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The Effectiveness of the Swkopmund Protocol on the Protection of Traditional knowledge in Namibia.

A Mini Thesis submitted in partial fulfilment of the requirement for the degree of Legum Magister (LLM), Faculty of Law, University of the Western Cape, South Africa

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DATE: 27 OCTOBER 2017

Declaration

I, Lucia P.I.N Nandjembo declare that the effectiveness of the Swakopmund Protocol on the protection of traditional knowledge is my own work, that it has not been submitted before any degree or examination in any other University, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Signature: ……. Date: 27 October 2017

Signed: …… Date……

PROF P. LENAGHAN

Abstract

Traditional knowledge has been around for centuries and has gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. The Swakopmund Protocol has been one of the legislations that has been put in place to protect Traditional knowledge and has to be reviewed. With Traditional communities playing a huge role at the in the Namibian communities, the aim of the protocol is to protect them by establishing its effectiveness.

The mini thesis aims to study the intellectual property system in Namibia as a system of protection which is inadequate for protecting Traditional knowledge, and as a result there is a huge need for Namibia to develop its national sui generis system for protecting TK. There are so many gaps existing in Namibia with regards to the existing intellectual property laws that need to be filled with all the results from the research this mini this will provide, it could provide the direction the country needs to go in.

The research focuses on the effectiveness of the Swakopmund Protocol that was implemented in 2010. Questions in the paper to be answered are such as what the protocol has achieved in the time that it has been in place, but more importantly how effective the Protocol is in protecting TK within the country and ways forward to protecting TK and making the protection as efficient as possible to extending necessary protection for TK and allow the next generations of people to have access to such knowledge. The mini thesis will be a desk-based research focusing on the Swakopmund Protocol.

There is today a growing appreciation of the value of traditional knowledge. This knowledge is valuable not only to those who depend on it in their daily lives, but to modern industry and agriculture as well. Many widely used products, such as plant-based medicines, health products and cosmetics, are derived from traditional knowledge. Other valuable products based on traditional knowledge include agricultural and non-wood forest products as well as handicraft.

DEDICATION

I dedicate this thesis to my absolutely selfless and amazing parents **ABRAHAM PENDAPALA NANDJEMBO** and **LUSIA NUUSIKU NANDJEMBO.** Thank you for literally being my support system on days where I felt the need to give up, your love and comfort has pulled me through. Thank you for laying down your lives for my sae and my brothers to see to it that we have all that we need. My whole life I have watched you two work tirelessly for our sake, without all that you do for me, today I wouldn't be here and I definitely wouldn't be able to complete this thesis.

I further dedicate this thesis to my late grandmother **MONICA GWANAMUPALA YaNAMUPALA**, your strength and courage although gone still encourages me every single day. The core values and morals that you have taught me are still instilled in me and I will forever continue to carry them – in you I see myself, and I am proud to be growing up & following into your footsteps and becoming the women you always wanted me to be. For all the traditional stories you have told us and importance of holding onto culture and to never forsake it, I dedicate this to you.

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A word of thanks to my classmates for being the best and making studying with them absolutely fun and amazingly supportive. Truly honoured to have met each and every one of you, I shall never forget you.

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KEYWORDS

Swakopmund Protocol,

Traditional Knowledge,

Generic Resources,

Indigenous Knowledge,

Copyright,

Intellectual Property

Contents

CHAPTER 1

INTRODUCTION

1.1 Background of the study

In the late 1980s, ownership of knowledge and artistic creations traceable to the world's indigenous societies emerged, seemingly out of nowhere, as a major social issue. Before then, museum curators, archivists, and anthropologists had rarely worried about whether the information they collected should be treated as someone else's property.[1] Today the situation is radically different. Scarcely a month passes without a conference examining the ethical and economic questions raised by the worldwide circulation of indigenous art, music, and biological knowledge.[2]

Legal examinations have added their questions to the debate. While a few countries have enacted statutes to protect traditional knowledge[3] or to be more precise access to biodiversity and genetic resources, the main focus of the debate lies in international and regional fora. The international and regional aim is to establish at least a far-reaching, if not worldwide, consensus on legal mechanisms suited to the protection of traditional knowledge.[4] In 1997, when the World Intellectual Property Organisation (WIPO) established its Global Intellectual Property Issues Division, it provided space to voices that until then had been neglected in its first programme. [5]

WIPO conducted a worldwide fact-finding mission in 1998 and 1999, which, inter alia, took note of existing customary rules and practices employed in many communities as instruments to protect cultural assets against misuse and unwanted exploitation.[6]

WIPO's fact-finding report is the most comprehensive collection to date of legal anthropological data relating to ongoing efforts to develop legal answers to the challenge posed by the demands to protect traditional knowledge. WIPO's

[1] Hinz MO "The Swakopmund Protocol on the Protection of TK and Expressions of Folklore" (2012) *Namibia Law Journal Volume* 3 Issue 1.
[2] Brown, MF, 2003. *Who owns native culture?* Cambridge, MA/London: Harvard University Press, p IX. Remove spacing between footnotes
[3] Cf. World Intellectual Property Organisation/WIPO. 2010. *Legislative texts on the protection of traditional knowledge*. Available at www.wipo.int/tk/en/laws/tk.html; last accessed 19 October 2010.
[4] Cf. the WTO Agreement on Trade-related Aspects of Intellectual Property Rights of 1995 and its Article 27(2), which accepts the possibility of sui generis regimes for certain intellectual property rights, albeit within certain limits set by the agreement in general terms.
[5] [5]Main Program 11, Program and Budget 1998–1999; WIPO (2001). *Intellectual property needs and expectations of traditional knowledge holders. WIPO report on fact-finding missions on intellectual property and traditional knowledge (1998–1999).* Geneva: WIPO, 16.
[6] Cf. WIPO (2001:57ff, 207ff).

Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore meets regularly, and is currently occupied with drafting Articles on the Protection of Traditional Cultural Expressions/Expressions of Folklore[7]

At the regional level, the Harare-based African Regional Intellectual Property Organisation (ARIPO) added to the debate by adopting, in Lesotho in 2007, the Legal Instrument for the Protection of Traditional Knowledge and Expressions of Folklore and, in pursuance of this, in Swakopmund on 9 August 2010, the Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore.[8] Currently, 17 African countries are members of ARIPO,[9] nine of whom – including Namibia – have signed the Protocol. In accordance with section 27(3) of the Protocol, the instrument comes into force three months after six ARIPO members have deposited their instruments of ratification or accession.

Biotechnology, pharmaceutical and human health industries have in recent years increased their interest in natural products as sources of new biochemical compounds for drugs, chemicals and agro-products.[10] This interest is what has led to the exploitation of TK.

Therefore, before dissecting the Namibian IP law in relation to TK, it is imperative to give a brief overview of some of the notable TK uses that require protection, either because they have been commercialised without the proper consent or because they have been commercialised without any benefits accruing to the concerned communities.[11]

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[7] Cf. Document WIPO/GRTKF/IWG/1/3 of July 2010.

[8]Hereafter Swakopmund Protocol or "Protocol." On August 9, 2010, ARIPO and its Member States held a Diplomatic Conference at the coastal town of Swakopmund in Namibia for the adoption of the Protocol on the Protection of Traditional Knowledge and Expressions of Folklore. The Protocol was adopted by the Member States and signed by nine (9) States that presented their credentials at the Conference. The nine (9) Member States are: Botswana, Ghana, Kenya, Lesotho, Liberia, Mozambique, Namibia, Zambia and Zimbabwe. The Protocol will enter into force when six (6) Member States of the Organization either deposit instruments of ratification or instruments of accession. The nine (9) States that signed the Protocol will be required to deposit instruments of ratification whilst those that did not sign will have to deposit instruments of accession. Accession to the Protocol by such States shall entail acceptance of the agreement on the creation of the African Regional Intellectual Property Organization. Other than the Member States, the Protocol is also open to any state that is a member of the African Union or United Nations Economic Commission for Africa.

[9] The 17 countries are Botswana, the Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

[10]Mugabe J, *Intellectual property protection and traditional knowledge*, (African Centre for Technology Studies (ACTS) Press, (1998) Nairobi.7-8

[11] Mugabe J, *Intellectual Property Protection* (1998) 7-8.

The protection of Intellectual Property law really is to encourage innovation and creative works as this is mostly where the society benefits from these innovations and creative works that they tend to come up with.[12] In return, the author of the work is financially rewarded to compensate him/her time, labour and money invested – in the end it all pays off.[13]

The wild plants in Namibia have considerable genetic diversity and development potential, especially in the fields of agriculture and pharmaceuticals. A discussion will be made on a few plant varieties from Namibia that have commercial success, which are used by outsiders without the appropriate consent of the concerned communities.

1.2 Problem statement

The Protocol aims to provide protection for the holistic forms of traditional knowledge that have been generated, maintained and transmitted from generation to generation. It recognises the intrinsic value of traditional knowledge including its intellectual, scientific, medical, technological and industrial values. The protection under the Protocol will also encourage and reward authentic creativity and innovation resulting from traditional knowledge systems.[14] There is however an inadequacy of Intellectual Property law within the Namibian legal system, with the few pieces of legislation that are in place including the Protocol do not seem sufficient enough to cover the wide spectrum of intellectual property protection in the country.

TK is knowledge that has been, created over long periods of time and is a collective process of freely shared ideas, knowledge and practices that cannot be owned by an Individual[15] The Swakopmund Protocol is one of the pieces of legislation to be reviewed. The aim is to establish its effectiveness since coming into force. Traditional Knowledge plays a huge role in the Namibian traditional communities and this is one of the few things the Protocol highlights as needing recognition and protection.

[12] Wilmot 'Protection of Traditional Knowledge Bill' (2013) available at http://www.pmg.org.za/files/130912protection.pdf last accessed 24 January 2017.

[13] Wilmot 'Protection of Traditional Knowledge Bill' (2013) available at http://www.pmg.org.za/files/130912protection.pdf last accessed 24 January 2017

[14] Sackey EKA & Kasilo OMJ, '*Intellectual property approaches to the protection of traditional knowledge in the African Region'.* (2010) 100.

[15] [15] Shikongo, T *Intellectual Property, Traditional Knowledge and Genetic Resources, Access to Genetic Resources: Will Traditional Knowledge Survive This Millennium?* (2001) Paper presented at the WIPO International Conference on Intellectual Property, the Internet, Electronic Commerce and Traditional Knowledge 29 – 31 May, 2001.

1.3 Overarching research question and sub-questions

The objective of this paper is to test the adequacy and effectiveness of the Protocol itself for the accomplishment of its intended purpose - producing the intended or is expected result, finding the gaps within the protocol and trying to fill them by answering a few questions such as "*what has the Protocol achieved since coming to pass and whether the Protocol is needed?*

However, the guiding research question is: How effective the Swakopmund Protocol is in protecting Traditional Knowledge and Folklore Expressions in Namibia, and what it covers when it comes to protecting TK. This involves the following specific objectives: to bridge these gaps and propose effective ways in protecting our Traditional Knowledge, as well fill the gaps within the legal system where Intellectual Property is pushed to the side – there is a high need for proper and adequate IP laws in Namibia.

1.4 Aim and significance of research

This research on the effectiveness of the Protocol serves to be innovative, and helpful for Namibia as a developing country to bridge the gaps found in the legal system and pay more attention to Intellectual Property – as it affects many dimensions of our daily lives.[16] We ought not to turn a blind eye on this part of the law. There is a commitment to sharing the results of the research paper with the Ministry of Trade Industrialization and SME Development and hope that the paper work will not just be an extraction of truths but will grant them information which will be to the benefit and contribute to the Namibian country at large.

1.5 Methodology

This research will purely be desk-based research focusing primarily on the Swakopmund Protocol and the secondary sources such as ARIPO and WIPO. Primary sources would be articles written by different scholars on the protocol and other books on Intellectual Property.

Going forward in writing the paper countries like South Africa & Kenya would be most useful in this mini thesis. Kenya is one of the signatory countries to the Swakopmund Protocol and would be an exceptional country to compare with and unlike a number of

[16] Gosseries A, Marciano A, & Strowel A eds *Intellectual Property and Theories of Justice* eds (2008) 3.

countries Kenya seems to have intellectual property law at their core and value it. The Kenyan government has seen the establishment of the Traditional Knowledge (TK) and Genetic Resources (GR) unit at the Kenya Industrial Property Institute (KIPI), to specifically address issues of intellectual property rights relating to traditional knowledge associated with genetic resources for indigenous and local communities practising traditional lifestyles, their traditional cultural expressions and access and benefit sharing issues. KIPI as a national institute within its TK and GR unit has a mandate to provide leadership in formulating national strategies to combat bio piracy, bad patents, and general issues related to TK.[17]

South Africa is not a member of the Protocol, but being a sister country to Namibia and having quite similar laws and being regarded as one of the most developed countries on the continent, the country's intellectual property will be of great help

1.6 Overview of chapters

The 1st chapter will be an introduction of what the mini thesis will focus on and raise some of the issues that will be tackled in the discussion of the paper.

Chapter two takes a look at definitions and an overview of the Swakopmund Protocol and defining TK.

Chapter 3 looks at the legislation that has been put up in place with regards to the protection of TK, starting from international legislation to national legislation. This chapter will also be focusing on the effectiveness of these legislations, paying more attention to the Protocol. Taking a look at Traditional knowledge cases that have taken place since the passing of the protocol in Namibia but also in Africa particularly paying attention to the countries that have rectified the protocol. Also having to take a look at the loopholes in the protocol such as not giving specific definitions of what exactly is "tradition" and whether one has to borrow words from other legislations which are at this point not readily available in terms of Namibia itself as there is a lack of IP laws. The very few IPR found in Namibia do not make provisions for TK hence the Draft Bill.

The 4th chapter will be a comparative study with the South African & Kenyan legal system on Intellectual Property in protecting Traditional Knowledge. Kenya has been

[17] Geissler PW & Prince R 'Becoming One Who Treats: A Case Study of a Luo Healer and Her Grandson' (2001) *Anthropology and Education quarterly*.

chosen because they actually doing exceptionally well when it comes to IP regulation laws and is a party to the Protocol. South Africa on the other hand isn't a party to the Protocol but they do have great laws when it comes to regulating IP and Protecting TK at the same time.

The concluding chapter, chapter 5 focuses on recommendations and bridging the gap between the protocol of IP laws in the country and concludes the mini thesis.

CHAPTER 2

DEFINING TRADITIONAL KNOWLEDGE

2.1 Introduction

Indigenous knowledge has been around for a number of years. Before the 1980s, museum curators, archivists and anthropologists had no concerns regarding ownership of the information they collected.[18] It was only after the late 1980s that issues relating to the protection of Traditional knowledge (TK) started to emerge, but even during this time, discussions on the intellectual creativity of indigenous people was primarily focused on folklore. Subsequently in recent years, indigenous peoples, local communities, and governments, mainly in developing countries, have demanded equivalent protection for TK systems.[19] This chapter will be defining what TK is by looking at how different legislations and other authors define what TK is, as well the importance of TK in our communities today. This chapter will also take a brief look at methods in which TK can be protected and why it's important to protect TK finally it will take a look at a few examples of TK such as plants found in Namibia before concluding the chapter.

2.2 Traditional Knowledge defined

TK is knowledge that is held by members of a distinct and or sometimes acquired by means of inquiry peculiar to that culture and concerning the culture itself or the local environment in which they exist.[20]

TK is thus the totality of all knowledge and practices whether explicit or implicit used in the management of socio-economic and ecological facets of life.[21] This knowledge is established on past experience and observation. It is usually a collective property of a society. Many members of the society contribute to it over time and it is modified and enlarged as it is used over time. It is transmitted from generation to generation and it is generally an attribute of a particular group of people who are intimately linked to a particular socio-economic context, through various economic, cultural, ritual and religious activities. TK is also dynamic in nature and changes its character as the needs of the local people change. Examples of TK include knowledge about the use

[18] Hinz MO 'The Swakopmund Protocol on the Protection of TK and Expressions of Folklore' (2012) *Namibia Law Journal Volume* 3 Issue 1 p 101.
[19] [19] Hinz MO 'The Swakopmund Protocol on the Protection of TK and Expressions of Folklore' (2012) *Namibia Law Journal Volume* 3 Issue 1 p 101.
[20] Wekundah JM 'African Technology Policy Studies Network Biotechnology Trust Africa: Why protect traditional Knowledge?' Special Paper series issue 44 (2012) p 8.
[21] Wekundah JM (2010) p 8.

of specific plants and/or parts thereof, identification of medicinal properties in plants and harvesting practices.[22]

TK is a cumulative body of knowledge, know-how practices and representations maintained and developed by people with extended histories of interactions with the natural environment.[23] These sophisticated set of understandings, interpretation and meanings are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, customs, spirituality etc. TK emphasises the accumulation and transmission of knowledge through generations. Local knowledge is a broader term that refers to the knowledge of any people who have lived in an area for a long period of time.[24]

Indigenous Knowledge is the information base for a society which facilitates communication and decision making. IK systems are dynamic and are continually influenced by internal creativity and experimentation as well as by contact with external systems. IK and TK about people, plants, animals and the environment, contain spiritual, cultural and social aspects. Knowledge systems are passed from generation to generation and are at a risk of being eroded or lost as time passes and society changes. In Africa, IK and TK are often passed through shared and storytelling and the lack of a written record of these, puts it at risk of extinction.[25]

The Swakopmund Protocol defines TK as:

> 'any knowledge originating from a local or traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices and learning, where the knowledge is embodied in the traditional lifestyle of a community, or contained in the codified knowledge systems passed on from one generation to another. The term shall not be limited to a specific technical field, and may include agricultural, environmental or medical knowledge, and knowledge associated with genetic resources.'

There is no internationally accepted definition of TK as it can vary depending on the region and the traditional community from which the definition emanates although

[22] Wekundah JM p 8-9.
[23] Wekundah JM (2012) p 9.
[24] Wekundah JM (2012) p 9.
[25] Wekundah JM (2012) p 9.

definitions from international organisations such as African Regional Intellectual Property Organisation (ARIPO) are used as references in defining what TK is.

It is important to make a distinction between TK and Traditional and Cultural Expressions (TCE) also referred to as expressions of folklore. Although indigenous and traditional communities often regard expressions of their traditional culture folklore as inseparable from systems of TK, in the discussions about IP protection, TCE's and TK are generally discussed distinctly.[26]

In light of this, TCE's are defined as productions consisting of characteristic elements of the traditional artistic heritage developed and maintained by a community or by individuals reflecting the traditional artistic expectations of such a community.[27] This includes verbal expressions, musical expressions, expressions by actions and tangible expressions.[28] TK is whole package consisting of all knowledge and practices that communities practice which is accumulated over years and passed on from generation to generation, and the mini thesis focuses more on TK rather than TCE's, as a whole component that traditional communities practice and hang on to.

The term 'traditional 'does not imply that this knowledge is old or untechnical in nature, but 'tradition-based'[29] It is referred to as traditional because it is created in a manner that reflects the traditions of the communities. Hence, the term 'tradition 'does not denote the nature of the knowledge itself, but the way in which the knowledge is created, preserved and disseminated[30] The basic characteristics of TK are that it is a complex, multifaceted phenomenon that is constantly evolving in human interaction with the environment and is therefore regarded as dynamic and current.[31]

The World Intellectual Property Organisation (WIPO) fact-finding report has come up with examples of what can be considered to be TK and states that:

> Knowledge is not limited to any specific field of technology or the arts. Traditional Knowledge systems in the fields of medicine and healing, biodiversity conservation, the environment and food and agriculture are well known. Other key components of

[26] WIPO *Intellectual Property and Traditional Cultural Expressions/Folklore* Booklet No.1 available at http://www.wipo.int/export/sites/www/freepublications/en/tk/913/wipo_pub_913.pdf last (accessed 20 April 2017).
[27] WIPO *Intellectual Property and Traditional Cultural Expressions/Folklore* Booklet No.1 (2017) p 61.
[28] WIPO *Intellectual Property and Traditional Cultural Expressions/Folklore* Booklet No.1 (2017) p 61.
[29] Hansen SA and Van Fleet WJ *Traditional Knowledge and Intellectual Property: A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting their Intellectual Property and Maintaining Biological Diversity* (July 2003) p 3.
[30] Hansen SA and Van Fleet WJ (2003) p 3.
[31] Hansen SA and Van Fleet WJ (2003) p 3-4.

> Traditional Knowledge are the music, dance, and 'artisanal' (i.e. designs, textiles, plastic arts, crafts, etc.). Although there are creations which may be done purely to satisfy the aesthetic will of artisans, many such creations are symbolic of a deeper order or belief system. When a traditional singer performs a song, the cadence, melody, and forms all follow rules maintained for generations. Thus, a songs performance entertains and educates the current audience, but also unites the current population with the past.[32]

TK is wide and covers the spectrums of agriculture, science, technology, medicine and biodiversity.[33] In fact there has been a growing demand in recent decades for natural products and methods in the fields of biotechnology and pharmaceuticals. Consequently, this has led to a renewed interest in TK.[34] This is as a result of the significance of TK as a prime factor in advancing the development of science and technology. TK has been significant in acquiring insightful understanding about the inter-relatedness of ecological systems.[35]

2.2.1 The economic value of Traditional Knowledge

TK has a significant value, especially when it comes to Traditional Medicine and trade with TCEs. In Kenya, there has been an increase in trade related to traditional cultural expressions. Kenyans are deeply involved in their traditional arts and crafts which are part of their daily lives and it's such a beautiful thing to see diverse cultural expressions and knowledge all at once.[36] This includes tourism related activities such as traditional songs and dance, cultural artifacts such as wood and soft stones, carvings, traditional baskets. It also covers traditional medicines which cover products such as those of the neem tree for treatment of various diseases; *prunus africana* also known as the African Cherry is used for treatment of prostate cancer, Artemisia for treatment of malaria, etc. This has not been quantified into money value; however, it runs into millions of Kenya shillings.

[32]World Intellectual Property Organisation *Intellectual property needs and expectations of Traditional Knowledge holders*. WIPO report on fact-finding missions on intellectual property and Traditional Knowledge (1998–1999). Main Program 11, Program and Budget 1998–1999; WIPO (2001) Geneva: WIPO, p 16.
[33]Vilho AN, *A Critical Analysis of the Protection of Traditional Knowledge within the Namibian (*LLM thesis, University of Cape Town, 2014) p8.
[34] Sackey EKA and Kasilo OMJ '*Intellectual property approaches to the protection of Traditional Knowledge in the African Region': African Traditional Medicine Day*, Special Issue (2010) available at https://www.aho.afro.who.int/en/ahm/issue/13/reports/intellectual-property-approaches-protection-traditional-knowledge-african. (accessed 21 April 2017)
[35] KA Sackey and Ossy MJ Kasilo (2010).
[36] Wekundah JM 'African Technology Policy Studies Network Biotechnology Trust Africa: Why protect traditional Knowledge?' Special Paper series issue 44 (2012) p.

The Devils Claw plant in Namibia which is used as an analgesic and anti-inflammatory drug earns Namibia US$ 2 million annually. Joyce Nangula Namuhuja has hailed the Access to Biological and Genetic Resources Associated Traditional Knowledge Bill, saying once passed into law it can contribute to crucial areas, such poverty alleviation, women empowerment, employment and skills development particularly in rural areas.[37]

There are so many natural plants and resources that offer Namibians so much potential, including Moringa Oleifera and 'dhingila' plants. The Moringa Oleifera is classified as a super food. The tree grows naturally in some parts of Namibia and parts are said to be safe for human consumption. The plant is viewed as an energising product said to help with healing and is used to treat skin disorders, reportedly also diabetes, sleep disorders, anxiety and depression. Another indigenous Namibian plant, known locally as 'dhingila' for the manner it grows by twisting its sprouts around trees, is believed to contain properties that fight off certain types of cancer, including of the lungs, intestines, liver, brain.

The research focuses on Namibia and it looks at two countries in comparison, South Africa and Kenya. Looking at South Africa, it gets R29 billion per year from trade in Traditional Medicine[38] the San tribe of South Africa sold the right of ownership of the Hoodia plant to a British Company for about US$ 20 million. The African Cherry was imported from Kenya, Ethiopia and Cameroon by Germany in 1994 and it was worth US$150. Worldwide the products of *prunus africana* fetch US$ 220 million annually.

Trade in Biopiracy also illustrates the economic values of TK. Industrial enzymes from microbes used for fading jeans, stolen from Kenya, are worth US$600 million per year. The enzymes were collected from Lake Bogoria in Kenya. The diabetes drug processed by microbes from Lake Ruiru is worth Euro 278 million; it was collected from the lake in Kenya. There are several other cases within the trget countries but they are yet to be studied such as Amarula in Swaziland.

[37] Nakale A, 'Traditional knowledge can contribute to poverty alleviation' The New Era Newspaper 17 May.
2017.
[38] Monder, M, Ntuli L. Diedericks N, Mavundla K. Economics of traditional medicine trade in South Africa. In: The role of private sector within South African health system. South African Health Review; (2007). p 186-200. Available at http://www.hst.org.za/uploads/files/chap13_07.pdf. (accessed *29th May 2017).*

Sales of traditional medicine have seen a significant increase in the last decade. The annual industrial output for China listed on the herbal database Chinese Materia Medica was US$ 47.84 billion in 2010, up 29.5% from the previous year. Total profit reached nearly US$ 4.52 billion in 2010, up 33% over the previous year.[39]

Complementary/alternative medicine sales in Australia totalled US$ 1.12 billion in 2008. In Japan, herbal medicine (Kampo medicine) sales increased from US$ 1.42 billion in 2007 to US$ 1.47 billion in 2008. The same trend can be seen in the Republic of Korea where annual expenditures on traditional medicine were US$ 4.4 billion in 2004, rising to US$ 7.4 billion in 2009 through gradual market expansion.

All these countries have established herbal industries and or pharmaceutical companies that handle traditional medicines and have plenty of herbal dealers, drug stores for herbal medicine etc.[40]

2.2.2 The use and Importance of Traditional Knowledge in development.

There is need to protect TK against loss and misappropriation. Some form of protection may make local communities willing to part with their TK and genetic resources. Thus, if knowledge owners are compensated, they would be motivated to provide easy access to their TK. Moreover, they may be encouraged to conserve it and ensure future use and access. Concerning Traditional Medicine, if IPRs are used for protection, they may reduce access to products and treatment which are essential for a community. Government may therefore consider promoting the use of TK and also attempt to prevent misappropriation[41]

2.3 The importance of protecting Traditional Knowledge

For indigenous people, the rationale for protecting TK centres on questions of fundamental justice and the ability to protect, preserve, and control one's cultural heritage. There is also the concomitant right to receive a fair return on what these communities have developed, more emphasis will be made on this under the value of TK.[42]

[39] World Health Organisation Regional progress in traditional medicine 2011-2010 (June 2012) available at http://www.wpro.who.int/traditional_medicine/data/en/ (accessed 25 May 2017).
[40] Wekundah JM 'African Technology Policy Studies Network Biotechnology Trust Africa: Why protect traditional Knowledge?' Special Paper series issue 44 (2012) p 11.
[41] Wekesa M, 'What is sui generis system of Intellectual Property protection?' available at http://www.atpsnet.org/Files/sps44.pdf *(2006) p 9 (accessed 25 May 2017).*
[42] Wekundah JM 'African Technology Policy Studies Network Biotechnology Trust Africa: Why protect traditional Knowledge?' Special Paper series issue 44 (2012) 11.

Even non-indigenous people also have a strong incentive to ensure that fair use of TK is ensured because it has much to offer the modern society. It is increasingly being used to assist policy making in many areas: food and diversity; health, trade and economic development. On this basis there are five reasons why TK should be protected; these are: equity, conservation of biodiversity, preservation of traditional practices, prevention of biopiracy, and importance of TK in development.

2.3.1 Traditional Knowledge and equity

TK generates value that is currently inadequately recognised as well as compensated. Traditional farmers, for example, have nurtured, conserved and used both plants and animals. They have improved the value of plant genetic resources through continuous selection of the best adapted varieties. Seed companies then collect the varieties, process and produce for sale.[43] They are even allowed to protect the varieties through Plant Breeders Rights and can benefit from them while the farmers are left out. Farmers and Scientists thus rely on the genetic diversity present in crop plants that in hundreds of generations were accumulated, observed, selected, multiplied, traded and kept variants. The whole irony is that scientists can protect and benefit from their innovations whereas the traditional farmers contributions are overlooked. Farmers did not charge for the samples that the scientists and seed companies took, hence the inequality inherent in the current system of intellectual property rights.

2.3.2 Conservation of biodiversity

Knowledge innovations and practices of indigenous peoples and local communities are a show of their cultures. Protection of people's culture therefore entails preserving the link between the people and natural features including plants and animals. Protection of TK can therefore, help conserve the environment and promote sustainable agriculture and food security.[44]

2.3.3 Preservation of Traditional Practices

Protection of TK can provide a framework for maintaining practices and knowledge embodying traditional lifestyles. Preservation of TK helps to preserve the self-identification of people and can ensure the continuous existence of indigenous and traditional people.[45] This role is certainly beyond the scope of IPRs protection foreseen in TRIPS or any other multilateral instruments. The protection of TK through

[43] Wekundah JM (2012) 11.
[44] Wekundah JM (2012) 12.
[45] Wekundah JM (2012) 12.

appropriate form of IPRs can raise the profile of the knowledge and make it more attractive and worthy of preservation.

2.3.4 Prevention of Biopiracy

A Large number of patents have been granted on genetic resources and knowledge obtained from Africa and other developing countries. An example is the use of patent number 5, 401, 5041 granted for wound healing properties of turmeric acid. The innovation had been used in India for centuries prior to the registration of the patent by USA.[46] The Council of Scientific and Industrial Research (CSIR) from India successfully applied for its revocation. Kenya's kiondo was patented in Japan but this has not been revoked, same has been with the micro-organism for fading jeans, and the energy saving jiko just to mention a few cases.

A major concern is on how to prevent misappropriation of TK. Three suggestions have been advanced: documentation of TK with a view of establishing a TK digital library. This will enable states to check the possible misuse; the requirement of proof of origin for materials to be patented; and prior informed consent.

2.4 Ways in which Traditional Knowledge can be protected

In recent years, indigenous peoples, local communities, and governments—mainly in developing countries — have demanded IP protection for traditional forms of creativity and innovation, which, under the conventional IP system, are generally regarded as being in the public domain.[47] The IP system can be approached from two different angles to ensure protection of TK and TCEs. These two approaches— generally referred to as “positive” and “defensive” protection—can be undertaken together in a complementary way. The protection sought is twofold.[48]

2.4.1 Positive Protection

Under a first approach — “positive protection”— the IP system is designed to enable holders, if they so wish, to acquire and assert IP rights in their TK and TCEs. This can allow them to prevent unwanted, unauthorised or inappropriate uses by third parties (including culturally offensive or demeaning use) and/or to exploit TK/ TCEs

[46] Wekundah JM (2012) 12.
[47] WIPO ‘Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions’ (2015) available at http://www.wipo.int/edocs/pubdocs/en/tk/933/wipo_pub_933.pdf (accessed 25 May 2017).
[48] Traditional Knowledge and Intellectual Property – Background Brief http://www.wipo.int/pressroom/en/briefs/tk_ip.html (accessed on the 25 May 2017).

commercially, for example through the granting of licenses, as a contribution to their economic development. In brief, positive protection is the granting of rights that empower communities to promote their TK/TCEs, control their uses by third parties and benefit from their commercial exploitation.

2.4.2 Defensive Protection

A second approach — "defensive protection"— is designed to prevent the illegitimate acquisition or maintaining of IP rights by third parties. Stated otherwise, defensive protection aims to stop people outside the community from acquiring IP rights over TK and TCEs. India, for example, has compiled a searchable database of traditional medical knowledge that can be used as evidence of prior art by patent examiners when assessing patent applications. Defensive strategies might also be used to protect sacred cultural manifestations, such as sacred symbols or words, from being registered as trademarks.

The defensive protection may also be used to protect sacred cultural manifestations, which are used for trademarks such as sacred symbols or words.[49] A good example of a country that used this kind of protection is India. India has compiled a searchable database of all its traditional medicine, which can be used as evidence of prior art by patent examiners when accessing patent applications.[50] This database was used to revoke a patent granted for the use of turmeric to treat wounds, which is a property well known to traditional communities in India that is also documented in ancient Sanskrit texts. The Turmeric case was a landmark case in the jurisprudence of TK as this was the first time that a patent based on the TK of a developing country was successfully challenged.

2.4.3 Traditional Knowledge and defensive protection: The Turmeric patent

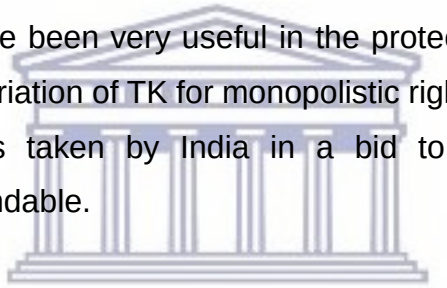
United States Patent 5,401,504 was initially granted with a main claim directed at a method of promoting healing of a wound in a patient, which consists essentially of administering a wound-healing agent consisting of an effective amount of turmeric powder to said patient. The patent applicants acknowledged the known use of turmeric in traditional medicine for the treatment of various sprains and inflammatory conditions. The patent application was examined, and the claimed invention was considered novel at the

[49] Dutfield G, *Protecting Traditional Knowledge and Folklore: A review of progress in diplomacy and policy formulation (*2003) 28-29 UNCTAD p 27 available at http://www.ictsd.org/downloads/2008/06/cs_dutfield.pdf
last accessed 20 April 2017.
[50] The Life Intellect Blog, '*Traditional Knowledge and Intellectual Property: Case of Turmeric'* (2013) 4-5 available at http://lifeintelect.com/blog/2013/10/24/traditional-knowledge-and-intellectualproperty-case-of-turmeric/ (accessed 21 April 2017).

time of application on the basis of the information then available to the examining authority. The patent was subsequently challenged and found invalid, as further documentation was made available (including ancient Sanskrit texts) that demonstrated that the claimed invention was actually already known.

In addition to this, numerous countries and nongovernmental organisations deem defensive protection necessary due to the fact that the IP system, especially patents, is considered defective in certain ways and allows companies to unfairly exploit TK.[51] Furthermore, defensive protection is considered to be more achievable than positive protection because some of the most commonly discussed defensive protection measures are basically enhancements to or modifications of existing IPR's.[52] Another reason is the fact that an effective positive protection mechanism is likely to require the very active and committed participation of many governments.[53]

These two approaches have been very useful in the protection of TK. Globalisation has led to a vast misappropriation of TK for monopolistic rights and no benefits for TK holders. Hence, the steps taken by India in a bid to protect its TK through documentation are commendable.



2.5 Creating and International *Sui Generis* Protection

A *sui generis* option has been suggested by many interested parties as the most appropriate alternative for the protection of TK. In this case, sui generis (the Latin for, "of its own kind") indicates that the protection granted exists independently of other categorisations (such as existing patent, copyright or trademark systems) because of its singularity.[54] Such a system would enable a focus on defining values and standards that could be applied to the protection of TK. The need for sui generis protection of TK arises from the perceived shortcomings of the existing IP system in Namibia and it would be a great system for the country. Potentially, a sui generis system could be defined and implemented differently from one country to another. In addition, a sui generis system may adopt measures of protection specific to TK.[55]

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[51] The Life Intellect Blog, '*Traditional Knowledge and Intellectual Property: Case of Turmeric'* (2013) 4-5 available at http://lifeintelect.com/blog/2013/10/24/traditional-knowledge-and-intellectualproperty-case-of-turmeric/ (accessed 21 April 2017).

[52] The Life Intellect Blog, *Tumeric Case* (2013).

[53]Hermann TM, Torri MC *Bridges Between Tradition and Innovation in Ethnomedicine:* Fostering Local Development Through Community-Based Enterprises in India (2011) p 72.

[54] The Life Intellect Blog, *Tumeric Case* (2013).

[55] Sackey EKA & Kasilo OMJ, '*Intelectual Property approaches to the protection of traditional knowledge in the African region*. Issue 13. Found at https://www.aho.afro.who.int/en/ahm/issue/13/reports/intellectual-property-approaches-protection-traditional-knowledge-african Issue 13 25 May 2017.

Advocates of the establishment of a *sui generes* system have argued that the existing IP mechanisms cannot provide for the recognition and protection of TK due to the differences between TK and conventional IPR's and this is the case with the Namibian system, the existing laws which are not as effective and are less compared to other counties laws in relation to protecting TK.[56]

In light of the fact that the existing IP system IP system does not fully protect TK, a number of communities and governments have called for an international legal instrument providing for *sui generis* protection.[57] The *sui generis* system is the modification of some features of the IP system so as to properly accommodate the special characteristics of its subject matter and the specific policy needs which led to the establishment of a different system.[58] Subsequently, in and afford to extend protection to TK, various countries have adopted existing IP systems to the needs of TK through *sui generis* measures.[59] A *sui generis* system might consist of some standard forms of IP protection combined with other forms of protection, or not at all for protecting TK.

An important feature of a *sui generis* system according to the Convention on Biological Diversity (CBD) is that any person interested in gaining access to a community's TK would need to obtain prior informed consent from the relevant community. There are a number of important elements to the *sui generis* system, one of the elements being that it includes elements of benefit sharing. In addition to this, *sui generis* laws include elements of disclosure of the country of origin. Another important feature of a *sui generis* system is that it usually includes provisions of customary laws.

In spite of the efforts made to provide a comprehensive *sui generis* framework for protecting TK, a number of constraints need to be overcome. These are problems of dysfunctional equivalence of terms, the legal doctrine that could form the basis of protection of TK, scope of the subject matter, formal requirements for acquisition of rights, substantive eligibility for protection and limitation of rights.[60] In countries of the African Region, the expertise in legal drafting required under a *sui generis* system, the lack of public enlightenment and institutional structures are some of the major constraints.[61] In

[56] Vilho AN, *A Critical Analysis of the Protection of Traditional Knowledge within the Namibian (*LLM thesis, University of Cape Town, 2014).
[57] WIPO, *Traditional Knowledge and Intellectual Property* 8.
[58] Kalaskar S 'Traditional Knowledge and Sui-Generis Law' (2012) *International Journal of Scientific and Engineering Reseach Volume 3, Issue 7.*
[59] Kalaskar S (2012) p 2.
[60] The Thirteenth Session of the Intergovernmental Committee on intellectual property and genetic resources, traditional knowledge and Expressions of Folklore (IGC), Geneva, Switzerland, (13-17 October, 2008 (Document reference,WIPO/GRtraditional knowledgeF/IC/13/5(A) and WIPO/GRtraditional knowledgeF/IC/13/5(B).
[61] Sackey EKA & Kasilo OMJ, '*Intelectual Property approaches to the protection of traditional knowledge in the African region*. Issue 13. Found at

the design and implementation of an effective administration and enforcement of sui generis protection of TK.

2.6 Examples of bio trade and bioprospecting in plants from Namibia

While commercial use and trade of wildlife (plants and animals) is in its infancy in Namibia, a wide range of natural (and cultivated) flora could be used commercially[62]. Some cases of bio trade and bioprospecting in Namibia already exist, raising questions of biodiversity conservation, protection of TK, and benefit-sharing. Below a few plants will be discussed.

2.6.1 Devil's Claw (Harpagophytum procumbens)

This plant has long been used for its medicinal properties, under traditional systems of customary resource use in the Kalahari Sands of Namibia, Botswana and South Africa. International bio trade from Namibia (and its neighbours) has grown substantially over the past four decades. The TK about the medicinal properties and applications of Devil's Claw held mainly by the San in the eastern parts of Namibia has already been lost, as some patents on extraction and processing methods have been granted to commercial companies in Germany and the United Kingdom. But access to the biological resource continues to raise issues of sustainable resource management and sharing of benefit from international trade.

2.6.2 Marula fruit (Sclerocarya birrea)

This fruit has been traditionally used as a food supplement by the San and by the Ovambo peoples. Some germplasm has left Namibia for South Africa and Israel. South Africa has done improvements on Marula fruit trees, with a view to juice and liqueur production as commercial application and has offered Namibia free access to the improved varieties.[63]

Meanwhile, Namibia is focusing its efforts on the commercialisation of Marula oil, building on TK and practices of oil extraction. Current issues revolve around: the development of commercially viable Marula oil extraction and processing techniques,

https://www.aho.afro.who.int/en/ahm/issue/13/reports/intellectual-property-approaches-protection-traditional-knowledge-african p 98 (accessed on the 26 May 2017).

[62] See, for instance: Lists of relevant plant species being developed by the National Botanical Research Institute (NBRI); as presented in Patricia Craven and Sian Sullivan, "Inventory and review of ethnobotanical research in Namibia: first steps towards a central 'register' of published indigenous plant knowledge"; and CRIAA SA-DC's survey of natural fruits (and related trees) in the Kavango region that have potential for commercialisation: CRIAA SA-DC (August 1999), "Non-Timber Forest Products Project, Phase 1 (NTFP-1), May 1998-July 1999, Kavango Region, Namibia", Final Report for CARE Oesterreich.

[63] Krugmann H, Cole D, Du Plessis P, (2003) '*Access and benefit-sharing mechanisms for the use of botanical resources in Namibia'* (2003) p 7 available at http://www.the-eis.com/data/RDPs/RDP66.pdf *(accessed 26 May 2017).*

product development to produce a commercially attractive oil product, marketing, and arrangements for the equitable sharing of benefits from the sale of processed Marula oil.

2.6.3 Succulents

Succulent plants, mainly from the southwestern desert stretches of Namibia (previous 'Sperrgebiet' for diamond production), have long been sought for research and taken out of Namibia by collectors for their novelty value[64]. Namibia could make significant amounts of money, if the succulents were properly cultivated in nurseries in the southwest, for commercial sale and trade.

2.6.4 Watermelon (Citrillus lanatus)

Namibia and Botswana are the joint centre of origin for genetic diversity of water melon. Different mixed wild and domesticated varieties are grown in Namibia's north. There are at least four traditional uses of watermelon, with all ethnic groups in Namibia being the custodians of the TK about cultivation and use. A local company in Oshakati is buying seeds from local women (who are in the business of extracting the seeds) for onward sale to cosmetics companies. A request has been received from a US company and the US Department of Agriculture to screen Namibian species of watermelon for natural resistance to fungi attacking cultivated species of commercial interest to the US.

2.6.5 !Nara fruit (Acanthosicyos horridus)

This fruit is a member of the watermelon family that grows in the Namib Desert. The desert-dwelling Topnaar people, traditional custodians of the fruit and related TK, have been directly benefiting from commercial! Nara[65] exports directly to a Cape Town based commercial company, via exporters in Walvis Bay. This trade is currently in limbo, and monetary benefits to the Topnaar are being threatened by new middlemen, in connection with the collapse of the Cape Town based company[66].

2.6.6 Monkey oranges (*Strychnos* spp)

These local fruits are currently being exported by a local Namibia-based private company to the University of Stellenbosch who are conducting an internationally funded project aimed at liqueur production. In this case, the issue is one of how to 'encourage' the local company to collaborate with the recently established Namibian

[64] It is not uncommon for Namibian succulent plants to pop up in northern catalogues.

Indigenous Fruit Task Team on sorting out benefit-sharing aspects associated with the export deal.

2.6.7 Manketti nut (Schinziophyton rautanenii)

For centuries, the San people have collected Manketti nut and extracted its oil for traditional use. In much of this activity in the Kavango region in Namibia's north, the San have been used as cheap labour by the Kavango people. Commercialisation of oil extraction, processing and sale could fetch substantial benefits to the local communities but would raise difficult questions about an equitable formula for partitioning of the benefits among different local peoples (e.g. San and Kavango). been directly benefiting from commercial! Nara[65] exports directly to a Cape Town based commercial company, via exporters in Walvis Bay. This trade is currently in limbo, and monetary benefits to the Topnaar are being threatened by new middlemen, in connection with the collapse of the Cape Town based company[66].

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[65] Krugmann H, Cole D, Du Plessis P, (2003) '*Access and benefit-sharing mechanisms for the use of botanical resources in Namibia'* (2003) p 8 available at http://www.the-eis.com/data/RDPs/RDP66.pdf *(accessed 26 May 2017).*
[66] Krugmann H, Cole D, Du Plessis P, (2003) p 8 *(accessed 26 May 2017).*

2.7 Conclusion

This chapter has defined what TK is in a nutshell from various sources as TK takes not only one form but many and it's constantly changing, it might occur that 20 years from now these definitions might change. It has and also shown how important TK is in society and economy at large, the amount of value it carries and wealth it generates and can bring to communities and countries.

The chapter makes a clear distinction between TK, TEK & IK but particularly this paper only focuses on TK. The importance of protecting TK within our societies has been revealed in the chapter, for promotion of equity and prevention of biopiracy to mention a few. TK is knowledge shared amongst a group of people and protecting TK also means protecting traditional communities and local communities a few examples of TK are made at the end of this chapter.

Furthermore, this chapter takes a look at examples of TK Possible ways of protecting TK with the paper further revealed that the international community has agreed on the need to establish a *sui generis* system for the protection of TK due to that fact that it has been recognised that the existing IP laws are inadequate for the protecting of the holistic nature of TK.

Sui generis protection of TK involves an acquisition of an alternative right that is separate from the rights that are recognised by the formal IP system, by the TK holders, as provided for under the system. This system seems to be more favoured as it is tailor made for the holistic nature of TK.

The following chapter focuses on the legislation put in place to protect TK at an international, regional as well as the national level. The chapter takes a look at what Namibia has done to ensure the protection of TK in the country as well as existing IP laws. The Swakopmund Protocol will be particularly looked at from all angels in this chapter, the chapter's main aim is to determine at the end whether existing IP laws and the Swakopmund Protocol is effective enough in Protecting TK currently in the country. It further takes a look at the Draft Policy on Access to Genetic Resources which is associated with the protection of TK and then assess whether these laws are eligible for the protection of TK and the principles laid do

CHAPTER 3

LEGISLATION IN RELATION TOTHE PROTECTION OF TRADITIONAL KNOWLEDGE

3.1 Introduction

Traditional communities have lost their livelihood and actual meaning of survival and many millions of dollars that accrued to Traditional Knowledge (TK) itself were lost to international companies that take advantage of TK and certain resources without any permission or any control.[67] Consequently, the rate at which TK about biodiversity is eroding is alarming, hence the need for the development of incentives for the protection and promotion of TK.[68] This chapter takes a look at legislation at an international, regional and national level that are put in place ready to protect TK. It also specifically zooms in on the provisions of the Swakopmund Protocol under national legislation and its objectives as laid down from the beginning off its existence.

This chapter looks at the progress that Namibia has taken with regards to protecting Intellectual Property rights within the country as well as internationally to see whether the existing laws can be used to protect TK especially within the country. The chapter also focuses on the Swakopmund Protocol and its provisions in protecting TK. It further takes a look at the Draft Policy on Access to Genetic Resources which is associated with the protection of TK and then assess whether these laws are eligible for the protection of TK and how effective the Protocol is in protecting TK.

3.2 International legislation

On an international level Namibia has committed itself to a number of multi-lateral agreements (MEAs). Article 144[69] states that

> 'unless otherwise provided by this Constitution or an Act of Parliament, the general rules of public international law and international agreements binding upon Namibia under this Constitution shall form part of the law of Namibia'.

The implication of this provision is that rules of public international law, as well as the provisions of international agreements ratified by Namibia, should be directly enforceable under Namibia law. Examples of some key MEAs relating to Access to benefit sharing that Namibia is a party to include, the Convention on Biological

[67] T Shikongo *Intellectual Property, Traditional Knowledge and Genetic Resources, Access to Genetic Resources: Will Traditional Knowledge Survive This Millennium?* (2001) p 5-6.
[68] T Shikongo(2005) 5-6
[69] The Namibian Constitution Act 1 of 1990.

Diversity (CBD) and the Cartagena Protocol on Biosafety, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the International Treaty on Plant Genetic Resources for Food and Agriculture and the World Trade Organisation Agreement on Trade Related Aspects of Intellectual Property Rights.[70]

As a party to TRIPS Namibia is under an obligation to comply with the minimum standards set by TRIPS for the protection of Intellectual Property Rights. Namibia also has responsibility for abiding by its provisions and implementing requisite national policies. While TRIPS generally does not protect TK (except perhaps potentially in a limited sense through mechanisms like trade secrets and indications of origin), its Article 27 (3)(b) allows members to "exclude from patentability plants and animals other than micro-organisms, and essentially biological processes for the production of plants and animals other than non-biological and microbiological processes". However, at the same time Article 27 (3)(b) requires members to provide for protection of plant varieties either by patents or by an effective *sui generis* system.

Even though the attribute 'effective' is controversial (remains subject to interpretation), this provision opens the door for establishing an alternative intellectual property rights regime covering TK (farmers' rights) under TRIPS, and at the same time ensuring implementation of Article 8(j) of the Convention on Biological Diversity (CBD) relating to indigenous and local communities. Namibia's Access to Genetic Resources draft legislation constitutes the *sui generis* system that ensures compatibility between TRIPS and CBD at the national level. In addition to this, Namibia is a party to various international agreements and conventions concerning the protection of IP.[71]

3.2.1 The Convention on Biological Diversity

The CBD is the first binding international instrument which acknowledges the importance of TK. It was signed at the Rio Summit in 1992. Namibia became a party to the CBD through ratification since 1997. The main objectives of the CBD are the conservation of biodiversity.

[70] Namibia is also a member of the World Intellectual Property Organisation (WIPO).
[71] Banjul Protocol since 2004, Berne Convention since 1990, Hague Agreement on Designs since 2004, Madrid Agreement on Marks since 2004, Madrid Protocol on Marks since 2004, Paris Convention since 2004, Patent Cooperation Treaty since 2004, WIPO Convention since 1991, WTO/TRIPS since 1995.

The CBD states in Article 8(j) that:

> 'Each contracting Party shall, as far as possible and as appreciate (j) Subject to 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 encouragement the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices'.

Furthermore, Article 10 (c) requires parties to 'protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with the conservation and sustainable use requirements'. Another important provision is found in Article 18.4, which states that parties must encourage and develop methods of corporation for the development and use of technologies, including indigenous and traditional technologies.

Ratification of the CBD seeks to suggest that Namibia recognises the importance of TK and has since 1997 committed herself to protecting TK within the country itself. Apart from the CBD Namibia has also ratified other international conventions and treaties.

3.2.2 The Nagoya Protocol on access and benefit-sharing

This is a new treaty that builds on and supports the implementation of the CBD. The Nagoya Protocol198 is said to have been conceived to respond to the major criticisms voiced against the CBD regarding the Access and Benefit-Sharing provisions. One of the criticisms is related to the protection afforded to indigenous TK.

Thus the purpose of this Protocol is to effectively implement the fair and equitable sharing of benefits arising from the utilisation of genetic resources.

More importantly, the protocol contains noteworthy provisions relating to TK in relation to genetic resources held by indigenous and local communities.[72] It also contains provisions relating to genetic resources held by indigenous and local communities where the rights of these communities over these resources have been recognised.[73]

[72] Article 3, article 5(5), article 7, article 7, article 11(2) article 12, article 13 (1) (b), article 16(1) article 18(1) article 21, article 22)5) (j).
[73] Article 5.

Furthermore, the protocol sets out clear obligations to seek the prior informed consent of indigenous and local communities.[74] In addition, the Protocol makes provision for the sharing of benefits arising from the use of TK associated to genetic resources, as well as benefits arising from the use of genetic resources in accordance with domestic legislation.[75]

Member states must also ensure that their national laws comply with the domestic legislation and regulatory requirements of provider states related to access and benefit.[76] The Nagoya Protocol also provides incentives for the promotion and protection of TK by encouraging the development of community protocols, minimum requirements for mutually agreed terms and model contractual clauses related to access and benefit-sharing of TK associated with genetic resources.[77]

Namibia has acceded to the Nagoya Protocol by depositing an instrument of accession to the United Nations Headquarters on the 15 May 2014.[78] According to the report, the instrument has been accepted and Namibia is officially a party to the said protocol. Kauna Schroeder, who is the Principal Coordinator and Adviser to the Office of the Environmental Commission was quoted by the local newspaper stating that Namibia opted to become a party to the Nagoya Protocol by way of accession due to the fact that a decision was taken that Namibia should only become party to the Nagoya Protocol once the country has a domestic law dealing with access and has benefit-sharing issues in place.[79]

Although the Draft Policy on Access to Genetic Resources and Protection of Associated TK is still under development and while endorsement by Cabinet and Parliament is still ongoing, she hopes that accession to the Nagoya Protocol will speed up the process.[80]

3.3 Regional Legislation

African Regional Intellectual Property Organisation (ARIPO) was the result of an idea mooted at a regional seminar on patents and copyright held in Nairobi in the early 1970's and the first draft agreement on the creation of a regional intellectual property

[74] Article 7.
[75] Article 5.
[76] Article 15.
[77] Article 12.
[78] A Shigweda 'Namibia Accedes to the Nagoya Protocol' *The Namibian News Paper*, 20 May.2014.available at http://allafrica.com/stories/201405200773.html?viewall=1 l (accessed on 17 April 2017).
[79]A Shigwedha 'Namibia Accedes to the Nagoya Protocol' *The Namibian Newspaper* available at http://www.*allafrica.com/stories/201405200773.html* (accessed 17 April 2017).
[80] A Shigwedha Namibia Accedes to the Nagoya Protocol' (17 April 2017).

organization was adopted in 1976 by a diplomatic conference – The Lusaka Agreement (also known as the draft Agreement on the Creation of the Industrial Property Organisation for English-speaking Africa (ESARIPO). The primary focus under regional legislation will be the Swakopmund Protocol as the mini thesis focuses on the effectiveness of the Swakopmund Protocol. The others two will be discussed in short.

Pursuant to its functions and powers under the Agreement (Article VII) the Administrative Council of ARIPO has developed protocols and regulations that form the background of the legal and operational design of intellectual property protection in member states under the system. These include:

a. The Harare Protocol on Patents and Industrial Designs within the Framework of the African Regional Industrial Property Organisation[81]
b. The Banjul Protocol on Marks;[82] and
c. The Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore.[83]

Membership to the Lusaka Agreement does not necessarily imply membership to the protocols. Each protocol applies to different aspects of intellectual property and membership to each is voluntary.

3.3.1 The Harare Protocol

The Harare protocol[84] provides a framework for filing and protection of patents and industrial designs within member states. The Protocol is supplemented in its provisions by administrative regulations that make further and detailed provisions for the manner in which an application is treated from the date of filing to grant of patent or refusal as the case may be.

There are principally two regulations under the Harare protocol in this regard;

1. The regulations for implementing the protocol on patents and industrial designs within the framework of the African regional intellectual property organisation ('the regulations'); and
2. The administrative instructions under the regulations for implementing the protocol on patents, industrial designs and utility models within the framework

[81] The Harare Protocol.
[82] The Harare Protocol.
[83] The Swakopmund Protocol on the protection of Traditional Knowledge and Expressions of Folklore of 2010.
[84] Namibia has been a member of the Harare protocol since April 23, 2004.

of the African regional intellectual property organization (the Administrative instructions)

3.3.2 The Swakopmund Protocol

The Swakopmund Protocol[85] was adopted in August 2010 by ARIPO member states and recognises in its Preamble the significance of TK. It also acknowledges that the knowledge, technologies, biological resources and cultural heritage of traditional and local communities are the result of tested practices of past generations.

The protocol aims to address deficiencies in the legal framework by providing the necessary tools to prevent the misappropriation of the traditional and cultural knowledge and heritage of Africa.

The Swakopmund Protocol[86] has its purpose lined out in the very first section of the protocol. Some of which includes the protection of TK holders against any infringement of their rights as recognised by this Protocol,[87] as well as to protect expressions of folklore against misappropriation, misuse and unlawful exploitation beyond their traditional context.[88]

The Protocol goes onto say that it shall be interpreted and enforced taking into account the dynamic and evolving nature of TK and the characteristic of TK systems as frameworks of ongoing innovation – as TK is constantly evolving and changing.

In accordance with the objectives of ARIPO generally and in particular Article III (c), which provides for the establishment of such common services or organs as may be necessary or desirable for the coordination, harmonisation and development of the intellectual property activities affecting its member states.

The Protocols preamble goes onto say:

> 'Recognising the intrinsic value of TK, traditional cultures and folklore, including their social, cultural, spiritual, economic, intellectual, scientific, ecological, agricultural, medical, technological, commercial and educational value. Convinced that traditional knowledge systems, traditional cultures and folklore are diverse frameworks of ongoing innovation, creativity and distinctive

[85] The Swakopmund Protocol on the protection of Traditional Knowledge and Expressions of Folklore, 2010.in these last two footnotes your font size has changed – I suggest you use font 10 throughout – ensure consistency.
[86] This Protocol shall not be interpreted as limiting or tending to define the very diverse holistic conceptions of traditional knowledge; or cultural and artistic expressions, in the traditional context.
[87] Section 19a).
[88] Section 1(b).

> intellectual and creative life that benefit local and traditional communities and all humanity.'[89]

The preamble further states that:

> 'the legal protection must be tailored to the specific characteristics of TK and expressions of folklore, including their collective or community context the intergenerational nature of their development, preservation and transmission, their link to a community's cultural and social identity, integrity, beliefs, spirituality and values, and their constantly evolving character within the community concerned.'

In addition to this, the Protocol furthers states that the purpose of the Protocol is 'to protect TK holders against any infringement of their rights as recognised by this Protocol; and to protect expressions of folklore against misappropriation, misuse and unlawful exploitation beyond their traditional context.[90]

The protocol is divided into 4 parts, the first part is preliminary provisions, and looks at definitions of terms in the protocol and the objectives of the protocol, the second part looks at the protection of TK, the third part takes a look at the protection of expression of folklore and the last part is general provisions.

It is interesting to note that the Protocol makes a distinction between TK and folklore and defines them separately. Section 2 deals with the definitions of TK and folklore. The former is defined as 'any forms, whether tangible or intangible, in which traditional culture and knowledge are expressed, appear or are manifested, and comprise the following forms of expressions or combinations thereof'. This includes verbal expressions, musical expressions, expressions by movement and tangible expressions.[91]

The Protocol grants automatic protection for TK that meets the requirements as stated in s4. Section 5(1) further states that the protection of TK shall not be subject to any formality. It further says that in the interests of transparency, evidence and the preservation of TK, relevant national competent authorities of Contracting States and ARIPO Office may maintain registers or other records of the knowledge.

[89] The Swakopmund Protocol on the protection of Traditional Knowledge and Expressions of Folklore, 2010 – preamble p 5.
[90] Article 1.
[91] S2.

Section 5.4 of the protocol goes on to say that in a case of two or more communities in the same or different countries that share the same TK, the relevant national competent authority of the Contracting States and ARIPO Office shall register the owners of the TK and maintain relevant records.

The Protocol affirms the principle that traditional and local communities are the custodians of their TK[92] and confers upon the owners of the rights, the exclusive right to authorise the exploitation of their TK.[93] They also have the right to prevent anyone from exploiting their TK.[94] It further goes on to say that the term exploitation with reference to TK knowledge refers to two acts – where TK is a product[95] and where it is a process.[96] In this regard, the protocol gives TK owners the right to assign and conclude licensing agreements which states that they shall be no force or effect if they are not done in writing where the drawn up document shall be approved by the national competent authority.[97] The exception to this is that TK that belongs to a local or traditional community may not be assigned.[98]

There shall be fair and equitable sharing of benefits arising from commercial or industrial use of their knowledge which has to be determined by mutual agreement between parties.[99] There are exceptions and limitations in section 11.

Section 15 is also of great importance as it makes it clear that authorised access to TK associated with genetic resources does not imply the right to access such resources and section 16 the criteria for the identification of an expression of folklore.

Section 12 is also an important provision as it states that 'where protected TK is not being sufficiently exploited by the rights holder, or where the holder of rights in TK refuses to grant licences subject to reasonable commercial terms and conditions, a Contracting State may, in the interest of public security or public health, grant a compulsory licence in order to fulfil national need. Ultimately, the rights to exploit TK are held by the local and traditional communities. It is only when they refuse to grant

[92] Section 6.
[93] Section 7(1).
[94] Section 7 (2).
[95] Section 7 (3) a.
[96] Section 7 (3) b.
[97] Section 8 (1).
[98] Section 8 (1).
[99] Section 9 (1).

a licence when it would be in the interest of public security or health that the State may compulsorily grant such licence.

In dealing with issues surrounding trans-boundary TK, the protocol makes provision for the registration of multicultural and trans-boundary TK and traditional and cultural expressions to resolve uncertainties relating to ownership of this knowledge, which may be held by more than one community within the same or neighbouring countries.[100] Regarding the period of protection, the Protocol grants protection in perpetuity. This, however, does not apply where TK belongs exclusively to an individual.[101]

In this instance, the protection of TK lasts for 25 years following the exploitation of knowledge beyond its traditional context by the individual.[102]

Section 18 states that the beneficiaries of the protection offered under the Protocol shall be the local and traditional communities:

Section 18 states that the beneficiaries of the protection offered under the Protocol shall be the local and traditional communities:

(i) to whom the custody and protection of the expressions of folklore are entrusted in accordance with the customary laws and practices of those communities; and

(ii) who maintain and use the expressions of folklore as a characteristic of their traditional cultural heritage.[103]

Furthermore, s19 lays out obligations for State Parties to provide adequate and effective legal and practical means for the protection of folklore. Regarding the duration of protection, s21 provides for perpetual protection against misappropriation, misuse or unlawful exploitation.

Section 22 ensures the effectiveness of the protection and management of the protection and management of expressions of folklore, the national competent authority and the ARIPO Office acting on behalf of the Contracting States shall be entrusted with the tasks of awareness-raising, education, guidance, monitoring,

[100] S(5) (4).
[101] S13.
[102] S13.
[103] S8.

dispute resolution and other activities relating to the protection of expressions of folklore. The Contracting States shall also ensure that accessible and appropriate enforcement and dispute resolution mechanisms, sanctions and remedies are available where there is a breach of the provisions relating to the protection of TK and expressions of folklore.[104]

One of the notable principles found in both the Protocol and the draft policy on access to genetic resources and the protection of associated TK is the principle of prior informed consent. The draft policy aims to ensure that no one will gain access to TK without the consent of the concerned community. This is in line with the Swakopmund Protocol, which allows the owners of TK to prevent anyone from exploiting their TK without their prior informed consent.[105] Although well-drafted, the Swakopmund Protocol vests ownership of TK in local or traditional communities,[106] but does not define them. This can be problematic as it is unclear as to which communities can be regarded as local or traditional.

3.4 National Legislation

Namibia has put in place certain legislation to regulate and protect IP within the country. Starting with the supreme law of the country, the Namibian Constitution[107] because all other laws are to be in line with the highest law of the country. Here are few legislations to be discussed below as they all touch on matters relating to TK. The Traditional Authorities Act (TAA), The Environmental Management Act (EMA), The Nature Conservation Amendment Act, The Forest Act (FA) as well as the Communal Land Reform Act (CLRA).

3.4.1 The Namibian Constitution, Property Rights and Traditional Knowledge.

In is important to take cognisance of Article 100 of the Namibia Constitution, which vests ownership of all natural resources not privately owned in the State. In the context of TK, it is imperative to state Article 95(1) of the Constitution, which obliges the state 'to adopt policies aimed at the maintenance of ecosystems, essential ecological processes and biodiversity, and the utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both at present and in the future'.[108] In addition, Article 16 of the Namibian Constitution deals with property rights and states that:

[104] Section 23(1).
[105] Article 72.
[106] Article 6.
[107] The Namibian Constitution, Act 1 of 1990.
[108] *Gemfarm Investments v Trans Hex Group* 2009 (2) NR (HC) at 481J-482C.

> 'All persons shall have the right in any part of Namibia to acquire, own and dispose of all forms of immovable and movable property individually or in an association with others.'

Although there is no explicit reference to IP made in the Namibian Constitution, Amoo[109] is of the opinion that this provision can be interpreted to include IP as a form of 'incorporeal property'[110], included in the phrase 'all forms of property, movable or immovable'.[111] In addition to this, Article 66 of the Namibian Constitution recognises the importance and existence of customary law. These provisions have made issues surrounding ownership, access and use of TK much clearer.

3.4.2 The Traditional Authorities Act (Act No.25 of 2000)

The TAA, defines a traditional community to mean 'an indigenous homogeneous, endogamous social grouping of persons comprising of families originating from exogamous clans, of whom share a common ancestry, language, cultural heritage, customs and traditions, who recognise a common traditional authority and inhabit a common communal area, and may include the members of that traditional community residing outside the common communal area'.

The definition of tradition in the TAA comprises of components found within the definition of what TK is as defined by the Swakopmund Protocol, where TK is found within small groupings of people sharing a common culture, language etc. The TAA can be used in helping with the identification of what tradition means at the national level since it is not defined in the Protocol.

3.4.3 The Environmental Management Act (Act No.7 of 2007)

The EMA Promotes community involvement in the management of natural resources and community sharing in the benefits from these resources. It also mandates the establishment of a Sustainable Development Advisory Council to advise the minister on how to conserve biological diversity, on the sustainable use of environmental resources, and on access to genetic resources.

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[109] Amoo *Intellectual property under the Namibian Constitution* (2010) 307 available at http://www.kas.de/upload/auslandshomepages/namibia/constitution_2010/amoo_harring.pdf (accessed 20 April 2017).

[110] Amoo SK *Intellectual property under the Namibian Constitution* (2010) p 307.

[111] Amoo SK *Intellectual property under the Namibian Constitution* (2010) p 307.

Traditional communities in areas are placed in charge in taking care of their environment and taking care of the TK within where they stay and protect TK and against any infringement of their rights as recognised by the Swakopmund Protocol as well as to protect expressions of folklore against misappropriation, misuse and unlawful exploitation beyond their traditional context. In the 6th section of the Swakopmund Protocol it confirms that traditional and local communities are the local custodians of TK. The EMA allows not only for these communities to be directly involved in the managing of the resources in their communities but also to share the benefits of them.

3.4.4 Forest Act (Act No. 12 of 2001)

The FA Grants rights of utilisation over forest resources and grasses to communal area residents on the proviso that they form community forests. Some plants used in the production of TK medicine are found in forests and have to be protected and not only from the top but the rights over the use of such forests are in the hands of the traditional communities that know them well and use them on a daily basis and not misuse the natural forests.

3.4.5 Communal Land Reform Act (Act No. 5 of 2002)

The CLRA Sets out procedures for the allocation of customary land rights and establishes communal land boards to oversee customary land rights allocations. To avoid unfair distribution of land within local communities the CLRA sets out procedures to be followed to ensure that residents all have land rights in the community.

3.5 Traditional Knowledge and Intellectual Property Rights in Namibia

TK is only mentioned in the Industrial Property Act (IPA) in s12 where TK is regarded as forming part of prior art under patent law. The Copyrights Act (CA) does not make mention of TK anywhere in the act itself. It is not clear whether it was the intention of the legislature to intentionally exclude TK from the protection offered under the current statutory law. Therefore rendering the IPA and CA inapplicable to TK as they make no specifications with regards to the protection of TK within the country.

3.5.1 Patents

Section 13 of the Industrial Property Act[112] states that patents are available for any invention, whether products or process, in all fields of technology, provided the invention is new, involves an inventive step and is industrially applicable.

[112] Act No 1 of 2012.

Section 14(1) of the Act, states that an invention is new if it is not anticipated by prior art. In terms of s12 'anticipated' means forming part of or disclosed by prior art. This includes:

i) all matters disclosed to the public, anywhere in the world, by publication in any form, or by oral disclosure, by use or in any other way
ii) matters contained in a pending application for a patent as contemplated in s14(3)
iii) knowledge developed by, or in possession of, a local or indigenous community and which originated at a date prior to the priority date of the relevant invention. [113]Furthermore, for an invention to be patentable, it must involve an inventive step.[114]

A patent involves an inventive step when, having regard to the entire relevant prior art, it is not obvious to a person skilled in the art. In this regard an invention is deemed obvious when the prior art provides motivation to try the invention, or when the method of making a claimed product is disclosed in, or rendered obvious by, a single piece or a combination of pieces of prior art. In terms of s45, patent protection expires 20 years after the filling date of the application for a patent.

WIPO has a tradition of which when members innovate within the TK framework, they may use the patent system to protect their innovations. However, TK as such - knowledge that has ancient roots and is often informal and oral - is not as often protected by conventional intellectual property systems. From the definition of a patent one can see that protection is extended to new inventions of which that new invention is not anticipated in any way. It is difficult to patent TK because of its ongoing and changing nature another thing to note is that s12 (3) of the IPA states 'that knowledge developed by, or in possession of, a local or indigenous community and which originated at a date prior to the priority date of the relevant invention' won't qualify as a new invention and TK falls within the bounds of this, TK belongs to indigenous communities.

In 2012 India[115] announced new guidelines for issuing patents by creating a Traditional Knowledge Digital Library (TKDL) which has raised eyebrows especially in the scientific world, and certain requirements which have to be met in order to patent TK. The Indian Patent office have played an important role in safeguarding TK by making this

[113] Act No 1 of 2012.
[114] Section 15(1).
[115] Patwardhan B, '*Traditional knowledge patents: New guidelines or deterrents?'* available from: http://www.ipindia.nic.in/iponew/TK_Guidelines_08November2012.pdf (accessed 28 May 2017).

database and they are the only country who has made such database,[116] access of TKDL is available to nine International Patent Offices (European Patent Office, United State Patent & Trademark Office, Japan Patent Office, United Kingdom Patent Office, Canadian Intellectual Property Office, German Patent Office, Intellectual Property Australia, Indian Patent Office and Chile Patent Office), under TKDL Access(Non-disclosure) Agreement.[117] TKDL is proving to be an effective deterrent against bio-piracy and is being recognised as a global leader in the area of TK protection. In 2011, an International Conference was organized by World Intellectual Property Organisation (WIPO) in collaboration with CSIR on Utilization of TKDL as a Model for Protection of TK.

TKDL has made waves around the world, particularly in TK rich countries by demonstrating the advantages of proactive action and the power of strong deterrence. The idea is not to restrict the use of traditional knowledge, but to ensure that wrong patents are not granted due to lack of access to the prior art for Patent examiners.[118] More African countries can make use of the Indian TKDL, they can adopt the system and make use of it in their respective countries.

3.5.2 Trademarks

Over the past few decades, there has been an increase in the use of traditional words, designs and symbols by indigenous and non-indigenous entities.[119] This increase has come as a result of a growing trend in 'ethnicity'. There are various examples of how traditional words, designs and symbols have been used in the course of trade. In Canada for example, names of the first Nations such as Algonquin, Mohawk, Haida and Cherokee, as well as symbols such as Indian heads and tepees are used as trademarks by a number of non-Aboriginal companies.[120] They were used to market products such as cars and firearms. In Namibia for example, *Omaere* is a registered trademark, but it has its origins as traditional milk made by the Ovaherero people.[121] *Meme Mahangu* is another Namibian registered trademark the trademark gains its name from the Oshiwambo culture where *meme* is used to refer to mother and *mahangu* is the traditional name for pearl millet.

[116] New guidelines for patents processing available at http://www.iipta.com/new-guidelines-patent-processing/ (accessed 31 May 2017).
[117] About TDKL available at http://www.tkdl.res.in/tkdl/LangGerman/common/Abouttkdl.asp?GL=Eng (accessed 31 May 2017).
[118] About TDKL available at http://www.tkdl.res.in/tkdl/LangGerman/common/Abouttkdl.asp?GL=Eng (accessed 31 May 2017
[119] Zografos D *Intellectual property and Traditional Cultural Expressions* (2010) p 67-69.
[120] Zografos D *Intellectual property and Traditional Cultural Expressions* (2010) p 67-69.
[121] M Nunuhe *Namibia: Protecting Your Intellectual Property.* New Era Newspaper 26 April 2013 available at http://allafrica.com/stories/201304260909.html?viewall=1 last (accessed 14 March 2017).

A trademark is defined in s131 of the Industrial Property Act as:

> 'a trade mark other than a certification or a collective trademark means a mark used or proposed to be used by a person in relation to goods or services for the purpose of distinguishing those goods or services from the same kind of the same kind of goods or services connected in the course of trade with any other person.'

Traditional communities have, as a result, become concerned about the use of their traditional marks and symbols as trademarks, without proper consent.[122] There is a different between TK and traditional marks. Examples of traditional forms of trade mark include word marks, logos, device marks, slogans, letter marks or combination thereof. In addition to this, some of the traditional marks and symbols are used in ways that are offensive and degrading to traditional communities. A further concern is the fact that the use of traditional marks and symbols in the course of trade may lead to the traditional communities being barred from the use of their own marks and symbols.[123]

Consequently, it has become appropriate to examine the protection of TK, especially cultural expressions within the trade mark law system.

As can be seen from the definition, the essential and primary function of a trademark is to indicate the origin of the goods or services in respect of which manner it is being used.[124] This function of a trademark has also been stated in case law were the courts have stated that a trademark is a badge of origin.[125] Once an application for a trademark has been granted, it is valid for a period of 10 years from the date of the application for registration.[126]

Furthermore, s139 stated deals with who may apply for the registration of a trademark. The section stated that any person who has a bona fide claim to proprietorship of the mark may apply. The person must also have bona fide uses or intend to use the mark as a trademark.

The appropriate role for trademarks in protecting indigenous people's TK and cultural property is not easily determined. Indigenous peoples sometimes seek the exclusivity

[122] Vilho AN, *A Critical Analysis of the Protection of Traditional Knowledge within the Namibian (*LLM thesis, University of Cape Town, 2014) p28.
[123] Vilho AN LLM Thesis (2014) p28.
[124] Zografos D *Intellectual property and Traditional Cultural Expressions* 56-57.
[125] *Varimark (Pty) Ltd v BMW AG* (2007) SCA 53 (RSA) at para13.
[126] Section 157.

that arises from trademark registration as protection for signs and symbols, and thus registration is potentially a valuable legal protection.

At the same time trademarks are limited tools that lend only a small amount of assistance in protecting limited aspects of indigenous peoples' cultural intellectual property claims.[127]

The trademark right, like all intellectual property rights, and indeed property rights more generally, is not a right to own or to control all uses, but a right to exclude others from certain uses.[128] The right to exclude will often practically result in the right to use. However, trademark registration does not give a positive right to use the trademark in all situations. It is limited to certain uses in relation to the class of goods or services in which it is registered and third parties may make legitimate fair use of trademarks.[129]

The protection of *sui generis* which is discussed in chapter 2 may be the one way in which the protection of indigenous people's cultural intellectual property in signs and symbols can be developed, at both national and international level to ensure the protection of trademarks.

The protection of indigenous symbols and signs, although sometimes possible through trademark law, should not be regarded as a subset of trademark law, but potentially an area requiring a greater extent of protection than trademark law offers. This may mean a *sui generis* system functioning alongside trademark law or a radical rethink of trademark law.

The time has come to protect indigenous peoples' signs and symbols at national and international levels of trademark systems. Many indigenous peoples believe that such protection is long overdue.

3.5.3 Copyright

There are four arguments that can be advanced to justify the protection of copyright. The first one is the natural-justice argument,[130] which states that authors, like any worker, are entitled to the fruits of their labour.

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[127] Frankel S, '*Trademarks and Traditional Knowledge and Cultural Intellectual Property Rights'* (2015) 3 available (PDF download available, available at https://www.researchgate.net/publication/228136506_Trademarks_and_Traditional_Knowledge_and_Cultura l_Intellectual_Property_Rights (accessed 28 May 2017).
[128] TRIPS Agreement, *supra* note 3, art. 16.
[129] TRIPS Agreement, *supra* note 3, art. 17.
[130] H Klopper *Law of Intellectual Property in South Africa* (2011) 144.

The second argument is known as the economic argument. This argument is premised on the principle of a just return on labour. Hence; authors must be remunerated for the exploitation of their work.

The third argument is the cultural argument. This argument is of the opinion that rewarding creativity is in the best interest of the public, which will subsequently lead to enhanced national culture.

Lastly, the social argument states that dissemination of copyright work to the public advance society. In addition, this argument states that wide dissemination of works leads to social cohesion and is ultimately viewed as a social service. This is what leads to the protection of copyright works.

Copyright law protects the material expression of ideas apart from the physical embodiment of the work in which they are expressed.[131] Namibia has been a party to the Berne Convention relating to copyright ever since 1990; hence it affords copyright protection to any work eligible for such protection. The Berne Convention sets out minimum standards of copyright protection, which members are obliged to incorporate into their national legislation and defines the protection to be extended by member states to works of others.[132]This is known as the principle national treatment.

Section 2 of the Copyright and Neighbouring Rights Protection Act[133] outlines the works eligible for copyright as

- Literary works
- Musical works
- Artistic works
- Cinematograph films
- Sound recordings
- Broadcasts
- Programme-carrying signals
- Published editions and
- Computer programmes

[131] Galago Publishers (Pty) Ltd v Erasmus 1989 (1) SA 276 (A) 283-285.
[132] International Copyright law – 'The Berne Convention. Fact sheet - 08: The Berne Convention' (5th July 2004) available
[133] Act No. 6 of 1994.

In addition to this, s2 (1) further requires that for a work to be eligible for copyright, it must be original.

Furthermore, s2 (2) requires that for a work to be eligible for copyright protection, it must have been written down, recorded or otherwise reduced to material from. Broadcasts or programme-carrying signals are exempted from this requirement.

In short, for there to be copyright, there must be a work; the work must be original; it must be in material form and lastly, the work must fall into one of the categories listed in s2(1). Section 6 states that copyright shall subsist during the life of the author and for a period of 50 years from the end of the year in which the author dies.

The Act does not define what 'original' means, but according to Dean[134] 'original' in this context does not mean the work must be in any way unique or inventive. 'Original' in the context of copyright means that the work must be a product of the author's own labour and should have not been copied. In *Accessco cc v Allforms (Pty) Ltd* at 469[135] it was held that originality is a matter of degree depending on the skill, judgement or labour involved in the making of the work.

Copyright only protects original works, the works of TK copyright might must have been original once and whether a work was created a long time ago that the term original required by copyright will extend its protection to TK. When it comes to TK different communities may claim similar TK and they may have arrived at this knowledge independently, which would prevent each community having copyright in the knowledge. If one community had copied it from another community or if they both copied it from a third community, then the community that created the work will hold the copyright.[136]

Although Copyright law says the author should be mentioned there is a provision in the Berne Convention, article 15(4) that says In the case of certain unpublished works of unknown authorship it can still be protected, and TK mostly is undocumented and

[134] O Dean *Handbook of South African Copyright Law* (2006) p -37.
[135] *Accesso CC v*. *Allforms* (*Pty*) Ltd. [1998] 4 All SA 655.
[136] Magalla B, 'Copyright protection in Traditional Knowledge and development of information and communication technology' (2015) p 14 available at https://cyber.harvard.edu/copyrightforlibrarians/Module_8:_Traditional_Knowledge. (accessed 3 May 2017).

the founder of a particular knowledge may not be known but that does not exclude it from being protected.

When it comes to fixation and TK, there may be a big problem as TK constantly keeps changing. Traditional buildings as well as sculptures may qualify for this copyright requirement, but traditional songs, dances and even stories are not fixed. Some laws at the international level do not coincide with the laws at the national level and countries ought to decide which one takes precedence.

3.6 Existing intellectual property rights regimes cannot be used to protect Traditional Knowledge

Although not many laws in place to protect TK, and one can see the inadequacy of laws especially at the National level itself. The few laws that are in place will be discussed below to see whether they are sufficient in protecting TK.

3.6.1 Conventional intellectual property right system.

Generally, existing intellectual property rights (IPR) regimes notably patent systems are inappropriate for the protection of TK, for reasons including the following:[137]

> They were originally designed and developed for industrial inventions, whereby innovations are viewed as individual activity composed of separate identifiable components and ideas, each of which can be described and owned, and thus patented. In contrast, most traditional innovation at the local and community level is a result of a collective process of freely sharing new ideas, knowledge and practices that cannot be owned by an individual or even a group. This applies, in particular, to local-level management and use of biodiversity.
>
> The financial and legal resources required to apply for, maintain, and if necessary defend, any patent are generally far beyond the capacity and means of resource-poor local communities.
>
> Commercial companies can patent products and/or processes derived from TK by making small 'improvements' (such as isolating an active component and patenting the extraction process) without any of the benefits accruing to the custodians of the TK.

[137] Krugman thematic report p 12.

> Holders of TK are groups that are often not homogenous and may live in transboundary areas, thus making it difficult to be represented under a single title or rubric. Local communities often find it difficult to handle sensitive commercial information in a confidential but transparent manner.

It has been argued that some limited protection of TK would be possible using regimes of copyright, trade secrets and geographical indications (certificates of origin).[138] These and other innovative mechanisms are being examined in an effort by the WIPO to identify and explore the intellectual property needs and expectations of the new beneficiaries.

Conventional intellectual property law does not cover inventions and innovations of indigenous and local peoples. Their contributions to plants breeding, genetic enhancement, biodiversity conservation and global drug development are not recognised, compensated or even protected. Similarly, the TK of indigenous and local peoples is not treated as intellectual property worth protecting, while the knowledge of modern scientists and companies is granted protection. The patentability of products and/or processes derived from TK raises critical questions associated with the compensation for the knowledge, and the protection against future uncompensated use of the knowledge. This is worrisome as it leaves room for TK to be easily exploited without traditional communities being compensated as it is not protected and therefore have no law to fall back on. TK is worth protecting in all areas from music to plants as discussed in the previous chapter, TK generates huge amounts of income for different countries.

3.7 Draft Policy on Access to Genetic Resources and the Protection of associated Traditional Knowledge

Namibia has developed a draft policy on the regulation of access to genetic resources and the protection of associated TK, in a participatory fashion and with the active involvement of relevant stakeholder groups.

The draft policy explicitly recognises that ‘current forms of intellectual property protection, such as patents and plant breeders’ rights, cannot be applied for either technical reasons or because they are contrary to the practices and beliefs of some

[138] Mugabe J, “Intellectual Property Protection and Traditional Knowledge: An Exploration on International Policy Discourse”, Biopolicy International No.21, (1999) p.13 available at http://www.wipo.int/edocs/mdocs/tk/en/wipo_unhchr_ip_pnl_98/wipo_unhchr_ip_pnl_98_4.pdf (accessed 27 April 2017).

communities'.[139] The draft policy therefore proposes the creation of a "*sui generis* system on the basis of traditional resource rights and community intellectual rights to protect the knowledge, innovations and practices associated with genetic resources separate from existing intellectual property rights systems". The *sui generis* legislation would be the foundation of traditional resource rights and community intellectual rights to protect the knowledge, innovations and practices associated with genetic resources separate from existing IPR system.[140]

The Namibian Draft Policy provides in this regard provides for the ownership of all genetic resources rests with the State and the ownership of all TK and technologies associated with any genetic resource s rests with the indigenous or local community that holds such knowledge[141]

These provisions are anchored in the Namibian draft legislation on Access to Genetic Resources that has been developed hand in hand with the draft policy. Part III defines and enshrines 'Community Rights' (Articles 17-24), including 'Recognition of Community Intellectual Rights' (Article 24) concerning TK, innovations and practices associated with genetic resources and biodiversity in the wild, while Part IV specifies 'Farmers' Rights' (Articles 25-27) to protect TK, innovations and practices regarding cultivated varieties and agro-biodiversity.

The Bill is guided by the following principles:

- Namibia has sovereign rights over genetic resources in areas within its jurisdiction;
- Ownership of genetic resources rests with the State;
  - The State and its people have the right to regulate access to resources and to associated knowledge, innovations and practices of local and indigenous communities;
  - Access to genetic resources must be subject to prior informed consent (PIC) and mutually agreed terms;
- Access determination process must be transparent;
  - Local communities have collective rights over genetic resources, as well as over their associated knowledge;

[139] Krugmann, *Namibia's thematic report* (2001) 8.
[140] Vilho AN, *A Critical Analysis of the Protection of Traditional Knowledge within the Namibian (*LLM thesis, University of Cape Town, 2014) p37.
[141] Vilho AN, LLM Thesis (2014) p 37.

- Access to genetic resources must conform with existing sustainable use legislation and reflect a precautionary approach;
- Benefit-sharing shall include financial benefits, technology transfer and capacity building;

- Co-operation with other states.

The Bills guiding principles has taken on the nature and character of TK. It gives local communities rights over the genetic resources found in the areas they live in which places responsibility upon them and not to allow them to be exploited. It is noteworthy to see that the Bill allows for financial benefits, technology and transfer, although TK mostly is undocumented, and oral it gives it a chance for TK to be made aware to other communities, countries etc. Transparency is very important and the Bill makes it very clear that access determination requires them to be transparent which is an excellent principle as not only local communities share TK but it can be mutually shared amongst different states.

In the absence of the bill the Interim Bioprospecting Committee (IBPC) has been advising and guiding the government on the application and matters related to benefit sharing issues in the country. Some of the ongoing discussions about the Bill are such as that the Bill would require the setting up of a unit in the ministry's department of environmental affairs to deal with the implementation of the provisions of the Nagoya Protocol on Access and Benefit Sharing, to which Namibia is a party.[142]The Bill which was passed in May 2017 is set for the national council for review.

3.8 The protocols effectiveness in protecting Traditional Knowledge

The preamble to the Swakopmund Protocol is important because of its clear policy guidelines which, it is submitted, represent its objectives which include enhancing the value of folklore; recognizing the importance of folklore as part of innovation systems of society; emphasising the role of customary laws and practices in a protective framework as well as the communal basis of the creation of expressions of folklore.[143]The preamble recognises the intrinsic value of TK, traditional cultures and folklore, including their social, cultural, spiritual, economic, intellectual, scientific, ecological, agricultural, medical, technological, commercial and educational value.

[142] Shigwedha A, 'NA passes bill on use of genetic resources' The Namibian newspaper , Availabe at https://www.namibian.com.na/164452/archive-read/NA-passes-bill-on-use-of-genetic-resources, (accessed 30 September 2017). Remove the spacing below footnote 142

[143] Nwauche ES, '*The Swakopmund Protocol and the Communal Ownership and Control of Expressions of Folklore in Africa (*2014) available at http://www.*onlinelibrary.wiley.com/doi/10.1002/jwip.12027/pdf* p 192. (accessed 20 August 2017)

The importance of an effective and efficient protection framework that maintains an equitable balance between the rights and interests of those who develop, preserve and maintain TK and expressions of folklore, and those who use and benefit from such knowledge and expressions of folklore is affirmed in the preamble.[144]

The criteria for the identification of an expression of folklore is to be found in Section 16 of the Swakopmund Protocol.[145] The section provides that protection shall be extended to expressions of folklore, whatever the mode or form of their expression, which are (a) the products of creative and cumulative intellectual activity such as collective creativity or individual creativity where the identity of the individual is unknown; and (b) characteristic of a community's cultural identity and traditional heritage and maintained, used or developed by such community in accordance with the customary laws and practices of that community.

This gives the impression that when an individual creator is known, the work cannot be regarded as an expression of folklore, except of course that the customary laws and practices of the community designate the individual creator as a representative of the community so that his work is representative of the community. Secondly, there is also a fundamental reliance on the customary laws and practices of the community as the framework for the identification of an expression of folklore.

The identification of an expression of folklore is entirely subjective. Furthermore Nwauche's criterion assumes that the community is an identifiable group in a state which is defined as including a local or traditional community.

The protocol states that it shall not be interpreted as limiting the diverse holistic conceptions of TK. However, it only recognises the rights of communities over their TK, and not over related biological resources. This goes against the holistic indigenous worldview where knowledge and biological resources are inextricably linked and cannot be separated. It also fails to recognise the enormous contribution of communities to conserving and improving genetic resources, and their close dependence on these resources. And it may create practical challenges since TK and genetic resources are often used together.[146]

[144] Nwauche ES (2014) p 192.
[145] See section 3.3.2.
[146] Regional Laws On Traditional Knowledge And Access To Genetic Resources available at https://biocultural.iied.org/regional-laws-traditional-knowledge-and-access-genetic-resources (accessed 19 April 2017).

Remarkably, the Protocol makes provisions for instances where two or more communities in the same or different countries share the same expression of folklores. In this case then, the relevant national competent authorities of the Contracting States and the ARIPO office will register the owners of the rights of those expression of folklores, this being the regional mechanism for the administration and management of such rights.[147] Some arguments have been raised as to how problems can be resolved where an indigenous community is found in more than one country.

The practical implications of this can be found in the scenario of the San community who are scattered all over Southern Africa. ARIPO through the Swakopmund Protocol has proposed a solution to this under Section 17; however, problems may still arise where an indigenous community is found in a contracting state of the ARIPO and also in a non-contracting state. For example, the San community is found in ARIPO member states and South Africa; however, South Africa is not party to the ARIPO, and has its own laws that regulate TK.

This will create problems and conflicts in the determination of ownership of the TK/TCE because each community in the different state may want to benefit from or receive recognition for the TK. The solution then in instances like this is trans-boundary co-operation between the States. Wekesa[148] proposes that a regional indigenous body be set up, with minimum intervention from the states, to deal effectively with the TK/TCE in the trans-boundary context. This issue is far from settled and has a lot of implications in practice

The Protocol gives recognition and confirmation of customary law. In countries such as Namibia, the Protocol confirms the importance of customary law and gives this an additional international blessing. It also acknowledges that all the efforts to protect TK will only work when there is provision for the law that is closest to TK, this being customary law.

The significance of the Protocol lies in the fact that extant national frameworks for the protection of expressions of folklore barely recognized communities who produce the expressions of folklore. Available evidence of the protection of folklore in ARIPO

[147] Section 17.4 in addition section 22.4 provide for instances where two or more communities are in different countries then the ARIPO offices will be responsible for all the activities.

[148] Wekesa M '*What Is Sui Generis System Of Intellectual Property Protection?*' (2006) p *available at* http://www.atpsnet.org/publications/technopolicy_briefs/index.php. (accessed 3 May 2017).

States leads to a plausible conclusion that the protection of expressions of folklore has been ineffective because of the endowment of the ownership and control rights on African States and/or their national authorities. Accordingly, it is also plausible to argue that national frameworks may not be significantly enhanced under the Swakopmund Protocol as only the ownership rights of communities is recognised.

3.9 Conclusion

This chapter takes a look at the legislations put in place with the aim of protecting TK. Taking a look at them from an International level to regional as well as the national laws in Namibia. Namibia is a member to certain international instruments that aims at protecting TK such as the Convention of Biodiversity which was one of the first instruments on protecting TK and seeing that by virtue of article 144 of the Namibian Constitution international laws are biding unless otherwise stated.

The chapter revealed that the Namibian legal system has laws in place for the protection of IPR's, namely patents, copyright, trademark. Certain statutes have been put in place with regards to protecting Intellectual Property rights and / property rights in the country at large and to a greater extend incapable of protecting TK.

The chapter particularly zooms in on the Swakopmund Protocol itself its provisions with regards to the protection of TK. The Protocol which Namibia has signed adopts the *sui generis* approach to the protection of TK, and takes on automatic protection when the requirements set out in s4 are met. Although a stepping stone for Namibia, there are a few shortcomings and challenges which the protocol faces such as when two different communities of different countries both have rights to TK and one state may not be a member of ARIPO. The protocol recognises the rights of communities over their TK, and not over related biological resources – in many instances these two are used as one and not readily distinguishable.

The chapter thus concluded that the current IP laws in Namibia are inadequate to protect TK due to its complex nature and the Swakopmund Protocol being able to protect TK to a certain extend and not fully as effective as there are still communities in Namibia today who haven't claimed their TK rights to their TK and cultural expressions. Namibia being a country of only 2 million people is showing commitment to protecting IPR'S in the country as a growing and developing country the need to protect IP is also on the rise. The Policy on Access to Genetic Resources and Associated TK has not yet been passed despite of progress that's been made. It is one of the achievements Namibia has made as well in protecting TK, it's indeed a good initiative and it also suggests the creation of *sui generis*.

The following Chapter will be taking a look at what South Africa and Kenya has done in ensuring the Protection of TK in their countries in comparison to Namibia and possible lessons Namibia can learn from the two Countries. The two countries are specifically chosen for reason being that they are prospering and doing a phenomenal job at looking after TK and IP laws in place. The Namibian IP industry is yet in its primary stages and ensure maximum protection of TK other jurisdictions that have taken lead. This Chapter makes a comparative study by looking at the Constitutional framework with regards to IP and the enforcement of these laws at the national level. Recently Kenya passed a TK act, the chapter intends on looking at a few selected provisions of the Act and ensuring effective protection of TK in Kenya. South Africa on the other hand has a TK Bill and the Intellectual Property Law Amendment Act (IPLAA), which will be looked at as well. Ownership of TK in both countries will be compared and conclusions will be drawn from these.

CHAPTER 4

A COMPARATIVE STUDY ON THE PROTECTION TRADITIONAL KNOWLEDGE WITHIN THE KENYAN AND SOUTH AFRICAN LEGAL SYSTEM.

4.1 Introduction

Traditional Knowledge (TK) of local communities is based on collective efforts of their language, social and cultural values, and natural resources within their environment. It is used as intangible property to sustain the community's culture, as well as the genetic resources necessary for its survival.[149] To date, the existing Intellectual Property (IP) regimes are not adequately extended to the holders of TK and associated Genetic Resources. Research scientists have taken advantage of this to access and utilise a community's TK and associated genetic resources to publish, make commercial products and films without recognition of the communities. There are a number of countries in the world that have expressed concerns about acknowledging the protection of TK as most of it is being exploited and used without the consent of the owners of the TK. [150]

Many developing countries have acknowledged the dire need for the protection of their TK, which has been used without their consent. Subsequently, there have been heated debates on the need to provide protection for the TK of indigenous and local communities at both an international and national level reference to these debates. Furthermore, finding an appropriate mechanism for providing such protection has proved difficult as discussed in chapter 2 under 3.8.

This chapter takes a close look at two countries specifically that have put up IP laws in place. Kenya and South Africa (SA). Kenya, like Namibia is member of the Swakopmund protocol, and they have put up IP laws in the country and have a system that seems to be working for them in the protection of TK. The national IP legislative framework for Kenya is divided into copyright law, trade mark law, industrial property law and anti-counterfeiting law. SA on the other hand is not a member of the Swakopmund Protocol, but relatively for a country that isn't a member of the protocol,

[149]Otswong'o OF, '*Trade Notes'* Issue 31, p1 January 2001 available at https://www.researchgate.net/publication/316104626_Protecting_Traditional_Knowledge_and_Associated_G_enetic_Resources_in_Kenya_What_A_Community_Needs_To_Know (accessed 05 May 2017).

[150] Otswong'o OF, '*Trade Notes'* Issue 31 (accessed 05 May 2017).

the laws seem to be stable in protecting IP in relation to TK. SA has a number of laws that are aimed at protecting TK within the country itself.

This chapter will first take a look at Kenya, specifically looking at its constitution and how they have incorporated the protection of IP in their constitution and to what extent the protection is offered. Secondly it will then take a look at the Kenyan Traditional Knowledge Act of 2016 as well as the criticisms of the act itself and the effectiveness of the efficiency of TK legal protection. Furthermore the chapter shows how Kenya has chosen to take a *sui generis* approach.

Thirdly and finally the chapter looks at SA and the legal protection of TK within the country looking at the Intellectual Property Amendment of 2013 and lastly the SA Traditional Knowledge Bill and ownership of TK under the bill before concluding the chapter.

4.2 Kenya

With respect to TK, the government of the Republic of Kenya commits to address both the negative and positive aspect of TK protection. In the negative sense, the government is to protect TK systems from unauthorised IP claims, and to require mandatory disclosure of source of origin of genetic resource and TK in IP applications. In the positive sense, the government will endeavour to create a *sui generis* system to protect, integrate, enhance and validate TK know-how and practices while ensuring that the owners of the TK directly benefit on an equitable basis and on mutually agreed terms from any commercial exploitation of it or from any technological development derived from it and its derivatives.[151]

The national policy calls for a coordinated legal framework on the protection of TK, genetic resources and traditional cultural expressions. 'to facilitate the protection and utilization of TK, genetic resources and traditional cultural expressions,'[152] the policy states, it is imperative that an appropriate legal framework is put in place.[153]

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[151] The National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009 p16 http://www.wipo.int/edocs/lexdocs/laws/en/ke/ke022en.pdf. (accessed 17 May 2017*).*

[152] section 5.1.1 of the "The National Policy On Traditional Knowledge, Genetic Resources And Traditional
Cultural Expressions'' of the Republic of Kenya, July 2009 p16.

[153] WIPO, *Intellectual Property and Traditional Knowledge*, available at <www.wipo.int/freepublications/en/tk/920/wipo_pub_920.pdf>. (accessed 17 May 2017).

To accomplish the national policy's objectives, a plan is required that should involve the government, non-government stakeholders, and communities and define the various roles and responsibilities.[154] Kenya's national IP legislative framework is divided into copyright law, trade mark law, industrial property law and anti-counterfeiting law.

4.2.1 The constitutional framework for the protection of intellectual property rights in Kenya

The constitution[155] of Kenya 2010 on its promulgation proved itself as a force to be reckoned with when it comes to the protection of Intellectual Property Rights (IPR) in Kenya. This is not to say that before it there was no actual protection of IPR, there was protection and they will be listed down below to indicate that protection indeed was offered and it was effective just not as effective enough hence with the promulgation of the constitution came the actual backing from the supreme law in the land and thus such existing protection was assured now in a more authoritative way.[156]

This study seeks to look at the protection of intellectual property rights (IPRs) from the angle of the constitution, shifting from the various legislation present and focusing solely on the constitution itself as the supreme law of the land. IPR is a system based on the western legal theory and economic philosophy,[157] IPRs are meant to assure rewards to innovators, and are claimed to have been and important driving force behind the rapid industrial growth in the developed world. They were primarily evolved to Kroger mechanical and chemical innovations for which identification of novelty, inventive step and innovator is relatively straight forward. TK is living knowledge sustained and developed and it is passed on from generation to generation. IPRs can be used to protect TK as it changes and develops over the years and TK can be recognised for its originality and creativity. One of the most common IPR are patents which are discussed in details with regards to TK in chapter 3[158].

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[154] Nzomo V, *Towards Legislation on Traditional Knowledge in Kenya* (2011), available at http://ipkenya.wordpress.com/2011/11/08/towards-legislation-on-traditional-knowledge-in-kenya/ (accessed 27th May 2017).

[155] The Constitution of the Republic of Kenya, 2010.

[156] Tuli A, LLB (Hons),(Catholic University of Eastern Africa) 'The Constitutional Framework For The Protection Of Intellectual Property Rights In Kenya' available at *https://www.academia.edu/9007001/The_Constitutional_Framework_For_The_Protection_of_Intellectual_Pro perty_Rights_in_Kenya* (accessed 27 May 2017).

[157] Venkataraman K, Latha SS 'Intellectual Property Rights, Traditional Knowledge and biodiversity of India', available at nopr.niscair.res.in/bitstream/123456789/1781/1/JIPR%2013%284%29%20326-335.pdf (accessed

[158] See section 3.5.1.

The Constitution[159] provides that:

> 'any treaty or convention ratified by Kenya shall form part of the law of Kenya under this Constitution'

This in effect makes IPRs related conventions such as the Berne Convention for Literary and artistic works and (TRIPS) part of the Kenyan law.

IPRs in the Kenyan constitution fall under the Bill of rights contained under the fourth chapter, thus making them part of an integral system of human rights protected in the country by the Constitution.

The Constitution[159] recognises culture as the foundation of the Nation and as the cumulative civilization of the Kenyan people and nation and also to promote all forms of national & cultural expression through literature, the arts, and trade. Celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage.[160] It also promotes the IP rights of the Kenyan people and recognises the role of science & indigenous technologies in the development of the Nation.

The Constitution further ensures communities receive compensation royalties for use of their cultures and cultural heritage[161] by the government and recognises and protect ownership of indigenous seeds and plant varieties, their genetic and diverse characteristics and their use by the communities of Kenya.

The effect of the above article[162] is to give or bestow upon the state a positive duty to not only protect the intellectual rights of its citizens but also to recognize and once upon such recognition, to promote such rights. Such intellectual property may be in the form of cultural expression through literature, arts and trade. The government is mandated by the constitution to provide or come up with legislation that ensures such protection is effectively ensured to the extent that even citizens do receive royalties in the event of use of such properties.

[159] Article 11) (1).
[160] Article 11(2).
[161] Article 11 (3).
[162] Article 11.

Subject to Article 40(1), every person has the right, either individually or in association with others, to acquire and own property of any description and in any part of Kenya. This makes it possible for any person to acquire any property including IP of any description (as long as it is legally possible and permissible) in any part of the country.

4.2.2 Enforcement of intellectual property rights under the constitution of Kenya

The enforcement of intellectual property rights is covered under Article 22 of the Constitution. Under this Article every person has the right to institute court proceedings claiming that a right or fundamental freedom in the Bill of Rights has been denied, violated or infringed, or is threatened. This includes an infringement or violation of any IPRs.

4.3 The Traditional Knowledge Act of 2016

The Preamble of the Act[163] is brief and simply states that this Act provides "a framework for the protection and promotion of TK and Cultural Expressions (CEs)". The Act is disproportionately protectionist with little or no provisions on support, access, development, let alone promotion of TK and CEs.

The Protection of TK under the Act[164] shall be extended to TK that is generated, preserved and transmitted from one generation to another, within a community, for economic, ritual, narrative, decorative or recreational purposes. TK that is individually or collectively generated, distinctively associated with or belongs to a community and integral to the cultural identity of community that is recognized as holding the knowledge through a form of custodianship, guardianship or collective and cultural ownership or responsibility, established formally or informally by customary practices, laws or protocols.

It is interesting to note that the Act with regards to the Protection of TK states that it shall not be subject to any formalities.[165] However the county governments shall collect information, document and register TK within the respective counties for the purpose of recognition.[166]

When more than one community owns TK the country government is expected to register to the communities sharing the rights to the TK.

[163] The Traditional knowledge Act of 206 (Act 33 of 2016).
[164] Section 6.
[165] Section 7(1).
[166] Section 7(2)

When more than one community owns TK the country government is expected to register to the communities sharing the rights to the TK.

Every community in Kenya shall have the exclusive rights to the rights conferred to holders of TK.[167] They have a right to authorize the exploitation of their TK and prevent any person from exploiting their TK without their prior informed consent. There are remedies available provided their TK is exploited. They are allowed to institute legal proceedings against any person who exploits TK without permission.[168]

A compulsory licence is to be granted for exploitation by the cabinet secretary, subject to Article 40(3) (b) of the Constitution where protected TK is not being sufficiently exploited by the owner or rights holder, or where the owner or holder of rights in TK refuses to grant licenses for exploitation.[169]

TK shall be protected for so long as the knowledge fulfils the protection criteria referred to under section 6. Whichever form or mode that the TK takes up, it shall be protected it's not limited to one form only.

The act acknowledges with regards to TK that any copyright, trademark, patent, industrial design, geographical indication or other intellectual property right that exists in relation to a derivative work shall vest in the creator of the work as provided by the relevant intellectual property law.[170]

The act says that the protection of owners and holders of TK 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. Equitable benefit sharing rights. 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.

Section 37 - 41 of the Act lays down available remedies and sanctions that one may consider and if anyone is found guilty of misusing TK in any way or their actions fall

[167] Section 10 (1).
[168] Section 10 (2).
[169] Section 12.
[170] Section 20(1)

within the offences laid down in article 37, they will be punished, and this punishment may go up to not more than 5 years imprisonment and or 1 million shillings.

4.3.1 Criticism of the Traditional Knowledge Act 2016.

Sections 4 and 5 are commendable as they seek to entrench the Constitutional principle of devolution into the Act. However as alluded to above, there is no clarity on which ministry or agency will be responsible for the Act at the national level whereas at the county level,[171] the Act is clear that the county executive committee member responsible for matters relating to culture within the county government shall be responsible for the Act.[172]

Section 7 remains problematic since in the event of concurrent claims by communities, it is not clear whether KECOBO (Kenya Copyright Board) or the concerned county government(s) will have the primary role of resolving such disputes. This is as a result of an overlap of responsibilities between both levels of governments with regard to maintaining the Repository. In this regard, it is submitted that section 22 ought to have been amended to require that the register of licenses/assignments be kept by KECOBO since the latter is in charge of the TK Repository at the national level. In this regard, it is submitted the power to settle disputes about ownership of rights in section 30 of the Act would be better placed in the hands of a tribunal to be established under the Copyright Act. Finally, it is unclear whether the references to the Authority in sections 32 and 42 refer to KECOBO or some other state organ.

It may have been instructive for the Act in section 8 to borrow a leaf from the provisions of the Industrial Property Act and Trade Marks Act with respect to the establishment and maintenance of the county registers and TK Digital Repository (TKDR) generally. A great deal of information appears to be missing regarding formalities for application, processing and registration of TK and CEs at county and national levels. In this regard, it is further submitted that this section may consider introducing a system of inspection of the TKDR for purposes of searches to be conducted by prospective users as well as the introduction of a TKDR Journal for notifications, advertisements and any other relevant publications related to administration of the Act.

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[171] Tuli A, LLB (Hons),(Catholic University of Eastern Africa) 'The Constitutional Framework For The Protection Of Intellectual Property Rights In Kenya' available at *https://www.academia.edu/9007001/The_Constitutional_Framework_For_The_Protection_of_Intellectual_Pro perty_Rights_in_Kenya* (accessed 27 May 2017).

[172] Section 4.

The compulsory license regime under section 12 of the Act is problematic largely due to the inclusion of the term prior informed consent. It is clear that if there is compulsory licensing then there can be no prior informed consent. In other words, the compulsory acquisition of TK or CEs presupposes that consent has been withheld by the community/owner. Furthermore the dispute resolution provisions in subsections (2) and (3) create two parallel avenues through the courts and the Cabinet Secretary since it is clear that ‘’a dispute’’ in subsection (3) may relate to a determination of “compensation” in subsection (2).

There is need to harmonise section 18 of the Act with the existing provisions of the Copyright Act relating to folklore. In those provisions, the Attorney General is granted certain express powers with respect to authorising and prescribing the terms and conditions governing any specified use of folkore or the importation of any work made abroad which embodies folklore.

While it is acknowledged that the Act defines derivative works as works derived from TK or CEs, its application in section 20 is problematic since such works are relevant in copyright but have no legal meaning for purposes of industrial property such as trademarks, patents and industrial designs. Similarly, the Act in section 22 problematically borrows the intellectual property law framework of licensing and assignment of rights yet in the context of TK and CEs, the concept of assignment would be contrary to the very nature of the rights in TK and CEs held by a community Sections 24 to 36 of the Act contains useful provisions relating to management of rights in TK and CEs which cannot be operationalised without clarity on who exactly is the Cabinet Secretary and/or national agency responsible for the Act.

Finally, section 37 to 41 deal with sanctions and remedies under the Act. It is observed that the offences and penalties provided in section 37(1), (2),(9) and (10) are problematic due to their punitive nature since they apply indiscriminately to both third parties as well as bona fide members of a community.

4.4 The Efficiency and Effectiveness of Legal Protection

The Kenyan experience shows that creating an effective system of protection is complicated. Part of the problem may be that, in some respects, genetic resources and TK resemble fundamental knowledge, which is not protected by any special legal

regime[173]. A protection regime for genetic resources and TK can easily come into conflict with the general interest in being able to use resources for developing useful and practical applications.

Ownership of genetic resources and TK is a particularly tricky issue. Local communities have not created, and may not even have contributed in any meaningful way to genetic resources, and TK has often been developed over extended periods of time through a gradual, trial and error approach. Importantly, while conventional intellectual property rights tend to be developed by one or a few identifiable persons, TK arises from the ideas of several generations and many people and, therefore, is not controlled or owned by one or a few persons, but by large communities.

Conventional intellectual property involves a specific application of knowledge or effort in a well-defined process or situation, but TK can be relatively generic, fairly loosely defined, and not reduced to practical or technical processes. In the Western world, neither fundamental knowledge, including much of scientific knowledge, nor existing genetic resources or TK are protectable, except if they meet the requirements for patents, trademarks or copyright. There is an important difference, however, between protection of genetic resources and TK and conventional IP regimes.

Without the incentives generated by IP protection regimes, many inventions would never be made. This is so because absent IP protection investments in inventions could never be recouped, unless they could effectively be kept secret. Once the invention has been made public by the inventor, any person would be able to use it for free, and the inventor would suffer a competitive disadvantage, having incurred the research and development cost. There would be no reason for anybody to invest in inventions and creations that cannot be kept secret.

Thus, IP protection is a necessary incentive for investment into IP development. IP protection is a necessary condition for IP creation. In the case of genetic resources and TK, however, there is no such incentive rationale. Genetic resources, by and large, exist without any specific human activity having been directed at their creation. Likewise, the development of TK does not depend on the incentives generated by legal

[173] Bergkamp D (February 2013) 'Will Kenya's Policies for the Protection of Traditional Knowledge and Genetic Resources Pay Off?' p10.

protection. Legal protection is not a necessary condition for the creation of TK. Experience confirms this argument: countries like Kenya have lots of genetic resources and TK without having had any protection regime in place. Indeed, the rationale for protecting genetic resources and TK is not incentivising, but granting local communities a right to share in the benefits derived from these resources.[174] This difference suggests too that the nature of the legal protection offered to genetic resources and TK does not have to resemble traditional IP regimes.

Closely related to the policy rationale, the question arises how genetic resources and TK should be protected. Kenya has opted for a *sui generis* regime for TK. Given that TK, unlike traditional IP, already is in the public domain and rights need to be created in it for the communities that developed it, a separate and specific law would appear to make more sense.[175]

A *sui generis* regime can address the highly specific issues around (1) the identification of the genetic resources and TK that are protected, and the pertinent conditions for protection, (2) the holders of the collective rights to such resources and TK. The local, indigenous communities from which the genetic resources or TK originate, and how they can be represented, and (3) the scope and limits of the rights, and how they can be exercised. Given that the value of genetic resources and TK is often uncertain and highly dependent on further efforts and investments of the developer of a commercial product, specific arrangements may be required, which suggests that mutual agreement should play a primary role.

Further, granting complete and exclusive control to local communities would not appear to be necessarily in the public interest, so appropriate exceptions should be provided for. If, for instance, a local community categorically refuses access to genetic resources, it should be possible to obtain access to the resources through a different procedure.

[174] Several other reasons for protection of TK have been proffered, but they all appear to be secondary or derivative from the monetary consequences of property rights in TK. See, e.g., Victor Nzomo *South Africa's TK Bill Debate: Sui Generis versus Intellectual Property Protection of Traditional Knowledge* (2011), available at http://ipkenya.wordpress.com/2011/09/24/africas-tk-debate-sui-generis-versus-intellectual-property-protection-of-traditional-knowledge/. (20 May 2017).

[175] Stellenbosch University Chair of Intellectual Property. *Traditional Knowledge – Legislation in the New Tradition* (2011), available at https://blogs.sun.ac.za/iplaw/2011/09/18/traditional-knowledge-%E2%80%93-legislation-in-the-new-tradition/.(Accessed 17th May 2017).

Establishing and operating a legal regime for the protection of genetic resources and TK is likely to generate benefits, but also involves cost. The benefits include primarily potential income for local communities. Other benefits (incentives for the generation of TK, tend to be more speculative, because of the 'public good' aspect of TK.

The Kenyan National Policy document refers to a 'documented conservative estimate' of the market value of products based on genetic resources alone (the 'green gold') of more than USD 800 billion.[176] It is unclear, however, what portion of this amount is related to genetic resources to be obtained from Kenya. On the cost side, legal protection regimes can be expensive. There are direct, administrative and transactional costs associated such regimes, and indirect cost resulting from delays in obtaining access or inability to obtain access. The Kenyan government has not conducted a cost/benefit analysis of the proposed protection policies, and in general, quantifying the costs and benefits of proposed legal regimes is hard, but it is even harder with respect to genetic resources and TK because there is uncertainty on many issues.

Even if Kenya were to put in place a robust, balanced and predictable regime for the protection of genetic resources and TK, there is a serious question about the effectiveness of any such regime.

Companies may use genetic resources and TK outside of Kenya to develop products, and this process may take several years or longer. If they succeed and develop valuable technology, they will file for protection under national IP law. Whether TK can be invoked as prior art to defeat a claim to a patent will depend on whether the country itself has ratified and implemented the relevant provisions of international instruments.

Where that is the case, it may still be difficult for communities or even nations to effectively assert any such rights in a cross-border context. Further, it may be impossible for them to dispute IP rights to inventions derived from genetic material. Thus, a protection regime for genetic resource and TK may prove to be ineffective internationally. This is a problem because the value of these resources will be realized predominantly in markets other than Kenya.

4.5 Inadequate protection for Traditional Knowledge

[176] Republic of Kenya, *National Policy* (2013). (accessed 20 May 2017).

Policy support is necessary to stimulate the development of traditional medicine technologies. In particular the protection of IPRs of TK holders has been wanting. The current policies governing IPRs are inappropriate for the protection of TK and related resources and the mechanisms for the protection, access to and benefit sharing arising from TK and related resources are inadequate.[177] For example while the government is keen to enforce IPRs - patents, plant breeders rights, copyright, trademarks for innovations and creations produced through modern science - there has been no effective legal instrument to protect the IP of traditional innovators. The Laws of Kenya do not recognise communities as legal entities and consequently communal ownership is not honoured or recognised by patents and cannot therefore protect TK. As a result of the lack of recognition and protection of TK indigenous and local peoples do not share in, at least in a fair and equitable manner, benefits arising from the appropriation of their medicinal knowledge and its subsequent use in drug development. Hence the need to strengthen the existing mechanisms with appropriate measures to develop alternative protection mechanisms. Although in the new constitution of 2010 culture is recognised and appreciated, and the state made a policy statement 'to support, promote and protect indigenous knowledge and the intellectual property rights of the people of Kenya' – the procedures for the protection of IPRs specifically from an IK perspective are lacking.

Now that we have discussed the protection of TK afforded to Kenya, the mini thesis will take a look at the protection afforded to SA and compare the two.

4.6 South Africa

South Africa through the Ministry of Trade and Industry drafted a document dealing with the protection, recognition and commercialisation of Indigenous Knowledge (IK). SA has provided for the protection of indigenous knowledge through the existing IPRs system. These policy considerations are what lead to the Intellectual Property Laws Amendment Act 2013 (IPLAA),[178] which amends SA's four existing IP statutes to incorporate indigenous intellectual knowledge as a form of IP.

For purposes of this mini thesis the statutes amended will just be mentioned below and the IPLAA will be discussed in detail below with reference to the protection it

[177] Ongugo P, Mutta D, Pakia M, Munyi P 'Protecting Traditional Health Knowledge in Kenya: The role of Customary Laws and Practices' (October 2012) p5.
[178] The Intellectual Property Laws Amendment Act of 2013, (Act of 2013).

awards TK and take a look at how each statute was amended. The amended statutes are the SA Copyright Act 1978, the Performers Protection Act 1967, the Trade Mark Act 1993 and the Design Act 1993 have been amended to include certain forms of TK protection under the premise of these particular Acts. The Protection of Traditional Knowledge (PTK) Bill adopts the *sui generis* approach to the protection of TK. The Constitution will be discussed followed by the IPLAA amendment act.

Whilst SA has chosen to protect TK within the country through the conventional system of amending the existing Intellectual property laws. The chapter reviewed how the amendment has managed to accommodate TK into the existing IP laws of SA. Although the amendments were made it is still required for them to comply with provisions of previous Acts.

4.6.1 The South African constitution

Unlike the constitution of the republic of Kenya, the SA constitution does not at its heart put Intellectual property but it does mention the right to property. The relevant portion with regards to property is found in section 25 of the Constitution reads: '(1) No one may be deprived of property except in terms of a law of general application, and no law may permit arbitrary deprivation of property. (2) Property may be expropriated in terms of a law of general application (a) for a public purpose or in the public interest; and (b) subject to compensation for the purposes of this section – (a), (b) property is not limited to land.'

Enforcements of rights under the SA constitution are found under article 38. The article goes onto list who is eligible to approach a competent court if any of their rights are wronged, as one can see from section 25 no one may be deprived of property except in terms of the general application of right itself.

4.6.2 The Intellectual Property Laws Amendment Act of 2013, (Act of 2013)

In terms of the Intellectual Property Laws Amendment Act of 2013 (IPLAA), the South African Copyright Act 1978, the Performers Protection Act 1967, the Trade Mark Act 1993 and the Design Act 1993 have been amended to include certain forms of TK protection under the premise of these particular Acts. The Protection of Traditional Knowledge (PTK) Bill, which will be discussed later on, it adopts the *sui generis* approach to the protection of TK.

The four existing statutes that are used to protect intellectual property in South Africa are the Performers' Protection Act 11 of 1967, the Copyright Act 98 of 1978, the Trade Marks Act 194 of 1993 and the Designs Act 195 of 1993. These are the statutes that will be extended in order to provide protection for traditional cultural expressions.

Protection of Intellectual Property in terms of these four statues is through a property-based mode.

The statutes have been amended as follows:

The Copyrights Act No. 98 of 1978

The IPLAA starts of by amending s1 of the Copyrights Act for the purposes of including the definition of traditional works, indigenous works and derivative indigenous works. The IPLAA further provides for the insertion of Chapter 2A into the Copyright Act.

According to Section 1 (i) (j) a derivative indigenous work means 'the person who first made or created the work, a substantial part of which was derived from an indigenous work'.

Further, an indigenous work is defined as 'the indigenous community from which the work originated and acquired its traditional character'.

Section 1 (j) defines traditional work as work that 'includes a derivative indigenous work and an indigenous work'.

The Copyright Act has been further amended to:
i) Provide for the recognition and protection of copyright works of an indigenous character
ii) Provide for the establishment of a National Council in respect of indigenous IP
iii) Provide for the establishment of a national trust and trust fund in respect of indigenous IP.

The Performers' Protection Act[179] has been amended to provide for the recognition and protection of traditional performances having an indigenous origin.

The Trademarks Act has been amended to:

[179] Performers Act of 1967.

i) Provide for the further protection of geographical indication
ii) Provide for the recognition of terms and expressions of indigenous origin and for the registration of such terms and expressions as trade marks
iii) Provide for the recording of traditional terms and expressions

The Designs Act has been amended to
i) Provide for the recognition and registration of indigenous designs
ii) To create for this purpose a further part of the designs register.

The amendments on the four statutes are exceptional, because now Indigenous knowledge can be recognised as per all four statutes and protection is afforded to them. Perhaps the outstanding part can be found within the copyright act which provides for an establishment of a national council in respect of the indigenous knowledge and IP, also registration of this knowledge is now available and records can be kept.

The IPLAA further makes provision for the introduction of statutory provisions, which establish a National Council in respect of IK, a National Database for the recording of IK and a National Trust and Trust Fund for the purpose of IK. The Indian

When it comes to the protection of TK, indigenous communities are often at a disadvantage because most intellectual property systems concentrate mostly on exclusivity and a single author or definable group of authors[180], as opposed to a communal effort which is what TK mostly comprises of. The matter is further complicated in that TK is constantly evolving and therefore not static. An intellectual property right implies that, if the right holder complied with a compulsory licensing scheme and registered or licensed his intellectual property, he has the “right to say no” to another person using his property.

The IPLAA was an attempt to give special protection to traditional cultural expressions. The act does not, however, create a new form of protection, but instead extends the existing South African intellectual property regime to include these expressions. Not included is traditional technical knowledge such as medical treatments and agricultural methods. TK regarding traditional medicine is therefore not included.

[180] Vilho AN, *A Critical Analysis of the Protection of Traditional Knowledge within the Namibian* LLM thesis, University of Cape Town, (2014) p 29.

4.7 The Protection of Traditional Knowledge Bill

The PTK Bill recognises TK as a different form of IP and proposes a *sui generis* approach to the protection of TK. Wilmot states that there has been universal support for *a sui generis* approach for the protection of TK.[181] James motivates this by stating that WIPO too favours a *sui generis* approach.[182] Another example is ARIPO's Swakopmund protocol which adopted a *sui generis* approach.[183] .Although South Africa is not a member of African Regional Intellectual Property Organisation (ARIPO), the Swakopmund Protocol applies to her due to the fact that she shares borders with ARIPO member states whose traditional communities have a close affinity with South African communities. James therefore encouraged South Africa to stay in line with international trends by implementing *sui generis* legislation.[184]

The aim of the bill is to provide adequate, financially viable, legally enforceable protection for TK. This protection is expected to:

Comply with South Africa's international obligations,

Give effect to the principles for the protection of IK advocated by WIPO

Safeguard our existent IP statutes from irreparable harm

Establish a more sophisticated system for the protection of TK in South Africa that far exceeds the level of protection anywhere else in the world, to mention but a few.

The PTK bill is premised on three categories[185];

1. Traditional works
2. Traditional Designs
3. Traditional Marks

4.7.1 Traditional Works

A traditional work is defined as 'a literary, musical or artistic work… which evolved in, or originated from a traditional community, and in respect of which no individual is

[181] Dean O 'Synopsis of the Protection of Traditional Knowledge Bill' (2010) p Doc: 20D2012 available at http://blogs.sun.ac.za/iplaw/files/2012/02/2OD2012.pdf (accessed on 25th May 2017) p213.
[182] Wilmot J 'Protection of Traditional Knowledge Bill' (2013) p available at http://www.pmg.org.za/files/130912protection. (accessed 25th May 2017).
[183] Wilmort J, Protection of Traditional Knowledge Bill (2013) p 3.
[184] Wilmort J, Protection of Traditional Knowledge Bill (2013) p 3.
[185] Wilmort J (2013) p3.

known'.[186] This definition is quite different from the definition of indigenous work in terms of the IPLAA, which defines it in relation to the community in which the work originated from.

In order for a traditional work to be eligible for protection, the traditional work must be reduced to a material form[187] by or for the community,[188] and it must be recognized as being derived from, and characteristic of, that community by the people outside that community.[189]

Furthermore, in terms of s3 (1), the owner has the exclusive right to perform the traditional work in public, and to broadcast, and make adaptations and distribute copies.

By virtue of s3 (2), the rights to the traditional work can only be infringed if the person who commits the unauthorised act has knowledge of the right and had no license. In this regard, the exceptions relating to copyright apply here.[190]

Published traditional works are protected for a period of 50 years from the date of its first publication.[191] The TK right is protected indefinitely in the case where it is not published.[192]

4.7.2 Traditional Design

Regarding the protection of traditional designs, the PTK Bill defines a traditional design as 'an aesthetic design that is applied to an article and which evolved in, or originated from, a traditional community and in respect of which the owner is not known.'[193]

To qualify for protection, the design must be reduced to material form302 by the community[194] and it must be considered as being derived from, or characterized of, that community by people outside the community.[196]

The owner of a traditional design is vested with the rights to make, use or dispose of any article embodying the protected design.[195] It therefore follows that a traditional

[186] Section 1 PTK Bill, 2013.
[187] Section 2(a).
[188] Section 2(b)
[189] Section 2(c).
[190] Section 4.
[191] Section 5(1).
[192] Section 5(2).
[193] Section 1.
[194] Section 8 (b).
[195] Section 9 (c).

design cannot be infringed without the knowledge that the design in relation to which the Act is performed is a protected traditional design.[196]

4.7.3 Traditional Marks

The PTK defines a traditional mark to 'include a trade mark, collective mark or certification mark which evolved within, or originated from, a traditional community.'[197]

To meet the criteria for protection, the traditional mark should be represented graphically by, or on behalf of, the originating community and should be recognized as being derived from that community and branded by outsiders as their own.[198] The owner of a traditional mark has the right to register it as a certification mark, a collective mark or a trademark under the Trade Marks Act.[199] Section 9(1) vests the owner with the exclusive right to make, import, use or dispose of the design.

In addition, this mark is deemed to enjoy repute for the purposes of bringing a passing of case.[200] Traditional Marks can only be infringed with the necessary knowledge of the right, coupled with lack of authority from the traditional mark owner.[201]

4.8 Ownership of Traditional Knowledge under the Protection of Traditional Knowledge Bill

Ownership of TK is vested in what the PTK refers to as a 'community proxy'[202] who is designated by the community to hold ownership of the TK in a representative capacity.[203] Unlike the IPLAA, under the PTK a traditional community is not regarded as a juristic person, hence the designation of the community proxy. The PTK defines a community proxy as someone 'a person that is duly delegated from time to time to represent, and to act and to own a TK right for and on behalf of, a particular traditional community.'[204] Ownership of TK is not transmissible by assignment or by operation of the law.[205]

[196] Section 9(2).
[197] Section 1.
[198] Section 13 (a) (b) (c).
[199] Section 14(1).
[200] Section 14(2) of the PTK and s 10(12) of the Trade Marks Act of 1993.
[201] Section 9(2).
[202] Section 38(1).
[203] Section 38(1).
[204] Section1.
[205] Section 1.

4.9 Conclusion

This chapter is summed up of a comparative study with Kenya as well as South Africa. It firstly has revealed the positive and negative aspects that Kenya took into consideration in the protection of TK in Kenya.

The chapter also revealed the Kenyan constitution which is a force of reckoned when it comes to protecting IP and TK in Kenya, at the heart of this constitution are the laws placed to protect IP, which is under the Bill of rights under the fourth chapter which from this chapter we have seen it forms part of the integral system which is absolutely amazing as its part of the supreme law of the country.

The enforcement of the rights under the Kenyan constitution are provided for under section 22. Whilst under the SA constitution is found under article 38, both under the bill of rights of the constitution.

The chapter further looked at the PTK Act of Kenya which in sections more than one are similar to the Swakopmund Protocol, of which Kenya is also a member. It's notable that the Kenyan Act does not place a limitation on the right to hold the TK, as long as it complies with section 6.

Although Kenya and SA have both have put up laws in place to protect TK in their respect countries, the chapter however revealed that there is indeed an inadequate protection of TK, even with all the efforts made by both countries. The current laws are not sufficient enough to protect TK fully a lot still has to be done to extend this protection. There is an undying need to create a system of protection that is not complicated to cater to everyone. The Indian database

The PTK Bill adopted the *sui generis* approach and treated TK as separate form of IP. The approach PTK bill is less cumbersome because it is one separate document wholly committed to protecting TK and does not subject TK holders to the complicated provisions of the conventional act. A *sui generis* approach offers more effective and comprehensive protection to TK because it is tailor-made and sensitive to the special needs of indigenous communities and TK.

The following Chapter is the conclusion on the discussion the mini thesis has been based on and a few recommendations that are made.

CHAPTER 5
CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The protection of TK has been for the last couple of years at the centre of countries debate, attempts have been made nationally and at an international level. International communities, TK holders and national policymakers have all made tireless efforts to find the best solution to this problem. Although some progress has been made the debates to protect TK are still ongoing.

TK has played a significant role in areas such as food security and agriculture, human rights, resource management, sustainable development and conservation of biological diversity, health and economic development to mention but a few. Because of the rise of TK in the word of today, many communities have demanded protection as a lot of outsiders have gained knowledge and the exploitation has as well risen. In most instances the instruments that are proposed as solutions, do not satisfy all the concerns of indigenous communities.

The mini thesis has looked at TK from an international and regional level to a national level. Defining what TK is and how different instruments of law define TK and the differences in them. The importance of TK has been on the rise in the last years and a realisation of protection has come about trying to protect TK. Chapter 1 is a brief introduction of TK outlining some of the issues that are discussed in the mini thesis itself and how they will be tackled.

The second Chapter looks at what TK entails by defining TK[206] although as previously stated the definitions are bound to change the chapter further looks at methods of protection for TK which looked at two ways of protection. Namibia has signed the Swakopmund Protocol which is broken down provision by provision in the second chapter and it adopts the *sui generis* approach to the protection of TK which is more favourable than the others. The provisions of the Swakopmund Protocol can be complemented by the enactment of the Draft Policy which is discussed in the 3rd chapter. A clear distinction was made between TK, TEK and IK although the focus of this mini is only TK.[207]The chapter also gives insight on the economic value of TK, its

[206] See section 2.1.1.
[207] See 2.1.1.

use as well it is important, it is without a doubt that TK is not just something to be taken lightly or seen as irrelevant, but necessary as very important.[208]

The mini thesis discusses different legislations in the 3rd chapter which are aimed at protecting TK in Namibia but also at an international level, relating the legislations to how T has been defined and looked at from different angles in chapter 2. Chapter 3 reveals that Namibia is a party to various other international instruments dealing with the protection of TK. This shows that at an international level, Namibia has shown commitment to protecting TK, but at a national level Namibia still has to implement National legislation.[209]

There are currently no laws in Namibia that are specifically targeted at the protection of the TK or Traditional Cultural Expressions (TCE) of the indigenous community. This system has proved to be inadequate for the protection of TK for a number of reasons. For instance, TK cannot be protected under Patents as TK is regarded as forming part of the prior art and will therefore not qualify to be registered. Although TK is not excluded from registration as is the case with patents, due to its complex nature, it would be difficult to meet the requirements and the protection will be limited.[210] Be this as it may, Namibia has shown that it is committed to protecting TK. This commitment is evidenced by the fact that Namibia is in the process of developing a Draft Policy on Access to Genetic Resources and the Protection of TK.[211]

The Swakopmund Protocol at this point can be rendered ineffective when it comes to protecting TK within Namibia. For starters the protocol does not define what TK is and as this is a regional protocol countries that have ratified to this protocol may this define tradition differently in accordance with their national laws and how other instruments fit in, into their national laws. One is not sure which body is responsible for the enforcement of the protocol at the national level.

In the 4th chapter, different legislations pertaining to the protection of TK has been revealed in comparison with South Africa and Kenya a study is made to see how they have incorporated in their countries. The fourth chapter compares two countries to Namibia in its attempt to protect TK, South Africa and Kenya.

[208] See section 2.1.1, 2.2.1 and 2.1.3.
[209] See section 3.6.
[210] See section 3.5.1.
[211] See section 3.7.

South Africa, who adopted a conventional approach by amending the existing IP laws to cater for TK, trying to fit TK into the existing IP laws is cumbersome.[212] The mini thesis also looked at the PTK Bill, which takes a *sui generis* approach and treats TK as a different form of IPR and which is also premised into 3 categories, traditional works, traditional designs and traditional marks.[213] After looking at the IPLAA and the PTK Bill, the study concludes that IPLAA is indeed cumbersome as TK holders are expected to understand the technical provision.

The South African constitution makes mention of the right to own property which is under article 25 and enforcement of rights provided under article 38.[214]

Kenya on the other hand has IP at the centre of its laws, at the national level engraved in the 2010 constitution is fundamental laws with regards to the protection of IP.[215] But unlike the approach taken by South Africa it does not take a *sui generis* approach. The mini thesis reveals that Kenya's national IP legislative framework is divided into copyright law, trade mark law, industrial property law and anti-counterfeiting law and that the national policy with regards to protecting TK.

The Kenyan 2010 constitution which was a forced reckon in protecting which allowed the country's supreme law to really back up IP. It promotes the IP rights of the Kenyan people and recognises the role of science & indigenous technologies in the development of the Nation, and there is a duty placed upon the government of the republic of Kenya to protect TK in traditional communities in the country.[216] As revealed by the chapter Kenya in 2016 has passed the Protection of Traditional knowledge Act of 2016 (Act 28 of 2016). Which shares a limited number of provisions with the Swakopmund Protocol such as no formalities to be applied when it comes to the protection of TK. The Act also does not place a limitation on the protection which is actually very interesting to note – the protection goes on for as long as the TK continues from generation to generation and satisfies the wordings of section 6.

[212] See section 4.6.
[213] See section 4.7.
[214] See section 4.6.1.
[215] See section 4.2.
[216] See section 4.7.4.

5.2 Recommendations

It is recommended that Namibia design laws that are specially tailored for the protection of TK and TCE and the prevention of the misappropriation of TK and TCE by third parties and having owners of TK lose out on that which is owed to them.

The laws to be adopted by Namibia should be based on the *sui generis* system for the protection of TK and TCE. Before creating these laws the government should consult with the indigenous communities through holding workshops that facilitate their views and inputs being captured.

The laws that will be developed in Namibia for the protection of TK and TCE must take into consideration the needs and the customary laws of the indigenous communities. The laws should allow for the indigenous people to have access to just and fair procedures for resolving disputes and to effective remedies for the infringement of their Intellectual Property Rights (IPRs) over their TK/TCE. Indigenous people should have the right to freely pursue their economic, social and cultural development as reinstated in various human rights instruments.

It is therefore recommended that Namibia finalises the Draft Policy, which will give adequate protection to TK in Namibia.

5.3 Lessons Namibia can learn

Although the protection of TK is at the centre of most debates it is not yet decided upon which protection should be accorded although most of the suggestions seem to be pointing in the direction of *sui generis*. The Swakopmund Protocol itself is leaning in towards *sui generis* protection which is protection for a specific nature.

When it comes to South Africa and Namibia both countries take different approaches when it comes to protecting TK. South Africa takes on protection through existing IPRs while Namibia goes for sui generis, chapter 3 revealed that Namibia is in the process of adopting the Access to Genetic Resources and Associated TK Bill which is an excellent way of protecting TK.

If the bulk of the holders of TK do not understand the law as it relates to the protecting their TK, the purpose behind the Act protecting TK will be defeated. Which is true as many of the traditional owners of this knowledge have no accurate and exact

knowledge of the existing IPRs. Hence the *sui generis* protection discussed in chapter 2,[217] which is recommended than for Namibia to adopt and compliment the protocol.

It would be of much help if Namibia was to enact *sui generis* legislation to complement the Swakopmund Protocol which it already ratified because a *sui generis* approach will not only deal with the concerns relating to the identification of the TK to be protected, it will also deal with the issues relating to the scope and limits of the collective rights belonging to the holders of TK, which have proved to be controversial issues.

[217] See section 2.4.

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