Recent International Policy Developments for Plant Genetic Resources

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The plant genetic resources are very vital for the growth of agriculture in all countries of the world. All countries depend on genetic diversity from other countries which calls for international cooperation and open exchange of genetic resources The International Treaty on Plant Genetic Resources for Food and Agriculture is a step forward in this direction. The Treaty eases access to plant genetic resources and information and provides legal instrument for fair sharing of the benefits arising from these genetic resources The paper highlights the details of standard material transfer agreement, multi-year plan of work, extending the use and the training and technical assistance needed for effective implementation of the Treaty. The experience of CGIAR Centres in distributing and acquiring material under the standard material transfer agreement during the initial period of the new agreement has also been enumerated

Key Words: Material transfer agreement, International treaty, Convention on Biological Diversity, Multilateral system, Access and benefit sharing, Plant genetic resources

Introduction

The coming into force of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), on 29 June 2004, represented a crucial step in the fight against hunger and poverty. No country is self-sufficient in plant genetic resources; all depend on genetic diversity in crops from other countries and regions, which implies that international cooperation and open exchange of genetic resources are essential for food security. The Treaty eases access to plant genetic resources and information, and at its first meeting in June 2006, the Governing Body took another important step by implementing, for the first time, the fair sharing of benefits arising from the use of these resources through the Standard Material Transfer Agreement (SMTA) – the legal instrument that governs exchange of material and information under the Treaty. But this is just the beginning.

Standard Material Transfer Agreement

The Standard Material Transfer Agreement is a uniform contract that is simple to operate and will encourage widespread use. It will also ensure the sharing of benefits associated with the use of plant genetic resources. Its adoption was a clear signal that all parties were ready to rebuild an atmosphere of trust and collaboration that is bound to be good for the future of agriculture, especially in developing countries. The Treaty creates a multilateral system that enables access to plant genetic resources and also establishes benefit-sharing based on royalties levied on commercial products that use material obtained through the multilateral system. The SMTA sets out the terms that govern access and benefit sharing and will accompany all transfers of genetic materials. One major achievement in the adoption of the SMTA concerns the definition of a product: any variety that incorporates material from the multilateral system. Previous drafts had spoken of genetic thresholds and specific economically valuable traits, both difficult to assess. The simplified definition makes it easier to use the SMTA and will avoid problems of interpretation. The definition also broadens the scope of products that will trigger a payment, and because of that and its simplicity, the SMTA should encourage widespread use of the multilateral system. The royalty payment was set at 1.1% of sales. It is mandatory if the product is not available for further breeding and research. Payments are voluntary if the products are not restricted and are available for further use. The funds will be devoted to conservation efforts, mainly in developing countries.

The first meeting of the Governing Body also recognized the Global Crop Diversity Trust as an essential element of the International Treaty's funding strategy. This reaffirms the Trust's unique global mandate, and such strong endorsement from the international community will help the Trust to ensure the conservation and availability of plant genetic resources for the benefit of agriculture everywhere.

Multi-Year Plan of Work

The following year, in June 2007, the Commission on Genetic Resources for Food and Agriculture adopted a strong commitment to examine the specific needs of the

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agricultural sector with regard to access to genetic resources and the fair and equitable sharing of the benefits derived from their use. The Commission negotiated the International Treaty; with those out of the way, it had space to consider new work. After some discussion and good support from member countries, the Commission adopted a multi-year plan of work that covers all aspects of agriculture: plants, animals, forestry, fisheries, insects and microbes.

The Commission will address all genetic resources for food and agriculture, and it is absolutely appropriate that it examines all the components not in isolation but with a cross-sectoral approach. The multi-year plan of work adopts just such an approach and lays out the Commission's work for the next five sessions, ten years.

Before the International Treaty, the only international legal instrument regulating access and benefit-sharing for genetic resources was the Convention on Biological Diversity (CBD), which established a system that generally operates through bilateral agreements. Many commentators felt that this model was not appropriate for agriculture, which may have suffered as a result. The Treaty's multilateral system of access and benefit sharing, by recreating an innovative form of commons, establishes an alternative system for certain important plant genetic resources for food and agriculture.

The Commission's multi-year plan of work offers a chance to examine still other mechanisms for access and benefit sharing that may go beyond both the CBD and the International Treaty, taking into consideration the special needs of agriculture and the particularities of each sector's genetic resources. Furthermore, a deeper examination of access and benefit sharing systems on a cross-sectoral basis for food and agriculture could be good news for the use of biodiversity to improve agricultural resilience and productivity. The Commission's decision may represent the moment when the pendulum began to swing back in favour of agricultural research and how it can help poor people .

Extending the Use of the SMTA

Following the Commission's decision to consider all aspects of agriculture, the Governing Body of the Treaty, at its second meeting in November 2007, took several more decisions that will help the world community to fight poverty and hunger. One of the most important decisions was to extend the range of crops that the Consultative Group on International Agricultural Research (CGIAR) centres will distribute under the Standard Material Transfer Agreement. The SMTA, which CGIAR centres have been using since 1 January 2007, now covers plant genetic resources for food and agriculture that are not on Annex 1 of the Treaty, but that are nevertheless important to countless small farmers in the developing world and that are conserved in the CGIAR collections. It thus effectively brings those species within the scope of the multilateral system of the International Treaty.

The CGIAR collections are among the largest in the world, containing more than 650,000 samples of crops vital for food security, including species of globally important staples such as wheat, rice and maize. The collections are home to crop wild relatives and traditional varieties, valuable resources for helping farmers and breeders develop new varieties that are able to withstand the effects of climate change.

Extending the scope of the SMTA is a major step that bodes well for the future of the Treaty and the multilateral system, because distributing crop diversity under the SMTA ensures that material and information remain freely available and subject to the benefit sharing provisions of the Treaty.

Delegates took the decision following a report prepared by the CGIAR System-wide Genetic Resources Programme (SGRP) that described the CGIAR centres' experiences in distributing material under the SMTA. The centres distributed 97, 669 samples of crops to farmers and breeders around the world within the first seven months of using the agreement (Table 1). In the same period, they received 3,988 samples of new genetic material from collections around the world to safeguard in-trust for the global community.

A look at figures from 2004, the most recent year for which data are available, underlines the significance of the report. In the whole of 2004, the CGIAR centres sent out 90,504 samples and received 5033 new accessions. The figures for the first seven months of 2007 thus represent a clear increase for distributions. The report further showed that the CGIAR centres were distributing a high proportion of improved lines that breeders are releasing for further work and assessment by others, which is vitally important for the further development of crop varieties. Using the SMTA to do this ties the material and any products derived from it to the access and benefit sharing system of the Treaty and means that these lines will always be available for others to make use of.

Table 1. Experience of the CGIAR Centres in distributing and acquiring material under the SMTA during the first seven months of the new agreement

Centre	Acquisitions	Transfers normal PGRFA	Transfers PGRFA under development	Total transfers
Bioversity	36	85		85
CIAT	0			747
CIMMYT	1,890[1]	5,585	20,957	26,542
CIP	23[2]	1,324	63	1,387
ICARDA	0	6,554	[3]	6,554
ICRAF	No Annex 1 material			
ICRISAT	0	1,178	15,662	16,840
IITA	0			5,423
ILRI	0			406
IRRI	2,039	23,484	12,166	35,650
WARDA	0			4,035
TOTAL	3, 988	38,210	48,848	97,669

1 Samples developed by CIMMYT's breeding programmes and acquired by the genebank
2 SMTA not yet signed
3 14,442 samples were transferred using the old Material Transfer Agreement, since the material was not designated material in the in-trust collection. ICARDA will now be using the SMTA for transfers of improved material.

Following the report, delegates to the Governing Body approved the centres' proposal to use the SMTA for distributing material that falls outside the crops listed in Annex 1 of the International Treaty. In practice, footnotes will be included in the SMTA for those provisions that refer to Annex 1 materials or the Multilateral System, indicating that these should not be interpreted as precluding the use of the SMTA for transfers of non-Annex 1 materials. The issue will be reviewed by the Governing Body at its next session and Bioversity is leading an effort to develop guidelines that will help the centres implement this decision.

Training and Technical Assistance Needed

Although the centres' experiences with distributing material under the SMTA were mostly positive, the report also identified areas where the operation of the system could be eased. One of the most important areas was the need to train potential users about the Treaty. One centre commented in compiling its data for the report that there was an almost universal lack of awareness and understanding, with frequent requests for specific information or for training courses. In this regard, the Governing Body welcomed news of a Joint Programme being set up by Bioversity International and the Food and Agriculture Organization of the United Nations (FAO) to provide technical assistance to developing countries to help them implement the Treaty and its Multilateral System.

The session also approved requests from the International Cocoa Genebank of Trinidad and Tobago and the Secretariat of the Pacific Community to enter into agreements with the Governing Body, placing their collections within the purview of the Treaty.

Conclusion

Overall, the meeting held in November 2007 was a great success, and the prospects for ease of access to plant genetic resources and information, and for the equitable sharing of benefits derived from their use, look good. The number of countries that have ratified the Treaty has increased from 104 to 116 in just over a year. Positive messages were also heard from the United States (US) regarding the process of their ratification. The US has not signed the Convention on Biological Diversity; if it were to ratify the Treaty this would send a strong signal to other countries that have not yet ratified. The centres of the CGIAR have embraced the Treaty and are putting it to work. Perhaps the one negative note to be sounded in all this is that as of the second meeting of the Governing Body, no country had reported substantive progress in implementing the Treaty's provisions. Thus, while one can be optimistic, one also needs to exercise a certain caution. The need for the principles and practices enshrined within the International Treaty go well beyond the activities of the CGIAR centres and must include the global community as a whole. With more awareness, more training, and especially more political will among the many countries that have ratified it, the Treaty will really come into its own as an international instrument to improve agriculture for those who need it most.