

# **Global Policy Environment**

Workshop on Cassava Germplasm: Collection  
Process and Action Plan for South, East and  
Central Africa, Dar es Salaam, Tanzania, 4-6  
June, 2013

**Godfrey P. Mwila**

Acting Chief Agricultural Research Officer, Zambia  
Agriculture Research Institute (ZARI)

# Outline

1. Introduction
2. Convention on Biological Diversity
  - Nagoya Protocol
3. International Treaty on Plant Genetic Resources
  - Elements of the MLS
  - Other relevant provisions of the Treaty
4. Plant Variety Protection
  - International Union for the Protection of new varieties of plants (UPOV)
5. Trade-related Intellectual Property Rights (TRIPS)
6. Conclusions

# Introduction

- Many countries worldwide have signed a number of key international instruments dealing with biodiversity, biosafety and Intellectual Property:
  - Convention on Biological Diversity (CBD);
  - Cartagena Protocol on Biosafety;
  - Agreement on Trade Related Aspects of Intellectual Property Rights of the World Trade Organization (WTO/TRIPS);
  - International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA);
  - Global Plan of Action for the conservation and sustainable use of plant genetic resources for food and agriculture (GPA).
  - Union for the Protection of Plant Varieties (UPOV);
  - and Convention on Endangered Species of Wild Fauna and Flora (CITES).

## Introduction Contd.

- By ratifying these international instruments, member states are obliged to implement their provisions:
  - need to review and harmonize the national legal and policy framework,;
  - development of national action plans;
  - putting in place institutional arrangements etc.
- However most developing countries face various challenges including lack of technical and financial capacity, as well as legal expertise to effectively domesticate these instruments.
- Therefore despite the efforts made to put in place the various policy and legal systems at the global level there are still a number of challenges affecting availability and accessibility of PGRFA as well as to realise equitable benefit sharing out of their use at the global level.

# Convention on Biological Diversity (CBD).

- Realisation that biological resources and diversity were dwindling.
- Led to common desire by countries to come together and agree on common principles and strategies
- Culminating in the birth of the Convention on Biological Diversity (CBD), which was adopted in 1992.
- Many countries have signed and ratified the CBD and are hence Party to it.
- The Convention addresses issues of conservation, sustainable use, regulating access to genetic resources, access to and transfer of technology and exchange of information.
- Member countries are expected to undertake policy and legal measures aimed at addressing these issues at the national level.

## CBD Contd.

- After CBD, genetic resources and associated traditional knowledge was no longer treated as a common good but came under the jurisdiction of countries where these are found.
- Required policy and legislative frameworks at national level for controlling access to such resources.
- Article 15 of the CBD sets guidelines on how to come up with access regimes.
  - It obliges states to provide access to others through Material Transfer Agreements (MTAs) and subject to Prior Informed Consent (PIC) and ensure equitable sharing of benefits arising out of research as well as commercialization of resources.

## **CBD contd.**

- Led to significant amount of policy and legislative activity at the regional, sub-regional and national levels dealing with environmental management, access to, conservation and utilization of genetic resources.
- Resulting in the development of a number of policy and legislative frameworks in the form of:
  - model laws, material transfer agreements, licensing agreements and codes of practice.
  - These differ in their binding force and regulatory scope but they all offer valuable options for the implementation of the rules and guidelines for the regulation of access and fair benefit sharing.

## **CBD contd.**

- There are a number of case studies where proper access and benefit sharing mechanisms were put in place outside Africa i.e. Costa Rica, India and Brazil.
- A number of countries in Africa have taken some initiatives to put in place access regimes and protection of traditional knowledge systems.
- It is expected that these initiatives will be accelerated once the recently adopted Nagoya Protocol comes into force.

# Nagoya Protocol.

- The Nagoya Protocol on ABS is a supplementary agreement to the CBD.
- Was adopted on 29 October 2010, but is yet to enter into force, which will be 90 days after the fiftieth instrument of ratification
- Aims at providing a transparent legal framework for the effective implementation of one of the three objectives of the CBD, which is the fair and equitable sharing of benefits arising out of the utilization of genetic resources (ABS).

## Nagoya Protocol Contd

- The Protocol applies to genetic resources that are covered by the CBD, and to the benefits arising from their utilization.
- It also covers traditional knowledge (TK) associated with genetic resources
- Access to genetic resources for their utilization shall be subject to domestic access and benefit-sharing legislation or regulatory requirements, and to the prior informed consent of the Party providing such resources.
- Further each Party shall take measures to ensure that traditional knowledge associated with genetic resources that is held by indigenous and local communities is accessed with the prior and informed consent of these indigenous and local communities.

# Nagoya Protocol Contd.

- National legislation or regulatory requirements should provide for:
  - conditions to promote and encourage research which contributes to the conservation and sustainable use of biological diversity, particularly in developing countries
  - Pay due regard to cases of present or imminent emergencies that threaten or damage human, animal or plant health, as determined nationally or internationally.
  - Need for expeditious access to genetic resources and expeditious fair and equitable sharing of benefits arising out of the use of such genetic resources
  - Consider the importance of genetic resources for food and agriculture and their special role for food security.

# ITPGRFA

- The CBD recognised the special needs of plant genetic resources for food and agriculture (PGRFA):
  - These, in particular, include conditions of access, difficulties of determining country of origin and need to allow for continued exchange of PGRFA.
  - Regarding access it was recognised that there was need to allow access as easily as possible and to reduce transaction costs as well as need for easy, efficient and equitable system of benefit sharing.
  - The CBD provided for access and benefit-sharing agreements on a bilateral basis, which had the potential of slowing down exchange and creating higher transaction costs.
  - Deemed desirable to handle access and benefit sharing for PGRFA on a multilateral basis.

## ITPGRFA Contd.

- Furthermore the CBD did not address the issue of status of *ex situ* collections acquired prior to the entry into force of CBD.
- It was thought that these outstanding issues could best be settled within the FAO Global System on PGRFA.
- FAO mandated by CBD to devise a mechanism to address outstanding issues.
- Through FAO Conference Resolution 7/93 the Commission on Genetic Resources was mandated to negotiate the International Undertaking on Plant Genetic Resources in order to bring it in harmony with the CBD.

## **ITPGRFA contd.**

- The FAO Commission is a recognised international forum where governments negotiate all matters dealing with agricultural biodiversity, genetic resources for food and agriculture and related biotechnologies.
- Negotiations undertaken from 1997 and was completed in 2001 when the International Treaty on Plant Genetic Resources was adopted by the FAO Conference.
- The adoption of the ITPGRFA was a historic landmark for the global management and use of PGRFA.

# Elements of Multilateral System of the Treaty

- A key element of the ITPGRFA is the Multilateral System of Facilitated Access and Benefit Sharing (MLS), which provides access and benefit sharing conditions for PGRFA of selected crop species.
- Main Features of the MLS:
  - a list of crop species chosen on basis of importance for food security and interdependence (Annex1) :
    - 35 genera of food crops and 29 forage species, including all major 'CGIAR crops' except groundnut, soybean and tropical forages. In the case of cassava, only *Manihot esculenta* is included.
  - agreement on rules regarding facilitated access and benefit sharing.

## MLS contd.

Other conditions of access to PGRFA under the MLS are that:

- Access to plant genetic resources for food and agriculture under development shall be at the discretion of its developer, during the period of its development. This includes material being developed by farmers;
- Access to plant genetic resources for food and agriculture protected by intellectual and other property rights shall be consistent with relevant international agreements, and with relevant national laws. This entails that IPRs are expected to be respected;
- PGRFA found in in situ conditions will be provided according to national legislation or, in the absence of such legislation, in accordance with such standards as may be set by the Governing Body. This applies to PGRFA found on farmers fields?

# Standard Material Transfer Agreement (SMTA)

- The SMTA was negotiated and agreed following adoption the Treaty as an instrument under which PGRFA under Annex 1 would be made available.
  - Elaborates rules regarding access and benefit sharing under the MLS.
- - No need for tracking individual accessions,
  - Recipients must continue to make the materials received available to other Contracting Parties under similar terms and conditions of the SMTA
  - Intellectual property or other rights that limit facilitated access to the plant genetic resources for food and agriculture, or their genetic parts and components, in the form received from the Multilateral System' may not be claimed.

## SMTA contd.

- Because genetic resources are pooled, there is no individual owner with whom individual contracts for access and benefit sharing must be negotiated.
- Benefits must be shared in a pooled, multilateral way (Benefit Sharing Fund).
- Facilitated access is itself considered a major benefit.
- Non monetary benefits include: exchange of information; access to and transfer of technology; and capacity building.
- Mandatory payment of monetary benefits are triggered if:
  - a product that incorporates material from the MLS is commercialized in such a way that it is not available without restriction to others for further research and breeding.
- If it is available without restriction to others, payment is voluntary. Funds realised will be used in the context of the Treaty's Funding Strategy.

## **SMTA contd.**

- Limited facilitated access of PGRFA from the MLS.
- Few contracting parties have designated germplasm collections into the MLS.
- No known case of benefits accruing to the benefit sharing fund arising from utilisation of PGRFA accessed from the MLS.
- Funds provided to the benefit sharing fund through donations
- General feeling that progress with regard to implementation of the Treaty, including the MLS is slow.
- Access to PGRFA included under the MLS may not be guaranteed, even from countries that are party to the Treaty.

# Other Relevant Provisions of the Treaty

- General provisions for the conservation and sustainable use of all PGRFA (Art. 5&6),
- Farmers' Rights (Art 9),
- supporting components
  - Global Plan of Action (The priority activities of the GPA form the basis for implementing the general provisions of the Treaty, in particular conservation and sustainable utilisation. GPA was recently updated
  - Agreements with International Agricultural Research Centres holding *ex situ* collections (about 600,000 accessions)
  - International Plant Genetic Resources Networks
  - Global Information System.
- Financial and institutional provisions.

## Other Relevant Provisions of the Treaty Contd.

Under Article 5.1, each Contracting Party is expected to promote an integrated approach to the exploration, conservation and sustainable use of PGRFA, including:

- Carrying out survey, inventories and collections
- Supporting farmers and local communities efforts to manage and conserve on-farm their PGRFA ;
- Promoting in-situ conservation of crop relatives and wild plants used for in food production.
- Cooperating to promote an efficient and sustainable system of ex-situ conservation, including ensuring adequate regeneration, characterisation and evaluation, and documentation.

## Other Relevant Provisions of the Treaty Contd.

Under Article 6.2, measures that Contracting Parties may take to ensure sustainable use of plant genetic resources for PGRFA are provided and may include:

- pursuing fair agricultural policies that promote the development and maintenance of diverse farming systems;
- strengthening research which enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers;
- promoting plant breeding efforts which, with the participation of farmers, strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including in marginal areas;
- broadening the genetic base of crops and increasing the range of genetic diversity available to farmers
- promoting the expanded use of local and locally adapted crops, varieties and underutilized species.

# Farmers' Rights

- Treaty recognizes the enormous contribution that farmers and their communities have made and continue to make to the conservation and development of plant genetic resources:
  - protection of traditional knowledge,
  - freely continue exchanging their genetic resources among themselves and play a role in determining conditions of access to genetic resources under their control
  - and the right to equitably share in benefits arising from utilisation of genetic resources
  - participate in decision-making relating to the management and use of plant genetic resources. The Treaty specifically places the responsibility for implementing these rights on national governments.
- National governments have faced various challenges in the implementation and realisation of Farmers' Rights.
- This situation has brought about frustrations mainly on account that the Governing Body of the Treaty has not rendered any support to assist governments in this regard.

# Financial Provisions

- Include a Funding Strategy to enhance the availability, transparency, efficiency and effectiveness of the provision of financial resources to implement activities under the Treaty (Art. 18.2).
- The Global Crop Diversity Trust, which was established in 2004, is an essential element of Funding Strategy:
  - Under a Relationship Agreement signed between the Governing Body of the Treaty and the Executive Board of the Trust the Governing Body of the Treaty provides overall policy guidance to the Trust, though the Trust retains executive independence.
  - The main focus of the Trust is the establishment of an endowment fund for the purpose of supporting the long term conservation of global priority ex situ germplasm collections. (targets mainly CGIAR centre genebanks).
  - The Trust has also mobilised funds to implement projects aimed at strengthening the global system of ex situ conservation.

# Plant Variety Protection

- Plant Variety Protection (PVP) systems were based on European experiences. The founding countries did not follow the Paris Convention for the Protection of Industrial Property of 1983 with regard to agricultural resources.
- It was felt that due to the exclusive rights of its patents system, patents would impede the common practice of using protected varieties for further commercial breeding.
- UPOV was therefore established in 1961 as the first PVP or PBR system.
- International Union for the Protection of New Varieties of Plants (UPOV) unites member countries under a common regime to protect the interests of plant breeders.
- Membership of UPOV largely comprises developed countries, attracting only a small proportion of its membership from developing countries.

## **PVP contd.**

- The principles of Distinctiveness, Uniformity and Stability for a variety to be recognised under UPOV exclude most of the landraces or farmers varieties under the custody of most small scale farmers in developing countries and Africa in particular.
- Although UPOV provides for farmers privileges, it is felt that this falls short of taking care of farmers' rights as provided for in the Treaty.
- UPOV is a form of Intellectual Property Regime designed to protect individual rights and is therefore generally considered to be incompatible with farmers' rights.
- The number of African countries that have become members of UPOV in recent years and have put in place plant protection legislation based on UPOV has increased.

# TRIPS (Trade-related Intellectual Property)

- The Agreement requires all parties to provide either patent or Sui generis (unique) protection for the ownership of plant varieties.
- The term "effective Sui-generis system" has, however, not been defined sufficiently. It is difficult to determine what an effective Sui generis system for plant varieties will entail.
- However, countries have the option to come up with their own Sui Generis Legislation to protect innovations that fall out of the patent regime.
- UPOV is currently selling itself as the ready-made solution for compliance with TRIPs.
- More than any other Agreement WTO/TRIPS has put more pressure on member countries to comply

# Conclusions

- ❖ The array of policy and legal developments regarding biological resources and plant genetic resources signifies the increasing realisation of the importance of cooperation among countries to improve management of these resources for global benefit.
- ❖ There are still a number of challenges affecting availability and accessibility of PGRFA as well as realise equitable benefit sharing out of their use at the global level, despite the efforts made to put in place the various policy and legal systems at various levels.
- ❖ It is generally acknowledged that genetic resources and associated traditional knowledge are no longer treated as a common good, but are under the jurisdiction of countries where these are found.
- ❖ The CBD and the Nagoya Protocol both highlight importance of genetic resources for food and agriculture and their special role for food security and therefore to give these special consideration to facilitate easy access and benefit sharing.

## Conclusions contd.

- When the Treaty was adopted it was hailed as a historic landmark for the global management and use of PGRFA. The Treaty sought to put in place mechanism to ensure continued and unimpeded flow of the PGRFA for the benefit of farmers and farming communities worldwide.
- Some provisions relating to access conditions under the MLS of the Treaty require further clarification in order to provide a common understanding and expedite their implementation.
- Apart from PGRFA provided through CGIAR centres there has been limited facilitated access of PGRFA from the MLS by Contracting Party.
- The number of African countries that have become members of UPOV in recent years and have put in place plant protection legislation based on UPOV has increased, partly influenced by need to comply with TRIPS.
- However, despite the stringent protection accorded to inventors by the patent regime there are options under TRIPS for countries to come up with their own Sui Generis Legislation to protect innovations, such as plant varieties that fall out of the patent regime.

**Thank You!!!!**