensing provisions to promote the diffusion of new varieties.

- As part of its responsibility for developing national research capacity and public policy research, the panel suggests that the CGIAR cosponsor with interested developing countries, a program on the development of national systems for plant variety protection, in partnership with interested countries, and the responsible international organizations and other interested parties, including the seed industry in developing countries. The purpose would be to develop common approaches and share experience among developing countries at a technical level. A project design workshop sponsored by the CGIAR would be a required first step for developing a global initiative.

(c) On Ex-situ Germplasm Conservation

- The Panel commends the decision of the CGIAR and its centers to place their designated germplasm collections under the auspices of the FAO Commission on Plant Genetic Resources and its Network of Ex-situ Collections. The Panel encourages the CGIAR to bring the agreements to closure as quickly as possible.
As issues on plant genetic resources are under active discussion in the FAO Commission on Plant Genetic Resources and in the Conference of the Parties to the Convention on Biological Diversity, the CGIAR centers need to be cognizant of these discussions and the policy advice provided to the International Network on Ex Situ Collections of plant genetic resources.

In considering the use of agreements, such as Material Transfer Agreements (MTAs), for acquiring and distributing germplasm, the CGIAR should use procedures which continue to encourage maximizing the utilization of genetic material and facilitating access to technology that benefits developing country farmers.

On In-situ Germplasm Conservation

- The CGIAR should encourage the in-situ conservation of habitats rich in genetic diversity.

- CGIAR centers, such as CIFOR and IPGRI could provide technical advice, on request, to countries developing in-situ conservation practices.

(d) On Publication of Information

- The Panel commends the CGIAR Centers for their long-standing record of publication of their research results and encourages the centers to explore new methods of information technology to facilitate the early public disclosure and wide dissemination of research results.

Next Steps

The Panel would welcome comments on its initial findings and stands ready to provide further advice to the CGIAR Chair, on request, on the further development of intellectual property policies within the CGIAR system.
INTRODUCTION

The major aim of the CGIAR has been to protect and promote the interests of small and resource poor farming families in developing countries. CGIAR's new vision places the productivity, profitability, and stability of food-based farming systems in the developing countries on an environmentally sustainable and socially equitable basis as being of highest priority.

A Panel on Intellectual Property rights met in Washington on 15 September 1994, at the invitation of Mr. Ismail Serageldin, Chair of the CGIAR, and under the Chairmanship of Dr M. S. Swaminathan. A list of Panel Members is attached at Annex 1. CGIAR policies and practices on intellectual property rights have evolved over the past decade. Through reviews by its Technical Advisory Committee (TAC), the Center Directors, and several study groups, the CGIAR has considered on various occasions the implications of intellectual property protection for CGIAR-supported research. These efforts have helped the CGIAR to harmonize the legal basis for its germplasm holdings and to establish preliminary principles on intellectual property management.

At the CGIAR Mid-Term Meeting in May 1992, the CGIAR unanimously adopted a document which reflects current policies and practices by the CGIAR centers (Annex 2). The minutes of the May, 1992 meeting state that Centers and their Boards of Trustees bear responsibility for developing operational policies and procedures. The meeting concluded that: as the issues are the subject of consultations in various fora it is premature for the CGIAR to move toward a formal system-wide policy at the present time. The CGIAR System will keep the issues under active review.

In June 1992, the Center Directors issued 'Suggested Guiding Principles of the International Agricultural Research Centers on Plant Genetic Resources and Intellectual Property Right Issues' in which they affirmed the CGIAR's adherence to the principle of unrestricted availability of its plant genetic resources (Annex 3). Document ICW/93/15 of October 8, 1993, issued by the Center Directors' Committee on Intellectual Property Rights provides the most recent review of discussions in the CGIAR, including a description of policies adopted by individual centers.
Current CGIAR policies and practices are based on the principles of:

(a) free availability of germplasm;
(b) public disclosure of research results; and
(c) rapid dissemination of research products to developing countries, in close partnership with National Agricultural Research Systems (NARS).

The approach has resulted in the CGIAR:

(a) assembling and conserving one of the world's most important collections of agricultural plant genetic resources;
(b) characterizing, evaluating and cataloguing the collections;
(c) breeding a large number of new varieties of crop plants and improved materials for evaluation by national programs in developing countries;
(d) developing a wide variety of other inventions (e.g. farm machinery suitable for small holders);
(e) generating and disseminating new knowledge and technology; and
(f) developing new methods for the control of livestock diseases for improving livestock productivity.

RECENT DEVELOPMENTS IN INTELLECTUAL PROPERTY RIGHTS

The following two major developments have made it necessary to review and restate CGIAR's position in relation to intellectual property rights:

(a) the Convention on Biological Diversity which became operational on December 29, 1993; and
(b) the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations (the World Trade Agreement) signed at Marrakech on April 15, 1994. Its Agreement on Trade-related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods (TRIPs Code) requires signatory countries to implement minimum rules for intellectual property protection.
In addition, the UN Framework Convention on climate change which came into force on March 21, 1994 and the Convention on Desertification, which will be open for signature in October 1994, have implications for CGIAR’s research agenda, especially in relation to forestry and agro-forestry.

INTELLECTUAL PROPERTY ISSUES NEEDING CONSIDERATION

The Panel considered that the following four areas need attention now in relation to how they affect the mission of the CGIAR:

(a) patents;
(b) plant variety protection in developing countries,
(c) germplasm collections, both ex-situ and in-situ; and
(d) publication of information.

A. PATENT ISSUES

The CGIAR recognized in its statement in Istanbul in May, 1992 that: Modern biotechnology is becoming an important tool for the work of the centers and their collaborators. Advances in its use offer the potential for the centers and their collaborators to increase productivity in agriculture, forestry and fisheries in developing countries. In a changing research environment, the centers need to collaborate with a wide range of agencies in both the public and private sectors which increasingly protect their inventions through holding intellectual property.

The CGIAR further agreed in Istanbul: that centers should not seek intellectual property protection unless it is necessary to ensure access by developing countries to new technologies and products. The centers would not seek intellectual property protection for income-generating purposes or view potential returns from intellectual property protection as a source of operating funds. The Panel endorsed this view as continuing to be an appropriate stance for the CGIAR.

The Panel discussed various types of products which may be eligible for IPR protection. These include:

(a) vaccines;
(b) agricultural implements suitable for small farmers;
microorganisms and other biological products, such as biofertilizers and biostimulants; and

biotechnology inventions.

It was pointed out that new processes eligible for patenting were likely to result from collaborative research in frontier areas of technology, such as biotechnology and information technology, conducted jointly with advanced institutions. Procedures developed under the Rice Biotechnology Network, sponsored and funded by the Rockefeller Foundation may serve as a useful basis for CGIAR policies (Annex 4). Frequently, the precise terms would have to be agreed with the institutions/universities/private companies involved in the research partnership on a case-by-case basis.

There was considerable discussion as to whether it may be prudent for the CGIAR Centers, committed to the cause of international public good, to seek patents on important products of applied value. For such cases, a policy of license of right with transfers on a no-cost basis to NARS should be developed, in consultation with collaborating institutions. Arrangements between the International Agricultural Research Centers (IARCs) and NARS should include appropriate provisions for this purpose.

Some Panel members also noted that it may be useful if the CGIAR were, in the future, to have a legal personality, enabling the CGIAR to seek any intellectual property protection on behalf of individual centers, negotiate exchange and access to technologies on behalf of NARS and license on a no-cost basis to developing countries.

Recommendations on Patent Issues

The reasons for CGIAR centers taking patent protection on their inventions may be to:

(a) prevent appropriation by others;

(b) ensure further product development and its delivery to the farming community in developing countries; and

(c) use ownership of intellectual property to negotiate access to other proprietary technology for the benefit of developing countries.

When the CGIAR centers obtain patent protection on an invention they should be prepared to license such rights to developing countries on a no-cost basis.

The choice of countries where a center would apply for patent protection will need to be considered on a case-by-case basis.
In regard to collaborative research agreements with advanced research institutes, cost-sharing arrangements and future sharing of IPR will need to be agreed on a case-by-case basis.

The CGIAR centers and their Boards of Trustees should become knowledgeable on IPR issues and monitor developments relevant to the management of their research programs. This may require some System-wide technical and legal common services to enable the CGIAR centers to become responsibly aware to the implications of the IPR environment and to develop common operational approaches.

B. Plant Variety Protection in Developing Countries

The Panel reviewed the implications for the centers and developing countries of the World Trade Agreement. This agreement makes it obligatory for signatory countries to provide for the protection of plant varieties, through either a utility patent system, the International Convention for the Protection of New Varieties of Plants (the UPOV system) or new *sui generis* systems, which are tailored to suit the national needs of individual developing countries. Many countries are now preparing legislation to satisfy the TRIPs requirements of the World Trade Agreement through one of these systems.

Farmers' roles were considered in two separate areas.

(a) *Farmer-cultivators* who use their own seeds for raising crops and for local exchange; and

(b) *Farmer-conservers* who have helped to conserve land races, wild species, and other genetic material currently serving as sources of valuable genes for use in both conventional plant breeding and in genetic engineering.

The role of farmers in the conservation of plant genetic resources was recognized by the FAO Commission on Plant Genetic Resources by articulating the concept of Farmers' Rights. However, methods of rewarding farmers for their contributions to the conservation of variability in crop plants and wild relatives are yet to be developed.

The Panel discussed the potential role of the CGIAR centers in assisting developing countries to develop procedures for recognizing and rewarding the contribution of farmer-conservers in the *in situ* conservation of genetic variability at the species and ecosystem level. The centers have not only preserved valuable germplasm but have also added value to them by characterizing and evaluating them. Where available, IARCs can supply information which may help implement the rights of farmer-conservers under plant variety protection. For example, the detailed pedigrees of new varieties may reveal the contribution of land races and folk varieties in providing genes critical to the success of the new commercial varieties.
The Panel considered that legislation for plant variety protection should contain provisions that emphasize the rights of farmers to plant back the seeds or planting material they had purchased and to enter into limited exchange with their neighbors; it should also provide for the right of researchers to use a protected variety in breeding programs. The rationale for the CGIAR's support for this position is (1) to recognize the economic necessity for farmers in developing countries to be able to re-plant their seed and (2) to maintain genetic diversity.

With regard to the responsibilities of the CGIAR institutes (including ISNAR, IFPRI, and CIFOR) in national institution-building and public policy research, the Panel considered that it would be a useful innovation for the CGIAR to work with interested countries and the responsible international organizations in building national capacity to develop and apply plant variety protection systems. The CGIAR should co-sponsor a program on the development of suitable plant variety protection systems, which would enable the sharing of experience amongst developing countries and the IARCs. The program would involve policy-makers from developing countries governments and IARCs representatives, together with experts from agencies such as from UPOV, WIPO, FAO, UNEP, and the future World Trade Organization, and other interested parties, including the seed industry in developing countries. A project design workshop, possibly sponsored jointly with UNDP in relation to the Capacity-21 program, would help to prepare a global initiative.

Recommendations on Plant Variety Protection

- The Panel recognized the requirement for countries to develop sui generis systems for plant variety protection under the provisions of the World Trade Agreement. The Panel strongly supports the concept that such legislation should incorporate provisions for farmers' privilege to save and exchange seed, a research exemption, as well as licensing provisions to promote the diffusion of new varieties.

- As part of its responsibility for developing national research capacity and public policy research, the Panel suggests that the CGIAR co-sponsor with interested developing countries, a program on the development of national systems for plant variety protection, in partnership with interested countries, the responsible international organizations and other interested parties, including the seed industry in developing countries. The purpose would be to develop common approaches and share experience among developing countries at a technical level. A project design workshop, sponsored by the CGIAR, would be a required first step for developing a global initiative.
C. Ex-situ and In-situ Germplasm Conservation

(i) Ex-situ Germplasm Conservation

The international centers conserve global germplasm collections for their mandate crops. The purposes of the genebanks are to conserve the germplasm in a safe manner, to hold it in trust for the world community and to use it in breeding programs. The CGIAR collections helped to conserve a representative sample of genetic variability in food crops, which otherwise might have become extinct due to civil strife, as, for example, in the case of rice in Cambodia and beans in Rwanda.

There are three major categories of genetic material either maintained or generated by IARCs (as defined in the CGIAR Policy on Plant Genetic Resources, 1989):

(a) germplasm collections;

(b) advanced generation and segregating genetic material derived from hybridization, distributed among NARS for selection and further breeding; and

(c) novel genetic combinations arising from biotechnological research.

In order to ensure that this unique genetic wealth remains available for promoting food and livelihood security in developing countries, the CGIAR centers have decided to place designated germplasm collections under the auspices of the FAO Commission on Plant Genetic Resources as part of the International Network of Ex-situ Collections, through agreements with FAO. The Panel encourages the CGIAR to bring these agreements to closure as quickly as possible.

There was spirited discussion as to the possible future use of contractual agreements, such as Material Transfer Agreements (MTAs), to cover the exchange of germplasm between the IARCs and their collaborators, in both developing and industrial countries, especially in the light of the provisions of the Convention on Biological Diversity. Some considered that it may become necessary to use MTAs in order to ensure the continuing exchange, recognition of origin, and utilization of germplasm for research purposes and the public availability of research products. Other Panel members considered that it may be premature for the IARCs to take the lead in promoting Material Transfer Agreements. The effect of MTAs upon access to samples of genetic resources by plant breeders needs to be explored further by all countries. Countries are presently dealing with terms of access at the FAO Commission on Plant Genetic Resources and the CGIAR should be guided by the consensus that emerges there.

It was also noted that special efforts should be made to strengthen phyto-sanitary facilities both in IARCs and NARS in order to comply with the provisions of the World Trade Agreement.
Recommendations on *Ex-situ* Germplasm Conservation

- The Panel commends the decision of the CGIAR and its centers to place their designated germplasm collections under the auspices of the FAO Commission on Plant Genetic Resources. The Panel encourages the CGIAR and FAO to bring these agreements to closure as quickly as possible.

- As issues on plant genetic resources are under active discussion in the FAO Commission on Plant Genetic Resources and in the Conference of the Parties to the Convention on Biological Diversity, the CGIAR and its centers need to be cognizant of these discussions and the policy advice provided to the International Network on *Ex-situ* Collections of plant genetic resources.

- In considering the use of agreements, such as Material Transfer Agreements (MTAs) for acquiring and distributing germplasm, the CGIAR centers should use procedures which continue to encourage maximizing the utilization of genetic material and facilitate access to technologies that benefit developing country farmers.

(ii) *In-Situ* Germplasm Conservation

- *In-situ* conservation is essential for the conservation of land races, folk strains and wild species and for the conservation of inter-specific variability. It is also important in the protection of certain habitats which are rich in biodiversity. *In-situ* conservation is a relatively new area for the CGIAR, but one which is likely to become increasingly important.

Recommendations on *In-Situ* Conservation

- The CGIAR should encourage the *in-situ* conservation of habitats rich in genetic diversity.

- CGIAR Centers, such as CIFOR and IPGRI could provide technical advice, on request, to countries developing *in-situ* conservation practices.

D. Publication of Information

The preferred means of dissemination of CGIAR research results is through public disclosure. IARCs publish detailed information on both germplasm collections and genetically enhanced material as well as on other scientific research of applied value. Such research publications prevent any unauthorized acquisition of ITR on the results of the centers' work. Data bases on germplasm maintained by the centers also help to protect the rights of farmer-conservers. The CGIAR centers also publish research results in other areas such as Geographic Information Systems (GIS), in order to put this information into the public domain.
Recommendations on Publication of information

- The Panel commends the CGIAR centers for their long-standing record of publication of their research results and encourages the centers to explore new methods of information technology to facilitate the early public disclosure and wide dissemination of research results.

CONCLUSION

The foregoing steps are designed to ensure that the primary purpose for which donors provide funds to the CGIAR, namely promoting sustainable food security and livelihoods among the world’s economically and ecologically disadvantaged women, men and children is achieved under the emerging global trade environment. The World Trade Agreement excludes investment on scientific research from the calculation of subsidies. Thus, support for scientific research especially in relation to agriculture, occupies a privileged position in subsidy law under the World Trade Agreement. An effective method of safeguarding and strengthening food security at the household level in developing countries would be greater investment in research and training and continued conservation and sharing of genetic material and of products and processes of value in achieving sustainable advances in farming systems intensification and diversification.

NEXT STEPS

The Panel welcomes comments on its initial findings and stands ready to provide further advice to the CGIAR Chair, on request, on the further development of intellectual property policies within the CGIAR system.
Professor John Barton  
Stanford Law School  
Stanford University  
Palo Alto, CA 94305-5015  
TEL: 415 723 2691  
FAX: 415 7250253  
---  
Dr. Adel El-Beltagy  
Board Chairman  
Agricultural Research Center  
Ministry of Agriculture  
El Nour Street  
Dokky, Cairo, Egypt  
TEL: 20 2 702 442  
FAX: 20 2 712061  
---  
Professor Bo M. Bengtsson  
Department of Crop Production Science  
Swedish University of Agricultural Sciences  
P.O. Box 7043  
S-750 Uppsala, Sweden  
TEL: 46 18 672 615  
FAX: 46 18 672909  
---  
Dr. Simon G. Best  
Chief Executive Officer and Managing Director  
Zeneca A.V.P.  
P.O. Box 751  
Wilmington, DE 19897  
TEL: 302 886 1148  
FAX: 302 8861610  
---  
Dr. Lukas Brader  
Director General  
IIITA  
P.M.B 5320  
Ibadan, Nigeria  
TEL: 234 22 400 300  
FAX: 874 1772276  
---  
Dr. Carlos M. Correa  
Director  
Universidad de Buenos Aires  
Centro de Estudios Avanzados  
Buenos Aires  
Argentina  
TEL: 541 322 0338  
FAX: (541) 311 0516  
---  
Dr. Jack Doyle  
Deputy Research Director  
ILRAD  
P.O. Box 30709  
Nairobi, Kenya  
TEL: (254 2) 632066  
FAX: (254 2) 631499  
---  
Dr. Donald N. DuVick  
6837 NW Beaver Drive  
Johnston, IA 50131  
TEL: 515 278 0861  
FAX: 515 253 2125  
---  
Dr. Jose-Maria Esquinas  
Alcazar  
Secretary, FAO Commission on Plant Genetic Resources  
United Nations Food and Agricultural Organization  
Viale delle Termi di Caracalla  
00100 Rome, Italy  
TEL: 396 52254986  
FAX: 396 52253271  
---  
Dr. Brad Fraleigh  
Agriculture, Canada  
Biodiversity Convention Office  
Wm. Saunders Building  
Ottawa, Ontario K1A 0C6  
Canada  
TEL: 819 953 7626  
FAX: 819 9531765  
---  
Dr. Calestous Juma  
African Centre for Technology Studies (ACTS)  
P.O. Box 45917  
Nairobi, Kenya  
TEL: 254 2 565173  
---  
Dr. Usha Menon  
National Institute of Science, Technology and Development Studies  
New Delhi 110 012  
India  
TEL: 91 11 5729151  
FAX: 91 11 5754640  
---  
Dr. Maria Jose de Oliveira Zimmermann  
EMBRAPA-CNPAF  
Caixa Postal 179  
74001-970 Goiania  
Golas, Brazil  
TEL: 55 62 212 1999  
FAX: 55 62 261 3880  
---  
Dr. M.S. Swaminathan  
M.S. Swaminathan Foundation  
Foundation  
3rd Cross Road, Taramani  
Institutional Area  
Madras 600113, India  
TEL: 91 44 235 1229  
FAX: 91 44 235 1319  
---  
Dr. Jan Engels  
Director  
International Plant Genetic Resources Institute (IPGRI)  
Rome  
TEL: 39-6-8951-2222  
FAX: 39-6-575-0309  
---  
Dr. Gabrielle Persley  
World Bank  
Washington, D.C.  
TEL: (202) 473-0353  
FAX: (202) 522-3246  
---  
Dr. Wolfgang Siebeck  
CGIAR Secretariat  
Washington, D.C.  
TEL: (202)473-8969  
FAX: (202)296-5421
Annex 3

CGIAR Working Document on Genetic Resources and Intellectual Property

The working document adopted by the Group follows:

This document reiterates the commitment of the Consultative Group on International Agricultural Research (CGIAR) to the conservation and use of genetic resources, and to the dissemination of its discoveries and products to the developing world in an expeditious and cost-effective manner.

Established in 1971, the CGIAR is an association of countries, international and regional organizations and private foundations dedicated to supporting international research. It currently sponsors 18 autonomous international research centers involved in research on problems related to production in agriculture, forestry and fisheries. The purpose of the CGIAR-sponsored research is to improve the quantity and quality of production in a sustainable manner. The centers have made substantial contributions toward these goals for the benefit of producers and consumers in developing countries. These contributions have resulted from the work of scientists at the centers, in close collaboration with scientists in the national research systems and in public institutions, universities and private companies throughout the world.

In this connection the value of biological resources is becoming increasingly recognized by the world community. The centers are contributing to the conservation of biological diversity through: (1) the collection, characterization, ex-situ maintenance and worldwide distribution of plant genetic resources; and (2) germplasm enhancement for subsequent breeding and adaptation to local agroecological conditions by national research systems and in public institutions, universities and private companies throughout the world.

In this connection the value of biological resources is becoming increasingly recognized by the world community. The centers are contributing to the conservation of biological diversity through: (1) the collection, characterization, ex-situ maintenance and worldwide distribution of plant genetic resources; and (2) germplasm enhancement for subsequent breeding and adaptation to local agroecological conditions by national research systems and in public institutions, universities and private companies throughout the world.

A fundamental objective of the CGIAR is to ensure access to knowledge, technology and materials in the interests of the developing countries. The CGIAR reaffirms that the genetic resources maintained in the genebanks of the centers are held in trust for the world community. Material from the genebanks at the centers will continue to be freely available, in accordance with the 1989 CGIAR Policy on Plant Genetic Resources.

Modern biotechnology is becoming an important tool for the work of the centers and their collaborators. Advances in its use offer the potential for the centers and their collaborators to increase productivity in agriculture, forestry and fisheries in developing countries. In a changing research environment, the centers need to collaborate with a wide range of agencies in both the public and private sectors which increasingly protect their inventions through holding intellectual property.

Centers do not seek intellectual property protection unless it is absolutely necessary to ensure access by developing countries to new technologies and products. The centers will not seek intellectual property protection for income-generating purposes and will not view potential returns from intellectual property protection as a source of operating funds. Should exceptional cases arise where a center might receive a financial return, an appropriate means will be used to ensure that such funds are used for the conservation of genetic resources and related research.

On a case-by-case basis, the centers carefully consider the advantages and disadvantages, and the costs and benefits before deeming it necessary to seek and maintain any form of intellectual property protection on their inventions. A center's decision reflects its own priorities and concerns as well as those of its collaborators and the nations with which it works. Such decisions are motivated by the need to: (1) establish collaborative research with advanced laboratories; (2) ensure product development and distribution; or (3) forestall preemptive protection by others of CGIAR-generated technology.

Any intellectual property rights acquired by a center are exercised without compromising in any manner whatsoever the fundamental position of the CGIAR regarding the free access by developing countries to knowledge, technology, materials and plant genetic resources.
Recognizing that policies related to plant genetic resources, intellectual property rights and biosafety are of considerable and increasing international interest and concern, the Directors General of the International Agricultural Research Centers (IARCs) associated with the CGIAR System propose that the Centers would operate on the following broad principles:

- That the plant genetic resources maintained in the genebanks of the IARCs are held in trust for the world community;

- That the IARCs adhere to the principle of unrestricted accessibility to the plant genetic resources they hold in trust;

- That the IARCs recognize both Plant Breeders' Rights and the concept of Farmers’ Rights, in accordance with the agreed interpretation of the International Undertaking on Plant Genetic Resources;

- That the IARCs consider that naturally occurring genes are common property. Therefore the IARCs will not seek patent protection of such genes;

- That the IARCs, in respect of novel biotechnological techniques, processes and other inventions developed by them, will consider seeking intellectual property protection, only in those exceptional cases where necessary to ensure access to these technologies by developing country partners;

- That the IARCs do not see the protection of intellectual property as a mechanism for securing financial return for their research efforts. If an IARC seeks intellectual property protection on an invention, any financial returns stemming from commercialization by others, will be used to further the conservation and use of genetic resources in developing countries;

- That the IARCs will continue to follow host country guidelines concerning biosafety where they exist. Where this is not the case internationally recognized guidelines will be followed;

- That the IARCs will ensure that their policies are consistent with the articles of the Convention on Biological Diversity adopted by the UN Conference on the Environment and Development (UNCED) in Brazil in June 1992.

* As amended at the Center Directors Meeting held in Nairobi, June 1992.
TO: RF Rice Biotechnology Grantees.
FROM: Gary Toenniessen

The rice biotechnology network has made substantial progress due to the intelligence and hard work of scientists involved, and their willingness to collaborate. Rice biotechnology is now sufficiently developed to allow the production of potentially useful products. A policy statement follows which we hope clarifies what the Foundation expects of grantees with regard to collaboration and the sharing of materials. Our consideration of requests for financial support will increasingly be based on the degree to which grantees contribute to this chain of collaborations as well as the scientific quality of their research.

POLICY STATEMENT ON RESEARCH COLLABORATION AND PROPRIETARY RIGHTS.

The goal of the Rockefeller Foundation's International Program on Rice Biotechnology is to apply advanced biological technologies to rice production in developing countries for the benefit of low-income rice producers and consumers.

The research supported is expected to contribute, through a series of cooperative projects and transfers of technology, to the production of improved seed and other materials used by farmers.

A primary criterion for evaluation of rice biotechnology grantees will be the contributions they make to this chain of research collaborations stretching from the basic to the applied.

Mechanisms are in place, coordinated by the International Rice Research Institute (IRRI) and the Centro Internacional de Agricultura Tropical (CIAT), which facilitate the free exchange and distribution of rice breeding lines. Improved varieties ultimately reach the developing-world farmer either through public sector distribution or through commercial varieties distributed in the developing world. In general, the developing-world farmer should have access to varieties at the lowest possible price and should pay no royalties, or at most nominal royalties. If there is exclusivity at this level, it should be only to facilitate effective distribution.

It is expected that Rockefeller Foundation rice biotechnology grantees will share materials and technology resulting from Foundation-supported research with cooperating researchers at zero royalty for use in developing countries. Grantees should not enter into agreements that conflict with this obligation. If such agreements are already in place, the Foundation should be so informed. This policy covers intermediate steps such as research results, transformation procedures and rights under material transfer agreements as well as final products and rights under patents or other forms of intellectual property.

At the same time, it is recognized that grantees may wish to pursue intellectual property rights on their discoveries and their improved materials in order to obtain economic return in developed countries for the support of further research and to maintain a strong bargaining position in the event of any intellectual property disputes. For purposes of this policy, "developing nations" include all the nations of Central and South America including Mexico, all the nations of Asia except Japan and the Soviet Union, all the nations of Africa, and the nations of Oceania except Australia and New Zealand. All other nations are considered "developed".

Collaboration and the free exchange of research materials are hallmarks of the rice biotechnology network and contribute much to its success. In many cases materials are shared and technologies transferred prior to publication. It is expected that Foundation grantees will publish their research results and following publication legitimate requests for materials from others in the network should be honored. All government regulations and restrictions concerning the exchange and handling of biological materials should be observed and appropriate biosafety procedures should be practiced at all time. The Foundation should be informed of any exchanges involving a significant biosafety risk.

September 13, 1991.