Chapter 11

International Research Centres

The Consultative Group on International Agricultural Research and the International Treaty on Plant Genetic Resources for Food and Agriculture

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Introduction

The Consultative Group on International Agricultural Research (CGIAR) is a strategic alliance of 64 members comprising governments, international organizations and private foundations that support a common mission: to achieve sustainable food security and reduce poverty in developing countries through scientific research and research-related activities in the fields of agriculture, forestry, fisheries, policy and environment. It was set up in 1971 under the co-sponsorship of the World Bank, the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Development Programme (UNDP) to mobilize science to benefit the poor.

The CGIAR supports 15 international agricultural centres (CG Centres), whose tasks are, inter alia, to conserve genetic resources for food and agriculture, to develop improved varieties and to promote the sustainable utilization of those genetic resources. The CG Centres maintain collections of plant genetic resources for food and agriculture (PGRFA) numbering over 650,000 accessions, whose importance for food and agriculture has been recognized in the International Treaty on Plant Genetic Resources for Food and Agriculture (the Treaty). A major interest of the CG Centres has been to ensure that PGRFA can continue to be available for research, breeding and training for food and agriculture for the
benefit of developing countries, within a stable international system that allows for
the equitable sharing of benefits arising from the use of those resources.

This chapter examines the history of the involvement of the CG Centres in
the conservation and sustainable utilization of PGRFA, and the role played in the
negotiating of the Treaty (see Annex 1 of this volume for the list of all Commission
and Treaty negotiating meetings).

The nature of the CGIAR and its centres

The first international agricultural research centres\(^2\) were established in response
to concerns that food resources in developing countries would be insufficient to
meet the needs of their growing populations and the need to seek improved varie-
ties to increase food production. A number of new centres were set up within the
CG system during the 1970s and 1980s,\(^3\) and yet other existing centres brought
within the CGIAR during the 1990s,\(^4\) thus bringing the centres to its present total
of 15 (see Table 11.1 below). The need for a more focused system-wide approach
within the CG system has been the driving force for reforms over the last few
years. The first such reform was the establishment of the Alliance of CG Centres
in 2004 as a means of providing a collective unified voice for the centres on matters
requiring a common position. Under the Alliance procedures, decisions could be
taken by majority vote that would bind all centres. More far reaching reforms
have recently been instituted, involving the establishment of a Consortium of CG
Centres, with its own legal personality, together with a Fund Council, which, it is
hoped, will provide more direction and funding stability for the CG system.\(^5\)

The work of the initial centres, and, in particular, that of plant breeders like
Norman Borlaug of CIMMYT, bore spectacular results, heralding the birth of the
so-called ‘Green Revolution’. At the same time, the introduction of new improved
varieties tended to supplant existing local varieties and threatened the very biodi-
versity on which the original green revolution, and future crop improvements,
depended. The CG system responded to this new threat by increasing its efforts to
collect and conserve endangered PGRFA.

In 1974, the CGIAR set up the International Board on Plant Genetic
Resources (IBPGR) hosted by FAO with the task of coordinating an international
plant genetic resources programme, and organizing collecting missions as well
as building and expanding gene banks at the national, regional and international
level. Over the period 1974–1980, IBPGR collected and conserved over 65,000
accessions from over 70 countries. The material collected through these missions,
which were for the most part carried out jointly with institutions in the countries
concerned, were deposited for conservation in some 52 gene banks. These gene
banks included both national or parastatal institutions such as EMBRAPA in
Brazil, the Kenyan Agricultural Research Institute (KARI), CGN in The Nether-
lands, VIR in Russia, and the Rural Development Administration of Korea, as well
as international institutions such as the CG Centres, AVRDC and CATIE. In total
8 CG Centres\(^6\) formed part of the nascent network.
### Table 11.1 The 15 Centres ** of the Consultative Group on International Agricultural Research

<table>
<thead>
<tr>
<th>Abbreviation and name of CGIAR Centres</th>
<th>Former name</th>
<th>Dates of founding</th>
<th>Location of headquarters</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfricaRice – Africa Rice Centre*</td>
<td>WARD – West Africa Rice Development Association</td>
<td>1971</td>
<td>Cotonou, Benin</td>
</tr>
<tr>
<td>Bioversity International*</td>
<td>IBPGR – International Board for Plant Genetic Resources; then IPGRI – International Plant Genetic Resources Institute merged with INIBAP</td>
<td>1974</td>
<td>Rome, Italy</td>
</tr>
<tr>
<td>CIAT – International Centre for Tropical Agriculture*</td>
<td></td>
<td>1969</td>
<td>Cali, Colombia</td>
</tr>
<tr>
<td>CIFOR – Centre for International Forestry Research*</td>
<td></td>
<td>1993</td>
<td>Bogor, Indonesia</td>
</tr>
<tr>
<td>CIMMYT – International Maize and Wheat Improvement Centre*</td>
<td></td>
<td>1963</td>
<td>Mexico City, Mexico</td>
</tr>
<tr>
<td>CIP – International Potato Centre*</td>
<td></td>
<td>1971</td>
<td>Lima, Peru</td>
</tr>
<tr>
<td>ICARDA – International Centre for Agricultural Research in the Dry Areas*</td>
<td></td>
<td>1975</td>
<td>Aleppo, Syrian Arab Republic</td>
</tr>
<tr>
<td>ICRISAT – International Crops Research Institute for the Semi-Arid Tropics*</td>
<td></td>
<td>1972</td>
<td>Patancheru, Andhra Pradesh, India</td>
</tr>
<tr>
<td>IFPRI – International USA Food Policy Research Institute</td>
<td></td>
<td>1979</td>
<td>Washington DC, USA</td>
</tr>
<tr>
<td>IITA – International Institute of Tropical Agriculture*</td>
<td></td>
<td>1967</td>
<td>Ibadan, Nigeria</td>
</tr>
<tr>
<td>ILRI – International Livestock Research Institute*</td>
<td>Previously existing as two institutions: ILCA – International Livestock Centre for Africa; and ILRAD – International Laboratory for Research on Animal Diseases</td>
<td>1973</td>
<td>Nairobi, Kenya</td>
</tr>
<tr>
<td>IRRI – International Rice Research Institute</td>
<td></td>
<td>1960</td>
<td>Los Baños, Philippines</td>
</tr>
<tr>
<td>WorldFish Centre</td>
<td>ICLARM – International Centre for Living Aquatic Resources Management</td>
<td>1991</td>
<td>1977</td>
</tr>
</tbody>
</table>

* Article 15 of the International Treaty on Plant Genetic Resources for Food and Agriculture states that contracting parties to the Treaty call upon the International Agricultural Research Centres (IARCs) to conclude agreements with the Governing Body of the Treaty with regard to ex situ collections. The centres with an asterisk close to the name signed agreements with FAO on 16 October 2006 for the inclusion of their ex situ collections within the purview of the Treaty and to make PGRFA listed in Annex I available in accordance with the provisions set out in Part IV of the Treaty. Since 2007, those centres also distribute PGRFA other than those listed in Annex I of the Treaty and collected before its entry into force with the standard material transfer agreement (SMTA) and an interpretative footnote was endorsed by the Governing Body for the use of a unique SMTA.

** There were 16 centres until 2004. ISNAR – the International Service for National Agricultural Research – based in The Hague, The Netherlands was founded in 1980 and ceased to exist in 2004. Some competencies were transferred to the Knowledge, Capacity, and Innovation Division of IFPRI.
During the period 1980–2004, the number of new accessions into the CG Centres as a whole has ranged from a high of almost 35,000 per year in 1984 to a low of 5000 in 2004 (Halewood and Sood, 2006). Today, the CG gene banks contain a total of over 650,000 accessions. While this represents only about 12 per cent of the total accessions held in ex situ collections worldwide, the CG collections are particularly valuable in light of the high proportion of landraces and wild relatives. They are also well maintained and documented (Moore and Tymowski, 2005). Improvements in the conservation and maintenance of the CG collections have recently been introduced through the Global Public Goods Project financed by the World Bank. And the financial security of the collections is being secured through a series of long-term funding arrangements with the Global Crop Diversity Trust (GCDT), a new endowment fund set up to ensure the long-term conservation and availability of plant genetic resources for food and agriculture.

The CG system firmly believes that the true value of plant genetic resources lies in their use. In so far as possible, both unimproved and improved PGRFA are treated as international public goods, and distributed as freely and widely as possible to breeders and farmers throughout the world. Since 1 January 2007, the CG Centres have been distributing PGRFA of crops listed in Annex I to the Treaty under the SMTA adopted by the Governing Body at its First Session in June 2006. At its second session in November 2007, the Governing Body also authorized the Centres to distribute PGRFA of non-Annex I crops collected before the entry into force of the Treaty under the same SMTA. The early experience with use of the SMTA indicated that most of the material distributed consists of improved materials.

In describing the role of the CG system in general and the CG Centres in particular in the negotiation of the Treaty, it is important first to understand their legal status.

The original CGIAR system was made up of the Consultative Group itself (the CGIAR), an independent Science Council and 15 International Agricultural Research Centres. Neither the CGIAR system nor the CGIAR itself had any independent legal personality of their own, either under international law or indeed under any system of national law. The International Agricultural Research Centres (IARCs) on the other hand each have their own independent legal personality. Initially there were doubts as to whether some of the CG Centres as originally established had legal personality under international law as opposed to national law. Most if not all of these doubts have been resolved through agreements concluded in the last 15 years explicitly recognizing the international legal personality of the centres concerned. Today, the international legal personality of the CG Centres holding ex situ collections of PGRFA has been recognized and forms the basis of the agreements signed by the Centres with the Governing Body of the Treaty, as mandated in Article 15 of the Treaty.
The International Undertaking and the Convention on Biological Diversity (CBD)

As noted above, the CGIAR and the individual CG Centres have always been committed to ensuring the maximum availability of PGRFA, including both unimproved and improved materials, as a means of promoting agricultural research and breeding for the benefit of farmers in developing countries and elsewhere. Due to the special nature of PGRFA, and the spread of PGRFA across country and continental borders over the centuries, all countries and regions are now highly dependent on PGRFA from other countries and regions to sustain and develop their agriculture and food security (Moore and Tymowski, 2005).

This interdependence was recognized in the International Undertaking on Plant Genetic Resources (IU) adopted by the FAO Conference in 1983, which was based on the ‘universally accepted principle that plant genetic resources are a heritage of mankind and consequently should be made available without restriction’. Its stated objective was to ‘ensure that plant genetic resources of economic and/or social interest, particularly for agriculture, will be explored, preserved, evaluated and made available for plant breeding and scientific purposes’.

The IU also called for the development of international arrangements then being initiated by FAO and the International Board for Plant Genetic Resources, the predecessor of IPGRI, now Bioversity International, to develop a global system for plant genetic resources, including ‘an international network of base collections in gene banks, under the auspices or jurisdiction of FAO, that have assumed the responsibility to hold, for the benefit of the international community and on the principles of unrestricted exchange, base or active collections of the plant genetic resources of particular plant species’.

A series of discussions were held in the FAO Commission on Plant Genetic Resources during the latter part of the 1980s on the legal arrangements that would be appropriate to establish the international network, which as noted above, covered both national and international institutions. In the end, the Commission decided to go ahead only with the establishment of agreements (the so-called In Trust agreements of 1994) with the CG Centres and gene banks holding the Coconut Genetic Resources Network (COGENT) collections. However, a number of the institutions in the original network as promoted by the IBPGR in addition to the CG Centres are being considered for financial assistance by the GCDT as part of an efficient and sustainable global system of ex situ collections.

In the international climate generated by the IU, it is not surprising that the highest rates of germplasm acquisition and distribution by the Centres as a whole were achieved in the years 1983–1985.

During the subsequent years, the concept of free availability of PGRFA started to be eroded. From the side of the plant breeding industry came the push to recognize the rights of formal breeders and researchers over the products of their breeding and research (see Chapter 12). From the side of developing countries providers of PGRFA came a countervailing movement for the recognition of the sovereign rights of countries over their natural resources, including PGRFA. The
result was the adoption of a series of Agreed Interpretations of the IU recognizing on the one hand that plant breeders’ rights, as provided for under the UPOV Convention, were not incompatible with the IU, as well as the rights of farmers arising out of their contribution to the conservation and development of plant genetic resources. The Agreed Interpretations, on the other hand, also recognized the sovereign rights of countries over their plant genetic resources.

The concept of sovereign rights over genetic resources and the right of national governments to determine access to those resources in accordance with their own national legislation became a cornerstone of the CBD which was opened for signature in 1992. The CBD provided for access to genetic resources to be subject to the prior informed consent of the country of origin providing the resources and to be on the basis of mutually agreed terms. While there is nothing in the CBD that requires that prior informed consent and mutually agreed terms be on a bilateral basis, this was the way in which the Convention was in practice implemented, at least until the negotiation of a set of mutually agreed terms for access to some PGRFA under the Treaty.

In this atmosphere of intense national concern over the sovereign rights of nations over their patrimony, it is hardly surprising that the rate of acquisition of new materials by the CG Centres dropped to an all time low (Halewood and Sood, 2006). New acquisitions in 1993 dropped to under 10,000, almost a quarter of the total in 1984. Although the rate rose again in 1994, this was due more to transfers between centres, or to transfers from developed country gene banks, such as the United States Department of Agriculture (USDA), rather than to new acquisitions from collecting missions in countries of origin (Halewood and Sood, 2006).

The need to find a more appropriate system of access to PGRFA, given the dependence of all countries on easy and effective access to PGRFA from other countries and regions, coupled with a lack of clarity over the legal status of the ex situ collections acquired before the entry into force of the CBD, led directly to the conclusion of the In Trust agreements between the CG Centres and FAO in 1994, and the renegotiation of the IU. Both were the subject of Resolution 3 adopted by the Diplomatic Conference that adopted the CBD in 1992. Resolution 3 called for the development of complementarity and cooperation between the CBD and the FAO Global System for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Sustainable Agriculture, and recognized the need to seek solutions to outstanding matters concerning plant genetic resources with the Global System, including, in particular, access to ex situ collections not acquired in accordance with the CBD, and the question of Farmers’ Rights.

**In Trust agreements of 1994**

A study prepared by the Legal Office of FAO in 1987 pointed out the uncertainty that surrounded the legal status of many of the existing ex situ collections forming part of the international network, including those of the CG Centres. The uncertainties related, in particular, to the legal status of the institutions holding...
those collections, ownership over the accessions in the collections, and the rights of the host governments over the collections. As noted above, these uncertainties were left outstanding by the CBD, which expressly did not cover ex situ collections of genetic resources acquired before its entry into force.

The CGIAR system responded in a number of ways to this situation. The first response was to develop the concept of the ‘in trust’ status of the ex situ collections held by the CG Centres. Collections held by the CG Centres were not the property of individual nations, nor were they the property of the CG Centres themselves, but were held by the centres ‘in trust’ for the international community. This concept was first set out in a CGIAR Policy on Plant Genetic Resources adopted in 1989.21 As can be seen, the concept drew, to a large extent, on the notions set out in the IU. The concept is still referred to in Article 15 of the Treaty.

The second response was to clarify the international legal status of the individual centres holding ex situ collections.22

The third response was to clarify once and for all the status of the collections in agreements with FAO representing the international plant genetic resources community. This was achieved through the signature on 26 October 1994 of a series of agreements23 between FAO and the 12 CG Centres then holding ex situ collections of germplasm. Under the agreements the centres formally placed their collections of designated germplasm under the auspices of FAO as part of the International Network of ex situ collections provided for under the IU. The agreements also clarified the status of the designated germplasm as being held in trust by the centres for the benefit of the international community. The centres undertook neither to claim legal ownership over the material nor to seek intellectual property rights over it or related information. They also undertook to manage the designated germplasm in accordance with internationally accepted standards and to make samples of it available to users for the purpose of scientific research, plant breeding and genetic resources conservation without restriction. The centres were to ensure that where material is transferred to the recipient and subsequent recipients, these recipients are also bound by the same conditions. Perhaps most significantly, the centres recognized the intergovernmental authority of FAO and its Commission on Plant Genetic Resources in setting policies for the International Network, and to give full consideration to any policy changes proposed by the Commission. The In Trust agreements were to remain in force for four years and be subject to automatic renewal for further periods of four years unless terminated by either party.

The In Trust agreements had a double significance for the centres. In the first place they clarified the status of the collections held by the centres. Second, by recognizing the intergovernmental policy authority of FAO and its Commission, they brought the centres on board in the process of renegotiation of the IU. This latter aspect was as important to the centres in safeguarding the future of the collections, as it was to the renegotiations in ensuring that these important collections would be brought within the purview of the new international instrument being negotiated.
The CGIAR and the Negotiation of the Treaty

The CG system was represented at all stages of the negotiations on the Treaty, including in the sessions of the contact group which spearheaded the final negotiations. It was perhaps this continuous presence, coupled with the steady stream of timely, relevant and reliable technical inputs and the political neutrality of the CG system that contributed most to its influence on those negotiations. The role of the CG system, represented primarily by IPGRI, which had the mandate to represent the CG system as an observer in the negotiations, was necessarily limited, given the intergovernmental nature of the negotiations. Nevertheless, it did play a significant part in promoting the concept of a multilateral system (MLS) for PGRFA, and in providing the necessary scientific and technical information that allowed for its acceptance (see Annex 3 of this book for details on the main provisions of the Treaty). It was particularly effective in providing technical information on the current state of gene flows and the interdependence of all countries, including, in particular, developing countries, on access to plant genetic resources for their own agricultural development. In an atmosphere of technical uncertainty that characterized the early stages of the negotiations, this provision of impartial and reliable scientific information was particularly helpful in bringing about a consensus.

The role played by the CG system in the negotiation of the Treaty has been examined at some length in an article published in 2003 (Sauvé and Watts, 2003). In the article, the authors found that the CG system ‘exerted influence on the issue of the multilateral system of access and benefit … [and] the level of influence it exerted on this specific can be deemed important, but not critical’. It also exerted critical influence to ensure that access for conservation as well as utilization was included in the scope of the MLS. IPGRI (and the CG system) also had an influence on the scope of the MLS, canvassing successfully for the expansion of the MLS to cover most of the CG mandate crops, although they were unsuccessful in achieving complete coverage of those crops in Annex I to the Treaty. They also argued successfully for the coverage of in trust collections held by the CG Centres in a specific article (Article 15) of the Treaty, and for the legal mechanism finally adopted by the Treaty of bringing those collections within the purview of the ‘Treaty by means of separate agreements between the centres and the Governing Body of the Treaty, in recognition of the international legal personality of the individual centres. Most important, however, was the general role of IPGRI and the other CG Centres ‘as a leading source of scientific and technical information to delegates, through studies, seminars, formal interventions during the negotiations and personal contacts’. The study had revealed that IPGRI was seen as ‘a consistent and reliable presence throughout the negotiations’, [had] ‘consistently promoted the concept of the Multilateral System’, and ‘had improved the general understanding of the issues being dealt with in the negotiations and that it shed light on the nature of the interlinkages between issues, especially between the issues of access and benefit-sharing’.
The ex situ collections and the Treaty

The Treaty contains one article dedicated to ex situ collections held by the CG Centres and other relevant international institutions.\textsuperscript{25} In Article 15, the contracting parties recognized the importance of the collections held in trust by the CG Centres and called on the centres to sign agreements with the Governing Body placing those collections within the purview of the Treaty. As noted above, this approach was necessitated by the fact that the centres, for the most part, possess their own independent international legal personality but are not States and thus can neither be bound by the Treaty itself nor become parties to the Treaty in their own right.

Article 15 sets out the main terms and conditions that are to be contained in such agreements. Annex I PGRFA held by the centres are to be made available in accordance with the same conditions as applicable to collections held by contracting parties – that is, they are to be made available under the SMTA.

The conditions under which non-Annex I material is to be made available depend on the date when it was collected.

Material collected before the entry into force of the Treaty were to be made available in accordance with the MTA then being used by the centres under the In Trust agreements of 1994. This MTA was to be amended by the Governing Body no later than its second session to bring it into line with the relevant provisions of the Treaty, including, in particular, the provisions relating to facilitated access and benefit-sharing. In fact a decision was taken at the second session of the Governing Body that the centres should use the SMTA itself for transfers of non-Annex I material as well as for Annex I material. The Governing Body agreed to the addition of an explanatory footnote to the SMTA clarifying its application to Annex I as well as non-Annex I material (ITPGRFA, 2007). The centres are to periodically inform the Governing Body about the MTAs entered into in accordance with conditions established by the Governing Body,\textsuperscript{26} are to make samples of PGRFA collected in in situ conditions available to the contracting party where they were collected without an MTA, and to take appropriate measures, in accordance with their capacity, to maintain effective compliance with the conditions of the MTA and promptly inform the Governing Body of cases of non-compliance.

Non-Annex I material collected after the entry into force of the Treaty, on the other hand, is to be made available for access on terms consistent with those mutually agreed between the centres receiving the material and the country of origin of those resources, or the country that acquired them in accordance with the CBD or other applicable law.

Under Article 15 the contracting parties agree to provide centres that have signed agreements with the Governing Body with facilitated access to Annex I PGRFA. They are also encouraged to provide centres with access on mutually agreed terms to non-Annex I material that is important to their programmes and activities.

Article 15 also includes general provisions drawn from the former in trust agreements, including: recognition of the authority of the Governing Body to
provide policy guidance relating to the collections held by them; the collections
to be administered in accordance with international accepted standards; and for
technical support and assistance with the evacuation or transfer of threatened
collections to the extent possible.

**The agreements between the CGIAR Centres and the Governing Body of the Treaty**

The agreements provided for in Article 15 of the Treaty were signed by FAO on behalf of the Governing Body and the 11 CG Centres holding ex situ collections on World Food Day (16 October) 2006. The agreements repeat almost verbatim the relevant provisions of Article 15.

At the same time, the CG Centres issued a statement regarding their interpretation of the agreements, on much the same lines as the joint statements issued at the time of the signature of the In Trust agreements with FAO in 1994. The statement clarified the centres’ common understanding of certain provisions of the agreements and indicated some actions that the centres would be taking to implement them.

On the issue of availability of the germplasm held in trust by the centres, the centres clarified their understanding that while the agreements talked only in terms of making samples of PGRFA available to contracting parties, this would not prevent the centres from also making germplasm available to non-contracting parties, using the SMTA in the case of Annex I materials and the MTA (now the SMTA with footnotes) for non-Annex I material. The centres also voiced their understanding that the agreements did not preclude them from making PGRFA also available to farmers for direct cultivation, as was the case with material made available under the earlier In Trust agreements.27

The Statement also clarified the steps that the centres would take to promote compliance by recipients with obligations under the MTA, including requesting explanations in respect of perceived violations, informing the Governing Body and taking action with national authorities for violations involving intellectual property rights.

In much the same way as the centres had done in their earlier joint statements regarding the implementation of the In Trust agreements, the centres further indicated the way in which they would be implementing the provisions of the agreements regarding the obligation to make PGRFA available. In this respect, the centres made it clear that while they would do their best to respond to all requests as quickly as possible and free of charge, sound management practices as well as practical or even biological constraints (such as seed availability or the health status of a sample) may at times limit the ability of centres to provide PGRFA, and that centres would have to use some discretion in determining the size and number of samples to be provided at any given time to a particular recipient. In some cases, such as for woody species, multiplying and supplying accessions can involve very time-consuming and expensive procedures. In such circumstances it
would be unreasonable to expect that centres could guarantee unlimited quantities or immediate availability of all germplasm. At their discretion, centres might request that users cover all or part of the costs involved in multiplication.

**The CGIAR Centres’ experience with the implementation of the Treaty**

The agreements with the Governing Body entered into force in January 2007, and the centres chose to implement them in full as from 1 January 2007. In the first 19 months of operation (1 January 2007 to 31 July 2008) the Centres distributed approximately 550,000 samples of PGRFA under the SMTA. Of these, almost three quarters were materials that the centres had been involved in improving. The overwhelming majority of the samples were sent to developing countries (74 per cent) and countries with economies in transition (6 per cent). In only three cases in the first seven months of implementation did potential recipients refuse to accept materials under the SMTA. There were no instances of refusal during the period 1 August 2007 to 1 August 2008. There were, however, a number of queries and concerns raised over the SMTA, particularly during the earlier stages of implementation, including, in particular, its length and complexity. Many of the questions raised are being responded to in a series of Frequently Asked Questions on the websites of the individual centres. Other questions of a more complex nature are being referred to an ad hoc technical advisory committee on the SMTA and the MLS set up by the Governing Body at its Third Session in 2009.

On the whole, however, the experience of the centres with the implementation of the Treaty has been positive; even more so since the decision of the Governing Body at its second session to authorize the centres to use the same SMTA for both Annex I and non-Annex I material. This simplifies considerably the task of the centres in making PGRFA available and reduces the administrative costs involved. Even more streamlined procedures for the distribution of germplasm will inevitably come about with the introduction of the computerized one-stop ordering system for the CG system.

**Conclusions**

The CGIAR system has always been committed to ensuring the conservation of PGRFA and the wide availability of both unimproved and improved materials, as a means of promoting agricultural research and breeding for the benefit of farmers in developing countries and elsewhere. It has also been concerned to ensure that a stable global system is in place that would allow the centres to continue to play their part in conserving and promoting the sustainable use of PGRFA as a means of achieving food security. It was with these interests in mind that the CGIAR system has played a significant role in the development of the Treaty, and is now working with contracting parties to ensure its full implementation.
Notes

1 ITPGRFA, Article 15.1.
2 The International Rice Research Institute (IRRI) was established in 1960, the Centro Internacional de Mejoramiento de Maíz y Trigo (CIMMYT) in 1964, the International Institute of Tropical Agriculture (IITA) in 1967 and the International Centre for Tropical Agriculture (CIAT) in 1969.
3 International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) (1972); Centro Internacional de la Papa (CIP) (1973); International Laboratory for Research on Animal Diseases (ILRAD), now incorporated with ILCA into the International Livestock Research Institute (ILRI) (1973); International Food Policy Research Institute (IFPRI) (1979); International Livestock Centre for Africa (ILCA) now incorporated with ILRAD into ILRI (1974); West Africa Rice Development Association, now called Africa Rice Center (WARDA) (1975); International Center for Agricultural Research in the Dry Areas (ICARDA) (1975); International Service for National Agricultural Research (ISNAR) (1980).
5 See www.cgiar.org/changemanagement/index.html.
6 CIAT, ILCA, ICRISAT, CIMMYT, IITA, CIP, IRRI and ICARDA.
7 See http://sgrp.cgiar.org/?q=node/583.
8 So far, long-term funding agreements have been concluded in respect of 13 collections of global significance, including collections held by seven CG Centres and two collections held by the Secretariat of the Pacific Community (SPC).
9 Out of 542,493 samples distributed during the first 19 months of operation of the SMTA, 372,170 (over 68.6 per cent) were of improved material. See ‘Experience of the Centres of the Consultative Group on International Agricultural Research (CGIAR) with the implementation of the agreements with the Governing Body, with particular reference to the Standard Material Transfer Agreement’, FAO Docs. IT/GB-2/07/Inf. 11 and IT/GB-3/09/Inf. 15, reports submitted to the Second and Third Sessions of the Governing Body of the Treaty, October/November 2007, and June 2009.
10 The CGIAR system is now in the process of reform. The new system will now consist of a CGIAR fund and a consortium of CGIAR Centres now being established as a legal entity, See www.cgiar.org.
11 The Consultative Group is composed of 47 country members and 17 international or regional organizations.
12 The Science Council, which is an independent scientific body of the CG system consisting of a Chair and six members appointed by the CGIAR on the recommendation of its Executive Council.
13 WARDA; Bioversity International (formerly IPGRI); CIAT; CIFOR; CIMMYT; CIP; ICARDA; ICRISAT; IFPRI; IITA; ILRI; IRRI; IWMI; World Agroforestry Centre; WorldFish Center.
14 The CGIAR itself is described in the Charter of the CGIAR system as an informal association of public and private sector members. The CGIAR system is described as
a loosely connected network of components.

15 See, for example, the Agreement for the Recognition of the International Legal personality of the International Potato Center (CIP) of 1999; Agreement Recognizing the International Legal Personality of the International Rice Research Institute (IRRI) of 1995; Agreement on the Establishment of the International Plant Genetic Resources Institute (IPGRI) of 1991; Agreement between the Center for International Forestry Research (CIFOR) and the Government of the Republic of Indonesia regarding the Headquarters seat of the Centre, of 1993.

16 FAO Conference Resolution 8/83.
17 International Undertaking, Article 1.
18 International Undertaking, Article 1.
19 International Undertaking, Article 7.
20 Legal Status of Base and Active Collections of Plant Genetic Resources, FAO doc. CPGR/87/5.

21 The Policy stated that ‘it is CGIAR policy that collections assembled as a result of international collaboration should not become the property of a single nation, but should be held in trust for the use of present and future generations of research workers in all countries throughout the world’.

22 See note 15 above.

23 For a copy of the agreement and the statement made by the CG Centres at the time of signature, see Booklet of CGIAR Centre Policy Instruments, Guidelines and Statements on Genetic Resources, Biotechnology and Intellectual Property Rights, at www.sgrp.cgiar.org/?q=publications.

24 IPGRI (the International Plant Genetic Resources Institute) was set up as an international organization in 1991 as a successor to the International Board on Plant Genetic Resources. Reflecting the fact that the mandate of the organization now covers all forms of biodiversity, it has been operating under the name of Bioversity International since 2006, although the legal name remains unchanged.

25 While most of the provisions of Article 15 apply directly to the collections held by the CG Centres, Article 15.5 also provides that the Governing Body will seek to establish agreements with other relevant international institutions. So far such agreements have been concluded in respect of the COGENT coconut collections, the CATIE Collection, the FAO/IAEA mutant germplasm collection, the cacao network collections held by the University of the West Indies and the ex situ collections held by the Centre for Pacific Crops and Trees of the Secretariat of the Pacific Community.

26 At its 3rd session in 2009, the Governing Body decided that reports should be submitted on a biennial basis. See Resolution 5/2009, para 15.

27 For a copy of the Statement see www.sgrp.cgiar.org/?q=publications.

References