

# **Access and Benefit Sharing of Biological Diversity**

**Submitted to**

**Centre for Environmental Policy and Advocacy**

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## **Acronyms**

ABS	Access and Benefit Sharing
CBD	Convention of Biological and Advocacy
CEPA	Centre for Environmental Policy and Advocacy
DARTS	Department of Agriculture Research and Technical Services
DNPW	Department of National parks and Wildlife
FA	Forestry Act
FD	Forest Department
FRIM	Forestry Research Institute of Malawi
GATT	General Agreement on Tariffs and Trade
GMO	Genetically Modified Organism
GRBC	Genetic Resources and Biotechnology Committee
IPR	Intellectual Property Rights
NEAP	National Environmental Action Plan
NEP	National Environmental Policy
NRCM	National Research Council of Malawi
PIC	Prior Informed Consent
TRIPs	Trade - Related Intellectual Property Rights
VFA	Village Forest Area
VNRMC	Village Natural Resources Management Committee
WIPO	World Intellectual Property Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

## **Executive Summary**

The paper examines a set of complex issues of access to and benefit sharing of biological resources. It deals with the key principles, relationships between various instruments, as well as gaps, conflicts and inconsistencies and the extent of compliance of Malawi's national instruments to binding international instruments in access to and benefit sharing.

Combining a review of national policies and legislation and regional and international instruments current practices and information on access to and benefit sharing among various stakeholders is described. In Malawi, a range of institutions is involved in the management of genetic resources in general and access to and benefit sharing issues.

The analysis has revealed a number of gaps, conflicts, inconsistencies and noncompliance which exist.

This paper provides useful concrete suggestions for formulating of new or revision of existing policy and legislation for effective regulation of utilization, management and control of access and benefit sharing mechanisms in Malawi.

## **1.0 Introduction and Background**

This paper deals with a set of complex issues of access to and benefit sharing of genetic resources. It seeks to do so in a relatively clear and non-technical manner. It proceeds therefore by a series of description and some form of analysis using a review of national policies and legislation, regional and international instruments. An institutional analysis of the current framework for management of genetic resources and access to and benefit sharing in particular has also been done. Some of the more technical and theoretical underpinnings of the analysis are relegated to foot notes or to the citation of relevant sources.

According to the NRCM (2002), Malawi is endowed with rich biological diversity and genetic resources with great potential to provide diverse chemicals, enzymes and genes. These resources if properly used and in a sustainable manner, can contribute to the socio-economic development of the country.

Malawi is party to several international treaties, conventions and agreements that have implications on genetic resource utilization and exploration. These articles bind the Government of Malawi under International Law to enact the necessary regulations for their implementation (NRCM, 2002). These include the Convention on Biological Diversity (CBD) to which Malawi acceded in 1992. The CBD places great emphasis on national and community sovereignty over genetic resources and biodiversity and moves away from the notion that these resources and knowledge are the common heritage of mankind.

In addition, at international level, the World Trade Organization (WTO) Agreement on Trade –Related Intellectual Property Rights (TRIPs) calls for parties to adopt a wide range of intellectual property rights' regimes, including patents, plant breeders' rights and trade secrets.

Although, Malawi has been remarkably prolific in considering and promulgating new environmental protection and natural resources management policies and legislation it has not yet prepared policies and legislation on access and benefit sharing in line with the dynamic economic, political and social circumstances. Malawi is now finalizing the drafting of the new Land Legislation. The country has endured a history of continuously reconstituted clusters of traditions, colonialism, rules, expectations and conflicts, which gave rise to policy and legislative reform in the environment and natural resource management sector. Access and benefit sharing to be effective and fair needs appropriate policy and legislative instruments. In which case, the need for the country to develop policies and legislation, which promote access to biodiversity and equitable sharing of benefits should be legitimately viewed as seeking a mechanism to promote optimum access and benefit of Malawi's biological resources for development.

Malawi has operated without a comprehensive policy on access and benefit sharing for a long time. The present system utilizes traces of access and benefit

sharing, which are found in various sectoral policies and legislation. The absence of a comprehensive access and benefit sharing policy and legislation affects other issues like intellectual property rights.

In order to address this access and benefit sharing related problems, policy and legislative reform should be dealt with fundamentally and comprehensively. Nevertheless, this has to be done in a way that will not compromise the expectations of various stakeholders and the ability of the biodiversity resource to generate adequate benefits.

This review considers the existing provisions in various sectoral policies and legislation in Malawi. It eventually ends by making some concrete suggestions on the possible steps, which must be undertaken to develop sound access and benefit sharing policy and legislation.

## **2.0 Scope and Definition**

### **2.1 Access**

Seeding Solutions (2001)<sup>2</sup> defines access as “obtaining, collecting, utilizing and/or exporting material (derivatives) (associated information).

Conditions for Access - Seeding Solutions (2001) provides for three options in terms of providing consent:

#### **Option 1**

The competent authority of this country (i.e. only the appointed competent authority would have the right to say ‘yes’ or ‘no’ to an application; there is no provision to require the prior informed consent of private parties or local and indigenous communities). This seems to be the current practice in Malawi. According to NRCM GRBC (2002) a number of government institutions have been given this responsibility of providing approval.

#### **Option 2**

- (i) The competent authority of this country, and
- (ii) The local community or person with any exclusive right or interest in the material (or derivatives) (or associated information).

#### **Option 3**

The local community or person with any exclusive rights or interest in the material (or derivatives) (or associated information), (i.e. only the local

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<sup>2</sup> See Seeding Solutions (Volume 2, 2001);

community, and there is no need to obtain the approval of any government authority).

## 2.2 Benefit Sharing

Article 1 of the CBD describes 'benefits' as those 'arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and appropriate funding'. The desired outcome in benefit sharing mechanisms is to have a facility, which has provisions for equitable sharing, implying that a different subset or stakeholder makes no difference in their right to resources<sup>3</sup>.

## 3.0 Approach and Methodology

A detailed desk study reviewing existing legal, policy and current practices affecting access and benefit sharing was conducted. Some contacts were also made with key informants to get more specific information. Any information gaps, conflicts and inconsistencies have been highlighted.

## 4.0 The Findings

This section provides a summary of the findings, which have been presented under a series of topic headings.

### 4.1 Property Rights

It is useful to understand property rights in order for us to appreciate the manner in which access and benefit sharing mechanisms are operating. In economics, property right refers to a bundle of entitlements defining the owner's rights, privileges and limitations for use of the resource (Tietenberg, 2000). By examining such entitlements and how they affect communities, we will better understand how access and benefit sharing problems arise.

Generally, natural resources can be held under any one of the three property regimes<sup>4</sup>:

- (a) *State – property regimes*: where the government owns and controls the property. National Parks, Wildlife Reserves and Forest Reserves for example are frequently owned and managed by the government. Problems with both efficiency and sustainability can arise in *state-property regimes* when the incentives of bureaucrats who implement and/or make the rules for resource use diverge from collective interest;

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<sup>3</sup> See Chadza, W (2001), Biological Resources – Access and Benefit Sharing Dynamics, Paper presented at the Workshop on Forest Ecosystems Biodiversity, Department of Forestry.

<sup>4</sup> This section relies on the classification system presented in Bromley, (1991);

- (b) *Common - property regimes*: where the property is jointly owned and managed by a specific group of co-owners. User-rights for the resource are controlled by an identifiable group and are not privately owned or managed by governments; there exists rules concerning who may use the resource, who is excluded from the resource and how the resource should be used. Entitlements to use *common-property resources* may be formal, protected by specific legal rules, or they may be informal, protected by traditional or custom. Common property regimes exhibit varying degrees of efficiency and sustainability, depending on the rules which emerge from collective decision making; and
- (c) *Res nullius property regimes*: in which no one owns or exercises control over the resources. It is therefore not strictly a *property rights regime* at all nor is it a management regime since people use, opportunistically, the resources but do not manage them. *Res nullius* property resources can be exploited on a first-come, first-served basis, because no individual or group has the legal power to restrict access. *Open - access resources*, as they are also referred to have given rise to what has become known popularly as the “*tragedy of the commons*.”

In most parts of Malawi, there are *res nullius* property regimes<sup>5</sup>. The problems of such open access resources can be further illustrated by examining the ‘*common-pool resources*’ concept. A typical example in Malawi is the trees used for making charcoal in Neno South<sup>6</sup>. Non-exclusivity and divisibility characterize common-pool resources. Non-exclusivity implies that they can be exploited by anyone while divisibility means that the capture of part of the resource by one group subtracts it from the amount available to the other groups (Tietenberg, 2000). Anybody, who needs a resource, easily gets whatever he or she needs. The unlimited access destroys the incentive to conserve. This is what has become of most of the biological resources in Malawi, including those in protected areas, like Forest Reserves. Those who have been getting these resources include both foreigners and locals.

## 4.2 Rights and Benefits

An owner of a resource with a well-defined property right has a powerful incentive to use that resource efficiently because a decline in the value of that resource represents a personal loss. We can illustrate this point by examining the incentives communities may face if their role in regulating access and benefit sharing is formalized. People seek to manage biological resources when the benefits are perceived to exceed its cost. This is important, because when

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<sup>5</sup> See Chadza, W, (2002), Sustainable Management of Natural Resources Project, Report of the Community Consultations Conducted in the Lisungwi Area – *Overview, Discussion, Analysis and Recommendations*;

<sup>6</sup> Wildlife and Environmental Society of Malawi has been working in Neno South since 1996 implementing two community based natural resources management projects;

formal arrangements have been instituted then communities will have the right to prevent exploiters from consuming a product in the absence of payment; the exploiters must pay or suffice specific procedures to receive the product. This would ensure that there is compliance.

### **4.3 Illegal Activities**

Illegal activities may arise from a variety of circumstances, as defined in a particular legislation, and may relate to the category of Biodiversity. Many of the activities are carried out in violation of applicable sectoral legislation. In some cases the law may be so unclear or procedures and guidelines in place may not have legislation to back them up. This is the situation with the NRCM GRBC Procedures and Guidelines. The best example is research currently on going in Mulanje Mountain Forest Reserve. Besides herbalists is another category accessing and benefit from biodiversity in protected areas. Herbalists often come from areas far away from where resources exist. Some herbalists are very destructive, cutting the whole trees and taking whole plants – this causes extinction.

### **4.4 Enforcement of Compliance to Procedures and Guidelines**

#### **4.3.1 Role of Communities**

The NRCM GRBC (2000) Procedures and Guidelines<sup>7</sup> provide for ensuring that prior informed consent (PIC) has been obtained from communities under whose jurisdiction the area falls prior to commencement of any research work that involves collection. There are obviously a lot of incidences in which communities just see researchers both local and foreign coming in and undertaking their work, including taking specimens. For the proper management of the affairs communities must be encouraged to be organized and be on the look out for any researchers both local and foreign coming into their area to conduct any work.

Some of the legislation, like Forestry Act (1997)<sup>8</sup>, states that the Director of Forestry has power to designate communities to participate in enforcement of forestry legislation. This implies that it is possible to amend legislation and provide for communities to be able to play a role in regulating access and benefit sharing.

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<sup>7</sup> See NRCM GRBC (2002), Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi.

<sup>8</sup> Section 9 (3), “Any village natural resources management committee may seize and detain any forest produce or article which the village natural resource management committee reasonably suspects has been obtained or removed from the village forest area in contravention of rules made by such village natural resource management committee.”

### 4.3.2 Role of Immigration Department

The Government of Malawi's Immigration Department and the Malawi Revenue Authority need to mainstream or at least have some basic knowledge on the importance of regulating cross border movement of genetic resources. An examination of the Malawi Customs Declaration form does not make reference to biological resources and how their cross border transactions should be regulated.

### 4.4 Institutional Framework

The National Research Council of Malawi's Genetic Resources and Biotechnology Committee (GRBC) is the institution mandated to grant approvals for the collection and exportation of genetic resources for research purposes. The GRBC comprises of the following:

GRBC is expected to monitor and document genetic materials that are collected or researched upon by foreign scientists including those dispatched by local researchers to foreign institutions. However, this system is not being fully implemented and as a result, foreign researchers and institutions have continued to collect Malawi's genetic resources without proper approvals and records<sup>9</sup>. It is useful to examine in detail some of the key institutional framework elements, given the acknowledgement of collapse of the system.

Besides the NRCM GRBC Procedures and Guidelines do not have legislative force and their efficacy as such has not been demonstrated<sup>10</sup>. This is worthy some analysis. NRCM prepared the Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi in 2000<sup>11</sup>, while in 2002 it prepared the Science and Technology Policy and Act for Malawi. Furthermore in 2002 Parliament enacted the Biosafety Bill.

One surprising – and – disturbing finding is that, the piecemeal and sector development of the legislation and policies has resulted in conflicts of institutional mandates, responsibilities and roles. In the NRCM Procedures and Guidelines, a number of institutions have been designated the responsibility of certifying any transactions regarding genetic resources. These institutions derive their authority from their sector legislation<sup>12</sup>. The Biosafety Act (2002) gives authority to license to the Minister responsible for environment. This is a *GMO license*<sup>13</sup>.

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<sup>9</sup> See NRCM GRBC (2002), Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi.

<sup>10</sup> See CEPA (2004), Draft Inception Report for Consultancy to Collect Information on Access and Benefit Sharing Under the Southern Africa Biodiversity Support Program;

<sup>11</sup> The NRCM GRBC (2000) Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi were revised in October 2002;

<sup>12</sup> See 4.5 Policies and Legislation of Designated National Institutions;

<sup>13</sup> Biosafety Act (2002), Section 16 "Subject to the provisions of this Act and except in accordance with a license granted under this section (hereinafter referred to as a "GMO license", no person shall engage in-..."

Interestingly, both the Science and Technology Act (2002) and the Biosafety Act (2002) do not recognize or make reference to the NRCM GRBC Procedures and Guidelines. There is no reference to them throughout these two Acts. Yet the NRCM GRBC Procedures and Guidelines are broader than the other two pieces of legislation.

### **Capacity of Designated National Institutions**

These designated institutions are supposed to provide advice to NRCM's GRBC for it to grant approval to researchers. The designated institutions are:

- (a) Agricultural Resources:
  - (i) Department of Agricultural Research and Technical Services (DARTS);
  - (ii) Department of Animal Health and Industry.
- (b) Natural Resources:
  - (i) Forestry Research Institute of Malawi (FRIM);
  - (ii) Department of Fisheries;
  - (iii) Department of National Parks and Wildlife.
- (c) Other Institutions
  - (i) Ministry of Health and Population.

First, it must be noted that all these six are government institutions. Undoubtedly, most of the institutions in the public sector are increasingly constrained in terms of budgetary allocation. Government funding is still minimal and not sufficient to support implementation of natural resource management activities<sup>14</sup>. This casts doubts as to whether they are able to undertake responsibilities as provided for in Part E of the NRCM GRBC (2002) Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi<sup>15</sup>. Then too other certifying agencies like FRIM have suffered from depletion of expertise as key staff have either resigned or retired.

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<sup>14</sup> See Malembo, L, Chadza, W, Kamuloni, S and Kanjedza, R (2002), Proceedings of the Second National Community Based Natural Resource Management in Malawi, 12<sup>th</sup> to 15<sup>th</sup> November 2002;

<sup>15</sup> Ibid.;

#### 4.5 Policies and Legislation of Designated National Institutions

Malawi has a number of policies and legislation that have a bearing on access to and control of biodiversity.<sup>16</sup> There is need to deliberately examine these policies and legislation particularly those with linkages to the designated institutions to assess whether they are reflecting their role in certification of collection of genetic resources. These include the National Environmental Policy (2003), Environmental Management Act (1997)<sup>17</sup>, Forestry Act (1997), National Forestry Policy (1996), Fisheries Conservation and Management Act (1997).

##### Forestry Sector

The Forestry Act (1997) hardly provides for certification of genetic resources in forest, though there are traces on permits for exportation, importation and re-exportation of forest produce<sup>18</sup>.

One of the general objectives<sup>19</sup> of the National Forestry Policy (1996) is: “allowing all citizens to have regulated and monitored access to some forest products.” The Strategy<sup>20</sup> is to “enact a law that removes restrictions to access to the use of forests and forest products, and promote equity and participation by local communities.” It is ironical that while the policy wants to promote access in one way, in another the prescription of *some forest products* already limits the room for negotiation with any potential client who may want to access the resources. Yet another weakness is that Forestry Department solely defines what can be accessed in public forests.

There is often a certain level of skepticism amongst the Forestry Department staff regarding what communities can access in public forests. ‘Scientistical’ arguments – arguments that evoke scientific authority are used. These include technical – sounding arguments regarding quantities of resources available in the forests. These kinds of arguments have elsewhere led to overly complex management planning requirements that have often made it impossible for local communities to access resources<sup>21</sup>.

These arguments are consistent with what CEPA (2004) found out that while the Forestry Policy is clear and expansive in its objectives and promises, the Forestry Act is more restrictive. The Act itself is halfhearted and unclear. It gives power to the Director of Forestry to enter into co-management agreements with local communities<sup>22</sup> for implementation of ‘the management plan’ in a forest

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<sup>16</sup> See CEPA (2004), Draft Inception Report for Consultancy to Collect Information on Access and Benefit Sharing Under the Southern Africa Biodiversity Support Program;

<sup>17</sup> The Environmental Management Act (1997) is currently under review.

<sup>18</sup> Forestry Act (1997), Section 47 and 48;

<sup>19</sup> See National Forestry Policy (1996), Objective 2.2.1;

<sup>20</sup> See National Forestry Policy (1996), Strategy 2.2.1.1;

<sup>21</sup> See Democratization of Natural Resources;

<sup>22</sup> See Forestry Act (1997) Section 25 and 31;

reserve or protected forestry that mutually acceptable to both parties; but the terms 'local communities' or 'management plan' are not defined. CEPA (2004) further states that the Act does not give any indication as to whether access and benefit sharing issues will be incorporated in such an agreement. In addition, the Act is even more confusing in relation to customary land forests. Village Forest Areas (VFAs) are established by consultation between the Director of Forestry and the Village Headman; their management however is to be undertaken by a management authority which does not necessarily involve a Village Headman. The agreement can provide for, inter alia, assistance the Department of Forestry may provide for use and deposition of forest produce and revenue from VFA.

Partly as a result of the foregoing legislative uncertainties and partly as a consequence of inadequate capacity in terms of infrastructure and extension services, there has been little uptake of policy reforms envisaged in the National Forestry Policy of 1996. Community institutions established in terms of the Act are not suitable as they fail to attract interest of local people who see little or no benefit in them. In a few pilot areas, where the Department of Forestry initiated access and benefit sharing regimes some tangible results were recorded but these have not been consolidated by enabling legislation or regulations and have fizzle out as the pilot projects have folded.

### Fisheries Sector

The Fisheries Conservation and Management Act (1997), provides for entrance into fisheries access agreements<sup>23</sup>. However, there are hardly provisions on ensuring compliance to the conditions in the agreement and how benefits from such an agreement will be shared. The Director of Fisheries is empowered to enter into co-management agreements with fisheries management authorities. The agreements will stipulate the terms and conditions for access to and utilization of fisheries resources including their duties and responsibilities.

The framework of the agreement from Fisheries Department shows that the agreement will seek to transfer to the fisheries management authorities (the association) the specific rights of use and other aquatic resources. This would seem to create exclusive user rights in favor of the association and would therefore curtail rights of other Malawians from outside the membership of the association.

On the other hand the proposed transfer falls short of transferring ownership which remains in the state. In this respect the fisheries management authorities obtain no more than mere licenses that every other Malawian gets when they are allowed by the Department of Fisheries to exploit fisheries resources in the waters of Malawi. It follows therefore that the association can be given power to

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<sup>23</sup> Fisheries Conservation and Management Act (1997), Part XIII, Section 52 (1): The Minister may, on the recommendation of the Board enter into fisheries access agreements with other foreign states providing for allocation of fishing licenses to commercial fishermen of such states.

issue licenses to persons who are not their members and therefore regulate fishing in its area of jurisdiction.

### Environmental Sector

NEP (2004) states as one of its guiding principles that indigenous knowledge systems provide important knowledge in the agricultural, medical and pharmaceutical industries that has provided a significant proportion of modern technologies and products. This knowledge needs to be protected by appropriate *sui generis* legislation. One of the strategies suggested for fair distribution of costs and benefits deriving from protected areas between central and local governments and local communities<sup>24</sup>.

### Wildlife Sector

The National Parks and Wildlife Act was amended in 2004 to provide, inter alia, for collaborative management of wildlife between the Department of National parks and Wildlife (DNPW) and local communities and the private sector. It is interesting to note however that the amended Act repealed, without any replacement, Section 4 (1) which vested ownership of wildlife in the president for the benefit of the people of Malawi. In essence therefore the ownership and control of wildlife resources will be governed by Section 207 of the Constitution and Section 4 of the Environmental Management Act.

Pilot areas were designated in various protected areas such as Nyika/Vwaza, Lengwe, Liwonde and Kasungu. In these areas some progress has been made to create and facilitate Natural Resources Committees, some of which were incorporated as trusts under the Trustees Incorporation Act. The most well known and perhaps most activities is the Nyika/Vwaza Association. In addition, the DNPW has entered into a concession agreement with Africa Parks (Majete) Limited for the management of Majete Wildlife Reserve in the Lower Shire of southern Malawi. Further local communities have been allowed to harvest certain natural products such as mushrooms, thatch grass, caterpillars, medicinal plants, reeds and other products mainly for domestic use. Finally, Treasury agreed as a matter of policy to share resource earnings from protected areas with local communities on a 50 – 50 basis; but no payments have started up to now.

It is noteworthy that almost all these initiatives, the pilot benefit schemes, the resource sharing arrangements as well as the establishment of associations are associated in one way or another with projects funded by external donors. The resource sharing mechanisms agreed by Treasury also seem to be a result of donor conditionality. The sustainability of these schemes and continued government commitment to them may therefore be in doubt over the long term.

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<sup>24</sup> NEP (2004), 4.12, Conservation of Biological Diversity.

## 4.6 Regional and International Instruments

### 4.6.1 Convention on Biological Diversity

The Convention on Biological Diversity (CBD) was one of the international environmental instruments that came out of the Earth Summit held in Rio de Janeiro, Brazil in 1992. The World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002 extended this concept, emphasizing on livelihoods and enhancing quality of living as an essential part of sustainable development<sup>25</sup>.

The objectives of the CBD are: the conservation of biological diversity; the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking account all rights over those resources and to technologies, and by appropriate funding.

There are two key articles dealing with access and benefit sharing under CBD. Article 8 (j) calls on state parties to respect, preserve and maintain indigenous knowledge and the innovations and practices of indigenous and local communities relevant for conservation and sustainable use of biological diversity; and to encourage their utilization and equitable sharing of their benefits. CEPA (2004) indicates that Article 8 (j) recognizes the important contributions that indigenous and local communities make to biodiversity conservation and the need therefore to fully involve them in its management and their right to benefit from its utilization.

Article 15 (1) “*Access to Genetic Resources*” states that ‘Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation’.

Regulation of access to biodiversity is clearly declared a national responsibility, hence putting to rest the controversy over whether biodiversity is a common heritage resource for all mankind to enjoy as had be stipulated, for example in the International Undertaking on Plant Genetic Resources for food and agriculture adopted in 1983. As a party to the CBD, Malawi is obliged, inter alia, to put in place policy, legislation and other relevant mechanisms to achieve the objectives of the CBD.

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<sup>25</sup> See CEPA (2004), Draft Inception Report for Consultancy to Collect Information on Access and Benefit Sharing Under the Southern Africa Biodiversity Support Program.

#### 4.6.2 Trade – Related Intellectual Property Rights

The Uruguay Round of talks which began in 1986 introduced, for the first time in the history of the General Agreement on Tariffs and Trade (GATT), multilateral negotiations on “Trade – Related Intellectual Property Rights”. Under strong pressure by the industrialized countries, a specific agreement on the availability and enforcement of such rights became part of the Final Act of the Round: the Agreement on Trade – Related Aspects of Intellectual Property Rights<sup>26</sup>.

The TRIPS Agreement is, by its coverage the most comprehensive international instrument on Intellectual Property Rights (IPRs), dealing with types of IPRs, with the sole exceptions of breeders’ rights (only incidentally referred to) and utility models.

In April 2002 the Conference of Parties to the CBD adopted the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of the Utilization (the Bonn Guidelines). These guidelines provide important elements for developing mechanisms for applying access and benefit sharing at national level whether in form of enabling policy, legislation administrative measures or agreements under mutually agreed terms and conditions to regulate relationship between providers, collectors, researchers and users of genetic resources (CEPA, 2004).

The IPR Legislation in Malawi comprises the Patents Act (1958); the Registered Designs Act (1958); and the Copyright Act (1989)<sup>27</sup>. The Patents Act provides for a nationally independent system of patent protection in all fields of technology with a patent term of sixteen years and possible extension. There is an acknowledgement that the existing Patents Act and other related acts need to be amended to comply with the TRIPs agreement which Malawi ratified under the WTO.

### 5.0 Recommendations

This paper has argued that access and benefit sharing of genetic resources is a complex affair. The nature of the resource involved the nature of the tenure system and the motivational dynamics, which operate create different equations, which must be considered when formulating or reviewing policy and legislation regulating access and benefit sharing. However, we have primarily been concerned with the cost and benefits for communities living amidst these genetic resources. Some of the recommendations we make are as follows:

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<sup>26</sup> See Mwakyembe, H and Kanja, G. M, (2001), Implications of the TRIPS Agreement on the Access to Cheaper Pharmaceutical drugs by Developing Countries: *Case Study of South Africa vs The Pharmaceutical Companies*, Research Paper in partial fulfilment of the award of a Post-Graduate Diploma in Intellectual Property of the WIPO WorldWide Academy and the Faculty of Law, University of Turin;

<sup>27</sup> See Science and Technology Policy for Malawi, (2002), National Research Council of Malawi;

## 5.1 Some Policy and Legislative Considerations

### 5.1.1 Value of Biodiversity

Effective regulation of access and benefit sharing will best be achieved by giving Biodiversity a focussed value for those who derive livelihood from it. This principle encapsulates the proposition stated in Section 4.2 that ‘people seek to manage the environment when the benefits of management are perceived to exceed its costs’.

### 5.1.2 Differential Inputs must result in Differential Outputs

This principle relates to the question ‘value for whom’? The answer is ‘those who have the resource and pay for its existence.’ Biological resources are distributed unevenly in any national context; equally the cost of sustaining and managing these assets is unevenly distributed. These costs include the opportunity costs of assigning land to biodiversity specifically in instances where there are protected areas rather than other options. Policy must ensure that benefit is directly related to input. Besides, both the competent authority and local community with an interest in the material need to give consent before exploitation of the biodiversity.

### 5.1.3 Correlation Between Quality of Management and the Magnitude of Benefit

There must be a positive correlation between quality of management and the magnitude of benefit. The differential input requiring differential benefit involves not only the assets and costs mentioned above, it also incorporates management costs, both quantitative and qualitative. A fundamental policy objective is to provide the motivation for good management thus policy should ensure that good management ‘pays.’

### 5.1.4 Unit of Proprietorship and Production, Management and Benefit

The unit of proprietorship should be the unit of production, management and benefit. Institutionally this is the only structure, which can efficiently combine the principles mentioned earlier. Proprietorship (which answers the question *who decides?*<sup>28</sup>) cannot be separated from production, management and benefit and is a fundamental component in a communal resource regime. The management prerogatives and responsibilities implied in proprietorship need not conflict with any larger structures of management activity. Such structures are necessary

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<sup>28</sup> The ‘right to decide’ implied in proprietorship importantly includes the determination of the distribution of revenues and benefits. There is a widespread tendency for policy to attempt to control the mode and distribution of benefits, placing an emphasis on community projects of collective benefit. This often stems from a paternalistic distrust of the ability of small-scale communities to make wise decisions on the matter.

because of the nature of wildlife resources, but should be primarily coordinative and regulatory.

### **5.1.5 Size of Unit of Proprietorship**

The unit of proprietorship should be as small as practicable, within ecological and socio-political constraints. From a social dynamics perspective scale is an important consideration; large-scale structures tend to be ineffective, increasing the potential for inefficiency, corruption and the evasion of responsibility. Conversely, a communal resource management regime is enhanced if it is small enough (in membership size) for all members to be in occasional face-to-face contact, enforce conformity to rules through peer pressure and has a long-standing collective identity. One of the possible institutions, which can be adopted, is the Village Natural Resource Management Committee (VNRMC)<sup>29</sup>.

## **5.2 The Legislative Dilemma**

This paper has argued that in Malawi there is no policy or legislation specifically for access and benefit sharing. The country may either formulate a separate policy and legislation or alternatively it considers amending existing sectoral laws on, for example wildlife, forestry, fisheries and national parks and wildlife. In addition, it very important that the role of the certifying agency under both sectors should be very clear with penalties for non compliance clearly articulated. One advantage of reforming existing natural resources laws PIC, benefit sharing and other provisions is that the country can employ existing administrative measures, policies and institutional structures.

## **5.3 Institutional Mechanisms**

Although, no legislation regarding enforcement of ABS exists, there are a number of laws related to biotechnology. These are Biosafety Act (2002), Science and Technology Act (2002). However none of these recognize the existence of the NRCM GRBC (2002) Guidelines and Procedures. These Laws should be amended.

## **5.4 Prior Informed Consent**

The Law should include communities as one of those to provide PIC. Furthermore, the Law should authorize local communities to arrest anybody who obtains collects, utilize biological resources without their consent.

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<sup>29</sup> According to the Supplement to the National Forestry Policy which deals with Community Based Forest Management dated July 2003 (the Policy Supplement), the VNRMC will represent the interests of the village or group village and act as a point of liaison in dealings with forest extension workers and other government officials.

Of course being designated enforcement officers carries certain responsibilities with it to ensure that they do not violate other people's rights. In this respect it is important that some short training be given to these communities on the rights of a suspect or accused.

Local communities should be encouraged to join court user committees, at court centres near them, so that they get acquainted on how they can use courts to enforce regulations.

## **5.5 Genetic Resource Management and Institutional Building**

This paper has revealed that communities under the right circumstances can play an effective role in regulating access and benefit sharing. The obverse is also true. The fair sharing of benefits from genetic resources can act as a powerful catalyst for community institutional development. This is particularly the case if the resources concerned have high economic potential.

## **5.6 Monitoring Mechanisms**

A number of concerns have been raised in the paper on the enforcement of compliance to the procedures and guidelines for access to genetic resources and the general regulatory regime in this respect. There is a need to develop a mechanism for monitoring use of genetic resources once approval has been granted for research or collection of samples. These will facilitate the determination of benefits to be obtained from use of genetic resources collected from this country. These monitoring mechanisms will have to be designed in such a way that public institutions that grant permits and in some cases export licenses should be following the NRCM GRBC procedures and guidelines.

## **5.7 Sensitization on Access and Benefit Sharing**

There is a need for sensitization of biodiversity issues and access and benefit sharing mechanisms among traditional authorities and traditional healers. These two can play a vital role in access and benefit sharing especially with regards to the value of genetic resources and local knowledge; they can therefore avoid biopiracy when researchers go directly to them without permits.

## **5.8 Capacity Building**

Capacity of the public institutions that grant permits and in some cases export licenses is not adequate to cope with the challenges associated with access and benefit sharing. Capacity in terms of facilities, equipment and technical skills of personnel involved in access and benefit sharing relating to biodiversity needs to be developed.

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