

ACCESS TO AND BENEFIT SHARING OF GENETIC RESOURCES IN KENYA

Submitted in partial fulfilment of the requirements of the Bachelor of Laws Degree,
Strathmore University Law School

By
Alex Gatawa Nyororo
082398

Prepared under the supervision of
Dr Isaac Rutenberg

January 2018

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Acknowledgement


I give my sincere gratitude to my supervisor Dr Isaac Rutenberg for his encouragement, guidance and support since the writing of my proposal up to the realisation of this dissertation.

I thank the members of my family particularly my father, my mother and my sisters for supporting and encouraging me.


Finally, I would like to thank the Almighty God for guiding me throughout this dissertation and for gifting me the capacity to write this dissertation and seeing me through the entire process.

Declaration

I, ALEX GATAWA NYORORO, do hereby declare that this research is my original work and that to the best of my knowledge and belief, it has not been previously, in its entirety or in part, been submitted to any other university for a degree or diploma. Other works cited or referred to are accordingly acknowledged.

Signed: 
Date: 29/05/2018
.....

This Research Proposal has been submitted for examination with my approval as University Supervisor.

Signed:  for Dr. Rutenberg
Date: 30/5/2018
.....

DR ISAAC RUTENBERG

Abstract

Access to and benefit sharing of genetic resources, which are defined as including microorganisms, plant and animal material including indigenous seeds, genetic plant varieties and traditional animal breeds that contain functional hereditary units, has been a topic of debate in international law. Previously genetic resources were regarded as a common heritage of mankind, this granted free access, collection and utilization of genetic resources belonging to local communities without the informed consent of those community.

This study examined the current legislative and regulatory globally and in Kenya and came up with recommendations which Kenya can implement to facilitate the participation of local communities in the process of access to genetic resources and to ensure that local communities benefit from exploitation of their genetic resources. The study was conducted through comparative analysis of the approaches taken by India and Philippines.

List of Abbreviations

ABS - Access to and Benefit Sharing.

CBD - Convention on Biological Diversity

EMCA - Environmental Management and Coordination Act.

FAO - Food and Agriculture Organisation

GRs - Genetic Resources.

ICCPR - International Covenant on Civil and Political Rights.

ICC - Indigenous Cultural Communities.

ICESCR - International Covenant on Economic, Social and Cultural Rights.

ICIPE - International Centre of Insect Physiology and Ecology.

ILC – International Law Committee.

ILO - International Labour Organisation

IP - Intellectual Property.

IPRs - Intellectual Property Rights.

KWS - Kenya Wildlife Service.

MAT - Mutually Agreed Terms.

NBA - National Biodiversity Authority.

NCST - National Council for Science and Technology.

NEMA - National Environmental Management Authority.

NES - National Environment Secretariat.

PIC - Prior Informed Consent.

TK – Traditional Knowledge.

UDHR - Universal Declaration of Human Rights.

UNDRIP - United Nations Declaration on the Rights of Indigenous Peoples

UNEP - United Nations Environmental Programme.

WIPO - World Intellectual Property Organisation.

WCMA - Wildlife Conservation and Management Act.

CHAPTER 1

INTRODUCTION

1.1 Background

There has recently been a growing need to protect and to promote the traditional knowledge of local communities and particularly knowledge pertaining to genetic resources and the genetic resources themselves. The Convention on Biodiversity, in its preamble, recognises the fact that many indigenous and local communities embodying a traditional lifestyle are dependent on biological resources and that the conservation of biological resources is important in meeting the food health and other needs of the world's population. And because of this it requires states to respect preserve and maintain knowledge of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.¹

This need for protection has been as a result of unauthorized patenting of invention based on genetic resources and traditional knowledge of genetic resources. The convention established three important principles; states have the sovereign right to exploit their own resources² but they shall endeavour to create conditions to facilitate access on mutually agreed terms³ and subject to prior informed consent, and there should be fair and equitable sharing of benefits of use of genetic resources with providing party.⁴

Kenya, being a party to the Convention, set out in its Constitution that the state shall protect and enhance the intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities⁵ and also the protection of genetic resources and biological diversity. The constitution also requires parliament to pass legislation recognising and protecting ownership of indigenous seeds and plant varieties, their genetic and diverse characteristics and their use by the communities of Kenya.⁶

¹ Article 8(j), Convention on Biodiversity, 29 December 1993, 1760 UNTS 79.

² Article 3, Convention on Biodiversity.

³ Article 15(4), Convention on Biodiversity.

⁴ Article 15(5), Convention on Biodiversity.

⁵ Article 69(1)(c) Constitution of Kenya (2010).

⁶ Article 11(3)(b) Constitution of Kenya (2010).

This paper examines whether Kenya, through legislation, has implemented the access to and benefit sharing (ABS) regime highlighted in the CBD and whether this regime of ABS promotes the rights of local communities in light of the recently passed Protection of Traditional Knowledge & Traditional Cultural Expression Act.

1.2 Statement of Problem

The overall research problem addressed in this study is that the Kenyan Act caters for the access to and benefit sharing of traditional knowledge and traditional cultural expressions but fails to provide for access to and benefit sharing of genetic resources, yet Article 69(1)(c) of the constitution requires the state to protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the community. Article 26(2) of the Protection of Traditional Knowledge & Traditional Cultural Expression Act states that access to associated genetic resources shall be a subject matter of relevant legislations relating to genetic resources, this provision alludes to the fact that access to genetic resources should be governed by amongst other legislation the Environmental Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing).

The subjecting of access to genetic resources to relevant legislation is inadequate in offering protection for intellectual property rights belonging to local communities as highlighted in the Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples which notes that the existing protection mechanisms are insufficient for the protection of Indigenous Peoples Intellectual and Cultural Property Rights.⁷

The Act also provides for the establishment of a repository at the Kenya Copyright Board⁸ which shall contain information relating to traditional knowledge and traditional cultural expression.⁹ The act fails to mention any information relating to genetic resources being included in the repository and this might have the effect of exploitation of genetic resources without equitable benefit sharing to the communities that own these genetic resources.

1.3 Justification of The Study

In Kenya, the National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expression recognised the fact that traditional knowledge, genetic resources and

⁷ Para 1.2, the Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples (1993).

⁸ s5(1), Protection of Traditional Knowledge and Traditional Cultural Expression Act (2016).

⁹ s4(1), Protection of Traditional Knowledge and Traditional Cultural Expression Act (2016).

traditional cultural expressions are being disseminated and exploited with little benefit flowing back to the communities that own these intellectual properties.¹⁰ The policy noted in particular that Genetic Resources and especially those not directly associated with traditional knowledge have been used for bioprospecting and the existing legal policy and framework are inadequate in addressing the issue of access and benefit sharing.¹¹

The policy also points out that genetic resources and the traditional knowledge associated with them are being appropriated and patented by multinationals.¹² Plant genetic resources are considered an important aspect in primary healthcare in Kenya and the World Health Organisation estimates that nearly 80% of the world's population relies on traditional medicine for primary healthcare¹³ and that components derived from genetic resources used in pharmaceuticals account for more than any other raw material.¹⁴

A good example of this is seen in the recent deal entered between the Kenyan Government and a top industrial enzyme maker Novozymes. This deal seeks to provide compensation to both the state and the indigenous communities for the exploitation of the microbial diversity which has been largely unexploited.¹⁵ This deal was necessitated by the fact that Kenya had been a victim of bio piracy which means that, corporations were generating products from the genetic resources that belong to the communities in Kenya without the consent of the communities to access the resources. This is clearly seen in the lawsuit filed by the Kenya Wildlife Service against a company known as Genencor. The suit regarded the use of microbes accessed from Kenya to make an enzyme that fades jeans. The suit was filed on the basis that Genencor had acquired the microbes without the consent of the people and the government and that the traditional community from which the microbe was extracted did not enjoy any benefit.

Because of the importance attached to genetic resources this dissertation examines the regime of access to and benefit sharing of genetic resources in place and whether they adequately

¹⁰ Task Force for the Development of Laws for the Protection of Traditional Knowledge, Genetic Resources, *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expression*, 2009, 4.

¹¹ Task Force for the Development of Laws for the Protection of Traditional Knowledge, Genetic Resources, *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expression*, 2009,5.

¹² Task Force for the Development of Laws for the Protection of Traditional Knowledge, Genetic Resources, *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expression*, 2009,8.

¹³ Task Force for the Development of Laws for the Protection of Traditional Knowledge, Genetic Resources, *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expression*, 2009,11.

¹⁴ Task Force for the Development of Laws for the Protection of Traditional Knowledge, Genetic Resources, *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expression*, 2009,11ss.

¹⁵ 'Wallis D : Kenya unveils Novozymes deal, warns bio-pirates' <http://www.reuters.com/article/environment-kenya-biotech-idUSL2868123520070628> accessed on 3/02/17.

protect local communities' rights to share in the benefits derived from use of their genetic resources.

1.4 Statement of Objective(s)

The specific objectives of this study are to:

- i. Investigate the Access to and Benefit Sharing of traditional knowledge and genetic resources in Kenya.
- ii. To investigate whether the Environmental Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations adequately caters for the access to and benefit sharing rights of local communities.
- iii. To investigate whether the Protection of Traditional Knowledge & Traditional Cultural Expression Act supplements access to and benefit sharing of genetic resources in Kenya.

1.5 Research Question (s)

The dissertation will consider the following research Questions;

- i) What implications does section 26 of the Protection of Traditional Knowledge and Cultural Expressions Act have on the right to access and benefit sharing of genetic resources by local communities?
- ii) Have Local Communities benefited from the access to and benefit sharing of genetic resources in Kenya?
- iii) Why does bio-piracy of genetic resources still occur despite the existence of the Environmental Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations?

1.6 Hypothesis

The following are the hypotheses of the study:

- i. That the regulations do not cater for the involvement of local communities in determining access to and benefit sharing of genetic resources.
- ii. That the principles of access to and benefit sharing and prior informed consent in the regulations do not factor article 8(j) of the Convention on Biodiversity.

1.7 Limitations

The biggest limitation facing this study is that the Act was recently passed and therefore there is not a lot of research done on the implications of the Act on Genetic resources.

1.8 Chapter Breakdown

Chapter two will discuss the philosophical theory that justifies access to and benefit sharing of genetic resources by local communities.

Chapter three will detail the history of local community rights recognition and seek to illustrate how these rights formed the basis for the recognition of the efforts local communities have put in order to maintain genetic resources and why as a result of this effort they not only deserve to benefit from the utilisation of these resources, but their permission must be sought after by those seeking to exploit these genetic resources. The chapter will also examine the international legislations that establish the concept of access to and benefit sharing of genetic resources as well as highlighting the access to and benefit sharing framework in Kenya

Chapter four will begin by identifying the challenges that the legislation on access to and benefit sharing of genetic resources in Kenya has faced as well as carry out a comparative study between Kenya and India and Philippines.

Chapter five will provide a conclusive summary of the previous chapters as well seek to provide certain recommendations that should be considered in the reform of access to and benefit sharing of genetic resources.

CHAPTER 2

THEORETICAL FRAMEWORK

This dissertation is based on the intellectual property theory of Distributive Justice. Traditionally, IP rights were justified by three theories; law and economics, personality theory and Locke's labour approach.¹⁶ Under law and economics theory, focus is on promoting the production of scientific and cultural goods by use of laws designed to promote economic efficiency. This theory aims at maximizing the social welfare of the public from an economic perspective.¹⁷ The personality theory justifies private property on the basis that property enables one to develop and flourish their personhood, and therefore IP rights and especially the right to control should be provided because the creators express their personality through their inventions and so they should enjoy certain rights including the right to control the use of their property. The Lockean labour theory advocates for granting of property rights to individuals who have put an effort into producing their work, therefore IP rights should be granted to individual creators and inventors because they have invested in creating and developing their work.¹⁸

The above theories would not adequately justify the need for granting communities IP rights as they apply mainly to individuals. The theory of Distributive Justice would be better placed in justifying the grant of IP rights to communities. Distributive Justice is concerned with the allocation and reallocation of social resources, for example capital, as well as powers and rights among individuals or groups in society.¹⁹ It attempts to answer the question of how society should allocate goods among individuals with competing interest in a just and fair manner.²⁰

One of the leading proponents of this theory is Professor John Rawls, his theory of justice addresses the principles of just and appropriate distribution rules which should serve as the basis for the allocation benefits according to Rawls justice should 'define the appropriate distribution of the benefits and burdens of social co-operation,²¹ it seeks to establish the

¹⁶ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches *Lewis & Clark Law Review*, 21(1), 2017,7.

¹⁷ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches 7.

¹⁸ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches 10.

¹⁹ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches 10.

²⁰ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests 95(3) *Review of Agricultural and Environmental Studies*, 2014, 349.

²¹ Rawls J, A Theory of Justice *Harvard University Press*, 1971, 4.

principles of justice to be used to serve as the basis of all social arrangements among individuals as well as between Government and Individuals.²² Rawls states that the principles of justice, must be the principles that free and rational persons concerned to further their own interests would accept in an initial position of equality as defining the fundamental terms of their association.²³

Rawls in his development of a theory of justice sets out two principles of justice, the first principle is that “each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all” and the second principle is that “social and economic inequalities are to be arranged so that they are both to the greatest benefit of the least advantage and attached to offices and positions open to all under conditions of fair equality of opportunity.” The first principle requires equal and fair distribution of rights to all individuals and the second principle provides that only inequalities which benefit the whole of society should be allowed.

Yanisky- Radin argues that although Rawls’s Theory of Justice comes under heavy criticisms it could be used as a moral foundation of distributive justice applied to IP.²⁴ He argues that through the use of Rawls’s principles of justice an equitable and fair system of IP could be formulated but only if these rules reflect the value of mutual equality and are not designed to serve the interests of the stronger party.²⁵ He also argues that IP laws have reflected an aspect of distributive justice from the very beginning but, the law and economics theory interpretation of IP rights resulted in the current view of IP rights as mainly individualistic.²⁶

However, Rawls theory of justice has faced criticism from various authors for example Richard Gold who states that Rawls theory requires an examination of whether indigenous people have similar liberties and freedoms as non-indigenous people,²⁷ and he states that such an approach would reveal inequalities because focus is on equal distribution of goods which is inefficient

²² Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches, 13.

²³ Rawls J, A Theory of Justice, 11.

²⁴ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches, 13.

²⁵ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches, 16.

²⁶ Yanisky-Ravid S, The Hidden though Flourishing Justification of Intellectual Property Laws: Distributive Justice; National Versus International Approaches, 18.

²⁷ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 352.

in achieving justice for indigenous people.²⁸ Gold further states that Rawls theory does not address certain inequalities which may impact the collective identity of indigenous people.²⁹

According to Gold, the distributive justice theory that best captures the inequalities suffered by indigenous people is the theory of equality of capabilities a theory propounded by Amartya Sen and Martha Nussbaum.³⁰ Equality of Capabilities theory focuses on the freedom to promote objectives we value, according to this theory justice of a certain situation depends on whether people have the freedom to choose the life they have reason to value.³¹ Amartya Sen argues that the distribution of freedoms is more fundamental than distribution of goods because substantial freedom enjoyed by people will not necessarily be equalized by an equal distribution of goods.³²

According to Gold the Equality of Capabilities best addresses the inequalities indigenous people face because it focuses on promoting the overall welfare of the indigenous people and this allows room for the importance of the collective and it does not prescribe what goods are to be valued.³³ Gold states that the greatest injustice that indigenous communities face is the deprivation of the freedom of self-determination,³⁴ however he is of the opinion that the consequence of distributive justice is that it will re-empower indigenous communities and increase their control over their own culture which includes traditional knowledge and genetic resources.³⁵

²⁸ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 352.

²⁹ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 352.

³⁰ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 352.

³¹ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 353.

³² Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 353.

³³ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 353.

³⁴ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 354.

³⁵ Gold R & Tania B, Genetic resources and Traditional Knowledge: Case Studies and Conflicting Interests, 354.

CHAPTER 3

LEGISLATIVE, REGULATORY AND INSTITUTIONAL FRAMEWORK FOR ACCESS TO AND BENEFIT SHARING OF GENETIC RESOURCES

Access to and benefit sharing of genetic resources has garnered international recognition in recent years, this chapter will highlight the various international instruments that have recognised the rights of local and indigenous communities to not only benefit and share from the exploitation of their genetic resources but also to grant their permission for these genetic resources to be shared. The first section of this chapter highlights the development of indigenous and local communities' rights that resulted in international recognition and protection of indigenous and local communities' intellectual property rights which resulted in the formulation of access to and benefit sharing regulations. The second part of this chapter shall examine and highlight the major international instruments that provide guidelines on access to and benefit sharing of genetic resources and the final part of this chapter shall highlight the access to and benefit sharing regime in Kenya in two periods; pre-2010 Constitution and post 2010 Constitution.

3.1 HISTORY OF LOCAL AND INDIGENOUS COMMUNITY RIGHTS

The World Intellectual Property Organisation(WIPO) defines intellectual property as creations of the mind which include inventions, literary and artistic works, and symbols, names and images used in commerce.³⁶ The creators, or owners of such property are afforded intellectual property rights which allow them to benefit from their own work or investment in a creation.³⁷ These rights are outlined in the Universal Declaration of Human Rights(UDHR), which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions.³⁸ This understanding of intellectual property and intellectual property rights is based on the western idea that innovation is the product of individual genius and therefore innovators are deemed to be deserving of economic rights granted by the state.³⁹ The above understanding of intellectual property is

³⁶ WIPO, 'What is Intellectual Property?' http://www.wipo.int/edocs/pubdocs/en/intproperty/450/wipo_pub_450.pdf accessed on 16th January 2018.

³⁷ WIPO, 'What is Intellectual Property?' http://www.wipo.int/edocs/pubdocs/en/intproperty/450/wipo_pub_450.pdf accessed on 16th January 2018.

³⁸ Article 27, Universal Declaration of Human Rights, 1948.

³⁹ Posey D and Dutfield G, *Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities*, International Development Research Centre, 1993, 76.

individual centric and it fails to consider the recent forms of IPR granted to indigenous communities.

In order to understand the recent push for the recognition and protection of indigenous community rights in international conventions such as the Convention on Biodiversity(CBD) it is important to highlight the recognition of community rights. WIPO in defining local or indigenous communities' notes that there is no universal definition of local communities,⁴⁰ it however defines local communities as the human population in a distinct ecological area who depend directly on its biodiversity and ecosystem goods and services for all or part of their livelihood and who have developed or acquired traditional knowledge as a result of this dependence, including farmers, pastoralists, forest dwellers and others.⁴¹

Despite the lack of an agreed definition of indigenous or local community certain international conventions recognised the fact that indigenous communities have certain rights including the right to self-determination and development by indigenous communities which formed the basis upon which the recognition of indigenous intellectual property rights was advocated for by developing countries. The right to self-determination is provided for in both the International Covenant on Economic, Social and Cultural Rights(ICESCR) and the International Covenant on Civil and Political Rights(ICCPR). Both the ICESCR and the ICCPR grants all peoples the right of self-determination by virtue of which they freely determine their political status and freely pursue their economic, social and cultural development.⁴² The above article must be construed as containing a positive right of a collective nature i.e. that the right holders are communities and not individuals.

The right to development encompasses both the right to access to resources on their territory and the right to seek development on their own terms.⁴³ This right is enshrined in the International Labour Organisation(ILO) Indigenous and Tribal Peoples Convention which states that:

“The peoples concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own

⁴⁰ <http://www.wipo.int/tk/en/resources/glossary.html#26> accessed on 17/09/2017.

⁴¹ <http://www.wipo.int/tk/en/resources/glossary.html#26> accessed on 17/09/2017.

⁴² Article 1 International Covenant on Economic, Social and Cultural Rights & Article 1 International Covenant on Civil and Political Rights.

⁴³ Posey D and Dutfield G, Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities, 1993, 55.

economic, social and cultural development. In addition, they shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly."⁴⁴

The recognition that local communities are entitled without discrimination to all human rights recognized in international law, and they possess collective rights which are indispensable for their existence, well-being and integral development as peoples was later acknowledged by the United Nations Declaration on the Rights of Indigenous Peoples.⁴⁵ The Declaration also recognised the fact that:

*"Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions."*⁴⁶

However, despite the recognition of indigenous rights in international law, intellectual property rights systems did not recognise traditional forms of intellectual property. One reason for this was the idea that existing IPR systems would offer adequate protection to traditional forms of intellectual property. This idea was disputed by several authors including David Posey who was of the view that the existing regimes cannot adequately protect the knowledge and resources of indigenous communities because IPR laws are purely economic whereas the interests of indigenous communities are only partly economic and linked to self-determination.⁴⁷ Greg Younging was of the opinion that IPR systems are inadequate in providing sufficient protection to traditional forms of intellectual property because of three reasons: 1) that expressions of TK often cannot qualify for protection because they are too old and are, therefore, supposedly in the Public Domain; 2) that the "author" of the material is often not identifiable and there is thus no "rights holder" in the usual sense of the term; and, 3) that

⁴⁴ Article 7(1), Indigenous and Tribal Peoples Convention, 1989.

⁴⁵ Preamble, United Nations Declaration on the Rights of Indigenous Peoples, 2007.

⁴⁶ Article 31, United Nations Declaration on the Rights of Indigenous Peoples, 2007.

⁴⁷ Posey D and Dutfield G, *Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities*, 1993, 92.

TK is owned “collectively” by Indigenous groups for cultural claims and not by individuals or corporations for economic claims.⁴⁸

The idea that traditional forms of intellectual property were considered to be part of the public domain under existing IPR systems was a fundamental reason as to why developing countries advocated for the recognition and protection of genetic resources during CBD negotiations. The public domain, in intellectual property (IP) law, is generally said to consist of intangible materials that are not subject to exclusive IP rights and which are, therefore, freely available to be used or exploited by any person.⁴⁹ According to Greg Younging traditional forms of intellectual property were treated as belonging in the public domain because indigenous peoples did not use IPRs to protect their knowledge.

In support of the fact that traditional forms of intellectual property was viewed as public domain the Food and Agriculture Organisation’s (FAO) 22nd conference adopted a resolution which stated that plant genetic resources are a heritage of mankind to be preserved, and to be freely available for use, for the benefit of present and future generations.⁵⁰ As a result of this understanding of genetic resources as a common heritage of mankind, entrepreneurs had freely accessed, collected and utilized genetic resources of indigenous communities for various purposes such as commercial activities including pharmaceuticals without the informed consent of the community an aspect known as bio-piracy.⁵¹ This resulted in large rewards accrued by industries benefiting from genetic resources made at the expense of local communities, which had played a vital role in the preservation of the traditional knowledge and genetic diversity, who remained unrewarded due to the lack of legal rights over these resources.⁵²

With the strengthening of IPRs in the 1980s there were concerns that traditional knowledge and genetic resources were being appropriated from developing countries at their detriment.⁵³ Because of this fear, developing countries were unhappy with the common heritage approach to TK and GR and so they sought out international protection of TK and GR by arguing that

⁴⁸ Young-Ing G, Intellectual property rights, legislated protection, sui generis models and ethical access in the transformation of indigenous traditional knowledge, PhD Thesis, The University of British Columbia October, 2006.

⁴⁹ Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore WIPO, 2010, GRTKF/IC/17/INF/8.2.

⁵⁰ Food and Agriculture Organisation, *International undertaking on Plant Genetic Resources*, Resolution 8/83, C 83/REP/8, 22 November (1983)

⁵¹ The Institute of Economic Affairs, Biodiversity Traditional Knowledge and Intellectual Property: The framework for sustainable economic development, 5.

⁵² West S, Institutionalized Exclusion: The political Economy of Benefit Sharing and Intellectual Property 8(1) *Law Environment and Development Journal*, 2012, 25.

⁵³ West S, Institutionalized Exclusion: The political Economy of Benefit Sharing and Intellectual Property, 30.

they should be treated as part of the property of the sovereign state in order to protect TK and GR from the rapacity of the open market.⁵⁴

3.2 GLOBAL AND REGIONAL LEGISLATIVE AND INSTITUTIONAL FRAMEWORK FOR ACCESS TO AND BENEFIT SHARING OF GENETIC RESOURCES

3.2.1 Convention on Biodiversity

In order to therefore cater for the protection of TK and GR, the CBD was enacted at the Rio Earth Summit in 1992. The CBD marked the first time in international law that indigenous and local communities embodying traditional lifestyles were expressly recognised for their contribution to biodiversity conservation.⁵⁵ In its preamble the CBD recognised the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources, and the desirability of sharing equitably benefits arising from the use of traditional knowledge, innovations and practices relevant to the conservation of biological diversity and the sustainable use of its components.⁵⁶ The Convention defines biodiversity as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems,⁵⁷ and it defines genetic resources as genetic material of actual or potential value with genetic material comprising of any material of plant, animal, microbial or other origin containing functional units of heredity.⁵⁸

The CBD outlines its three main objectives as: 1) the conservation of biological diversity, 2) the sustainable use of its components and 3) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.⁵⁹ According to Elisa Morgera, there are two approaches to benefit sharing under the CBD; an interstate approach and a state to community approach. According to Elisa Morgera, the principle of interstate benefit sharing is tied to the principle of national sovereignty over genetic resources as enshrined in the CBD.⁶⁰ As stated earlier genetic resources were regarded as being in the public domain, however the CBD

⁵⁴ West S, Institutionalized Exclusion: The political Economy of Benefit Sharing and Intellectual Property, 30.

⁵⁵ Posey D and Dutfield G, *Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities*, 104.

⁵⁶ Preamble, Convention on Biodiversity.

⁵⁷ Article 2, Convention on Bio-diversity.

⁵⁸ Article 2, Convention on Bio-diversity.

⁵⁹ Article 1, Convention on Bio-diversity.

⁶⁰ Morgera E, *The Evolution of Benefit Sharing: Linking Biodiversity and Community Livelihoods, 19/2 Review of European Community and International Environmental Law*, 2010, 152.

addressed this issue of by granting states the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.⁶¹ This provision introduced the concept of national sovereignty which replaced common heritage of mankind as the overarching legal principle guiding treatment of traditional knowledge and genetic resources.⁶²

One of the key principles the CBD introduces with regard to genetic resources is that in order to facilitate access to genetic resources, access shall be subject to prior informed consent (PIC) of the Contracting Party providing such resources,⁶³ with the access agreement being arrived at on mutually agreed terms (MAT).⁶⁴ By subjecting access to genetic resources to the prior informed consent of the state party providing those resources, the principle of national sovereignty provides a clear legal basis for interstate benefit sharing as enshrined in the third objective of the CBD.⁶⁵

The third objective of the CBD, benefit sharing from the use of genetic resources, has been firmly linked with access to genetic resources, however according to Elisa the language of the CBD places greater emphasis on the concept of benefit sharing with the concept of access being a subordinate concept.⁶⁶ She gives the example of article 15(7) which calls upon parties to take legislative, administrative or policy measures aiming to share the results of research and development, and the benefits arising from the commercial and other utilization of genetic resources with the provider country, underscoring that such sharing of benefits must be based on MAT.⁶⁷ Notably, this requirement for national benefit-sharing measures is not linked to access. However, it is important to remember that the CBD still recognises access to genetic resources by requiring each contracting Party to endeavour in the creation of renditions that facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention.⁶⁸

The CBD also envisions a qualitatively different concept of benefit sharing which Elisa refers to as state to community benefit sharing, this concept of state to community benefit sharing is

⁶¹ Article 3, Convention on Bio-diversity.

⁶² West S, Institutionalized Exclusion: The political Economy of Benefit Sharing and Intellectual Property, 26.

⁶³ Article 15(5), Convention on Bio-diversity.

⁶⁴ Article 15(4), Convention on Bio-diversity.

⁶⁵ Morgera E, The Evolution of Benefit Sharing: Linking Biodiversity and Community Livelihoods, 152.

⁶⁶ Morgera E, The Evolution of Benefit Sharing: Linking Biodiversity and Community Livelihoods, 154.

⁶⁷ Article 15(7), Convention on Bio-diversity.

⁶⁸ Article 15(2), Convention on Bio-diversity.

seen in article 8(j) which states that “*Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices*”⁶⁹ This provision envisages a benefit sharing mechanism through which a relationship between the state and local communities is established based on national law.⁷⁰

The CBD Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity operational guidelines to Principle 4 recommend that state party to the CBD adopt policies and regulations that ensure that indigenous and local communities and local stakeholders who are engaged in the management of a resource for sustainable use receive an equitable share of any benefits derived from that use, and promoting economic incentives that will guarantee additional benefits to those involved in the management of any biodiversity components, such as job opportunities for local peoples, or equal distribution of returns amongst locals and outside investors, and support for co-management further provide an interesting exemplification of benefit sharing as an incentive for communities’ participation.⁷¹

Both provisions highlighted above indicate a recognition of the contribution of indigenous and local communities’ traditional knowledge, innovation and practices to the conservation of biodiversity and it encourages the flow of benefits from the state to the community as a result of the effort local communities have put in place to ensure the conservation and sustainable use of genetic resources in accordance with the first and second objectives of the CBD.⁷²

Over and above recognizing the fact that local communities should benefit from the resources that flow from the exploitation of genetic resources the concept of state to community benefit sharing also entails the participation of local communities in the formulation of benefit sharing mechanisms. The CBD Working Group on Article 8(j), in its programme of work to implement the commitments of article 8 (j) of the Convention and to enhance the role and involvement of indigenous and local communities in the achievement of the objectives of the Convention, advises parties to the CBD “*to develop appropriate mechanisms, guidelines, legislation or*

⁶⁹ Article 8(j), Convention on Bio-diversity.

⁷⁰ Morgera E, The Evolution of Benefit Sharing: Linking Biodiversity and Community Livelihoods, 151.

⁷¹ Secretariat of the Convention on Biological Diversity, Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity, 2004, principle 4.

⁷² Morgera E, The Evolution of Benefit Sharing: Linking Biodiversity and Community Livelihoods, 159.

other initiatives to foster and promote the effective participation of indigenous and local communities in decision-making, policy planning and development and implementation of the conservation and sustainable use of biological diversity at international, regional, sub-regional, national and local levels, including access and benefit-sharing and the designation and management of protected areas, taking into account the ecosystem approach"⁷³ According to Elisa Morgera, this provision of the programme of work specifies the need for a bottom-up approach to state to community benefit sharing by calling for the active participation of local communities in the development of benefit sharing mechanisms.⁷⁴

3.2.2 Bonn Guidelines

The Bonn Guidelines were adopted in order to assist governments in establishing legislative, administrative or policy measures on ABS. However, they provide limited guidance with regard to implementation of the benefit-sharing requirements as set out in CBD, Article 15(7). The Guidelines provide that: Contracting Parties with users of genetic resources under their jurisdiction should take appropriate legal, administrative or policy measures, as appropriate, to support compliance with prior informed consent of the Contracting Party providing such resources and mutually agreed terms on which access was granted.⁷⁵ The Guidelines further provide a list of measures that countries with users in their jurisdiction could consider, including mechanisms to provide information to potential users on their obligations;⁷⁶ measures to encourage disclosure of the country of origin of genetic resources and traditional knowledge in applications for intellectual property rights;⁷⁷ measures to prevent the use of genetic resources obtained without the PIC of the provider party;⁷⁸ cooperation between parties to address alleged infringements of ABS agreements;⁷⁹ voluntary certification schemes;⁸⁰ measures discouraging unfair trade practices; and other measures to encourage users to comply with the Guidelines' provision on users' obligations for implementation of MAT.⁸¹ This

⁷³ UNEP, Decisions Adopted by The Conference of the Parties to The Convention On Biological Diversity at Its Fifth Meeting, /CBD/COP/5/23 26 May 2000.

⁷⁴ Morgera E, *The Evolution of Benefit Sharing: Linking Biodiversity and Community Livelihoods*, 161.

⁷⁵ Article 16(d), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, 2002.

⁷⁶ Article 16(d)(i), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

⁷⁷ Article 16(d)(ii), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

⁷⁸ Article 16(d)(iii), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

⁷⁹ Article 16(d)(iv), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

⁸⁰ Article 16(d)(vi), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

⁸¹ Article 16(d)(vii), Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

provision states, *inter alia*, that users should ‘as much as possible endeavour to carry out their use of the genetic resources in, and with the participation of, the providing country’ and should also ensure the fair and equitable sharing of benefits arising from the commercialization or other use of genetic resources, including technology transfer to providing countries, in conformity with MAT. The Guidelines further provide some guidance with regard to the types, timing and distribution of benefits, and mechanisms for benefit sharing, in order to assist parties and stakeholders in the development of MAT to ensure fair and equitable sharing of benefits, as well as a list of examples of monetary and non-monetary benefits.⁸²

3.2.3 Nagoya Protocol

The Nagoya Protocol is a legally binding, supplementary agreement to the Convention. It aims to further develop the legal ABS framework provided by the CBD.⁸³ It establishes a framework for regulating how users of genetic resources and/or traditional knowledge associated with genetic resources (for example, researchers and commercial companies) may obtain access to such resources and knowledge.⁸⁴ It provides for general obligations on sharing the benefits arising from the utilization of such resources and knowledge in addition to obliging Parties to ensure that users under their jurisdiction respect the domestic ABS legislation and regulatory requirements of the Parties where the resources or knowledge have been acquired.⁸⁵

The issue of access to genetic resources and/or traditional knowledge associated with genetic resources forms a core part of the ABS concept.⁸⁶ It is addressed in different parts of the Nagoya Protocol. The protocol reiterates the sovereign rights of States over their natural resources, it clarifies once more that access to genetic resources is subject to PIC granted by the provider country, unless otherwise determined.⁸⁷ The protocol states that States are required to take measures, in accordance with domestic law and as appropriate, to ensure that PIC or the approval and involvement of Indigenous and Local Communities is obtained.⁸⁸

⁸² Article 46, Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.

⁸³ Greiber T, Moreno S, Åhrén M, Carrasco J, Chege E, Medaglia J, Welch M, Ali N and Williams C, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing, International Union for Conservation of Nature and Natural Resources, 2012, 25.

⁸⁴ Greiber T, Moreno S, Åhrén M, Carrasco J, Chege E, Medaglia J, Welch M, Ali N and Williams C, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing, 25.

⁸⁵ Greiber T, Moreno S, Åhrén M, Carrasco J, Chege E, Medaglia J, Welch M, Ali N and Williams C, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing, 25.

⁸⁶ Greiber T, Moreno S, Åhrén M, Carrasco J, Chege E, Medaglia J, Welch M, Ali N and Williams C, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing, 26.

⁸⁷ Article 6(1), Nagoya Protocol On Access to Genetic Resources and The Fair and Equitable Sharing of Benefits Arising from Their Utilization to The Convention on Biological Diversity, 12 October 2014, UNEP/CBD/COP/DEC/X/1.

⁸⁸ Article 6(2) Nagoya Protocol On Access to Genetic Resources and The Fair and Equitable Sharing of Benefits Arising from Their Utilization to The Convention On Biological Diversity.

The protocol also requires States to take measures, in accordance with their domestic law and as appropriate, aiming to ensure that such traditional knowledge held by Indigenous and Local Communities is accessed either with their PIC or with their approval and involvement.⁸⁹ Furthermore, Article 7 clarifies that in such cases MAT have to be established with the ILCs. Article 7 aims at contributing to the implementation of Article 8(j) of the CBD.⁹⁰

In addition to dealing with matters of access the Nagoya Protocol also provides for fair and equitable sharing of resources. The protocol states that “*in accordance with Article 15, paragraphs 3 and 7 of the Convention, benefits arising from the utilization of genetic resources as well as subsequent applications and commercialization shall be shared in a fair and equitable way with the Party providing such resources that is the country of origin of such resources or a Party that has acquired the genetic resources in accordance with the Convention. Such sharing shall be upon mutually agreed terms.*”⁹¹ The protocol also requires each Party to take legislative, administrative or policy measures, with the aim of ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.⁹²

3.2.3 OAU Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources

The OAU African Model Legislation aims at conservation, evaluation and sustainable use of biological resources, including agricultural genetic resources, and knowledge and technologies so as to maintain and improve their diversity as a means of sustaining the life support systems.⁹³ The model legislation puts forth specific obligations covering recognition of the rights of local communities and breeders, regulation of access to biological resources and community knowledge and technologies, promotion of benefit sharing mechanisms, and various others

⁸⁹ Article 7 Nagoya Protocol On Access to Genetic Resources and The Fair and Equitable Sharing of Benefits Arising from Their Utilization to The Convention On Biological Diversity.

⁹⁰ Greiber T, Moreno S, Åhrén M, Carrasco J, Chege E, Medaglia J, Welch M, Ali N and Williams C, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing 27.

⁹¹ Article 5(1) Nagoya Protocol On Access to Genetic Resources and The Fair and Equitable Sharing of Benefits Arising from Their Utilization to The Convention On Biological Diversity.

⁹² Article 5(2) Nagoya Protocol On Access to Genetic Resources and The Fair and Equitable Sharing of Benefits Arising from Their Utilization to The Convention On Biological Diversity.

⁹³ Part I, OAU Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (2000).

relating to participation, community rights, capacity-building, conservation and sustainable use of plant genetic resources, agricultural sustainability, and food security.

The model legislation requires any access to any biological resources and knowledge or technologies of local communities in any part of the country to be subject to an application for the necessary prior informed consent and written permit,⁹⁴ the written prior informed consent required is that of the National Competent Authority as well as that of the concerned local communities, ensuring that women are also involved in decision making.⁹⁵ The legislation also provides for benefit sharing by entitling the State and the community or communities to a share of the earning derived from when any biological resource and/or knowledge collected generates, directly or indirectly, a product used in a production process.⁹⁶

3.3 LEGISLATIVE AND INSTITUTIONAL FRAMEWORK OF ACCESS TO AND BENEFIT SHARING IN KENYA

3.3.1 Pre-2010 Constitution

Kenya being a signatory of the CBD had to enact legislation which catered for the ABS of genetic resources, Evanson Chege in his article notes that the Environmental Management and Coordination Act(EMCA) was enacted in order to adhere to the requirement of the CBD. Evanson in examining ABS in Kenya examines the legislation in place before entry into force of the EMCA in 1999 and the period after entry into force of the EMCA.

He notes that historically, the biological diversity policy of Kenya was coordinated by the National Environment Secretariat(NES),⁹⁷ however he states that the NES was never provided with statutory legal status and therefore it lacked any influence on the activities various lead agencies such as the Kenya Wildlife Service(KWS).⁹⁸ As a result the interest of the major lead agencies influenced the shape of the existing legislation on biological diversity and as Evanson notes biological diversity was never regulated in a single Act.⁹⁹ The consequence of not enacting a single legislation to cater for the regulation of biodiversity is that there exists fragmented legislation that governs ABS. He notes that the two main legislation, in the period

⁹⁴ Article 3, OAU Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (2000).

⁹⁵ Article 5, OAU Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (2000).

⁹⁶ Article 12, OAU Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (2000).

⁹⁷ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya 3(3) *Revista Internacional de Direito e Cidadania*, 2009, 77.

⁹⁸ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 77.

⁹⁹ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 77.

before 1999, governing genetic resources were the Wildlife Conservation and Management Act(WCMA) and the Forest Act.¹⁰⁰

3.3.1.1 Wildlife Conservation and Management Act

The Wildlife Act provides the legal framework for the protection, conservation and management of wildlife in Kenya. It permits the Minister to declare any area of land to be a National Park after consultation with the competent authority. The Act established the Kenya Wildlife Service and mandated it, amongst other things, with the formulation of policies regarding the conservation, management and utilization of all types of flora and fauna.¹⁰¹ The Director of the KWS is responsible for the management of the parks and in this capacity can reserve portions of the land as breeding places or let sites for accommodation purposes.¹⁰²

Evanson notes that the WCMA in section 13 and 16 forbids a variety of activities against both flora and fauna without its authorisation and it empowered the Minister of Tourism and Wildlife to make any entry regulations as well as establishing any fees to be paid upon entry.¹⁰³ This requirement restricted access to and exploitation of wildlife resources as it required anyone seeking access to such resources to seek a permit from the minister.¹⁰⁴ Evanson observes that although wildlife resources are a national heritage held in trust for the benefit of the public the WCMA did not possess any provisions on sharing of benefits arising from the access and utilisation of wildlife resources,¹⁰⁵ and that the Act was also silent on the participation of local people in determining access to wildlife and sharing of benefits arising from the utilisation of these resources.¹⁰⁶

According to Evanson, Kenya's shortcomings of adequate regulation of ABS issues pre 1999 were based on a number of issues. The first issue that Evanson notes is that during that time period the Constitution of Kenya did not cater for ABS and therefore there was a lack of a vital prerequisite to guide the regulation of ABS.¹⁰⁷ The second issue was that there was a weak and ineffective system of coordination and collaboration between the various lead agencies.¹⁰⁸ The third and main issue was that existing legislation, policies and implementation were highly

¹⁰⁰ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 77.

¹⁰¹ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 78.

¹⁰² Section 9, Wildlife (Coordination and Management) Act, 1989.

¹⁰³ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 78.

¹⁰⁴ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 78.

¹⁰⁵ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 78.

¹⁰⁶ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 78.

¹⁰⁷ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 79.

¹⁰⁸ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 79.

fragmented based on the interests of the major lead agencies and this resulted in an overlap and conflict of mandates and activities.¹⁰⁹

3.3.1.2 Environmental Management and Coordination Act(EMCA)

After 1999, all issues concerning the conservation of biological diversity and access to genetic resources were brought under the general administration of the Environmental Management and Coordination Act.¹¹⁰ According to Anne Angwenyi, the EMCA is Kenya's framework legislation coordinating all environmental management activities in the country and because of this it constitutes the primary implementing legislation for the CBD.¹¹¹ The EMCA has certain provision that have either direct or indirect potential impacts on the issue of access to GRs.

The EMCA elaborates the issue on GRs more explicitly through Section 53 which is the main provision that deals with access of genetic resources in Kenya. It provides that "*the Authority shall, in consultation with the relevant lead agencies, issue guidelines and prescribe measures for the sustainable management and utilization of genetic resources of Kenya for the benefit of the people of Kenya.*"¹¹² The Act states that any guidelines issued, or measures prescribed, shall specify, "*appropriate arrangements for access to GRs of Kenya, including the issue of licenses and fees to be paid for that access, measures for regulating the import or export of germplasm, the sharing of benefits derived from GRs of Kenya and any other matter that the Authority considers necessary for the better management of the GRs of Kenya.*"¹¹³ According to Evanson, section 53 clearly states that GR shall be managed and utilized sustainably for the benefit of the people of Kenya he however notes that appropriate measures must integrate the interests of all stakeholders in a balance of reality.

Pursuant to the requirements of section 53, National Environmental Management Authority(NEMA) has issued the relevant regulations, namely the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations which are the main regulations that govern access to and benefit sharing of genetic resources in Kenya.

¹⁰⁹ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 80.

¹¹⁰ Chege E, Sovereignty Over Genetic Resources: Right to Regulate Access in a Balance. The Case of Kenya, 81.

¹¹¹ Angwenyi A, 'The Law-Making Process of Access and Benefit-Sharing Regulations -The Case of Kenya', in Chege E & Winter G (eds) *Genetic Resources, Traditional Knowledge, and the law: Solutions for Access and Benefit Sharing*, Earthscan, 2009, 177.

¹¹² Section 53 (1), Environmental Management and Coordination Act 1992.

¹¹³ Section 53(2), Environmental Management and Coordination Act, 1992.

3.3.1.3 Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations 2006

According to Anne Angwenyi, The Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations presents the most comprehensive attempt by the government to date to put in place a regulatory framework for ABS.¹¹⁴ The Regulations do not specifically define GRs, which are defined in the parent Act, the EMCA, as any genetic material of actual or potential values.¹¹⁵ Part III of the Regulations lays out the institutional framework for the management of GRs. It designates NEMA as the competent authority for all matters relating to access to GRs.¹¹⁶

The Regulations define access as the obtaining, possessing and using genetic resources conserved, whether derived products and, where applicable, intangible components, for purposes of research, bio-prospecting, conservation, industrial application or commercial use,¹¹⁷ it also defines benefit sharing as the sharing of benefits that accrue from the utilization of genetic resources.¹¹⁸ The Regulations require any person intending to access genetic resources to apply for an access permit from NEMA, the application must be accompanied by evidence of prior informed consent from interested persons and relevant lead agencies.¹¹⁹ Lead agency is defined as any government ministry, department, parastatal, state corporation or local authority in which any law vests functions of control or management or any element of environment or natural resources.¹²⁰

Once the application is received by NEMA, a gazette notice is circulated for the purpose of getting comments from any interested person within a period of 21 days.¹²¹ The Regulations also grant NEMA the power to review the application, on receipt of representations or objections to the proposed access permit from the public, and if satisfied that the activity to be

¹¹⁴ Angwenyi A, The Law-Making Process of Access and Benefit-Sharing Regulations -The Case of Kenya,179.

¹¹⁵ Section 2, Environmental Management and Coordination Act ,1992.

¹¹⁶ Angwenyi A, The Law-Making Process of Access and Benefit-Sharing Regulations -The Case of Kenya, 180.

¹¹⁷ Section 2, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹¹⁸ Section 2, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹¹⁹ Section 9, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁰ Section 2, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²¹ Section 10, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

carried out shall facilitate the sustainable management and utilization of genetic resources for the benefit of the people of Kenya issue an access permit to the applicant.¹²²

The Regulations give NEMA the power to impose terms and conditions as it may deem necessary.¹²³ The regulations also state certain terms and conditions that are implied in every access permit including: duplicates and holotypes of all genetic resources collected shall be deposited with the relevant lead agency;¹²⁴ records of all intangible components of plant genetic material collected shall be deposited with the Authority;¹²⁵ reasonable access to all genetic resources collected shall be guaranteed to all Kenyan citizens whether such genetic resources and intangible components are held locally or abroad;¹²⁶ all agreements entered into with respect to access of genetic resources shall be strictly for the purposes for which they were entered into;¹²⁷ the furnishing of quarterly reports to the Authority on the status of research, including all discoveries from research involving genetic resources and/or intangible components thereof;¹²⁸ the holder of an access permit shall inform the Authority of all discoveries made during the exercise of the right of access granted under the access permit;¹²⁹ the holder of an access permit shall provide the following reports; a semi-annual status report on the environmental impacts of any ongoing collection of genetic resources or intangible components thereof; a final status report on the environmental impacts of collection of genetic resources or intangible components thereof, in the event that the collection is of a duration of three months or less¹³⁰ and the holder of an access permit shall abide by the laws of the country.¹³¹ The Regulations also state that no person shall transfer any genetic resources outside Kenya unless such person has executed a Material Transfer Agreement.¹³²

¹²² Section 11, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²³ Section 15(1), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁴ Section 15(2)(a), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁵ Section 15(2)(b), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁶ Section 15(2)(c), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁷ Section 15(2)(d), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁸ Section 15(2)(e), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹²⁹ Section 15(2)(f), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹³⁰ Section 15(2)(g), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹³¹ Section 15(2)(h), Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹³² Section 18, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

The measures for benefit sharing in respect to both non-commercial and commercial research are found in section 20 of the Regulations. The Regulations provide that the holder of an access permit shall facilitate an active involvement of Kenyan citizens and institutions in the execution of the activities under the permit and that the facilitation by the holder of an access permit shall include enjoyment of both monetary and non-monetary benefits arising from the right of access granted and the use of genetic resources.¹³³

3.3.2 Constitution of Kenya, 2010

The Constitution of Kenya recognises the fact that culture is the foundation of the nation and the cumulative civilisation of the Kenyan people¹³⁴ in doing so it recognises the fact that indigenous technologies have played a role in the development of the nation and therefore the state is mandated to promote the intellectual property rights of the people of Kenya including that of indigenous and local communities.¹³⁵ Therefore in order to protect the intellectual property of indigenous and local communities Parliament is required to enact legislation which recognises and protects the ownership of indigenous seeds and plant varieties, their genetic and diverse characteristics and their use by the communities of Kenya.¹³⁶

The Constitution imposes certain obligations on the state in respect of the environment, one of the obligations is the protection and enhancement of intellectual property in and indigenous knowledge of, biodiversity and genetic resources of the communities.¹³⁷ It also requires the state to protect genetic resources and biological diversity.¹³⁸ In light of these requirements Parliament enacted the Protection of Traditional Knowledge and Cultural Expressions Act in 2016.

3.3.2.1 Protection of Traditional Knowledge and Cultural Expressions Act

The short title of the Act defines it as providing a framework for the protection and promotion of traditional knowledge and cultural expressions; to give effect to Articles 11, 40 and 69(1) (c) of the Constitution and for connected purposes. The Act defines holders as individuals or organizations within communities in whom the custody or protection of traditional knowledge and cultural expressions are entrusted in accordance with the customary law and practices of

¹³³ Section 20, Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006.

¹³⁴ Article 11(1), Constitution of Kenya, 2010.

¹³⁵ Article 11(2) Constitution of Kenya 2010.

¹³⁶ Article 11(3), Constitution of Kenya, 2010.

¹³⁷ Article 69(1)(c), Constitution of Kenya, 2010.

¹³⁸ Article 69(1)(e), Constitution of Kenya, 2010.

that community,¹³⁹ while it defines owners as local and traditional communities, and recognized individuals or organizations within such communities in whom the custody or protection of traditional knowledge and cultural expressions are entrusted in accordance with the customary law and practices of that community.¹⁴⁰ The Act also defines PIC as the giving of, by the prospective user, complete and accurate information, and based on that information, the prior acceptance, by the owners, to the use of their traditional knowledge or cultural expressions.¹⁴¹

It is important to note that the Act does not define the concept of access or benefit sharing. However, despite the lack of definition of access the Act does require any person exploiting traditional knowledge and traditional cultural expressions to seek express permission of the local community providing the knowledge or cultural expression. The Act states that the owners of traditional knowledge or cultural expressions rights shall have the right to assign and conclude licensing agreements and that traditional knowledge or cultural expressions belonging to a local or traditional community shall not be assigned without the authorization of the custodian of the local or traditional community.¹⁴²

The Act also recognises the concept of benefit sharing as seen in the provision which states that *“the protection of owners and holders of traditional knowledge or cultural expressions shall include the right to fair and equitable sharing of benefits arising from the commercial or industrial use of their knowledge, to be determined by mutual agreement between the parties. The right to equitable remuneration might extend to non-monetary benefits, such as contributions to community development, depending on the material needs and cultural preferences expressed by the communities themselves.”*¹⁴³ This section recognises the fact that local communities as the owners of traditional knowledge and traditional cultural expressions as part of their right are entitled to benefit from the commercial or industrial use of their knowledge with this benefit being based on mutual agreement between the community and the exploiter.

From the provisions above we can see that the Act contains very progressive provisions that recognise the rights that indigenous and local communities with respect to their intellectual property. However, it is important to recognise that the Act has certain qualifications with

¹³⁹ Section 2, Protection of Traditional Knowledge and Cultural Expressions Act.

¹⁴⁰ Section 2, Protection of Traditional Knowledge and Cultural Expressions Act.

¹⁴¹ Section 2, Protection of Traditional Knowledge and Cultural Expressions Act.

¹⁴² Section 22, Protection of Traditional Knowledge and Cultural Expressions Act.

¹⁴³ Section 24, Protection of Traditional Knowledge and Cultural Expressions Act.

regard to its provisions on access to and benefit sharing. The Act expressly states that *“authorization granted to access protected traditional knowledge associated with genetic resources shall not be an authorization to access the associated genetic resources, access to associated genetic resources shall be a subject matter of relevant legislations relating to genetic resources.”*¹⁴⁴ This section implies that access to and benefit sharing under the act is only limited to traditional knowledge associated with genetic resources and not the genetic resources themselves. This means that the Act highlighted in part 3.3.1 above namely; the Wildlife Conservation and Management Act, the Forest Act, the Environmental Management and Coordination Act and the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations are still the main legislative framework that govern access to and benefit sharing of genetic resources.

¹⁴⁴ Section 26, Protection of Traditional Knowledge and Cultural Expressions Act.

CHAPTER 4

CHALLENGES FACING KENYA'S ACCESS TO AND BENEFIT SHARING OF GENETIC RESOURCES FRAMEWORK AND A COMPARATIVE STUDY OF BRAZIL AND INDIA

4.1 Introduction

Having highlighted the legislative and institutional framework of ABS of GR in Kenya, this chapter will begin by highlighting the limitations and challenges faced by the current legislative and institutional framework in Kenya. After highlighting the limitations and challenges the paper shall analyse the situation in India and Philippines highlighting the lessons and practises Kenya could adopt in order to ensure indigenous and local communities can fully exercise their rights in terms of access to and benefit sharing of genetic resources.

4.2 Challenges Facing Access to And Benefit Sharing Of Genetic Resources In Kenya

Kenya has been the victim of bio-piracy of its genetic resources and this has posed the greatest challenge to implementation of access to and benefit sharing of genetic resources by local communities. An example of bio-piracy of genetic resources in Kenya is seen in the Genencor International Inc. situation. In 1992 a microbiologist from Leicester University, Dr William Grant, discovered two organisms living in the hot caustic geysers of Lake Bogoria and along the shores of Lake Nakuru. Conditions in these waters resemble a washing machine filled with hot soapy detergent. Not only did Grant find an organism that survives such environments, but also one that softens the fabric and 'eats' indigo dye from jeans, giving them the faded look. Another organism from the lake helped remove biological stains from cotton products.¹⁴⁵ Dr Grant reportedly got the endorsement of the National Council for Science and Technology (NCST) to carry out her research with the proviso that she would submit a report of her findings to NCST at the completion of her Ph.D.¹⁴⁶ Dr Grant did not work alone but was accompanied by an employee of Genencor, Brian Jones, and a group of scientists who, though they went

¹⁴⁵ Multi-million bio-piracy lawsuit over faded jeans and African lakes The Guardian-
<<https://www.theguardian.com/uk/2004/sep/05/highereducation.science>> accessed on 28th January 2018.

¹⁴⁶ Danish Firm Pays 2.3 Million Shillings in Royalties to Endorois Community for Lake Bogoria Enzyme by Victor Nzomo - <<http://blog.cipit.org/2014/11/02/danish-firm-pays-2-3-million-shillings-in-royalties-to-endorois-community-for-lake-bogoria-enzyme/>> accessed on 28th January 2018.

ahead to publish their results in the *Extremophile Journal* of the UK in 1998, did not have any authorisation from KWS.¹⁴⁷

According to the *EastAfrican* newspaper Genencor had stated that its scientists discovered the extremophile from which they developed an easy-to-use enzyme that can treat denim (jeans) to create the popular "stonewash" look, in Kenya.¹⁴⁸ According to Genencor they had commercialised an extremophile (tiny organisms that are able to survive and thrive in extreme environmental conditions) enzyme, *Puradax cellulase*, derived from a new *Bacillus* species found in the Rift Valley soda lakes of East Africa.¹⁴⁹ The newspaper also adds that Genencor had also introduced *Indiage neutra*, an enzyme derived from a bacterium that was isolated from the soda mud flats on the shores of the highly alkaline Lake Nakuru in Kenya.¹⁵⁰ Genencor after discovering the "extremophiles" in Kenya, cloned and later sold them to Procter & Gamble, which used them as critical ingredients in the manufacture of the detergent.¹⁵¹

With assistance from scientists at the International Centre of Insect Physiology and Ecology (ICIPE), KWS intended to launch a claim for a share of the proceeds accruing to the US multinational giant Procter & Gamble and to Genencor International BV of the Netherlands with respect to the sales of Tide Alternative Bleach Detergent and "stonewashing" material.¹⁵² KWS wrote to lawyers working for Public Interest Intellectual Property Advisors, an international not-for-profit organisation whose lawyer-members offer free legal advice to disadvantaged indigenous communities on matters related to the protection of intellectual property rights, in the US to handle the matter on its behalf.¹⁵³ KWS based its claim on the provisions of the Convention on Biological Diversity (CBD), which not only affirms the sovereign rights of signatories over the biological resources found within their territories, but also commits parties to "fair, equitable sharing of the benefits accruing from the utilisation of

¹⁴⁷ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁴⁸ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁴⁹ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵⁰ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵¹ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵² KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵³ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

genetic resources."¹⁵⁴ Despite the announcement by the Kenya Wildlife Services of their intention to bring an international lawsuit against Genencor for its violation of intellectual property rights, the lawsuit never came to fruition.

According to the *EastAfrican*, the claim by KWS would have been significant for Kenya not only because of the sheer amount of money involved, but also because it could put a halt to the illegal extraction of the country's biological resources, particularly the illegal traffic in tiny organisms with huge industrial potential.¹⁵⁵ The newspaper also noted the fact that the two multibillion dollar companies have been patting each other on the shoulder over this evidently mutually-beneficial partnership despite the fact that the people of Kenya and particularly the community living around Lake Bogoria have not seen a single cent from the millions of dollar generated from the sales of these products.¹⁵⁶

According to KWS, the point of contention was that the research permit which was granted to Dr Grant by the Ministry of Education and Technology in Kenya with the recommendation of NCST did not include any commercial involvement of the research findings whatsoever.¹⁵⁷ KWS maintains that if any such additional prospecting was intended, neither Dr Grant nor the University of Leicester had ever expressed such intention.¹⁵⁸ If they had done so, KWS states that the researchers would have required a new and different kind of permit.¹⁵⁹ Meanwhile the candidate's story is that she only obtained a permit to carry out the research she had declared in her proposal and that at the end of her doctoral research, she complied with the requirements of her permit by submitting her report.¹⁶⁰

From the scenario above it is evident that despite existing laws that had provided for access to and benefit sharing situations of bio-piracy still arose. One of the reasons for this failure is the

¹⁵⁴ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵⁵ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵⁶ KWS Seeks Millions From Procter & Gamble by John Mbaria - <<http://www.theeastafrican.co.ke/news/2558-244242-wkgos4z/index.html>> accessed on 28th January 2018.

¹⁵⁷ Danish Firm Pays 2.3 Million Shillings in Royalties to Endorois Community for Lake Bogoria Enzyme by Victor Nzomo - <<http://blog.cipit.org/2014/11/02/danish-firm-pays-2-3-million-shillings-in-royalties-to-endorois-community-for-lake-bogoria-enzyme/>> accessed on 28th January 2018.

¹⁵⁸ Danish Firm Pays 2.3 Million Shillings in Royalties to Endorois Community for Lake Bogoria Enzyme by Victor Nzomo - <<http://blog.cipit.org/2014/11/02/danish-firm-pays-2-3-million-shillings-in-royalties-to-endorois-community-for-lake-bogoria-enzyme/>> accessed on 28th January 2018.

¹⁵⁹ Danish Firm Pays 2.3 Million Shillings in Royalties to Endorois Community for Lake Bogoria Enzyme by Victor Nzomo - <<http://blog.cipit.org/2014/11/02/danish-firm-pays-2-3-million-shillings-in-royalties-to-endorois-community-for-lake-bogoria-enzyme/>> accessed on 28th January 2018.

¹⁶⁰ Danish Firm Pays 2.3 Million Shillings in Royalties to Endorois Community for Lake Bogoria Enzyme by Victor Nzomo - <<http://blog.cipit.org/2014/11/02/danish-firm-pays-2-3-million-shillings-in-royalties-to-endorois-community-for-lake-bogoria-enzyme/>> accessed on 28th January 2018.

fact that Kenya has no single policy instrument that offers biodiversity management as a single unit.¹⁶¹ According to a study done by the Institute of Economic Affairs, Kenya has no single policy instrument that offers biodiversity management as a single unit.¹⁶² The reason for this is the sectoral planning approach the Government used to manage biodiversity, which resulted in major overlaps of the legal and institutional mandates.¹⁶³ Another difficulty that resulted in the Genecor case is that there exists overlapping mandates between different institutions has not been addressed.¹⁶⁴

The Institute of Economic Affairs notes that ownership of biological material has not clearly been defined under law in fact they observe that under Kenyan law, the legal ownership of biological material is fragmented, and in some cases, ownership is not defined.¹⁶⁵ According to Jorge Cabrera Medaglia, although Kenyan law contains specific provisions on benefit sharing, none of the provisions indicate mandatory terms, or clearly articulate how benefits are to be distributed to local community, nor is there clarity as to whom local communities are, or what procedures are to be followed to identify them as potential beneficiaries.¹⁶⁶ Because of this lack of identifying who the owners of genetic resources are it is unclear which stakeholders are supposed to give PIC.¹⁶⁷

The Institute of Economic Affairs focused on the difficulties faced in the implementation of the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations and in the report it pointed out the following difficulties: the first difficulty identified is that it is not clear whether the regulations cover just genetic resources or biological resources in general. According to the Institute the majority of the sections of the regulations refer to access to genetic resources while others such as section 6, 7 and 8 which refer to biological diversity.¹⁶⁸ According to Joseph M.

¹⁶¹ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 35.

¹⁶² Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 35.

¹⁶³ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 35.

¹⁶⁴ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 36.

¹⁶⁵ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 47.

¹⁶⁶ Medaglia J, Welch F and Phillips F, Overview of national and regional measures on access and benefit sharing. Challenges and opportunities in implementing the Nagoya Protocol *CISDL Biodiversity & Biosafety Law Research Programme*, 2014, 93.

¹⁶⁷ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 36.

¹⁶⁸ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 35.

Wekundah, the Kenya Regulations are for research on plants alone and this might be related to the mandate of National Environmental Management Authority whereas the Kenya Wildlife Services is focused on wild animals and this leaves out medicinal plants and related TK, other animals and micro-organisms. As a result, medicinal plants and micro-organisms that can generate revenue for the Government and Communities are not addressed by the regulations. The plants (germplasm) for research could come up with patented products and yet the regulations do not indicate the sharing of royalties. This only applies to plants other than genetic resources for food and agriculture as those are exempted.¹⁶⁹

As a result of the various challenges faced by ABS regulations in the country the Institute noted that the targeted impact of biodiversity conservation with a view of ensuring that bioprospecting activities result in benefits to local communities has not been well achieved.¹⁷⁰

4.3 India

India passed the Biological Diversity Act in 2002 with the aim of providing for conservation of biological diversity, the sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources and knowledge associated with the biological resources.¹⁷¹ The Act defines biological resources as plants, animals and micro-organisms or parts thereof, their genetic material and by-products (excluding value added products) with actual or potential use or value, but does not include human genetic material,¹⁷² this definition is similar to the definition of genetic resources in the Protection of Traditional Knowledge and Cultural Expressions Act of Kenya and therefore the terms biological resources and genetic resources shall be used interchangeably.

The Biological Diversity Act establishes the National Biodiversity Authority (NBA) which has the functions of issuing guidelines for access to biological resources and for fair and equitable benefit sharing,¹⁷³ advising the Central Government on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of the utilization of biological resources,¹⁷⁴ advising the State Governments in the selection of areas of biodiversity importance as heritage sites and measures for the management of such

¹⁶⁹Wekundah J, Why Access and Benefit Sharing Policy and Legal Frameworks Are Important for Africa, African Technology Policy Studies Network, 2012, 16.

¹⁷⁰ Institute of Economic Affairs, *Biodiversity, Traditional Knowledge and Intellectual Property in Kenya: The Legal and Institutional Framework for Sustainable Economic Development*, 2012, 85.

¹⁷¹ Preamble, Biological Diversity Act 2002(India).

¹⁷² Section 2, Biological Diversity Act, 2002(India).

¹⁷³ Section 18(1), Biological Diversity Act, 2002(India).

¹⁷⁴ Section 18(3)(a), Biological Diversity Act, 2002(India).

heritage sites¹⁷⁵ and performing such other functions as may be necessary to carry out the provisions of this Act.¹⁷⁶

The Act requires any person who intends to obtain any biological resource occurring in India or knowledge associated thereto for research or for commercial utilization or for bio-survey and bio-utilization or transfer the results of any research relating to biological resources occurring in, or obtained from, India, to make an application to the National Biodiversity Authority.¹⁷⁷ The National Biodiversity Authority shall while granting approvals ensure that the terms and conditions subject to which approval is granted secures equitable sharing of benefits arising out of the use of accessed biological resources, their by-products, innovations and practices associated with their use and applications and knowledge relating thereto in accordance with mutually agreed terms and conditions between the person applying for such approval, local bodies concerned and the benefit claimers.¹⁷⁸ The Act defines benefit claimers as the conservers of biological resources, their by-products, creators and holders of knowledge and information relating to the use of such biological resources, innovations and practices associated with such use and application,¹⁷⁹ this includes local communities.

The Act also establishes the Local Biodiversity Fund which is used for conservation and promotion of biodiversity in the areas falling within the jurisdiction of the concerned local body and for the benefit of the community in so far as such use is consistent with conservation of biodiversity.¹⁸⁰

The Indian Act differs from the Kenyan Regulations in various ways. The first difference is that the Indian Act recognises local communities as benefit claimers, this means that the local communities have a claim when it comes to the benefits that are accrued from the exploitation of their genetic resources. The Kenyan Regulations on the other hand do not expressly identify local communities as benefit claimers in fact the Regulations do not define who enjoys the various benefits it lists. Another difference between the Kenyan Regulations and the Indian Act is the fact that the Indian Act requires the National Biodiversity Authority, before granting approvals to those seeking to exploit biological resources, to ensure that the terms and conditions subject to which approval is granted secures equitable sharing of benefits arising

¹⁷⁵ Section 18(3)(b), Biological Diversity Act, 2002(India).

¹⁷⁶ Section 18(3)(c), Biological Diversity Act, 2002(India).

¹⁷⁷ Section 19(1), Biological Diversity Act, 2002(India).

¹⁷⁸ Section 21(1), Biological Diversity Act, 2002(India).

¹⁷⁹ Section 21(1), Biological Diversity Act, 2002(India).

¹⁸⁰ Section 44(2), Biological Diversity Act, 2002(India).

out of the use of accessed biological resources, their by-products, innovations and practices associated with their use and applications and knowledge relating thereto in accordance with mutually agreed terms and conditions between the person applying for such approval, local bodies concerned and the benefit claimers.

This requires the National Biodiversity Authority to respect the mutually agreed terms and conditions entered into by the local community and the persons seeking access to the genetic resources. The Kenyan Regulations permit NEMA to grant access permits to those seeking to exploit genetic resources in Kenya, however they do not state that NEMA must consider any mutually agreed terms between the local community and the person seeking access to the genetic resources.

4.4 Philippines

The Philippines enacted the Indigenous Peoples Rights Act of 1997 in recognition and promotion of all the rights of Indigenous Cultural Communities (ICC)/Indigenous Peoples enumerated within the framework of their Constitution which expressly mandates the recognition, respect, and protect of the rights of indigenous cultural communities and indigenous communities.¹⁸¹ The Act provides the most conclusive definition of Indigenous Cultural Communities/Indigenous People, it defines them as *“a group of people or homogenous societies identified by self-ascription and ascription by others, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed and utilized such territories, sharing common bonds of language, customs, traditions and other distinctive cultural traits, or who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures, become historically differentiated from the majority of Filipinos. ICCs/IPs shall likewise include peoples who are regarded as indigenous on account of their descent from the populations which inhabited the country, at the time of conquest or colonization, or at the time of inroads of non-indigenous religions and cultures, or the establishment of present state boundaries, who retain some or all of their own social, economic, cultural and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains”*¹⁸²

¹⁸¹ Section 2, Indigenous Peoples Rights Act, 1997 (Philippines).

¹⁸² Section 3, Indigenous Peoples Rights Act of 1997 (Philippines)

The Act recognises the right that Indigenous Communities have to Indigenous Knowledge Systems and Practices and to Develop their own Sciences and Technologies. Under this right Indigenous Peoples are entitled to the recognition of the full ownership and control and protection of their cultural and intellectual rights.¹⁸³ They have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, including derivatives of these resources, traditional medicines and health practices, vital medicinal plants, animals and minerals, indigenous knowledge systems and practices, knowledge of the properties of fauna and flora, oral traditions, literature, designs, and visual and performing arts.¹⁸⁴

With regard to access of genetic resources, the Act states that “*access to biological and genetic resources and to indigenous knowledge related to the conservation, utilization and enhancement of these resources, shall be allowed within ancestral lands and domains of the ICCs/IPs only with a free and prior informed consent of such communities, obtained in accordance with customary laws of the concerned community.*” Free and prior informed consent is defined as “*the consensus of all members of the ICCs/IPs to be determined in accordance with their respective customary laws and practices, free from any external manipulation, interference coercion, and obtained after fully disclosing the intent and scope of the activity, in a language and process understandable to the community.*”¹⁸⁵

The Philippines Act is the most progressive act in terms of recognition of indigenous people’s intellectual property rights. It differs from the Kenyan Regulations in that the Philippine’s Act recognises the fact that intellectual property rights are inherent to the rights of indigenous communities and therefore their express authorisation is required by the law before any exploitation of genetic resources occurs. The Kenyan Regulations do not recognise the fact that indigenous communities have intellectual property rights over their genetic resources and because of this the Regulations do not require the authorization of local communities with regard to access and benefit sharing of genetic resources.

¹⁸³ Section 34, Indigenous Peoples Rights Act of 1997(Philippines)

¹⁸⁴Section 34, Indigenous Peoples Rights Act of 1997(Philippines)

¹⁸⁵ Section 3, Indigenous Peoples Rights Act of 1997(Philippines)

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study has examined the legislative and institutional framework governing access to and benefit sharing of genetic resources in Kenya considering the article 11 and 69 of the Constitution of Kenya and the newly enacted Protection of Traditional Knowledge and Cultural Expressions Act. The study also highlighted the legislative framework put in place in India and in the Philippines. The objectives of the study were to find out whether the access to and benefit sharing framework in Kenya recognises the fact that local communities not only have a right to determine how their resources are utilised but also the fact that they play an active role in the maintenance of genetic resources and because of this they have a right to benefit from the use of these genetic resources.

As highlighted in chapter three, the Protection of Traditional Knowledge and Cultural Expressions Act states that authorization granted to access protected traditional knowledge associated with genetic resources shall not be an authorization to access the associated genetic resources, access to associated genetic resources shall be a subject matter of relevant legislations relating to genetic resources. From the reading of this provision it is possible to conclude that the Act calls for further legislation to be passed by parliament in order to govern access to and benefit sharing of genetic resources.

From the provisions highlighted in chapter three it is clear that the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations do not cater to the rights of local communities. The Regulations do not contain any provisions that require that the permission of local communities be sought out before genetic resources are exploited, in fact the Regulations adopt a national sovereignty approach. Authors such as Jorge Cabrera Medaglia note that none of the specific provisions on benefit sharing in Kenya indicate mandatory terms, or clearly articulate how benefits are to be distributed to local community, nor is there clarity as to whom local communities are, or what procedures are to be followed to identify them as potential beneficiaries.

Because the Protection of Traditional Knowledge and Cultural Expressions Act does not apply to access to and benefit sharing of genetic resources it can be concluded that the State has yet to fulfil its obligation to protect genetic resources under Article 69 of the Constitution.

According to Robert Lettington article 8(j) of the CBD recognises the fact that indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity should equitably share the benefits arising from the utilization of such knowledge, innovations and practices because local communities play a critical role in the maintenance of ecosystems and individual species therefore a community that is aware of the question of access to genetic resources is one that can assist its government in enforcement of access to and benefit sharing of genetic resources regulation because it is extremely difficult for an outsider to conduct any activity in a rural African community without that community knowing something about it.¹⁸⁶ Because of the importance that local communities play in the maintenance of genetic resources the fact that the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations does not recognise local communities as major players in the field of access to and benefit sharing of genetic resources the current regulations do not adequately protect genetic resources.

The study also highlighted the legislative provisions in place in India and Philippines. In the case of India, the Biological Diversity Act expressly provides for the enjoyment of local communities in the benefits accruing from the use of genetic resources, this is a recognition of the fact that local communities play a vital role in the conservation of genetic resources and therefore they are entitled to share in the benefits that arise from the use of these genetic resources. The Philippines on the other hand is very progressive in terms of recognition of the rights of indigenous communities. The Indigenous Peoples Rights Act recognises the fact indigenous communities have the right to control their genetic resources and because of this any access to genetic resources has to be with the express consent of the indigenous communities.

5.2 Recommendations

From the study above, it is clear that the legislative framework in place inadequately provide for local communities, the regulations do not reflect the requirements of the Constitution which require the State to protect genetic resources and biological resources. I would recommend the following changes to the legislative, regulatory and institutional framework for access to and benefit sharing of genetic resources in Kenya:

¹⁸⁶Lettington R, 'Access to Genetic Resources in The Republic of Kenya' in Nnadozie K, Robert Lettington R, Bruch C, Bass S and King S(eds), *African Perspectives On Genetic Resources a Handbook On Laws, Policies, And Institutions*, Environmental Law Institute,2003,162.

1. That the Regulations on access to and benefit sharing of genetic resources should be reviewed by Parliament to reflect the rights that local communities have with respect to their intellectual property. The Regulations should expressly define what local communities are as well as expressly require that any person seeking to access genetic resources in Kenya should seek prior informed consent of the local communities providing the genetic resources. The Regulations should also identify local communities as benefit claimers similar to the Indian legislation.
2. That Parliament should enact legislation identifying the rights that local communities have similar to the Philippines Act.
3. That Parliament should establish an institute with the sole mandate of governing access to and benefit sharing of genetic resources in order to reduce the overlapping roles played by various institutions such as the Kenya Wildlife Service and the Kenya Forest Service

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