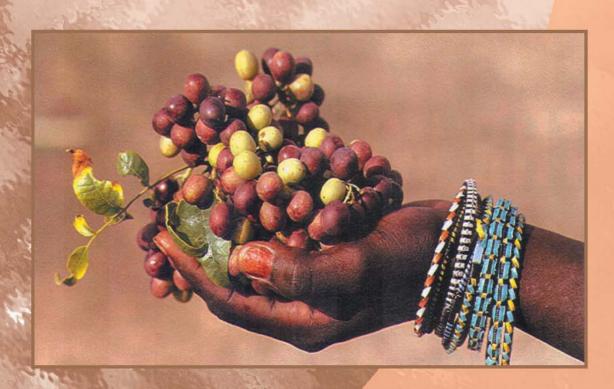


PROMOTING FOOD SECURITY AND SUSTAINABLE AGRICULTURE
THROUGH FACILITATED ACCESS TO PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

Understanding the Multilateral System of Access and Benefit Sharing



Ronald Naluwairo Edgar Tabaro

ACODE Policy Research Series, No. 18, 2006

Source of the cover photo:	
The cover photo was taken from A Guide to World Resource Poor- Managing Ecosystems to Fight Poverty, World Resource DC.	

PROMOTING FOOD SECURITY AND SUSTAINABLE AGRICULTURE THROUGH FACILITATED ACCESS TO PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Understanding the Multilateral System of Access and Benefit Sharing

Ronald Naluwairo Edgar Tabaro

ACODE Policy Research Series No. 18, 2006

TABLE OF CONTENTS

AC	KNOWLEDGEMENTS	II
LIS	ST OF ACRONYMS	Ш
1.	INTRODUCTION	1
2.	BACKGROUND	2
3.	HISTORY AND DEVELOPMENT OF THE TREATY	3
4.	SYNOPSIS OF THE TREATY	8
5.	THE MULTILATERAL SYSTEM OF ACCESS AND BENEFIT SHARING	11
7.	THE STANDARD MATERIAL TRANSFER AGREEMENT. 6.1. Parties to the SMTA. 6.2. Rights and Obligations of the Provider. 6.3. Rights and Obligation of the Recipient. 6.4. Dispute Settlement Mechanism. CONCLUSION.	16 17 18 19 20 21
8.	SELECT BIBLIOGRAPHY	22
	PUBLICATION IN THIS SERIES	24
	xes x 1: Importance of Plant Genetic Resources for Food and Agriculture	
Bo:	to Food Security and Sustainable Agriculture	8 11 13

ACKNOWLEDGEMENTS

Despite many international, regional and national efforts aimed at promoting sustainable agriculture and ensuring food security, food insecurity still remains a major global challenge. In a renewed international effort to address this problem, the international community negotiated and adopted the International Treaty on Plant Genetic Resources for Food and Agriculture as the key international framework for achieving food security and sustainable agriculture.

The treaty establishes a multilateral system of facilitated access to key plant genetic resources that are vital for human food and nutrition, and sustainable agriculture. If properly implemented and utilized, the system offers very good prospects for dealing with the challenges of food insecurity and unsustainable agriculture among others.

This paper has been prepared to promote the understanding and value of the multilateral system of facilitated access to plant genetic resources for food and agriculture especially in addressing the problems of food insecurity and unsustainable agriculture.

The authors are indebted to the Humanist Institute for Development Cooperation (HIVOs) for availing the funds that made the production and publication of this paper possible.

LIST OF ACRONYMS

ACODE Advocates Coalition for Development and Environment

ASARECA Association for Strengthening of Agriculture Research in Eastern

and Central Africa

CBD Convention on Biological Diversity

CGIAR Consultative Group on International Agriculture Research

CGRFA Commission on Genetic Resources for Food and Agriculture

EAPGREN Eastern Africa Plant Genetic Resources Network

FAO Food and Agriculture Organisation

HIVOs Humanist Institute for Development Cooperation

IARCs International Agriculture Research Centres

ICCPR International Covenant on Civil and Political Rights

ICESCR International Covenant on Economic, Social and Cultural

Rights

IFPRI International Food Policy Research Institute

IPGRI International Plant Genetic Resources Institute

MTA Material Transfer Agreement

PIC Prior Informed Consent

SMTA Standard Material Transfer Agreement

TPB Third Party Beneficiary

UDHR Universal Declaration on Human Rights

UNCED United Nations Conference on Environment & Development

UNEP United Nations Environment Programme

UNCTAD United Nations Conference on Trade and Environment

UPOV International Union for the Protection of New Varieties of

Plants

WIPO World Intellectual Property Organisation

1. INTRODUCTION

The International Treaty on Plant Genetic Resources for Food and Agriculture (herein after referred to as the Treaty) is a landmark international agreement for ensuring food security and sustainable agriculture especially in the developing countries. It establishes an elaborate system of facilitated access to a number of plant genetic resources considered key in agriculture production and meeting the nutritional and food related needs of humanity. Under the system, access is to be provided expeditiously with minimal costs, if at all, only to cover the administrative costs involved. The system also offers several monetary and non-monetary benefits that are vital for ensuring sustainable agriculture, and increased and improved food production to feed the rapidly growing world population.

Due to the opportunities that the system offers especially to developing countries in promoting food security and ensuring sustainable agriculture, it is important that the scientists, policy makers, legal practitioners and managers of plant genetic resources for food and agriculture in these countries get to appreciate and understand the operation of the system at the earliest opportunity.

This paper has been prepared to contribute to the understanding of the operation of the Multilateral System of Access and Benefit Sharing (herein after referred to as the Multilateral System) and the opportunities it offers in promoting food security and sustainable agriculture. The paper traces the history and evolution of the Treaty and provides a synopsis of its major provisions. As a major focus, the paper examines the Multilateral System and its major implementing instrument - the Standard Material Transfer Agreement (SMTA) in the context of promoting food security and sustainable agriculture. The paper concludes with some observations and recommendations vital for understanding the Multilateral System and enabling countries to take maximum benefit of the system in promoting food security and sustainable agriculture.

¹ The Treaty was adopted on November 3, 2001 by the Thirty-First Food and Agriculture Organisation (FAO) Conference in Rome, Italy. It came into force in June 2004 after ninety days from the date of deposit of the fortieth instrument of ratification in accordance with Article 28. FAO Conference is the highest decision making organ of the FAO. It constitutes of all members to the treaty establishing the Organisation.

2. BACKGROUND



One of the most pressing world development challenges apart from poverty reduction, HIV/AIDs and terrorism, is how to feed the rapidly growing population at the time when the world's biological resources are diminishing at alarming rates. According to the official United Nations estimates, the world population is expected to increase by 2.6 billion over the next 45 years, from 6.5 billion today to 9.1 billion in 2050.2 Almost all growth will take place in the less developed regions, where today's 5.3 billion population is expected to swell to 7.8 billion in 2050.3 To feed such a growing population would require an astonishing increase in food production.

Concerned with the number of people in the world (at the time) who did not have enough food to meet their basic nutritional needs, the world Heads of State and Government at the World Food Summit, agreed on a global plan of action to reduce the number of undernourished and hungry people to half by 2015.⁴ They re-affirmed the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of every one to be free from hunger.⁵

The world leaders acknowledged the major causes of food insecurity including constraints on access to food, poverty, instability of supply and demand, as

² See, UN Press Release POP/918 available on <u>www.un.org/News/Press/docs/2005/pop918.doc.htm. Accessed on October 5</u>, 2005.

³ Supra.

⁴ The World Food Summit was convened by FAO in November, 1996 in Rome, Italy to enhance and strengthen international cooperation in dealing with hunger and food insecurity in the world. At the time, the number of People who did not have enough food stood at over 800 millions. For more details, see the Rome Declaration on World Food Security.

⁵ Articles 25 of the Universal Declaration on Human Rights (UDHR), 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and 6 of the International Covenant on Civil and Political Rights (ICCPR) provide for the right to food and freedom from hunger.

well as natural and man-made disasters. In Africa, unsustainable agricultural practices and technologies also contribute to the poor state of food security in the region.

The adoption and coming into force of the Treaty, represents a major step in meeting the objectives of the World Food Summit i.e. reduction of the number of hungry people by half by 2015 and promoting sustainable agriculture. It is in the above context that the Treaty sets out elaborate mechanisms for achieving sustainable agriculture and food security. These machanisms in particular the Maltilateral System are the major focus of this paper.

3. HISTORY AND DEVELOPMENT OF THE TREATY

In order to understand the Multilateral System and its implementing instrumentthe SMTA, an examination of the history and evolution of the Treaty is paramount. This section is therefore a brief on the history and development of the Treaty.

The history and the development of the Treaty can be traced from the establishment of the FAO Global System for the Conservation and Sustainable Use of Plant Genetic Resources (herein after referred to as the System). The System was established in 1983 by member countries of FAO as an arrangement through which issues of plant genetic resources and development would be engaged and addressed on a continuous basis. It covers both the conservation (*ex situ* and *in situ*, including on-farm) and utilization of plant genetic resources for food and agriculture.

It aims at ensuring the safe conservation, and promoting the availability and sustainable use of plant genetic resources by providing a flexible framework for sharing the benefits and burdens. It consists of several elements the major ones being; the Commission on Genetic Resources for Food and Agriculture, the Treaty (formerly the International Undertaking on Plant Genetic Resources herein after to be referred to as the International Taking) and the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and

⁶ According to the World Food Summit Plan of Action, food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

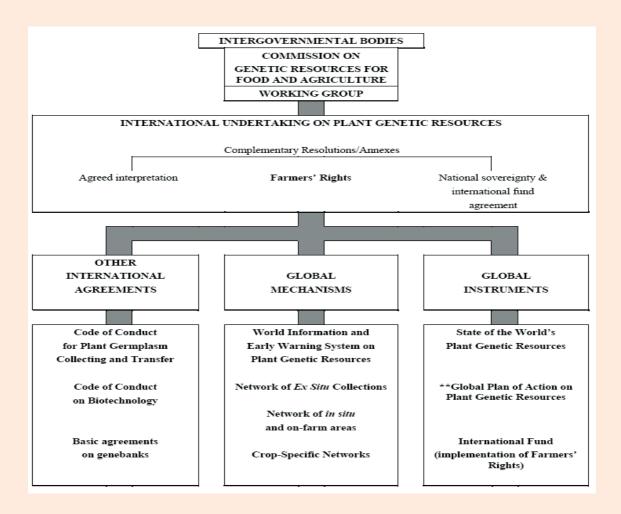
Yee, the Progressive Report on the FAO Global System for the Conservation and Utilization on Plant Genetic Resources for Food and Agriculture, UNEP/CBD/COP/3/15. Available at www.iisd.ca/biodiv/cop315ae.pdf. Accessed on November 5, 2006.

⁸ Supra.

⁹ Supra.

Agriculture. ¹⁰ The figure below shows the various components of the System and how they relate to each other.

The FAO Global System for the Conservation and Sustainable Use of Plant Genetic Resources



Source: Adopted from the FAO Progressive Report on the FAO Global System for the Conservation and Utilization on Plant Genetic Resources for Food and Agriculture to the third Conference of the Parties to the Convention on Biological Diversity, 1996.

A major component of the System was the International Undertaking which incorporated the traditional view that plant genetic resources were a common

¹⁰ See the FAO website (www.fao.org) for details.

heritage of mankind to be freely available without any restrictions.¹¹ Right from the days of exploration, explorers took discovered plant species back to their own countries as new foods and raw materials for plant breeding without any significant restrictions.¹² This spirit was reflected in the practice of the International Consultative Group on International Agricultural Research (CGIAR).¹³ Resolution 3/83 of the FAO Conference by which the International Undertaking was adopted, recognized that "plant genetic resources are a heritage of mankind to be preserved, and to be freely available for use, for the benefit of the present and future generation." The concept of common heritage of mankind applied not only to farmers' varieties and wild materials, but also plant genetic resources subject to plant breeders' rights.¹⁴

It is important to emphasize in this regard, that one of the major reasons for the International Undertaking's approach to plant genetic resources as a common heritage of mankind was to enable the free flow and exchange of such resources between and among countries, research institutions, farmers and breeders to ensure their general availability to meet the agriculture and food related needs of the globe, thus contributing to food security and sustainable agriculture.

As a result of the International Undertaking's approach, many developing countries including USA, Canada, France, United Kingdom and New Zealand expressed reservations and unwillingness to support it. Concerned with the number of countries that had expressed reservations and the poor adherence to its provisions, the FAO through its Commission on Plant Genetic Resources, recommended that the secretariat prepares a paper for consideration by the Commission at its next session, analyzing the countries' reservations to the International Undertaking and delineating possible courses of action, including suggestions for possible interpretations of the text to increase its acceptance by States.¹⁵

The Commission established two major reasons for the reservations and poor adherence to the International Undertaking. First was its approach to plant genetic resources for food and agriculture as a common heritage of mankind

Harold, J., (1985), The Legal and Political Implications of the International Undertaking on Plant Genetic Resources, Ecology L.Q 12:1053. The International Undertaking was adopted by the FAO Conference at its Twenty Second Session in Rome, 1983 as a non legally binding instrument to encourage international cooperation in the conservation and sustainable use of plant genetic resources among other things. It was this International Undertaking which was later revised, developed and adopted into the Treaty.

¹² Bragdon, S., Fowler, C., Franca, Z. and Goldberg, E., (2005), Law and Policy of Relevancy to Plant Genetic Resources, International Plant Genetic Resources Institute (IFGRI) and the International Food Policy Research Institute (IFPRI).

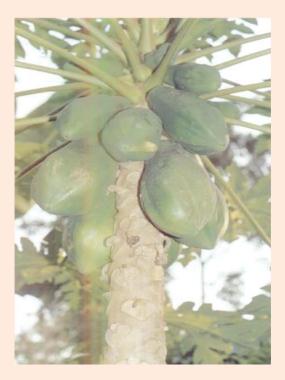
¹³ CGIAR is an association of public and private donors that supports a network of 16 International Agricultural Research Centres (IARCs) each with its own governing body.

¹⁴ See, Multilateral Trade Negotiations on Agriculture- A Resource Manual on TRIPs. Available on www.fao.org/documents. Accessed on October 15, 2006.

¹⁵ See, Anderson, R., (2005), The History of Farmers' Rights: A Guide to Central Documents and Literature, The Fridtjof Nansen Institute, Norway, 2005.

which should generally be available without restriction and the second reason concerned the need to recognize plant breeders' rights. Serious debate within FAO on privately held intellectual property rights over plant genetic resources, in particular plant breeders' rights started at this point.¹⁶

The debates were protracted and characterized by a lot of controversy, suspicion and uncompromising spirit between the developed world and the developing countries. The developing countries argued that it was inequitable, unfair and unjust to continue the historical free flow of germplasm from their countries to the developed world (which was seen as the major beneficiaries of plant breeders' rights) without first recognizing and rewarding the enormous contribution of farmers especially from the developing countries for nurturing and making available the plant genetic resources which were the foundation of plant breeding.



The developed countries on the other hand sought to justify the need for recognition of plant breeders' rights on the basis that they invest a lot of time and money in research techniques that enable them make genetic improvements. For that matter, they needed to recoup their investment and be rewarded for their effort. They also argued that the principle of common heritage contained in the International Undertaking conflicted not only with the International Union for the Protection of New Varieties of Plants that requires States to grant breeders certain exclusive rights to new plant varieties but also with their national patent laws, which grant intellectual property rights in isolated and purified genes. 18

In an effort to have a negotiated and acceptable solution, it was agreed that an interpretation to the International Undertaking be provided that would recognize

¹⁶ Supra.

¹⁷ For more details on these negotiations, see, Naluwairo, R., (2006), From Concept to Action: The Protection and Promotion of Farmers' Rights in East Africa. ACODE Policy Briefing Paper No.15, 2006.

¹⁸ The International Convention for Protection of New Varieties of Plants was adopted by several European States in Paris in December 1961 to provide protection of new varieties of plants by intellectual property rights. The Convention has so far been revised three times viz. in 1972, 1978 and 1991.

both plant breeders' rights and farmers' rights. Thus in November 1989, by Resolution 4/89, the FAO Conference at its 25th Session in Rome provided an agreed interpretation to the International Undertaking that recognized that plant breeders' rights as provided for by the International Convention for the Protection of New Varieties of Plants were not incompatible with the International Undertaking. The Resolution simultaneously recognized farmers' rights which were subsequently defined in Conference Resolution 5/89.¹⁹

Resolution 4/89 therefore constituted the first major qualification to the concept of common heritage of mankind under the International Undertaking. By recognizing plant breeders' rights and farmers' rights, it meant that from then on, the concept of common heritage of mankind was now to be subject to the recognized rights.

The other major qualification to the concept of common heritage of mankind in the International Undertaking was introduced by FAO Conference Resolution 3/91. This Resolution affirmed that the concept of heritage of mankind was subject to the sovereign rights of nations over their plant genetic resources. This concept of "State Sovereignty" over their plant genetic resources was largely pushed by the developing countries which sought to correct the asymmetry of benefits accruing to developed and developing countries by the International Undertaking's recognition of plant breeders' rights.

The move to push for recognition of the concept of State Sovereignty in the International Undertaking seems to have been influenced by the then ongoing negotiations for the Convention on Biological Diversity (CBD) where the same concept was discussed and finally incorporated in the final text.²⁰ In fact the subsequent revision of the International Undertaking and its adoption into the Treaty as a legally binding instrument for the conservation, sustainable use and equitable sharing of benefits arising from use of plant genetic resources for food and agriculture was largely influenced by the conclusion and adoption of the CBD.²¹

¹⁹ The Resolution defined farmers' rights as rights arising from the past, present and future contribution of farmers in conserving, improving, and making available plant genetic resources, particularly those in centres of origin/diversity. According to FAO Conference Resolution 3/91, these rights were largely to be implemented through an International Fund on Plant Genetic Resources. For a detailed discussion of the concept of farmers rights, see, Naluwairo, R., (2006), *supra* note 17.

The CBD was negotiated under the auspices of the United Nations Environment Programme (UNEP) as an international framework for the conservation and use of biological diversity. It was adopted in May 1992 and came into force on December 29, 1993. Its objectives are the conservation, sustainable use and equitable sharing of benefits arising from biological diversity

²¹ The major difference between the CBD and the Treaty is that the former deals with issues of biological diversity as a whole and is largely concerned with the environment whereas the latter deals with specifically issues of plant genetic resources for food and agriculture and is concerned with food security and agriculture.

While adopting the agreed text of the CBD, countries also adopted Resolution 3 of the Nairobi Final Act which recognized that access to *ex situ* collections not acquired in accordance with the CBD, and farmers' rights, were outstanding matters which the CBD had not addressed and for which solutions had to be sought within the System. The Resolution also called for ways and means to be explored to develop complementality and cooperation between the CBD and the System.

Similar recommendations were made by the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro which called for the strengthening of the System and its adjustment in line with the CBD, as well as taking further steps to realize farmers' rights.²²

Accordingly, the FAO Conference at its 27th Session in November 1993, requested the Director General of FAO to provide a forum for negotiations on revision of the International Undertaking and adapting it in harmony with the CBD as well as considering the issue of realization of farmers' rights.²³ Negotiations to the above effect commenced in November 1994 and in April 1999, the Commission on Plant Genetic Resources for Food and Agriculture at its 8th Regular Session agreed to establish a Contact Group to continue the process. It was this process that resulted into the adoption of the Treaty in November 2001.

4. SYNOPSIS OF THE TREATY

The Treaty seeks to achieve three major interrelated objectives. ²⁴ First, it seeks to ensure the conservation of plant genetic resources for food and agriculture. Secondly, it aims at promoting the sustainable use of plant genetic resources for food and agriculture and its components. Finally, it strives to ensure the fair and equitable sharing of benefits arising out of use of plant genetic resources for food and agriculture. These objectives are to be achieved "in harmony with the CBD, for <u>sustainable agriculture and food</u>

Box 1: Importance of Plant Genetic Resources for Food and Agriculture to Food Security and Sustainable Agriculture

Plant genetic resources for food and agriculture constitute the indispensable raw material and input in any agricultural system in the world. They are the foundation for agricultural/ food production and provide the building blocks for modern plant breeding of useful and new crop varieties for sustainable agriculture.

<u>security</u>. ²⁵ This therefore means that the Treaty's overall goal is the attainment of sustainable agriculture and food security. This goal is to be achieved through the conservation and sustainable use of plant genetic resources for food and agriculture, and the fair and equitable sharing of the benefits arising out of their use.

²² See, Chapter 14 of Agenda 21, Programme Area G

²³ See, FAO Conference Resolution 7/93.

²⁴ See, Article 1.

²⁵ Supra.

In line with Resolution 3 of the Nairobi Final Act, by which the CBD was adopted, which recommended that issues of access to *ex situ* collections not acquired in accordance with CBD, and farmers' rights be addressed within the System, the Treaty deals with the issue of access to the pre-CBD *ex situ* collections and farmers' rights in some detail.

It recognizes the concept of Farmers' Rights and the enormous contribution of farmers from all regions of the world, particularly those in the centres of original crop diversity in the conservation and development of plant genetic resources for food and agriculture. It enumerates some of the rights that are protectable under the concept of Farmers' Rights including: the protection of traditional knowledge relevant to plant genetic resources for food and agriculture; the right to equitable sharing of benefits arising from the utilization of plant genetic resources for food and agriculture and the right to participate in decision making processes on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture. The Treaty upholds the farmers' fundamental right to seed and provides that nothing therein would be interpreted as limiting the farmers' right to save, use, exchange and sell farmer-saved seed/propagating material. Overall, it devolves the responsibility for realization of farmers' rights to national Governments of Member States in accordance with their needs and priorities.

With regard to the issue of access to *ex situ* collections acquired before the Treaty came into force, the Treaty provides that upon IARCs signing agreements with Governing Body,³⁰ plant genetic resources for food and agriculture listed in Annex I and held by them shall be available in accordance with the Multilateral System set out in part IV.³¹ But plant genetic resources for food and agriculture other than those listed in Annex I of the Treaty, which were collected before the Treaty came into force, remain available in accordance with the provisions of the Material Transfer Agreement (MTA) in use by the IARCs subject to future agreements between the IARCs and FAO.³² Once IARCs sign the above mentioned

²⁶ Article 9.1.

²⁷ Article 9.2.

²⁸ Article 9.3.

²⁹ supra note 27.

³⁰ The Governing Body is the major decision making organ of the Treaty. It is composed of all Contracting Parties. Its major functions are to provide policy direction and guidance, and adopting plans and programmes for the effective implementation of the Treaty. All decisions of the Governing Body are taken by consensus, unless by consensus another method of arriving at a decision is reached. See, Article 19 for details.

³¹ Article 15.1 (a).

³² Article 15.1 (b). In October, 1994, 12 CGIAR Centres signed Agreements with FAO providing that the Centres will hold germplasm designated under the agreements in trust for the international community, and would not claim legal ownership over the germplasm or any intellectual property rights over it or related information. These agreements also require the Centres to make samples of designated germplasm and related information available for the purpose of scientific research, plant breeding or genetic resources conservation, without restriction. For more details regarding these agreements, see, Moore, G. and Tymowski, W., 2005), Explanatory Guide to the International Treaty on Plant Genetic Resources for Food and Agriculture, IUCN Environmental Policy and Law Paper No.57

agreements, they become entitled to facilitated access to Annex I crops in the jurisdiction of Contracting Parties.³³ The Contracting Parties in whose territory the plant genetic resources for food and agriculture were collected from *in situ* conditions have the right to be provided with samples of such material by the IARCs on demand without any MTA.³⁴ In general, the IARCs recognize the authority of the Governing Body to provide future guidance relating to *ex situ* collection held by them that are subject to the Treaty.³⁵



Other than the pre-CBD ex situ collections and farmers' rights - issues that the CBD had left outstanding, the Treaty sets out comprehensive mechanisms for the conservation of plant genetic resources for food and agriculture. It highlights the need to conduct surveys and to keep inventories of plant genetic resources for food and agriculture, promote collection of plant genetic resources and relevant-associated information in those resources that are under threat or are of potential use, promote and support farmers and local communities' efforts

in managing and conserving on-farm their plant genetic resources for food and agriculture, promote conservation of wild crop relatives and wild plants for food production, and cooperation in the development of an efficient and sustainable system of *ex-situ* conservation.³⁶

The Treaty also sets out elaborate strategies for promoting sustainable use of plant genetic resources for food and agriculture. These include: development of appropriate policy and legal measures for sustainable use of plant genetic resources for food and agriculture; strengthening of research which enhances and conserves biological diversity; promotion of plant breeding efforts which strengthen the capacity to develop varieties particularly adaptable to social, economic and ecological conditions; broadening the genetic base of crops and increase in the range of genetic diversity available to farmers; and reviewing

³³ Article 15.2.

³⁴ Article 15.1 (b) (ii).

³⁵ Article 15.1 (c).

³⁶ See, Article 5.

and adjusting, as appropriate, breeding strategies and regulations concerning variety release and seed distribution.³⁷

One of the unique features of the Treaty is the comprehensive mechanism it establishes for the fair and equitable sharing of benefits arising from conservation and sustainable use of plant genetic resources for food and agriculture. This mechanism is particularly linked to the Multilateral System and is discussed in some detail in the section that follows. Suffice it to mention that the benefits include: facilitated access to Annex I crops and forages; access to and transfer of technology; exchange of information; capacity building; and monetary benefits from commercialization of products that incorporate material obtained from the Multilateral System.³⁸

5. THE MULTILATERAL SYSTEM OF ACCESS AND BENEFIT SHARING

Box 2: A Fundamental Principle of the Multilateral System

A fundamental principle of the Multilateral System which is also recognized by the CBD is that it is based on the sovereign rights of States over their own plant genetic resources for food and agriculture. The system recognizes that the authority to determine access to those resources rests with national governments and is subject to national legislation. It is in exercise of their sovereign rights, that the Contracting Parties established the multilateral system.

Article 10 of the Treaty

One of the outstanding features of the Treaty is the Multilateral System established under part IV of the Treaty to facilitate access to plant genetic resources for food and agriculture listed in Annex I of the Treaty.³⁹ Annex I plant genetic resources were established according to the criteria of food security and interdependence.⁴⁰ They represent most of the important food crops for which countries are interdependent and no single Member State to the Treaty can boast of being self sufficient. These crops combined contribute over 80% of the world's total energy food supply.⁴¹

The Multilateral system only applies to Annex I plant genetic resources for food and agriculture under the control and management of the Contracting Parties and in the public domain.⁴² This therefore means that Annex I plant genetic resources for food and agriculture held by private individuals and entities does not fall within the system. Contracting Parties however agreed to take appropriate measures to encourage natural and legal persons within their jurisdictions who

³⁷ See, Article 6.

³⁸ See, Article 13.2.

³⁹ Article 11.1.

Supra

Moore, G., and Tymowski, W., (2005), supra note 32.

⁴² Article 11.2.

hold Annex I plant genetic resources for food and agriculture to include such resources in the Multilateral System.⁴³

Annex I Plant Genetic Resources for Food and Agriculture

FOOD CROPS	FORAGES			
Breadfruit	Lentil	Legume	Grass	Other
		Forages	Forages	Forages
Asparagus	Apple	Astragalus	Andopogon	Atriplex
Oat	Cassava	Canavalia	Agropyron	Salsola
Beet	Banana/plantain	Coronilla	Agrostis	
Brasscica complex	Rice	Hedysarum	alopercurus	
Pigeon pea	Pearl Millet	Lathyrus	Arrhenathrum	
Chickpea	Beans	Lespedeza	Dactylic	
Citrus	Peas	Ltus	Festuca	
Major aroids	Rye	Luinus	Lolium	
Carrot	Potatoe	Medicago	Phalaris	
Yam	Egg Plant	Meliotus	Phleum	
Finger millet	Sorghum	Onobrychis	Poa	
Strawberry	Triticale	Ornithopus	Tripsacum	
Sunflower	Wheat	Prosopis		
Barley	Faba /bean/vetch	Pueria		
Sweet potato	Cowpea et al.	Trifolium		
Grass pea	Maize			

The Multilateral System also includes those Annex I plant genetic resources for food and agriculture held in *ex situ* collections of the IARCs of the CGIAR.⁴⁴ These collections are held in trust for the international community. In this connection, these resources need not be under the control and management of contracting parties. *Ex situ* collections of other international organizations that sign agreements with the Governing Body are also included in the Multilateral System.⁴⁵

⁴³ Article 11.3.

⁴⁴ Article 11.5.

⁴⁵ Articles 11.5 & 15.5.

According to the Treaty, Contracting Parties are obliged to offer facilitated access to Annex I plant genetic resources to each other and the legal and natural persons under their jurisdiction. 46 This means that facilitated access will be provided to individuals, as well as institutions or organizations that have a legal personality, such as private companies and civil society organizations that are located in the territory of a Contracting Party, or organized and operating under its jurisdiction.

Box 3: Opportunities Created by the Multilateral System

- Facilitated access to plant genetic resources for research, breeding and training
- Access to and transfer of technology transfer, improved varieties and genetic materials and assistance in using different technologies
- Information exchange on genetic materials, from research and available technologies
- Capacity building including education and training, facilities and research
- Monetary benefits from commercialization of products containing material from the Multilateral System.

Although the Treaty does not in specific terms define "facilitated access", Article 12.3 (b) provides that, "such access shall be accorded expeditiously, without the need to track individual accessions and free of charge, or, when a fee is charged, it shall not exceed the minimal cost involved." This provision recognizes in general that administrative fees may be charged but that such fees should not exceed the costs involved nor constitute hidden access fees. ⁴⁷ To the extent that the Annex I crops under the Multilateral System are accessed almost free of charge by the Contracting Parties, they can be said to constitute some form of limited common property.

Facilitated access is provided solely for the purpose of utilization and conservation for research, breeding and training for food and agriculture. As Chemical, pharmaceutical and /or other non-food/feed industrial uses are expressly excluded from the system. For that matter, those seeking access for the excluded purposes need to enter into separate agreements with the Contracting

Box 4: Beneficiaries of the Multilateral System

- Contracting Parties to the Treaty
- Legal or natural persons under the jurisdiction of the Contracting Parties
- International Agriculture Research Centres
- International Organisations that sign agreements with the Governing Body

Parties. Nevertheless, in case of multiple-use crops (food and non-food), in line with the criteria for establishing the Annex I crops, their importance for food security is the determinant for their inclusion in the Multilateral System and availability for facilitated access.⁵⁰

⁴⁶ Article 12.2.

⁴⁷ Moore, G. and Tymowski, W., (2005), supra note 32.

⁴⁸ See, Article 12.3 (a).

⁴⁹ Supra.

⁵⁰ Supra.

Plant genetic resources for food and agriculture accessed under the Multilateral System and conserved are supposed to continue to be made available to the system⁵¹ and the recipients are barred from claiming intellectual property rights and other rights that limit facilitated access to the resource or their genetic parts or components, in the form received from the system. 52 It is fundamental to note in this regard, that unless subsequent improvements and modifications are made to the material, genetic parts or components thereof received from the Multilateral System, the recipient cannot claim intellectual property rights or other rights in the material so received. It would seem however that a minor improvement or modification on the material, genetic parts or components thereof will suffice to enable the recipient validly claim property rights in the resource. This has great potential to undermine and defeat the object and purpose of the Multilateral System. It is also important to note that the restriction relates only to intellectual property rights and other rights that limit facilitated access to such materials in the form they are received. Therefore to the extent that the asserted rights do not limit facilitated access to the material in the form they are received, they can validly be claimed.⁵³

In case of emergency disaster situations, the Multilateral System guarantees facilitated access to appropriate plant genetic resources for food and agriculture in the system for the purpose of contributing to the re-establishment of agricultural systems.⁵⁴ In such situations, facilitated access is accorded to both the Contracting Parties and non-Contracting Parties. The purpose of according facilitated access to non-Contracting Parties is to help restore the agricultural systems in situations of disaster. Once the restoration is achieved, they cannot therefore continue benefiting from facilitated access.

One key aspect of the Multilateral System which is also a major objective of the Treaty is the concept of equitable sharing of benefits. Article 13.2 of the Treaty provides that the benefits arising from use, including commercial, of plant genetic resources for food and agriculture under the Multilateral System shall be shared fairly and equitably through exchange of information, access



⁵¹ Article 12.3 (g).

⁵² Article 12.3 (d).

⁵³ The above provision was one of the most controversial in the negotiation process and its ambiguity is testimony to that fact. The ambiguious wording was the only compromise that the negotiators could settle for at the time.

⁵⁴ See, Article 12.6.

to and transfer of technology, capacity building, and sharing of benefits arising from commercialization.⁵⁵

In regard to exchange of information, the Treaty obliges Contracting Parties to make available information which encompass catalogues and inventories, information on technologies, results of technical, scientific and socio-economic research, including characterization, evaluation and utilization regarding Annex I crops and forages. This is information that is very useful for utilization of plant genetic resources for food and agriculture to meet a vast array of needs of different Parties including crop improvement and boosting agriculture production. The above information is to be made available to Contracting Parties subject to three major qualifications i.e. where it is confidential, it is to be provided subject to applicable national law and in accordance with national capabilities.

With respect to access to and transfer of technology, the Parties undertook to provide and/or facilitate access to technologies for the conservation, characterization, evaluation and sustainable use of plant genetic resources that are under the Multilateral System. ⁵⁶ The Parties also undertook to provide and/or facilitate access to genetic material under the Multilateral System, improved varieties and genetic material developed through the use of plant genetic resources for food and agriculture under the Multilateral System. ⁵⁷

In regard to developing countries that are Party to the Treaty, in particular least developed countries and countries with economies in transition, access to and transfer of technology including that protected by intellectual property rights is to be provided and/ or facilitated under the fair and most favorable terms, in particular the case of technologies for use in conservation as well as technologies for the benefit of farmers.⁵⁸

Capacity building as a form of benefit sharing includes establishing and /or strengthening programmes for scientific and technical education and training in the conservation and sustainable use of plant genetic resources for food and agriculture, developing and strengthening facilities for the conservation and sustainable use of plant genetic resources for food and agriculture and carrying

⁵⁵ In Article 13.1 the Contracting Parties recognize that facilitated access to plant genetic resources for food and agriculture which are included in the Multilateral System constitute in itself a major benefit of the system which should be shared fairly and equitably. Regarding access to and transfer of technology, the Treaty specifically mentions that even technologies protected by intellectual property rights will be transferred under "fair and most favorable terms", in particular in the case of technologies for use in conservation as well as technologies for the benefit of farmers in developing countries, especially in least developed countries, and countries with economies in transition. See, Article 13.2 b (iii).

⁵⁶ See Article 13. 2 b (i). According to the United Nations Conference on Trade and Development (UNCTAD), technology transfer is the transfer of systematic knowledge for the manufacture of a new product, for the application of a process or for the rendering of a service.

⁵⁷ Supra.

⁵⁸ See, Article 13.2 b (iii).

out scientific research and research capacity development in developing countries in fields where there is a need.⁵⁹

The monetary benefit sharing arrangements are triggered by commercialization of a product containing material from the Multilateral System and only when the product is not available without restriction to others for further research and breeding. ⁶⁰ In this respect, in exchange for access to plant genetic resources for food and agriculture under the Multilateral System, Parties that incorporate materials from the Multilateral System into commercial products must pass an equitable share of the benefits into a trust account. ⁶¹ These benefits are meant to flow primarily, directly and indirectly, to farmers in all countries, especially in developing countries, and countries with economies in transition, who conserve and sustainably utilize plant genetic resources or food and agriculture. ⁶²

6. THE STANDARD MATERIAL TRANSFER AGREEMENT

The SMTA is the main instrument for implementing the Treaty provisions relating to the Multilateral System. It was negotiated and adopted as a model agreement that the providers and recipients of plant genetic resources for food and agriculture under the Multilateral System would use for facilitation of access to such resources and ensuring the fair and equitable sharing of benefits that would arise from such access. In this regard, the Treaty provides "that facilitated access under the Multilateral System shall be provided pursuant to a SMTA which shall be adopted by the Governing Body."

Pursuant to this provision, a Contact Group comprising of 12 representatives per FAO region was established through which the process of developing the SMTA was to be undertaken. The Contact Group was preceded by an Expert Group which was charged with the mandate of developing the initial elements of the SMTA which the Contact Group would develop further for consideration of the Governing Body. The composition of the Expert Group was also based on regional representation of experts and advisors. There was one meeting of the Expert Group and two meetings of the Contact Group.

The negotiations leading to the SMTA were protracted and marked with a lot of controversy right from the establishment and development of the Terms of Reference (TORs) for the Expert Group and Contact Group. For instance regarding the development of TORs for the Expert Group, it was observed by commentators

⁵⁹ See, Article 13.2 (c).

⁶⁰ See, Article 13.2 d (ii).

⁶¹ Supra.

⁶² See, Article 13.3.

⁶³ See, Article 12.4.

that too much time was spent discussing such an advisory group for the interim committee, which in turn would only make recommendations to the Governing Body.⁶⁴

Others commented that the lengthy debate on minute details was politically motivated, with some countries trying to influence the substantive debate prior to the constitution of the Governing Body. The lengthy discussion on the Expert Group's composition and representation highlighted these political sensitivities. Although, the final result was viewed as a compromise package deal, some participants still expressed their surprise and dissatisfaction at the decision not to include a CBD representative, particularly from Africa despite the inclusion of representatives from CGIAR, the World Intellectual Property Organisation (WIPO), Union for the Protection of New Varieties of Plants (UPOV), and notwithstanding the specific references to the CBD in the Treaty's text and the conventions work on access. ⁶⁵ Some pessimists had indicated that the process would take another 7 (seven) or so years before getting completed. ⁶⁶

In spite of the cynicism, the process of developing the SMTA got completed in time for the First Session of the Governing Body to consider it as per the Treaty requirement.⁶⁷ Through Resolution 1/2006, the Governing Body adopted the SMTA on June 16, 2006.

6.1 Parties to the SMTA

Article 1 deals with parties to the Agreement. As a contract, the SMTA involves at least two parties i.e. the Provider and the Recipient. These could be individuals or institutions both private and public. They must be persons or institutions within the jurisdiction of the contracting Parties.

⁶⁷ Article 5 (a).

⁶⁴ Report of First Meeting of CGRFA acting as Interim Committee for the International Treaty on Plant Genetic Resources for Food and Agriculture. Available at http://www.iisd.ca/biodiv/itpgr Accessed on November 1,2006.

⁶⁶ See, Lettington, R., (2001), The International Undertaking on Plant Genetic Resources in the Context of the CBD-International Centre for Trade & Sustainable Development Year 5, No.6 at 11-13.

6.2 Rights and Obligations of the Provider

The rights and obligations of the provider are provided for under Article 5. According to this Article, the provider is obliged to permit access in an expeditious

manner, without the need to track individual accessions and free of charge, or, when a fee is charged, not to exceed the minimal cost. 68 This provision is the essence of facilitated access under the Multilateral System. It is a replica of Article 12.3 (b) of the Treaty. It is important to emphasize still that this facilitated access only applies to the legal or natural persons among the Contracting Parties.



The Provider is obliged not just to provide the genetic material, but also all available passport data and any other associated available non-proprietary descriptive information. ⁶⁹This provision is also a replica of Article 12.3 (c) of the Treaty. In line with the Treaty⁷⁰, the SMTA also requires the Provider to respect the relevant national and international laws when providing plant genetic resources subject to intellectual property rights and other property rights. ⁷¹ Since most of the plant genetic resources in the Multilateral System are those in the public domain, and therefore not subject to intellectual property rights, this provision mainly applies to materials included in the Multilateral System voluntarily by their private holders within the meaning of Article 11.3 of the Treaty. ⁷²

Access to plant genetic resources for food and agriculture under development, including material being developed by farmers can only be provided at the discretion of the developer, during the period of its development.⁷³ This therefore means that genetic materials of crops in the Multilateral System but under development are not available as of right. The farmers and breeders can refuse to allow access to such material, if they choose.

⁶⁸ Article 5 (b). Passport data is the basic data that describes and identifies the particular material.

⁶⁹ Article 12.3 (f).

⁷⁰ Article 5 (d).

⁷¹ See also, the reasoning by Moore, G. and Tymowski, W., (2005), supra note 32.

Plant genetic resources for food and agriculture under development are defined in Article 1 of the SMTA as material derived from the Material, and hence distinct from it, that is not ready for commercialization and which the developer intends to further develop or to transfer to another person or entity for further development. The period of development for the plant genetic resources under development shall be deemed to have ceased when those resources are commercialized as a product.

⁷³ Article 5 (e)

As another obligation, the SMTA requires the Provider to periodically inform the Governing Body about the MTAs entered into.⁷⁴ This Information is to be made available to the Governing Body as the Third Party Beneficiary (TPB) to the Agreement entered into between the Provider and the Recipient.

6.3 Rights and Obligations of the Recipient

Most of the rights and obligations of the Recipient like those of the Provider, derive directly from the Treaty. This is especially so because Article 12.4 of the Treaty provides for certain key provisions that had to be included in the SMTA. The Article provides that "the SMTA would contain provisions of Articles 12.3 a, d and g, as well as the benefit sharing provisions set out in Article 13.2d(ii) and other relevant provisions of the Treaty, and the provision that the recipient of plant genetic resources for food and agriculture shall require that the conditions of the MTA shall apply to the transfer of the genetic resources to another person or entity, as well as to any subsequent transfers of those plant genetic resources for food and agriculture."

In the above regard therefore, the SMTA obliges the Recipient to undertake that the material received or to be received shall be used or conserved only for the purposes of research, breeding and training for food and agriculture. The Recipient is also barred from claiming any intellectual property rights or other rights that would limit facilitated access to the material provided under the agreement, or its genetic parts or components, in the form received from the Multilateral System. She is obliged when she conserves the material supplied, to make it and the related information available to the Multilateral System. In case she transfers the material supplied under the SMTA to another person or entity (subsequent Recipient), she is to do so under the terms and conditions of the SMTA, through a new MTA; and is obliged to inform the Governing Body within the meaning of Article 5 (e) of the SMTA.

In the case that the Recipient commercializes the product that incorporates material from the Multilateral System, and where such product is not available without restriction to others, he/she is required to pay a fixed percentage of the sales of the commercialized product into a trust account.⁷⁹

⁷⁴ Article 6.1.

⁷⁵ Article 6.2.

⁷⁶ Article 6.3.

⁷⁷ Article 6.4.

⁷⁸ Article 6.7.

⁷⁹ See, Annex 2. No payment is however due on any product under this option that is available to others for further research and breeding, or when the product has been purchased or obtained from another person or entity who has already made payment on the product.

There are two possible payment schemes that recipients can choose from. The first requires the recipient to pay 1.1 percent (1.1%) of the revenues less thirty percent (30%) of the sales of the product or product that is based on material from the multilateral system. ⁸⁰ Under the second option, a company could decide to pay 0.5 percent of revenues from commercialization on all of its varieties which are covered by the Multilateral System, regardless of whether or not they are also made available to other persons or entities without restriction. ⁸¹

When a Recipient who has obtained intellectual property rights on any products developed from the material or its components, obtained from the Multilateral System assigns such intellectual property rights to a third party, s/he is required to transfer the benefit- sharing obligations of the SMTA to that party.⁸² The Recipient is also required to make available to the Multilateral System, all non-confidential information that results from research and development carried out on the material, and is encouraged to share through the Multilateral System non-monetary benefits identified in Article 13.2 of the Treaty that result from such research and development.⁸³

6.4 Dispute Settlement Mechanism

The SMTA establishes a three-step dispute settlement mechanism that starts with amicable settlement through negotiation.⁸⁴ In case of failure to resolve the dispute through negotiation, the parties may choose mediation through a neutral third party mediator agreeable to both.⁸⁵ If the dispute is not settled through the above mechanisms, then a party may submit it for arbitration under the Arbitration Rules of an international body as agreed by the parties.⁸⁶ In case of failure of agreement by the parties as to the international body to submit to the dispute, the dispute is finally settled under the rules of arbitration of the International Chamber of Commerce, by one or more arbitrators appointed in accordance with the above-mentioned rules.⁸⁷

The dispute settlement mechanism allows the provider, the recipient, or the entity designated by the Governing Body (representing the Governing Body and the Multilateral System) to initiate the dispute settlement process.⁸⁸ The entity to be designated by the Governing Body, is referred to as the "Third Party

⁸⁰ Article 6.11.

⁸¹ Article 6.10.

⁸² Article 6.9. The non-monetary benefits identified in Article 13.2 of the Treaty include exchange of information, access to and transfer of technology and capacity building.

⁸³ Article 8.4 (a).

⁸⁴ Article 8.4 (b).

⁸⁵ Article 8.4 (c).

⁸⁶ Supra.

⁸⁷ Articles 8.1 & 8.2.

⁸⁸ It is referred to as so because under usual contractual relations, contracts don't create rights or obligations for non parties. In the above case therefore, the entity to be designated by the Governing Body is a third party who ordinarily would not have any rights under the contract between the provider and the recipient.

Beneficiary" (TPB). ⁸⁹ The TPB has the right to request that the appropriate information, including samples as necessary, be made available by the provider and recipient, regarding their obligations in the context of the SMTA. ⁹⁰ The idea TPB is important for strengthening the role of the Governing Body with regard to monitoring the performance of transactions under the SMTA, especially as they relate to sharing of benefits, in particular the monetary benefits. ⁹¹

7. CONCLUSION

The Multilateral System constitutes one of the most important initiatives at the international level aimed at addressing the challenge of food insecurity and promoting sustainable agriculture. Other than providing for facilitated access to important food crops and forages considered key for human food and nutrition, the system also provides for several benefits critical for achieving sustainable agriculture and food security. These include: exchange of information and research findings, access to and transfer of technology, capacity building and monetary benefits arising from commercializing of products containing material from the Multilateral system. The instrument for operationalizing the Multilateral System (the SMTA), has been adopted by the Governing Body. The challenge is now for States party to the Treaty and the legal and natural persons under their jurisdiction to strategize and take advantage of the system in solving their agricultural and food insecurity related problems.

This would not only require a lot of awareness raising and capacity building, but also calls for constant engagement with the Treaty processes. Monitoring countries' dealings related to the Multilateral System is essential especially when it comes to tracking the monetary benefits. Revision of the Treaty and the SMTA corresponding provisions that in essence allow for intellectual property rights over materials accessed from the Multilateral System as long as they are not in the form in which they where received from the system (however minor the modifications) may become inevitable. Those provisions have great potential to be abused to defeat the very object and purpose of the Treaty.

⁸⁹ Article 8.3. This seems to be the compromise position that resulted from North America and South west Pacific countries' success in taking out of the SMTA, reference to reporting requirements on intellectual property rights obtained on plant varieties developed using material from the Multilateral System.

Mwila, P., (2006), The Standard Material Transfer Agreement: Salient Features and Issues for Countries in Eastern and Southern Africa, paper presented at the ASARECA/EAPGREN Regional Training Workshop of Lawyers and Policy Makers on Law and Policy of Relevance to Plant Genetic Resources for Food and Agriculture, 18-19 September, 2006, Entebbe, Uganda.

8. SELECT BIBLIOGRAPHY

Anderson, R., (2005), The History of Farmers' Rights: A Guide to Central Documents and Literature, The Fridtjof Nansen Institute, Norway, 2005

Bragdon, S., and Downes, D., (1998), Recent Policy Trends and Development Related to the Conservation, Use and Development of Genetic Resources. Issues in Genetic Resources No. 7. IPGRI, Rome, Italy

Bragdon, S., Fowler, C., Franca, Z. and Goldberg, E., (2005), Law and Policy of Relevancy to Plant Genetic Resources, International Plant Genetic Resources Institute and the International Food Policy Research Institute.

Harold, J., (1985), The Legal and Political Implications of the International Undertaking on Plant Genetic Resources, Ecology L.Q 12:1053.

Lettington, R., (2001), The International Undertaking on Plant Genetic Resources in the Context of the CBD- International Centre for Trade & Sustainable Development Year 5, No.6 at 11-13 (July -Aug 2001).

Moore, G. and Tymowski, W., (2005), Explanatory Guide to the International Treaty on Plant Genetic Resources for Food and Agriculture, IUCN Environmental Policy and Law Paper No.57.

Multilateral Trade Negotiations on Agriculture - A Resource Manual on TRIPs. Available on www.fao.org/documents. Accessed on October 15,2006.

Mwila, P., (2006), The Standard Material Transfer Agreement: Salient Features and Issues for Countries in Eastern and Southern Africa, Unpublished paper presented at the ASARECA/EAPGREN Regional Training Workshop of Lawyers and Policy Makers on Law and Policy of Relevance to Plant Genetic Resources for Food and Agriculture, 18-19 September, 2006, Entebbe, Uganda.

Naluwairo, R., (2006), From Concept to Action: The Protection and Promotion of Farmers' Rights in East Africa, ACODE Policy Research Series No. 15, 2006. ACODE-Kampala

Report of First Meeting of Commission on Genetic Resources for Food and Agriculture acting as Interim Committee for the International Treaty on Plant Genetic Resources for Food and Agriculture. Available at http://www.iisd.ca/biodiv/itpgr. Accessed on November 1, 2006.

Sitarz, D., (1994), AGENDA 21: The Earth Summit Strategy To Save Our Planet, Earthpress, Boulder, Colorado.

The Progressive Report on the FAO Global System for the Conservation and Utilization on Plant Genetic Resources for Food and Agriculture, UNEP/CBD/COP/3/15. Available at www.iisd.ca/biodiv/cop315ae.pdf. Accessed on November 5, 2006.

9. PUBLICATIONS IN THIS SERIES

Tumushabe, G.W., Bainomugisha, A., and Muhwezi, W., (2000), Towards Strategic Engagement: Government NGO Relations and the Quest for NGO Law Reform in Uganda. *ACODE Policy Research Series*, No. 1, 2000.

Kameri-Mbote, P., (2000), The Operation Environment Constraints for NGOs in Kenya: Strategies for Good Policy and Practice. *ACODE Policy Research Series*, *No.* 2, 2000.

Tumushabe, G.W., (2001), The Precautionary Principle, Biotechnology and Environmental Litigation: Complexities in Litigating New and Emerging Environmental problems. *ACODE Policy Research Series*, No.3, 2001.

Tumushabe, G.W., Mwebaza, R., and Naluwairo, R., (2001), Sustainably Utilizing our National Heritage: Legal Implications of the proposed Degazzettement of Butamira Forest Reserve. *ACODE Policy Research Series*, No.4, 2001.

Tumushabe, G.W., Bainomugisha, A., et al: (2003), Sustainable Development Beyond Rio + 10-Consolidating Environmental Democracy in Uganda Through Access to Justice, Information and Participation. *ACODE Policy Research Series, No.* 5, 2003.

Mugyenyi, O., Naluwairo, R., (2003), Uganda's Access to the European Union Agricultural Market: Challenges and Opportunities. *ACODE Policy Research Series*, No. 6, 2003.

Mugyenyi, O., Nuwamanya, D., (2003), Democratizing EPA Negotiations: Challenges for Enhancing the Role of Non State Actors. *ACODE Policy Research Series*, No.7, 2003.

Kameri-Mbote P., (2004), Towards a Liability and Redress System under the Cartagena Protocol on Biosafety: A Review of the Kenya National Legal System. *ACODE Policy Research Series*, No. 8, 2004.

Kabudi, P.J., (2004), Liability and Redress for Damage Caused by the Transboundary Movement of Living Modified Organisms (LMOs) under the Cartagena Protocol on Biosafety: A Review of Tanzania Legal System. *ACODE Policy Research Series, No. 9, 2004.*

Tumushabe, G.W., Bainomugisha, A., (2004), Constitutional Reforms and Environmental Legislative Representation in Uganda: A Case Study of Butamira Forest Reserves in Uganda. *ACODE Policy Research Series, No. 10, 2004.*

Musiime, E., Kaizire, B., Muwanga, M., (2005), Organic Agriculture in Uganda: The Need for A Coherent Policy Framework. *ACODE Policy Research Series*, No.11, 2005.

Tumushabe, G.W., (2005), The Theoretical Legal Foundations of Community-Based Property Rights in East Africa. *ACODE Policy Research Series, No. 12, 2005.*

Bainomugisha, A., Mushemeza, D., (2006), Deepening Democracy and Enhancing Sustainable Livelihoods in Uganda: An Independent Review of the Performance of Special Interest Groups in Parliament. *ACODE Policy Research Series*, No. 13, 2006.

Mugyenyi, O., Zeija, F., (2006), The East African Customs Union Protocol: An Audit of the Stakeholders' Participation in the Negotiation Process. *ACODE Policy Research Series*, No.14, 2006.

Naluwairo, R., (2006), From Concept to Action: The Protection and Promotion of Farmers' Rights in East Africa. *ACODE Policy Research Series No.15*, 2006.

Banomugisha, A., (2006), Political Change and Environmental Governance in Uganda: A Review of Political Parties Manifestos. *ACODE Policy Research Series, No.16, 2006.*

Tumushabe, G., Musiime, E., (2006), Living on the Margins of Life: The Plight of the Batwa Communities of South Western Uganda. *ACODE Policy Research Series*, No. 17, 2006.

How to access ACODE Publications:

Write to Library Assistant

ACODE Library of Law and Public Policy Plot 96, Kanjokya Street, Kamwokya P.O.Box 29836, Kampala- Uganda Email: library@acode-u.org

©ACODE

Citation:

Naluwairo, R., and Tabaro, E., (2006), Promoting Food Security and Sustainable Agriculture through Facilitated Access to Plant Genetic Resources for Food and Agriculture: Understanding the Multilateral System of Access and Benefit Sharing. ACODE Policy Research Series, No. 18, 2006. ACODE-Kampala.

ABOUT THE AUTHORS

Ronald Naluwairo is a Research Fellow and Manager of the Intellectual Property Rights and Biotechnology Policy Programme at Advocates Coalition for Development & Environment. He also teaches at the Faculty of Law, Makerere University. He has undertaken research and published in the areas of Biotechnology and Biosafety Policy, Intellectual Property Rights, Good Governance and Human Rights. Naluwairo holds a Master of Laws Degree (LL.M) from the University of Cambridge (United Kingdom), a Bachelor of Laws Degree (LL.B) from Makerere University and a Post Graduate Diploma in Legal Practice (Dip. L.P) from Law Development Centre.

Edgar Tabaro is a Research Associate with ACODE and a lecturer at the Faculty of Law, Uganda Christian University. He holds a Master of Laws Degree (LL.M) from University of Witwatersrand (South Africa), a Bachelor of Laws Degree (LL.B) from Makerere University and a Post Graduate Diploma in Legal Practice (Dip. L.P) from Law Development Centre.





Advocates Coalition for Development and Environment

Plot 96, Kanjokya Street, Kamwokya P.O. Box 29836 Kampala-Uganda Tel: 256-41-530798, Fax: 256-41-534056 Email: acode@acode_u.org

Email: acode@acode_u.org Website: www.acode_u.org