PROTECTION OF TRADITIONAL KNOWLEDGE, AN INCOMPLETE VICTORY? TOWARDS INCLUSION OF GENDER CONSIDERATIONS IN TRADITIONAL KNOWLEDGE PROTECTION: A ZAMBIAN PERSPECTIVE

by

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Treaty Establishing a Common Market for Eastern and Southern Africa, 1993.

ABBREVIATIONS

7NDP	Seventh National Development Plan 2017 – 2021		
ARIPO	The African Regional Intellectual Property Organisation		
COMESA	Common Market for Eastern and Southern Africa		
IK	Indigenous Knowledge		
IP	Intellectual Property		
IPLCs	Indigenous Peoples and Local Communities		
IPRs	Intellectual Property Rights		
LK	Local Knowledge		
MCTI	Ministry of Commerce Trade, and Industry		
NGOCC	Non-Governmental Organisations Coordinating Committee		
NIPP	National Intellectual Property Policy		
PACRA	The Patents and Company Registration Agency		
PTK Act	Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore Act of Zambia		
PTKCE Act	Protection of Traditional Knowledge and Cultural Expressions Act of Kenya		
SDGs	Sustainable Development Goals		
TCEs	Traditional Cultural Expressions		
TEK	Traditional Ecological Knowledge		
ТМК	Traditional Medical Knowledge		
ТК	Traditional Knowledge		
WIPO	World intellectual Property Organisation		
WIPO IGC	WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore		

ABSTRACT

This thesis explores the important issue of protection of traditional knowledge from a gendered perspective. More specifically, it seeks to explore the traditional knowledge protection landscape in Zambia in the context of gender sensitivity and gender responsiveness. It further delves into the role of gender considerations in traditional knowledge protection in the achievement of Zambia's national and international development goals.

The work relies on desktop research. It draws on primary and secondary sources of information to inform the analysis, provide the necessary background to ground and situate the research. This thesis argues that a gendered approach to TK protection is justified and important. Based on analysis of the prevailing traditional knowledge protection regime in Zambia, the thesis finds and contends that the current protection available is neither gender sensitive nor gender responsive. Further, the current traditional knowledge protection provided in Zambian legislation falls short in various aspects. The role of gender sensitive and gender responsive traditional knowledge protection in the achievement of Zambia's national and international development objectives as expressed in the Zambian Vision 2030 and Sustainable Development Goals is also explored in the work.

This thesis suggests that Zambia's traditional knowledge protection regime must be changed to include gender considerations. It presents recommendations for change for Zambia from a legislative perspective partially based on emulating the traditional knowledge protection strategy adopted in Kenya. Gender considerations in traditional knowledge protection legislation in Zambia must be included to ensure that protection is real and effective for women. Through this work it is hoped that attention is drawn to the urgent need for decisive changes in the traditional knowledge protection regime in Zambia in the context of gender sensitivity and gender responsiveness.¹

¹ The scope or coverage period of this research ends in March 2022.

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1. CHAPTER ONE – SETTING THE STAGE FOR THE RESEARCH

1.1. Introduction

The intellectual property (IP) system has long held knowledge in high esteem and is the most dominant knowledge protection system on the globe. The value of knowledge has become more evident in recent times with the shift from resource based to knowledge-based economies and societies.¹ The advent of the knowledge economy has created systems of production based on intellectual capital and in turn magnified the importance of protective mechanisms for the products of human capital. Endowed with ability in equal measure, both women and men possess intellectual capital with the capacity to invent and innovate.

Owing to its potential value, among other reasons, knowledge merits protection through a fully functional and effective system. However, the situation becomes more complex when the nature of the knowledge to be protected shifts from what is commonly accepted as knowledge generated in a strictly scientific context to something else. Knowledge generated in a traditional context, that is, traditional knowledge (TK) is one such 'something else'.

TK is a crucial part of culture for indigenous peoples and local communities (IPLCs). Beyond its cultural importance, it spans across different aspects of life including health, spirituality, recreation, economics, the environment, nature, and nutrition.² It plays a vital role in community living. The immediate relevance, importance and application of TK is understandably more readily observable in a traditional community living context. However, TK finds application directly and indirectly to those outside its immediate community circle and TK holders themselves.³ Therefore, the question of its protection is rightly a matter of global concern.

¹ Gerd Schienstock *Embracing the Knowledge Economy: The Dynamic Transformation of the Finnish Innovation System* (2004) 187.

² This list is not exhaustive.

³ For example, the role that traditional medical knowledge (TMK) and associated genetic resources has played in the health sector has become recognised as legitimate and important. The lead generation of some of the most important drugs has been sourced from organic material, the use of which is rooted in TMK as was the case with penicillin and cortisone. See: G Pandey 'Leveraging Traditional Knowledge for Drug Discovery' (2017) 6 *Journal of Traditional Medicine & Clinical*

Significant strides have been made in the quest to protect TK. More relevant to IP in particular has been the debate surrounding protection strategies for TK within the realm of IP or outside it through *sui generis* protection methods.

This thesis shifts the focus and moves beyond the debate of how to protect TK. It delves into the effectiveness of TK protection for a group that stands to be hugely impacted by whatever means is chosen for protection – women. In the grand scale of TK protection, an important yet underexplored dimension to protection is assessing protection through the lens of gender which is directly linked to the recognition of women's TK. Plainly and deliberately implementing gender considerations into TK protection stands to strategically position women to experience real protection of their TK in the wake of custom, traditions and development. As TK moves closer towards playing a significant role in national and indeed global development, it is vital that the interests of women's TK and effective protection for women through legislation are not only secured but that their importance in the journey to utilisation of TK is recognised.

Zambia, as a country in the knowledge producing South, has adopted the *sui generis* approach to the protection of TK. Dedicated legislation in the form of the Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore⁴ (PTK) Act has been enacted. However, for TK protection to be complete and effective for women, it must be gender sensitive and gender responsive.⁵ These terms are defined and differentiated in section 1.6 below. An absence of gender sensitivity and gender responsiveness considerations becomes a blind spot in the pursuit of effective TK protection in Zambia and arguably at an international level.

This thesis seeks to address this potential blind spot in Zambia's TK protection strategy and implementation. It also explores the role gendered TK

Naturopathy 1325. Traditional ecological knowledge (TEK) is now widely sought after in the race to combat climate change and depletion of natural resources through sustainable farming and husbandry methods. Also see: Guttorm G & Porsanger J 'Working with Traditional Knowledge: Communities, Institutions, Information Systems, Law and Ethics: Writings from the Abediehu Pilot Project on Documentation and Protection of Saami Traditional Knowledge' (2001) 1 *International Journal of Education* 267.

⁴ Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore Act No. 16 of 2016.

⁵ For a brief explanation of these terms, see the section 'Understanding Key Terms as used in this Research' in this chapter.

protection can play in contributing to the achievement of Zambia's developmental goals domestically and internationally.

1.2. Context of the Research

In traditional setups, women play a key role in knowledge generation and dissemination from one generation to the next. To this end, it has been argued that recognition be given to a specific category of TK known as 'women's knowledge'.⁶ The possession and generation of women's knowledge largely goes unnoticed and unacknowledged hence by extension it is unlikely to reach the domain of formal IP rights (IPR) or other protection.

Challenges in terms of capacity to own property, the ability to manage finances individually or at least have a say in managing financial resources in the home setup and other traditional norms and aspects of culture all contribute to increased difficulties for women in stepping forward to assert IPRs or take advantage of any protection available for TK. This, coupled with a reluctance to address the gender dynamics associated with TK, for fear of 'interfering with culture or imposing western values'⁷ has greatly contributed to the absence of the gender perspective in the debate on protection of TK in general.

Recognising and protecting women's TK is an essential step in acknowledging the existence and participation of women in the generation of and contribution to TK.⁸ Beyond that, it is a pivotal step in drawing attention to 'the

⁶ Terra. L. Gearhart-Sema 'Women's Work, Women's Knowing: Intellectual Property and the Recognition of Women's Traditional Knowledge' (2009) 21 *Yale Journal of Law & Feminism* 385 at 386 -389.

⁷ Secretariat of the Permanent Forum on Indigenous Issues in collaboration with the Office of the Special Adviser on Gender Issues and the Advancement of Women and the Division for the Advancement of Women *Gender and Indigenous People – Briefing Note No. 6, Gender and Indigenous Peoples' Human Rights UN* (2010), .

⁸ The support of the recognition of women's TK is in no way intended to suggest that women's TK is the only dynamic to or type of or most important sort of TK. It is simply a push for deserved recognition of women's contribution to TK and positioning them to equally benefit from the use of TK economically and otherwise in ways suggested through various protection mechanisms.

value of women's work and bring[ing] women (especially in developing nations) out of the dark corners of intellectual property law'. ⁹

The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (WIPO IGC) was constituted specifically to address TK issues and protection of associated genetic resources. The committee met for the first time in 2001 and has since carried out composite studies in order to assess the possibility of development of an international *sui generis* protection system. The committee has enlisted expert opinions from various countries globally including Zambia, Nigeria, Peru, Portugal, and the United States. However, no concrete conclusion or resulting instrument has come to fruition.¹⁰ Discussions about draft provisions for the enhanced protection of TK and traditional cultural expressions (TCEs) against misappropriation and misuse are ongoing. The WIPO IGC has most recently taken more definitive steps to address a serious issue regarding the operation of the *sui generis* regime in the context of recognition of the fact that TK may in some instances be considered public knowledge or be, in the IP sense, lacking novelty. Hence, detailed discussions around a tiered approach have ensued.

The glaring absence of the gendered perspective in the protection of TK is evident in the negotiations for an international TK protection regime at the WIPO IGC level and the draft articles which have resulted from the negotiations. This is somewhat surprising considering the importance WIPO places on gender equality initiatives, programmes, and policies.¹¹

At a Southern African regional level, the African Regional Intellectual Property Organisation (ARIPO) has made a notable attempt at providing specialised protection for TK. This has been done through the enactment of the Swakopmund

⁹ Alice A Kemp *Women's Work: Degraded and Devalued* Englewood Cliffs, Prentice Hall (1994) 48.

¹⁰ Isaac N. Mazonde Indigenous Knowledge System and Intellectual Property Rights in the Twenty-First Century. Perspectives from Southern (2007) 70.

¹¹ WIPO 'Gender Equality and Intellectual Property' available at *https://wipo.int/women-and-ip/en/*, accessed on 13 February.2020.;WIPO "Mind the Gap - Evaluation of WIPOs Gender Equality Policy" available at *https://www.wipo.int/export/sites/www/about-wipo/en/oversight/iaod/evaluation/pdf/policy_gender_equality_infographic.pdf*, accessed on 13 February.2020.

Protocol on the Protection of Traditional Knowledge and Expressions of Folklore (the Swakopmund Protocol). ¹² The stated purpose of this Protocol is to, 'protect traditional knowledge holders against any unauthorized exploitation of their rights; misappropriation, misuse and unlawful exploitation beyond their traditional context'.¹³ The protocol was intended as a direct response to the problem of protection of TK itself, the rights and interests of TK holders and the misappropriation of genetic resources.¹⁴ There is a clear absence of gender considerations in the Swakopmund Protocol and in the legislation member states have passed in response to regional obligations arising from the protocol.

At a national level, TK protection has featured on the agenda in some countries. Any country which seeks to implement some form of TK protection within its borders is presented with two options; either to incorporate protection into the mainstream IP system or to look towards adopting a *sui generis* protection strategy. Based on these two generally available options, states have proceeded with attempts to implement protection of TK.

The use and practice of TK is alive and prevalent in Zambia; for example, over 75 per cent of Zambia's population benefit from traditional medical practice.¹⁵ There are about 73 different ethnic groups in Zambia¹⁶ each of which, although related, generally has their own culture and traditional community living style.¹⁷

¹² Adopted by the Diplomatic Conference of ARIPO at Swakopmund (Namibia) on August 9, 2010. ¹³ See section 1.1 and section 7 of the Protocol.

¹⁴ Although a commendable initivative, the protocol is rife with weaknesses as has been explored by other scholars. See: Enyinna S Nwauche *The Protection of Traditional Cultural Expressions in Africa* (2017) 67; Ngombe Laurier Y 'The Protection of Folklore in the Swakopmund Protocol Adopted by the ARIPO (African Regional Intellectual Property Organization) ' (2011) 4 *Journal of World Intellectual Property* 403; Enyinna S Nwauche 'The Swakopmund Protocol and the Communal Ownership and Control of Expressions of Folklore in Africa ' (2015) 17 *Journal of World Intellectual Property* 191.

¹⁵ Mwitwa J The Status of Traditional Medicinal Plant Practice in the Miombo Eco-Region of Southern Africa: Zambia Case Study (2009) Lusaka Zambia, WWF Southern Africa Regional Programme Office, .

¹⁶ Mabel C. Milimo; Monica L Munachonga; Lillian Mushota et al Zambia – A strategic Country Gender Assessment (2004) World Bank, 1 at 55.

¹⁷ As a former British colony, although subjected to foreign laws from the colonial rulers, application of and adherence to native traditional rules which did not conflict with those of the Crown was permitted. Remnants of this system of laws were carried on post-independence. Today, Zambia continues to run what is known as the received law alongside customary law Remnants of this system of laws were carried on post-independence. Today, Zambia continues to run what is known as the received law. Hence, many indigenous

Being part of the global south which is typically considered as the TK producing developing world,¹⁸ Zambia like many other developing countries, stands to benefit from the potential TK holds. This has been explained in arguments presented by various authors in the rationale for TK protection.¹⁹

As of the end of 2021, 45.2 per cent of the Zambian population lived in urban areas.²⁰ This means 54.8 per cent of the population live in rural areas and this is where traditional practices and living are most actively practised as a way of life. Thus, the use of TK in various avenues affects over half of the country's population, over 50 per cent of whom are women.²¹ This alone is sufficient to warrant active concern for the effectiveness of TK protection for women in Zambia.

The enactment of the Protection of Traditional Knowledge (PTK) Act in 2016 was a welcome development in Zambia. The PTK Act gives effect to the Swakopmund Protocol²² and in some respects mirrors provisions contained in the Protocol. This relatively new piece of legislation has, thus far, not received much attention from scholars. However, the new framework it creates in terms of the ownership and licensing of TK has been considered.²³ The research carried out in that area with particular reference to the PTK Act was limited to an exploration of TK associated with genetic resources with regard to the domestication of the Nagoya

communities still exist and carry on indigenous community life; See Hoover E. L.; Piper J. C.; Spalding F 'The Evolution of Zambian Courts' (1970) 5 *Zambia Law Journal* 5 at 5-6.

¹⁸ Schüklenk U; Kleinsmidt A 'North-South Benefit Sharing Arrangements in Bioprospecting and Genetic Research: A Critical Ethical and Legal Analysis' (2006) 6 *Developing World Bioethics* 122 at 124.

¹⁹ See: Charles A Masango 'Indigenous traditional knowledge protection: prospects in South Africa's intellectual property framework?' (2010) 76 *South African Journal of Libraries and Information Science* 74-80; Graham Dutfield 'TK unlimited: The emerging but incoherent international law of traditional knowledge protection' (2017) 20 ; Verma S K 'Protecting TK: Is a suis generis system an Answer' (2005) 7 *Journal of World Intellectual Property* ; Quinn M L 'Protection for Indigenous Knowledge: An International Law Analysis' (2001) *St. Thomas Law Review* ; Frantzeska Papadopoulou *The Protection of Traditional Knowledge on Genetic Resources* (2018).

²⁰ World Data Atlas 'Zambia - Urban population as a Share of Total Population' available at *https://knoema.com/atlas/Zambia/Urban-population*, accessed on 16 January 2022.

²¹ Ibid.

²² See the PTK Act Preamble.

²³Enyinna Nwauche 'New Frameworks for the Ownership and Licensing of Traditional Knowledge Associated with Genetic Resources in Africa ' in Susy Frankel (ed) *The Object And Purpose Of Intellectual Property* (2019) 90.

Protocol.²⁴ In contrast, this thesis zooms in on not a particular type of TK but a particular aspect or dimension that appears to have been completely ignored in the drafting and construction of the PTK Act, that is, the gendered perspective.

As a developing country, Zambia strives to set in motion various development initiatives which ultimately contribute to the achievement of national goals in the effort to spur on development. In the past fifteen years, she has made extensive plans nationally and commitments internationally designed to support and facilitate national development.

In 2006, Zambia adopted on the development of the first long term plan for national development known as Vision 2030 with a vision statement for Zambia to be 'a prosperous and middle income nation by 2030'.²⁵ One of the principles underpinned in the vision is 'gender responsive sustainable development'.²⁶ A recognition of and protection for women's TK through a gender sensitive and responsive PTK Act speaks directly to this principle. TK has been lauded for its eco-friendly methods in farming and other ecological practices; women's knowledge plays an active role in this. Therefore, women's TK stands to contribute immensely to the realisation of the principle of gender responsive sustainable development and the associated sector vision of achieving gender equity and equality in the social economic development process by 2030.

The achievement of the Vision 2030 is made more manageable by the formulation of shorter term national development plans which run for 5 years at a time.²⁷ The Seventh National Development plan, $2017 - 2021 (7NDP)^{28}$ presents a very specific focus. The theme for the 7NDP is, 'accelerating development efforts

²⁴ The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity of 2011 (entered into force October 2014).

²⁵ Vision 2030 - A Prosperous and Middle Income Nation by 2030 – Zambia (2006) 1.

²⁶ Other principles are democracy; respect for human rights; good traditional and family values; positive attitude towards work; peaceful coexistence and; private-public partnerships. See Vision 2030, supra at 8.

²⁷ Although the National Development Plans typically run for five year periods at a time, they may be revised during the 5 year period for various reasons, for example, change in government as was the case with the Sixth National Development plan in 2013 or a fundamental or substantive shift in focus of the plan or strategy.

²⁸ This is the national development plan for Zambia which has succeeded 3 national development plans prior to it.

towards the Vision 2030 without leaving anyone behind'. This theme entails that development efforts must be inclusive and should not leave anyone behind, including women.

Owing to Zambia's history as largely following a patriarchal system, women generally in the traditional context have little access to and control over resources at both household and market level.²⁹ This situation creates the very real possibility that women will be left behind in development in spite of them generating and possessing relevant TK which could be used for their benefit through direct engagement in the labour market or in other ways. The 7NDP seeks to adopt a multi sectoral strategy towards development and has made specific reference to the role gender equality efforts could play in this endeavour.³⁰ The plan involves using engendering strategies to promote women's empowerment and participation in key sectors driving national development to ensure equitable distribution of national resources between men and women.³¹

In line with the rest of the global community, Zambia has undertaken to actively support and pursue the 2030 Agenda for Sustainable Development through working towards achieving the 17 sustainable development goals (SDGs).³² While all the SDGs are important, this research focuses on only those which are identified as achievable through TK protection in a gender sensitive and responsive way. Bearing in mind the link between Zambia's Vision 2030 and the SDGs, it is important for Zambia to ensure that active domestic steps are taken to contribute to achieving the SDGs which by extension also contributes to pushing the nation's long term development vision.

It is important for the protection of TK to be re-examined from a gender perspective in order to speak to the real needs of IPLCs and provide real protection for them – including women. The historical marginalisation of women especially demands that they should be among the target groups for development programmes,

²⁹ Milimo, Munachonga & Mushota supra at 40.

³⁰ See part 5.4.2 of the 7NDP.

³¹ See 7NDP, 45.

³² For a full list of the SDGs see: United Nations 'Sustainable Development Goals' available at *https://sustainabledevelopment.un.org/sdgs*, accessed on 14 February.2020.

protection, and initiatives. In spite of this, development initiatives are still generally largely targeted at men.³³ Additionally, re-looking at this issue and making changes as needed harmonises with the gender mainstreaming agenda which is targeted at reducing and eventually eliminating disparities between the sexes.³⁴

1.3. Understanding TK from a Gender Perspective

1.3.1. Defining TK in General

Finding an exact definition of TK has proven difficult. This is partially due to its broad and complex nature as a system. However, academicians and organisations have tabled a plethora of suggested definitions. Among these is the definition Mugabe offers who describes TK as 'the totality of all knowledge and practices, whether explicit or implicit, used in the management of socio-economic and ecological facets of life. This knowledge is established on past experiences and observation'.³⁵ This definition reflects the diverse nature of TK and the role it plays in the lives of traditional communities. Additionally, it takes cognisance of TK existing in a practical form by referring to practices. Although this definition provides a general understanding of TK and is an appropriate starting point, it fails to outrightly highlight the continuously evolving nature of TK.

The WIPO IGC describes TK as:

the content or substance of knowledge that is the result of intellectual activity and insight in a traditional context, and includes the know-how, skills, innovations, practices and learning that form part of traditional knowledge systems, and knowledge that is embodied in the traditional lifestyle of a community or people, or is contained in codified knowledge systems passed between generations. It is not limited to any specific technical field, and may include agricultural, environmental and medicinal knowledge, and knowledge associated with genetic

³³ Pidatala Krishna; Rahman Khan Aisha Women and indigenous knowledge : a South-South perspective (2003) South Asia, World Bank,available at http://documents.worldbank.org/curated/en/417911468302957741/pdf/30454.pdf, .

³⁴ Heather Gibb *Gender Dimensions of Intellectual Property and Traditional Medical Knowledge* (2007) *Asia-Pacific Trade and Investment Initiative UNDP Regional Centre*; Gerd Johnsson-Latham; Everjoice J Win; Joanne Sandler; Mariama Williams 'Gender Mainstreaming: Can it work for Women's Rights' (2004) 3 AWID .

³⁵ John Mugabe 'Intellectual Property Protection and Traditional Knowledge; An Exploration in International Policy' (1991) 1 *African Center for Technology Studies* 1.

resources.36

The description from the WIPO IGC reveals the all-encompassing nature of TK and effectively points to the fact that TK and its scope could very well be limitless. TK as a system forms an integral part of the identity of IPLCs. It spans across various avenues of daily life.³⁷

TK has sometimes been viewed as backward, primitive and on some occasions has been equated to heathenism.³⁸ Such viewpoints may be attributed to socialisation patterns where people are trained to believe that real knowledge generation can only occur in formal scientific settings involving higher learning institutions and scientific research. However, the reference to a 'specific technical field' in the WIPO IGC definition of TK demonstrates that TK does not lack in scientific or technological basis³⁹ rather it derives its uniqueness from its nature as constituting part of the customs and cultural traditions of the community in which it has been developed and maintained.

While having several definitions proves helpful in gaining an understanding of TK, formulating an exact and universally accepted definition of TK is not desirable because it could have a limiting effect on the scope of the understanding assigned to TK. Moreover, the evolving nature of TK may render any definition cast in stone quickly obsolete, inapplicable, or too narrow within a short time. Further, there is no universal tradition. Various IPLCs each have their own specific traditions and TK which although related, are different. These differences within countries translate to even broader differences across countries and by extension, globally.

³⁶ WIPO available at *http://www.wipo.int/edocs/pubdocs/en/wipo_pub_TK_2.pdf.*, accessed on 2 October.2019.

³⁷ Daniel J Gervais International Intellectual Property: A Handbook of Contemporary Research (2015) 137; Also see Bubela Tania and Gold E. Richard Genetic Resources and Traditional Knowledge Case Studies and Conflicting Interests Cheltenham England, Edward Elgar Publishing (2012) 3.

³⁸ P J Kabudi 'Protection of Intellectual Property Rights of Indigenous Knowledge in Tanzania: Legal Constraints and Challenges' (2004) 3 *Indilinga: African Journal of Indigenous Knowledge Systems* 33.

³⁹ J Erstling 'Using Patents to Protect Traditional Knowledge,' (2009) 15 *Texas Wesleyan Law Review* 296.

Therefore, TK appropriately resists a one-size-fits-all description. It is more than simply knowledge but extends to human identity and the concept of belonging for community members.

1.3.2. Establishing the meaning of TK from a Gender perspective

Acknowledging that there is a gender perspective to TK in general is the first step in creating a TK protection regime which is alive to the needs of women. Once this is acknowledged, it is important to establish an understanding of TK from a gender perspective or put differently, to understand TK through the lens of gender. This entails understanding the role of women in the generation, use and dissemination of TK. It also means finding out where gender issues fit into the larger scheme of TK protection. This understanding can then form the basis of securing a complete victory for gendered TK protection.

The issue of TK protection is generally well researched. However, many studies tend to overlook the gender dimension of TK. Despite this, there is evidence from empirical studies conducted that there is indeed a gender dynamic to TK.

Regarding TK in the area of ethnobotany,⁴⁰empirical research that has been conducted shows that there are significant distinctions between the ethnobotanical knowledge held by men and that held and maintained by women in rural communities.⁴¹ TK which guides activities such as home garden management is more often held by women in rural regions of the tropics because they are more involved in managing local resources near the homesteads.⁴² In the Lençóis community of Brazil, women possess a greater depth of traditional medical knowledge (TMK) than men in identification, naming and use of plants with

⁴⁰ Ethnobotany 'is the study of interrelations between humans and plants; however, current use of the term implies the study of indigenous or traditional knowledge of plants. It involves the indigenous knowledge of plant classification, cultivation, and use as food, medicine and shelter'. See Maurice M Iwu 'Ethnobotanical approach to pharmaceutical drug discovery: strengths and limitations' (2002) 1 *Advances in Phytomedicine* 309 -320.

⁴¹ Kothari B 'The invisible queen in the plant kingdom: Gender perspectives in medical ethnobotany ' in L Howard P (ed) *Women and Plants: Gender Relations in Biodiversity Management & Conservation* London, Zed Books(2003) 150-164.

⁴² Robert A. Voeks 'Are Women Knowlegde Resevoirs of Traditional Plant Knowledge? Gender, Ethnobotany and Globalization in Northeast Brazil' (2007) 28 *Singapore Journal of Tropical Geography* 7 at 15.

medicinal properties.⁴³ The same was found to be the case in Canada, where indigenous women are more familiar with the identities and medicinal uses of local plants than men.⁴⁴

A study that was conducted regarding Aboriginal TK indicated that 'women's knowledge is unique and is often related to specific lands and ancestral territories'.⁴⁵ Women were also reported to have closer links to water and hence more likely to notice changes in it and have specialised knowledge regarding its protection.⁴⁶ In the area of rice production in Ini, Nigeria, research shows that there are gender specific roles at different stages of production in the process of rice production including harvesting, winnowing and marketing.⁴⁷

The empirical research carried out in the studies highlighted above from different parts of the world provides support for the idea that there is a gender perspective to TK and that TK can in fact be gender specific.

Gender specific TK is attributable to traditionally and historically assigned gender roles in indigenous communities. The specialised TK generated, possessed and disseminated by women covers a range of subjects. This specificity in some cases has been a result of closer interaction with a particular aspect of life and the resultant division of labour. Many women in traditional communities are assigned the role of primary care giver in the family. In carrying out this role, the knowledge they possess or come to possess in the process, for example, knowledge on plants with medicinal properties, midwifery skills or traditional medical care associated with childbirth is often neglected, sidelined, or forgotten.

⁴³ 48.2 per cent versus 36.7 per cent for men regarding knowledge on traditional names for medicinal plants and 27.4 per cent versus 17.7 per cent for men regarding uses of medicinal plants – See Voeks supra at 13.

⁴⁴ Voeks, supra at 7.

⁴⁵ Native Women's Association of Canada Aboriginal Women and Aboriginal Traditional Knowledge (ATK): Input and Insight on Aboriginal Traditional Knowledge (2014) Canada, Environment Canada, 4 at 14.

⁴⁶ Deborah McGregor 'Traditional ecological knowledge: An Anishnabe woman's perspective' (2005) 29 *Atlantis Women's Studies Journal* 1-10; Colleen Kattau 'Women, water and the reclamation of the feminine' (2006) 3 *Wagadu* 114-143.

⁴⁷ I.A Akpabio and Akankpo G.O 'Indigenous knowledge practices and the role of gender in rice production in Ini, Nigeria ' (2003) 2 *Indilinga African Journal of Indigenous Knowledge Systems* 45 at 26 -50.

Even outside the confines of indigenous knowledge (IK), the reflection of traditional gender specific roles is observable. For example, the nursing profession has for a long time been perceived as a job for women.⁴⁸ It is not uncommon for men who take on the nursing profession to be specifically referred to as 'male nurses'.⁴⁹ This is largely because of the traditional gender assignment connected with nursing the sick which was seen as a feminine female designated role. Although perceptions have somewhat evolved, prevailing notions of masculinity and femininity constrained the participation of males in general nursing in the past and presently to some extent.

TK and gender are inherently interconnected. Therefore, gender plays a role in the nature and type of TK held. Women have their own unique insights and knowledge in a traditional context. Social constructs and traditional role assignments play a part in knowledge differentiation. Knowledge differentiation comes about because of specialisation and role assignments. While this is not necessarily a bad thing, there is a need to recognise women's role and respond to their needs as a different social group. If recognised and effectively protected, these insights can make an essential contribution to sustainable development in different areas.

1.4. Research Objective

This thesis answers the following primary research questions:

- 1. 'How if at all, does Zambia incorporate a gendered approach to the protection of TK within her prevailing protection regime?'
- 2. How may such an approach be entrenched and enhanced in alignment with Zambia's developmental goals?

⁴⁸ Shireen Arif and Sami Khokharar 'A historical glance: Challenges for male nurses ' (2017) 6 *The Journal of the Pakistan Medical Association* 1889 at 1889. This is especially true for the 'post Florence Nightingale' nursing profession. Florence nightingale founded the modern day nursing profession after World War I. By the mid nineteenth century, the association of males with nursing had generally ended. Male nurses were excluded from general nursing and were limited to asylum nursing. This was again reflective of gender stereotypes in that they were permitted to enrol for asylum nursing because they were to use their strength to restrain violent patients. Also see Joan Evans 'Men nurses: A historical and feminist perspective' (2004) 47 *Journal of Advanced Nursing* 321-8.

⁴⁹ Catherine Burns 'A Man is a Clumsy Thing Who does not Know How to Handle a Sick Person' : Aspects of Masculinity and Race in the Shaping of Male Nursing in South Africa, 1900 - 1950 ' (1998) 24 *Journal of Southern African Studies* 695.

These questions come about as a result of interrogating the current status of women and TK in Zambia and whether the perceived advancement Zambia has made in the protection of TK through implementation of the PTK Act is mindful of and responsive to the needs of women. It is cardinal to address these research questions adequately in light of the fast growing potential in terms of utilisation of TK, the advancement of domestic legislation and the need to incorporate women effectively in the development agenda as it relates to TK and its role in enabling Zambia to achieve her developmental goals.

The objective of the research is to establish a justification for adopting a gendered approach to protection in the broader TK landscape. Further, the research aims to situate women in TK protection in Zambia through an analysis of the PTK Act. This will include identifying where it falls short from a gendered perspective and mapping out a route towards gendered TK protection in the context of the PTK Act. Additionally, the research seeks to identify how a gendered approach to TK protection aligns with Zambia's developmental goals both domestically and internationally.

1.5. Some Important Considerations

This research proceeds on the basis that the importance of TK and its protection has already been established and that the question of whether to protect TK within the IP system or outside has been resolved in favour of adopting a *sui generis* approach in Zambia.

The research acknowledges from the onset that both men and women play important roles in the area of TK in terms of its generation, existence and preservation. However, as will be established in building the case for gendered consideration of TK protection, the issue of women's TK and TK protection that speaks to providing effective protection even for women is cardinal to attaining a complete victory in the quest for TK protection.

It is not the aim of this thesis to diminish or downplay the role men play in the TK system. Rather, the intention is to zoom in on and recognise the role that women, a traditionally marginalised group, play in the generation, use and preservation of TK and to draw attention to the effectiveness or ineffectiveness of current protection mechanisms in the PTK Act of Zambia for women.

Further, it is not the intention of this thesis to present gendered TK protection as the sole solution to the advancement of Zambia's developmental goals nor as the only or most important route to the empowerment of female TK holders. However, the object is to present the detriment of a gender blind TK protection strategy and to plot suggested ways forward towards a gendered TK protection strategy.

1.6. Understanding Key Terms as Used in this Research

Throughout this thesis, certain key terms will be used frequently. To lay a firm foundation for grasping the ideas expressed, it is important to establish the meaning assigned to these terms in the context of this thesis. This section offers a brief and basic understanding of identified terms which will be further developed in later parts of the research.

Indigenous Peoples and Local Communities (IPLCs)

Indigenous peoples generally refer to peoples who 'having historical continuity with pre-invasion and precolonial societies that developed on their territories, consider themselves distinct from other sectors of the society now prevailing in those territories or parts of them'.⁵⁰ According to the African Commission on Human and People's rights, the definition of indigenous people in the African context should not place emphasis on indigenous people's being the first inhabitants of the land, rather, identification of indigenous groups should be based on highlighting the main characteristics of indigenous people.⁵¹ Self identification as an indigenous group is a fundamental characteristic for a group to 'qualify' as an indigenous group.⁵² For purposes of this thesis, the definition of indigenous groups should be understood and interpreted to include practical characteristics including a way of life dependent on

⁵⁰ Martínez Cobo Study of the Problem of Discrimination Against Indigenous Populations (1986) United Nations, 1-14

⁵¹ Jeremie Gilbert 'Indigenous peoples' human rights in Africa: the pragmatic revolution of the African Commission on Human and Peoples' Rights' (2011) 7 *International and Comparative Law Quarterly* 245 at 253.

⁵² Indigenous and Tribal Peoples Convention, 1989 (No. 169) Article 1(2).

land and other natural resources, strong spiritual links to physical territory, distinct social, economic and political systems and distinct knowledge systems and beliefs.

A local community is a group of people within a specific geographical location with particular cultural practices and outlooks.⁵³ Local communities live within the broader context of a larger plural society. The Zambian PTK Act in describing local communities describes them as 'a human population living in a distinct geographical area in Zambia which is the creator or...custodian of a traditional knowledge, genetic resource or expression of folklore'.⁵⁴

The distinction between indigenous peoples and local communities may lie in that local communities are tied to a physical geographical location while this is not necessarily the case for indigenous peoples. However, as suggested above, the focus is better placed on the particular characteristics which qualify a group to be considered an indigenous population or a local community. In this thesis, IPLCs will be referred to simultaneously and the arguments made in the context of gendered TK protection apply to both indigenous peoples and local communities.

TK, Indigenous Knowledge (IK), Local Knowledge (LK)

An explanation of TK is provided in section 1.3.1 of this chapter. Various authors have presented ideas that TK, IK and LK, are interrelated but may differ in some respects. It has been argued that an important difference between TK and LK is that while TK is historical in nature, LK is not necessarily historical in nature and changes its definition depending on the scope of a particular study.⁵⁵ Regarding the distinction between TK and IK, it has been suggested that IK must be tied to specific indigenous groups and passed on only in the context of an indigenous network, through indigenous performances, indigenous oral traditions, indigenous songs and

⁵³ Philip Nel 'Indigenous Knowledge Systems, Loccal Community and Community in the Making' (2006) 5 *Indilinga African Journal of Indigenous Knowledge Systems* 99-107.

⁵⁴ Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore Act No. 16 of 2016. PTK Act s 2. Although this definition is of 'traditional communities', the Act indicates that the terms local community and community shall be construed accordingly.

⁵⁵ Piers Blaikie and Katrina Brown et al 'Knowledge in action: Local knowledge as a development resource and barriers to its incorporation in natural resource research and development' (1996) 55 Agricultural Systems 217.

indigenous ceremonies.⁵⁶ It has also been suggested that TK and IK may be subsets of LK.⁵⁷

Whether the differences presented above are accepted or not, a fundamental common denominator between TK, IK and LK is that they are all on the same end of the spectrum when compared with western or mainstream scientific knowledge. They each share characteristics in terms of the nature of knowledge. Therefore, in the context of this thesis, these terms will be used synonymously.

Women's TK

Women's TK refers to TK which women possess or have possessed for generations and have generated in a traditional context.⁵⁸ It is knowledge particular to the community of women and is associated with 'women's work' in the traditional community setup. It is a specific category or subset of the larger body of TK in which women are the generators and possessors of the TK. It may involve areas such as TK in home gardens,⁵⁹ culinary traditions, traditional ecological knowledge, medicinal plant knowledge, traditional use of natural resources as cosmetics.⁶⁰ The terms women's IK, women's TK, and women's LK will be used synonymously in this thesis.

Gender Sensitive and Gender Responsive

Gender sensitive refers to having 'an understanding [of] and taking into account the societal and cultural factors involved in gender-based exclusion and discrimination in ...spheres of public and private life'⁶¹ and being alive to the need to redress

⁵⁶ Margaret Bruchac *Indigenous Knowledge and Traditional Knowledge* (2014) New York, Springer Science and Business Media, 3814.

⁵⁷ Blaikie et al, supra.

⁵⁸ Gearhart-Sema, supra at 373.

⁵⁹ Nontuthuko R. Ntuli, Alpheus M. Zobolo, Stefan J. Siebert et al 'Traditional vegetables of northern KwaZulu-Natal, South Africa: Has indigenous knowledge expanded the menu? (2012) 45 *African Journal of Agricultural Research* 6027.

⁶⁰ Montanari, supra.

⁶¹ European Institute for Gender Equality 'Gender Sensitivity' available at <u>https://eige.europa.eu/thesaurus/terms/1218</u>, accessed on 2 March 2020.

existing inequalities.⁶² Gender responsive means adjusting strategies and practices to appropriately respond to the differences in life experiences and characteristics that men and women bring to a particular field or context.⁶³ Thus, though interrelated, gender sensitivity is concerned with theoretical understanding and acknowledgement while gender responsiveness speaks to the practical implementation of the understanding gained through gender sensitivity.

Gendered TK Protection

This is TK protection which is cognisant of and alive to the needs of women in light of the role they play in the TK landscape. It is TK protection which includes the gender dynamic. It involves recognition of women's TK and adopting a gender sensitive and gender responsive approach based on a consideration of numerous factors including historical constraints, cultural considerations, social contexts, and practical considerations to achieve real and effective TK protection.

Gender Blind(ness)

Gender blindness is 'a term used to describe treating all genders the same regardless of their biological or historical differences'.⁶⁴ It adopts a 'blinkered horse approach' and applies blanket treatment to both males and females. This approach is blind to or does not consider any historical factors, biological differences, developmental needs or other extrinsic factors in the treatment of men and women.

1.7. What the Research Does Not Do

The research does not limit itself to specific types of TK but is broadly applicable to various categories of TK. Although this work does not cover Traditional Cultural Expressions (TCEs) specifically, the principles and ideas formulated can in some respects overlap and apply to TCEs.

⁶² Josie Christodoulou & Anna Zobnina A Glossary of Gender Related Terms (2009) Mediterranean Institute of Gender Studies at 14.

⁶³ B Owen; S Covington & B Bloom *Gender Responsive Strategies: Research, Practice and Guiding Principles for Women Offenders* (2003) Washington D.C. Department of Justice, National Institute of Corrections.

⁶⁴ Sydney Randolph 'What is Gender Blindness and Why is it a Problem for Women?' available at *https://medium.com/@sydney.j.randolph/what-is-gender-blindness-and-why-is-it-a-problem-for-women-8d870c35bbfe*, accessed on 6 March.2020.

This thesis addresses a development component in terms of how effective gendered TK protection can contribute to Zambia's development aspirations. To do this effectively, the thesis looks at The Vision 2030 and the national development plan of Zambia. However, the thesis does not critique the content, quality or strategic correctness of The Vision 2030 and the associated national development plan. The work simply adopts the plan as it is and focuses on how it links to gendered TK protection.

The thesis also considers selected SDGs. Similarly, it does not critique the content or quality of the SDGs but merely analyses the role effective gendered TK protection plays in their fulfillment or possible attainment in Zambia.

1.8. Research Questions

This research addresses two main research questions. To assist in systematically answering the main research questions, the main questions have sub research questions.

Main Research Questions

- 1. 'How if at all, does Zambia incorporate a gendered approach to the protection of TK within her prevailing protection regime?'
- 'How may such an approach be entrenched and enhanced in alignment with Zambia's developmental goals?'

Sub Research Questions:

In order to answer these two main questions, the thesis engages with the following sub-questions:

- a) What is the role of women in the generation, use, dissemination and protection of TK?
- b) In which ways may the exclusion of a gendered perspective affect TK protection?
- c) What is the current legal position relating to TK protection specifically in Zambia?
- d) To what extent, if at all, does and should the Constitution play a role in TK protection in Zambia?

- e) Is the current PTK Act gender sensitive and gender responsive? If not, how can the Act be amended to adopt a gender sensitive and gender responsive approach?
- f) In what areas does the PTK Act fall short? Are there lessons to be learned from the Kenyan model in this regard?
- g) What role does gendered TK protection play in the attainment of Zambia Vision 2030 and SDGs?
- h) To what extent has Zambia positioned herself to honour current and potentially future international commitments or obligations regarding an international protection framework for TK in the context of gendered TK protection?

1.9. Research Method

This research mainly relies on desktop research. It uses doctrinal research from inception through to completion. This entails a consideration of primary resources including national statutes, national policies, national development plans and other official documents. Secondary sources in the form of relevant literature such as books, journal articles, official reports and statistical data also play a vital role in the research. Surveys, published studies and reports are an important source of information adding perspective and accuracy to the work. Online and electronic resources are used. This enables access to web-based information repositories and broadens the scope of information available and accessible.

The research includes a comparative element. A comparison will be made between the PTK Act of Zambia and the Protection of Traditional Knowledge and Cultural Expressions (PTKCE) Act of Kenya.⁶⁵ It is appropriate to compare Kenya and Zambia because the two countries have much in common. Both countries have a shared colonial history in that they are former British colonies and attained independence just over a year apart from one another.⁶⁶ Therefore, these two

⁶⁵ 2016.

⁶⁶ Kenya attained independence on 12 December 1963 while Zambia attained independence on 24 October 1964, see: Encyclopaedia Britannica 'World War II to Independence' available at *https://www.britannica.com/place/Kenya/World-War-II-to-independence*, accessed on 15

democracies are basically 'age mates' or counterparts hence the comparison is among countries which can be considered peers.

The two countries have a shared cultural history while being relatively geographically proximate. Zambia and Kenya are both developing countries, share common developmental struggles and face challenges common to the knowledge producing South. Each country is rich in IPLCs and by extension possesses a rich stock of TK. Thus, a TK protection agenda is important for both nations. Additionally, since 2015, Zambia and Kenya have made deliberate efforts to strengthen bilateral relations.⁶⁷

As ARIPO member states both countries have modelled their TK protection legislation on the Swakopmund Protocol.⁶⁸ However, the difference in interpretation of the protocol as reflected in the final domestic legislation produced by each country provides interesting points of departure worth exploring.

The choice value ⁶⁹ of Kenya as a comparator jurisdiction for this research lies in the common legal culture between Kenya and Zambia and the shared respect and value of TK and traditional societies in each country. The choice of Kenya as a comparator jurisdiction also partially facilitates the original contribution of this thesis in that these jurisdictions have not been compared before in the context of TK protection; in particular, a comparative exposition of the PTK Act and the PTKCE Act.

The comparative method demands that divergent, identical or similar elements in the legal systems being compared ⁷⁰ in relation to the subject matter under consideration be identified, after which, possible reasons for similarities or

February.2020.; Encyclopaedia Britannica 'Colonial Rule' available at *https://www.britannica.com/place/Zambia/Colonial-rule*, accessed on 15 February.2019.

⁶⁷ This is evidenced from a series of four MOUs signed in 2015 in the areas of Police Cooperation, Tourism, Gender Equality and Development, and Bilateral Cooperation in the Agriculture sector: Ed 'Kenya and Zambia Sign Pacts to Enhance Bilateral Relations' available at *https://www.president.go.ke/2015/07/03/kenya-and-zambia-sign-pacts-to-enhance-bilateral-relations/*, accessed on 13 February.2020.

⁶⁸ Coincidentally, the PTK Act and the PTKCE Act were enacted in the same year and have been operating for about the same amount of time.

⁶⁹See Ruth Chang 'Comparison and the Justification of Choice' (1998) 146 University of *Pennsylvania Law Review* 1569 at 1575 for an explanation of the concept of choice value and choice worthiness in selection of comparator jurisdictions.

⁷⁰ Mark Van Hoecke *Methodology of Comparative Research* (2015) 10.

differences are discussed and analysed in context. For purposes of this research, the comparison is circumscribed. The comparison is not intended to be a comprehensive review of the entire Kenyan system as a whole but the objective is to focus on points of departure between the two pieces of legislation and assess gaps identified in the Zambian PTK Act that may be filled by emulating the Kenyan model. Thus, where there are similarities, these aspects may be mentioned in passing for completeness in terms of explanation and analysis, but they will not be dwelt on.

The nature of the research demands an in depth exploration of the PTK and PTKCE Acts as legal protection mechanisms for TK in Zambia and Kenya respectively. Therefore, the legal dogmatic method is appropriate. This involves a critical analysis of these laws in relation to the protection of TK in a gender sensitive and gender responsive way.

This thesis also relies on the rationalist methodology for knowledge generation.⁷¹ Since law is part of human science, it is inclined toward the rationalist methodology.⁷² When using rationalism in research, the solution to the problem can be found by logical consistency in reasoning and rational justification of a position. This entails knowledge generation based on the deep consideration of a problem — which in the present case is gendered TK protection — and working out possible solutions rationally and logically. In applying this method, this thesis connects arguments logically and builds on rational reasoning in analysing the current situation and proposing possible solutions.

This research does not undertake any empirical studies. While it is understood that empirical research may contribute to research of this nature, the thesis draws and builds on the fair number of empirical studies and other field work already conducted in the past by other researchers in this area to draw conclusions and inform certain aspects of the research as appropriate.

⁷¹ IJ Kroeze 'Legal Research Methodology and the Dream of Interdisciplinarity' (2013) 16 *Potchefstroom Electronic Law Journal* 36 at 42 - 43. ⁷² Ibid, at 42-46.

An additional method that is used for information retrieval is reference chain searching.⁷³ This entails looking for other potential sources of information related to the research based on the sources referenced in the bibliography of a given publication. This broadens the range of the research.

1.10. Structure of the Thesis

Chapter one serves as the introductory chapter which addresses preliminary issues and presents the context of the research. Importantly, it also highlights the research questions which set the tone for the thesis and lay the foundation for subsequent chapters.

Chapter two delves into a justification for the gendered approach thereby providing a basis on which to address the question of gendered TK protection. It explores various considerations which serve as grounds for justifying a gendered TK protection approach and provides insights into the effect of these considerations on women.

Chapter three provides an analysis of the current legal position of TK protection in Zambia. It examines gender specific considerations in the PTK Act with a view to determining whether the Act is gender sensitive and gender responsive. Further, the chapter discusses constitutional and moral rights considerations in TK protection in Zambia.

In chapter four, a comparison is made between the Kenyan PTKCE and the Zambian PTK Act. The Kenyan approach is considered in detail and a determination is made of whether there are lessons to be learned for Zambia worthy of emulation from the Kenyan approach.

Chapter five discusses gendered TK protection in the fulfillment of national and international development obligations for Zambia. Specifically, it explores to what extent gendered TK protection plays a role in attainment of Zambia's Vision 2030, the 7NDP and selected SDGS.

⁷³ It is also called reference mining or bibliographic mining.

Chapter six concludes with a summary of the thesis and provides some final remarks on the subject of gendered TK protection in Zambia based on the findings of the research.

2. CHAPTER 2 – JUSTIFYING THE GENDERED APPROACH

2.1. Introduction

Adopting a gendered approach to issues has been done before in different areas of law and in various legal contexts. For example, it is commonplace to find outright attempts to recognise and incorporate gender considerations in areas such as employment law, family law and constitutional law.¹ Arguably, these are areas in which gender issues are likely easier to identify. Discussions on gender considerations around IP and IPRs have also gained momentum although they are still not fully explored. Examples of the contexts in which gender considerations and IP have been discussed are the visible impact of gender on the distribution of copyright and the associated consequences ² and explorations of the gender gap in patenting activity.³ The area of TK should be no exception. This chapter aims to provide sound justification for adopting a gendered approach and taking into account gender considerations in the protection of TK through legislation and policies. It examines why such an approach is necessary from different angles. While exploring different lines of reasoning, each of which makes the case for adopting a gendered approach in the protection of TK, this chapter touches on the detrimental effect of failing to include a gender perspective in TK protection.

2.2. Gender Roles

The question of gender and its precise definition is a complex one. The meaning of gender has evolved as social circumstances and perceptions have changed.⁴ This evolution has seen the introduction of arguments in support of the idea that gender is not a binary category but can involve identifying one's gender as being something

¹ See the Employment Code Act of Zambia 2019, sections 5(2), 41 and 43 for a demonstration of the inclusion of non - discrimination clauses based on gender.

² Ann Bartow 'Patent Law, Copyright Law, and the Girl Germ Effect' (2016) 90 *St John's Law Review* 579.

³ Melo-Martin Immaculada 'Patenting and the Gender Gap: Should Women Be Encouraged to Patent More?' (2013) 19 *Science & Engineering Ethics* 49.

⁴ Desmond Osaretin Oriakhogba 'Empowering Rural Women Crafters in Kwazulu-Natal: The Dynamics of Intellectual Property, Traditional Cultural Expressions, Innovation and Social Entrepreneurship' (2020) 137 *South African Law Journal* 142 at 159.

other than male or female.⁵ For purposes of this thesis, the gender analysis will be limited to and focus on two gender constructs, that is, male and female.

It has been generally established that gender is concerned with a set of societal behaviours and expectations.⁶ Gender is thus linked to culture and environment and is attached to what it means to be male versus what it means to be female within that context. It is socially constructed. Within livelihood systems, men and women play different roles. In TK systems, this difference is quite evident.⁷ The different roles men and women play and how they fulfil those roles within the TK system is influenced by their independent experiences, independent views and different socialisations.

Gender plays a significant part in the generation and maintenance of TK. According to Fernandez, there are at least four ways to think about gender differences in knowledge systems. These are: that women and men may have; 'a different knowledge of similar things; a different knowledge of different things; different ways of organising knowledge; and different ways of preserving and transferring knowledge'.⁸ To these four categories, a fifth can be added; that women and men may have a different way of interpreting and applying the same knowledge. Again, this can be attributed to their different characteristics or ways of thinking based on different experiences. As a result of these differences, the goals and interests of women and men may not necessarily align. Therefore, formulating laws, policies, or any other protective mechanisms in ignorance of these differences means that the needs of one group or the other will be overlooked. By extension, this has a serious impact on the effectiveness of the intended protection offered through any measures taken.

⁵ Marie Gustafsson Sendén Anna Lindqvist, Emma A. Renström 'What is gender, anyway: a review of the options for operationalising gender' (2020) *Psychology & Sexuality* 1 at 9.

⁶ Jane Flax 'Gender as a Social Problem: In and For Feminist Theory' (1986) 31 American Studies /Amerika Studien 193, Gender is in this context contrasted with sex which is biologically determined.

⁷ Maria E. Fernandez 'Gender and Indigenous Knowledge' (1994) 2 *Indigenous Knowledge & Development Monitor* 2 and Isabel Altamirano-Jiménez Nathalie Kermoal (ed) *Living on the Land: Indigenous Women's Understanding of Place*, (2016) Edmonton, AU Press 3.

⁸ Fernandez, supra at 7.

The different ways of production, interpretation and utilisation of TK as adopted by women and men add value to the TK production chain and the system overall. Diverse viewpoints are key in driving problem solving within traditional communities; therefore, women's perspective and specialised knowledge is equally important for the continued existence of TK and the continuity of the knowledge system. Women are important holders and protectors of TK and have their own unique relationship to it. ⁹

Women and men live in different sets of circumstances even within the same environment. This means they have different insights each of which needs to be considered when deciding on and implementing TK protection to ensure the success of the protection initiative whether in the form of legislation or otherwise and to ensure that the initiative has a balanced effect among women and men. Ignoring gender dynamics and perspectives can negatively impact the survival of TK as a system.¹⁰ Additionally, exclusion of a gendered perspective becomes a missed opportunity to capitalise on the differences as experienced by each gender in the TK process.

Protection of TK in theory may appear to have an overall positive effect, however, the reality of this protection is that it has different implications for women and men. This can be adequately addressed through a gendered protection approach from the onset. Adopting a gendered approach to TK protection is a move in recognition of the need to reward and protect the interests and contributions of women in the TK production, preservation, and dissemination process.

2.3. Reinforcement of Gender Disparities

When TK protection laws are passed in ignorance of gender perspectives, legislators may believe they are achieving resolution of one set of problems when in effect they are creating another set of or reinforcing another category of problems. Laws which may be intended to be neutral may have the effect of reinforcing negative gender

⁹ Native Women's Association of Canada Aboriginal Women and Aboriginal Traditional Knowledge (ATK): Input and Insight on Aboriginal Traditional Knowledge (2014) Canada, Environment Canada, 10 and 28.

¹⁰ Ghazaleh Jerban *The SDGs and Gender: The Case of Indigenous and Local Women's Traditional Knowledge* (2019) Canada, *Center for International Governance Innovation* 1.

constructs and gender disparities. These laws may go as far as reinforcing social patterns of dominance and submission.¹¹

Boateng¹² observes that TK protection laws targeted at knowledge of traditional weavers in Ghana 'have unexpectedly reinforced gender disparity within the community'. This observation was made following a discovery after conducting research, that male weavers comprised the majority of those bringing infringement claims against small business owners or operators, the majority of whom were female. This created a new set of problems and reinforced an old problem - that of gender disparity. Although such consequences may be unintended, the likelihood of legislation, policies or initiatives being constructed in a way that subtly reinforces certain ideologies, stereotypes, assumptions or standards based on traditional notions of gender roles and assignments is high. This is because a gender blind approach has been the norm in TK protection legislation. Therefore, these notions and ideas may be woven into legislation unknowingly if no deliberate effort is made to legislate with the intention of avoiding such reinforcements.

Failure to consider gender issues in TK protection is tantamount to adopting a gender blind approach. A gender blind approach ignores any extrinsic factors including background information, special needs, economic position, social position and others in formulating laws and policies. The effect of this is to reinforce or maintain the status which it has been established is undesirable because it is rife with inequalities. This approach essentially becomes an 'anti-equality' one which is not geared towards transforming the *status quo* in terms of distribution of and equal access to TK protection and the associated benefits for both women and men.

To avoid these consequences, it is imperative to adopt a gendered approach to TK protection. This requires legislators to think beyond the surface appearance of a particular law to protect TK and to think about the impact of the proposed law from a gendered perspective. A blanket treatment of men and women as 'the exact same

¹¹ Katherine T Bartlett 'Feminist Legal Methods' (1990) 103 *Harvard Law Review* 829 at 830. ¹² Dan L Burk 'Bridging the gender gap in intellectual property' available at *https://wipo.int/wipo_magazine/en/2018/02/article_0001.html*, accessed on 12 February.2020. and Boatema Boateng *The copyright thing doesn't work here : Adinkra and Kente cloth and intellectual property in Ghana* Minneapolis, University of Minnesota Press (2011).

ends up doing more harm than good'.¹³ This statement is accurate because women and men are not on equal footing as a result of historical, cultural and other factors. Therefore, to hope that treating them in exactly the same way would culminate in equality for both or translate to equal opportunities and outcomes is illogical. The gendered approach provides a more holistic solution to TK protection while actively responding to the realities of the possible effect of TK protection laws and policies on each gender.

2.4. The Position of Women in IP in General

The role and participation of women in the acquisition of IPRs and in the IP sphere in general has historically not been at par with that of their male counterparts. The IP system has been unaccustomed to recognising the contribution of women in innovation in an equal manner to that of men. Various branches of IP were historically rooted in male dominated disciplines, for example, copyright centred on activities such as literature and painting (typically male dominated fields). It was considered improper for women to obtain patents. Investigations have suggested that patents for female inventors were taken out in the name of their husbands or guardians. This attitude or approach towards women and their place in terms of recognition of IPRs could have been influenced by the fact that women were largely not permitted to own property in general and this may have spilled over into an inability to own an intangible property right.¹⁴

Women's contribution to innovation was not recognised as innovative work deserving of the same reward granted to male inventors in the form of IPRs, rather it was simply considered women's work.¹⁵ Alternatively where women were technically not barred from asserting IPRs, the form of discrimination manifested itself in different ways including the views of examiners during the IPR acquisition

¹³ Sean Zheng 'United Nations Gender Statistics Manual' available at *https://unstats.un.org/unsd/genderstatmanual/Glossary.ashx*, accessed on 17 October 2020.
 ¹⁴ See Gender Profiles in Worldwide Patenting An Analysis of Female Inventorship, 2016.

¹⁵ This view was most prevalent particularly during the 19th Century into the 20th Century. While there has been a slight improvement during the 21st Century, the notion of women's innovation being seen as simply women's work still remains challenge. Phyllis Graff 'A Short History of Patent Law' available at *https://phyllisgraf.com/2019/02/02/a-short-history-of-patent-law/*, accessed on 22 October.2019.

process and informal barriers through social perceptions and attitudes attached to women in fields where IPRs featured prominently.¹⁶

Although with the passage of time it may be argued that efforts have been made to encourage women to register their IPRs, these efforts have been unable to address the underlying problem of gender insensitivity within IP systems.¹⁷ Even where women have outrightly taken on entrepreneurial roles, some studies have revealed that male entrepreneurs are twice as likely to hold a form of IPRs than female entrepreneurs.¹⁸ This is the case for a number of reasons including some more commonly proposed ones such as insufficient participation of women in traditional STEM areas, little or no access to resources to invest in IPR acquisition and inherent biases against women at different stages in the IPR acquisition process.¹⁹ Industry specific statistics in terms of IPR holding show that participation of women in IP and IPR acquisition is lower than that of men across different industries. Gender differences are quite pronounced in patent intensive industries in particular. Women's participation in IPR acquisition is low even in industries where more women are found. This may be aggravated by the fact that more women are found in industries where there is significantly less opportunity for IPRs. These industries include unclassified industries, agriculture, construction, fishing, hunting, transport, and warehousing.²⁰

Moreover, the IPR system as it exists has not created a pro-female innovator or inventor environment and has in effect 'contributed to marginalisation of women's work and creativity by failing to cover areas of practice in which female engagement is high'.²¹ TK is one such area where protection for women's knowledge has by and large been ignored or ineffectively catered for.

¹⁶ Bartlett, supra.

¹⁷ Jerban, supra at 3. For more information about feminist critiques of IP and how feminine forms of creativity have been excluded from the IP rights system, see Shelley Wright 'A Feminist Exploration of the Legal Protection of Art' (1994) 7 *Canadian Journal of Women & the Law* 59.

¹⁸ Kara W Swanson 'Intellectual Property and Gender: Reflections on Accomplishments and Methodology' (2015) 24 American University Journal of Gender, Social Policy & the Law 175.

¹⁹ For a more detailed exploration on some of these reasons particularly with regard to the patent system, see Swanson, supra.

 ²⁰ Jessica Milli Emma Williams-Baron, Barbara Gault Innovation and Intellectual Property among Women Entrepreneurs (2018) Institute for Women's Policy Research, 15.
 ²¹ Jerban, supra at 3.

The position of women in IP in general necessitates a gendered approach to the protection of TK. Lessons are to be learned from the barriers experienced in traditional IPRs which have also translated into TK protection. Though TK is not typical IP, it still involves creations of the mind therefore protective mechanisms may be related to typical IP methods or fall into the category of a *sui generis* protection strategy.

The fact that women are historically at a disadvantage in the context of IP merits their receipt of special consideration in order for them to receive a legitimate and fair opportunity to capitalise on TK comparable to that of their male counterparts.

2.5. Cultural Considerations

Culture is an important aspect of life for traditional communities. As a broad concept, culture is 'the full range of learned human behaviour patterns'.²² It is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man²³ as a member of society.²⁴ Culture therefore influences perceptions, behaviours, attitudes, and interactions within a society. It also has a huge impact on gender roles, particularly, on the perceived responsibilities, duties, privileges and societal positions which women and men should occupy.

In countries with dual legal systems, such as Zambia,²⁵ in which customary law runs parallel to the general or received law, customary law is a very legitimate, enforceable, and live aspect of the legal system. The customary law is based on local customs which are by extension rooted in culture. Although cultures differ, they do in some areas share similarities in ideas, perceptions, and belief systems. For example, women tend to have less independence, fewer resources and access to resources, and limited decision making power across different cultures.²⁶ Challenges

²² Edward Brunett Tylor *Primitive Culture* Cambridge Cambridge University Press (2010).

²³ The term 'man' here refers to the collective community of humans and not man in the strict sense of males.

²⁴ Tylor, supra.

²⁵ Zambia becomes the focal point of this thesis in subsequent chapters.

²⁶ Johanna Schalkwyk *Culture, Gender, Equality and Development Cooperation* (2000), Canadian International Development Agency.

in terms of capacity to own property, the ability to manage finances individually or at least have a say in managing financial resources in the home setup and other traditional norms and aspects of culture all contribute to increased difficulties for women in stepping forward to assert any protection available for TK.

An additional issue to grapple with in the African context is the fear of being accused of 'interfering with culture or imposing western values'²⁷ on traditional communities if gender dynamics associated with TK were to be addressed. Some of these so-called western values include basic concepts of women's rights, from the right to own property up to and including the right to self-determination. Therefore, the nature of culture and cultural attitudes, mindsets and considerations demand that gender considerations be factored into decisions on TK protection if it is to be real and not merely imagined protection for women.

The default position of culture to lean in favour of men or place women at a disadvantage in one way or the other makes it all the more important to take a gendered approach to TK protection. It has been demonstrated in chapter one that women make a significant and unique contribution to the body of TK including women's knowledge in particular hence they deserve to be beneficiaries of TK and have their TK equally protected. However, the absence of gender considerations provides an opportunity to hide behind culture as a reason to fail to recognise women's contribution to TK.

'Gender discrimination is so frequently defended by reference to culture, religion and tradition that it seems safe to conclude that no social group has suffered greater violation of human rights in the name of culture than women'. ²⁸ The foregoing statement is accurate because women's rights and entitlements are often construed as being foreign to the concept of culture and branded as a western ideology. It must be acknowledged, however, that there are a few matriarchal

²⁷ Secretariat of the Permanent Forum on Indigenous Issues in collaboration with the Office of the Special Adviser on Gender Issues and the Advancement of Women and the Division for the Advancement of Women *Gender and Indigenous People – Briefing Note No. 6, Gender and Indigenous Peoples' Human Rights UN* (2010), .

²⁸ Farida Shaheed Statement by the Special Rapporteur in the field of cultural rights at the 67th session of the General Assembly (2012) New York, United Nations Human Rights - Office of the High Commisioner 1.

societies in which women's rights and the power dynamics shift from what is typically known in patriarchal societies. An example of one such matriarchal society is the Bemba people located in Northern Zambia.²⁹ The women in the Bemba tribe bear the responsibility of providing for and feeding the family. When they marry, the husband occupies a 'second class role'³⁰ and is simply assimilated as a member of his wife's extended family tasked with performing service roles.

The concepts of culture and women's rights need not remain at loggerheads. There is a growing move towards harmonisation of gender mainstreaming agendas, equality movements and protection of culture and cultural considerations.³¹ Though typically viewed as opposing, these agendas can be pursued in tandem and harmonised. Incorporating gender considerations in TK protection is a key avenue to demonstrate the workability of this harmonisation. Finally, in the absence of a gendered approach, cultural considerations will continue to be used as a tool for gender discrimination thus little or no real TK protection systems and strategies which essentially exclude women from benefitting. The default position presented by culture therefore justifies a gendered approach to be considered by law and policy makers to ensure that women are included in all 'levels of benefit sharing and implementation'.³²

2.6. Double Marginalisation

IPLCs and women are among the world's most marginalised and vulnerable groups of people.³³ In addition to contending with persistent differential treatment, social stigmatisation and other stereotypes that are attached to being part of IPLCs, women also grapple with the marginalisation that is due to their being women. Therefore, when one is a woman and is a member of IPLCs, the problem of vulnerability and

²⁹ Heide Goettner-Abendroth *Matriarchal Societies: Studies on Indigenous Cultures Across the Globe, Revised Edition* New York, Peter Lang Publishing (2013) 374.

³⁰ Goettner-Abendroth, supra at 371.

³¹ Graham Dutfield 'TK unlimited: The emerging but incoherent international law of traditional knowledge protection' (2017) 20 *The Journal of World Intellectual Property*144 at 147.

³² Otsile Ntsoane 'Women, Knowledge and Protection' (2004) 3 *Indilinga African Journal of Indigenous Knowledge Systems* 57 at 59.

³³ Khalid Malik Human Development Report 2014: Sustaining human progress: reducing vulnerabilities and building resistance (2014) Washington DC, USA, United Nations Development Programme 3.

marginalisation is compounded. This necessarily entails that if women are to benefit from TK protection and the potential TK holds to foster their empowerment economically and otherwise, gender considerations must be accounted for.

The need to grant special consideration to women has been demonstrated in some international instruments. The United Nations Declaration on the Rights of Indigenous Peoples³⁴ in arts 21 (2) and 22 emphasises the need to pay particular attention to the rights and needs of indigenous women in the attempts to improve economic and social conditions and in the overall implementation of the declaration. The specific attempt to isolate women in particular indicates a recognition that indigenous women are a double marginalised group and that as general measures are taken in favour of improvement of the economic and social conditions for IPLCs, special consideration should be given to how best to implement these measures in the context of the particular needs of indigenous women.

The Convention on the Protection and Promotion of Diversity of Cultural Expressions³⁵ in the preamble and in art 7 requires that due attention be paid to 'the special circumstances and needs of women...' This demonstrates, first, an acknowledgement that women face unique circumstances which require particular consideration and secondly, that in order to enhance the status and role of women in society as is emphasised in the preamble, further and specific action in response to the circumstances of women is needed. While the provisions of the convention are directed at cultural expressions, these principles and the analysis are applicable to the body of TK in general. Although Zambia is not a party to this convention,³⁶ Zambian women too have special circumstances in the context of marginalisation as is the case for women globally.

In response to the double marginalisation of women it is imperative that TK protection legislation be approached with gender sensitivity and gender responsiveness as core considerations.

2.7. Fair Reward for Labour

³⁴ United Nations Declaration on the Rights of Indigenous Peoples (A/RES/61/295) of 2007.

³⁵ The Convention on the Protection and Promotion of the Diversity of Cultural Expressions of 2005.

³⁶ <u>https://en.unesco.org/creativity/countries?member_parties=1</u>, accessed 15 January 2022.

A simple but profound notion is the idea that there must be a fair reward for hard work. The foundations of this notion can be traced to John Locke's argument that expending labour, even on what may have previously been held in the commons, gives the labourer a natural property right over the fruits of his or her labour, a right which the state has the responsibility to enforce though this enforcement may remain subject to certain conditions.³⁷ Using this reasoning, it can be argued that women too put in hard work or expend labour in the generation of TK, hence there is an obligation for them to reap fair rewards for their labour. Further, there is a responsibility which rests on the state to enforce the right for them to reap from their labour. This responsibility derives from the power vested in state organs by the people to promote and protect the rights and freedoms of a person³⁸ and 'ensure justice is done to all without discrimination'.³⁹ Therefore, in discharging this obligation, the need to have legislation that actually responds to and gives women a fair opportunity to be rewarded for labour expended in the context of TK is a pressing one which must be reflected in the nature of TK protection systems in place.

The right to reap reward from one's labour is not discharged when simply *any*⁴⁰ reward is given for labour expended. The reward must be adjudged as fair in light of the labour expended.⁴¹ Women must therefore not simply be rewarded for their participation in TK but they must be fairly rewarded. This implies that no lesser reward for TK production whether in the form of access to TK protection or other associated benefits must be given on the basis of being women but equal consideration or reward must be provided for and be accessible to both women and men in equal stead as TK producers and holders.

When applied to TK in general, whether speaking of protection that relates to men or women, it has been argued that much of the work involved in producing TK

³⁷ See William Fisher 'The Puzzle of Traditional Knowledge' (2018) 67 *Duke Law Journal* 1511 at 1543.

³⁸ See Article 91 (3)(e) of the Constitution of Zambia.

³⁹ See Article 118 (2)(a) of the Constitution of Zambia.

⁴⁰ Author's emphasis.

⁴¹ Michael D A Freedman *Introduction to Jurisprudence* Sixth ed London, Sweet & Maxwell (1994) 383.

was done by ancestors who are no longer present.⁴² This argument can be countered by the inherently cumulative nature of TK. Admittedly, it may be difficult to definitively separate the precise contribution made by ancestors versus modern day members of IPLCs but the fact remains that present day members of traditional groups can demonstrate some contribution, addition or alteration to typical TK. Additionally, the adaptability of IPLCs is testament to the fact that they are able to adapt their TK to suit the changing environment.⁴³ Therefore, there is some labour expended which deserves a reward.

Gendered considerations in this context are therefore justified because women form part of the workforce or labourers involved in the production of the body of TK. It is through these considerations that these women contributors to TK can be given the opportunity to reap rewards for their work.

2.8. Corrective Justice and Distributive Justice

Theories of justice form an important part of legal jurisprudence. Based on ideas formulated by early legal scholars, they express different perspectives, ideologies and concepts directed at an exploration of what justice is, possible ways of categorising it and how it finds expression in practical terms. Corrective justice and distributive justice as theories of justice, though different, can both be used as a basis to justify a gendered approach to TK protection.

The original notion of corrective justice can be traced back to Aristotle.⁴⁴ Corrective justice is concerned with restoration of notional equality to the parties concerned. Although in its original formulation and context it was intended to be applied to and address transactions within the sphere of private law, its underpinning principles can serve as a justification for the application of gender considerations in the protection of TK.

⁴² Fisher, supra at 1545.

 ⁴³ Matthew Rimmer 'Intellectual Property, Indigenous knowledge and climate change' in Rimmer Matthew (ed) *Indigenous Intellectual Property* Cheltenham, Edward Elgar Publishing(2015) 382.

⁴⁴ Roger Crisp *Aristotle: Nichomachean Ethics* Cambridge, UK, Cambridge University Press (2000) 1130.

Corrective justice aims to correct or rectify some injustice which has taken place. Therefore, corrective justice serves a rectificatory function. The idea is to respond to or address an injustice and seek to as far as possible undo it.⁴⁵ Corrective justice is successful when the end result is to 'make good the deficiency of the other party',⁴⁶ that is, the party to whom the injustice has been done.

This operation and ideology of corrective justice finds application in the present context because historically, women have been marginalised. They have suffered various injustices in the name of culture. Specifically, when it comes to reaping the benefits of TK production being utilised outside the confines of the traditional community context, women have remained in the background. Therefore, correcting this injustice or rectifying this situation becomes necessary. One way this can be achieved is through a gendered approach when drafting legislation, rules and policies related to TK protection with the aim to rectify the injustice in order to restore notional equality between the sexes.

In implementing corrective justice, considerations and principles drawn from distributive justice find applicability. Distributive justice encompasses the allocation and re-allocation of social resources within a society.⁴⁷ These resources are not limited to physical or material resources such as capital and goods, but they extend to intangible resources including rights and power. Rights and power inevitably influence the allocation and utilisation of physical resources among individuals within a community. Therefore, their inclusion as resources to be allocated is appropriate and the principles governing their allocation are important.

Distributive justice seeks to determine which principles will govern the distribution of the resources earlier described. There are several principles which could be applied in determining distribution. For present purposes, the principle that

⁴⁵ Ernest J. Weinrib 'Corrective Justice in a Nutshell' (2002) 52 *The University of Toronto Law Journal* 349 at 350 – 352.

⁴⁶ Ernest, ibid.

⁴⁷ G A Cohen 'Where the Action Is: On the Site of Distributive Justice' (1997) 26 *Philosophy & Public Affairs* 3.

'all receive shares in resources according to their respective merits or worth^{'48} will be the focal point.

As applied to TK in this context, the *resource* being spoken of is 'the benefits arising from TK or rewards derived from production of TK', the *merit* is the 'extent to which one has contributed to the development of the TK'. Therefore, receiving shares in resources according to their respective merits means receiving the benefits derived from TK production according to the extent to which one made a contribution in the production of the TK. This principle, per the reasoning adopted in distributive justice should be the basis of determining distribution of resources. This requires that men and women be rewarded for contributions made to TK based purely on the extent of the identified contribution regardless of the gender of the contributor (TK producer). The associated rewards should be equally available and accessible irrespective of gender or other surrounding considerations.

Aristotle identified a formidable challenge with resource distribution based on worth when he stated as follows, 'in distribution all men allow that what is just must be according to merit or worth of some kind, but they do not all adopt the same standard of worth'.⁴⁹ This is especially applicable in the case of women's TK. The contribution of women to TK has not been viewed at par with that of men in terms of worth and value. Feminine TK has been considered as more natural and instinctive while masculine TK has been considered more technical.⁵⁰ The areas of work typically performed by or allocated to women are devalued compared to those performed by men.⁵¹ Therefore there has been a clear inequality between men and women in terms of the worth attached to their TK.

In view of the challenge Aristotle expresses, enhanced TK production alone is not sufficient to guarantee distributive justice because it implies the mere existence of TK protection laws is enough. Equality along with other principles including

⁴⁸ Frank I Michelman 'Distribution of the Constitutional Idea of Property' (1987) 72 *Iowa Law Review* 1319 at 1319 -1320.

⁴⁹ Aristotle, supra.

⁵⁰ Terra. L. Gearhart-Sema 'Women's Work, Women's Knowing: Intellectual Property and the Recognition of Women's Traditional Knowledge' (2009) 21 *Yale Journal of Law & Feminism* 385 at 383.

⁵¹ Alice A Kemp *Women's Work: Degraded and Devalued* Englewood Cliffs, Prentice Hall (1994).

freedom and equal opportunity are fundamental principles in decision making for distribution of resources.⁵² Thus, measures need to be taken through deliberate gender considerations in TK protection legislation to ameliorate the radical inequality that has existed in the past.

Corrective justice and distributive justice are complementary and can be applied simultaneously and harmoniously to achieve the desired outcome. These two theories of justice constitute sound reasons for the justification of gender considerations in TK protection. Corrective justice demands that past wrongs be remedied while distributive justice requires that allocation of resources be done on an equitable basis among other considerations. In looking to implement corrective justice, principles of distributive justice can serve as an appropriate guide. Similarly, when applying distributive justice, corrective justice can serve as a theoretical justification for actions prompted by distributive justice.

Adopting a gendered approach to TK protection on the basis of corrective justice provides a means of addressing past wrongs done to women in the form of their marginalisation and unequal participation in accessing TK protection laws and reaping the potential benefits arising from TK. Such an approach would simultaneously support the ends of distributive justice in that considerations of equality and fairness in TK legislation protection itself would positively affect actual resource allocation and distribution for women in IPLCs. Therefore, the principles underpinning corrective and distributive justice support a gender sensitive and responsive approach to TK protection.

2.9. Conclusion

The reasons discussed in this chapter in favour of a gendered approach to TK protection demonstrate that from various perspectives, there is good reason to adopt this approach. Gendered TK protection is justifiable on the basis of well accepted theories of justice, cultural considerations and a considered regard for the realities reflected in differences in gender roles within society. Further, ensuring that gender issues are factored into TK protection legislation demonstrates a cognisance and an

⁵² John Rawls A Theory of Justice Revised Edition ed Oxford, Oxford University Press (1999) 6 -7.

understanding of the effects of the past on the present status of women from a cultural perspective as well as a secular perspective in the mainstream IP system. A gendered approach to TK protection paves the way for real and effective TK protection for women.

3. CHAPTER 3 - TAKING A CLOSER LOOK THROUGH THE LENS OF GENDER: THE CASE OF ZAMBIA

3.1. Introduction

Zambia has made provision for the general protection for TK through the PTK Act. In order for legislation to be gender sensitive and gender responsive it must be drafted in a way that speaks to and demonstrates recognition of the different needs of men and women in the context of TK protection. It needs to respond in a way that acknowledges the lived realities of those it seeks to protect. This chapter examines whether the legislation concerned with the protection of TK in Zambia is gender sensitive and gender responsive through an exploration of the PTK Act. As isolated sections of the Act are examined, it provides commentary on what can be done to make the Act gender sensitive and gender responsive in order to provide real protection even for women in IPLCs. An analysis of the extent to which the Constitution of Zambia should and does play a role in the gendered protection of TK is carried out. The chapter ends with a discussion on the crucial aspect of moral rights and their importance in the protection of TK in Zambia.

3.2. Why Should it Matter?

The importance and justification of adopting a gendered approach to TK protection was discussed and explored in chapter two. Seven justifications were considered. These are (i) gender roles, (ii) reinforcement of gender disparities, (iii) the position of women in IP in general, (iv) cultural considerations, (v) double marginalisation, (vi) fair reward for labour and (vii) corrective and distributive justice. These justifications are cross cutting and therefore apply in the Zambian context as well.

An examination of the protection of TK using the PTK Act through the lens of gender is important for Zambia in order for TK protection to be considered 'complete'. Completeness here refers not to the precise coverage in terms of the scope of protection the PTK Act offers for TK holders but to coverage, in terms of equal practical application of the protection to rightsholders – regardless of whether they are women or men.

3.2.1. Culture

For Zambia, specific efforts need to be made in this regard because of the historical underpinnings of Zambian culture. While Zambia comprises different tribes and ethnic groups each with their own culture and customary law, the general cultural foundations and principles in terms of the position men and women occupy in society is by and large similar.

This is also the case in matrilineal tribes such as the Kaonde people found in North – Western Zambia; the idea of subordination to men is deeply ingrained in girls from a tender age.¹ While children within the clan belong to their mother, and the link between a woman and her matrilineage could never be severed even after marriage, the basic assumption remains that men have authority over women.² The effect of matrilineage is essentially not that women wield more influence or occupy an equal position in society but is a difference between which males wield authority over the woman, that is, her maternal male relatives or her husband and his male relatives. This is evident in political contexts within the tribe. Women do not speak up during political consultations or community discussions in general with the exception of some much older women who even when they speak are seldom heard. The general position is that a man is the head of the house, the provider, and the chief decision maker in terms of property decisions, childbearing decisions, and other areas.³ This male authority spills over into a community context in that in public settings, community representatives or actors are male. Therefore, even in matrilineal societies, men retain their authority over women and occupy a higher gender hierarchy.

As observed by the Non-Governmental Organisations Coordinating Committee (NGOCC), 'The traditional and culturally accepted image of the Zambian girl child is that of a passive and submissive character who remains in the background, the first to serve and last to speak'. These girl children eventually

¹ Kate Crehan *The Fractured Community: Landscapes of Power and Gender in Rural Zambia* (*Perspectives on Southern Africa*) California, University of California Press (1997).

² Crehan, supra.

³ Mikaela Nyman *It is just culture* Linköping University, (2013) and Christine P. Mushibwe What are the Effects of Cultural Traditions on the Education of women? (The Study of the Tumbuka People of Zambia) University of Huddersfield, 2009) at 118.

become women in the community who wield little control over TK they may possess and little ability to materially benefit from the knowledge outside the confines of traditional use.⁴

Traditions and culture therefore play a significant role in conceptualising the position one can play or is permitted to play as an individual actor in IPLCs and in general. The position women occupy in the gender hierarchy overall in Zambia in IPLCs and cultural communities, sets them at a disadvantage from benefitting from TK protection in spite of the actual contributions they make. Against this background cognisant of the Zambian cultural context, it is important that TK protection be assessed through a gendered lens.

3.2.2. The Development Agenda

In Zambia's developmental agenda, issues of gender equality, gender equity, women's development, and focus on development for minorities which include IPLCs have been placed at centre stage and received much attention. These considerations are linked either directly or impliedly to the overall development agenda of the country. This is evidenced in a number of national agendas, policies and international agendas to which Zambia subscribes. On a national level, Vision 2030 requires that Zambia achieves gender responsive sustainable development. The 7NDP which is designed to make Vision 2030 for Zambia more achievable in smaller iterations has the theme, 'accelerating development efforts towards the Vision 2030 without leaving anyone behind'. The National Gender Policy has its stated aim as to 'create a nation where there is gender equity and equality for sustainable development'.⁵

Historically, development initiatives whether deliberately or inadvertently have been focused on men. Olowu explains: 'Naturally, men have always been part of the policies and practices of development work but have often been treated as representing all of humanity thus perpetuating masculine norms and gender

⁴ Non Governmental Organisations Coordinating Committee Annual Report (2006) Lusaka Zambia, Coordinating Committee.

⁵ Republic of Zambia National Gender Policy (2014) at 1.

inequalities...⁶ This observation is accurate and is again reflective of the Zambian experience and perception from a cultural perspective. Development initiatives and programmes have been focussed on men.⁷ This is indicative that gender considerations in development as a whole are important and the development agenda must be inclusive of women and IPLCs as part of the groups that should not be left behind.

Women have the right to participate in their own development. This right to participate in their development should exist not only superficially but as a reality. The existence of this right as a reality necessarily entails that their participation should be enabled practically by responding to their needs. This needs-based response should be reflected in legislation and policy adopted. The extensive TK women possess can and should contribute to implementation of sustainable development initiatives.⁸ The absence of gender considerations in legislation aimed at protection of TK has a disabling or a hindering effect – whether intended or otherwise – on the ability of women to assert their right to participate in their own development.

The all-encompassing nature of TK entails that its usefulness and applicability spills over into a number of sectors including the environment, food production and production of other non-consumable goods. These sectors particularly in the Zambian context have an important role to play in national development. Including gender considerations presents the opportunity to harness a unique comparative advantage in sectors where women's TK is at the forefront. Women in TK ascend to the status of local level experts and engage in economically sound and environmentally friendly production methods which have on some occasions proven more appropriate than mainstream methods or techniques

⁶ Dejo Olowu 'Mainstreaming women, equating men: Charting an inclusionary approach to transformative development in the African decade for women ' (2011) 15 *Law, Democracy & Development* at 261.

⁷ Rounaq Jahan *The elusive agenda: Mainstreaming women in development* London, Zed Books (1995) at 5-7.

⁸ Yetunde Adebunmi Aluko 'Women's Use of Indigenous Knowledge for Environmental Security and Sustainable Development in Southwest Nigeria' (2018) 9 *The International Indigenous Policy Journal* 1 at 1-3.

presented by scientists.⁹ Recognising women's TK and legislating its protection effectively - in a gendered manner - is a vital building block on the route to the successful participation of women in the local and eventually global markets.

Internationally, the SDGs to which Zambia subscribes contain some goals which align with the underpinning justifications and need for gender sensitive and gender responsive protection in the PTK Act. Four goals in particular are applicable. These are;

Goal 5 – 'Achieve Gender Equality and Empower all Women and Girls': This requires that women and girls as a target group be provided equal treatment and protection in the PTK Act. Ensuring that the legal provisions in the PTK Act are gender sensitive and responsive is key to achieving SDG 5.

Goal 8 – 'Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for all': This goal focusses on inclusivity, sustainability, and decency of work for all. IPLCs and women are part of the groups of people this goal envisions. TK presents an opportunity for employment creation, and for TK holders to be part of national sustainable economic growth. Enabling women to be part of the labour chain in a way that clearly recognises and dignifies their contribution is a vital part of the productivity and decency aspect of this goal. The PTK Act needs to facilitate these goals through the protection it provides.

Goal 9 – 'Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialisation and Foster Innovation': Inclusive and sustainable industrialisation requires that women be fully part of and actively involved in the industrialisation process. The inclusion of women who possess TK can contribute to the sustainability both in terms of industrialisation methods and the continuity of industrialisation processes. Fostering innovation as an aspect of SDG 9 is relevant in the context of TK because TK has been key to innovation in different sectors including the medical field. It is being looked to for assistance to address climate

⁹ Fatma Osman Ibnouf 'The Value of Women's Indigenous Knowledge in Food Processing and Preservation for Achieving Household Food Security in Rural Sudan ' (2012) 1 *Journal of Food Research* 238 at 240.

change¹⁰ with particular reference to traditional ecological knowledge. Women's TK is relevant and can contribute to fostering innovation. It therefore needs to be enabled and brought to the fore in order to position women in IPLCs to fully participate in achieving SDG 9.

Goal 10 – 'Reduce Inequality Within and Among Countries': This requires the reduction of inequality within Zambia as a country. The scope includes reducing inequalities not only between IPLCs and urbanised or modern communities but also inequalities within IPLCs; specifically, between men and women. A gender blind PTK Act works against this goal because it is not used as an active tool to contribute to reduced inequalities in the area it legislates.

The SDGs highlighted are directly achievable through gender sensitive and gender responsive TK protection.¹¹ Therefore, ensuring a gendered PTK Act is a fundamental step which can contribute towards achieving the identified SDGs, Zambia's Vision 2030 and goals expressed in other domestic policy documents aligned to the Vision 2030. The specific role gendered TK protection plays in the attainment of Zambia Vision 2030 and the identified SDGs is explored in detail in chapter five of this thesis.

Overall, cultural considerations and Zambia's development agenda make it important to analyse the current position with respect to gender sensitive and gender responsive TK protection. The cultural environment makes women vulnerable to being overlooked in legislative and policy protective mechanisms while Zambia's development agenda requires that women play an active role. A failure to consider these issues is detrimental to the development agenda.

3.3. Where is Zambia Now?

¹⁰ Nadzirah Hosen; Hitoshi Nakamura; Amran Hamzah 'Adaptation to Climate Change: Does Traditional Ecological Knowledge Hold the Key?' (2020) 12 *Sustainability* 676 at 677.

¹¹ Although there are many factors which play a role in achieving the SDGs, gender sensitive and gender responsive TK protection plays an important role as an inhouse strategy for Zambia in meeting international obligation while pushing her own national agenda. Gender sensitive and gender responsive TK protection should be applied along with other initiatives and efforts equally geared towards achieving the SDGs.

TK protection in Zambia includes policy and legislative protection. The National Intellectual Property Policy (NIPP)¹² objective in relation to TK is to promote strategic use of the IP system for the protection of TK. The PTK Act is the primary means used at a legislative level for the protection of TK.

3.3.1. Current Status of the PTK Act

3.3.1.1. The Inception

For legislation to be gender sensitive and gender responsive it is important that gender considerations are part of the process from inception. This means that considerations of the different needs of women and men and how legislation affects them should factor into the process of law making from the beginning and should not be added on as an afterthought. The idea should not be to fit in or squeeze in gender considerations where possible but to consider them an important part of the core fibre of legislation. A conscious decision must be made on the part of law makers to ensure that a gendered perspective is intricately interwoven into the proposed law at all stages of the law making process.

Draft legislation in Zambia goes through several iterations and consultation processes. At each stage, whether it be the consultation process that precedes the tabling of a Bill or the debates that take place during the life of the Bill until it is finally assented to, gender considerations must be taken into account. These should translate into the final product of the completed law.

The PTK Act was initiated under the Ministry of Commerce Trade, and Industry (MCTI). At the time of second reading of the Bill the then Minister of Commerce Trade and Industry, Honourable Mrs. Margaret Mwanakatwe stated that IP legislation had not effectively facilitated the exploitation of TK and that this scenario had prompted the government to develop the then PTK Bill to support development and protection of TK.¹³ She further stated that the 'main object of the Bill was to protect the rights of TK holders and recognise and reward holders of TK,

¹² Ministry of Commerce Trade and Industry 'National Intellectual Property Policy' (2020) at 8.

¹³ National Assembly of Zambia 'Parliamentary Debates' available at *parliament.gov.zm/node/5302*, accessed on 12 April 2021.at 10.

allowing indigenous people to control their cultural heritage and receive a fair return on what their communities had developed'.¹⁴

During the moving of the Bill in parliament and the surrounding debate, several issues were discussed including the potential for disputes between tribes on ownership of TK and the general plight of IPLCs as being vulnerable to theft of their TK by pharmaceutical companies looking to benefit financially. However, there was no mention of gender in any context of the then proposed Bill. The debates did not include an analysis of or call for attention to how the Bill stood to affect women in IPLCs, their role in generation of and custodianship of TK or otherwise. Whether this was a deliberate omission or an omission as a result of an assumption that covering the 'community' interests during the discussions was the equivalent of, amounted to or included covering women's interests in TK protection is difficult to say.

When the general comments offered by members of the house regarding the Bill are examined, it can be argued that there was certainly room to examine the proposed Bill through a gendered lens. For example, submissions presented included the need for the Bill to protect the rights of TK holders and recognise and reward them. An important question at this point in the scrutinisation of the Bill would have been whether the Bill as it was drafted would serve this purpose effectively for women in IPLCs. The expression of the Zambian government's commitment to protecting TK for the benefit of the people¹⁵ while generally appearing as a positive goal, presented an opportunity to delve into the specifics of who constitute 'the people'.

A stated basis of the PTK Bill was that 'poor people can turn their knowledge into income generating activities and opportunities'.¹⁶ This aspect of the PTK Bill demanded a specific discussion around women primarily because women form a significant component of the poor. Further, women need to be actively involved in commercialisation of TK but are likely to be sidelined in the process – hence there

¹⁴ Parliamentary debates supra at 10.

¹⁵ Parliamentary debates supra at 13.

¹⁶ Parliamentary debates supra at 13.

was need for a deliberate effort to be made in line with creating specific provisions within the Act that anticipated these difficulties and responded to them.

Granted, the analysis of issues through a gender lens may not be an automatic inclination or immediately appear as a priority to government ministries in general. However, the immediate and automatic leaning towards, or direct awareness of gender issues is expected from the government Ministry whose mandate revolves around gender issues. During the legislative process for the PTK Act, submissions were received from the Ministry of Gender as represented by the then Minister of Gender, Honorable Professor Nkandu Luo.¹⁷ The focus of the submissions was on the importance of using TK for wealth creation. Wealth creation was not discussed in the context of gender or how the wealth creation goal should be reflected in the Bill in a way that makes it attainable for women in IPLCs. No submissions or mention of gender was made in relation to the Bill in general from the Ministry.

The absence of gender related submissions during the debates, drafting and finalisation of the Bill are an indication that gender considerations were not part of the process of legislating for TK protection. This is in spite of the fact that the Ministry moving the Bill, the MCTI, was incidentally headed by a woman at the time. The Ministry of Gender was also headed by a woman at the time, who previously served as Minister of Chiefs and Traditional Affairs and as a result would likely have had some insights into traditional frameworks and the workings of customary law. Therefore, while there was female representation during the law making process, this on its own was not sufficient to guarantee that gender interests would be effectively advocated for.

For the PTK Act to be gender sensitive and gender responsive it must have gender considerations embedded as part of the law making and drafting process. However, this was not the case because gender and considerations were not addressed from inception and throughout the creation of the Act.

3.3.1.2. The Substantive Act

¹⁷ Honorable Professor Nkandu Luo served as Minister of Gender from 2015 -2016 and previously served as the Minister of Chiefs and Traditional Affairs from 2014 - 2015.

Having established that the process in the enactment of the PTK Act omitted gender considerations, this section analyses the PTK Act to determine whether the provisions are gender sensitive and gender responsive. The analysis is limited to specific sections in the Act which are relevant to TK and fall within the scope of the research.

The Preamble

The Preamble explains in detail the purpose of the PTK Act. It identifies a number of things the Act is meant to do or provide for. For purposes of this research, the following aspects are identified as relevant. To:

- i. provide a transparent legal framework for protection of, access to and use of TK...which also guarantees equitable sharing of benefits and effective participation of holders,
- ii. guarantee equitable sharing of benefits and effective participation of holders,
- iii. recognise the spiritual, cultural, social, political and economic value of TK,
- iv. to promote the preservation, wider application and development of TK,
- v. recognise, protect and support the inalienable rights of traditional communities, individuals and groups over their TK,
- vi. confer rights on traditional communities, individuals and groups,
- vii. promote fair and equitable distribution of the benefits derived from the exploitation of TK,
- viii. ensure that exploitation of traditional knowledge...takes place with the prior informed consent of a traditional community, individual or group.¹⁸

The various sections in the Act should be intended to achieve what is set out in the preamble. The outlined aims of the Act as they appear do not specifically speak to a gendered consideration of TK protection. While the preamble does not

¹⁸ PTK Act preamble.

contain language that explicitly excludes women from TK protection, it does not contain aims geared towards ensuring that women are equal beneficiaries from the scope of protection the Act offers. Generic terms such as 'traditional communities' 'individuals', 'holders' and 'groups' are used. From a theoretical or law on paper perspective, there is no direct or upfront intended disadvantage to or exclusion of women from the scope of protection. However, from a practical perspective, the aims as indicated in the preamble offer no real protection for women. The expressed aims as explained in the preamble are given effect in the substantive provisions of the Act. The next section examines substantive provisions in the Act to assess whether they are gender sensitive and gender responsive.

Section 2 – Interpretation Section

The interpretation section sets the tone for how words and phrases within the Act will be given meaning and ultimately plays a role in the extent and scope of application of substantive provisions in the Act which contain these words and phrases. As such, the starting point is to consider the meaning assigned to TK in the Act.

TK: Several scholars and authors have offered different definitions for TK as highlighted in chapter one. The definition s 2 offers generally aligns with views of other scholars and organisations. ¹⁹ Section 2 provides that TK means:

any knowledge, not limited to a specific subject area, technical or medical field associated with genetic resources, originating from a traditional community, individual or group that is the result of intellectual activity and insight in a traditional context and where the knowledge is embodied in the traditional lifestyle of a traditional community or is codified in knowledge systems and passed on from one generation to another.

The above definition includes women's TK according to the definition of women's TK discussed in chapter one. However, because of the context in which

¹⁹ See Quinn M L 'Protection for Indigenous Knowledge: An International Law Analysis' (2001) *St. Thomas Law Review* at 293, also, for example, John Mugabe 'Intellectual Property Protection and Traditional Knowledge; An Exploration in International Policy' (1991) 1 *African Center for Technology Studies* at 1, WIPO/GRTKF/IC/3/8 *Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, Second Session* (2001) *WIPO*, at par 17.

women's TK operates, the failure to explicitly mention it as part of the definition in the Act creates an opportunity for exclusion in the interpretation of what constitutes TK that qualifies for protection under the Act. The cultural framework within which women's TK operates supports the likelihood for assumptions that women's TK can be considered as merely part of routine women's work in IPLCs and therefore not deserving of protection. The definition of TK as it appears in the Act does not demonstrate knowledge and cognisance of the situation within which TK operates for women and men respectively. The definition fails in terms of gender sensitivity and responsiveness.

Holder: The PTK Act is largely geared towards protection of TK holders,²⁰ and the benefits holders can derive. Therefore, understanding the scope of the definition of a holder is important. Section 2 of the Act defines a 'holder' as follows:

means a *traditional community, an individual or a group,* irrespective of the pattern of ownership, and *who is the owner of the traditional knowledge,* genetic resource or expression of folklore in a traditional and intergenerational context who *has a right over* or *to whom traditional knowledge,* a genetic resource or expression of folklore belongs to, *in accordance with customary laws and practices*²¹

According to this definition, in order to qualify as a holder, one(s) must:

- 1. be a traditional community, an individual or a group,
- 2. be an owner of the TK and,
- 3. have a right over the TK or it must belong to one in accordance with customary laws and practices.

By tying ownership to 'in accordance with customary practices', this definition places women at a disadvantage because according to some customary laws and practices women do not have capacity to, nor are they permitted to own property.²² This means that women under such customary laws would be unable to fulfil the requirement to be an 'owner' in order to qualify as a holder. Additionally, that the description of a holder does not specifically mention that the individual or

²⁰ Section 4 PTK Act.

²¹ Emphasis added by the author.

²² Himonga Chuma.N ; Munachonga Monica 'Women's Access to Agricultural Land in Settlement schemes' (1991) 10 *Third World Legal Studies* at 22 – 24.

members comprising the traditional community or group may be any person irrespective of their gender compounds the problem.

The Act does not define who an 'owner' is. This is a significant omission because the concept of being an owner feeds into whether one can qualify as a holder. It is therefore important to explain who an owner is. It may be inferred from the definition of a holder that an owner is one to whom TK belongs or who has a right over TK. If this is the case, the definition reverts to the same problem of tying qualification of ownership to rights and belonging in a traditional context. The definition of a holder therefore lacks gender sensitivity and gender responsiveness and is discriminatory in its effect.

Section 4 – Extent of Protection, Benefits and Principles

Section 4 protects holders of TK. As discussed above, the concept of a holder as it exists is neither gender sensitive nor gender responsive. Therefore, the actual protection offered in this section for women is limited in effect.

Holders are protected against infringement of their rights in relation to TK misappropriation, misuse and unlawful exploitation.²³ Holders also have the right to institute legal proceedings against any person who infringes on these rights. While the right to institute legal proceedings is a logical remedy, the question of whether the process is accessible for IPLCs in Zambia is an important one. IPLCs in general have problems with getting access to legal recourse and the problem is worse in the case of women in IPLCs. Studies have shown that women have problems accessing legal services for various reasons including financial and social barriers.²⁴ The Act simply stops at mapping out that legal proceedings can be initiated but does not enable the pursuit of this remedy.

Section 4(4) gives holders the right to protect their IP rights and register their TK with The Patents and Company Registration Agency (PACRA) and ARIPO.

²³ Section 4(1) PTK Act.

²⁴ See Fergus Kerrigan and Lungowe Matakala Access to Justice in the Republic of Zambia - A Situation Analysis (2012) Government of the Republic of Zambia Ministry of Justice and Danish Institute for Human Rights, and Financial Sector Deepening Zambia Report on women's access to financial services in Zambia, (2014) South Africa, German Ministry for Economic Coorporation and Development (BMZ) and International Capital Corporation (ICC).

Placing the onus on rights holders which should include women demands that there is some level of knowledge on their part on how to go about asserting the rights bestowed on them. This presents the general limitation that positive protection strategies for IP have. Positive protection of IPRs requires rights holders to actively register their rights as a means towards asserting these rights.²⁵ In this case, registration with PACRA and ARIPO requires that the necessary registration procedures be followed and required fees be paid. This demands specialised knowledge or engagement of those with specialised knowledge. Additionally, it means that rights holders must have access to these organisations. Practically, it is unlikely that this knowledge is commonplace within IPLCs particularly in the case of rural based IPLCs. The problem is intensified for women because women in IPLCs are not likely to be in a position to assert these rights from a knowledge and resource availability perspective.

The last part of s 4(4)(d) provides that holders be able to obtain benefits arising from the commercial use of such TK. The distribution of benefits of commercialisation of TK among TK holders in general has been problematic. The argument is that benefits do not flow to IPLCs when their TK is exploited.²⁶ The benefits derived from TK exploitation whether in the form of monetary reward or development initiatives are largely directed at and utilised by men.²⁷ The Act here fails to recognise and respond to this circumstance. There is no express mention of the requirement for women to obtain benefits arising from TK commercialisation. While women are not expressly excluded, in effect they are likely to be excluded because of the prevailing social circumstances and customary law considerations.

In outlining the principles and concepts which should be a basis for access and use of TK, s 4(5)(a) mentions recognition of various factors including 'cultural, spiritual, economic, intellectual, scientific, ecological, agricultural, medical, technological, commercial and educational value of, and respect for, TK systems.'

 ²⁵ Amos Saurombe 'The Protection of Indigenous Traditional Knowledge through the Intellectual Property System and the 2008 South African Intellectual Property Law Amendment Bill' (2009)
 4 *Journal of International Commercial Law and Technology* at 190 at 196.

²⁶ See Silke Von Lewinski Indigenous heritage and IP: Genetic Resources TK and Folklore Kluwer Law International (2008).

²⁷ Jahan, supra.

The issue of recognition of women's TK is well suited to be reflected in this section because it should form an important basis for access to TK along with the other considerations mentioned in the Act. Ensuring complete protection for TK includes assessing protection through the lens of gender and this is directly linked to recognition of women's TK. The inclusion of gender considerations and women's contribution to TK as one of the principles or concepts to be taken into account for the use of and access to TK plays a role in ensuring women's interests are recognised and protected in this context. The omission of this perspective from s 4(5) further demonstrates a lack of gender sensitivity and responsiveness in the Act.

Responsiveness to the actual needs of holders by empowering them to exercise due control over their TK is listed as one of the principles in s 4(5)(b) of the PTK Act which should form the basis of access to and use of TK. It has been established that women should equally qualify as TK holders. Therefore, the Act should be responsive to their needs and make provision for them to exercise due control over TK. The Act does not specifically empower women to exercise due control over TK. This is evident in the way that it reverts to application and exercise of rights in accordance with customary law, which may not be compatible or may conflict with the concept of women owning property or rights in TK. Further, the concept of 'due control' is not expanded on in the Act and is therefore left open to a myriad of interpretations. Due control could easily be interpreted as control within the confines of societal expectations of women within IPLCs as regulated by customary law. There are no targeted mechanisms directed towards addressing specific challenges faced by would be women TK holders in exercising due control over their TK.

The promotion of benefit sharing is a key principle according to the Act²⁸ which should govern use of and access to TK. However, again in this instance, the Act does not provide for gender balanced benefit sharing or benefit sharing which is inclusive for women as TK holders and as members of IPLCs in general. This issue is closely tied to the promotion of the use of TK for a bottom-up approach to

²⁸ Section 4(5)(f) PTK Act.

development.²⁹ While the Act recognises the potential to use TK for development, it fails to highlight the gender perspective of this principle. A crucial component of bottom-up development is the inclusion of women in the development agenda. This entails their active involvement in development initiatives at the grassroots level. A clear indication that women are equally important and part of the utilisation of TK in the development strategy is lacking in this section.

The reference to the use of the patent system to protect innovation in TK ³⁰ as a basis for using TK when considered from a gendered perspective has a disproportionate impact. This stems from the general level of participation of women in the IPRs arena.³¹ The Act simply states this principle but does not demonstrate or map out how this will be actualised in the context of the specific challenges women face in actively participating in the patent system.

Section 4(5)(1) highlights the principle of 'recognition of customary laws and practices which define how traditional communities develop, hold and transmit TK, including the custodianship of TK'. This principle demands that customary laws governing concepts of holding and custodianship of TK form the basis of use and access to TK. The importance of customary laws and practices in relation to TK is well understood and valued. However, customary laws and practices can in some instances form the basis of a failure to protect women's TK and their rights or interests in it. The Act fails to recognise that this principle when applied in total, or in a blanket fashion forms the basis for unequal TK protection or no TK protection at all for women. It fails to account for gender sensitive and responsive protection in that there is no exception made for the non applicability of customary laws which jeopardise the recognition of women's TK, women's proprietary interests in TK and their ability to benefit in multiple ways from TK. This provision essentially creates an opportunity for TK protection as set out in the Act to be inapplicable by virtue of customary laws and practices. The situation is worsened because this provision is stated as a principle or concept which applies to, and forms the basis for, access and use of TK. Therefore, in interpreting other provisions within the body of the Act, this

²⁹ Section 4(5)(g) PTK Act.

³⁰ Section 4(5)(j) PTK Act.

³¹ See chapter 2, Section 2.4.

principle has unlimited applicability and potential to influence interpretation of subsequent sections as an overriding principle. In this regard, the Act fails in terms of gender sensitivity and gender responsiveness.

Section 7 - Administration

The Administration of the PTK Act is covered in ss 5 - 13 of the Act. Of particular interest is s 7 which addresses the appointment of officers who participate in the administration of the Act including assistant registrars and examiners. The Act is silent on the gender composition of appointed assistant registrars and officers. There is no requirement that the appointments be gender balanced in order to promote a balanced representation of women and men. The appointment of officers and assistant registrars is left to the discretion of the Board. The Board according to s 2 refers to the Board of PACRA. The PACRA Act regulates the composition of the Board.³² The PACRA Act contains no gender specific requirements on the composition of the Board therefore there is no statutory obligation for a gender balanced representation.³³ Additionally, there is no requirement in the PACRA Act nor in the PTK Act for appointed officers at various levels and Board members to actively take into account gender considerations in the administration of the PTK Act and in the execution of their respective duties. This creates a conducive environment for gender blindness in the administration of the PTK Act. This situation is not favourable for gender sensitive and responsive TK protection.³⁴

Section 16 to Section 18 – Benefits, Rights and Licensing Section 16 states that the beneficiary of TK shall be the holder. This section presents a dire consequence of an unsatisfactory definition of a holder (one that does not explicitly include women) in s 2 discussed previously. If women do not qualify as holders, the direct consequence is that they are excluded as beneficiaries of TK and cannot be granted the rights of a holder which s 17 and s 18 describe. The

³² Section 6 PTK Act.

³³ As of January 2022, there are seven PACRA board members, only one of whom is a woman. This is only about 14% female representation on the board. See PACRA 'Corporate Governance available at <u>https://www.pacra.org.zm/?page_id=1765</u>, accessed on 22 January.2022.

³⁴ It is noted however, that simply having equal female representation in decision making and administrative processes does not guarantee gender consciousness or representation of issues from a gendered perspective as demonstrated during the drafting of the PTK Act; more is required.

implication of s 17 is that the holder of the knowledge has the *exclusive* right to make decisions regarding exploitation of their TK, including decisions on assignment and access agreements.

When applied to men, even within IPLCs, the exclusive right to make decisions is not a foreign concept and aligns with the general prevailing situation. However, the implication of explicit recognition of women as holders is that this exclusive decision making right accrues to them as well. A woman would therefore have the exclusive right to manage her property (in this case, the TK) and be in full control of exploitation of her TK including entering contractual agreements. Interpreting this provision in this manner creates a direct conflict with the general position in customary law. Full and exclusive control over property is constrained by 'customary law and by attitudes and practices which may reflect the subordinate position of women under customary law, or which may be violations of principles of customary law'.³⁵ The application of the principle in s 4(5)(1) would permit an exclusion of women from exercising these rights as holders on the basis of recognition of customary laws and practices.

Section 18 requires that prior informed consent be obtained from the holder or from the Agency acting on behalf of the holder (where the holder requires this). However, the Agency must act in accordance with 'the traditional decision-making and governance processes of the traditional community concerned.' The Act does not qualify the compliance to traditional processes as only applicable where these processes are not gender discriminatory. This effectively chains the Agency, PACRA, to act in accordance with the traditional processes even where those processes are to the disadvantage of women TK holders. This is detrimental to actual protection for women as TK holders.

Section 21 – Acknowledgement of the Holder

This section addresses the important issue of acknowledgement of TK holders. Users of TK are obliged to acknowledge the TK holder, the source and origin. Women's TK has often times gone unacknowledged as TK and been relegated to the forum of

³⁵ Ministry of Gender and Child Development 'National Gender Policy' (2014).

simply women's work. However, the Act in this section does not reflect a recognition or understanding of this in that there is no direct reference made to recognition of women as TK holders. This is compounded by the problem identified in the definition of a holder as being potentially to the exclusion of women. Section 21 presents a prime opportunity for the acknowledgement of women's TK in a substantive portion of the Act.

Section 41 to Section 43 - Access Agreements and Benefit Sharing

Section 41 indicates that an access agreement to TK is between the holder and the permit holder. If women were to be considered holders, it is implied that they must have contractual capacity. This conflicts with some customary laws where women do not have contractual capacity and cannot enter into contracts unassisted by their husbands, for married women or by their fathers, brothers, or uncles for single women.³⁶

Section 42(2) requires that benefits by a traditional community from utilisation of TK should be put to the common benefit of the traditional community. The Act contains no specific provision compelling benefits from TK to be extended in equal opportunity to women in the IPLCs. Such a provision is important to ensure that women are not left behind in the development agenda.

Section 43 outlines the nature of benefits which can be derived from a holder. Some listed benefits include:

- i. research and development funding;
- ii. employment opportunity;
- iii. participation of Zambian nationals, the Agency or appropriate institution designated by the Agency in the research, and development based on the genetic resource or TK;
- access to products and technologies derived or developed from the genetic resource or TK;

³⁶ The specific adult male who has the authority to assist the woman to enter into a contract or enter a contract on her behalf may vary in matrilineal and patrilineal societies respectively.

- v. training, both at institutional and traditional community levels, to enhance local skills in genetic resources or TK, and their conservation, evaluation, development, propagation and use; and
- vi. provision of equipment, infrastructure or technological support;

These benefits are not crafted in a way that represents the differences between women and men in the social context of IPLCs. The benefit of research and development funding, for example, does not require any portion of the research and development funding to be allocated to women or guarantee their participation in research and development activities. Similarly, the creation of employment opportunities benefit is silent on the participation of women. There is no requirement to ensure that some portion of the employment created is specifically directed towards women. The participation of Zambian nationals in research based on TK also contains no outright requirement that the Zambian nationals must be equally comprised of men and women. Access to products and technologies developed from TK is stated as a blanket benefit without a requirement or obligation to ensure that women too can access these technologies because typically, women are side-stepped in this regard. The benefit in the form of training to enhance local skills in TK gives no indication of the need for women to be involved in this training or to form an equal quota of those targeted for capacity building. The section fails to address the socio-economic realities of women in IPLCs in stating these benefits. Women in IPLCs are not often the target of development programmes, technology or employment opportunities. Therefore, this section in its present condition while not appearing to have any gender bias is gender blind and will have different impacts on women and men. There is a need to reflect these differences in the way these benefits are crafted. Doing so will ensure that, as set out in the NIPP, benefits derived from the exploitation of TK are distributed fairly and equally.³⁷

Overall Comments

The sections highlighted in this chapter demonstrate that the PTK Act is neither gender sensitive nor gender responsive. Sections which are not discriminatory in form but are discriminatory in effect have also been highlighted. The interpretation

³⁷ National Intellectual Property Policy, 2020 at 9.

section sets the tone in dealing with fundamental concepts in a way that is gender blind. The definitions are not cognisant of the nature of societal structures and gender roles which (in)advertently exclude women from qualifying as holders and beneficiaries of TK therefore depriving them of recognition of, control over and reward for their role in TK production. The Act is drafted in a way that assumes that protection offered impacts all users and holders in IPLCs uniformly. The Act appears to be based on the lived experiences of men.

Further, interpretation of the Act in many instances is restricted to the rules of customary law and practices. This in itself places women at a disadvantage because customary laws and practises related to property ownership, control of property and contractual capacity among others are largely discriminatory against women. Restrictions are placed on the extent to which women can own, manage, and control their property (this extends to TK) or enter into contractual agreements independently. The Act silently perpetuates gender based discrimination through constant reinforcement of unrestricted and unregulated adherence to customary law even to the disadvantage of women.

3.3.1.3. Making the Act Gender Sensitive and Gender Responsive

The current status of the PTK Act is a clear example of the influence of culture on the shape of the law. The PTK Act must promote equal TK protection for both women and men. The starting point is to recognise the differential impact of protection as it is offered in the current state of the Act. An examination of the lived differences for men and women TK holders in IPLCs must be made to ensure that the changes made reflect the practical realities they face.³⁸

The ideal scenario is to initially embed gender considerations into the core of the law making process to ensure that they form part of the foundation and underlying considerations in drafting legislation. In Zambia's case, this opportunity has been lost. However, the suggestions described in this section can still be taken on board to rectify the situation.

³⁸ See W A Rumbiak and E V Wambrauw Natural Resource Management based on Gender Perspectives and Integrating Traditional Ecological Knowledge of the Tepera in Jayapura, Papua (2018) IOP Publishing, at 8.

The Preamble in the PTK Act should be restructured to present from the outset that TK protection is directed towards both men and women as TK holders. The stated aims of the Act should clearly indicate that the rights created in the substantive provisions of the Act are equally bestowed on and to be enjoyed by both men and women as TK holders and members of IPLCs. The inclusion of a specific aim directed at equal access for women and men to rights created and benefits derived from the protection of TK notwithstanding customary laws and practices to the contrary is a good starting point towards a gender sensitive and gender responsive tone for the Act.

The definition of TK should explicitly mention women's TK to immediately exclude any assumptions that women's TK falls outside the scope of the general definition of TK in the PTK Act. This would demonstrate gender sensitivity in that it reflects a recognition of the existence, legitimacy and importance of women's TK. It would also demonstrate gender responsiveness in that a decisive practical action has been taken to prevent possible prejudice to women arising from the context within which women's TK operates. The definition of a holder should be amended to overtly state that both women and men can qualify as holders in the Act. It should not be tied to ownership according to customary laws and practices where such customary laws and practices are prejudicial to the inclusion of women as TK holders.

The inclusion of gender considerations and women's contribution to TK as a guiding principle in the use of and access to TK is important in ensuring women's interests are recognised and protected in the Act. The Act needs to recognise that women face a different reality in the context of TK protection and respond accordingly. It should not provide a basis for blanket application of customary law to the detriment of would be women TK holders. The adherence to customary laws and principles should be limited to circumstances where this does not threaten TK protection for women. Limiting the application of customary law in this regard is vital and would have a ripple effect on the interpretation of the Act as a whole.

Benefits derived from TK should be expressly indicated to compulsorily include women considering their history as a marginalised group. The inclusion of gender considerations responsive to each type of potential benefit outlined, for example, a mandatory quota of employment opportunities reserved for women, a balanced participation between women and men in training programmes and other initiatives will ensure that in the interpretation of Act, the different levels on which women and men operate are factored in and actively addressed.

The rights to protect and register TK and institute legal proceedings where TK rights are infringed upon places a serious onus on TK holders which in a practical sense proves difficult to discharge, more so for women in IPLCs. The remedy to this problem lies both within and outside the Act in terms of implementation. From within the Act, a positive obligation on the State to avail legal services and access to registration offices should be created. Fulfilling this obligation would require implementation using bodies and mechanisms outside the Act as well. Policies to ensure that women and men in IPLCs have access to legal services and required expertise and practical steps to implement this are essential. This involves educating IPLCs on the availability of enforcement mechanisms. Further practical steps include for example, providing mobile registration services in which officers from the Agency go into the IPLCs and offer onsite registration services. The waiver of registration fees at a local level should be considered because the requirement to pay registration fees may be a barrier to registration for IPLCs.

The PTK Act must be amended to directly reflect gender considerations and respond to circumstances as a result of culture and customary laws in order to provide real protection for women. Beyond a change in the substantive provisions of the Act, there must be sufficient mechanisms to support legislation and interventions at different levels. While changing the PTK Act to be gender sensitive and gender responsive is a suitable solution, it is important to consider the position of the Constitution of Zambia in the TK protection landscape because this ultimately impacts overall protection available. The section which follows examines constitutional considerations in TK protection.

3.4. Constitutional Considerations

The nature of a Constitution as the superlative law and the living document from which all other laws derive their legitimacy is well established. Ideally when laws or sets of values are reflected in the Constitution, they gain a special status and rise above other ordinary laws. Laws enshrined in the Constitution gain the ultimate protection in that they qualify as the rue brick against which the legitimacy of other laws is measured and tested. This is to the extent that laws can be nullified if deemed unconstitutional. It is therefore important to have an appreciation of what belongs in a Constitution to tackle the question of whether the Zambian Constitution should and does play a role in TK protection.

3.4.1. What to Include in a Constitution

Constitutionalisation has traditionally been analysed on the basis of idealistic normative accounts with the rationale for creating constitutions and deciding what to include in them being attributed to ideologies which the State determines suitable. However, several additional lines of reasoning have emerged as the rationale for constitutionalisation. Among these is the reasoning that constitutions are created and amended to fulfill a functionalist role. This means they can be created to offer efficient responses to systemic issues.³⁹ Another suggestion is that constitutions are created to be used as tools of power. This entails that the provisions enshrined in the Constitution are based on a pragmatic approach and provide a framework for inclusion of future provisions in response to unanticipated issues. A different rationale for the creation of constitutions is their use as threat reducing mechanisms.⁴⁰ The reasoning in this case is that the nature of the constitution elevates the laws contained in it and reflects commitments in a league of their own to do or not to do certain acts which if not bound by this level of commitment may otherwise be done. The idea is to lower risks of negative sets of behaviour, reflect worldviews and certain policy preferences. The envisioned result is public buy in and increased legitimacy of the ruling authority. A Constitution can aptly serve the various functions described in this paragraph.

The criteria for what to include in a country's Constitution is broad. Constitutionalisation from a rights based perspective of Constitutional development should be reflective of genuine popular will and the political environment. A constitution must reflect and respond to the issues facing the society for which it is enacted both in terms of its structure and content.

³⁹ Ran Hirschl 'The social and political foundations of constitutions' in Versteeg Denis J. Galligan and Mila (ed) *Social and Political Foundations of Constitutions* New York, Cambridge University Press (2013) at 161.

⁴⁰ Hirschl supra, at 166.

Gavison argues that there are three main candidates for inclusion in constitutions; these are regime arrangements, human rights, and general credo.⁴¹ Regime arrangements refer to basic governmental structures and the interaction between arms of government, their powers, responsibilities and functions. General credo means guiding beliefs or principles which strongly influence the way people live.⁴² Gavison further argues that only credos or basic values and commitments which are widely shared should be included in the constitution. This is a slippery line of reasoning to adopt because of the difficulty of canvassing what exactly 'widely shared' means. Constitutional protection of minorities, for example IPLCs, is important, however it may be argued that their credos are not 'widely shared' hence do not properly belong in a constitution. The result of this though would be unacceptable because it would essentially disqualify minority groups from having their interests represented or protected in constitutions by virtue of them being minority groups.

The Zambian Constitution contains the three main items Gavison outlines for inclusion in the constitution. Part II contains national values and principles. The contents of Part II are not exhaustive because the expression of values and principles is also interwoven into other parts of the Constitution. Notably, these expressed values and guiding beliefs in some regards speak to protection of minorities. For example, art 8 (d) indicates equality and non-discrimination as national principles. This is expanded on further in the Bill of Rights in art 23 of the Constitution. Protection of human rights is addressed in Part III of the Constitution. Parts IV to XVIII discuss extensively government structures, arms of government and other national administrative issues.

According to Holzinger et al⁴³ constitutionalisation of IPLCs has been prominently observed in sub Saharan Africa and is thus an indication of the political

⁴¹ Ruth Gavison 'What Belongs in a Constitution?' (2002) 13 *Constitutional Political Economy* at 89.

⁴² Cambridge University available at *https://dictionary.cambridge.org/dictionary/english/credo*, accessed on 2 April.2021.

⁴³ Roos Haer Katharina Holzinger, Axel Bayer, Daniela M. Behr and Clara Neupert-Wentz 'The Constitutionalization of Indigenous Group Rights, Traditional Political Institutions, and Customary Law' (2019) 52 *Comparative Political Studies* 1775.

importance of constitutionalisation of provisions related to protection of IPLCs.⁴⁴ Constitutional protection of IPLC rights and interests and more specifically, in this context, constitutional protection for TK is important because it demonstrates respect for TK, represents an assurance of protection and where violated, provides a forum and a platform for the enforcement of the protection rights granted. The constitutionalisation of TK protection is appropriate for Zambia on the basis of this discussion. The Constitution should play a significant role in TK protection. This is more so because of the interplay between TK and customary law.⁴⁵

3.4.2. Protection Offered in the Zambian Constitution

The Constitution as the grundnorm, in the preamble makes the following powerful statement: 'We the people of Zambia : CONFIRM the equal worth of women and men and their right to freely participate in, determine and build a sustainable political, legal, economic and social order'. Based on this principle, it is apparent that in the eyes of the Constitution men and women are of equal worth. By extension, the work they do must also be viewed as being of equal worth even in the context of contributions to TK. Therefore, associated TK protection legislation must be crafted in a way that reflects this equality of worth between men and women.

Moving beyond the preamble, art 8(d) of the Constitution lists among other things equality and non-discrimination as national values and principles of Zambia and proceeds in art 9(1)(b) to direct that application of national values and principles shall be made to '...interpretation of the law and development and implementation of state policy'. The definition of law per art 7 (a) – (c) includes the Constitution, laws enacted by parliament and statutory instruments. The collective effect of these constitutional provisions is that any law or state policy, from the stage of formulation to enactment, to interpretation and application must be done with equality and nondiscrimination in mind and with the notion that women and men are of equal worth. From this perspective, it is constitutionally mandatory to align with these considerations at any stage of law and policy making. Thus, in the formulation of

⁴⁴ Holzinger supra, at 1776.

⁴⁵ According to studies carried out by Holzinger et al, former British colonies, countries with high ethnic fractionalization and low levels of modernity (of which Zambia is all three) are more likely to constitutionalise customary law, practises and related aspects.

laws and policies related to the protection of TK, the final laws and policies concluded upon must necessarily demonstrate an adherence to the outlined constitutional values. Failure to do so would be a basis to challenge the particular law or policy as unconstitutional on the strength of constitutional supremacy provided for in art 1(1) and implementing the right to defend the Constitution per art 2(a).

Article 10(2) of the Constitution clearly states as a basis for economic policy formulation that, 'The Government shall promote the economic empowerment of citizens so that they contribute to sustainable economic growth and social development'. Citizens here includes both male and female citizens. TK has been identified on the basis of its eco friendly methods as one of the more sustainable methods to facilitate economic growth. TEK, TMK and overall interaction with genetic resources and other resources including land and water are environmentally friendly and sustainable. TK considerations are critical for designing eco friendly strategies for resource use.⁴⁶ Thus one interpretation of this Constitutional provision is that Government has the responsibility to promote the empowerment of Zambian women and men to enable them to contribute to sustainable economic growth and development using TK.

Article 266 provides a definition of property as including 'a vested or contingent right to, or interest in, or arising from— intellectual property'. Thus, the provisions in art 16 regarding protection from deprivation of property apply to IP.

Specific reference to IK is made in the art 257 entitled 'Land, Environment and Natural Resources'. This article obliges the State in the utilisation of natural resources and management of the environment to protect and enhance IP in and IK

⁴⁶ Katrinka Ebbe Sheltoh H. Davis, Alicia Hetzner *Traditional knowledge and sustainable development : proceedings of a conference sponsored by the World Bank Environment Department and the World Bank Task Force on the International Year of the World's Indigenous People held at the World Bank, Washington, D.C., September 27-28, 1993* Environmentally sustainable development proceedings series (1995), Munyaradzi Mawere *Culture, Indigenous Knowledge and Development in Africa: Reviving Interconnections for Sustainable Development* Cameroon, Langaa Research & Publishing CIG (2014) at 16, Zank Sofia Natalia Hanazaki, Viviane Stern Fonseca-Kruel 'Indigenous and traditional knowledge, sustainable harvest, and the long road ahead to reach the 2020 Global Strategy for Plant Conservation objectives' (2018) 10 *Rodriguésia*, P S Ramakrishan 'Traditional Forest Knowledge and Sustainable Forestry: A north-east India Perspective' (2007) 249 *Forest and Ecology Management*.

of biodiversity, and genetic resources of local communities. The responsibility on the state is twofold; protection and enhancement. However, this article does not address the principles to follow in the implementation of protection, neither does it specifically recognise, acknowledge or mention gender issues as a consequence of protection and enhancement of IP in TK. The social context of women in IPLCs and as a double marginalised group is a sufficient basis to include specific safeguards to ensure that this constitutional provision protects and enhances IP and TK even for women. While the language in the Constitution in art 256 is not directly to the exclusion of women, it fails to respond to the social needs of those whom it should protect – a key function of a Constitution.

The Constitution of neighboring Malawi in Chapter IV, s 30⁴⁷ in addressing the right to development demands that special consideration be given to women, children and the disabled in the implementation of this right. The language used in the Malawian Constitution and the existence of such a provision in itself is a demonstration of gender awareness in the crafting of this right. This additional layer to the right outlined in art 257 of the Zambian Constitution is missing.

The placement of the provision for protection and enhancement of the IP in, and IK of biodiversity and genetic resources in the Zambian Constitution under land, environment and mineral resources makes the focal point the resources to which TK can be applied as opposed to the rights holders of TK. The debate on whether IP and associated rights should be considered human rights is well researched. Two general schools of thought are identifiable in the debate. The first belongs to the group which has highlighted the antagonism between human rights and IP. Some scholars who subscribe to this view have argued that IPRs are a threat and a hindrance to the enjoyment of human rights.⁴⁸ On the other hand, the second group with scholars of a

⁴⁷ Republic of Malawi (Constitution) Act of 1994, as amended.

⁴⁸ Volker Heins 'Human Rights, Intellectual Property, and Struggles for Recognition' (2008) 9 *Human Rights Review* 213, Susak K Sell *Private Power, Public Law: The Globalization of Intellectual Property Rights* Cambridge, Cambridge Unversity Press (2003), Mikhalien du Bois 'Justificatory Theories for Intellectual Property Viewed through the Constitutional Prism' (2018) 21 *Potchefstroom Electronic Law Journal* 1, Mikhalien du Bois 'Intellectual Property as a Constitutional PropertyRight: The South African Approach' (2012) 24 *SA Mercantile Law Journal* 177.

different view argue that IPRs are in fact human rights in themselves.⁴⁹ In the context of Zambian Constitution, it can be argued that on the basis of the Constitutional definition of property per art 266, an IPR enjoys protection on the same level as other rights included in the Bill of Rights.

The Constitution does not contain provisions which outrightly and specifically address the protection of TK in the Bill of Rights. There is no independent right to the protection of TK. This is in contrast to for example, the Kenyan Constitution. Article 11 of the Kenyan Constitution gives a prominent position to cultural issues and makes the connection between cultural expression, IK / TK and technologies and IPRs. The Kenyan Bill of Rights in art 40 under protection of the right to property specifically mentions in sub article 5 that, 'The State shall support, promote and protect the IPRs of the people of Kenya.' Again, Kenya features IP and IK in art 69(1)(c) of her Constitution which creates obligations on respect for the environment in providing that the state shall 'protect and enhance IP in, and IK of, biodiversity and the genetic resources of the communities'.

The Kenyan PTKCE Act in the long title makes the constitutional protection connection by stating that the PTKCE Act is enacted to give effect to specific constitutional provisions, that is, arts 11, 40, and 69(1) which deal with TK protection. This is a powerful starting point for a piece of legislation to draw directly on the Constitution. Even as the PTKCE Act moves into substantive provisions, there is recurrent constitutional reference.

Overall, the Zambian Constitution plays a minimal role in TK protection because it contains no independent TK specific protection provisions. The minimal protection that does exist is merely a subset of a different rights group with a separate focus and is neither gender sensitive nor gender responsive. Therefore, its effectiveness is very limited. However, the Constitution is an appropriate place for TK protection because as property and as an issue heavily concerned with minority and vulnerable groups it should be protected within the Bill of Rights. The area of TK also has huge potential for discrimination in terms of its protection and the

⁴⁹ Heins, Sell, Du bois, supra.

application of benefits which arise from it in relation to women in IPLCs as a double marginalised group. This also falls within the realm of the Bill of Rights in terms of protection from discrimination. Finally, TK protection touches on the value and belief systems entrenched in Part II of the Zambian Constitution because it plays a significant role in sustainable development.

3.4.3. Interaction of the Constitution with Customary Law

The PTK Act refers to customary laws and practices several times. The role that customary law plays in IPLCs is an undeniable one. It influences ways of daily living, conduct, societal expectations, and gender roles. Customary law contains cultural functions which lay out the behaviour of individuals and their rights and duties within the communities in which they live. It exerts significant influence on its subjects.

While customary law continues to exist actively in Zambia, constitutionally, it operates within the ambit of certain restrictions. The primary restriction on customary law appears in art 1 of the Constitution which provides that customary law and customary practice which is inconsistent with the provisions of the Constitution is void to the extent of the inconsistency. In reemphasising the qualified application of customary law in Zambia, art 7 (d) includes as part of the laws of Zambia, 'Zambian customary law which is consistent with the Constitution'. Traditional dispute resolution mechanisms are also regulated. Article 118 in outlining the principles of judicial authority states that traditional dispute resolution mechanisms 'shall not contravene the Bill of Rights, be inconsistent with the provisions of the Constitution or other written laws and shall not be repugnant to justice and morality'. This demonstrates the purported subservience of customary law and its operation to the Constitution and to other written laws.

The above provisions indicate that there is potential for conflict between customary law and other written laws. The tension between customary law and other written laws is well covered in literature.⁵⁰ At a constitutional level, the conflict

⁵⁰ See for example Mikano Emmanuel Kiye 'Conflict Between Customary Law and Human Rights in Cameroon: The Role of the Courts in Fostering and Equitably Gendered Society' (2015) 36 *African Study Monographs* 75, Muna Ndulo 'African Customary Law, Customs, and

arises largely because of differences in each system on the rights and freedoms individuals as legal subjects are entitled to. Tensions emerge in the enforcement of rights as enshrined in the Bill of Rights as opposed to adherence to customary laws and practices which conflict with certain constitutional rights.

The area of gender discrimination notoriously features as a tension point between customary law and statutory law in Zambia. There is case law which demonstrates challenges to customary laws or practices. For example, the *Chibwe vs Chibwe*⁵¹ case which dealt with the division of property after dissolution of a customary law marriage was a progressive development. In that case, the court held that each spouse was entitled to a reasonable share in the matrimonial property even when married under customary law. The property award the court makes is guided by the need to do justice in taking into account the circumstances of each case. While other cases with similar facts have referred to considerations from the *Chibwe* case,⁵² the level of awareness of this decision by local Court Justices is not to the required extent.⁵³ Therefore, the case on many occasions has not been strictly followed.

In principle, customary laws and practices which conflict with the Constitution are void. As identified, one of the conflict areas for customary law and constitutional law is that of rights and discrimination against women. Article 23 (1) of the Constitution provides that '...no law shall make any provision that is discriminatory either of itself or in its effect'. In describing what discriminatory in this article means, art 23(3) is instructive. It explains discriminatory as:

affording different treatment to different persons attributable, wholly or mainly to their respective descriptions by race, tribe, *sex*, place of origin,

Women's Rights' (2011) 18 Indiana Journal of Global Legal Studies 87, Glen Mola Pumuye ' Legal Transplants: A conflict of statutory law and customary Law in Papua New Guinea' (2017) 4 IALS student law review 31, Victoria M Time Women's Social and Legal Issues in African Current Affairs : Lifting the Barriers Lanham, Lexington Books (2017), Chipo Mushota Nkhata and Felicity Kayumba Kalunga 'Resolving the Tension Between Gender, Equality and Culture: Comparative Jurisprudence from South Africa and Botswana' in Using the Courts to Protect Vulnerable People: Perspectives from the Judiciary and Legal Profession in Botswana, Malawi, and Zambia South Africa, Southern Africa Litigation Centre(2015), Oluwatobiloba (Tobi) Moody Protecting Traditional Knowledge and Traditional Cultural Expressions (2019) Toronto Canada, ;United Nations Handbook for Legislation on Violence against Women (2010) United Nations - Department of Economic and Social Affairs, .

⁵¹ (2001) Z.R. 1

⁵² See Joseph Musonda v Ruth Zulu Appeal No 173 of 2012, Connie Munalula v David Mwaba Appeal No 20/2017) [2020] ZMSC 6.

⁵³ Kerrigan and Matakala, supra, 303.

marital status, political opinions colour or creed whereby persons of one such description are subjected to disabilities or restrictions to which persons of another such description are not made subject or are accorded privileges or advantages which are not accorded to persons of another such description.

The definition of discriminatory in the Constitution does not explicitly include gender as a basis for discrimination. It only refers to 'sex'. This is a gap in the Constitution because of the fundamental difference between sex and gender, that is, that sex is biological while gender is based on roles assigned by society. It is surprising however that art 23 does not specifically mention gender especially given that the Constitution appears to have gender on its agenda to the extent of constitutionalising the establishment of the Gender Equity and Equality Commission in art 231(1) which is mandated to promote the attainment and mainstreaming of gender equality.⁵⁴

Article 266, however, in defining gender describes it as 'female or male and the role individuals play in society as a result of their sex and status'. This is indicative of an acknowledgement of the distinction between sex and gender. Though the absence of an explicit reference to gender as a basis of discrimination is not desirable, gender may be included as 'one such category' in line with sex as an explicitly mentioned category. This is a reasonable approach because the definition of gender makes a connection to sex demonstrating that there is an intended relationship between the two.

Article 23 provides a guarantee against discrimination. However, art 23(4) (5) and (7) contain limitations to the non-discrimination clause. Article 23(4) (c) states that art 23(1) shall not apply to any law that makes provision 'with respect to adoption, marriage, divorce, burial, devolution of property on death or other matters of personal law'. Article 23(4)(d) proceeds to state that the non-discrimination clause shall not apply for 'the application in the case of members of a particular race or tribe, of customary law with respect to any matter to the exclusion of any law with respect to that matter which is applicable in the case of other persons'. These exceptions shield matters of personal law from the scrutiny of art 23. Personal law

⁵⁴ Article 231 (2), Constitution of the Republic of Zambia.

includes property rights.⁵⁵ Property encompasses intangible property, which includes TK. Therefore, the application of customary law and practices to the protection of TK along with its implications are exempted from the non - discrimination provisions contained in art 23 of the Bill of Rights. The effect of this is that the Constitution makes itself subservient to customary laws and practices.

This situation means the Zambian Constitution provides a weak basis for gender equality protection or protection from discrimination on the basis of gender where there is a conflict between customary law and the right to nondiscrimination entrenched in the Bill of Rights. The Constitution in effect permits discrimination on the basis of customary law to the extent described in art 23(4) - (8). This is a dangerous situation for the progression and advancement of the gender equality agenda in general. This exception can be heavily relied on to perpetuate inequality. This is detrimental for TK protection because the gender insensitive and gender unresponsive state of the PTK Act can be shielded under the guise of being compliant with customary law, the discriminatory application of which is protected by virtue of the exemption in arts 23(4)(c)and (d).

3.4.4. The Solution

The protection of TK from a Constitutional perspective needs to be reexamined. The constitutionalisation of TK protection from a gendered perspective is necessary. The current status of TK protection in the Zambian Constitution is unsatisfactory. It only exists as a brief mention in art 257 in the context of utilisation of natural resources and environmental management. Additionally, the manner in which this minor protection exists is neither gender sensitive nor gender responsive. There is no evidence of awareness of the different ways in which male and females experience TK, participate in the generation of TK and require protection tailored to their needs. The protection as it exists in the Constitution does not cover specific important

⁵⁵ Lillian Mushota 'International Law, Women's Rights, and the Courts: A Zambian Perspective ' in Using the Courts to Protect Vulnerable People: Perspectives from the Judiciary and Legal Profession in Botswana, Malawi, and Zambia South Africa, Southern Africa Litigation Centre(2015).

aspects which to some extent are included in the PTK Act, albeit in a non-gendered way.

To give TK the appropriate recognition and protection, a robust, sufficiently detailed and clear constitutionalisation exercise must be undertaken. The right to TK protection must be included in the Constitution setting out the general principles that govern TK protection in a gender sensitive and responsive manner. This should include among other aspects:

- i. A general recognition of TK and its importance,
- ii. A specific recognition of women's TK,
- iii. The right for men and women to have their TK protected equally,
- iv. Outright inclusion of moral rights in TK for both men and women, ⁵⁶
- v. A recognition and creation of the right for both men and women to benefit equally from their TK as individuals and as part of larger communities, and
- vi. Clear acknowledgement that the Constitution recognises the different social contexts in which men and women in TK production and ownership operate and that the protection offered will be responsive to those differences.

Constitutionalisation of these general principles will provide for these rights to be justiciable as constitutionally created rights. The modalities, details and administration issues should be dealt with in the PTK Act, also in a gender sensitive and responsive manner. Following this route would give the PTK Act a Constitutional basis for all the provisions it contains thereby guaranteeing Constitutionally supported gender sensitive and responsive legislation at par with other matters covered in the Constitution.

However, ending at mere constitutionalisation does not address the problems created by the exemption contained in art 23(4) of the Constitution. While constitutionalisation of TK protection is important, it serves no purpose if customary

⁵⁶ This is expanded on in section 3.5 of this chapter.

laws and practises which affect women's rights to own TK, manage it and enter into contractual agreements remain shielded. Though legislative transformation through removal of this shield is important, it must be recognised that sufficient attention should be paid to the need for societal transformation. A societal transformation in the gender agenda is necessary for transformed laws to operate effectively. Law in itself does not necessarily transform society. Customary law, similar to any other body of law need not be static but should develop and respond to the needs of those whom it serves. Traditionally, customary law would change to respond to new situations in need of adjudication which arose.⁵⁷ Advancement can be made towards the harmonisation of customary law and removal of gender discrimination.⁵⁸

The solution is therefore four tiered; constitutionalisation of gendered TK protection, removal of the shield for customary law in the non-discrimination clause; amendment of the PTK Act to provide gender sensitive and gender responsive and societal transformation. All these aspects are required for protection of TK to be truly effective for both men and women.

3.5. Moral Rights

Moral rights are an important avenue of rights. However, they are often relegated to the shadows in favour of the more focused on category of economic rights in IP. This is more so in the case of common law jurisdictions which unlike civil law jurisdictions place far less emphasis on moral rights.⁵⁹ The concept of moral rights more often features in discussions related to copyright because these rights concern the author of a work and are personal rights. They involve a bundle of rights which 'secure the bond between authors and their works'. ⁶⁰ These rights are inalienable.

⁵⁷ Kerrigan and Matakala, supra.

⁵⁸ See Graham Dutfield 'TK unlimited: The emerging but incoherent international law of traditional knowledge protection' (2017) 20 *The Journal of World Intellectual Property* 144 at 147. Oluwatobiloba, supra.

⁵⁹ Ysolde Gendrea 'Moral Rights' in Henderson Gordon F. (ed) *Copyright and Confidential Information Law of Canada* Toronto, Carswell(1994).

⁶⁰ Gillian Davis & Kevin Garnett *Moral Rights* London, Thomson Reuters Limited (2010) at 3.

Moral rights generally involve the rights of integrity and paternity. ⁶¹ The right of integrity gives authors the right to object to any distortion, mutilation or modification to their work which would be prejudicial to their honor or reputation.⁶² The right of paternity entails that an author of the work should be so credited for their work. Put differently, it is the right to claim authorship over the work one has created. The Copyright and Performance Rights Act of Zambia⁶³ in s 24 provides a similar catalogue of moral rights. Zambia is a contracting party to the Berne Convention for the Protection of Literary and Artistic Works.⁶⁴ The Berne Convention recognises moral rights in art 6 bis (1) where it provides for the right to claim authorship over one's work (right to attribution) and to object to certain modifications and derogatory actions (right to integrity).

Moral rights are relevant in the context of TK protection in general and more so in the context of gender sensitive and gender responsive TK protection. The worth and importance of TK is not only measurable in monetary terms. Some fundamental parts of TK are the spirituality, respect, specific procedures, rules of use and cultural values attached to it. Moral rights as a category of rights speaks to the integrity of TK. The need for IPLCs to be able to regulate how their TK is used and control what can and cannot be done to their TK is important in honouring the sacredness of their TK. The right to have this type of control is precisely what is encompassed in the moral right to integrity. This aspect of moral rights entitles the author of the work or in this case the holder of TK to object to certain uses of the TK in terms of modifications and distortion. The opportunity is therefore created for considerations of scaredness, cultural use and spirituality to be prioritised and find some formal legal protection. In the absence of this explicit protection, there is room created for

⁶¹ Mira T Sundara Rajan 'Moral rights: the future of copyright law?' (2019) 14 Journal of Intellectual Property Law & Practice 257.

 ⁶² Tanya F Aplin and Ahmed Shaffan Mohamed 'The concept of 'reputation' in the moral right of integrity ' (2019) 14 *Journal of Intellectual Property Law & Practice* 268.
 ⁶³ Act No 44 of 1994.

⁶⁴ 1886.

misuse of TK which results in undermining the significance of TK, distortion of TK and injury to the dignity of IPLCs.⁶⁵

The right to paternity is vital and appropriate for gendered TK protection. Women's TK has historically suffered from a lack of recognition and has been often relegated to the realm of ordinary work not deserving of recognition as specialised TK. The right to paternity which demands that authors be credited for their work would create an obligation to recognise women's TK and credit them accordingly. Additionally, the paternity right would enable women to enforce their right to be correctly recognised for their TK where the credit is falsely given to someone else. Moral rights considerations capture a range of interests for the actors within IPLCs.

An express inclusion of moral rights is fundamental to gendered TK protection because it addresses important aspects for TK protection as described above. In order for such express inclusions to be effective and offer real protection for women, they must be captured in a way that recognises the social and cultural context in which TK operates from the perspective of women. The creation of a generic obligation to recognise moral rights of TK holders will not suffice. Specific reference to the obligation to recognise paternity and integrity rights of women for women's TK is essential. Enabling mechanisms are needed to facilitate women's ability to actively enforce these rights. This requires that restrictions based on customary laws and principles which would hinder the exercise of these moral rights are expressly indicated in legislation as inapplicable. For example, effectively exercising the right of integrity would include the right and ability of women to exercise control over how their TK is used in terms of objecting to uses they deem inappropriate, among other things. The existence of any customary laws, practices or principles which prevent women from making decisions of this nature regarding their TK must not be accepted as a basis for the right to be set aside. Normalising the recognition of women as holders of moral rights in their TK and the full complement

⁶⁵ Brigitte Vézina 'Ensuring Respect for Indigenous Cultures, A Moral Rights Approach' (2020) 243 *Centre for International Governance and Innovation* at 2 and Madhavi Sunder 'Intellectual Property and Identity Politics: Playing with Fire' (2000) 4 *Gender, Race & Justice* 69.

⁶⁶ Arun Agrawal and Clark Gibson 'Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation' (1999) 27 *World Development* 629.

of attribution, control and management which attaches to moral rights regardless of any existing predispositions to the contrary is imperative.

3.5.1. Moral Rights and Personhood

Moral rights are typically rooted in the concept of personhood, that is protecting an individual author. The idea of personhood may seem at odds with the community ownership or authorship concept which is prevalent and relevant for TK. However, in the context of IPLCs it has been argued that there exists a concept of 'peoplehood'⁶⁷ which captures the notion of the identity of an indigenous group as a people or as a group. This creates an inroads into bestowing what would typically be an individual right to claim as a right for the entire group, in this case moral rights.

Although some authors have criticised this line of thought arguing that it is descriptively and normatively flawed,⁶⁸ the concept of personhood ties back to some underpinning justifications for the existence of IPRs, that is, to reward the inventor, encourage innovation and grant control over their inventions. This would be the case even where there exists more than one inventor at a time. This situation of peoplehood which exists in the TK context versus that of personhood in typical mainstream IPRs is yet another demonstration that strict IPR protection is not a hand in glove fit for TK. Rather changes need to be made for the protection of TK to suit TK itself. This incompatibility supports the conclusion that transplanting the concept of moral rights as is from the realm of copyright for application in TK protection would not achieve the desired effect or results. Generally, this would fail dismally on account of conceptual differences between TK and copyright systems.⁶⁹

Vézina ⁷⁰ proposes the adoption of a *sui generis* model of protection based on the precepts of copyright's moral rights but with a different more targeted focus. The focus should be on ensuring that the reputation, honour and

⁶⁷ Sonia K Katyal & Angela R Riley Kristen A Carpenter 'In Defense of Property' (2008) 118 Yale Law Journal 1022 at 1050 – 1059.

⁶⁸ John Lie *Modern Peoplehood* Harvard University Press (2004).

⁶⁹ Vézina, supra at 2.

⁷⁰ Vézina, supra at 3.

integrity of IPLCs and their culture is maintained while ensuring proper attribution when their TK is used. This proposal is logical and desirable because it would grant free reign to properly focus on what such a moral rights system should focus on and achieve for IPLCs specifically. This would also create an appropriate platform to ensure gender interests are properly represented within the framework of moral rights both in terms of attribution and integrity. An independent moral rights system leaves room to accommodate the concept of peoplehood to extend to allow a group moral rights notion, unrestricted and free from the confines of mainstream moral rights copyright requirements.

3.5.2. Status of the PTK Act

The preamble of the PTK Act mentions 'recognising the inalienable rights of traditional communities over their knowledge'. It could be that the inalienable rights envisioned here are linked to some semblance of moral rights. However, this may be a stretch in interpretation because the substantive parts of the Act, particularly ss 27 and 30 identify the inalienable rights as the right to use and exchange genetic resources in a traditional context. Further on in the preamble, the recognition of the spiritual and cultural value of TK is mentioned. This may be an indication of a slight recognition of the right to integrity however it is not captured with sufficient clarity to be directly linked to moral rights in TK protection.

The PTK Act does not specifically mention moral rights in TK protection. However, s 21 of the Act requires that a person who uses TK beyond its traditional context 'acknowledges the holder, indicates its source and, where possible, its origin and use the TK in a manner that respects the cultural values of the holder'. This could be linked to the moral rights of attribution and integrity in some way. However, rather than firmly and outrightly create a clear category of moral rights which the holder can enforce, the Act only creates an obligation on the user of TK. Brushing on moral rights in this brief manner is insufficient to properly create the appropriate moral rights protection for TK. Additionally, the section as it exists is not gender sensitive or responsive in that it does not explicitly include the need to recognise female TK holders and women's TK.

Section 36 in stating the obligations of access permit holders in part (1) requires that they 'recognise the locality where the genetic resource or TK has been accessed in an application for protection of the product developed from the genetic resource'. This is perhaps a better attempt at creating a moral right. It is in particular an allusion to the right of paternity. However, this still falls far short of an outright creation of moral rights. The section creates the obligation to recognize the *locality*, not the *holder* (be it an individual or the traditional community) of the TK.

The attempted recognition of moral rights in s 21 is unsatisfactory and insufficient. Moral rights are an important aspect of gender sensitive and gender responsive TK protection. They should be represented as such in the PTK Act and in the Constitution. The Zambian PTK Act stands in stark contrast to for instance the Kenyan PTKCE Act. In the Kenyan Act, Part V deals with moral rights in TK and TCEs. It explains the scope and application of moral rights in the context of TK protection. Although there are comments to be made on whether the Kenyan provisions are gender sensitive and gender responsive, in terms of the existence and coverage of moral rights in themselves, the Kenyan Act provides a relatively good example. Article 21 of the PTKCE clearly answers these questions regarding moral rights in TK:

Question	Answer
• In whom do moral rights vest?	Owners of TK
• What is the scope of moral rights created?	 Right of attribution Right not to have TK falsely attributed Right of integrity Right to protection from false and misleading claims to authenticity and origin
• What is the nature of moral rights?	 Exist independently Are inalienable Not transferrable Incapable of waiver
• What is the duration of existence of	• Exist in perpetuity

the moral rights?	

A similar approach to moral rights protection for TK is needed in the Zambian landscape of TK protection. However, the approach must be gender sensitive and gender responsive.

3.6. Conclusion

This chapter has critically examined the status of TK protection in Zambia. The PTK Act is neither gender sensitive nor gender responsive. While TK protection is a proper subject for constitutionalisation, the current protection in the Zambian Constitution directed at TK is insufficient. The prevailing exceptions in the application of customary law contained in the Constitution and the PTK Act are a constraint to gender sensitive and gender responsive TK protection and actively perpetuate inequality. Moral rights in TK protection is an issue which needs to be addressed both constitutionally and within the PTK Act. This chapter has also offered suggestions on how to make the PTK Act gender sensitive and responsive. There is an urgent need to change the approach to TK protection in Zambia to achieve effective TK protection for women. This will contribute towards maximising the potential of TK to contribute to Zambia's development agenda while ensuring that women through the use of TK ae active participants in Zambia's domestic and international development agenda.

4. CHAPTER 4 – A HELPFUL NEIGHBOUR FOR ZAMBIA? CONSIDERING THE KENYAN APPROACH

4.1. Introduction

Chapter four examines the Kenyan approach to TK protection through the PTKCE Act with a view to identifying aspects of the protection strategy worthy of emulation for Zambia. The chapter achieves this through scrutinising various provisions in the PTKCE Act and comparing them to what presents in the Zambian PTK Act. The analysis of the Kenyan PTKCE is limited to an exploration of issues which have been identified as better handled in the Kenyan Act than in the Zambian Act. It will not include a detailed identification of weaknesses, criticism of flaws nor detailed recommendations for the Kenyan PTKCE Act. However, certain issues may be pointed out regarding the Kenyan Act at some points during the analysis for the sake of completeness and maintaining the integrity of the context of this thesis in terms of gender sensitive and gender responsive TK protection. The aim is to identify opportunities and gain insights for improvement of the Zambian PTK Act and the overall TK protection strategy. The chapter not only identifies lessons to learn from the Kenyan approach but also discusses them in a gendered context of TK protection.

4.2. Getting Some Context

4.2.1. Justification for the Comparator Jurisdiction

As indicated in chapter one, the choice of Kenya as the comparator jurisdiction is appropriate because Zambia and Kenya share similarities in various aspects. Both countries have a number of different tribes and ethnic groups¹ and are rich

¹ Zambia has about 73 different ethnic groups and Kenya has over 42 tribes. See Samantha Balaton-Chrimes ' Who are Kenya's 42(+) tribes? The census and the political utility of magical uncertainty' (2021) 15 *Journal of Eastern African studies* at 43 and Mabel C. Milimo; Monica L Munachonga; Lillian Mushota et al *Zambia – A strategic Country Gender Assessment* (2004) *World Bank*, 1 at 55.

in stock and diversity of TK. Additionally, similar to Zambia, a large part of the Kenyan population uses and depends on TK in different avenues of daily life.²

Having attained independence within a year of each other, the two countries are counterparts in terms of time elapsed post-independence. ³ Zambia and Kenya are both developing nations hence they share similarities in terms of developmental struggles, the developing country landscape and being part of the global South in general. Additionally, both countries are members of the Common Market for Eastern and Southern Africa (COMESA). Therefore, they subscribe to common values and objectives COMESA member states hold regarding, among others, the investment in development of indigenous entrepreneurs, the role of women in development and the role of women in business. ⁴

The prevailing legal systems in Zambia and Kenya provide another point of similarity. Both jurisdictions have customary law as part of their legal systems. Article 7 of the Zambian Constitution expressly includes customary law as source of law and art 2 in the Kenyan Constitution in referring to constitutional supremacy includes customary law in the definition of 'any law'. Further, the Kenyan Judicature Act^5 in s 3(2) mentions that the Courts shall be guided by African customary law in civil cases. This is an additional indicator of the applicability of customary law in Kenya.

However, the application of customary law is conditional in both countries. In Zambia, only customary law which is consistent with the Constitution forms part of the Laws of Zambia.⁶ Further limitation on the

² Margaretta Ocholla Bishop Titus Zakayo Ingana, Frank Ndakala and Joyce Ngure *Mapping And Documenting Indigenous Knowledge In Science, Technology And Innovation In Machakos District-Kenya* (2010) Kenya, *Directorate Of Research Management And Development (DRMD)* - *Ministry Of Higher Education, Science And Technology*, 1.

³ Kenya attained independence on 12 December 1963 while Zambia attained independence on 24 October 1964, see: Encyclopaedia Britannica 'World War II to Independence' available at *https://www.britannica.com/place/Kenya/World-War-II-to-independence*, accessed on 15 February.2020.

 $^{^4}$ Treaty Establishing a Common Market for Eastern and Southern Africa, 1993. See arts 2-6 and arts 146(c) , 154 and 155.

⁵ Judicature Act Cap 8 No 16 of 1967 of the Laws of Kenya.

⁶ See art 7 of Constitution of the Laws of Zambia.

applicability of customary law is found in s 12(1)(a) of the Local Courts Act⁷ which states that,

Local Courts shall administer the African customary law applicable to any matter before it insofar as such law is not repugnant to natural justice or morality or incompatible with the provisions of any written law.

This is known as the repugnancy clause. Kenya adopts a similar approach to customary law. The Kenyan Judicature Act in s 3(2) qualifies the application of customary law in a similar way to the repugnancy clause structure in stating that African customary law shall apply if it is '...not repugnant to justice and morality or inconsistent with any written law'.

Particularly compelling is that both countries have adopted a similar approach to TK protection. They have adopted a *sui generis* approach through the enactment of independent TK protection Acts. While each Act may have been modelled off the Swakopmund Protocol formulated in the ARIPO forum, Kenya and Zambia have included similar and at times different provisions in their domestic TK protection legislation. In this regard, some content within the Kenyan Act is worthy of emulation in the Zambian approach to serve for more robust TK protection for IPLCs.

4.3. Specific Issues

Before embarking on an exploration of lessons to learn from the Kenyan PTKCE Act, it is important to highlight some issues which affect the overall understanding of both the Zambian and Kenyan TK Protection Acts. Tackling these issues first adds context to some aspects of the identified lessons in section 4.4. The two important aspects which have been identified are discussed in this section. This section also draws on the relevance of the Kenyan experience in addressing the issues raised.

4.3.1. Dealing with the Claw Back Clauses

The Zambian Constitution contains a guarantee against discrimination in art 23. However, as discussed in chapter three, this non-discrimination clause is inapplicable

⁷ Local Courts Act Cap 29 of 1966 of the Laws of Zambia.

to customary law in matters of personal law. Therefore, while there is in theory protection against discrimination on the basis of gender, in practice there are exceptions or limitations created in art 23 itself. Article 23 (4)(c) and (d) in particular states that the non-discrimination provision in art. 23(1) shall not apply to any law that makes provision 'with respect to adoption, marriage, divorce, burial, devolution of property on death or other matters of personal law'. Article 23(4)(d) proceeds to state that the non-discrimination clause shall not apply for

the application in the case of members of a particular race or tribe, of customary law with respect to any matter to the exclusion of any law with respect to that matter which is applicable in the case of other persons.

These are essentially claw back clauses; the Constitution gives protection with one hand and takes it away with the other.

While it may be reasoned that these claw back clauses are made in an effort to protect and preserve the continued application of customary law in certain aspects of the lives of those to whom customary law applies, this cannot be done at the expense of perpetuating gender based discriminatory practices. Further, customary law as an evolving body of law must be responsive to advancements in calls for nondiscrimination.

Claw back clauses water down the right being protected and can have the effect of invalidating rights granted thereby nullifying them.⁸ Much criticism has been levelled against claw back clauses because of the effect they have on human rights entrenched in Constitutions and international agreements in which they exist.⁹ Beyond the issue of perpetuating discrimination, the existence of the claw back clauses in effect threatens the concept and application of constitutional supremacy in Zambia. It promotes the pursuit of parallel agendas; one in which there is a continued basis to legitimise gender based discrimination and the other where there are concerted constitutional efforts to eliminate gender based discrimination. Matters

⁸ Loveness Mapuva 'Negating the Promotion of Human Rights Through Claw-Back Clauses in the African Charter on Human and People's Rights' (2016) *International Affairs and Global Strategy* 1 at 2-3.

⁹ William Edward Adjei 'Re-Assessment of "Claw-Back" Clauses in the Enforcement of Human and Peoples' Rights in Africa' (2019) 24 *Journal of Legal Studies* 1 - 22. Also see Sandhiya Singh 'The impact of clawback clauses on human and peoples' rights in Africa' (2009) 18 *African Security Review* 95 - 104.

of personal law are an extremely problematic area when it comes to discriminatory practices against women. In particular, in the context of this thesis, while mainstream laws in Zambia move towards promoting women owning and managing their own property, the existence of the claw back clauses allows customary law to retain the ability to block women from ownership, control, management and acknowledgement of their property, including TK.

The Kenyan experience here proves instructive. The 2008 Constitution of Kenya (that is, the Constitution immediately preceding the 2010 Constitution) contained provisions similar to those in the Zambian Constitution regarding protection from discrimination. Article 82(1) of the 2008 Constitution of Kenya provided that 'no law shall make discriminatory provisions either of itself or in its effect'. This mirrors art 23(1) of the Zambian Constitution which also states, 'no law shall make any provision that is discriminatory either of itself or in its effect'. As is the case in the Zambian Constitution, the former Kenyan Constitution also contained claw back clauses in that matters of personal law and customary law were protected from scrutiny of the non-discriminatory law contained in art 82. In particular, art 82(4)(b) and (c) stated that

subsection (1)¹⁰ shall not apply to any law so far as that law makes provision: (b) with respect to adoption, marriage, divorce, burial, devolution of property on death or other matters of personal law. And (c) for the application in the case of members of a particular race or tribe of customary law with respect to any matter to the exclusion of any law with respect to that matter which is applicable in the case of other persons.

The detrimental effect of these exceptions particularly on women was seen in a number of decisions in the Kenyan courts. Among these was the decision of the Kenyan Court of Appeal in *Mukindia Kimuru v. Margaret Kanario*.¹¹ This case concerned the eligibility of a daughter to inherit from her father's estate and involved consideration of Meru customary law. The court stated that daughters are normally excluded from land inheritance but may receive a share if they remain unmarried.¹²

¹⁰ Subsection (1) of art 82 of 2008, Constitution of Kenya (repealed).

¹¹ CA No. 19 of 1999.

¹² The court cited Eugene Contran *Restatement of African Law: 2 Kenya II Law of Succession* London, Sweet & Maxwell (1969) 30.

The court on the basis of art 82(1) and (4) held that exclusion of daughters from inheritance of land is 'sanctioned' by the Constitution when a court is applying customary law in regard to devolution of property on death of the owner of that property'.¹³ This meant that the discrimination in this regard on women's right to inherit property was constitutionally sanctioned on the basis of the claw back clauses. In effect, the Meru customary law as it then was prevailed over non-discrimination provisions in the Constitution. This kind of ruling from the court which sits at the apex of the Kenyan Court hierarchy was a devastating blow to the extent of protection provided for women in terms of non-discrimination on the basis of sex and gender.¹⁴

4.3.1.1. Making the Changes

The enactment of the 2010 Kenyan Constitution drastically changed the landscape of limitations in the application of customary law. The removal of art 82 and the associated limitations on the non-discriminatory law which included the claw back clauses demonstrates the unequivocal stance which Kenya has adopted on the extent to which customary law remains valid and applicable where it conflicts with the Constitution. Article 2(4) of the 2010 Kenyan Constitution states that,

Any law, including customary law, that is inconsistent with the Constitution is void to the extent of the inconsistency, and any act or omission in contravention of the Constitution is invalid.

This clear and unconditional rule demands that customary law which contravenes the provisions of the Constitution is void.

Article 27 of the 2010 Kenyan Constitution comprehensively deals with equality and freedom from discrimination. This is a marked change from the previous art 82 provision in several ways. The observed differences are highlighted below:

1. There are no qualifications or exceptions to the applicability of the non discrimination provisions in art 27, even on the basis of customary law.

¹³ CACA No. 19 of 1999.

¹⁴ Also see *Otieno v. Ougo & Siranga* Appeal no. 31 of 1987, where the court in discussing the place of customary law and its applicability, concluded that Luo customary law trumped a woman's right to bury her husband under the common law and allowed his relatives to decide his burial place.

- 2. Article 27 introduces the issue of equality in the same section which deals with freedom from discrimination. This shows recognition of the demonstrable link between the two, more so when with regards to women.
- 3. Article 27(3) specifically mentions women and men and their right to equal treatment and proceeds to isolate specific avenues where this equal treatment may be compromised. Among the stated avenues is culture. The mention of culture demonstrates a deliberate effort to bring culture and cultural issues into the scope of matters which are subject to constitutional scrutiny to ensure equal treatment for women and men.
- 4. Article 27(5) specifies that a person shall not discriminate against another person whether directly or indirectly on various ground including sex.¹⁵ The mention of individual persons is appropriate and especially relevant in the context of customary law as individual perpetuators of gender based discrimination under the guise of applying customary law abound.
- 5. Articles 27(6) and (7) of the Kenyan Constitution sanction legislative measures and policies designed to redress disadvantages which individuals or groups may have suffered on the basis of past discrimination. Some such groups are women in general and women in IPLCs. This can be gleaned from a reading of other constitutional provisions. In particular, art 21 (3) of the Kenyan Constitution includes in the definition of vulnerable groups, 'women and members of ethnic or cultural communities' and art 260 defines 'marginalised group' as 'a group of people who, because of laws or practices before, on, or after the effective date, were or are disadvantaged by discrimination on one or more of the grounds in art 27 (4)'. With this in mind, arts 27(6) and (7) demonstrate gender sensitivity and gender responsiveness. They are gender sensitive in that they take steps to remedy what was observed through being gender sensitive. Some steps

¹⁵ Other grounds mentioned in art 27(4) of the Constitution of Kenya 2010 are 'race,

pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth'.

explicitly mentioned in art 27(6) are affirmative action, legislation and policies designed to redress previous wrongs.

The Kenyan strategy for dealing with the claw back clauses contained in the 2008 Constitution was decisive and commendable. In summary, it involved:

- 1. Repeal of the unconstitutional art 82 exemptions,
- 2. A complete overhaul on the scope and framing of the non discrimination clause in the then Kenyan Constitution,
- 3. A recognition of the possible effect the existence of art 82 may have had and making provisions within the new Constitution to address this and,
- 4. A reassessment of the Constitution as a whole; this involved ensuring that other provisions speak to and are consistent with the new non-discrimination provision.¹⁶

Kenya's removal of the claw back clauses influences the interpretation of certain provisions in the PTKCE Act. It eliminates exceptions to discriminatory customary laws and practices which can now properly be classified as unconstitutional without resort to the claw back clauses to re-legitimise them.

The Kenyan experience demonstrates that claw back clauses can be overcome. This model is an appropriate one for Zambia to follow. Removing the art 23 exemptions is an important step to reinstitute constitutional supremacy in its true sense in that there will be no room for customary law to (in)advertently trump the Constitution. Taking these steps at a constitutional level is key to achieve gender sensitive and gender responsive protection for TK in Zambia.

Such steps would remove a hiding place in the name of customary law for the perpetuation of discrimination. It would mean that in the context of ownership of property (which includes women's TK), the typical customary laws and practices based on largely patriarchal systems would not be availed protection behind the curtain of legitimate exemptions to Constitutional scrutiny.

¹⁶ See the following articles in the Constitution of Kenya 2010; art 21(3) on implementation of rights and fundamental freedoms for vulnerable and marginalised groups, art 56 on specific application of rights to minorities and marginalised groups and art 100 on promotion of representation of marginalised groups.

This would by extension flow into the interpretation of the PTK Act in Zambia and address to an extent some issues identified, for example, determination of TK holders. Section 2 of the PTK Act ties determining who a 'holder' of TK is to customary laws and practices. As a result, if a certain customary law or practice is found to be discriminatory, for instance, that women cannot own property simply because they are women, it would be void, even if that customary law or practice deals with some personal law. Discriminatory customary law could not therefore be legitimately used as a basis or as a rule to determine who could own and manage TK. This would essentially remove customary law as a barrier to TK ownership and management for women in IPLCs. It would also have a cross cutting effect in the interpretation of the PTK Act particularly on occasions where it reverts to application and exercise of rights in accordance with customary law.

Further, there is a need for Zambia to overhaul the non-discrimination clause as it presently exists in the Constitution. Making changes to specifically address gender equality and the invalidity of unconstitutional customary laws without exception is needed for Zambia to move towards achieving true gender sensitive and gender responsive TK protection. The complete repeal of the art 23 claw back clauses is not simply a matter of changing or deleting specific sections within the article itself. For the change to be effective and complete, the Constitution as a whole must be examined to fully align with the idea of gender equality and non discrimination on any basis including customary law. This holistic approach is important because it will facilitate a Constitution that is consistent as a document and plays a role in interpretating itself without contradiction.

4.3.2. Commercialisation and Commodification.

4.3.2.1. What is TK commodification and TK commercialisation?

Commodification and commercialisation are related concepts though distinct. Commodification in general means that the product or knowledge in question becomes a commodity, that is, something that can be traded or bought and sold. In effect, it becomes an article of commerce or an object of trade. ¹⁷ Commodification of culture is described as 'the process of packaging and selling cultural objects, such as performances and various lifestyles of society'.¹⁸ Although this definition is in the context of commodification of culture, because TK is an element of culture, it sheds light on what TK commodification entails.

The process of commodification involves assigning some commercial value to something which may not have had a commercial value assigned to it in the past. That is 'making something that was not a commodity previously to become a commodity'.¹⁹ There is an element of the introduction of commercial relationships, aspects and contexts into a space which was previously purely a social relationship space.²⁰ Therefore what previously was not, is essentially turned into a good or service which can be consumed by buying and selling. In the context of TK, it means attaching some commercial value to TK and availing it for sale and purchase.

Commodification involves a change in status of the subject of commodification. The subject of commodity (whether knowledge, labour, or a tangible product) becomes simply put, a saleable product which can be introduced on the market. ²¹ Marx outlined as an important requirement for commodification, that the subject of commodification must have use value and exchange value. This means it must be shown to have value to others and it should be capable of being priced.²²

¹⁷ Nancy L Lough and Ceyda Mumcu 'Berkshire Encyclopedia of World Sport' in Pfister David Levinson and Gertrud (ed) *Commodification and Commercialization* Great Barrington, MA, Berkshire Publishing Group LLC(2014) at 297.

¹⁸ Zulkifli Zulkifli and Muhammad Ridwan 'Revitalization of the traditional values lost due to the commodification of art/crafts: a case study of Bataknese traditional Ulos' (2019) 20 *Asian Ethnicity* at 541 at 546.

¹⁹ Zulkifli and Ridwan supra, at 546.

²⁰ Lough and Mumcu supra, at 297.

²¹ Al Chukwuma Okoli 'Commercialism and Commodification of Illicity: A Political Economy of Baby Buying/Selling in South East of Nigeria' (2014) 2 *International Journal of Liberal Arts and Social Science* 77.

²² Karl Marx Capital: A critique of Political Economy Volume One Penguin Books (1982)

Marx proceeds to discuss commodification in the context of capitalism and explores further requirements for the efficiency of commodification in the market economy. Also see Margaret Radin *Contested commodities: Trouble with trade in sex, children, body parts and other things* Cambridge, Harvard University Press (1996) . Radin suggests additional conditions for commodification supplementary to Marx's initial suggestions as objectification, fungibility and commensurability. This thesis restricts its discussion of commodification to what is required for a basic understanding of the

Jacob makes a pertinent observation regarding commodification in dealing with academic knowledge as a product, which is applicable in the analysis of commodification of TK. Jacob observes that the state of commodification is 'neither absolute nor permanent'.²³ The subject of commodification can change from a commodity in one moment and circumstance to a gift in a different moment or circumstance.²⁴ This is applicable to TK in that the same TK which can be perceived as a commodity, that is, where the TK is packaged and sold in exchange for some monetary or other value, or even exchanged for money within IPLCs, can be freely shared, given or applied within the traditional community for the benefit of others on different occasions. Therefore, TK can move from non commodity to commodity and back to non commodity over a short period, or over a prolonged period several times.

Once something (labour, product or knowledge) has been commodified the question of commercialisation becomes relevant because the commodified thing is potentially ready for introduction to the market. Commercialisation is, 'a process utilised to bring a new product or service to the market.'²⁵ Commercialisation can be a complex process constituting of various stages, however, in the context of this thesis the basic definition offered is sufficient.²⁶ Commercialisation introduces the element of availing the commodity to an audience (usually the target market) and moves into the business landscape. At this point, concepts of profit making, production scaling and others come to the

underlying meaning of commodification within the context of TK and does not delve into an in depth analysis of commodification as a concept, its historical underpinnings or its evolution.

²³Merle Jacob 'On Commodification and the Governance of Academic Research' (2009) 47 *Minerva* 391 at 394.

²⁴ Jacob illustrates this by referring to a carpenter who sells her labour during the week but donates her labour during the weekend to a friend who needs some carpentry expertise, therefore transforming her commodity into a gift and back to a commodity. This aptly illustrates the fluidity of the status of a commodity. See Jacob, supra.

²⁵ Arthur A. Boni 'The Business of Commercialization and Innovation' (2018) 24 *Journal of Commercial Biotechnology* 1 at 3.

²⁶ Cohen identifies four principal types of types of commercialisation as complementary commercialisation, substitutive commercialisation, encroaching commercialisation and rehabilitative commercialisation. See Erik Cohen 'The commercialization of ethnic arts' (1989) 2 *Journal of Design History* 161 at 162 – 164.

fore.²⁷ Therefore, for TK, commercialisation means making the commodified TK available for broader consumption to the market.

The question of whether knowledge can be commercialised has been examined previously from a higher education perspective, that is, the commercialisation of academic knowledge.²⁸ Just as it has been possible to commercialise academic knowledge and its distribution, TK has also been commercialised in some instances. Commercialisation can be done on two fronts. The first is where commercialisation is sought within the sphere of cultural aspects to be shared with outside consumers, for example, sharing knowledge of and performing a traditional dance as a cultural exhibit for tourism.²⁹ In this instance, TK is commercialised through sharing or exhibiting the TK in its raw form. The second context is where any trace of the traditional origin of the TK is diminished, overtaken by events or falls into the background unrecognised. For example, using TK around medicinal plant properties to eventually produce medicinal drugs or products in the pharmaceutical industry.

These avenues of commercialisation raise different issues including questions of ethics, relations between IPLCs and commercial interactions, the trade offs between potential financial gain and the integrity of TK and several others which culminate in the question of whether to commodify and commercialise TK at all. The approach the thesis takes to these questions is tackled below.

4.3.2.2. Making The Case for Commercialisation

Various scholars have discussed at length and in different contexts the question of whether to commercialise TK.³⁰ The conversation on TK commodification

²⁷ Casey and Martens, supra.

²⁸ Ilkka Kauppinen ' Different Meanings of 'Knowledge as Commodity' in the Context of Higher Education' (2014) 40 *Critical sociology* 393.

²⁹ TK regarding knowledge of Maasai traditional which is expressed as the dance itself, has been commercialised as part of the tourism industry in Kenya and has been described as a 'multi million dollar attraction'. See Naomi Lanoi Leleto 'Maasai Resistance to Cultural Appropriation in Tourism' (2019) 5 *The Indigenous Peoples' Journal of Law, Culture & Resistance* 21 at 24.

³⁰ Peter Ho Karlis Rokpelnis, Gong Cheng and Heng Zhao 'Consumer Perceptions of the Commodification and Related Conservation of Traditional Indigenous Naxi Forest Products as Credence Goods (China)' (2018) 10 *Sustainability* 1 at 2.

and commercialisation is a broad one.³¹ Arguments for and against commodification and/or commercialisation have been advanced. Some scholars outrightly reject commercialisation for various reasons. These include fears of loss of spiritual and cultural value of TK, potential for misappropriation, threat to social structures and livelihoods of IPLCs and environmental concerns arising from pressure on genetic resources linked to TK.³²

Conversely, other scholars express support for the idea of commodification and/or commercialisation for reasons such as potential to improve the livelihoods of IPLCs, creation of social and economic relations with the outside world and sharing TK and cultural aspects with and to the benefit of the wider community beyond IPLCs.³³

A different segment of scholars presents a third school of thought in the form of what has been termed 'new commodification'. In this line of thought, the scholars argue that there needs to be a shift from the one dimensional classification of previously typically non commodity items, services, knowledge or labour including indigenous culture. These scholars argue that the ability to commodify things should be a liberating act which law should facilitate to defeat the former narrative of commodification based on desperation or done clandestinely for fear of criticism for commodifying what was categorised as non commodifiable on moral, ethical, social or other grounds.³⁴ Examples of non

³¹ Commodification and commercialisation though distinguishable are interrelated. Arguments advanced or comments made in this thesis in relation to commodification are applicable to commercialisation and vice versa.

³² Michael R Dove 'Center, periphery, and biodiversity: A paradox of governance and a development challenge' in Stabinsky Stephen B. Brush and Doreen (ed) *Valuing local knowledge. Indigenous people and intellectual property rights* Washington DC, Island Press(1996), Debora J Halbert *Resisting intellectual property.* Routledge (2005), David Orozco and Latha Poonamallee 'The Role of Ethics in the Commercialization of Indigenous Knowledge' (2014) 119 *Journal of Business Ethics* 275.

³³ Jana M Hawley 'The Commercialization of Old Order Amish Quilts: Enduring and Changing Cultural Meanings ' (2005) 23 *Clothing & Textiles Research Journal* 102 and

Victoria F. Phillips 'Commodification, Intellectual Property and the Quilters of Gee's Bend' (2007) 15 *Journal of Gender, Social Policy & the Law* 359, Julie Yassine 'IP Rights and Indigenous Rights: Between Commercialization and Humanization of Traditional Knowledge' (2018) 20 *San Diego International Law Journal* 71 at 88.

³⁴ Martha Ertman and Joan C. Williams (ed) *Rethinking Commodification: Cases and Readings in Law and Culture*, (2005) New York, NYU Press. There have been arguments to the contrary

commodifiable things on moral and ethical grounds are reproductive rights and sale of body organs.

While the questions of whether to commodify and commercialise TK are important and the arguments touched on from several scholars are appreciated, the approach the thesis takes in this regard is to move past the discussion of whether TK should be commodified and commercialised. The reasoning is that rather than dwelling on whether to commodify and commercialise TK and revisiting already advanced arguments, it is more important to respond to prevailing realities and the expressed or deduced intentions of the legislature in TK protection legislation; in particular in the Zambian PTK Act.

TK holders, IPLCs who are not TK holders and the outside world³⁵ all recognise the actual and potential value of TK. While the nature, context and extent to which each group recognises the value of TK may differ, there is value recognition from all the identified groups nonetheless. An example of value assigned to TK is its potential to be used outside the confines of its traditional context as knowledge in itself, as knowledge associated with its holders or as a starting point for creations which would give rise to mainstream IP protection among other things.

The commercial or economic potential TK holds for various fields including, for example, ethnopharmacology, environmental conservation and development in general, is well accepted.³⁶ In recognition of this potential, some TK has been commoditised and commercialised whether done legitimately, that

however indicating that the liberation is only conditional on real involvement of the owners of what is sought to be commodified – see Radin, supra.

³⁵ Outside world in this context refers to those who seek to use TK outside the confines of its traditional context and who are not IPLCs.

³⁶Charity Manyeruke and Shakespeare Hamauswa Archibold Mposhi 'The Importance of Patenting Traditional Medicines in Africa: the case of Zimbabwe' (2013) 3 *International Journal of Humanities and Social Science* 236, Melisande Middleton *Using Traditional Knowledge in Economic Development : The Impact of Raised Field Irrigation on Agricultural Production in Puno, Peru* (2007) Washington DC *World Bank*, ;Sumita Chaudhuri 'Urbam poor, economic opportunties and sustainable development through traditional knowledge and practices' (2015) 26 *Problemi di bioetica* 86, Teshager W Dagne *Intellectual property and traditional knowledge in the global economy : translating geographical indications for development* 1st ed London, Routledge (2015) 242., Chidi Oguamanam 'Localizing Intellectual Property in the Globalization Epoch: The Integration of Indigenous Knowledge' (2004) 11 *Indiana General of Global Legal Studies* 135.

is, in accordance with TK protection legislation, or done as a result of misappropriation with no benefits flowing back to the IPLCs. This has gone to the extent that TK has been used directly and indirectly to push product sales through references to aspects of TK or IPLCs in product marketing.³⁷

Association of products with naturalness, exoticism, and IPLCs may be a factor that appeals to certain groups within the target market for product sales. The desire to be associated with IPLCs, their perceived connection to nature and the naturalness of any products that they may use can be a powerful tool for corporations in generating sales. Essentially, unbeknownst to the IPLCs they begin to play the role of influencers for the product.³⁸ The association of IPLCs with the product impacts potential buyers playing a role in or influencing them to buy into the product or service. In the age of social media and digital marketing, influencers are highly sought after and have become important parts of sales and marketing strategies.³⁹ However, this is happening in some cases without the knowledge of the IPLCs and without any benefits flowing back to them for their role as 'unofficial' influencers.⁴⁰ In effect, there is false attribution of their TK and themselves as IPLCs to these products. This constitutes a moral rights infringement and a deprivation of commercial gain arising from their TK and personage.

Therefore, because of the potential TK holds, the value considerations attached to it which potentially conflict with pure commercial considerations, and that TK is being commoditised and commercialised, the question of whether the Zambian PTK Act sufficiently addresses TK commercialisation and its surrounding considerations is an important one in the quest for gender sensitive and gender responsive TK protection.

³⁷ See Susy Frankel 'Traditional Knowledge, Indigenous Peoples, and Local Communities' in Pila Rochelle Dreyfuss and Justine (ed) *The Oxford Handbook of Intellectual Property Law* Oxford, Oxford University Press(2018).

³⁸ Sara McCorquodale *Influence : how social media influencers are shaping our digital future* London, Bloomsbury Business (2019) at 11.

³⁹ Carolina Stubb ; Anna-Greta Nyström ; Jonas Colliander 'Influencer marketing: The impact of disclosing sponsorship compensation justification on sponsored content effectiveness' (2019) 23 *Journal of communication management* 109.

⁴⁰ The influencer industry was forecast to be worth 10 billion United States Dollars by 2020, see McCorquodale, supra at 12.

4.3.2.3. Zambia's Approach to Commercialisation in the PTK Act

The preamble to the PTK Act mentions one of the stated purposes of the Act as to, 'promote fair and equitable distribution of the benefits derived from the exploitation of TK'. Another stated purpose of the Act is to ensure TK exploitation is done with prior informed consent of the traditional communities. Within the ambit of the Act, exploitation in reference to TK as a product means

(i) manufacturing, importing, offering for sale, selling or using the product beyond the traditional context;

(ii) being in possession of the product for the purposes of offering it for sale, selling it or using it beyond the traditional context.⁴¹

Exploitation in reference to TK as a method or process means '(i) making use of the method or process beyond the traditional context.' ⁴²

The definition of exploitation presented in the Act speaks to the questions of commodification and commercialisation in that it specifically mentions offering for sale or selling TK products and/processes. The stated purpose of the Act as to ensure exploitation is done with prior informed consent indicates a recognition of the reality that TK can, may or is already being offered for sale.

The Zambian PTK Act in s 4(5) in outlining the principles and concepts to apply and use as a basis for access to and use of TK mentions recognition of the commercial value of TK.⁴³ This confirms that commercial value of TK is acknowledged and per the Act should be a consideration in access to and use of TK. Section 4(5)(i) highlights 'fair competition' as another concept to apply in access to and use of TK. Section 2 of the PTK Act defines fair competition as 'any act of competition that is based on honest practices in industrial or commercial matters and includes various acts that do not mislead the public or cause confusion'. The inclusion of fair competition in this section is indicative of some attempt or at least an intention to regulate the use of TK in a commercial

⁴¹ Section 2 of the Zambian PTK Act.

⁴² Section 2 of the Zambian PTK Act.

⁴³ Section 4(5)(a) of the Zambian PTK Act.

context. Additionally, the specific inclusion of fair competition as including acts that do not mislead the public or cause confusion is further indicative of public use of TK in a commercial context.

Included among the rights of holders in s 17 of the PTK Act is the right to authorise exploitation and prevent exploitation without prior informed consent. This essentially confers the right to manufacture, import, offer for sale and sell TK beyond the traditional context. Put differently, TK holders have the exclusive right to commodify and commercialise their TK and the right to prevent such commodification and commercialisation of their TK by third parties without their prior informed consent. Section 67 of the PTK Act goes to the extent of placing a responsibility on traditional communities to 'prohibit any person who does not belong to the traditional community from using its TK... without prior informed consent'. Placing a mandatory requirement on IPLCs to prohibit unauthorised exploitation suggests that this right to exploit ranks highly.

The inclusion of this right under the catalogue of rights which accrue to TK holders demonstrates a pro commodification and commercialisation approach to TK. This pro commercialisation approach is also observable in the Zambian National IP Policy. It includes as a measure towards achieving specific objective 5 in the policy, which relates to TK protection, promoting the use and commercialisation of TK for the benefit of the community and the country at large.⁴⁴ The policy demonstrates an outright intention to promote TK commercialisation.

Commodification and commercialisation create a number of competing interests. Chief amongst these is the question of how and whether it is possible to proceed with commodification and commercialisation of TK without compromising its integrity. Integrity in this context refers to the tenets of TK including its spiritual, environmental, cultural and social value to IPLCs.

Once TK commercialisation is embarked on, an interdisciplinary territory is entered because there are multiple considerations including the interests of IPLCs,

⁴⁴ National Intellectual Property Policy 2020, at 9.

the interests of potential users of commercialised TK, business efficacy considerations and the environment surrounding business management. What may seem the logical, appropriate course of action from a commercial perspective may not necessarily be appropriate or correct from the perspective of TK holders. For example, in a study which elicited the views of the San, an indigenous community, in the cultivation of the Hoodia plant on a commercial scale outside its natural environment, some respondents expressed that if cultivated outside its natural habitat, the plant would lose its life force and power to heal.⁴⁵ While growing the plant on a commercial scale would mean doing so outside its traditional habitat in the San communities – which appears sensible from a commercial perspective– for the spiritual and practical value of the plant. This difference in perspective demonstrates the need to address competing interests in the commodification and commercialisation of TK.

4.3.2.4. Gender Considerations in Commercialisation

Gender considerations in TK commercialisation are important because women and men in IPLCs may have different views on commercialisation. Moreover, women and men use and perceive TK differently and this should affect commercialisation strategies. Importantly, the gendered context in the use of TK within IPLCs necessitates special considerations if TK commodification and commercialisation are to be equally effective for both women and men.

An example of this is seen from research carried out with the San indigenous group. The San are an indigenous group with communities distributed in parts of Southern Africa including South Africa, Botswana and Namibia.⁴⁶ The research conducted shows the differences between women and men in their views on TK commercialisation and identifies reasons behind those differences.⁴⁷ The study through a series of fictitious scenarios gathered first

⁴⁵ Saskia Vermeylen 'From life force to slimming aid: Exploring views on the commodification of traditional medicinal knowledge' (2008) 28 *Applied Geography* at 224 - 231.

⁴⁶ Carina M. Schlebusch, Frans Prins & Marlize Lombard et al 'The disappearing San of southeastern Africa and their genetic affinities' (2016) 135 *Human Genetics 1365*.

⁴⁷ Vermeylen, supra, at 229.

hand information on whether the San favoured complete refusal to share their TK, agreement to share their TK in exchange for a share of profits from sale of TK products without any part in IPRs obtained on the basis of the products or willingness to share TK provided they receive legal protection and can control the use of their TK without necessarily receiving financial rewards.

Most women favoured sharing their TK in exchange for a share of profits from sale of TK products while most men were willing to share TK but wanted to retain control and were not necessarily concerned that there was no guarantee of financial reward.⁴⁸ Women were concerned with financial empowerment because as women they had little or no control over financial resources and most labour they provide is unpaid, hence they are generally excluded from the cash economy. In contrast, the men were more concerned with restoring and maintaining their human dignity.⁴⁹

For Zambia's TK commercialisation efforts to succeed from the perspective of women in IPLCs, it is important that commercialisation strategies be developed which ensure women's participation. In fact, TK commercialisation is an ideal area where women's TK in particular can excel. This is the case in that women's TK can lead to production of specialised or unique products which have in the past proven commercially viable and lucrative.⁵⁰

The benefits of gender sensitive and responsive TK commercialisation include female economic empowerment and increased opportunities for women to enhance their business experience and acumen. ⁵¹ TK commercialisation initiatives must therefore be set up to target women as well and ensure that they have real access to and control over benefits derived from commercialisation of individual TK where women's TK is involved and communal benefits where community owned TK is involved. Commercialisation undoubtedly involves an introduction of business considerations alongside the actual TK being commercialised. Since women in

⁴⁸ Vermeylen, supra at 227 -8.

⁴⁹ Vermeylen, supra, at 227 – 229.

⁵⁰ Phillips, supra.

⁵¹ Leleto, supra.

general and more so women in IPLCs have been on the fringes of business dealings and aspects of commercial transactions, providing training on understanding the value of their TK, maximising its exploitation and other surrounding issues is essential as an empowerment initiative. Kenya sets an example in this regard which Zambia can emulate. For instance, the project 'Developing Leadership and Business Skills for Informal Women Workers in Fair Trade' under the Basecamp Maasai Brand includes training women in protecting their beadwork and getting trademark protection for their work.⁵² Resultantly, Maasai women with TK on beadwork use this knowledge to create beadwork which they then use to generate income.⁵³ The Zulu rural women of KwaZulu-Natal, South Africa are a group which has demonstrated innovativeness and creativity in the use of their TK.⁵⁴ The indigenous craft of beadwork these women produce using their knowledge of the different meanings different beads have at different stages in life has served to empower them as entrepreneurs and their communities. ⁵⁵ These women are constantly harnessing, creating recognition for, and benefiting from commercialisation of their TK.⁵⁶

Taking steps to develop policies which reserve certain sectors involving TK products and services specifically for women in IPLCs to eliminate competition from non IPLC traders will serve to protect the industry for women in IPLCs. Commodification and commercialisation can also lend itself to mass production. For mass production to make commercial sense and benefit from economies of scale, there would likely be some adjustments required to the traditional way of manufacturing or producing the TK involved. However, the detachment from traditional production processes and handling of resources can

⁵² Leslie Vryenhoek Developing Women's Leadership and Business Skills (2016) Women in Informal Employment Globalizing and Organzing, available at https://www.wiego.org/sites/default/files/resources/files/Women-Leadership-and-Business-Skills-LVryenhoek-CaseStudy-Nov2016.pdf, 4.

⁵³Regina Scheyvens 'Promoting Women's Empowerment Through Involvement in Ecotourism: Experiences from the Third World' (2000) 8 *Journal of Sustainable Tourism* 232.

⁵⁴ Desmond Osaretin Oriakhogba 'Empowering Rural Women Crafters in Kwazulu-Natal: The Dynamics of Intellectual Property, Traditional Cultural Expressions, Innovation and Social Entrepreneurship' (2020) 137 South African Law Journal 145 at 145.

⁵⁵Oriakhogba supra at 149 -152. This has been done in particular under the 'Woza Moya' project of the Hillcrest AIDS Centre Trust ('HACT'), a non-profit organisation in, KwaZulu-Natal, South Africa.

⁵⁶ Oriakhogba supra at 147.

result in a loss of personhood in the TK and unwittingly interfere with the sacredness of TK or assigned non commercial value. Including and implementing the recommended safeguards on stronger moral rights protection suggested for the Zambian PTK Act in section 3.5 of chapter three in this thesis is an integral part of how to structure commercialisation without running the risk of compromising the non commercial value of TK.

Ensuring that the structure of market transactions does not pose unfair risks to women in IPLCs as they have been identified as 'most often at risk of getting hurt in market transactions'⁵⁷ is important. Possible ways of structuring TK commodification and commercialisation include setting up community cooperatives through which the TK commercial transactions take place. This often involves appointing some representatives from the IPLCs for the cooperative to be the front facing part of the operation. At this stage already, precautions can be taken to ensure women's interests by making it mandatory that there be equal male and female representation accompanied by equal ability of women to influence and wield decision making power for the group in the same way as their male counterparts.

Kenya provides a good practical example of positive steps towards TK exploitation within the meaning of the Zambian PTK Act. Meetings have been held to discuss the best way to unlock Kenya's potential in use of TK.⁵⁸ These discussions have not only involved government ministries and authorities but they have also capitalised on the support of international organisations such as the United Nations. The Kenyan strategy enlists the participation of various stakeholders including TK holders, governments, research institutions and IP organisation members among others. While government is included in the above discussed initiative it is a collaborative one incorporating different actors. Some Kenyan IPLCs have themselves also demonstrated initiative to take steps to commercialise TK. For example, the Maasai community in Kenya requested assistance from WIPO in terms

⁵⁷ Michael J. Sandel 'What Money Can't Buy: The Moral Limits of Markets' in Williams Martha M. Ertman & Joan C. (ed) *Rethinking Commodificiation* New York, NYU Press(2005) 122.

⁵⁸Geoffrey Omedo and Kabaka Watai 'Unlocking Kenya's BusinessPotential Arising from the use of its Traditional Knowledge' available at *https://abs-sustainabledevelopment.net/story/kenyas-business-potential-arising-from-biodiversity-and-traditional-knowledge/* accessed on 1 July.2021.

of steps to document and preserve their cultural heritage including TK and TCEs.⁵⁹ The Kenyan approach demonstrates that for the TK commercialisation process to take strides forward, several actors must champion it. Beyond this, it is important that the participants in the commercialisation process and the steps taken to ensure that commercialisation returns real benefits for IPLCs are gender sensitive and gender responsive.

4.4. Lessons to Learn from Kenya

This portion of the chapter canvasses the Kenyan PTKCE and isolates specific aspects in which the Zambian PTK Act can emulate the Kenyan approach. The analysis does not cover all sections in the Kenyan PTKCE but deals with selected provisions deemed relevant for this thesis.

4.4.1. The Preambles

From the onset, in its preamble, the Kenyan PTKCE Act outlines its purpose as being to 'provide a framework for the protection and promotion of TK'. ⁶⁰ The preamble further makes a direct connection to the existence of the PTKCE Act as a tool to give effect to the Constitutional protection provided for TK in arts 11, 40, and 69 of the Kenyan Constitution. It is an essential function the Act is intended to serve. This provides an immensely powerful starting point in terms of the position TK protection occupies and the priority level theoretically attached to it as constitutionally protected subject matter.

However, in the Zambian PTK Act this is not the case. The Zambian Constitution does not address TK protection in particular nor directly either in the Bill of Rights or other constitutional provisions. At best it touches on TK as a limited

⁵⁹Wend Wendland and Jessyca Van Weelde 'Digitizing Traditional Culture' available at *https://www.wipo.int/wipo_magazine/en/2008/03/article_0009.html* accessed on 12 July.2021.

⁶⁰ Preamble states 'AN ACT of Parliament to provide a framework for the protection and promotion of traditional knowledge and cultural expressions; to give effect to arts 11, 40 and 69(L) (c) of the Constitution; and for connected purposes'.

component of different rights categories of which TK is not the focal point.⁶¹ This is unsatisfactory considering the importance of TK and the arguments presented in chapter three for the appropriateness of the inclusion of TK in the Constitution. Drawing on a constitutional basis for the PTK Act as is the case in Kenya presents a stronger foundation for TK protection. Zambia should emulate the Kenyan example in this regard. Further, the nature of constitutional provisions from which the Zambian PTK Act should draw should be drafted to be gender sensitive and gender responsive. That is, among constitutional provisions directed towards TK protection from which the PTK Act should draw, there should be included provisions directed at gendered TK protection including mandated recognition for women's TK and deliberate equal protection for women's TK.

4.4.2. Interpretation Sections

Interpretation sections define how certain words and phrases within an Act should be understood. Based on these definitions and explanations, an understanding of entire sections within the Act is generated. Therefore, these words and phrases play a major role in determining the scope, extent and nature of application of legal provisions within an Act.

The Zambian PTK Act and the Kenyan PTKCE Act share some similarities in terms of which words and phrases appear in the interpretation sections. However, there are some differences in the definitions accorded to some terms. In some instances, terms in the Zambian PTK Act have not been defined while in the Kenyan PTKCE Act they have been defined. In chapter three, an analysis was done of selected terms in s 2 of the Zambian PTK Act also particularly in the context of gender sensitivity and gender responsiveness. In this section the definitions of 'customary laws and practices' and 'owners' in the Kenyan and Zambian TK Protection Acts are compared while remaining attentive to the gender component of the analysis.

Customary laws and practices – the Kenyan PTKCE Act defines this as 'customary laws, norms and practices of local and traditional communities that are

⁶¹ See chapter three section 3.4. of this thesis for further explanation.

legally recognised in Kenya'. The Zambian PTK Act presents the definition of customary laws and practices as 'customary laws, values, norms, protocols and practices of a traditional community'. While the general meaning attached to customary laws and practices is the same in both Acts, the Kenyan context presents an important condition for something to constitute a customary law and practice within the ambit of the Kenyan PTKCE Act, that is, that the customary law, norm or practice must be legally recognised in Kenya. This is an important qualification because it means purported customary laws, norms or practices that are not legally recognised will not qualify as customary law or practice. What constitutes 'legally recognised' can be gleaned from art 2(4) of the Kenyan Constitution, that is, customary law that is not inconsistent with the Kenyan Constitution.

On the other hand, the Zambian PTK Act creates no such requirement. The implication of this is that customary laws, values, norms or practices will qualify as such even if they are an illegality within the ambit of the laws of Zambia. In this regard, the biggest issue to tackle is the question of in which situations customary law would be deemed invalid or illegal. At this juncture, the Constitution and the repugnancy clause enter the analysis. Customary law which is inconsistent with the Constitution would technically be 'illegal' customary law. However, even if Zambia were to emulate the Kenyan approach in limiting the scope of definition of customary law and practices through the introduction of a legality clause, this would serve little purpose. This is because of the claw back clause found in art 23 of the Zambian Constitution. Whatever would be achieved by ousting 'illegal' customary law would be reversed by the art 23 exceptions which essentially clothe discriminatory customary laws relating to matters of personal law with legality. Therefore, to effectively emulate the Kenyan example, Zambia needs to first address the problem that exists in the claw back clause in art 23 as explained in section 4.3.1 of this chapter. The next step would be to alter the definition of customary law to explicitly exclude 'illegal' customary laws and norms from the definition within the PTK Act.

Owner – Unlike the Zambian PTK Act, the Kenyan PTKCE Act defines the term owner. Per s 2 of the PTKCE Act, owner means

local and traditional communities, and recognized individuals or organizations within such communities in whom the custody or protection of

TK and cultural expressions are entrusted in accordance with the customary law and practices of that community.

The presence of a definition of an owner within the Kenyan PTKCE Act in itself is important and is a positive thing. In this regard the Kenya PTKCE Act provides a good example. However, an analysis of the content of the definition of an owner some shortcomings. First, the position of an owner is restricted to recognised individuals or organisations within the community. However, the PTKCE Act does not explain what constitutes or qualifies as recognition. It is also silent on who should do the recognising. Should it be the State? Is it customary law recognition or is there some other organisation or standard of recognition envisioned? These unanswered questions are problematic and create a serious gap in the real understanding of an 'owner' as intended in the Kenyan Act.

The attachment of ownership to customary law in the Kenyan definition while not ideal can be overcome because of the nature of the Kenyan Constitution of 2010 and the changes applied in terms of non discrimination, equality and the validity of customary law. The Kenyan PTKCE Act does not address gender aspects of the definition. In view of the context within which ownership operates in customary law societies, it is important that the definition explicitly include that both women and men can qualify as owners in the Act. While Zambia should emulate the inclusion of the definition of an owner into her own PTK Act, the exact content should be refined to avoid ambiguity and reflect gender sensitivity and gender responsiveness.

4.4.3. Guiding Principles

Section 3 of the Kenyan PTKCE Act sets the standard for the interpretation and administration of the Act in the exercise of powers conferred under the Act. It states that every person carrying out functions under the PTKCE Act must be guided by the national values and principles of governance contained in art 10 of the Kenyan Constitution.⁶² This is commendable because the PTKCE Act again seizes

⁶² Article 10 (2) Constitution of Kenya 2010

^{&#}x27;(2) The national values and principles of governance include— (a) patriotism, national unity, sharing and devolution of power, the rule of law, democracy and participation of the people; (b) human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination and

the opportunity to draw on the constitutional link created and reinforces national principles and ideologies. A particularly relevant national value in the context of gendered TK protection is art 10(2) (b) which refers to national principles of equality, non-discrimination and protection of the marginalised among others. These descriptions apply to women in IPLCs and by extension would be women TK holders. In contrast the Zambian PTK Act does not make a connection between the interpretation of the PTK Act, exercise of functions and administration of it and national values. This is a missed opportunity because the Zambian Constitution as it exists contains national principles the application of which are fundamental to the execution and administration of the PTK Act in a gender sensitive and gender responsive way, notwithstanding the existence of the claw back clauses.

Particularly, art 8 (d) of the Zambian Constitution includes equity, social justice and non discrimination as national values, all of which are relevant to gendered TK protection. Zambia should therefore glean from the Kenyan model and utilise the opportunity create a constitutional connection through provision of a dedicated section within the Act which outlines the role of national principles and values as guiding principles for individuals and institutions in the exercise of functions or in the interpretation and administration of the PTK Act.

4.4.4. Responsibility of the State

The State is a key player in TK protection. Thus, it is important to capture the onus placed on the State in terms of its roles and responsibilities in the TK protection landscape. The Kenyan PTKCE Act demonstrates awareness of this fundamental need. The Kenyan governmental system structure includes county governments and national government.⁶³ Therefore, the responsibilities in TK protection have been allocated on these two levels. However, these responsibilities are interrelated and may overlap. The specific responsibilities mentioned in s 5 of the PTKCE Act referred to as responsibilities of the national

protection of the marginalised; (c) good governance, integrity, transparency and accountability; and sustainable development'.

 $^{^{63}}$ Article 174 of the Kenyan Constitution of 2010 creates a devolved government system outlining devolved government principles and objectives. Parts 2 and 3 of the Constitution create county governments and detail their functions and powers in arts 176 - 199.

government present a more holistic, high level view of what responsibilities rest on the national government while those in s 4 which refer to the county governments contain more specific aspects which harmonise with those presented within the scope of national responsibilities. Among the responsibilities of county and national governments described in ss 4 - 5 are promotion and conservation of TK, protection from misuse and misappropriation of TK among others.

An example of a more specific responsibility placed on the State connected to the generic responsibilities created in ss 4 and 5 is found in s 18(4) of the Kenyan PTKCE Act. It provides that the 'national government in consultation with county governments shall establish mechanisms that enable the communities to prevent the misappropriation, misuse or unlawful access and exploitation of TK...'. This places the onus on the State to establish mechanisms to enable communities to protect their TK. This is appropriate because IPLCs in themselves may not have the capacity or resources to mobilise TK protection in terms of preventing exploitation or misuse on their own.

Section 18(4) of Kenyan PTKCE Act stands in stark contrast to s 67 of the Zambian PTK Act which places a heavy responsibility on traditional communities to prohibit unauthorised use of TK. There is no obligation imposed on the state to create an enabling environment or enabling mechanisms for the required prohibition. IPLCs may not have the capacity or resources to implement these prohibitions (notwithstanding that the precise meaning of prohibitions is unclear in the Act). This is even more so when gender considerations are factored in. Women in IPLCs face even greater challenges in defending their TK owing to the customary law context within which TK operates.

The failure to outline responsibilities of the state in TK protection is particularly strange because the PTK Act explicitly mentions the responsibilities of other actors such as traditional communities⁶⁴ and customs officers⁶⁵ in the protection of TK. The inclusion of a provision which addresses state responsibility is

⁶⁴ See s 67 of the Zambian PTK Act.

⁶⁵ See s 68 of the Zambian PTK Act.

important for purposes of state accountability and a clear delineation of the scope at least from a high level perspective of the responsibilities of the state. This is a gaping hole in the Zambian PTK Act which needs to be filled.

The Kenyan approach in including provisions which directly address the State's responsibilities is the superior approach. Outrightly placing obligations on national government⁶⁶ is something that Zambia can learn from. Placing a positive obligation on the state, hand in hand with local governments to carry out specific responsibilities with respect to TK to create mechanisms to enable IPLCs to enforce their TK protection will make for more effective protection. Further, a specific application of gender considerations in the nature of responsibilities or obligations placed on the State to ensure that women's TK and women's interests in their TK are equally protected is essential for Zambia. This entails the addition of protective covers which acknowledge, address, and respond to women's TK protection needs. Examples of such protective covers are:

- 1. Create the specific obligation to help women to enforce their TK,
- 2. Create the specific obligation to establish effective mechanisms for women to, assisted by the state, enforce their TK protection,
- Undertake to allocate a portion of resources to empowering women with knowledge and resources on TK abuse, misuse and policing, and
- Create suitable reporting mechanisms for unauthorised use of TK including various channels easily accessible to IPLCs including women.

However, the instructiveness of ss 4 and 5 of the Kenyan PTKCE Act is limited to the principle of inclusion of the State's responsibilities in TK protection. These sections fail to adopt a gendered perspective to the content of the responsibilities of the government. Some suggestions for specific responsibilities which would reflect gender considerations in the Zambian PTK Act include placing the onus on the State to;

⁶⁶ Along with county governments per the Kenyan context.

- 1. Ensure the recognition of women's TK,
- 2. Ensure that both men and women receive equal protection under the PTK Act,
- 3. Remove barriers of ownership of TK for women,
- 4. Create mechanisms for and allocate resources to promotion of women owned TK, and
- 5. Facilitate TK registration for men and women in IPLCs.

Therefore, while Zambia should imitate the Kenyan approach, there is need to apply a gender sensitive and gender responsive eye to the formulation of the State's responsibilities in TK protection for inclusion in the PTK Act.

4.4.5. TK Protection Criteria

Section 6(a) of the Kenyan PTKCE Act states that protection will be granted to TK that is 'generated, preserved and transmitted from one generation to another, within a community, for economic, ritual, narrative, decorative or recreational purposes'. This element of protection criteria is comparable to the protection conditions set out in s 14(1)(a) of the Zambian PTK Act which provides that TK shall be protected if it 'is generated, preserved and transmitted in a traditional and intergenerational context'.

While both protection criteria refer to generation, preservation, and transmission of TK in an intergenerational context, an observable difference is that the Kenyan criterion extends to cover the purposes for which the TK may have been generated. This level of detail not only recognises the diversity of purposes which lead to TK generation but presents an opportunity to reflect gender considerations. These categories can be extended to include domestic work or other areas where women's TK may have been typically classified simply as 'women's work'. Therefore, the introduction of categorisations of purposes for which TK may have been generated, along with a blanket inclusion of 'or other similar avenues' serves as an opportunity to contribute to gender sensitive and gender responsive TK protection. This would be a beneficial addition to the protection criteria in the Zambian PTK Act.

4.4.6. Duration of protection - Individual vs Community

The Kenyan and Zambian TK protection Acts grant protection to TK holders provided they meet the respective criteria set out. Section 13 of the Kenyan Act states that 'TK shall be protected for so long as the knowledge fulfils the protection criteria referred to under section 6'.⁶⁷ Section 24 of the Zambian PTK states that

TK shall be protected for as long as the knowledge fulfils the protection criteria referred to in section fourteen,⁶⁸ except that where traditional knowledge belongs exclusively to an individual, the protection given, in accordance with this Act, shall last for twenty-five years following the exploitation by the individual of the traditional knowledge beyond its traditional context.

The Zambian TK Act creates a distinction in the nature of protection granted to individual TK holders versus the traditional community as a whole or groups within the traditional community. The basis of this distinction is unclear. It is also uncertain at which point in the exploitation the 25 year period begins to run and questions regarding administrative and technical issues surrounding the exploitation arise and remain unanswered. For example, there is no direction regarding whether the exploitation should be formalised, documented or registered in some way in order to trigger the time period or whether there is a scale or measure attached to the extent of exploitation for it to qualify as exploitation. For instance, would exploitation as a result of compulsory licensing also be included in the category of exploitation which triggers the 25 year period?

⁶⁷ Section 6 of the Kenyan PTKCE sets out the following criteria, 'Protection shall be extended to traditional ' knowledge that is- knowledge (a) generated, preserved and transmitted from one generation to another, within a community, for economic, ritual, narrative, decorative or

recreational purposes; (b) individually or collectively generated; (c) distinctively associated with or belongs to a community; and (d) 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'.

⁶⁸Section 14 of the Zambian PTK Act sets out the following, 'Traditional knowledge shall be protected in accordance with this Act if it fulfils the following conditions:

⁽a) it is generated, preserved and transmitted in a traditional and intergenerational context;

⁽b) it is distinctively associated with a traditional community, individual or group;

⁽c) it is integral to the cultural identity of a traditional community that is recognised as holding the knowledge through a form of custodianship, guardianship or collective and cultural ownership or responsibility, whether formally or informally, by customary laws and practices'.

Additionally, the choice of 25 years as the protection period is unjustified. Perhaps it is modelled after the 20 year patent protection period provided in the Zambian Patents Act.⁶⁹ If this is the basis, it is inappropriate because of the vastly different contexts in which TK and patents operate. Although individually generated TK may be difficult to pin point, when it is identified, it equally constitutes intellectual creation in a traditional context as is the case for group TK. Therefore, this distinction in duration of protection is unwarranted.

On the other hand, Kenya makes no distinction between protection afforded to individually versus collectively, group or community generated TK. This uniform approach indicates that individually and collectively generated TK are treated equally. The discriminatory treatment of individual TK authors has no basis and serves to disadvantage individual TK holders which doubtless would include men and women TK holders. In pursuit of equal treatment among and within IPLCs, it is important that individual and group authors be treated equally. Therefore, if there is to be a limitation on TK protection post exploitation, this treatment should be accorded to TK holders across the board as is the case in Kenya, whether they are groups, communities or individuals.

4.4.7. Details of TK Protection

The level of detail and precision with which the Kenyan and Zambian TK protection Acts discuss TK protection in particular differs.

The Kenyan PTKCE Act in s 18 (1) begins by stating that, 'A person shall not, in any way misappropriate, misuse, abuse, unfairly, inequitably or unlawfully access and exploit TK...'. This is a general statement which provides an overall picture of the ways in which TK should not be accessed or exploited. The choice of terms included in s 18(1) is appropriate because these words speak to TK specific issues including misappropriation, abuse and misuse.

Of particular interest is the inclusion of the terms 'unfairly and inequitably'. This creates room for gender considerations in accessing TK in that an exclusion of

⁶⁹ See section 65(1) of Patent Act No. 40 of 2016 Laws of Zambia.

gender considerations, for instance ignorance of the existence of women's TK, failure to acknowledge and reward women as TK holders while providing acknowledgement and reward for men TK holders can be deemed unfair and inequitable use. Furthermore, the prohibition against 'unlawfully' accessing TK also provides additional blanket protection which may cover gender related aspects of TK protection if proven that failure to include gender considerations, for example, proper acknowledgement of women TK holders is unlawful. This is commendable.

However, the importance of expressly including and addressing gender considerations in the overall canvassing of the description of the scope and ambit of TK protection is key. This is because arriving at a gender sensitive interpretation of s 18 is not guaranteed and may largely depend on the mind set and background of whomever seeks to interpret the provisions as well as the level at which that interpretation is being done. Hence, a specific mention of the gender aspect in overall protection would prove more effective and leave no doubt as to the position gender considerations occupy and would make it mandatory that they be accounted for in the interpretation of the provision. More importantly, specific reference to the gendered aspect of protection would create the opportunity to add to the section a gender responsive component which comes as a result of gender sensitivity.

After the generic coverage in s 18(1), the Kenyan PTKCE Act delves into significant detail regarding TK protection in terms of specific prohibited acts without the prior informed consent of TK holders or owners in s 18(2). It prohibits the following acts regarding TK without prior informed consent; ⁷⁰

- (a) reproduction of TK
- (b) publication of TK
- (c) performance or display of TK in public

(d) broadcast of TK to the public by radio, television, satellite, cable or any other means of communication

(e) translation, adaption, arrangement, transformation or modification of TK

⁷⁰ Section 18(2)(a)-(i) of the Kenyan PTKCE Act.

(f) fixation of TK through any process, including making a photograph, film or sound recording

(g) availing online or electronic transmission to the public (whether over a path or a combination of paths, or both) TK

(h) creation of derivative works

(i) making, use, offer for sale, sell, import or export TK or products derived there from.

The coverage of s 18(2) is quite broad, and some aspects are reminiscent of acts which can be prevented under the catalogue of traditional IPRs. The prohibited acts in this section reflect a profound respect for moral rights (observable in s 18(2)(e)) because unauthorised modification of the work speaks to interference with the integrity of the work and potentially offensive use which are moral rights issues.

The actions addressed also demonstrate cognisance of the pace at which the digital world is moving and how TK protection stands to be affected. In response to this, in addition to mention of identified mediums or methods of communication, there is use of blanket cover statements including 'or any other means of communication' in s 18(2)(d) in covering the prohibition against unauthorised broadcasting of TK. Specific reference to online transmission in s 18(2)(g) equally demonstrates an alertness to online TK transmission and brings such transmission within the scope of protection.

Derivative works have often proven a hiding place for unlawful TK use, misuse and abuse because of traditional arguments that building on existing knowledge essentially results in new work. Section 2 of the Kenyan PTKCE Act defines derivative work as 'any intellectual creation or innovation based upon or derived from TK or cultural expressions'. Consequently, the particular inclusion of creation of derivative works as defined in the Act in effect blocks would be unauthorised exploiters from hiding behind the notion of derivative works to unlawfully exploit TK.

In contrast, the Zambian PTK Act does not dive into this level of detail for TK protection. It simply sets out generic protection in s 4(1)(b). Section 4(1)(b) of the Zambian PTK Act protects 'TK ...against misappropriation, misuse and unlawful exploitation'. This extent of coverage when compared to s 18 of the Kenyan PTKCE

Act discussed above is considerably reduced. While misuse, misappropriation and unlawful exploitation cover common TK problems, the elements of unfair and inequitable access which create room for a gender sensitive interpretation are omitted. Additionally, the focus is on unlawful exploitation while the aspect of mere unlawful access which may not necessarily involve elements of exploitation is not included. At this point in the analysis, the generic protection provision in the Zambian PTK is lacking and can benefit from emulating aspects of the Kenyan approach and improving them with regard to gender sensitivity and gender responsiveness as explained in the preceding paragraphs.

Were the analysis to be stretched, it could be argued that further TK protection detail lies in s 17 of the Zambian PTK Act. Section 17 addresses the rights of the holder as to '(a) authorise the exploitation of the holder's TK; and (b) prevent anyone from exploiting the holder's TK without the holder's prior informed consent'. On this basis, the detailed scope of protection can be said to include prevention of unauthorised exploitation which includes per the definition in s 2 of exploitation 'manufacturing, importing, offering for sale, selling or using the product beyond the traditional context; and being in possession of the product for the purposes of offering it for sale, selling it or using it beyond the traditional context'. Even if this were to be viewed as an addition to the details of TK protection it only covers a single aspect, that is, unauthorised exploitation.⁷¹ There is no further detail on TK protection provided in the Zambian PTK Act.

The level of detail exemplified in the Kenyan PTKCE Act is important because it sets out the exact nature of prohibited acts and where necessary is couched in a way that accommodates future technological developments which may impact the scope of TK protection. Zambia needs to adopt a similar level of detail in TK protection. While the inclusion of a broader protection provision serves a purpose, it does not substitute the need to zoom in on the specifics of prohibited acts.

⁷¹ This is comparable to s 18(2)(i) of the Kenyan PTKCE Act which states 'TK shall not without prior informed consent of the owners, be used for making, use, offer for sale, sell, import or export traditional knowledge or products derived there from'.

Interestingly though, the Zambian PTK Act in addressing the protection of expressions of folklore in s 49 tackles some specifics of protection. As is the case for TK, s 49(1) first sets out general expressions of folklore protection in stating that, 'An expression of folklore shall be protected against misappropriation, misuse and unlawful exploitation.' Section 49(2) acknowledges the generality of s 49(1) and proceeds to outline specific prohibited acts. These include:

reproduction, publication, adaptation, broadcasting, public performance, communication, distribution, rental, making available to the public and fixation of the expression of folklore or any derivative of the expression of folklore; $...^{72}$

'any distortion, mutilation or other modification of, or other derogatory action in relation to, the expression of folklore' $^{73}\,$

'the acquisition or exercise of intellectual property rights over the expression of folklore or adaptations to the expression of folklore'⁷⁴

derivative of the expression of folklore or acquisition or exercise of intellectual property rights over the expression of folklore or derivative which disparages, offends or falsely suggests a connection with a traditional community or brings a traditional community into contempt or disrepute; ⁷⁵

... use or exploitation for gainful intent without equitable remuneration or benefit sharing on terms determined and agreed with the traditional community or, in default, as determined by the Agency in consultation with the traditional community. ⁷⁶

The failure to set out similar specifics for TK protection as is done for expressions of folklore is an unacceptable omission. Whether the exclusion of TK protection specifics is the result of a conscious decision on the part of the legislature, or the outcome of an unintentional omission, it is essential that these details of TK protection be included in the Zambian PTK Act in addition to the generic protection provide in s 4(1)(b) as has been done for expressions of folklore and in imitation of the Kenyan approach.

⁷² Section 49(2)(a)(i) of Zambian PTK Act.

⁷³ Section 49(2)(a)(iii) of Zambian PTK Act.

⁷⁴ Section 49(2)(a)(iv) of Zambian PTK Act.

⁷⁵ Section 49(2)(b) of Zambian PTK Act.

⁷⁶ See section 49(3)(c) of Zambian PTK Act.

4.4.8. Exceptions and Limitations to TK Protection

Exceptions are an important part of TK protection. While they provide balance between the rights of TK holders and potential TK users, they can become a hiding place for would be unscrupulous TK users. Therefore, it is essential, especially considering the nature of TK, that exceptions and their application are sufficiently addressed in the context of TK protection.

The Kenyan PTKCE Act proves instructive in this regard. Section 19 addresses the question of exceptions and limitations in TK protection. Section 19(1)(a) provides that TK protection shall 'not restrict or hinder the normal usage, development, exchange, dissemination and transmission of TK... by members of a particular community within the traditional⁷⁷ and in accordance with the customary law and practices of that community'. This exception acknowledges some important features of TK. The reference to development recognises that TK is not stagnant and can be developed within a traditional context by members of the community. The normal usage, development and exchange, dissemination and transmission of TK is made open to members of the particular community. This does not present a problem where TK is communally held. However, where TK is individually held, the implication is that members of the community may freely use the TK, develop it, exchange, disseminate and transmit it within the community context per their customary laws and practices.

This is a point of departure with the approach the Zambian PTK Act adopts. The similar provision in the Zambian PTK Act regarding exceptions is s 22. It states that, 'the protection of TK shall not be prejudicial to the continued availability of the TK within the traditional context for the practice, exchange, use and transmission of the TK by its holder'. The major point of departure with the Kenyan strategy is that in the Zambian approach, TK protection shall not be prejudicial to the activities stated in s 22, that is, availability for practise, use, exchange, and transmission only by its holder. Again, this may not present a problem where TK is communally held. However, where TK is held in an individual capacity, the provision as it is captured essentially bars the rest of the

⁷⁷ It appears the word 'context' may have been erroneously omitted in the Act.

community from practice, exchange, use and transmission of the protected TK even within the traditional context. This limiting effect may prove detrimental in that several community members may inadvertently find themselves in breach of this provision.

To compound the problem, there is no procedure set out for how traditional communities or IPLCs would go about getting permission to use individually held TK in the traditional context. Certainly, this presents practical and logistical challenges. The Zambian approach here tilts the scales of TK protection in favour of granting a broader spectrum of rights to TK holders while the Kenyan approach in this instance leans on the side of broader community rights or IPLC member users of TK. In this instance, allowing the exception to apply to community use within the traditional context is the more practical and prudent approach. The nature of TK in terms of its characteristics and the context of its use indicates that largely, it may be put to use in the community context. On the other hand, where TK is commercialised, the existence of this exception could prove a hindrance where the commercialised TK is sought to be used in a traditional context. However, this exception reflected in the Zambian Act creates fertile ground for repeated breach of TK protection even when TK is being used in the traditional context and places IPLCs subject to repercussions for breach of TK protection provisions within the Act.

A second point of departure between the two Acts is that the scope of what can be done within the exception in the Zambian Act is narrower than that presented in the Kenyan Act. The Kenyan Act includes dissemination and development of TK within the traditional context and community as exceptions. These are not included within the scope of permissible activities in the Zambian Act. This is especially strange because the exception in the Zambian Act only applies to the holder(s) themselves. Therefore, prohibiting development and dissemination by the holder within the traditional context could hinder TK innovation and further limits the use of TK within the traditional context. More specific details regarding exceptions to TK protection in the Kenyan PTKCE Act are also found in s 19. It extends TK protection only to uses outside their traditional or customary context whether for commercial gain or not.⁷⁸ Therefore, TK protection does not apply to uses within the traditional or customary context. It further mentions specific exceptions limited to non commercial use including

teaching and research for educational purposes, personal or private use, criticism or review, reporting of current events, use in the course of legal proceedings, the making of recordings and reproductions of TK or cultural expressions for inclusion in an archive or inventory exclusively for the purposes of safeguarding knowledge or cultural heritage, and incidental uses.⁷⁹

Some of these exceptions and limitations are familiar in the realm of traditional IPRs. However, there is evidence that the choice of these exceptions was not a mere transplantation of exceptions which exist in mainstream IPRs. This is seen from the inclusion of TK specific aspects in the exceptions which refer to archiving TK and safeguarding knowledge or cultural heritage. The s 19 exceptions and limitations are detailed and appear broad. This is specifically the case for the 'incidental uses' exception. However, a redeeming feature is that the section attempts to limit the scope of protection in that the exceptions in s 19(c) apply to the needs of 'non commercial use only'. This can also guide and reign in the interpretation of what may be included in the incidental uses category in line with the previous itemised exceptions in s 19(c).

Further evidence of the specific attention to the TK context in constructing the exceptions and limitations is seen in ss 19(2) and (3). These sections create conditions applicable to TK use even when the purported use falls under the exceptions created. The TK user(s) are still required to get prior informed consent and acknowledge the TK owners through express mention of the owner(s) or the place of origin of the TK during the course of use of the TK.⁸⁰ The use of the TK should not be offensive to the relevant community and

⁷⁸ Section 19(1)(b) of the Kenyan PTKCE Act.

⁷⁹ Section 19(1)(c) of the Kenyan PTKCE Act.

⁸⁰ Section 19(2) of the Kenyan PTKCE Act.

should be compatible with fair practice and with the customary laws, protocols and practices of the relevant community.⁸¹ These conditions demonstrate that moral rights, fairness and TK value considerations beyond financial value remain important, applicable and relevant even where TK use falls within the scope of applicable exceptions.

Reference to specific aspects of exceptions and limitations is lacking in the Zambian PTK Act. Section 3(3) of the PTK Act mentions that, 'the use of TK...for educational, research and experimental purposes shall be exempt from the provisions of this Act'. The level of detail and the manner in which the exceptions are expressed is narrow and insufficient. Section 3(3) only captures three instances as opportunities for exception, that is education, research and experimentation. No qualification is made that these should be non commercial uses. Additionally, the open statement of 'research' as a category for exception creates room for abuse in that would be users with commercial agendas may seek to fall under the research exception to side step TK protection requirements since there is no non commercial qualification nor is there an attachment or condition to what the purpose of the research should be.

These exceptions are not tailored to TK protection needs and circumstances as are the ones in the Kenyan PTKCE Act. Interestingly again, exceptions and limitations are laid out in detail for expressions of folklore within the Act.⁸² The Zambian PTK Act needs to include further detail on exceptions and limitations to TK protection within the Act to ensure that it provides a balanced approach between rights of TK holders and rights of TK users which can be a basis to regulate the sometimes competing interests between these groups. It is also key that along with the exceptions and regulations, conditions for the use of TK even where it falls within the ambit of an exception, are provided which speak to needs of TK holders to preserve the sanctity of their TK, their moral rights and prevent TK being used unfairly.

4.4.9. Rights of the Traditional Community

⁸¹ Section 19(3) of the Kenyan PTKCE Act.

⁸² See Section 50 of the Zambian PTK Act.

Section 10 of the Kenyan PTKCE Act deals with rights conferred on traditional communities. Admittedly, s 10 contains several terminologies. It refers to rights as being for every 'community', while the section caption describes the section as dealing with rights conferred to 'holders', and within the subsections⁸³ there is a further terminology switch to 'owners'. This may cause some confusion in terms of the application of the section and who exactly is entitled to do what in particular. This notwithstanding, for purposes of the present analysis, the focus is on s 10(3)that refers to the community which essentially comprises of IPLCs. It confers an important right on the community. It provides that, 'Every community shall make and adopt its community rules prescribing the procedures for the authorisation of the exploitation of their TK'. This is an important step in making traditional communities part of the protection process for their own TK and moving them in the direction of active involvement. The Zambian PTK Act addresses rights of the holder in s 17. Section 17 mirrors s 10(1) of the Kenyan PTKCE Act only in that it grants the exclusive right to communities to authorise exploitation of their TK. It does not contain a provision that establishes the right for community involvement in the creation of rules for authorisation of TK exploitation. The Zambian Act falls short in this regard.

However, while the extension of the rights of holders in the Zambian PTK Act to include a similar provision to s 10(3) of the Kenyan PTK is desirable, this must be done in a gender sensitive and gender responsive way which is not the case in the Kenyan Act. The process to follow in making and adopting community rules is not prescribed and creates an opportunity to ignore gender considerations. Therefore, safeguards need to be put in place to avoid such a situation. Formulation of community rules would require consultation among community members. One way to contribute to the inclusion of gender considerations is to mandate the inclusion of women and men in these community discussions which culminate in the formulation of community rules and procedures.

Bearing in mind the context within which customary law in Zambia operates, the mere mandatory inclusion of both women and men in the consultative process is

⁸³ Section 10(2) of the Kenyan PTKCE Act.

not a guarantee that women would be participative in these processes. Even where women may be active participants, it remains a possibility that their voices may be relegated into the background during these consultations ultimately resulting in rules and procedures which ignore their contributions. Hence, along with legislative requirements, there is a need to push for a change in mindset and social setup in terms of promoting the voices of women and allowing these voices to be heard effectively. This would contribute to a representative exercise of the rights created for traditional communities to adopt their own exploitation rules and procedures.

4.4.10. Authorisation of Exploitation

The right of TK holders to authorise exploitation of their TK appears in both the Zambian⁸⁴ and Kenyan⁸⁵ TK protection Acts. The conditions which need to be fulfilled leading up to authorisation for exploitation are not detailed in the Zambian PTK Act. Conversely, the Kenyan PTK canvasses some important issues surrounding authorisation to exploit.

In Kenya, authorisation to exploit can be exercised directly by TK owners or by an authorised third party (this may be the government or anyone else). Before third party authorisation can be done, s 25(1)(b) of the Kenyan PTKCE requires that there must be 'necessary consultations'. The PTKCE Act does not explain what necessary consultations means. Therefore, if by some abstract standard a consultation is deemed unnecessary and accepted to be so, there is no requirement to consult. This is especially problematic for community owned TK because there are interests of the IPLC at large to balance as opposed to the interest of a single individual TK owner.

However, s 25 (3)(a) of the Kenyan Act states that where TK owners want to grant authorisation to exploit their TK they,

shall not grant the authorisation before undertaking appropriate and documented consultations with the members of the communities, in accordance with their traditional processes for decision-making and public affairs management.

⁸⁴ Section 17 of the Zambian PTK Act.

⁸⁵ Section 25 of the Kenyan PTKCE Act.

This portion of the Act suggests that consultation with community members must be done and documented. It also makes a connection to following the traditional processes of decision making and public affairs management.

Although the requirement to consult is good and important, the manner in which the Kenyan PTKCE Act captures it presents problems for gender sensitivity and gender responsiveness. The section contains no requirement that there be equal or fair representation and input from both women and men in the community. Additionally, the requirement for adherence to traditional decision making processes is likely to result in women being disadvantaged and underrepresented or indeed unrepresented. This is on account of the traditional exclusion of women in decision making processes and the role they play traditionally in patriarchal societies. For Kenya, it may be argued that because of the measures contained in the Constitution regarding equality and the removal of the claw back clauses, that it is implied that the traditional processes should only be followed in so far as they are not discriminatory towards women. This may be plausible, however it is not a guarantee that this is the interpretation of s 25(3)(a) that will be applied.

The case is even more dangerous for Zambia. While the aspect of the inclusion of a mandatory community consultation clause in the process of authorisation for exploitation is certainly positive and worth emulating, the approach needs to be adjusted to suit the Zambian context. Particularly, the requirement that it be done in accordance with traditional processes disadvantages women in IPLCs. This is because of the manner in which IPLCs operate, that is, that women are not typically involved in decision making. Where they are consulted, on many occasions, their voices are not heard, and this is in accordance with traditional patriarchal systems and would be covered under the exceptions in art 23 of the Zambian Constitution. The transplantation of the consultation requirement as is from the Kenyan Act is inherently dangerous for gendered TK protection because it refers to consultations in 'accordance with traditional processes for decision making and public affairs management.' Women have been handicapped by these kinds of requirements because traditional processes are sometimes to their exclusion. The approach is to silence their voices and opinions or simply not require or allow their input in the decision making processes and channels.

Further, the section does not explicitly state that women must be included in the discussions. To make the provision gender sensitive and gender responsive, there must be a requirement for women to be equally involved in the consultations, and make meaningful contributions during the consultations. Additionally, the recourse to traditional decision making processes should only be applied to the extent that those processes do not exclude or disadvantage women and their ability to be part of the decision making process. Adapting the Kenyan approach in this way will ensure that the inclusion of this provision in the Zambian PTK Act is done in a gender sensitive and responsive manner.

Section 25(3)(b) of the Kenyan Act requires that the authorisation granted align with the scope of TK protection available and provide for equitable sharing of the benefits arising from TK exploitation. The requirement here for equitable benefit sharing from exploitation is essential in the gender context. While it may seem that the requirement for equitable benefit sharing is positive for IPLCs overall, there is further action needed to ensure that women are recipients of benefits and are part of the community members with whom benefits are equitably shared. Therefore, the specific mention of equitability in benefit sharing is not only in the context of the TK user in favour of whom exploitation is authorised but also within the IPLCs between women and men.

Section 25(3)(c) of the Kenyan PTKCE Act stipulates that uncertainties or disputes relating to the determination of the communities which should be involved in granting authorisation should be resolved according to customary laws and protocols of the communities involved. This provision has the potential to disadvantage women depending on the nature of the customary laws and protocols. For Kenya however, because of the unequivocal equality provisions in the Constitution, it is possible to argue against customary laws and protocols which are discriminatory against women. However, in the Zambian context the existence of the claw back clauses creates a hiding place and legalises potentially discriminatory customary laws and protocols resulting in disproportionate effects on women and men in the application of customary laws. Therefore, Zambia should incorporate this provision but with a caveat on the applicability of customary law in dispute resolution, that is, that the customary law sought to be applied should not be

discriminatory or disadvantageous to women on any basis. This approach would reflect gender sensitivity and responsiveness.

Overall, there is a gap in terms of the level of detail surrounding authorisation for exploitation of TK. Zambia can imitate Kenya in including details on consultation, benefit sharing and dispute resolution in the context of exploitation. As these provisions are emulated, it is important for Zambia to equally consider gender sensitivity and gender responsiveness in drafting and implementing these details. Whereas it is important to remain respectful towards and maintain the role of customary law in TK processes and indeed TK protection, Zambia must guard against the resort to customary in a way that prejudices women and makes them vulnerable to discriminatory or unfair treatment and exclusion on the basis of customary law. Active and direct mention of the limit of the applicability of customary law in a way that does not in its form or effect disadvantage women despite the traditionally accepted ways of consultation or dispute resolution is essential.

4.4.11. Compulsory Licensing

The Kenyan and the Zambian provisions which relate to compulsory licensing in the respective TK protection Acts while similar present important points of difference. The Zambian PTK Act in s 23 describes two situations in which a compulsory licence can be granted. These are first, that the TK is not being sufficiently exploited or second that the holder refuses to grant access where reasonable commercial terms and conditions are offered. In either scenario, for the compulsory license to be granted there must be public security or public health interests at stake and the granting of the license must fulfill a national need in relation to public health or public security.

Despite the limitations on the instances where the State through the Minister can step in to grant a compulsory license, s 23 in reality creates the obligation to sufficiently exploit TK. As earlier highlighted, the idea of 'sufficient exploitation' is not defined in the Act. This makes it difficult to determine the scope of activities which qualify as sufficient exploitation. It is also unclear who makes the decision as to whether TK is being sufficiently exploited. Section 23 empowers the Minister to make the decision to grant a

compulsory license; perhaps this may be an indication that the judgment of whether TK is being sufficiently exploited rests with the Minister.

The Kenyan approach in s 12 of the PTKCE Act provides that a compulsory exploitation license can be granted in two scenarios. First, where the owner or rights holder of the TK is not sufficiently exploiting the TK and second, where the owner or rights holder refuses to grant an exploitation license. In either scenario, there is a requirement for the prior informed consent of the TK owner(s) before the license can be granted. Unlike the Zambian Act, the Kenyan Act does not link granting a compulsory license to public health or public security interests. Rather in line with art 40(3)(b) of the Kenyan Constitution, compulsory licensing is linked to public purpose or public interest.

The requirement for prior informed consent as a condition for granting the compulsory license is counterintuitive. The very need to grant a compulsory license arises because there has been a refusal to grant the license sought through what may be termed the normal or ordinary channels. Therefore, creating an obligation to obtain prior informed consent defeats the underlying basis on which compulsory licensing is built. While it is commendable that such a requirement is a clear attempt to ensure the participation of TK holders in the licensing process, it effectively means if prior informed consent is not obtained, the compulsory license acquisition is blocked. This is undesirable in particular where public interests are concerned.

Where an application is made for a compulsory license, s 28⁸⁶ of the Kenyan PTKCE Act creates the obligation to include public consultation of holders of the TK and allow the opportunity to make representations regarding the consent application. This reflects a deliberate effort to keep IPLCs involved in the process even where there is a compulsory license at issue. The requirement for wide distribution of the application process even including using technology such as websites is a positive initiative.⁸⁷ Whether the use of such technology is in fact effective for IPLCs may be questionable considering the extent to which

⁸⁶ As read with s 27 of the Kenyan PTKCE Act.

⁸⁷ Section 28(1)(b) of the Kenyan PTKCE Act.

they may have access to this kind of technology. The obligation to identify all holders of the TK for which consent is sought before consent can be granted per s 29(1) is a precaution towards ensuring that holders are not deprived of their rights and interests and by extension benefits in TK which arise from exploitation.

In gleaning what can be learned from the Kenyan approach, the Zambian Act can emulate Kenya's slightly broader spectrum for compulsory licensing. While the basis in the Kenyan model is public purpose or public interest, the Zambian approach limits the circumstances strictly to public health or public security. It is acknowledged that the concept and exact scope of public interest has proven difficult to define and determine.⁸⁸ It immediately evokes a question of individual interest or rights pitted against those of the greater public. Granted, because the public interest concept lacks precise definition and evolves in different circumstances, it may present opportunities for abuse.

However, its ability to change and evolve in different circumstances is precisely what renders it an important, indispensable concept. It retains the advantage of being sufficiently broad to address unforeseen circumstances. Therefore, the inclusion of public interest considerations as a basis for compulsory licensing as is the case in Kenya, should be emulated in the Zambian context. There will be a need to conduct rights balancing and proportionality exercises in determining public interest considerations in the context of compulsory licensing. This has in some way already been alluded to in the Zambian PTK Act in s 4(1)(c) where it states that the PTK Act protects 'an equitable balance between rights and interests of holders and users'. To monitor the potential for abuse of public interest provisions, a suggested course of action is to capture an explanation of public interest in the Constitution. This explanation need not be exhaustive or overly precise but should merely serve a

⁸⁸ See Luboš Tichý and Michael Potacs (ed) *Public Interest in Law*, (2021) Cambridge, Intersentia Ltd., Pavel Ondřejek 'The Theoretical Basis of the Relationship Between Fundamental Rights and Public Interests' in Potacs Luboš Tichý and Michael (ed) *Public Interest in Law* Cambridge, Interesentia Ltd(2021) ;Christoph Bezemek and Tomáš Dumbrovský 'The Concept of Public Interest' in Potacs Luboš Tichý and Michael (ed) Cambridge, Interesentia Ltd(2021).

directional and guiding purpose. This will again present the opportunity to draw directly on a constitutional provision in the PTK Act for Zambia as Kenya has done in s 12 of the PTKCE Act.

The Kenyan requirement for consultation, opportunity for representation and location of the TK holders is worth imitation. However, the nature of the public consultation should be such that it is not sufficient to merely publish the application, but there must be active consultation with concerned IPLCs as TK holders if they have been identified as such. Integral to this is the need to remain conscious of gender issues prior to, during and post consultations. In selecting the media through which to conduct consultations, it is important to include methods which will allow women in IPLCs to be effectively accessed. During the consultations, it is important to encourage and facilitate the active participation of women in spite of prevailing social norms regarding women's role in decision making based on customary laws.

The coverage of compulsory licensing in the Zambian PTK is incomplete. While it addresses in part the commercial compensation as a result of compulsory licensing, it fails to attach conditions related to other considerations in the non economic value of TK. It is worth stating that it is necessary to include provisions which reflect the position of moral rights considerations in TK even in the case of compulsory licensing. In addition, the concept of sufficient exploitation must be explained to add clarity and understanding to this responsibility to exploit sufficiently.

4.4.12. Derivative Works

Derivative works entail that inspiration is drawn for the new work from other previous work.⁸⁹ Derivative work in the context of TK is not uncommon as subsequent creations can be made based on or derived from TK. Addressing TK protection in the context of derivative works is important because derivative works based on TK often acquire IPR protection. The Kenyan PTKCE Act addresses

⁸⁹ Omri Rachum-Twaig Copyright Law and Derivative Works 1st ed Routledge (2019).

derivative works. It defines derivative works as 'any intellectual creation or innovation based upon or derived from TK'.⁹⁰

The Kenyan PTKCE Act in s 18(2)(h) prohibits the creation of derivative works without prior informed consent of the TK owner(s). Section 20, provides 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.⁹¹

It makes it mandatory for a user agreement to be entered into where the derivative work is to be used for commercial or industrial purposes.⁹² It explicitly states the obligatory information which must be in the user agreement and includes information such as, a benefit sharing agreement which provides fair equitable monetary or non monetary compensation, disclosure of the TK on which the derivative work is based through mention of the TK holder(s) or its place of origin⁹³ and that the TK in the derivative work will not be subject to derogatory treatment.⁹⁴

The aspects in the Kenyan TK Act provide clear guidance on how to handle derivative works and how the IPR system interacts with TK protection for derivative works in this regard. It presents a balanced view in that IPRs in derivative works vest in the creator of the works per IP laws but also protects the interests (both economic and moral) of TK owners in the use of derivative works. The effect of ss 18 and 20 is that derivative works cannot legitimately be created if the TK owners withhold their consent. While the requirement for consent may have been in an effort to ensure TK owners are in involved in decision making on how their TK is used and retain a measure of control over it, it may have a stifling effect on the creation of TK based derivative works. This could inadvertently hinder TK development. The safeguards in ss 20(2) and (3) protect TK owners whose TK forms the basis of a derivative work therefore the waiver of the requirement for prior informed consent for the creation of

⁹⁰ Section 2 of the Kenyan PTKCE Act.

⁹¹ Section 20(1) of the Kenyan PTKCE Act.

⁹² Section 20(2) of the Kenyan PTKCE Act.

⁹³ Section 20(3)(b) of the Kenyan PTKCE Act.

 $^{^{94}}$ Section 20(3)(c) of the Kenyan PTKCE Act.

derivative works is a reasonable strategy in balancing creative interests and protection of TK holders.

The Zambian PTK does not address the issue of derivative works based on TK. It only speaks of derivatives as products extracted or developed from natural resources and derivatives of expressions of folkore (these too are not defined in the Act) in the context of unlawful acts.⁹⁵ This gap is dangerous because it leaves TK derivative works unregulated. The Kenyan strategy in acknowledging that IPRs in TK derivative works vest in the creators provides some level of encouragement and security to creators of derivative works in terms of ownership of IP in their derived work.

Furthermore, the requirements for benefit sharing agreements where the work is commercialised along with the need to acknowledge paternity of the TK component and maintain the integrity rights of the TK in the derivative work protects the interest of TK holders. However, the requirement for prior informed consent before creating a derivative work is unrealistic and may in fact hinder creative work and development of new lines of TK. Therefore, this aspect of the Kenyan approach should be omitted. Rather it should be replaced with a requirement to maintain the moral rights of the TK component even in derivative works whether commercialised or not. Adopting this method protects TK moral rights in derivative works based on TK which may be hindered from unreasonably withheld prior informed consent. However, there would need to be a slightly different approach in the case of secret TK. For secret TK, it would be appropriate to introduce a requirement for prior informed consent owing to the different considerations which may apply to it.

4.4.13. Dispute Resolution

4.4.13.1. Dispute Resolution for TK Ownership

Disputes on TK ownership may arise in various instances. This may be the case within or between IPLCs. Section 30 of the PTKCE Act of Kenya prescribes how to

⁹⁵ See s 2 and s 49 of the Zambian PTK Act.

handle disputes on TK ownership. It instructs that the parties to the dispute should resolve the matter in accordance with customary laws or other means as agreed to by the parties.⁹⁶ This indicates that there are two options for resolution of ownership disputes; one is customary law and the second is any other means agreed by the parties.

The comparable provision in the Zambian PTK Act is s 18(9). It addresses disputes as to who is the holder of TK. It directs that disputes as to who is the holder of TK must be resolved according to customary laws and practices of the communities involved. It does not mention the use of other agreed means by the parties as a further option. Therefore, in this regard it is not as broad as the Kenyan PTKCE Act. However, s 18(10) authorises the Agency⁹⁷ to act as a mediator in ownership dispute resolution by invitation or of its own volition. The effect of this is to create a second option of TK ownership dispute resolution as mediation, limited to the Agency sitting as the mediator.

The power bestowed on the Agency to enter a dispute resolution situation uninvited is problematic from both a theoretical and practical perspective. Theoretically, the PTK Act in s 18(9) is specific in that the ownership dispute must be resolved using customary law. The Agency is not an expert in customary law in general neither is it specified that the representatives of the Agency who act as mediators must have any experience in or specialisation in customary law dispute resolution. Therefore, practically, it would be difficult for the Agency representatives to mediate effectively on resolution of a customary law ownership dispute issue. The approach of the Kenyan Act in this regard is preferred because it creates a sufficiently broad range of options for dispute resolution provided the means are agreed by the parties involved.

An important issue raised in both the PTK and the PTKCE Acts is the reference to customary law as the means for dispute resolution for ownership disputes. This is dangerous on two fronts. First, the mere fact that there is a dispute

⁹⁶ Section 30(1) of the Kenyan PTKCE Act.

⁹⁷ This refers to the Patents and Companies Registration Agency (PACRA) mandated to provide business and intellectual property protection services.

between traditional communities as suggested in the Zambian Act automatically entails that more than one specific type of customary law is involved. The question of how to determine which customary law to apply in the dispute resolution arises. Though customary laws share similarities, they also present differences in some regards, for example the way issues are dealt with in patrilineal versus matrilineal societies.

Assuming this first hurdle is overcome, customary law in itself contains some elements which prejudice women with regard to property ownership. Women in some customary laws are not allowed to own or manage property.⁹⁸ Therefore the application of customary laws and practice to a dispute involving TK ownership which involves women when followed strictly may prevent women from being recognised as TK owners simply because they are women and traditionally are not permitted to own and manage property. The outcome for potentially women owned TK would be detrimental for women in IPLCs in Zambia.

On this basis, the extent to which Zambia should follow the Kenyan route regarding using customary law in dispute resolution should be done in a gender sensitive and gender responsive way. This requires that the application of customary law procedure be limited to customary laws which do not discriminate or prejudice women's ability to own property simply on the basis of customs which dictate that women cannot own property. Customary practices in which theoretically a woman can 'own' property but the said property must only be managed by her husband (for married women) or by her father, brothers or uncle (for unmarried women) solely on the basis that she is a woman must be excluded. Furthermore, as done in the Kenyan model, Zambia should expand the options for dispute resolution on TK ownership to include other methods as agreed by the parties. This creates a balance because it does not rule out use of customary law, neither does it completely restrict dispute resolution to customary law methods.

⁹⁸ Mikaela Nyman *It is just culture* Linköping University, 2013) 70. And Christine P. Mushibwe *What are the Effects of Cultural Traditions on the Education of women? (The Study of the Tumbuka People of Zambia)* University of Huddersfield, 2009) at 118,Himonga Chuma.N; Munachonga Monica 'Women's Access to Agricultural Land in Settlement schemes' (1991) 10 *Third World Legal Studies* 22.

4.4.13.2. Other Disputes Under the Act

The immediately preceding discussion applied specifically to dispute resolution surrounding TK ownership. The following discussion applies to any dispute under the scope of the Zambian PTK Act and Kenyan PTKCE Act.

Section 40 of the Kenya PTKCE Act provides options of mediation, alternative dispute resolution procedures or customary laws and practices which are not inconsistent with the Constitution as dispute resolution mechanisms in addition to court proceedings. Once more, the Kenyan Act creates a broad range of dispute resolution options. For Kenya, the inclusion of only customary law which is not inconsistent with the Constitution is effective because the Constitution does not contain claw back clauses and has strong equality and non-discrimination provisions.

The Zambian PTK Act in dealing with dispute resolution for any matter within the Act takes a different approach. Section 56(1) of the Zambian PTK empowers the registrar 'to hold proceedings for purposes of the determination of a dispute under this Act'. The extent of the powers of the registrar in these proceedings extends to discretion to accept oral evidence, ⁹⁹ make awards for costs and give directions on how they should be paid.¹⁰⁰ After the powers of the registrar to hear disputes have been outlined, the PTK Act proceeds in s 63 to declare that 'any action or proceeding relating to the infringement of a right provided for in the Act shall be brought before the High Court'. This means it is mandatory for disputes involving TK rights infringement to be heard by the High Court. A side by side reading of all the provisions from the Zambian PTK Act regarding dispute resolution indicates that:

- 1. For disputes relating to TK ownership, the dispute resolution mechanism is customary law,
- 2. For disputes related to rights infringement the dispute resolution mechanism is proceedings before the High Court,

⁹⁹ Section 56(2) of Zambian PTK Act.

¹⁰⁰ Section 56(3) of Zambian PTK Act.

- 3. For any dispute arising from the Act, the dispute can be handled by the registrar,
- 4. Where a dispute is before the registrar and appears to involve a complex point of law, the registrar may refer the matter to the High Court,¹⁰¹and
- 5. Where a dispute is handled at the registrar's level but there is dissatisfaction with the decision, the decision may be appealed to the High Court.¹⁰²

There is a further set of rules for cross border TK disputes. Section 4(4)(e) of the Zambian PTK Act entitles a holder to use alternative dispute resolution 'procedures at ARIPO to settle disputes arising from TK... shared by different traditional communities across national boundaries'. Section 6(d) deals with cross border disputes regarding TK ownership and ropes in the registrar to where applicable refer 'the dispute to a regional or an international body for resolution upon exhaustion of local remedies'. Since the dispute being referred to in this case is an ownership dispute, local remedies from the perspective of the IPLCs on the Zambian side, would be using customary law as the dispute falls within the scope of what is dealt with using customary law. Alternatively, because the registrar is empowered to handle any dispute under the Act, it can also be argued that approaching the registrar for dispute resolution in this regard would be a necessary component of exhausting local remedies.

The Zambian PTK Act does not sufficiently lay out simply and clearly which disputes under the Act are dealt with using which method or option of methods. The effect of the Act as it exists, is in fact to restrict ownership disputes to customary law and the registrar, restrict rights disputes to the High Court and the registrar and ultimately allocate the widest scope and subject matter for dispute resolution to the registrar. The appropriateness and technical competence of the office of the registrar to play this significant role in dispute resolution is questionable. It should be noted

¹⁰¹ Section 65 of Zambian PTK Act.

¹⁰² Section 64(1) of Zambian PTK Act.

that the registrar being spoken of in the Act¹⁰³refers to the person appointed as registrar in accordance with the PACRA Act.

The PACRA Act¹⁰⁴ in s 16 lays out the qualifications of the registrar. It requires that the registrar must be a legal practitioner with at least ten years experience. These qualifications are not linked to nor do they necessarily entail knowledge of or experience in TK, it's nature, associated rights, gender issues related to TK protection and other issues related to TK and dispute resolution in general. Therefore, the appointment of the registrar as responsible for dispute resolution is ill fitting.

In cases where matters reach the registrar and are appealed or referred to the High Court, the inclusion of assessors who are experts in IP or the relevant field, in this case TK, is presented as optional not mandatory. This creates a situation where the court is permitted to sit and hear TK dispute resolutions in the absence of expert assessors in TK and / IP. To compound the problem, Zambia does not have any provision akin to s 37(11) of the Kenyan PTKCE Act which discusses specific considerations in, for example, sentencing those who have been convicted of TK offences. These considerations include among others disclosure of evidence by the accused regarding distribution channels, identity of persons involved in the distribution, and source of the unauthorised TK.

While High Court judges tasked with hearing TK rights disputes and matters referred to them from the registrar may be sufficiently competent in hearing various matters, TK presents unique circumstances because of its nature and surrounding considerations. Room for error is created due to the absence of the strict obligation to invite expert assessors into court handled TK dispute resolution. This situation is risky and can result in problematic rulings or recommendations.

Zambia needs to make the dispute resolution procedure clear in terms of what sort of disputes are handled and can potentially be handled in which dispute resolution forums. The inclusion of customary law as a dispute resolution

¹⁰³ Section 2 of Zambian PTK Act.

¹⁰⁴ Act No. 4 of 2020 Laws of Zambia.

mechanism must be a qualified one, that is, subject to non discrimination against women. The involvement of the High Court particularly where rights are concerned is appropriate. However, the presence of assessors who are experts in IP and TK should be made compulsory in order to ensure the quality of proceedings. The allocation of dispute resolution to the registrar is inappropriate and must be revised.

4.4.14. Offences

A notable feature of the Kenyan PTKCE Act is the detail with which it describes TK offences and the comparatively stern nature of penalties attached to breach of provisions in the PTKCE Act. Section 37(1)(a)-(f) covers various scenarios regarding unauthorised use of TK. These include, exposure or exhibition of TK, sale, barter exchange, hire or distribution of TK, possession and control of TK in the course of trade among other things. While s 37 is quite specific, it also leaves room for expanded interpretation. Specifically, s 37(1)(f) states 'or in any manner develops any goods or service using TK'. This covers possibly unanticipated scenarios of unauthoirsed TK use though limited to in the course of trade. The inclusion of these scenarios is practical and covers a range of possible TK misuses.

Section 37(2) of the Kenyan PTKCE addresses the issue of unauthorised use of TK even outside a trade or commercial context and equally classifies this as an offence. Sections 37 (3) and (4) are impressive because they tackle specific offences related to moral rights and prescribe precise penalties for violation of paternity and integrity rights. Section 37(3) deems failure to acknowledge the source of TK as an offence and s 37(5) covers false attribution and endorsements to TK holders. The explicit reference to moral rights offences and economic rights related offences demonstrates that moral rights and economic rights in TK are both viewed as important in the Kenyan Act. In fact, the penalty attached to moral rights offences and offences for non commercial use is doubled in terms of the maximum fine that can be imposed.¹⁰⁵ However, the economic offences attract a harsher prison sentence penalty, that is, a 10 year maximum term of imprisonment. This is twice as much as that imposed for moral rights and non commercial unauthorised use of TK.¹⁰⁶ The penalty is even harsher in relation to unauthorised exercise of rights over secret TK.¹⁰⁷ This penalty is at par with that of falsely suggesting some linkage or endorsement with TK holders.¹⁰⁸

In contrast, the Zambia PTK Act in s 71 deals with offences in a generic way. In terms of specific offences directly relating to TK and rightsholders, it outlines access to TK without an access permit,¹⁰⁹ and use or exploitation of TK without prior informed consent ¹¹⁰ as offences. Out of the 12 parts, that is, parts (a) – (l) in s 71 which set out specific offences, only two expand on TK related offences directly while the other provisions focus on aspects which are more generic and related to falsification of information on licensing agreements, defacing or altering documents¹¹¹, submitting false information to the agency or Registrar¹¹², and giving false testimony before the Registrar¹¹³ among other things.

While ensuring the administrative aspects of offences are provided for, which appears to be the focus of s 71, it is important to address the practical offences that are directly related to misappropriation of TK as the Kenyan Act

¹⁰⁵ Section 37(3) Kenya PTKCE – 'A person who fails to acknowledge the source of the traditional knowledge or cultural expression commits an offence and is liable, on conviction, to a fine not exceeding one million shillings or imprisonment for a term not exceeding five years or both'.

¹⁰⁶ Section 37(1) Kenya PTKCE – '...commits an offence and is liable on conviction to imprisonment for a term not exceeding five years, or to a fine of not exceeding five hundred thousand shillings in respect of each article or item involved or to imprisonment for a term not exceeding ten years or to a

fine not exceeding one million shillings'.

¹⁰⁷ See s 37(7) Kenya PTCKE – 'A person who without authorization, discloses, subsequently uses or acquires and exercises intellectual property rights over secret traditional knowledge or cultural expressions commits an offence and is liable, on conviction, to a fine not exceeding two million shillings or imprisonment for a term not exceeding ten years or both'.

¹⁰⁸ Section 37(5) – Kenyan PTKCE – 'A person who makes false, confusing or misleading indications or allegations which, in relation to goods and services that refer to, draw upon or evoke the traditional knowledge or cultural expressions, in a way that suggests an endorsement or linkage with the holders commits an offence and is liable, on conviction, to a fine not exceeding two million shillings or imprisonment for a term not exceeding ten years or both'

¹⁰⁹ Section 71(c) of the Zambian PTK Act.

¹¹⁰ Section 71(e) of the Zambian PTK Act.

¹¹¹ Section 71 (g) of the Zambian PTK Act.

¹¹² Section 71 (h) of the Zambian PTK Act.

¹¹³ Section 71(j) of the Zambian PTK Act.

has done. Although it may be argued that the inclusion of s 71(l) of the Zambian PTK Act which states that any person who 'otherwise breaches the act commits an offence' may be considered a blanket cover for offences in the Act, providing the particulars of TK offences is important for clarity, avoidance of doubt in implementing the Act and holding those in breach criminally liable. Zambia should embrace the Kenyan approach and provide a comprehensive description of specific offences directly related to the TK itself.

Another point of difference between the Zambian and Kenyan approaches is the manner and extent to which civil proceedings are addressed. The Kenyan Act devotes two sections to civil proceedings and the associated civil remedies. Section 38 creates the right for TK holders to institute legal proceedings for unauthorised use of their TK whether commercial or not and infringement of moral rights. Section 39 of Kenya PTKCE Act outlines possible remedies which can be granted by the court arising from civil proceedings. These remedies are an award of injunction, damages, declaration of contravention, order of apology, cease and reversal of false attribution, account for profits, forfeiture of profits, forfeiture of contravening articles to rightsholders, seizure of objects made, imported or exported, revocation or invalidation of IPRs acquired over TK or derivatives, or any other remedy the court considers appropriate.¹¹⁴

These remedies are reminiscent of remedies typically available in IPR infringement. However, there is evidence that these have not simply been blindly transplanted. The remedies demonstrate cognisance of the nature of TK and the possible nature of offences that can be committed. The remedies account for and attempt to compensate not only for financial loss but other losses such as emotional damage or offense. This is discernible from the inclusion of remedies such as the order for the infringer to make a public apology, and an order to cease false attribution.

The Zambian PTK Act handles this matter insufficiently. While the possibility for holders to institute civil action can be attributed to s 4(2) which

¹¹⁴ Section 39(a) - (k) of the Kenyan PTKCE Act.

empowers holders to institute legal proceedings against any person who infringes on their TK rights, it does not outline the remedies which would be available in civil suits. This is a gap in the PTK Act where the Kenyan example can be imitated.

4.5. Conclusion

In this chapter, the Kenyan TK protection approach through the PTKCE Act has been examined with a view to identifying areas in which Zambia can learn vital lessons. When compared to the Kenyan approach, several areas in which there is room for improvement in the Zambian PTK Act in terms of scope, content, and strategy for protection have been identified. A central issue which affects all aspects of gender sensitive and gender responsive TK protection is the existence of the claw back clauses in the Zambian Constitution. Kenya's resolution of the claw back clauses presents an important lesson which Zambia can draw from and emulate. Issues surrounding TK commercialisation have also been canvassed and suggestions made regarding how this can be addressed in a gender sensitive and gender responsive manner.

The purpose of this chapter is not to suggest that Zambia transplant Kenyan provisions exactly as they exist into the Zambian PTK Act. This would be ineffective because while the Kenyan Act is instructive in some respects as discussed in this chapter, the extent to which it adopts a gender sensitive and gender responsive approach to TK protection is limited in some instances. Therefore, Zambia needs to isolate the elements of positive principles or approaches to protection, implement them to suit the local context and incorporate into the central fibre of the provisions gender sensitivity and gender responsiveness considerations.

5. CHAPTER 5 – THE ROLE OF EFFECTIVE GENDER SENSITIVE AND GENDER RESPONSIVE TK PROTECTION IN FULFILLMENT OF NATIONAL AND INTERNATIONAL DEVELOPMENT GOALS

5.1. Introduction

TK and women are both critical to development and the fulfilment of Zambia's developmental objectives. The role of women in development is important because, among other reasons, they are a historically marginalised group and lag behind in various aspects of development.¹ TK also plays a pivotal role because of its unique ability to contribute to development in multiple areas and its association with IPLCs, a segment of the population which also are often sidelined in development. TK's capacity to be used as a tool particularly by women for their development and the development of the country as a whole strategically positions it to contribute positively towards Zambia's overall development agenda. On this basis, protecting TK in a gender sensitive and gender responsive way is fundamental in achieving developmental goals.

This chapter identifies, discusses, highlights and expands on the role of effective gendered TK protection in the attainment of Zambia's developmental objectives through national development agendas, particularly the Zambian Vision 2030 and the Seventh National Development Plan (7NDP) as well as the international development agenda in the form of the Sustainable Development Goals (SDGs).

5.2. The Vision 2030 for Zambia

The formulation of the Zambian Vision 2030 came about following the realisation that Zambia had never in the past had a long term development centred plan for the nation developed by the nation itself. Development plans in the past were limited to

¹ Otsile Ntsoane 'Women, Knowledge and Protection' (2004) 3 Indilinga African Journal of Indigenous Knowledge Systems 57.

short or medium term plans.² Due to their short and / or medium term nature, past plans lacked an intergenerational context and long term perspective.

Vision 2030 is designed to be the long term umbrella development plan under which all other short and medium term development plans including the national development plans fall. These short or medium term other development plans are channelled towards facilitating the achievement of Vision 2030.

5.2.1. Understanding Vision 2030 and the role of Gendered TK Protection in its Attainment

Vision 2030 is largely concerned with development of Zambia as a nation. This includes development at both a social and economic level. The Vision therefore covers economic growth, national developmental status, social issues and human development issues. It is intended to outline what Zambians aspire development to be and how it should be reflected in social living interactions within theZambian society. To capture all these requirements, Zambia's vision statement is 'to be a prosperous middle income nation by 2030'.³

The Vision 2030 presents three scenarios for the achievement of the vision statement. These are the baseline scenario, the preferred scenario and the optimistic scenario.⁴ Each scenario outlines different statuses of economic growth, stability of inflation and exchange rate stability as contributing factors to economic transformation and transformation of social values. The baseline scenario depicts a conservative or modest level of achievement of the Vision, the preferred scenario portrays a moderate level of development outcomes, while the optimistic scenario presents the best case scenario outcome for Vision 2030.

Vision 2030 is intended to guide all developmental efforts. Therefore, development of women, women in IPLCs and of IPLCs in general automatically and properly fits within the scope of the Vision. The long term context of Vision 2030 complements the long term commitment required for development as a result of gendered TK protection. This is the case because effective gendered TK protection

² Vision 2030 - A Prosperous and Middle Income Nation by 2030 2006) at 5.

³ Vision 2030, supra at 7.

⁴ Vision 2030, supra at 12 -14.

involves changes in mindsets, legislation and policy towards the protection for women in TK.

The Vision is founded on seven key principles. These are: gender responsive sustainable development, democracy, human rights, good traditional and family values, positive attitude to work, peaceful coexistence; and private – public partnerships.⁵ These principles are the backbone of the Vision in that the strategies and objectives within the Vision are built around a respect and recognition of these principles. Any information the Vision contains whether related to economic or social issues must not only harmonise with but actively work towards upholding these principles. Similarly, any implementation strategies directed towards the attainment of Vision 2030 must align with the seven principles and concerted efforts must be made to ensure they are neither flouted nor disregarded.

The principle of gender responsive sustainable development in particular directly relates to gendered TK protection. The concept of sustainable development is multifaceted.⁶ It assigns equal importance to development itself and to the sustainability of the development. Therefore, sustainable development requires an integrated approach where due consideration is given to development and its components as well as to sustainability, that is, ensuring the ability of future generations to meet their needs.⁷

Development includes social, economic and environmental indicators. Vision 2030 acknowledges the importance of social development trends in gauging development⁸ and includes gender discrimination among the social indicators of development.⁹ The vision document further acknowledges gender blindness and a lack of appreciation of gender as problematic areas in social development in Zambia.¹⁰ As highlighted in chapter two of this thesis, this is as a result of various

⁵ Vision 2030, supra at 8.

⁶ Olav Stokle 'Sustainable Development: A Multi Faceted Challenge' in Stokle Olav (ed) *Sustainable Development* First ed Florida, Routledge(2018).

⁷ Thomas M Parris Robet W. Kates, Anthony A Leiserowitz ' What is Sustainable Development? Goals, Indicators, Values, and Practice' (2005) 47 *Environment : science and policy for sustainable development .*

⁸ Vision 2030, supra at 28.

⁹ Vision 2030, supra at 28.

¹⁰ Vision 2030, supra at 29.

factors including cultural considerations and reinforcement of gender disparities in the Zambian context.¹¹ This reality is reflected in the PTK Act through a lack of gender sensitivity and responsiveness in the Act itself and is seen in the effects of the provisions of the Act.¹² For example, the tying of ownership of TK to the requirement that it be 'in accordance with customary practices' in s 2 of the PTK Act has the effect of disadvantaging women who are under customary laws where women do not have the capacity to or are not permitted to own property which includes TK.

Having established that gender considerations are fundamental in development, that women must play a key role in and participate in development and that TK is a key component of sustainable development, gendered TK protection in pursuit of Vision 2030 for Zambia is vital. Gender sensitive and responsive TK protection is a necessary component for the Vision 2030 agenda because it fully harmonises with the notion of gender responsive sustainable development as a principle.

Gender sensitive and gender responsive TK protection present the opportunity to use TK protection as a means to bring women to the fore in terms of participation in their own development and indeed in national development. This is possible because ensuring that women receive effective TK protection in the same manner as their male counterparts creates the opportunity for women in IPLCs in Zambia to be decision makers in the context of TK ownership, control, management and exploitation within the ambit of the PTK Act.

5.2.2. Gender Sensitive and Gender Responsive TK Protection in the Attainment of Sector Visions

Vision 2030 identifies three broad areas which play a role in the attainment of the overall development vision. These are economic growth and wealth creation, social

¹¹ See chapter two of this thesis, 'Justifying a gendered approach' sections 2.3, 2.5 and 2.6 on reinforcement of gender disparities, double marginalisation, and cultural considerations respectively.

¹² See chapter three of this thesis, 'Taking a closer look through the lens of gender: the case of Zambia' section 3.3.

investment and human development, and creating and enabling environment for sustainable social economic development.

Each identified area contains sectors categorised under it as components. Every sector has been assigned a sector vision to be attained through set targets or sector goals. For each identified area, specific sectors have been selected below for further discussion in the context of how they align with gendered TK protection and play a role in fulfilling the sector vision and ultimately Zambia's developmental goals.

5.2.2.1. Area 1 – Economic Growth and Wealth Creation

In the area of economic growth and wealth creation, five sectors will be discussed. These are agriculture, land, tourism, manufacturing, and science and technology.

Agriculture: Agriculture is a sector which inevitably involves participation of both women and men. Women and men play different roles at different stages in crop and food production.¹³ Therefore, the use of sustainable farming methods associated with TK known by IPLCs can contribute to sustainable and efficient farming methods. This promotes the overall sector vision of an effective, competitive, sustainable sector that assures food security and increased income. Gendered TK protection in this context creates a platform to facilitate women's participation in the agricultural sector with the use of their TK as an opportunity for sustainable growth of the sector. It also presents an opportunity for these women in the agricultural sector to participate in development and gain access to different support facilities in agriculture. Women and men have different roles and strategies in farming or agricultural management. Accordingly, they have different needs in terms of agricultural technology and support. Gendered TK protection significantly contributes to the recognition of this fact and provides a means to call attention to these differences which need to be recognised and responded to.

¹³ Patrick Kilby *The Green Revolution: Narratives of Politics, Technology and Gender* 1st Edition ed London, Routledge (2019).

Land: The land sector vision is to have 'secure, fair and equitable access and control of land for sustainable socio-economic development in Zambia'.¹⁴ This is directly connected to TK in general. TK land use and farming techniques harmonise with sustainable development goals because the methods used are generally environmentally friendly, ecofriendly and sustainable.¹⁵ This includes the use of sustainable agricultural practices including conservation agriculture and conservation farming in Zambia among IPLCs.¹⁶

Fair and equitable access to and control of land necessarily entails the inclusion of gender considerations. The statement of a goal under this sector as to ensure women and men have equal access to productive land for socioeconomic development reflects this. The fairness aspect which the sector vision requires necessitates considerations of gender inequalities in land ownership and in TK ownership. Control of land is linked to TK ownership because land is needed to apply ecological TK and to apply TK in land management. Therefore, gendered TK protection, which involves creating the correct legislative environment, along with constitutional changes and policy reforms, would mean that women in IPLCs are enabled to control the land and own and control their TK. As a result, they would be strategically positioned to contribute to social and economic development. Hence, gender sensitive and gender responsive TK protection can be a contributing factor in the achievement of this sector vision.

Tourism: Tourism is a crucial sector of the economy globally and for Zambia.¹⁷ It is one of the areas recognised in Zambia as a potential contributor to sustainable economic diversification and development.¹⁸ The tourism sector vision is

¹⁷Luiz Moutinho Strategic management in tourism. 3rd ed New York, CABI Press (2018).

¹⁴ Vision 2030, supra at 30.

¹⁵ Mudigere Sannegowda ; Saha Umesh Babu, Lala ; Garkoti, Satish Chandra 'Changing socioeconomic and climate scenario calls for documentation of the traditional knowledge and practices related to riverbed cultivation: a case study of a migrant farming community from Western Himalaya, India' (2020) 44 *Agroecology and sustainable food systems* 310.

¹⁶ Arega D. Alene Julius Manda, Cornelis Gardebroek, Menale Kassie, Gelson Tembo 'Adoption and Impacts of Sustainable Agricultural Practices on Maize Yields and Incomes: Evidence from Rural Zambia' (2015) 67 *Journal of Agricultural Economics* 130.

¹⁸ Sam McLachlan and Tony Binns 'Tourism, development and corporate social responsibility in Livingstone, Zambia ' (2014) 29 *Local Economy: The Journal of the Local Economy Policy Unit* 29 at 101 – 103.

for Zambia to be 'a major tourism destination of choice with unique features'.¹⁹ The sector goals include diversification of tourism products and increased participation of locals in the industry.²⁰ These sector goals are linked to TK and speak directly to gendered TK protection.

An opportunity for commodification and commercialisation of TK is in the tourism sector. While achieving diversification of tourism products, TK can be used as a unique tourist attraction and can be explored as part of the tourism sector (within limits of respect for sacred and secret TK as well as moral rights). Gender sensitive and gender responsive TK protection opens the prospect for women in IPLCs to participate in the tourism sector through TK commercialisation as has been the case in Kenya.²¹ This supports the sector goal of increased participation of locals in the tourism industry. Gendered TK protection will create the needed environment for women in IPLCs to participate formally and actively in this sector and become involved in development from this perspective. The mass of TK and cultural uniqueness in Zambia puts her in good stead to be a major tourism destination as envisioned in the tourism sector vision. An absence of gendered TK protection in terms of a non-responsive TK Protection Act as well as an unconducive policy environment stifles the participation of women in IPLCs in the tourism sector and works against this development goal for Vision 2030.

Manufacturing: The manufacturing sector vision to develop a 'technology based and export focused manufacturing sector which is dynamic and competitive with effective entities that add value to locally abundant natural resources'²² is linked to gendered TK protection. The reference to value addition to natural resources entails a knowledge aspect in terms of how to exploit natural resources. This knowledge in exploitation of natural resources is held in TK and indeed in women's TK because it involves an understanding of natural resources, their utilisation and treatment in order to maximise the benefits derived. Therefore, gendered TK protection facilitates equal participation of women and ensures that TK owners,

¹⁹ Vision 2030, supra at 30.

²⁰ Vision 2030, supra at 30.

²¹ See chapter 4 of this thesis, 'A helpful neighbour for Zambia: considering the Kenyan approach' section 4.3.2.4.

²² Vision 2030, supra at 30 – 34.

including women TK owners are protected as they apply TK to natural resources in contribution to the growth of the manufacturing sector. A specific manufacturing sector goal supports this reasoning because it sets one of the targets for Vision 2030 as to 'develop a fully integrated rural based agro based and light manufacturing sector by 2030'.²³ Women in rural areas in Zambia, some of whom are part of IPLCs form part of the workforce in the agriculture sector. Hence it is relevant that effective TK protection for women in IPLCs is readily available for the TK applied during farming and manufacturing processes.

Science and Technology: In the science and technology sector, the sector vision is centered on making Zambia a 'nation in which science, technology and innovations are driving forces in national development and compete globally'.²⁴ The creation of the Ministry of Science and technology²⁵ is a testament to the importance of this sector vision. This sector vision contains two components. The first is that of using science, technology and innovation as driving forces in national development and the second is the ability of this science, technology and innovation to compete globally. Both components are directly related to gendered TK protection.

TK has often been the subject of much criticism and fierce attacks for being basic, rudimentary and lacking accuracy simply because it does not necessarily employ the use of scientific methods in what may be considered conventional ways.²⁶ However, TK by no means lacks a scientific and technological perspective as it extends to various and specific technical fields. This is acknowledged in the reference to specific technical fields in the WIPO IGC description of TK as not being limited to a specific technical field.²⁷ Consequently, TK is directly relevant in this sector vision. Gendered TK protection is relevant and important because women's TK has a role to play in science, technology and innovation. This ties in with the

²³ Vision 2030, supra at 30.

²⁴ Vision 2030, supra at 31.

²⁵ Created in September 2021 following the August 2021 general elections.

²⁶ Ambe J Njoh *Tradition, Culture and Development in Africa: Historical Lessons for Modern Development Planning* Ashgate Publishing Limited (2006) and Michael R Dove 'Center, periphery, and biodiversity: A paradox of governance and a development challenge' in Stabinsky Stephen B. Brush and Doreen (ed) Valuing local knowledge. Indigenous people and intellectual property rights Washington DC, Island Press(1996) at 20.

²⁷ WIPO available at *http://www.wipo.int/edocs/pubdocs/en/wipo_pub_TK_2.pdf.*, accessed on 2 October.2019.

sector goal to 'establish and strengthen practical application of science and technology in all areas'.²⁸ Ensuring that TK actively plays a role in the science and technology sector broadens the spectrum for methods and innovations which can be developed in the sector to bolster national development overall.

Women's role in TK, its generation, application and preservation is fundamental to development thus it is important that TK protection offered is real and effective from women's perspective. In turn this will contribute to creating fair opportunities for women to participate in innovation using TK. Application of gendered TK protection is also pertinent for other sector goals such as the goal to 'build and sustain human resource capacity and capability'.²⁹ Interpreting this goal in the context of the founding vision principles which include gender responsive sustainable development entails that human resource capacity building and sustenance must include women. Gendered TK protection is a key component of creating a conducive environment for women to use their TK for national development without being disadvantaged in comparison with their male counterparts.

5.2.2.2. Area 2 - Social Investment and Human Development

In the area of social investment and human development, the arts and culture sector is selected for discussion and the role of gender sensitive and gender responsive TK protection in the achievement of the sector vision is explained.

Arts and Culture: Culture is an integral part of TK and is an essential part of cultural identity.³⁰ It forms the basis of TK and TCEs. Art being an example of a TCE is also inseparably linked to TK because indigenous art works are often inspired by and based on elements specific to the culture of the group or IPLC concerned such as identity.³¹ Therefore, the sector vision to create a 'thriving folk

²⁸ Vision 2030, supra at 31.

²⁹ Vision 2030, supra at 30.

³⁰ Purcell Filipo Siaki Sali 'Protecting traditional knowledge: An analysis of the pacific regional framework for the protection of traditional knowledge and expressions of culture' (2020) 51 *Law Review (Wellington)* 559 at 562.

³¹ Leıla Baracchini 'Becoming traditional: Contemporary san art and the production of (non-) knowledge' (2021) 1 *Ethnography* 1 at 5.

arts and cultural industry by 2030'³² for Zambia is related to TK and gendered TK protection.

An industry based on culture or any of its associated elements necessarily demands the participation of TK holders. Cultural industries initiatives are intended to maximise opportunities for TK benefits for IPLCs and the population as a whole.³³ This includes women. It is important that TK protection be robust and effective even in providing protection for women as potential players in the industry. Women's TK in the art and culture industry in Zambia is relevant because women have specialised knowledge in TK preservation and generation.³⁴ This aspect directly addresses the sector goal of preservation of intangible cultural heritage and production of high quality cultural goods and services for local and international markets. To achieve this, it is necessary to have gendered TK protection which addresses the needs of women as stakeholders in the TK arena. Properly structured and substantive TK protection which addresses women's needs in the context of commercialisation, capacity building and other areas will empower women to effectively contribute to development in the cultural industry through their use of TK.

5.2.2.3. Area 3 - Creating an Enabling Environment for Sustainable Social Economic Development

In the area of creating an enabling environment for sustainable economic growth, the Vision 2030 explicitly identifies gender as a sector to be addressed. This sector is expanded on below.

Gender: The sector vision under gender is to achieve 'gender equity and equality in the socio economic development process'.³⁵ Gender equality requires that traditional gender roles or stereotypes do not limit or disadvantage women and men;

³² Vision 2030, supra at 33.

³³ Miranda Forsyth 'Lifting the Lid on "The Community": Who Has the Right to Control Access to Traditional Knowledge and Expressions of Culture?' (2012) 19 *International Journal of Cultural Property* 1 at 20.

³⁴ Charlene Musiza Traditional Cultural Expressions Preservation and Innovation: The Tonga Baskets of Zambia (2021)

³⁵ Vision 2030, supra at 35.

it requires equal treatment of women and men.³⁶ Opportunities, rights and responsibilities are not decided on the basis of gender when gender equality is applied. On the other hand, gender equity considers the different needs of women and men and provides fair treatment in consideration of those needs. Therefore, it may involve differential treatment to provide equivalent opportunities or achieve an equivalent result for women and men.

In the context of TK protection, this means that women and men must be treated equally, that is, afforded equal TK protection and opportunities to benefit from their TK. In terms of equitable TK protection, this requires that protection given accounts for the different needs of women and men. These approaches aligns with gender sensitive and gender responsive TK protection. Gendered TK protection directly addresses the gender sector goal to reduce and eliminate gender imbalances and inadequacies associated with development. The gender imbalance associated with development is perpetuated in the Zambian PTK Act in its current state because women are due to a number of factors including customary law barriers and the gender blindness in the Act, excluded from being holders of TK and by extension excluded from the rights and benefits associated with being TK holders.³⁷ Where benefits are community benefits, women too are excluded because development programmes, financial rewards or benefits associated with TK are not extended to them equally.³⁸

TK has demonstrated its ability as a body of knowledge to make a fundamental contribution to economic development. The skills and competencies necessary for development can be found in or include TK and women's TK. A strong TK protection system alive and responsive to the needs of women and the context in which they operate in Zambia is essential to regulate how harnessing of knowledge, skills and values per the sector goal will be done fairly.

³⁶ Lydia Ruprecht and Sara Callegari 'Equity versus (Gender) Equality: Complexities and Implications in Programming, Monitoring, and Evaluation' in Marra Kim Forss and Mita (ed) *Speaking Justice to Power* 1st ed New York, Routledge(2014).

 $^{^{37}}$ See ss 2 and 4, 16 – 19, PTK Act.

³⁸ See ss 42 and 43, PTK Act. Also see Dejo Olowu 'Mainstreaming women, equating men: Charting an inclusionary approach to transformative development in the African decade for women ' (2011) 15 *Law, Democracy & Development* 160.

Therefore, gender sensitive and responsive TK plays a major role in this sector vision and ultimately the developmental goals of Zambia. Ensuring gendered TK protection through changing the PTK Act to be gender sensitive and gender responsive, taking appropriate action in terms of the Constitution and reevaluating customary laws will have a direct impact on achieving this sector goal in the realm of TK and aligns with the national commitment of Vision 2030 for Zambia.

5.3. The Seventh National Development Plan 2017 – 2021

To operationalise the goals of Vision 2030, Zambia uses national development plans (NDPs). These are shorter term plans which endeavour to break down the long term Vision 2030 into more manageable parts with the ultimate goal of attaining Vision 2030. The current NDP as at the time of writing is the seventh national development plan (7NDP). The theme of the 7NDP is 'accelerating development efforts towards Vision 2030 without leaving anyone behind'.³⁹ Gendered TK protection is relevant to this theme because it demands that women are not left behind in receiving protection for, benefiting from and owning and managing their TK, all of which contribute to Zambia's vision 2030 goals.

The 7NDP is also the document through which Zambia has domesticated the SDGs. It therefore localises and contextualises the SDGs. The 7NDP is thus a meeting point for Zambia's development objectives nationally and internationally.

The 7NDP promotes a multisectoral approach⁴⁰ in Zambia's developmental agenda overall. It explicitly acknowledges the need to enhance positive traits of Zambian culture as a mode to achieve sustainable development through activities reflective of Zambia's diverse culture. ⁴¹ The 7NDP recognises the disregard of positive culture and TK as a binding constraint to socio economic transformation and national development.⁴² It attributes this to some negative perceptions attached to Zambian culture as being primitive and backward and states that there is 'need to promote our positive cultural practices and indigenous knowledge, to foster national

³⁹ Seventh National Development Plan, Zambia (7NDP), at 4.

⁴⁰ Zambia Sustainable Development Goals Voluntary National Review 2020 (2020) Lusaka, Zambia, Government of the Republic of Zambia, at 1.

⁴¹ 7NDP, supra at 29.

⁴² 7NDP, supra at 31.

development while negating negative cultural practices'.⁴³ The development plan further recognises that 'Zambia's comparative advantage lies in its endowment of renewable and natural resources which can be productively harnessed.'⁴⁴ This statement undoubtedly establishes that there is a link between development for Zambia and her ability to utilise renewable and natural resources. TK is tied to natural resources and plays a role in terms of harnessing and exploiting these natural resources.

Creating a diversified and resilient economy for 'sustained growth and socioeconomic transformation driven by agriculture, mining and tourism'⁴⁵ is an important goal in the 7NDP. To realise this goal, the 7NDP contains five strategic objectives or pillars. These are to⁴⁶:

- a) diversify and make economic growth inclusive;
- b) reduce poverty and vulnerability;
- c) reduce developmental inequalities;
- d) enhance human development; and
- e) create a conducive governance environment for a diversified and inclusive economy.

Gendered TK protection and what it achieves are directly aligned with each of these strategic objectives. This is demonstrated in the discussion which follows below.

Diversify and make economic growth inclusive: Gendered TK protection promotes economic diversification in that it expands the opportunity for positive exploitation of TK in various industries including tourism and agriculture through the inclusion of women, some of whom are owners of women's TK which has the potential to positively impact these industries. To stimulate an inclusive economy, IPLCs and women must be included in the economic diversification process. Through gender sensitive and gender responsive TK protection, women are brought to the fore or at least placed on equal footing with their male counterparts which in

⁴³ 7NDP, supra at 31.

⁴⁴ 7NDP, supra at 7.

⁴⁵ 7NDP, supra at 54.

⁴⁶ 7NDP, supra at 54.

turn presents the opportunity for women to participate in their own development and economic growth.

Reduce poverty and vulnerability: Once women are included in economic growth in Zambia and can actively participate in economic activities through TK, this will contribute towards the achievement of the second pillar, that is, to reduce poverty and vulnerability. This is the case because poverty levels in Zambia are highest among female headed households and extreme poverty levels are more prevalent in rural areas (over 60 per cent).⁴⁷ Hence, if women in IPLCs are able to participate in the economy effectively through use of their TK enabled in a conducive protected environment (created by gender sensitive and gender responsive TK protection), they are better positioned to gain an income which can contribute to alleviating the poverty situation particularly in female headed households.

Reduce developmental inequalities: Reduction of developmental inequalities entails that no one is disadvantaged in terms of their developmental growth, input into their own development or access to development opportunities even on the basis of gender. Therefore, development opportunities must be presented equally and equitably for both men and women. In a TK context, this requires that women and men must receive equal protection and access to use and exploit their TK for purposes of their development as individuals and as a community. This is achievable through gendered TK protection.

Enhance human development: Enhanced human development can be facilitated through TK in view of its broad scope and potential for application in IPLCs and the human population in general. This requires a combined effort in the use and exploitation of TK in general, including women's TK. This would contribute to human development on a broad scope but also human development at an individual level for women in IPLCs. Therefore, gendered TK protection efforts align with the achievement of human development.

Create a conducive governance environment for a diversified and inclusive economy: This strategic objective involves creating an improved policy

⁴⁷ Zambia United Nations Country Team Zambia Country Analysis Zambia (2015) Zambia, United Nations, at 14.

environment among other things.⁴⁸ It entails establishment of inclusive consultative processes and legal reforms to formulate inclusive policies and laws. From a TK protection perspective, the current legal protection available is not inclusive when analysed from a gendered standpoint. In fact, the current PTK Act in Zambia is in effect to the exclusion of women in many respects. For example, the PTK Act defers to customary law, for rules on TK ownership hence if women cannot own property under customary law there are no ownership prospects of TK given that it is also classified as property.⁴⁹ This situation works directly against the achievement of this strategic objective.

The above brief exploration of each of the strategic pillars has shown that gendered TK protection is relevant and has a role to play in their attainment. Gender equality is identified as a cross cutting issue in the 7NDP as Zambia strives for economic stability and growth.⁵⁰As a cross cutting issue, gender equality considerations are applicable to each strategic objective discussed above. The planned strategy to address gender equality involves engendering policies, plans, programmes, projects and activities at various levels. It also extends to engendering the national budgeting and planning process. The inclusion of gender as a central consideration in national planning, legislation and policy development is important because gender issues permeate across sectors and are a fundamental consideration to ensure no one is left behind in the development agenda. This should include policies and legislation in the context of TK protection. Therefore, ensuring that TK protection in Zambia is gender sensitive and gender responsive fully harmonises with the strategic objectives and the 7NDP overall.⁵¹

5.4. The Role of Gendered TK Protection in Attainment of the Sustainable Development Goals for Zambia

Zambia's national development agenda and goals as reflected in Vision 2030 and the 7NDP align with the development agenda of nations on the international front. The

⁴⁸ 7NDP, supra at 123.

⁴⁹ See s2 PTK Act.

⁵⁰ 7NDP, supra at 47.

⁵¹ At the time of writing, consultations were underway for the 8NDP. However, a new NDP has not been finalised.

domestic and international development agendas have shared principles including gender equality, economic growth and sustainable development. Some ideas reflected in the Vision 2030 and in the 7NDP, are a domestic reflection of development goals in the global community as outlined in the SDGs.⁵² Therefore, there is a connection between international development goals and domestic Zambian development goals.⁵³ Efforts to achieve the SDGs therefore amount to efforts to achieve Vision 2030 and the 7NDP. Hence, the alignment of these efforts means that a consideration of the role of gendered TK protection in the attainment of the SDGs is relevant and important.

As identified in chapter one, the research isolates four SDGs for analysis in the context of gendered TK protection. These are:

- i. SDG 5 Achieve gender equality and empower all women and girls,
- ii. SDG 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all,
- iii. SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation, and
- iv. SDG 10 Reduce inequality within and among countries.

In 2020, Zambia undertook a voluntary national review of development progress towards achieving SDGs.⁵⁴ The report aims to inform and update stakeholders, partners and participants in the development process at national and international level on what has been achieved and the challenges being faced in pursuit of attaining SDGs. The report discusses various SDGs individually, including SDG 5, 8 and 9 which are relevant for the present analysis. The report does not discuss SDG 10 independently.

This section discusses how gender sensitive and gender responsive TK protection in Zambia aligns with and contributes to the attainment of each identified goal. The inclusion and recognition of gendered TK protection considerations for Zambia in the above SDGs is an important part of Zambia's efforts to adopt and

- ⁵³ Zambia–United Nations Sustainable Development Partnership Framework (2016-2021) 2016)
- ⁵⁴ SDG Voluntary Review, supra.

 $^{^{52}}$ 75 per cent of the SDGs and associated targets have been mainstreamed into the 7NDP – See SDG Voluntary Review, supra at i

localise SDGs to accurately suit the local context and meet Zambia's development goals.

5.4.1. Goal 5 - Achieve Gender Equality and Empower all Women and Girls

SDG 5 aims to achieve gender equality and empowerment for all women and girls. This is a broad goal which includes several facets of equality and empowerment in different areas. Some areas canvassed which directly concern gendered TK protection are expressed in the following targets and indicators:

Target 5.1 – This target aims to end to all forms of discrimination against all women and girls everywhere.⁵⁵ Ending all forms of discrimination requires that discrimination against women and girls is removed in every context. Historically in the Zambian context, some customary law practises harbour and justify discriminatory practises against women. The identification of women and girls as a target group for empowerment in this SDG means there is a direct effort made to focus on this group likely because they have been the target of unfair practices in the past and remain the subject of legal discrimination.

TK as an area closely connected to custom, tradition and culture is an avenue where discrimination against women persists. In particular, the current protection available for TK is a form of discrimination against women. As detailed in chapter 3 of this thesis, the Zambian PTK Act fails to recognise the gendered aspects of TK protection and excludes women from the benefits of TK protection. This is largely on account of the fall back to or cooperation with customary laws and practises as a basis for determining issues such as ownership and management of TK without accounting for the discriminatory consequences arising from this approach. For example, the definition of a "holder" in s2 of the PTK Act is as follows:

means a traditional community, an individual or a group, irrespective of the pattern of ownership, and *who is the owner of the traditional knowledge*, genetic resource or expression of folklore in a traditional and intergenerational context who *has a right over* or *to whom*

⁵⁵ United Nations Department of Economic and Social Affairs - Sustainable Development 'Achieve gender equality and empower all women and girls - Targets and Indicators' available at *https://sdgs.un.org/goals/goal5*, accessed on 10 January.2022.

traditional knowledge, a genetic resource or expression of folklore *belongs to, in accordance with customary laws and practices*;⁵⁶

Tying ownership to customary laws and practices automatically places women at a disadvantage. This is because according to some customary laws and practices women do not have capacity to or are not permitted to own property.⁵⁷ This definition disqualifies women from direct and independent ownership of TK. Once women are disqualified from ownership of TK, as a ripple effect they are excluded from any and all protection which accrues to TK owners including the right to protect their TK, exercise due control over it, obtain benefits from its commercial use⁵⁸ and be acknowledged as holders of TK.⁵⁹

Indicator 5.1.1 under this target requires an assessment of whether legal frameworks are in place to promote, enforce and monitor equality and non discrimination on the basis of sex.⁶⁰ In the context of TK, this directly addresses the status of the Zambian PTK Act. Presently, it actively works against achieving this SDG and fails dismally when measured against this target. Adopting a gender sensitive and gender responsive approach to TK protection would play a vital role in ending discrimination against women and girls in the form in which it exists in the PTK Act. The current status of the Act is antagonistic to the achievement of SDG 5.

Target 5.4 - This target advocates for the recognition and value of 'unpaid care and domestic work'.⁶¹ Women's TK has often gone unrecognised because it has been relegated to simply forming part of women's work. Granted, some women's TK may be developed in the context of domestic work ⁶² therefore it is perceived to overlap with women's routine domestic work not deserving of any particular reward

⁵⁶ Emphasis added by the author.

⁵⁷ Himonga Chuma.N ; Munachonga Monica 'Women's Access to Agricultural Land in Settlement schemes' (1991) 10 *Third World Legal Studies* 1 at 22-24.

⁵⁸ Section 4 PTK Act.

⁵⁹ Section 21 PTK Act.

⁶⁰ United Nations Department of Economic and Social Affairs - Sustainable Development 'Achieve gender equality and empower all women and girls - Targets and Indicators' available at *https://sdgs.un.org/goals/goal5*, accessed on 10 January.2022.

⁶¹ United Nations Department of Economic and Social Affairs - Sustainable Development 'Achieve gender equality and empower all women and girls - Targets and Indicators' available at *https://sdgs.un.org/goals/goal5*, accessed on 10 January.2022.

⁶² Ghazaleh Jerban *The SDGs and Gender: The Case of Indigenous and Local Women's Traditional Knowledge* (2019) Canada, *Center for International Governance Innovation*, at 4.

or recognition. However, the context within which women's TK may be created should not be a basis for failure to recognise and accord it the necessary protection.

To achieve SDG 5 there is a need to ensure that women's TK is recognised, acknowledged and valued on the same footing as that of their male counterparts. On this front, in support of Target 5.4, women's TK must be valued and acknowledged in the Zambian PTK Act. The limited moral rights framework in s21 of the PTK Act does not lend itself to support, acknowledgment and recognition of women as TK holders in the Zambian context. It provides fertile ground for the continued perpetuation of subsuming what actually constitutes women's TK into the forum of unrecognised and unacknowledged domestic work. This is counterproductive in the effort to achieve SDG 5 and must be rectified to harmonise with Zambia's developmental goal in this context.

Target 5.a - Target 5.a requires that reforms be undertaken to give women equal rights to among other things 'access to ownership and control over land and *other forms of property*... '(own emphasis).⁶³ TK as an intangible form of property qualifies as 'other forms of property.' Therefore, SDG 5 demands that Zambia make the necessary reforms to facilitate this. The approach taken in the phrasing of target 5.a. demonstrates a recognition that it is likely that the current state of the laws and policies of member states may not support equal property rights for women in this regard hence the need to undertake reforms. This is certainly true in the case of Zambia's PTK Act. It does not presently facilitate an equal opportunity for women to access ownership to and exercise control over their TK. Adopting a gender sensitive and gender responsive approach to TK protection is precisely the nature of reform which needs to be undertaken.

Target 5.c - Changes in TK protection laws and policies are key components to promotion of gender equality and empowerment of women and girls. Women and women in IPLCs as a double marginalised group require enforceable legislation which can be used to ensure protection of their TK and a conducive environment in

⁶³ United Nations Department of Economic and Social Affairs - Sustainable Development 'Achieve gender equality and empower all women and girls - Targets and Indicators' available at *https://sdgs.un.org/goals/goal5*, accessed on 10 January.2022.

which to derive real benefit from it. A robust legal framework is important in the progress towards achieving SDG 5. Target 5.c states thatmember states should '*adopt* and *strengthen* sound policies and enforceable legislation'(own emphasis).⁶⁴ This creates an obligation on states, including Zambia to formulate needed legislation and policies where they are non-existent or strengthen existing ones which are weak. Zambia currently has a legal framework for TK protection. While this framework can be used as a legislative tool to promote gender equality and while it exists, it requires strengthening. Therefore, a change in the legal framework in Zambia for TK protection is imperative. This includes constitutional considerations because of the interaction with the Zambian Constitution and customary law as well as a reflection of gendered TK protection in the Zambian PTK Act.

The analysis in the SDG Voluntary National Review of Zambia in addressing SDG 5 is silent on the issue of TK in general and that of gendered TK protection. The focus is on teenage pregnancy, child marriage, sexual violence against women and the proportion of women in decision making positions.⁶⁵ The exclusion of an analysis on TK is indicative of the level of importance the issue occupies as an area where girls and women suffer inequality. It demonstrates that there was no consideration of what role TK and gendered TK protection plays in contributing to the attainment of SDG 5.

The review touches on indicator 5.1.1, that is, whether there are frameworks in place to promote, enforce and monitor equality and non discrimination based on sex. It states that 'Zambia has in place an adequate legal framework that guarantees equality between men and women'.⁶⁶ This is not the case because it has been demonstrated that the claw back clauses which exist in the Zambian Constitution have the effect of giving with one hand and taking with the other. The existence of art. 23 of the Zambian Constitution which provides for matters of personal law in customary law to be shielded from Constitutional scrutiny creates a situation which

⁶⁴ Emphasis added by the author. See United Nations Department of Economic and Social Affairs - Sustainable Development 'Achieve gender equality and empower all women and girls - Targets and Indicators' available at *https://sdgs.un.org/goals/goal5*, accessed on 10 January.2022.

⁶⁵ SDG Voluntary Review, supra at 38 – 42.

⁶⁶ SDG Voluntary Review at 38.

permits discrimination based on customary law to the extent provided in art. 23(4) - (8).⁶⁷ This interferes with the guarantee against discrimination and works against achieving equality between women and men. This situation is aggravated because this leeway is created in the Constitution. As a result, other subordinate legislation finds protection under this Constitutional exception to perpetuate discrimination on the basis of this constitutionally sanctioned customary law exception. Therefore, there is work to be done for Zambia in the context of aligning herself with this SDG in the area of gendered TK protection.

5.4.2. Goal 8 - Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All

SDG 8 is multifaceted. It focuses on inclusivity, sustainability, productivity and decency of work for all.⁶⁸ Each of these elements can be directly related to gendered TK protection. Inclusivity requires that even women in IPLCs have the opportunity to engage in decent work, participate in economic growth and ultimately to participate in their own development. Sustainability is relevant in that TK is lauded for its generally eco-friendly methods of production known to IPLCs and adopted in different aspects of TK including medical knowledge, ecological knowledge and other aspects. Women's TK is part of the general body of TK which practise these methods designed to coexist sustainably with nature and inherently minismise the harm done to the environment. Productivity and decency though canvassing many aspects, include enabling women and by necessary implication women TK holders to be part of the labour chain in a way that clearly recognises and dignifies their contribution to it. SDG 8 can be linked to gendered TK protection through the following targets:

⁶⁷ See chapter 3 of this thesis, 'Taking a closer look through the lens of gender: the case of Zambia' section 3.4.

⁶⁸ United Nations Department of Economic and Social Affairs - Sustainable Development 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all - Targets and Indicators.' available at *https://sdgs.un.org/goals/goal8*, accessed on 8 January.2022.

Target 8.5: This target mainly requires that full, productive and decent employment is achieved by 2030 for all men and women.⁶⁹Additionally, it requires that women and men receive equal pay for work of equal value. TK presents an opportunity for employment through among other things TK commodification and commercialisation. Presently, TK is already being commercialised in various forms.⁷⁰ Therefore, it is important that gender considerations in commercialisation are accounted for in order to ensure equal benefit for both women and men in IPLCs in the TK commercialisation process. This is also relatable to the element of target 8.5 which demands equal pay for work of equal value. This notion can be extended to according the same recognition and reward to women's TK as that of TK held by men.

Target 8.4: An important component of sustainability is to ensure resources are used efficiently and in an environmentally friendly way. This is the focus of target 8.4 which requires nations to 'Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production'.⁷¹ TK and its associated environmental practices have already proven to be efficient, adaptable and sustainable.⁷² The uniqueness of TK lies in its adaptability which is a valuable resource for the ongoing challenge of climate change. Consequently, the ability of TK knowledge systems to respond to the physically changing environment makes

⁶⁹ United Nations Department of Economic and Social Affairs - Sustainable Development 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all - Targets and Indicators.' available at *https://sdgs.un.org/goals/goal8*, accessed on 8 January.2022. Target 8.5 also mentions young people and persons with disabilities as target groups. However these groups are not the focal point in this thesis hence they will not be discussed.

⁷⁰ Susy Frankel 'Traditional Knowledge, Indigenous Peoples, and Local Communities' in Pila Rochelle Dreyfuss and Justine (ed) *The Oxford Handbook of Intellectual Property Law* Oxford, Oxford University Press(2018).

⁷¹ United Nations Department of Economic and Social Affairs - Sustainable Development 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all - Targets and Indicators.' available at *https://sdgs.un.org/goals/goal8*, accessed on 8 January.2022.

⁷² Shalini Dhyani Rajarshi Dasgupta, Mrittika Basu, Rakesh Kadaverugu, Shizuka Hashimoto, Pankaj Kumar, Brian Alan Johnson, Yasuo Takahashi, Bijon K. Mitra, Ram Avtar & Priyanka Mitra 'Exploring Indigenous and Local Knowledge and Practices (ILKPs) in Traditional Jhum Cultivation for Localizing Sustainable Development Goals (SDGs): A Case Study from Zunheboto District of Nagaland, India' (2021) 1 *Environmental Management* 1 at 2.

them an asset to the achievement of this SDG.⁷³ Women's TK forms part of the TK that proves useful in this regard. It is therefore important that the protection available for TK which encompasses traditional ecological knowledge for example is effective for women. A gender sensitive and gender responsive TK protection regime in terms of policy and legislation which creates a conducive environment for women to be involved in the achievement of this SDG while protected is important. It offers an opportunity for developing countries such as Zambia to pit themselves at the fore in efforts to achieve this goal.

Target 8.9: The tourism sector is an important part of the economies of developing countries.⁷⁴ Zambia is no exception to this and has demonstrated recognition of the importance of tourism through the development of the Zambia Tourism Master Plan.⁷⁵ This plan is intended to in harmony with the 7NDP serve as a framework to enable the tourism sector to contribute to the attainment of Zambia's Vision 2030.

Target 8.9 recognises the role of tourism in the achievement of SDG 8. It requires that nations 'devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products'.⁷⁶ The relationship between tourism and culture means there is also a link between TK, IPLCs and tourism. This is more evident with the advent of the concept of indigenous tourism.

Indigenous tourism is tourism in which IPLCs are 'directly involved either through control and/or by having their culture serve as the essence of the attraction'.⁷⁷ Indigenous tourism creates a conducive environment for green tourism which 'enhances local cultural elements and operates under the control of local

⁷³ Matthew Rimmer 'Intellectual Property, Indigenous knowledge and climate change' in Rimmer Matthew (ed) *Indigenous Intellectual Property* Cheltenham, Edward Elgar Publishing(2015) 382 at 383.

⁷⁴ E. M. Ekanayake and Aubrey E. Long 'Tourism Development and Economic Growrhi in Developing Countries' (2012) 6 *The International Journal of Business and Finance Research* 51 at 52.

⁷⁵ Zambia Tourism Master Plan 2018 - 2038 2018).

⁷⁶ United Nations Department of Economic and Social Affairs - Sustainable Development 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all - Targets and Indicators.' available at *https://sdgs.un.org/goals/goal8*, accessed on 8 January.2022.

⁷⁷ Kwanya, supra at 110.

communities, provides employment and maintains economic benefits within the local communities'.⁷⁸ Therefore because indigenous tourism entails that IPLCs are in control of the tourism activity as being at the centre of it, members of IPLCs can generate economic reward from their TK and practices.

Indigenous tourism is also a form of TK commodification and commercialisation which IPLCs stand to gain from. The subject of indigenous tourism includes women in IPLCs and women's TK as it forms part of the body of TK and practices which serve as tourist attractions and offer tourists unique experiences. In this regard, it is import that TK protection available be gender sensitive and gender responsive. Equally important is the need for policies and commercialisation strategies and efforts to be developed to ensure women's participation.

The Voluntary SDG review reveals that the unemployment rate in nonagricultural informal employment for women is higher.⁷⁹ Gendered TK protection can contribute to using TK as a means to generate employment among women and to foster entrepreneurship in TK based innovation. For Zambia to act in harmony with and wok towards achievement of SDG 8, women in IPLCs must be included in the opportunity to own and benefit from TK. Efforts and resources should be directed towards a sustainable means of generating economic growth through full utilisation of women's TK to maximise productivity and efficiency with minimal environmental damage through promotion of green tourism and ecofriendly production methods. Women must be provided an equal opportunity to participate in their economic growth through facilitation and participation in indigenous tourism while ensuring their TK is adequately protected.

5.4.3. Goal 9 - Build Resilient Infrastructure, Promote Inclusive and Sustainable Industrialisation and Foster Innovation.

The latter part of this goal, that of fostering innovation, is directly tied to TK specifically in the context of developing nations. TK has served as a lead to

 ⁷⁸ Georgia Yfantidou and Michela Matarazzo 'The Future of Sustainable Tourism in Developing Countries' (2017) 25 *Sustainable Development* 459cat 459.
 ⁷⁹ SDG Voluntary Review, supra at 52.

innovation in different sectors⁸⁰ and is being viewed as a possible key to addressing climate change.⁸¹ Women's TK can contribute to fostering innovation. Thus, it needs to be enabled, adequately protected, and highlighted in order to position women in IPLCs to fully participate in and contribute towards achieving SDG 9. The following targets under SDG 9 are linked to gendered TK protection:

Target 9.5: This target seeks to enhance scientific research and capabilities of industrial sectors through encouraging innovation and sustainability.⁸² Innovation is an ongoing process in TK as IPLCs adjust and enhance their knowledge in response to changing environmental needs. TK in general, including women's TK, holds key information to sustainable production methods in different fields. There is a collaboration opportunity between TK and mainstream science as has been demonstrated in the past.⁸³ The potential of human capital which vests in women in IPLCs by virtue of their TK is underutilised. However, investing in and utilising women's TK is fundamental and is required to attain sustainable development.⁸⁴

A lack of gendered TK protection creates an environment hostile to women capitalising on their TK and engaging in TK related innovation. Gender sensitive and gender responsive TK protection creates a platform which is inclusive for women in ensuring that they wield decision making power over their TK. The current Zambian PTK Act with regard to decision making rights as provided in ss 16 – 19 excludes women as a consequence of their exclusion as holders flowing from the definition in s2 of the PTK Act.

Gendered TK protection is an important component to enable women to utilise their TK and reap the associated benefits. Intended benefits to be derived from

⁸⁰ Sushil Kumar Ajay Kumar, Komal , Nirala Ramchiary and Pardeep Singh 'Role of Traditional Ethnobotanical Knowledge and Indigenous Communities in Achieving Sustainable Development Goals' (2021) 13 *Sustainability* 1 at 8-9.

⁸¹ Nadzirah Hosen; Hitoshi Nakamura; Amran Hamzah 'Adaptation to Climate Change: Does Traditional Ecological Knowledge Hold the Key?' (2020) 12 *Sustainability* 676 at 677.

⁸² United Nations Department of Economic and Social Affairs - Sustainable Development 'Build Resilient Infrastructure, promote inclusive and sustainable industrialisation and forster innovation - Targets and Indicators.' available at *https://sdgs.un.org/goals/goal9*, accessed on 11 January.2022.

⁸³ Kumar, Komal, Ramchiary et al, supra.

⁸⁴ Anonymous Gender and Sustainable Development: Maximising the Economic, Social and Environmental Role of Women (2008) Organisation for Economic Cooperation and Development (OECD), at 7.

utilisation of TK according to s43 of the PTK Act include research and development funding, training opportunities as well as joint IP ownership among others. These benefits are pro-innovation in that they serve to encourage innovation. Research and development funding prompts and fosters investigation into avenues of development involving TK. Training opportunities would allow a merger of traditional TK utilisation techniques and mainstream science, while IP creates an opportunity to protect TK based innovations. Presently, these benefits are not crafted in the PTK Act in a manner which ensures that benefits will be equally available to men and women alike. The effect is to limit the ability of women to effectively participate in the innovation process thus side-lining the potentially sustainable innovations which may be fostered by women in IPLCs.

Furthermore, the recognition of women's TK as an area in which innovation takes place supports TK included innovation systems.⁸⁵ TK included innovation systems require a deliberate effort to make TK part of innovation systems. They facilitate sustainable development inclusive of IPLCs and indeed women in IPLCs. ⁸⁶ They also provide an opportunity for enhanced comparative advantage which is particularly advantageous to developing countries such as Zambia which are rich in TK. ⁸⁷ A gendered TK protection framework supports the agenda for innovation encouragement and sustainability. Women in IPLCs play an important role in TK based innovation. Their TK holds a unique perspective in different avenues where there is opportunity to innovate sustainably including ecological⁸⁸, medical and agricultural⁸⁹ knowledge. Women are important players in socially inclusive innovation, that is, innovation that speaks to the needs of women at a grassroots level in IPLCs. TK innovations are adaptive and hold great adaptive capacity because of

⁸⁵ Also referred to as indigenous knowledge included innovation systems.

⁸⁶ Jussi S. Jauhiainen and Lauri Hooli 'Indigenous Knowledge and Developing Countries' Innovation Systems: The Case of Namibia' (2017) 1 *International Journal of Innovation Studies* 89.

⁸⁷ Jauhiainen and Hooli, supra.

⁸⁸ Achille Ephrem Assogbadjo Belarmain Fandoh, Romain Glele Kakai, et al 'Women's Traditional Knowledge, Use Value, and the Contribution of Tamarind (Tamarindus indica L.) to Rural Households' Cash Income in Benin' (2010) 64 *Economic Botany* 248.

⁸⁹ Laurence Pourchez Women's knowledge: traditional medicine and nature; Mauritius, Reunion and Rodrigues. Local & Indigenous Knowledge 1. Paris, UNESCO Publications (2017) 14.

the creativity and adaptive capacity of IPLCs.⁹⁰ For example in the Kilifi and Kwale counties in Coast region of Kenya, IPLCs such as the Giriama, Chonyi, Rabai, Digo and Duruma which form part of the wider Mijikenda community have developed innovative TK based innovative farming practises in response to climate change.⁹¹

TK protection mechanisms which do not provide effective protection for women, work against efforts to achieve SDG 9 as they have the effect of hindering women's innovation in TK.

Target 9.b: Target 9.b aims to support domestic technology innovation and research and innovation in developing countries through ensuring a conducive policy environment.⁹² Domestic technology innovation includes TK innovations and research especially in the context of developing countries including Zambia. TK innovation is a reality among women in IPLCs in Zambia. Innovation is ongoing among women in IPLCs and in adherence with the notion of TK as a living body of knowledge, TK innovations similarly adapt and evolve over time to respond to various factors. For example, the Tonga women of the Tonga tribe in the Southern Province of Zambia engage in basket weaving. While adhering to traditional methods of weaving, the Tonga women have become innovative in adapting basket patterns and materials to suit changing demands and appeals.⁹³

SDG Target 9.b places an obligation on countries to support domestic innovation. Hence by extension there is an obligation to support TK domestic innovation by women in IPLCs. This can be done through creation of enabling legislation to support women's innovation in TK and ensuring that these innovation efforts are unhindered. When TK protection is gender sensitive and gender responsive it broadens the scope of potential participants in domestic TK innovation to include women. The current TK protection mechanisms in their gender blind state

⁹⁰ L. Ndalilo Chemuku Wekesa, P. Ongugo, N. Leley and K. Swiderska *Traditional knowledge based innovations for adaptation and resilience to climate change: the case of coastal Kenya* (2015) at 2.

⁹¹ Wekesa, supra.

⁹² United Nations Department of Economic and Social Affairs - Sustainable Development 'Build Resilient Infrastructure, promote inclusive and sustainable industrialisation and forster innovation - Targets and Indicators.' available at *https://sdgs.un.org/goals/goal9*, accessed on 11 January.2022.

⁹³ Musiza, supra.

prove restrictive to women's participation in innovation. This is counterproductive to efforts to achieve SDG 9.

The Voluntary SDG national review largely addresses the status of SDG 9 in the context of industrialisation and innovation as it relates to multi facility economic zones and the manufacturing sector. TK has the potential to play a role in this regard because TK innovations (where appropriate taking into consideration TK protection and status in terms of sacredness, secrecy or otherwise) can result in creation of products which fit into the manufacturing industry and feed into industrialisation in Zambia as a whole. This potential inroads of TK into achieving SDG 9 along with the analysis offered in this section has been overlooked in the review.

5.4.4. Goal 10 - Reduce Inequality Within and Among Countries

The goal of SDG 10 is to reduce inequality within and among countries.⁹⁴ Reduction of inequality within Zambia includes reducing inequalities between IPLCs and urban communities in the country. However, it also includes inequalities within IPLCs; specifically, between women and men. Discrimination and marginalisation often affects IPLCs which results in them being disregarded in legislative and policy formulation processes.⁹⁵ This problem is compounded for women in IPLCs.

The current TK protections system in Zambia as it exists – that is – in a gender blind state, does not support the achievement of SDG 10. Rather, it moves the country further away from reduction of inequality in not only TK protection specifically but in all other avenues affected as a result of unequal TK protection. For example, the inequality in status of ownership of TK and access for women to benefit sharing arising from TK utilisation denies them the opportunity to reap benefits from their TK.

The effects of inequality in the area of TK protection, spill over into other areas. This can be seen from for instance SDG 2, particularly, target 2.5.⁹⁶ Although

⁹⁴ United Nations Department of Economic and Social Affairs - Sustainable Development 'Reduce inequality within and among countries - Targets and Indicators' available at *https://sdgs.un.org/goals/goal10*, accessed on 12 January.2022.

⁹⁵ Rimmer, supra at 382.

⁹⁶ United Nations Department of Economic and Social Affairs - Sustainable Development 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture -

SDG 2 deals with hunger, food security, nutrition and sustainable agriculture, target 2.5 makes a connection between these elements and benefits arising from TK utilisation. Target 2.5 aims to among other things, 'promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge'. While the root of the inequality lies in unequal TK protection and access to benefits arising, as a result of inequality there is an effect in poverty among women. Therefore, it is important that gender based inequalities in TK protection are rectified in law and at policy level in efforts to directly attain SDG 10 and remedy the defects or consequences on other SDGs which flow from this flaw in TK protection for women.

Target 10.3 : specifically requires that countries, 'Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard'.⁹⁷ The Zambian PTK Act as discussed in chapter four is a discriminatory law in substance and in effect in that it excludes women from TK protection which includes prevention from owning, exercising control over, exploiting and benefitting from their TK in the same manner as their male counterparts. Elimination of discriminatory laws would therefore require that the PTK Act is reformulated in a gender sensitive and gender responsive manner and that Customary law which is discriminatory is nullified to that extent. TK protection laws should be cognisant of and respond to the needs of women and ensure that they receive equal protection for their TK.

SDG 10 was not individually addressed in the voluntary national review. The review states that, 'SDG 10 was not reported on because it is reflected in other goals, such as SDG 1, SDG 8 and SDG 17'.⁹⁸ While it is appreciated that the SDGs are interconnected and integrate to form part of the development agenda as a whole, this interlinking or interconnection is not a sufficient reason to omit an individual

Targets and Indicators' available at *https://sdgs.un.org/goals/goal2*, accessed on 12 January.2022.

⁹⁷ United Nations Department of Economic and Social Affairs - Sustainable Development 'Reduce inequality within and among countries - Targets and Indicators' available at *https://sdgs.un.org/goals/goal10*, accessed on 12 January.20
⁹⁸ SDG Voluntary Review, supra at 1.

discussion of SDG 10. This is particularly the case for SDG 10 because its finds specific applicability to the Zambian context and more precisely to TK and gendered TK protection as shown in the immediately preceding analysis. The inequalities which exist within the country itself warrant an individual analysis of performance of SDG 10.

5.5. Future Obligations

The WIPO IGC has been engaged in ongoing discussions regarding the formulation of an international protection framework for TK since 2010. These discussions have included debates on issues typically associated with the challenges of TK protection owing to its nature and characteristics. The year 2014 marked a significant development in the IGC discussions. In that year the idea of a tiered approach to TK protection was formally introduced.⁹⁹ The tiered approach for TK protection presents a protection strategy in which TK is separated into categories generally based on the extent to which the TK is public.¹⁰⁰ The 2021 WIPO General Assembly agreed to renew the IGC mandate for the 2022/2023 biennium.¹⁰¹ This means that discussions on an international strategy for TK protection will continue. The IGC42 session held in February 2022 – March 2022 addressed genetic resources. Discussions surrounding and an international protection strategy for TK are scheduled to be held during subsequent sessions in September 2022, November/December 2022 and proceed into the March/April 2023 and June/July 2023 sessions.¹⁰²

⁹⁹ WIPO IGC, 34th Session, The Protection of Traditional Knowledge: Draft Articles, WIPO/GRTKF/IC/34/5 (2017), available at www.wipo.int/meetings/en/doc details.jsp?doc id=368218.

¹⁰⁰ Article 1, The Protection of Traditional Knowledge: Draft Articles. Some authors have presented suggestions for additional tiers or a recategorization of the proposed tiers. See Ruth L. Okediji WIPO 'Traditional Knowledge and the Public Domain' (2018) 176 *Centre for International Governance Innovation (CIGI)* at 14 and Chidi Oguamanam 'Tiered or Differentiated Approach to Traditional Knowledge and Traditional Cultural Expressions The Evolution of a Concept.' (2018) 185 *Centre for International Governance Innovation (CIGI)* 1.

¹⁰¹ WIPO Report on the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC (2021) WIPO, available at <u>https://www.wipo.int/tk/en/igc/snapshot.html</u>.

¹⁰² WIPO 'Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore – Forty Second Session' available at <u>https://www.wipo.int/meetings/en/details.jsp?meeting_id=68408</u>, https://www.wipo.int/tk/en/news/igc/2022/news_0003.html.

The Zambian PTK Act in the preamble includes as part of the purpose of the Act as being to 'give effect to...any other relevant international treaty or convention to which Zambia is a state party'.¹⁰³ This demonstrates an intention on the part of Zambia to be compliant with international obligations which relate to TK protection. This position is further supported in s73(2) (a) of the PTK Act which empowers the Minister to make regulations by statutory instrument to provide for 'administrative requirements for the implementation of...any relevant international convention to which Zambia is a State Party.' This obliges Zambia to honour her current obligations and pass needed statutory instruments if necessary, in order to do so.

An international TK protection regime at present remains a work in progress because the proposed protection instrument relating to TK protection is in draft form. Generally, the draft articles regarding TK protection in principle canvass areas similar to those covered in the Zambian PTK Act. These areas include protection criteria, scope of protection and exceptions and limitations. However, a comparison of the specific articles in the proposed draft international TK protection mechanism to what exists in the Zambian PTK Act is premature at this stage because the articles still remain in draft form and stand to be further debated in future in the WIPO IGC forum. The potential for changes following discussions between member states in the coming years is evident in the current status of the draft articles which include alternatives in terms of wording and content for a single article, that is, different versions of a potential single article. For example, in the definitions section of the draft articles which forms the basis of the interpretation of the entire instrument, various alternatives are presented for definitions of terms which can be adopted by member states. For some terms, there is at least one or are as many as four alternative definitions provided.¹⁰⁴ These alternative definitions also appear in the body of the instrument.¹⁰⁵

The draft articles in their current state demonstrate consistently that there is an intention to grant member states some flexibility in the extent and implementation

¹⁰³ See PTK Act Preamble.

 ¹⁰⁴ See definition of misappropriation in the Protection of Traditional Knowledge: Draft Articles.
 ¹⁰⁵ See arts 2,4, 5 and 7 of the Protection of Traditional Knowledge: Draft Articles.

for examples. Available at https://www.wipo.int/meetings/en/doc details.jsp?doc id=439178.

of protection at national level. A number of the draft articles use statements which allow member states to defer to their national laws. For example, draft art. 5 which deals with the scope of TK protection refers to protection 'as appropriate and in accordance with national law'. Draft art. 6 discusses sanctions remedies and exercise of rights and leaves it up to members to put in place appropriate sanctions, 'to an extent determined in national law'. A similar trend is observable in draft art. 8 in administration of rights where the instrument refers to 'in accordance with national law of member states.' In the area of exceptions and limitations, draft art. 9 allows member states to adopt appropriate limitations and exceptions (both general and specific) in the protection of TK under their national law. This flexibility provided in the draft articles thus far means that Zambia and other member states will be permitted to make to an extent independent decisions in their national laws regarding TK protection as will be permissible in the scope of the finalised international protection instrument. From this perspective, Zambia should be well positioned to honor future commitments potentially arising as a result of a finalised international TK protection instrument.

In the context of gendered TK protection, the WIPO IGC negotiations have failed dismally to recognise the role women play in TK. The negotiations have also failed thus far to ensure that the international instrument being drafted is alive to the specific needs of women and can provide them with effective TK protection. The draft articles contain do not mention any women or gender specific dynamics in TK protection and thus have proceeded in a gender blind context.¹⁰⁶

This is a dangerous approach to TK protection and creates a gap in protection available to women. As highlighted in chapter 2 of this thesis, there is a strong justification for a gendered approach to TK protection. Among these justifications are the differences in gender roles for men and women, gender disparity, double marginalisation of women in IPLCs, cultural considerations, fair reward for labour and corrective and distributive justice considerations. An international protection mechanism is an ideal platform to ensure gendered TK protection because a

¹⁰⁶ Jerban makes a similar observation. See Jerban, supra at 2.

minimum requirement for gendered TK protection would compel member states to account for gender considerations in compliance with their international obligations.

The draft articles as they stand and the associated discussions at the IGC presently ignore gender considerations in TK protection. Therefore, if Zambia makes the changes needed to provide gendered TK protection, Zambian TK protection legislation will in effect provide a higher standard of TK protection than that in the international TK protection instrument assuming no gender perspectives are incorporated. Additionally, the flexibility offered to member states in the draft articles means that Zambia would be at liberty to extend this higher standard of TK protection to her people. On the other hand, if the WIPO IGC changes course and chooses to adopt a gender sensitive and gender responsive approach to the formulation of this international TK protection instrument (albeit at this late stage in the discussions), Zambia will be at an advantage in having already ensured gendered TK protection in legislation and policy.

5.6. Conclusion

This chapter has considered in detail how a gendered approach to TK protection aligns with national development goals. The absence of gender sensitive and gender responsive TK protection is regressive to leaving no one behind in the Zambian developmental agenda. It has been shown that gendered TK protection has the potential to greatly contribute to the achievement of the national Vision 2030 and the 7NDP. Ensuring that TK protection is gender sensitive and gender responsive entrenches and contributes to firmly securing the achievement of Zambia's developmental goals. Further, it has been demonstrated that the Zambian national development agenda and the SDGs are interlinked. Efforts to achieve Vision 2030 and the 7NDP contribute to attainment of the identified SDGs and vice versa. Therefore, the role that gendered TK protection plays in Zambia's development goals should not be ignored. Rather, gendered TK protection must be fully utilised as a tool in attaining Zambia's developmental goals. This chapter has also demonstrated that pursuing a gender sensitive and gender responsive approach to TK protection presently does not jeopardise Zambia's ability to fulfill potential future obligations in a gendered context in relation to an international TK protection regime. Rather, such an approach advances Zambia's developmental agenda and serves as a positive element should gender considerations be incorporated into international TKprotectionobligationsinthefuture.

6. CHAPTER 6 - CONCLUSION

6.1. Introduction

As the final chapter in this thesis, chapter six brings the discussion on gendered TK protection as addressed within the scope of the research to a close. The various issues and arguments posited in the thesis are summarised and the recommendations made are presented. The research questions are revisited, and the answers to the questions according to the thesis' findings are highlighted.

6.2. Summary and Recommendations

6.2.1. Chapter One

In chapter one, a general introduction to the thesis was provided and the context of the research was defined. It was established that women play a key role in TK generation and dissemination. The existence of women's TK as a specific branch of TK was canvassed and it was further established that women actively generate and disseminate TK in IPLCs. The uniqueness of women's TK was also highlighted in terms of specific connections they have to certain aspects of TK. A connection between gender and TK was made and it was argued that traditional gender roles play a part in knowledge differentiation in TK thus the role women play in TK use is connected to their assigned gender roles within society.

6.2.2. Chapter Two

Chapter two presented seven lines of argument which justify the need for a gendered approach to TK protection. The first reason discussed addressed the various differences in gender roles for women and men. It was explained that these differences result in different interests and relationships with TK between women and men which ultimately leads to different perspectives on TK and development of specialised knowledge. Therefore, it was determined that women and men interact differently with TK in its production, interpretation and utilisation. Closely linked to the issue of gender roles was the reinforcement of gender disparities as a second justification for gendered TK protection. It was emphasised that to avoid

reinforcement of gender disparities, TK protection must be gender sensitive and gender responsive.

A consideration of women's position in IP in general as lacking a strong background of involvement in IPR acquisition for various reasons provided the third justification for gendered TK protection considerations. These reasons included social constraints, limited access to resources and biased perceptions of those in the IPRs system among others.

Cultural considerations and double marginalisation were presented as the fourth and fifth arguments in support of a gendered approach to TK protection. As a result of customary laws, norms and practices women have been disadvantaged in terms of access to property ownership, resources and control of resources all of which create difficulties in terms of asserting TK ownership, associated rights, and protection. It was demonstrated that this problem is intensified for women in IPLCs because IPLCs are also historically marginalised groups.

The fair reward for labour argument which simply demands that there be fair reward for labour was shown to be the sixth basis for gendered TK protection. This argument demonstrated that gendered consideration of TK protection is important to ensure that women's labour in TK generation is rewarded in the same way as that of men.

Theories of justice, in particular corrective and distributive justice were presented as the final fundamental justification for gendered TK protection. As explained in chapter two, in the context of TK protection for women, these theories require that injustices from the past (unfair treatment of women) be rectified and as far as possible be undone with the aim of restoring equality of treatment between women and men. This is achievable through making specific considerations in resource allocation such as rights and power in TK.

Recommendation: Based on the reasons advanced for the need for gender considerations in TK protection, it is recommended that gendered TK protection considerations must be a compulsory component of TK protection in Zambia.

6.2.3. Chapter Three

Chapter three examined the current TK protection situation in Zambia through a gendered lens. It was established that deliberations in the drafting of the PTK Act did

not account for gender considerations. The lack of gender sensitivity and gender responsiveness in the Act was evident as early as from the preamble of the Act, into the interpretation section, and down to the substantive provisions in the Act. Chapter three considered selected provisions from the PTK Act in greater detail and considered the role of the Zambian Constitution in TK protection.

Regarding substantial provisions in the PTK Act, chapter three highlighted the extent of protection, benefits and principles¹ surrounding TK protection as being unfavourable for women. It was noted that the provisions in the PTK Act relating to these areas have the effect of excluding women from benefitting because of the manner in which they are captured and their lack of specificity in terms of their application in recognition of women's social context. Another problematic issue highlighted was the fallback or deference to recognition of customary law as a guiding principle in the use and access to TK particularly in terms of holding, transmission, ownership and custody of TK. This has the far reaching effect of influencing the interpretation of other provisions within the Act to the disadvantage of women based on discriminatory customary law principles.²

Gender sensitivity and responsiveness considerations in the administration of the PTK Act were identified as being absent both in terms of gender balanced composition and participation requirements.³

In terms of benefits, rights and licensing, it was shown that the PTK Act is gender blind because it excludes women from being TK rights holders as a consequence of the initial definition of TK holders. A further lack of gender considerations in the PTK Act was observable through the linking of prior informed consent requirements to traditional decision making and governance processes of the traditional community concerned.⁴ This places women in IPLCs at a disadvantage and does not facilitate recognition of women in TK holders on account of discriminatory customary law principles and practices.

¹ Section 4 PTK Act.

² Section 4(5)(l) PTK Act.

³ Section 7 PTK Act.

⁴ Section 16 - 19 PTK Act.

Access and benefit sharing provisions⁵ in the PTK Act also failed in providing gender sensitive and gender responsive protection. The provisions in the Act in this area are not captured in a gendered way because benefits are presented generically without accounting for differences in the social contexts for women and men and they reflect no deliberate effort to ensure that benefits are realised for both women and men.

Chapter three also revealed that moral rights are insufficiently catered for in the PTK Act in spite of their being an important aspect of TK protection. This is especially true in a gendered context where recognition of women's TK is not common place and is often done away with or undermined. Despite their importance, the PTK Act does not specifically mention moral rights nor does it provide robust moral rights protection.

In assessing the role of the constitution in TK protection, it was revealed that the Zambian Constitution provides weak TK protection. It contains no independent provisions directed towards TK protection and by extension contains no recognition or application of gender considerations in TK protection. The interplay between the Constitution and customary law is such that the art 23 claw back clause creates an opportunity for discriminatory customary law provisions to remain applicable and permit discrimination on the basis of customary law in certain matters. This creates a perilous situation for women in TK protection because the PTK Act defers to applicable customary law in several aspects.

Recommendations: It is recommended that women be compulsorily made part of the administration process within the PTK Act in terms of representation, composition and active participation. It will therefore be insufficient to merely provide that officers administering the PTK Act be equally composed of both women and men, rather there needs to be real and active participation of women in decision making, policy making and implementation of the PTK Act.

It is also recommended that the fallback to discriminatory customary laws and traditional decision making processes be dispensed with entirely in the PTK Act.

⁵ Sections 41 – 43 PTK Act.

The deferment to customary law which currently exists in the PTK Act is regressive to TK protection for women and presents a real risk to the realisation of effective TK protection for women.

In terms of benefit sharing, the current benefit sharing provisions within the PTK Act must be revised and crafted to be inclusive for women and create the express obligation to include women in any form of benefit structure. A conducive situation must be created both in terms of the legal environment and practical resources to enable enforcement of the rights contained in PTK Act for women.

Practical suggestions on provisions in the PTK Act which should be reworked to be gender sensitive and responsive therefore ensuring benefits are inclusive and effective for women include:

- i. Creating a requirement for an equal portion of research and development funding arising from TK to be allocated to women / women development centred programmes,
- ii. Guaranteeing women's participation in research and development activities arising from TK exploitation,
- iii. Mandating that an equal / equitable portion of employment benefits created as a result of TK is specifically directed to women,
- iv. Ensure participation of Zambian nationals in research based on TK compulsorily includes participation of women Zambian nationals,
- v. Creating the obligation to ensure women can access products and technologies created from TK, and
- vi. Including a mandatory equal female quota in those to be involved in training and enhancing local skills in TK (capacity building participants).

Taking such measures will bring the PTK Act closer to being effective for women's TK protection.

On the matter of the role of the constitution in TK protection, it is recommended that there is a need for constitutionalisation of TK protection in a gender sensitive and gender responsive manner. This requires creating provisions within the Zambian Constitution itself which speak directly to TK protection for both women and men. This protection must include coverage of important principles which will govern Constitutional TK protection in a gendered way. Suggestions for important issues to be included in TK protection in the Constitution are:

- 1. A general recognition of TK and its importance,
- 2. A specific recognition of women's TK,
- 3. The right for women and men to have their TK protected equally,
- 4. Outright inclusion of moral rights in TK for both women and men,
- 5. A recognition and creation of the right for both women and men to benefit equally from their TK as individuals and as part of larger communities,
- 6. Clear acknowledgement that the Constitution recognises the different social contexts in which men and women in TK production and ownership operate and that the protection offered will be responsive to those differences.

It must be noted though that the effectiveness of these proposed constitutional provisions for gendered TK protection is dependent on disposal of the art. 23 claw back clause. Therefore, it is vital that the claw back clause be dispensed with.

It is important that the PTK Act provides express and robust moral rights protection for TK in a gender sensitive and gender responsive way. It is recommended that the moral rights coverage should canvass key areas such as:

- i. Ownership of moral rights which should be explicitly stated to include women,
- ii. The nature of moral rights as being inalienable, non transferable, incapable of waiver and existing as a separate category of rights capable of independent enforcement,
- iii. The scope of moral rights. This should be descriptively laid out to include issues such as misleading claims to authenticity, use of TK in a way contrary or offensive to the owner(s), whether individual or as an IPLC, and
- iv. The duration of moral rights as being in perpetuity.

These provisions would create an obligation to recognise women as authors of their TK. Once authorial recognition is granted, the paternity and integrity rights which flow from authorship will also be availed and accessible to women.

Overall, decisive changes are needed in the PTK Act to make it gender sensitive and responsive in order to provide real TK protection for women. Implementing the recommendations for change to the specific aspects of the PTK Act as highlighted in this section will significantly contribute to a move towards effective TK protection for women.

6.2.4. Chapter Four

Chapter four began by establishing the appropriateness of Kenya as a comparator jurisdiction in this thesis. This was done through a brief discussion of some common denominators between Zambia and Kenya such as relative geographic proximity, common membership to regional organisations including ARIPO and COMESA, similarities in legal systems and interactions with customary law as well as similarities in their approach to TK protection.

The chapter provided insight into how Kenya has addressed claw back clauses by removing them in their entirety from her Constitution. It further considered the issues of commodification and commercialisation of TK and concluded that Zambia adopts a pro commercialisation approach to TK and that gender considerations must be accounted for during commercialisation and beyond. This has the potential to result in increased economic empowerment for women. In taking gender considerations into account in TK commercialisation, it is important to ensure that policies are favourable for TK commercialisation by women. The chapter proceeded to discuss in detail important lessons to be learned from the Kenyan PTKCE Act and Constitutional approach to TK protection.

Recommendations: Based on the lessons drawn from the Kenyan PTKCE Act, the following recommendations adapted to reflect gender sensitive and gender responsive considerations in TK protection for Zambia are made:

- i. The Zambian PTK Act should like the Kenyan PTKCE Act draw directly from the Constitution and make clear constitutional connections within the Act. This will provide the PTK Act a stronger foundation in the context of a directly attributable relationship to the Constitution. The content needed in the Zambian Constitution should reflect gender considerations as pointed out in the chapter three summary above.
- ii. The Kenyan approach demonstrates that decisive action is needed to remove claw back clauses. It is recommended that Zambia takes decisive action to remove claw back clauses from the Constitution. Additionally, there is a need to be conscious of the ripple effects such clauses may

have had. Therefore, it is important for Zambia to put in place mechanisms to remedy the damage these clauses may have already caused. Such measures should exist within the Zambian Constitution itself.

- iii. The Zambian PTK Act needs to add and make changes to some existing definitions in its definition section to ensure that these set the correct tone for the interpretation of the remainder of the PTK Act. Examples include the addition of the definition of an owner, amendments to the definition of a holder to explicitly include women and an addition of limitations on the applicability of customary laws and practices.
- iv. Explicit reference must be made to national values as fundamental considerations and guidelines in the interpretation and administration of the PTK Act as is the case in the Kenyan PTKCE Act. This is important because Zambian national values already include equity, social justice and non discrimination, all of which are relevant for gendered TK protection.⁶
- v. As is the case in the Kenyan PTKCE Act,⁷ clarity is required in the Zambian PTK Act on the role of the State in TK protection. There is a need to outline specific responsibilities which rest on the State in a gender sensitive and gender responsive manner. Examples of State responsibilities which need to be captured with particular reference to gendered TK protection include:
 - 1. Specific obligations to help women to enforce their TK,
 - 2. Specific obligations to establish effective mechanisms for women to, assisted by the State, enforce their TK protection,
 - Undertaking to allocate a portion of resources to empowering women with knowledge and resources on TK abuse, misuse and policing, and
 - Creating suitable reporting mechanisms for unauthorised use of TK including different channels easily accessible to IPLCs including women.

⁶ Article 8 (d) Zambian Constitution.

⁷ Section 4 and 5 PTKCE Act.

- vi. The protection criteria in the Zambian PTK Act should be expanded to cover the purpose of the TK being protected as is done in the Kenyan PTKCE Act.⁸ The coverage of protection criteria in the Zambian PTK Act will create the opportunity to explicitly include categories such as domestic work as qualifying for protection. This will directly contribute to the recognition of women's TK created in a domestic context among others.
- vii. The scope of TK protection in the Zambia PTK Act is generic⁹ compared with the broader and more detailed approach to the scope of TK protection captured in the Kenyan PTKCE Act.¹⁰ The scope of protection needs to be broadened to for example, reflect cognisance of advancing technology by making specific reference to online transmission of TK and provide protection for TK based derivative works. Assuming earlier definitional problems in the Zambian PTK Act are remedied, the broadened scope of protection should in principle be applicable for both women and men.
- viii. Equal treatment for groups and individuals in terms of duration of TK protection should be provided in the Zambian PTK Act.¹¹ As is the case in the Kenyan PTKCE Act,¹² there should be no distinction on the term of protection available for TK protection for individuals versus that which is available for groups. In ensuring that gender considerations are applied in this regard, there should also be no distinction on the term of protection available for Women TK holders versus men TK holders.
 - ix. In terms of exceptions, the Zambian PTK Act only captures, research, education and experimentation.¹³ Further, the application of exceptions where TK is individually held is narrow.¹⁴ It does not include dissemination and development of TK within the traditional context and

⁸ Section 6 PTKCE Act.

⁹ Section 4 PTK Act.

¹⁰ Section 18 PTKCE Act.

¹¹ Section 24 PTKCE Act.

¹² Section 6 PTKCE Act.

¹³ Section 3(3) PTK Act.

¹⁴ Section 22 PTK Act.

community. In imitation of the Kenyan approach, exceptions should be very specific and tailored to TK. ¹⁵ Exceptions in the Zambian PTK Act should be extended to allow use by individual community members within the traditional context and should demonstrate suitability for TK by including exceptions such as use for safeguarding TK and cultural heritage. The Zambian PTK Act in detailing the scope of exceptions should also categorically state that moral rights, fairness, and TK value considerations remain applicable even when using TK under the exceptions.

- x. The Zambian PTK Act contains no provision for involvement of traditional communities in the procedures and rules for prescribing authorisation of use of their TK.¹⁶ This is another area in which the Kenyan approach can be emulated. ¹⁷ The Zambian PTK Act should mandate the involvement of IPLCs in setting rules and procedures in this regard. However, this should be done in accordance with a gender sensitive and gender responsive approach. Women must be compulsorily represented and actively involved in and heard during these processes.
- Regarding authorisation to exploit, the Zambian PTK Act does not detail conditions to be fulfilled leading up to authorisation.¹⁸ On the other hand, the Kenyan PTKCE Act creates an obligation to consult the community.
 ¹⁹ Zambia should adopt the idea of a consultation requirement but with added measures to ensure women are part of the process and that traditional decision making processes do not hinder their participation in any way.
- xii. Compulsory licensing for TK use in the Zambian PTK Act is limited to public health and public security reasons.²⁰ Zambia can emulate the Kenyan position²¹ by broadening the compulsory licensing scope through

¹⁵ Section 19 PTKCE Act.

¹⁶ Section 17 PTK Act.

¹⁷ Section 10 PTKCE Act.

¹⁸ Section 17 PTK Act.

¹⁹ Section 25 PTKCE Act.

²⁰ Section 23 PTK Act.

²¹ Section 12 PTKCE Act read with art 40 Kenyan Constitution.

introducing public interest as a ground for compulsory licensing. To mitigate the potentially over broad nature of the concept of public interest, a constitutional connection should be made through inserting a definition of public interest in the Zambian Constitution to serve as a sufficient guide to what the interpretation of public interest should be. Importantly, the PTK Act, with regard to compulsory licensing must also create provisions for women's compulsory participation during the consultation process for compulsory licensing. Non commercial aspects of compulsory licensing in terms of applicability of moral rights obligations and considerations to compulsory licensing should also be addressed in the Zambian PTK Act.

- xiii. The Zambian PTK Act does not address derivative works based on TK hence derivative works are left unregulated. In partial imitation of the Kenyan PTKCE Act²² Zambia needs to introduce commercial and moral rights protection around derivative work including the obligation to acknowledge the TK component of derivative work and that of benefit sharing where commercialisation is done. A balanced view is needed in terms of the requirement to obtain permission from TK holders before creating a derivative work. This requirement should not exist to stifle TK development but should serve to protect specific considerations surrounding for example secret TK or considerations regarding spiritual factors regulating use of TK.
- xiv. The reference to dispute resolution using customary laws and practises in the Zambian PTK Act²³ should be adjusted to exclude discriminatory customary laws and practises against women. It must be ensured that where customary law will be applied, it will not be done in a prejudicial manner to women's TK protection. Dispute resolution should be expanded to allow other dispute resolution options to determine ownership disputes as is done in the Kenyan approach.²⁴ The registrar of

²² Section 18 (2) PTKCE Act.

²³ Section 18 PTK Act.

²⁴ Section 30 PTKCE Act.

PACRA was identified in the Zambian PTKCE Act as having the broadest scope for handling dispute resolution²⁵ however the technical competence and appropriateness of the registrar in this capacity is ill fitting. Provisions must be created within the Act for officers to be appointed for dispute resolution with the necessary knowledge and expertise to handle TK issues.

xv. The Kenyan PTKCE Act sets a fine example in articulating detailed, practical TK related offences.²⁶ It also makes specific reference to moral rights offences.²⁷ In contrast, the Zambian PTK Act focuses on generic, administrative types of offences and pays little attention to offences directly related to TK misappropriation.²⁸ The Zambian PTK Act should move away from genericism and be specific in detailing offences such as for example, using unauthorised TK in the course of trade, failure to acknowledge the source of TK, and making false endorsements or links to TK. Further, as is the case in the Kenyan PTKCE Act, ²⁹ the Zambian PTK Act should provide civil remedies for breach of TK rights with remedies which demonstrate cognisance of the specifics of TK protection including compensation for financial loss as well as non financial loss such as offense and emotional damage.

Overall, there are lessons to be learned from the Kenyan approach to TK protection. However, more is required than a simple copy and paste exercise. These lessons must be applied with caution and consideration for the Zambian context. Importantly, they need to be applied in a gender sensitive and gender responsive manner in order to fully address TK protection. The positive elements worth emulating must be isolated and entrenched into the Zambian PTK Act in a gendered way.

6.2.5. Chapter Five

²⁵ Section 56, 64 and 65 PTK Act

²⁶ Section 37 PTKCE Act.

²⁷ Ibid.

²⁸ Section 71 PTK Act.

²⁹ Section 39 PTKCE Act.

Chapter five examined the role of gender sensitive and gender responsive TK protection in attaining national and international development goals and commitments. It considered two important national documents which outline Zambia's developmental goals, namely, the Zambia Vision 2030 and the 7NDP. The thesis established that to achieve sector visions and associated goals in specific sectors of Vision 2030 and by extension the 7NDP, gendered TK protection is needed.

The three key areas in the vision were identified as economic growth and wealth, social investment and human development, and creating an enabling environment for sustainable social economic development. Under each area gendered TK protection was explained as being applicable to the identified sectors of agriculture, land, tourism, manufacturing, science and technology, arts and culture, and gender. In each of these sectors, it was demonstrated that gendered TK protection creates the opportunity for women to participate and contribute to Zambia's economic growth and wealth generation. This is because women in TK have the potential to, through their TK impact, participate and be empowered through these sectors and contribute to development. Chapter five also demonstrated that gendered TK protection harmonises fully with the strategic objectives of the 7NDP.

After a consideration of the national Zambian development agenda, the chapter engaged with developmental goals at an international level through a consideration of the SDGs. The role of gendered protection in attaining the four identified SDGs was discussed. It was shown that because of the connection between the SDGs, Vision 2030 and the 7NDP, advancement towards achieving national development goals inherently means advancement in achieving the SDGs. The identified SDGs were SDG 5 (to achieve gender equality and empower all women and girls), SDG 8 (to promote sustained, inclusive and stable economic growth, full and productive employment and decent work for all), SDG 9 (to build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation) and SDG 10 (to reduce inequality within and among countries). For all the chosen SDGs chapter five revealed that gendered TK protection has a key role to play.

Regrading SDG 5, specific targets and indicators of the SDG were identified as harmonising with the gendered TK protection agenda. Gendered TK protection, because it requires women and men to receive equally effective, non discriminatory TK protection directly contributes to achieving gender equality and women's empowerment. It ensures recognition of women's TK and serves as a legal mechanism in place to promote, enforce and monitor equality and non discrimination. Actively ensuring gender sensitive and gender responsive TK protection is a necessary change to TK protection laws in harmony with SDG 5.

The elements of sustainability, inclusivity, productivity and decency of work were demonstrated as being directly related to fulfilment of SDG 8 through gendered TK protection. These elements are also expressed as specific targets and indicators within the wider scope of SDG 8. Inclusivity and decency of work for all requires that women are fully included in economic growth. An essential way to achieve this is the equal recognition and equal pay for equal work done (including TK generation / TK related innovations). The idea of sustainability aligns with the nature of TK and its associated environmental practises in which women actively participate. The extension of sustainability to tourism is well suited for gendered TK protection in that TK is fundamental in indigenous tourism (this includes women's TK) and inherently includes sustainable practises. Therefore, gendered TK protection contributes positively to achievement of SDG 8.

SDG 9 was deemed relevant particularly because it relates to fostering innovation. Women's TK can play an important role in fostering innovation. The nature of TK as a living body of knowledge necessarily means that innovation is ongoing in TK as it changes and adapts to respond to its physical and social environment. Ensuring gendered TK protection is important to harness the human capital contribution to innovation from women in IPLCs and create a conducive environment to the realisation of their full contribution to development. The focus on domestic innovation highlighted in SDG 9 necessitates real TK protection for women to ensure that their innovation as part of the wider category of domestic innovation is fully supported and their innovation efforts remain unhindered by discriminatory laws.

In addressing SDG 10, it was explained that reduction in inequality within the country entails a reduction in inequality within IPLCs, that is, the inequality between women and men. Gendered TK protection would serve to eliminate disparate TK protection existing in the Zambian PTK Act and provide effective TK protection for women. This would be a leap forward towards the achievement of SDG 10.

Chapter five also demonstrated that Zambia is currently well positioned to honour international obligations for TK protection in a gendered context in that currently there are no explicit gendered TK protection obligations in existence. It was also highlighted that the ongoing deliberations regarding an international protection regime as well as the output of those deliberations in the form of the draft articles on TK protection exclude gendered TK protection considerations.

Overall gender sensitive and gender responsive TK protection for Zambia aligns with the national development goals and identified SDGs. Failure to provide gendered TK protection is a major drawback in efforts to achieve these development goals. Additionally, implementing gendered TK protection does not pose a risk to Zambia of falling foul of any potential future international TK protection regime envisioned based on the current status of efforts in that direction.

Recommendations: It is recommended that recognition be given to the role gendered TK protection plays in fulfilment of national and international development goals. Zambia should incorporate gendered TK protection fully and actively as a fundamental part in strategies formulated both at a policy and legislative level towards achieving development goals. By so doing, Zambia will accord herself the opportunity to benefit from her comparative advantage as a developing nation rich in TK.

This involves a merging of interests between gendered TK protection and achievement of developmental goals. This merger will entail actively constructing development strategies built around gendered TK protection with measurable milestones resulting from incorporation of gendered TK protection into the fibre of development strategies. It will also entail adding a gendered TK protection dimension to any periodical analysis made in strides towards achieving Zambia's national and international development goals.

It is also recommended that Zambia proceeds to implement gender sensitive and gender responsive TK protection in spite of the absence of these considerations in the current deliberations and draft articles on the international TK protection regime. Doing so will place her as a forerunner in gendered TK protection. Whether gendered TK protection considerations are incorporated into the final outcome of the international TK protection regime or not, Zambia is not at risk of falling foul of international obligations in terms of gendered TK protection.

6.3. Answering the Research Questions

From the onset, this thesis sought to answer two primary research questions, that is:

- 1. 'How if at all, does Zambia incorporate a gendered approach to the protection of TK within her prevailing protection regime?'
- 2. How may such an approach be entrenched and enhanced in alignment with Zambia's developmental goals?

To systematically address the primary research questions, a series of sub research questions were formulated in chapter one. Following the research done and findings as presented in this thesis the answers to the sub research questions are as follows.

a) What is the role of women in the generation, use, dissemination and protection of TK?

Women play an important and significant part in TK generation, use and dissemination. They possess special TK in areas such as medicinal knowledge related to plants, medicinal knowledge related to childbirth, home gardens, food security, culinary traditions, use of natural genetic resources as cosmetics, and ecological knowledge among other areas.³⁰ Women's TK as a subset of the larger body of TK is unique because of the special connection women have to it and the particular know how they possess in terms of its protection.³¹ Women are key in generation and dissemination of TK. Traditional gender roles play a part in knowledge differentiation in TK therefore there is a connection between gender and TK. This was canvassed in chapter one of the thesis.

³⁰ Montanari, supra and Ntuli, Zobolo, Siebert et al, supra.

³¹ McGregor, supra.

b) In which ways may the exclusion of a gendered perspective affect TK protection?

The exclusion of a gendered perspective in TK protection is detrimental to the survival of a TK system. It renders TK protection ineffective for women. Therefore, a gendered approach to TK protection is justified. This is because of several factors including cultural considerations, the double marginalisation of women, theories of justice, gender roles and gender disparity reinforcement. These justifications were advanced in chapter two of the thesis.

(c) What is the current legal position relating to TK protection specifically in Zambia?

TK protection in Zambia is catered for using a *sui generis* system, in particular the PTK Act. The PTK Act addresses various aspects of TK protection. Among the aspects covered are TK ownership, the extent of protection available, access to and use of TK and the associated principles on which this is based, exploitation of TK, benefit sharing, licensing, dispute resolution, administration of the Act, and offences surrounding TK. There is also an interplay between the PTK Act and customary law in that in the administration of the Act, customary law considerations, principles and practices remain applicable. This sub research question was answered in chapter three of the thesis.

d) To what extent, if at all, does and should the Constitution play a role in TK protection in Zambia?

The Constitution should play a role in TK protection in Zambia because TK is an appropriate subject for constitutional protection. This is because it falls within the ambit of what should be contained within the Constitution since it concerns property rights, as TK is intangible property and it is closely associated with IPLCs which are minority/vulnerable groups. However, the Zambian Constitution currently plays a very minimal role in TK protection and does not contain specific TK protection provisions. The absence of specific TK protection provisions and as a result a lack of TK protection provisions which are gender sensitive and gender responsive is detrimental to the protection of women's rights in this context. Additionally, the claw back clauses which exist in art 23 of the Constitution as discussed in chapter

three compound the problem in that women are further disadvantaged. The Zambian Constitution therefore falls short as explained in chapter three of the thesis.

e) Is the current PTK Act gender sensitive and gender responsive? If not, how can the Act be changed to adopt a gender sensitive and gender responsive approach?

The current Zambian PTK Act is neither gender sensitive nor gender responsive. It fails to account for gender considerations based on the context within which TK operates and contains several provisions which disadvantage women and effectively exclude them from TK protection. The PTK Act needs to be revised to address the specific needs of women in the context of TK to ensure that TK protection is available and effective for them. This involves the removal of barriers to protection for women arising from problematic gender insensitive definitions in the Act and removal of the dependency on aspects of the interpretation of the Act on customary law considerations. Further, there is a need to explicitly craft rights, protections and benefits available in the Act in a way that directly and practically speaks to the inclusion of women within the scope of these rights, protections and benefits. This sub research question was addressed in chapters three and four of the thesis.

f) In what areas does the PTK Act fall short? Are there lessons to be learned from the Kenyan model in this regard?

The PTK Act falls short in areas of scope, content and protection strategy particularly when it comes to details of protection, duration of protection, protection criteria, responsibility of the state, exceptions and limitations to protection, authorisation of exploitation, compulsory licensing, derivative works, dispute resolution and providing for offences. The manner in which these areas are addressed is insufficient from a generic content perspective but also and more importantly lacks from a gender sensitivity and gender responsiveness perspective. There are lessons to be learned from Kenya in terms of creating more robust TK protection provisions. The Kenyan approach to Constitutional protection of TK and to the existence of claw back clauses is worthy of imitation. However, the extent of the instructiveness of the Kenyan approach with particular reference to the Kenyan PTKCE Act is limited to generic content within the PTKCE Act and does not extend to a gendered approach to remedying existing deficits. Therefore, Zambia must

emulate the Kenyan PTKCE Act model in terms of the general context of the Act but the lessons learned must be adapted to be fully gender sensitive and gender responsive within the Zambian PTK Act. This sub research question was answered in chapter four.

g) What role does gendered TK protection play in the attainment of Zambia Vision 2030 and SDGs?

Gendered TK protection plays a fundamental role because it harmonises with Zambia's Vision 2030 and the SDGs. Gendered TK protection fully aligns with specific goals within the Vision 2030 and development goals as expressed in the 7NDP. It supports specific development goals aimed at gender equality, economic growth, and innovation, all of which are reflected in SDGs 5, 8, 9 and 10 as well as in Zambia's Vision 2030. A gendered TK protection approach facilitates the achievement of developmental goals aimed at gender equality through contributing to creating a legal environment where women are given equal opportunities to participate in sustainable economic growth and wealth creation in areas such as agriculture, tourism, manufacturing and science and technology, and innovation among others. A lack of gendered TK protection is actively antagonistic to the attainment of these national and international development goals. This sub research question was addressed in chapter five of this thesis.

h) To what extent has Zambia positioned herself to honour current and potentially future international commitments or obligations regarding an international protection framework for TK in the context of gendered TK protection?

The current draft articles for the international protection framework for TK developed at the WIPO IGC do not take into account gender considerations in the protection strategy for TK. They do not demonstrate recognition for the impact of gender on TK protection nor the social contexts within which women in TK operate. Therefore, the current TK protection mechanism in Zambia, in its gender blind state, does not fall foul of current potential international commitments on TK protection. If the implementation of the draft TK protection articles proceeds as is, without reconsideration in view of gendered TK protection, and Zambia proceeds to implement gendered TK protection, Zambia will still be in a position to honour such a future commitment to international TK protection in the context of gendered TK.

This is because the draft articles set the minimum baseline for protection and provide significant leeway for the application of protection and implementation in accordance with national laws. Therefore, if Zambia incorporates gendered TK protection into her TK protection laws this will constitute a level of protection above the minimum standard set in the draft articles thus far. If the draft articles for TK protection proceed to incorporate gender considerations in TK protection at a later stage, Zambia will be ahead on the gender sensitive and gender responsive TK protection scene having decided nationally to offer more effective protection from a gendered perspective. This sub research question was answered in chapter five of this thesis.

Having addressed the sub research questions, the answers to the two major research questions can be summarised as follows:

1. 'How if at all, does Zambia incorporate a gendered approach to the protection of TK within her prevailing protection regime?'

The current TK protection regime in Zambia is gender blind. It does not incorporate a gendered approach to TK protection. It fails to account for the differences between women and men in TK and their lived experiences. Further, it fails to consider the social context within which women in Zambia operate. The PTK Act although intended to provide TK protection is not effective for women. From a constitutional point of view, the Zambian Constitution fails dismally to create a strong foundation for TK protection overall as well as gendered TK protection. The existence of the claw back clauses ultimately creates an inroad for discriminatory customary laws and practices to disadvantage women in the context of TK protection. This is particularly detrimental because of the constant fall back to customary laws and principles in the construction, administration and implementation of the PTK Act. Therefore, it is concluded that Zambia does not incorporate a gendered approach to TK protection in her prevailing protection regime.

2. How may such an approach be entrenched and enhanced in alignment with Zambia's developmental goals?

Zambia's national and international developmental goals harmonise with gendered TK protection. International development goals are outlined in the SDGs while the national development agenda is reflected in Zambia's Vision 2030 supported by the

7NDP. The international development goals are reflected in national development agendas and goals hence the two categories of developmental goals are interrelated and intertwined.

To achieve Zambia's overall development agenda, the TK protection regime must be changed to become gender sensitive and gender responsive. Gender sensitivity and responsiveness ensures that women receive equal TK protection, are able to access associated benefits and fully participate in ownership, management and control of their TK. This extends to the ability to commoditise and commercialise their TK, oversee its use and exercise decision making power over it in the same way as their male counterparts. Using gendered TK protection to achieve this will contribute to achieving gender equality, enabling women to actively participate in economic growth and wealth creation though various TK associated sectors of the economy such as agriculture, tourism, technology and innovation. This is important in ensuring that women are not left behind and actively participate in development. Therefore, creating the right legislative environment through gender sensitive and gender responsive TK protection which clearly demonstrates recognition of gender considerations is fundamental in aligning with Zambia's development goals both domestically and internationally.

6.4. Final Remarks

While it is commendable that Zambia has a *sui generis* system dedicated to TK protection, this thesis has demonstrated that the TK protection regime is devoid of gender considerations. It is therefore ineffective for and discriminatory against women. TK protection in Zambia remains an incomplete victory as long as it fails to incorporate gender considerations. Although the TK protection regime is already in place, it is vital that the situation be remedied to be effective for women and to fully align with Zambia's developmental goals and finally move towards a complete victory in TK protection.

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