

7. PROTECTING TRADITIONAL KNOWLEDGE IN KENYA: TRADITIONAL JUSTICE SYSTEMS AS APPROPRIATE SUI GENERIS SYSTEMS

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ABSTRACT

Generally, the protection of traditional knowledge and the development of effective and appropriate frameworks for its protection have long since eluded policy makers at the global, regional and national levels. Current global efforts within the World Intellectual Property Organization Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore are a testament to this phenomenon. Prevailing intellectual property laws, environmental and human rights frameworks, institutions mandated to protect traditional knowledge, and existing literature have not examined the role of traditional institutions in the protection of traditional knowledge. Therefore, this paper seeks to examine the role of traditional governance systems in Kenya in protecting traditional knowledge and facilitating access and benefit sharing. Using data gathered from three (3) communities in Kenya, it illustrates how traditional justice systems are being used by communities in Kenya to strike a balance between ensuring protection and safeguarding of traditional knowledge. It also shows the successful use of traditional justice systems as appropriate *sui generis* frameworks requires they be used in collaboration with the intellectual property regime and not in isolation.

Keywords: *traditional knowledge, traditional justice systems, sui generis systems, intellectual property, Kenya*

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1. INTRODUCTION

There is not yet a globally accepted definition of traditional knowledge (TK). Some suggest a singular definition may not be necessary to delimit the scope of subject matter for which protection is sought.¹ There are, however, efforts at the global level aimed at addressing TK issues including definitional concerns. For instance, the World Intellectual Property Organization's (WIPO) Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore (IGC) allows member states to discuss IP issues surrounding traditional knowledge, traditional cultural expressions and genetic resources. In particular, IGC is charged with the mandate of negotiating a text-based instrument(s) for the protection of TK, genetic resources and traditional cultural expressions. At its ninth session, the IGC used the term 'traditional knowledge' on two levels: first, as a general, umbrella term (*lato sensu*) and second, as a specific term denoting the subject of specific IP protection on the use of knowledge (*stricto sensu*).² At a general level, TK is conceived as the broad description of subject matter which

[...] generally includes the intellectual and intangible cultural heritage, practices and knowledge systems of traditional communities, including indigenous and local communities (traditional knowledge in a general sense or *lato sensu*). In other words, traditional knowledge in a general sense embraces the content of knowledge itself as

¹ Michael Blakeney, 'Protecting the Knowledge and Cultural Expressions of Aboriginal Peoples' (2015) 39(2) University of Western Australia Law Review, 180-207, 194.

² 'The Protection of Traditional Knowledge: Revised Outline of Policy Options and Legal Mechanisms', Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (Ninth Session, Geneva, 24 – 26 April 2006) WIPO/GRTKF/IC/9/INF/5 (27 March 2006), 70.

well as traditional cultural expressions, including distinctive signs and symbols associated with traditional knowledge.³

Therefore, TK *lato sensu* is the 'ideas and expressions thereof developed by traditional communities and indigenous peoples, in a traditional and informal way, as a response to the needs imposed by their physical and cultural environments and that serve as means for their cultural identification.'⁴ This definition, however, seems to cover both aspects of protection of TK *stricto sensu* and TCEs. In a narrow sense, TK refers to,

knowledge as such, in particular the knowledge resulting from intellectual activity in a traditional context, and includes know-how, practices, skills, and innovations. Traditional knowledge can be found in a wide variety of contexts, including: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medical knowledge, including related medicines and remedies; and biodiversity-related knowledge, etc.⁵

The main features of TK are reflected in its holistic nature (interconnection between people, knowledge and space) and the fact that it is collectively and inter-generationally held (unwritten but preserved in the oral tradition and collective memory); has cultural, historical, ecological and spiritual value; is culturally situated (and informed by customs,

practices, rituals, proverbs, oral stories); governed by customary laws, and is dynamic and fluid.⁶

Protection of TK is largely advocated for through the intellectual property (IP) framework. However, the term protection has been interpreted variedly, and consequently, TK protection 'initiatives and measures vary considerably in their form and substance.'⁷ Some scholars have described TK protection measures to include: compensation; social recognition of certain rights (e.g. the right to be asked for consent; right to be acknowledged as creators or descendants or share benefits); safeguarding; and maintaining, preserving and controlling access to and uses of TK through unfair competition principles.⁸ In this paper, the term protection is used in the classic IP sense to mean the grant of exclusive rights to inventors and creators using different IP tools (patents, copyright, trademarks et cetera) and/or preventing unauthorised dealings in protected IP.⁹ Thus, and as Andanda postulates, the protection of TK is 'distinguishable from the efforts that have been made to promote and safeguard TK,'¹⁰ since safeguarding measures aim at preserving aspects of TK through photographs, sound recordings, films and manuscripts, itineraries, cultural mapping, video recordings, and the preservation of artefacts in libraries and museums.¹¹ Also in this study, it is noteworthy that 'protection' is not tantamount to 'safeguarding,' since the latter may engender

³ 'Glossary of Key Terms Related to Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions' Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (Thirty Seventh Session, Geneva, 27 – 31 August 2018) WIPO/GRTKF/IC/37/INF/7, 40.

⁴ See (n 2) 71.

⁵ See (n 3) 40.

⁶ Rodrigo de la Cruz, 'Regional Study in the Andean Countries: 'Customary Law in the Protection of Traditional Knowledge' (WIPO 2006), 36. See also Elmien du Plessis, 'Protection of Traditional Knowledge in South Africa: The Troubled Bill, the Inoperative Act, and the Commons Solution' in Caroline Ncube & Elmien du Plessis (eds) *Indigenous Knowledge & Intellectual Property* (JUTA 2016) 76.

⁷ Manuel Ruiz Muller, 'Legal Protection of Widely Shared and Dispersed Traditional Knowledge' in Daniel F. Robinson et al (eds), *Protecting Traditional Knowledge: The WIPO Intergovernmental*

Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (Routledge 2017) 123-140, 123.

⁸ *ibid*, 123. See also Sue Farran, 'Access to Knowledge and the Promotion of Innovation: Challenges for Pacific Island States' in Caroline Ncube & Elmien du Plessis (eds), *Indigenous Knowledge & Intellectual Property* (JUTA 2016) 22-23.

⁹ *Ibid*, 123. See also Ken Chisa & Ruth Hoskins, 'African Customary Law and the Protection of Indigenous Cultural Heritage: Challenges and Issues in the Digitization of Indigenous Knowledge in South Africa' (2016) 15 *African Journal of Indigenous Knowledge Systems* 1-15, 3.

¹⁰ Pamela Andanda, 'Striking a Balance between Intellectual Property Protection of Traditional Knowledge, Cultural Preservation and Access to Knowledge' (2012) 17 *Journal of Intellectual Property Rights*, 547-558, 547.

¹¹ *ibid* at 547. See also Farran (n 8) 22.

the identification, documentation, transmission, revitalization and promotion of TK to ensure its continued existence and viability, hence risk placing TK unintentionally in the public domain, thus necessitating the need for protection in the legal sense.¹²

As a member of the World Trade Organization (WTO) and World Intellectual Property Organization (WIPO), Kenya has enacted a number of IP laws.¹³ Kenya is also a signatory to the Convention on Biological Diversity (CBD)¹⁴ and the related Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization,¹⁵ which are implemented under the Environmental Management and Coordination Act.¹⁶ There are also policies that have specific provisions on TK protection.¹⁷ In addition, the 2010 Constitution¹⁸ and the Protection of Traditional Knowledge and Cultural Expressions Act 2016¹⁹ have explicit provisions dealing with TK. Some of the institutions whose work is relevant to TK protection are the Kenya Industrial Property Institute (KIPI), which administers trademarks, patents, utility models and industrial designs;²⁰ the Kenya Copyright Board (KECOBO), which administers TK²¹ and all matters of copyright and related rights in Kenya;²² and the Kenya Plant Health Inspectorate Service (KEPHIS), which administers plant protection, seeds and plant breeders' rights.²³

Whereas there is no doubt that some TK holders and indigenous peoples have used the IP system to protect their cultural creations like songs, arts and handicrafts,²⁴ the IP regime has some deficiencies in protecting TK. First, the IP regime fails to acknowledge and recognize TK and the customary laws and systems developed and used by TK holders to protect, safeguard and perpetuate their heritage and knowledge.²⁵ Thus, the IP regime fails significantly to offer robust protection to tradition-based knowledge systems with their holistic nature while 'ensuring cultural preservation and access to knowledge.'²⁶ For instance, whereas the territories, lands and resources of TK holders are vital to the continued generation, use and transmission of TK, the scope of the IP regime does not extend to those aspects.

Second, IP generally confers exclusive ownership rights on the author or inventor, which fundamentally contradicts the nature of TK. Consequently, using IP models to protect TK would occasion negative outcomes, such as

[...] undermining and destruction of TK holders cosmovisions, cultures and heritage, theft or biopiracy of plant, animal, and human genetic materials and the knowledge around these, the increasing difficulty for millions of poor people to have the access to traditional medicines and treatments, and the increasing monopolization of control over knowledge and

¹² Andanda (n 10) 547.

¹³ These include the Copyright Act 2001 (Kenya), Trade marks Act, Chapter 506 (Kenya), Industrial Property Act 2001 (Kenya), and the Seeds and Plant Varieties Act, Chapter 326 (Kenya).

¹⁴ The Convention on Biological Diversity (adopted on 5 June 1992, entered into force 29 December 1993) 1760 U.N.T.S. 69 (CBD).

¹⁵ Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable sharing of Benefits arising from their Utilization to the Convention on Biological Diversity (adopted on 29 October 2010, entered into force 12 October 2014) [hereinafter Nagoya Protocol].

¹⁶ Environmental Management and Coordination Act 1999 (as amended in 2017) (Kenya).

¹⁷ They include the National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions (2009) and the National Policy on Culture and Heritage (2009).

¹⁸ The Constitution of Kenya 2010 [hereinafter Constitution 2010].

¹⁹ Protection of Traditional Knowledge and Cultural Expressions Act, 2016 (No. 33 of 2016) (Kenya) [hereinafter TK/CE Act].

²⁰ Industrial Property Act 2001 (Kenya), ss 3 & 5.

²¹ Protection of Traditional Knowledge and Cultural Expressions Act 2016 (Kenya), s 5(a).

²² Copyright Act 2001 (Kenya), ss 3 & 5.

²³ Kenya Plant Health Inspectorate Service Act 2012, s 5.

²⁴ Victoria Tauli-Corpuz, *Biodiversity, Traditional Knowledge and Rights of Indigenous Peoples* (Third World Network 2003) 21.

²⁵ *ibid* 7-8. See also Deepa Varadarajan, 'A Trade Secret Approach to Protecting Traditional Knowledge' (2011) 36(2) *Yale Journal of International Law* 371, 378.

²⁶ Andanda (n 10) 547-558. See also Roger Chennells, 'Putting Intellectual Property Rights into Practice: Experiences from the San' in Rachel Wynberg *et al* (eds.), *Indigenous Peoples, Consent and Benefit Sharing: Lessons from the San-Hoodia Case* (Springer 2009) 212.

technologies by fewer individuals, countries and corporations.²⁷

Nonetheless, it is noteworthy that IP rights are not always individual-creator based, since there are IP forms that confer collective rights, such as geographical indications (GIs) and collective marks.

Third, TK is trans-generational, thus creating difficulty in identifying a creator or innovator to reward for their creativity.²⁸ This also raises the problem of the duration of protection, since intellectual property rights (IPRs) are protected for a limited duration of time which may not be apt for TK.²⁹ Last, the reward theory underlying IP policy is not apt in justifying protection of existing knowledge like TK.³⁰ There is a need to un-earth indigenous/traditional protection systems such as traditional justice systems (TJS) and use them in protecting TK. TJS are part of the customary governance systems used by TK holders for years as institutional frameworks for TK protection. The study hypothesizes that TJS, which are broadly conceptualized in an encompassing manner to include customary laws, customs, traditions, and institutions or structures (such as council of elders) existing among communities, are more appropriate in protecting TK than the IP institutions.

Consequently, this paper seeks to examine the appropriateness of TJS in protecting TK in Kenya. Using data gathered from three (3) communities in Kenya, the paper illustrates how TJS are capable of protecting and safeguarding TK, the territories of TK holders, tangible and intangible manifestations of TK and related systems, and striking a balance between TK protection and fair access to TK. The

paper will not only review literature dealing specifically with TK, but will also examine literature on subsets of TK such as indigenous knowledge,³¹ since it is relevant to this topic. Part 1 contains this introduction. Part 2 gives a brief overview of the main laws and policies dealing with TK in Kenya. Part 3 introduces the case studies. Part 4 discusses the research methods deployed while Part 5 discusses the findings and analysis. The conclusion is in Part 6.

2. TRADITIONAL KNOWLEDGE POLICIES AND LAWS IN KENYA

Apart from the IP laws mentioned above, Kenya has specific policies and laws dealing with TK protection, which are discussed below.

A. CONSTITUTION OF KENYA 2010

The Constitution obligates the state to support, promote and protect the IP rights of the 'people of Kenya'³² and to protect and enhance the IP and 'indigenous knowledge' associated with biodiversity and 'genetic resources of the communities.'³³ It recognizes culture as the foundation of the nation and cumulative civilization of the Kenyan people and nation³⁴ and requires the State to promote IPRs of the people of Kenya.³⁵ It also enjoins parliament to enact legislation, to ensure that 'communities receive compensation or royalties for the use of their cultures and cultural heritage',³⁶ and to recognize and protect the ownership of genetic resources and associated knowledge by indigenous peoples.³⁷ While the provisions of the Constitution are germane to the protection of TK, their Achilles heel is that they are couched in IP terms, suggesting TK should be protected within a similar context.

²⁷ Tauli-Corpuz (n 24) 9.

²⁸ Djims Milius, 'Justifying Intellectual Property in Traditional Knowledge' (2009) 2 *IPQ* 185, 193-194. See also Robert P. Merges, 'Locke for the Masses: Property Rights and the Products of Collective Creativity' (2008) 36 *Hofstra Law Review* 1179, 1190.

²⁹ John T Cross, 'Property Rights and Traditional Knowledge' (2010) 13(4) *Potchefstroom Elec. LJ* 21.

³⁰ Paul J. Heald, 'The Rhetoric of Biopiracy' (2003) 11 *Cardozo Journal of International and Comparative Law*, 519-546.

³¹ Indigenous knowledge is understood as the local knowledge that is unique to a particular culture and society that identifies itself as

indigenous, see John Mugabe, 'Intellectual Property Protection and Traditional Knowledge: An Exploration in International Policy Discourse' (African Center for Technology Studies 1999) 1-5.

³² Constitution 2010 (n 18), art 40(5).

³³ *ibid*, art 69(1)(c) & (e).

³⁴ *ibid*, art 11(1).

³⁵ *ibid*, art 11(2)(c).

³⁶ *ibid*, art 11(3)(a).

³⁷ *ibid*, art 11 (3)(b).

B. THE NATIONAL POLICY ON TRADITIONAL KNOWLEDGE, GENETIC RESOURCES AND TRADITIONAL CULTURAL EXPRESSIONS (2009)

To enhance the mainstreaming of TK systems into national development planning and decision making processes at all levels, the policy requires the recognition, preservation, protection and promotion of the sustainable use of TK.³⁸ It recognizes that TK is holistic, dynamic and constantly evolving through experimentation and innovation, fresh insight and external stimuli,³⁹ and is transmitted in many ways through repeated practice, oral traditions, sayings, proverbs, metaphors, and apprenticeship with elders and specialists.⁴⁰ It notes that TK and related traditions are being transferred illicitly from their original communities without fully understanding their meaning and purpose, thus eroding, debasing and ultimately destroying them.⁴¹ However, the policy fails to recognise the role of traditional institutions, which play a central role in the control, access and use of TK and that can ultimately safeguard TK against such illicit transfers and loss. It recognises that IPRs are inappropriate in TK protection, as they serve to protect private and corporate property but not the collective wisdom of the past, present and future generations of local communities.⁴²

C. THE NATIONAL POLICY ON CULTURE AND HERITAGE (2009)

Although dealing with culture and heritage, the policy on culture and heritage is relevant to TK. The policy defines 'culture' as 'that whole complex of distinctive, spiritual, material, *intellectual* and emotional features characterizing a society or social group,' while 'national heritage' is defined as the 'sum total of all the *creativity* in all its forms preserved,

enhanced and handed over to future generations as a record of human experience and aspirations.'⁴³ The policy recognises the unique cultural innovations of the Kenyan people resulting from long-term interaction with the environment and nature.⁴⁴ It also recognises culture as a repository of 'knowledge'⁴⁵ and urges government to harness culture, heritage and TK in sustainable management, preservation and conservation of the environment.⁴⁶ While it advocates for adoption of interventions geared towards promotion and protection of the cultures of Kenya's communities,⁴⁷ little attention is given to traditional governance structures in the protection of culture (a repository of TK). Another pitfall with the policy is that cultural creativity is identified as an IP accruing to individuals, communities, artist or performers and is to be protected as such,⁴⁸ implying that IP tools are adequate in TK protection.

D. PROTECTION OF TRADITIONAL KNOWLEDGE AND CULTURAL EXPRESSIONS ACT 2016

The Act aims 'to provide a framework for the protection and promotion of traditional knowledge and cultural expressions' in Kenya, giving effect to Articles 11, 40 and 69(1)(c) of the Constitution of 2010.⁴⁹ It vests 'ownership' of TK on local and traditional communities, and recognises individuals or organisations entrusted with the custody or protection of TK in accordance with customary law and practices.⁵⁰ It employs the notion of 'ownership' as applied in IP, which may be elusive and quite problematic in the case of TK, where holders of TK are custodians rather than owners. Again, it confers both moral⁵¹ and economic⁵² *sui generis* rights akin to IPRs on 'owners' and 'holders' of TK (or in their absence, a state

³⁸ *The National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions* (Republic of Kenya, 2009) para 1.1.10.

³⁹ *ibid* para 1.1.3.

⁴⁰ *ibid* para 1.1.2.

⁴¹ *Ibid* preamble.

⁴² *ibid* para 4.5.1.

⁴³ *The National Policy on Culture and Heritage* (Republic of Kenya, 2009) 2.

⁴⁴ *ibid*, 33.

⁴⁵ *ibid* 4.

⁴⁶ *ibid* 10.

⁴⁷ *ibid* 33.

⁴⁸ *ibid* 9.

⁴⁹ TK/CE Act (n 19).

⁵⁰ *ibid*, s 2.

⁵¹ TK/CE Act (n 19), ss 19(2) and 21(4).

⁵² *ibid*, ss 18, 20, 22 and 24.

agency). Rights in TK are conferred without formalities⁵³ and exist in perpetuity as long as the subject matter complies with the requirements for protection.⁵⁴

While the county and national governments are charged with the responsibility of establishing TK databases,⁵⁵ the role of communities in that regard is not clear. Equally, it is not apparent who 'owns' the databases once established and the documented TK. Is it the communities or the county or national government? Likewise, the law fails to address the role of customary laws and traditional governance structures (like TJS) in the protection of TK.

Further, the law treats TK as a natural resource that 'belongs to the people of Kenya' collectively, like land in Kenya, raising *inter alia* the question as to who should be rewarded for creativity. Likewise, benefits from protection of TK are framed as primarily local (for communities in Kenya) and national (for Kenya as a nation state),⁵⁶ as is the case with other forms of real property, essentially undermining or ignoring the creative contributions of local communities as envisaged in the National Policy on Culture and Heritage, 2009. Benefits from TK protection ought to be derived by communities that have developed the TK, unless the community is not identifiable or if the TK is so widespread and it is impossible to identify a specific community. In the later cases, the benefits might not necessarily be derived by one community.

3. THE CASE STUDIES

This study is based on three case studies. The first case study relates to the 'Mijikenda',⁵⁷ a Bantu-speaking people consisting of nine sub-communities: the *Chonyi*, *Digo*, *Duruma*, *Giriama*, *Jibana*, *Kambe*, *Kauma*, *Rabai* and *Ribe*, who are all related culturally and linguistically.⁵⁸ Each sub-community has a *kaya*, which is a political institution, and a settlement with a closely-knit society controlled by a council of elders, called the *kambi* or *ngambi*.⁵⁹ Again, each *kaya* has a unique history, committee of elders, and set of environmental and socio-cultural circumstances; but there are common themes traceable amongst them. Currently, there are about 50 *kaya* forests, covering an area of approximately 4,000 acres.⁶⁰ Today, the Mijikenda people are found in Kilifi, Kwale and Mombasa counties. There are, however, no *kayas* in Mombasa County. Kwale County is home to the Digo and Duruma sub-communities while Kilifi County has the other 7 Mijikenda sub-communities. The study focused on Kilifi County since it has some of the best managed *kayas* and there is strong adherence to cultural traditions. Moreover, most of the Kilifi *kayas* are on the world heritage listing, whereas in Kwale, only the Duruma *kayas* are listed.⁶¹ The TJS institution is manifest among others, in the form of the Mijikenda elders (*kaya* elders) who have custodial rights and obligations over TK. The *kaya* elders govern issues of access, use and control of resources (including TK) in accordance with customary laws (including rites and taboos) and enforce those laws. Through secrets, oral agreements and taboos, for instance, they can regulate who can access the forests, when, how and for what reasons. For example, it

⁵³ *ibid*, s 7(1).

⁵⁴ *ibid*, s 13.

⁵⁵ *ibid*, ss 4 and 5

⁵⁶ *ibid*, s 31(5). See also Harriet Deacon, 'Transboundary Knowledge and Regional Cooperation in the Protection of Traditional Knowledge in Kenya' (2017) *Journal of Intellectual Property Law & Practice* 1, 4.

⁵⁷ The name 'mijikenda' is a Swahili derivative from the expression *midzi chenda* (nine homes) referring to the nine constituent sub-communities.

⁵⁸ Paul Ongugo *et al*, *Protecting Traditional Health Knowledge in Kenya: The role of customary laws and practices* (International Institute for Environment and Development 2012) 4.

⁵⁹ *ibid*.

⁶⁰ Paul Matiku, 'The Coastal Forests of Kenya' <<http://coastalforests.tfcg.org/pubs/National-Synthesis-Ken.pdf>> accessed 20 April 2020.

⁶¹ Report on the Award of the Best Managed and Well Conserved Sacred Kaya Forests of the Mijikenda <<https://unesco.go.ke/wp-content/uploads/2018/11/Report-on-the-Award-of-the-Best-Managed-and-well-Conserved-Kaya-Forests-of-the-Mijikenda.pdf>> accessed 20 April 2020.

is a taboo to enter, bring flames, fence, or cut trees in the *kaya* without the consent of the elders. Additionally, the transmission of healing knowledge is complex and is determined by the elders (*kambi*) through a rating process assessing the personal conduct and motive of the applicant.⁶² Alternatively, an individual healer could select a family member or friend as a helper and the latter would ultimately access the knowledge upon payment of a predetermined token (*kadzama*) by the apprentice.⁶³

The second case study discusses the *njuri ncheke*⁶⁴ institution, the supreme decision-making organ among the Ameru people. The term *njuri ncheke* means the narrow jury. *Njuri ncheke* members are mature men believed to be almost faultless and people of high moral standing.⁶⁵ The *njuri ncheke* elders are the manifestation of TJS in this community. They are the custodians of the Ameru TK, culture, customs and traditions, and have developed a system of customs and practices for protecting their TK. These include the use of community sanctions and oaths to govern disclosure of TK. Moreover, the *njuri ncheke* are customary governance or legal systems of TK holders and are also being used as the first port of call for disputes (including land, family and political) in the community.

The third case study is from the Ogiek, a hunter-gatherer community claiming the Mau Forest Complex and Mount Elgon Forests as their cradle. The Ogiek believe they were born in forests and their identity stems from the socio-cultural value they place on the territories where they put their beehives and hunt. They are organised along the clan system and each clan has an elder (*pooyon*) who acts as a

mediator between the clan and the greater council of elders.⁶⁶ The council of elders has members drawn from each clan. However, during data collection, it was evident that the council of elders was weakened by constant eviction of the community from the Mau forest by the government and assimilation into the wider Kalenjin groups.⁶⁷ This has contributed to the destruction of the Mau forest and relevant TK. Their TJS include the institution of elders, customary laws, traditions and practices handed down from one generation to the other. The Ogiek elders are custodians of TK, customary laws, traditions and practices of the community, and have been relied on in developing the Ogiek Bio-cultural Protocol and in granting free prior informed consent (PIC).

4. RESEARCH METHODS

A review of documented literature on the role of TJS and customary laws in protecting TK among the Ogiek, Mijikenda and Meru communities of Kenya was conducted. Informal interviews and focused group discussions (workshops) were used to collect data from community leaders; government officials; community members; civil society members; researchers; and experts on TK and TJS.⁶⁸ Purposive selection was applied for all key informants where necessary. The participants met the following criteria: community elders in a community with traditional justice structures and ecological knowledge or a community member versed with ecological knowledge and traditional justice structures; or a person who is currently, or was previously, involved in studies of this nature (mostly researchers in IP and TK); or persons involved in civil society activities in the target communities; or a person or agency with interest in policy making in this field. Civil

⁶² Ongugo (n 58) 14.

⁶³ *ibid.*

⁶⁴ The term '*njuri njeke*' is also used to refer to the Ameru traditional elders. However, the accurate term according to Ameru people is '*njuri ncheke*.'

⁶⁵ See also Charles Wanyoro, 'Secrets of Njuri Ncheke Shrine Revealed to Youths of Integrity' *The Daily Nation* (Nairobi, 11 January 2014) <<https://www.nation.co.ke/news/politics/--Secrets-of-Njuri-Ncheke-/1064-2143012-bh208dz/index.html>> accessed on 24 May 2018.

⁶⁶ *Ogiek Bio-cultural Protocol: Safeguarding Rights and Managing Resources to Improve Livelihoods* (2nd ed, Ogiek Peoples' Development Program 2015) 9

<<https://www.ogiekpeoples.org/images/downloads/Ogiek-Bio-Cultural-Protocol.pdf>> accessed on 20 April 2020.

⁶⁷ *ibid.* 12.

⁶⁸ The author obtained ethics clearance (Protocol number H18/02/13) from the University of the Witwatersrand and permit from the National Commission for Science, Technology and Innovation (NACOSTI) (Permit number NACOSTI/P/18/71236/21734) in Kenya.

society organisations (CSOs)⁶⁹ and officials from different governance agencies dealing with IP, TK and conservation matters were interviewed.⁷⁰

The interviews were divided into two parts: the first part focused on the three communities and the second focused on researchers, government agencies and civil society actors. This approach was useful since some of the researchers, government officials, and civil society actors offered leads on how to conduct the research among the various communities. The informal interviews were conducted between April and June 2018. At least 20 community elders and 20 community members from each of the 3 case studies were interviewed. The informal interviews were based on an interview schedule consisting of questions for the various categories of respondents. The interview schedule questions posed to the elders and community members were translated into Swahili during the interviews. The interviews lasted between 30-45 minutes. Additionally, in the case of community elders and members, technical concepts were broken down into simple terms or equivalent local terms during the interview and the workshop. The proposed interviews were helpful in developing relevant themes and in gathering useful information for engaging with the stakeholders during the workshop.

Thereafter, three workshops were facilitated within the participants' locality to have a detailed discussion on, among other things, their feelings towards the existing laws that protect TK in their community, as well as identifying aspects of TK that should be protected by law but are currently neglected. Other participants in the workshops were

researchers in IP and TK, government officials and civil society organisations dealing with IP, TK or environmental matters who were purposively selected, interviewed and invited for the workshops. The workshops lasted between 30-45 minutes. A stakeholder approach was useful for two main reasons. First, it provided insightful information on how these communities view current legal frameworks, how they feel neglected or protected, and what they expect from an effective framework. Second, it helped identify the aspects of TK that should be protected by IP law but are currently neglected. It also aided in identifying how TJS among the three communities integrate cultural, ecological and self-determination aspects, and their adequacy in protecting TK.

5. TRADITIONAL JUSTICE SYSTEMS AS SUI GENERIS SYSTEMS FOR TRADITIONAL KNOWLEDGE PROTECTION: ROLE, PROSPECTS AND CHALLENGES

A. EXISTENCE AND NATURE OF TRADITIONAL JUSTICE SYSTEMS

In the three case studies, TJS stand out as common frameworks for TK protection. TJS are part of the customary governance or legal systems of TK holders and, in this paper, they are conceptualized in a broad and encompassing context, as the laws, customs, traditions, and institutions or structures (such as council of elders) existing among communities. In all the case studies, TJS are comprised of respected people as the custodians of knowledge, culture, traditions and community values. The wealth of knowledge that TJS institutions such as the *njuri ncheke* hold, enables them to play a crucial role in the 'devolved government,

⁶⁹ The CSOs include Resource Conflict Institute (RECONCILE) <<https://reconcile-ea.org/>> accessed on 20 April 2020; Center for Intellectual Property and Information Technology (CIPIT) <<https://www.cipit.org/>> accessed on 20 April 2020; Natural Justice <<https://naturaljustice.org/countries/kenya/>> accessed on 20 April 2020; African Biodiversity Network (ABN) <<https://africanbiodiversity.org/>> accessed on 20 April 2020; Institute for Culture and Ecology (ICE) <<https://www.icekenya.org/>> accessed on 20 April 2020; Community Action for Nature Conservation (CANCO) <<http://www.cancokenya.org/>> accessed on 20 April 2020;

Community Forest Associations (CFAs); Trust for Indigenous Culture and Health (TICAH) <<https://www.ticahealth.org/>> accessed on 20 April 2020.

⁷⁰ These include the Kenya Industrial Property Institute (KIPI), National Museums of Kenya (NMK), Coastal Forest Conservation Unit (CFCU), Kilifi County Forest Guards, local administration (assistant County Commissioners, chiefs and assistant chiefs), Kenya Forest Service (KFS), Kenya Wildlife Service (KWS), County Forest Officers, Kenya Resource Center for Indigenous Knowledge (KENRIK), Kenya Copyright Board (KECOBO) and National Environment Management Authority (NEMA).

especially in regard to conflict resolution, environmental conservation, education and development, among other roles.⁷¹

The continued use of TJS in the settlement of disputes, natural resource governance, assigning rights to resources, determining political leadership and maintenance of law and order⁷² evidences their resilience and popular support among communities, thus making them appropriate regulatory frameworks. In the Meru and Mijikenda case studies, it is commonplace for those vying for political positions to seek the endorsement of the *njuri ncheke* and *kaya* elders, respectively.⁷³ Similarly, continued reliance on TJS in developing community bio-cultural protocols, in granting free prior informed consent (FPIC) (in the Ogiek case study), and in the inventorying of TK and TK systems (in the Meru case study), attests to their resilience and legitimacy in society. Moreover, in all case studies, government agencies are relying on TJS to govern access, use and management of resources.⁷⁴ Likewise, CSO actors⁷⁵ recognize the existence and role of TJS in their work of documenting TK, reviving TK

holders' ecosystems and TK systems, developing bio-cultural protocols and in seeking FPIC.

TJS are recognised as a form of government, with legislative, executive and adjudicative arms.⁷⁶ For instance, the *njuri ncheke* elders were described as the 'oversers of execution or implementation of community rules.'⁷⁷ They (*njuri ncheke*) 'made and executed community laws, listened to and settled disputes, and passed on indigenous knowledge and rites across the generations.'⁷⁸

B. THE ROLE OF TJS IN TK PROTECTION

The three case studies show that TJS are effective and culturally appropriate in TK protection.⁷⁹ TK 'goes to the core of indigenous people and local communities' identity and right to self-determination' and thus 'any protection measure should be built around the existing traditional structures.'⁸⁰ TJS are 'flexible, socially negotiable and hence, more practical' and 'should not be viewed and treated as being inferior to statutory institutional structures but should be worked with to build systems of accountability.'⁸¹ A TJS

⁷¹Alex Kamwaria *et al*, 'Recognising and Strengthening the Role of the Njuri Ncheke in Devolved Governance in Meru County, Kenya' (2015) 2 (12) *Journal of Education Policy and Entrepreneurial Research* 42, 42. See also Obert Jiri *et al*, 'The Use of Indigenous Knowledge Systems to Predict Seasonal Quality for Climate Change Adaptation in Zimbabwe' (2016) 8(5) *Journal of Agricultural Science* 156, 160.

⁷²Albino Pereira de Jesus Jopela, 'Traditional Custodianship: A Useful Framework for Heritage Management in Southern Africa?' (2011) 13:2-3 *Conservation and Management of Archaeological Sites* 103, 111. See also Stelios Michalopoulos and Elias Papaioannou, 'Pre-Colonial Ethnic Institutions and Contemporary African Development' (2013) 81 *Econometrica* 113, 115.

⁷³A workshop organised by the author with *Njuri Ncheke* elders in Meru town on 23 May 2018. See also a workshop organised by the author with *Kaya* elders in Kilifi on 24 April 2018.

⁷⁴These include the National Museums of Kenya (NMK), National Environmental Management Authority (NEMA), and Kenya Industrial Property Institute (KIPI). Likewise, the Kenya Forest Service (KFS) in its manual on forming and registering community forest associations (CFAs), acknowledges that 'most communities have social structures that offer excellent opportunities for entering

into the community' see Kenya Forest Service 'Manual on forming and registering Community Forest Associations (CFAs)' (2009) 9.

⁷⁵Such as the Institute for Culture and Ecology (ICE), Natural Justice and the African Biodiversity Network (ABN).

⁷⁶Interview with Lawrence Chiro, an environmental scientist, Coastal Forest Conservation Unit (CFCU) (Kilifi, 25 April 2018).

⁷⁷Interview with the spiritual leader of *Njuri Ncheke*, a scholar on the Ameru people and a lecturer, Kenyatta University (Nairobi, 4 June 2018).

⁷⁸Kamwaria (n 71) 43.

⁷⁹Chisa & Hoskins (n 9) 11. See also Brendan Tobin, 'Now you see it now you don't-The Rise and Fall of Customary Law in the IGC' in Daniel F. Robinson *et al*, (eds.) *Protecting Traditional Knowledge: The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore* (Routledge 2019) 192, 193.

⁸⁰Interview with Wanjiku Karanja, Research Fellow, Center for Intellectual Property and Information Technology (CIPIT) (Nairobi, 28 June 2018).

⁸¹Judith Kamoto *et al*, 'Doing More Harm than Good? Community Based Natural Resource Management and the Neglect of Local Institutions in Policy Development' (2013) 35 *Land Use Policy* 293, 300.

approach to TK protection can secure self-determination, cultural and ecological integrity and build systems of accountability in TK governance, especially in regulating access to the knowledge.

TJS play a crucial mediating role in governing access to TK and benefit-sharing frameworks, since they have the 'potential to mediate external interventions into local contexts, and articulate between local and extra-local social and political processes.'⁸² This is so because TJS are 'decision-making levels designed to respond to issues regarding allocation, use and management of resources.'⁸³ Additionally, reliance on TJS in the development of community bio-cultural protocols, the grant of FPIC, and in inventorying TK and sacred natural sites suggests that TJS as custodial institutions can play a role in determining who can access TK, what type of TK, how TK is to be gathered and stored, and under what terms and conditions.⁸⁴

Using TJS to regulate access to TK supports and conforms to the principle of self-determination⁸⁵ by providing an equitable access and benefit sharing framework anchored on customary laws and that abhors unregulated access to TK. Moreover, anchoring all benefit sharing agreements on the customary laws of the relevant community might limit the commodification of TK. However, with different communities, there might be distinct notions of benefit-sharing (some based on monetary and non-monetary considerations and others that are inalienable based on distinct customary rights). In cases of unfairness to different populations within the community, and as a result of the customary rights-based notions of benefit sharing, the applicable TJS and customary laws can provide the framework for resolving those claims. However, if there are overlapping claims for benefit-sharing by communities with distinct customary norms, there will be need for TJS to collaborate

with the IP institutions to resolve those claims, especially where the respective TJS are unable to resolve those normative conflicts. This confirms that the IP and TJS frameworks can collaborate to yield a more effective form of TK protection and bridge the current protection gap. The inclusion of the FPIC and disclosure of origin requirements in some African countries (South Africa, Namibia and Botswana) before granting IP rights illustrates such a collaboration is indeed possible.

TJS are also essential in the protection of the territories of TK holders integral to TK due to the interconnectedness between TK, TK holders and nature. Using TJS in the management of sacred sites underscores the principle of self-determination, which requires *inter alia* consultations with communities through their institutions before developments take place in their territories.⁸⁶ In the Mijikenda case study, the *kaya* forest (symbolizing nature) is essential to the *kaya* and its continued existence, and hence the well-being of the community.⁸⁷ Nyamweru, writing on the *kaya* forests, notes that 'the continued survival of the groves demonstrates the contribution of local management and indigenous knowledge systems to environmental conservation'⁸⁸ illustrating that indeed TJS, as a local management institution, has a role to play not only in protecting the territories of TK holders, but also their TK. The recognition of TK holders' territories as indigenous and community conserved areas (ICCAs), national monuments, and as world heritage sites, confirms that TJS have a huge role to play in TK protection. The IP regime is unable to protect the territorial rights of TK holders.

Aspects of TJS such as traditional ceremonies, rituals, prayers and legends play a critical role in the protection of TK, especially those mitigating disasters such as drought, famine, disease or bad omen to the community.⁸⁹ For instance, among the Tharaka people (who are regarded as a subsection

⁸² *ibid* 294.

⁸³ Hastings Okoth Ogendo, 'The Tragic African Commons: A Century of Expropriation, Suppression and Subversion' (2003) University of Nairobi Law Journal 107, 108.

⁸⁴ Tobin (n 79), 204. See also Chisa & Hoskins (n 9) 4.

⁸⁵ Interview with Michael Odhiambo, Executive Director, Resource Conflict Institute (RECONCILE) (Nakuru, 11 May 2018).

⁸⁶ Interview with Simon Mitambo, General Coordinator of African Biodiversity Network (ABN) (Thika, 29 May 2018).

⁸⁷ A meeting organized by the author with *Kaya* elders (Kilifi, 22 April 2018).

⁸⁸ Celia Nyamweru, 'Sacred Groves of Africa' in Bron Taylor (ed) *The Encyclopedia of Religion and Nature* (Continuum 2005) 1451, 1455.

⁸⁹ *ibid*.

of the Meru), legends are used to pass on rules against cutting trees, fishing, hunting or cultivating in the sacred sites, thus ensuring that sacred natural sites are protected and preserved.⁹⁰

Since TK is holistic, with cultural (like traditional ceremonies), spiritual (protection is not only physical but at times supernatural where prayers and cultural rituals are conducted to thwart bad omens and pray for good omens like rain and good health)⁹¹ and ecological/biological aspects (where there are rules on access to, use and control of a resource), TK protection measures must capture the indigenous cosmology within which TK exists.⁹² Therefore, TK ought to be protected by TJS, which are equally holistic. TJS offer a socio-cultural and spiritual context that is essential in the 'continued existence and development' of TK.

TJS can play a role in bridging the current TK protection gap created by the prevailing approaches aiming to safeguard or protect TK. As safeguarding measures seek to identify, document, transmit, revitalise and promote TK use to ensure its continued existence and viability, they risk placing TK unintentionally in the public domain, hence the need for legal protection.⁹³ While protection measures may be useful in protecting certain aspects of TK, creating IP-like rights over TK faces numerous technical and ideological difficulties as mentioned above. The use of TJS by communities to protect and assert their cultural, self-determination, and resource rights, and in the grant of FPIC before documenting TK and developing bio-cultural protocols shows that TJS are the point of convergence of safeguarding and protection approaches and can be used to bridge the TK protection gap.

Discussions with CSO actors show that TJS can play a key role in the revival and restoration of lost or destroyed ecosystems and food crops, which allows the continuous use, production

and transmission of TK. Since TJS are the custodians of customary laws and knowledge, they can be relied on in reviving or restoring lost TK.

As custodial institutions, they can help reduce contests over 'ownership' and management of resources and TK between different actors. For instance, in the Mijikenda case study, the government has recognised the *kaya* elders as the custodians and managers of the *kayas* and so there are no conflicts over management of the resources. Likewise, in the Meru case study, the government recognises the sacred sites of the community and the role of the *njuri ncheke* in conflict resolution.

TJS are also relied upon by communities for 'information, guidance, help and support and gain most from developing social capital.'⁹⁴ They can provide knowledge and capacity for implementing policy initiatives and 'in the presence of weak state capacity' they may 'fill in the void created by the limited penetration of national institutions.'⁹⁵ Thus, TJS can fill the void created by the inadequacy, deficiency and unsuitability of the IP regime in protecting TK.

C. CHALLENGES IN USING TRADITIONAL STRUCTURES SUCH AS TJS IN TK PROTECTION

Although TJS can play a role in TK governance, there has been a tendency to suffocate and delegitimise them over the last century across most of Africa.⁹⁶ This suffocation has been blamed on the 'disruption caused by the African colonial experience; the hegemony of the rigid post-independence state-based heritage policies and management systems; changes in the wider economic, social, and cultural circumstances under which traditional systems operate; specific historical developments such as past and present land reforms, migrations, tourism and, more recently, globalisation.'⁹⁷ However, Jopela maintains that while formal

⁹⁰ Institute for Culture and Ecology (ICE), 'Documentation of Traditional and Ecological laws of Tharaka' undated report, 14 <<https://www.icekenya.org/publications/>> accessed on 20 June 2018.

⁹¹ See also Jopela (n 72) 108.

⁹² Chisa & Hoskins (n 9) 3.

⁹³ Andanda (n 10) 547.

⁹⁴ Kamoto (n 81) 300.

⁹⁵ Michalopoulos and Papaioannou (n 72) 117.

⁹⁶ Chidi Oguamanam, 'Tiered or Differentiated Approach to Traditional Knowledge and Traditional Cultural Expressions: The Evolution of a Concept' (2018) 185 CIGI Papers 1, 5. See also Jopela (n 72) 110.

⁹⁷ Jopela (n 72) 110.

heritage management systems were being imposed on local communities, 'traditional custodianship systems neither disappeared nor remained static;' rather, 'they shifted so as to remain relevant alongside the new models.'⁹⁸

The effectiveness of TJS in TK protection is also undermined by factors such as leadership wrangles, which create factions among elders, each claiming to be the legitimate elder; cultural erosion; loss of indigenous territories to pave the way for developmental projects; and the influence of modern education and religions that contributed to the loss of traditional beliefs and values.⁹⁹ For example, *kaya* elders lamented that they are despised and live in constant threat of attack and being labelled witchdoctors and, at times, killed by the community. Unlike in Kilifi, *kayas* in Kwale have since lost the traditional touch due to the influence of Islam in that there are no rules requiring people to remove shoes before getting into *kayas* (even in *kaya Kinondo*), traditional prayers are often altered to align them with Islamic religion, and the traditional Mijikenda clothing has been abandoned in favour of the *kanzu* (long white robe).¹⁰⁰ However, as the study shows, efforts are being undertaken by government and civil society actors to promote and reinforce TJS due to their vital role in governance.

6. CONCLUSIONS AND SOME SUGGESTIONS FOR THE WIPO IGC

Although the role of customary law in protecting TK¹⁰¹ has been recognised in numerous studies, those studies have not addressed the question of how to implement and execute those laws to protect TK. As a legislative, executive and adjudicatory arm under customary governance systems, TJS can be used to enforce customary laws and ensure effective

TK protection. Unlike other proposed models, including TK commons, TK databases and registers that seek to place TK into commons, a TJS approach offers a truly traditional commons and gives effect to customary law which is the normative framework governing the generation, use and transmission of TK. The paper makes the following recommendations:

A. STRENGTHENING TJS IN TK PROTECTION AND NATURAL RESOURCES MANAGEMENT

Although there are efforts (for instance within the IGC texts) showing growing acceptance that communities have their own institutions for protecting their knowledge,¹⁰² there is a need to recognise the existence and role of TJS among communities, strengthen, and rely on them in TK governance. This requires the legal recognition of the powers and functions of traditional authorities in the protection, conservation, management and use of TK and related resources.

There is also a need to rely on TJS and engage TK custodians in the TK and IP law reform, since such efforts have often been led by natural scientists and IP experts with limited understanding and appreciation of the holistic nature of TK and the worldviews of TK holders.¹⁰³ This will require the collaboration of the TJS and IP frameworks. IP practitioners, policy makers and scholars should not assume that TJS are non-existent amongst communities or that they play no role in TK governance before conducting empirical research studies. Instead, they ought to realise the proposed approach permits for an intercultural encounter where the IP and TJS frameworks are able to engage, thus allowing TK holders to define their own power and status vis-à-vis others for themselves. Moreover, rather than frame TK protection as a

⁹⁸ *ibid* 110-111.

⁹⁹ United Nations for Human Rights Office of the High Commissioner 'Human rights and traditional justice systems in Africa' (2016) <https://read.un-ilibrary.org/human-rights-and-refugees/human-rights-and-traditional-justice-systems-in-africa_e4202da6-en#page1> accessed on 20 April 2020.

¹⁰⁰ A workshop organised by the author with *kaya* elders in Kilifi on 24 April 2018.

¹⁰¹ Oguamanam (n 96) 1-20. See also Chisa & Hoskins (n 9) 1-15.

¹⁰² George S. Shemdoe and Loy Mhando, 'National Policies and Legal Frameworks Governing Traditional Knowledge and Effective Intellectual Property Systems in Southern and Eastern Africa: The Case of Traditional Healers in Tanzania' (2012) African Technology Policy Studies Network Working Paper Series 8.

¹⁰³ Ongugo (n 58) 1.

trade or IP issue only, the proposed collaborative framework expects the IGC process to pursue a multidisciplinary approach in view of the holistic nature of TK. Therefore, the process must draw from human rights and environmental law frameworks and any other discipline that helps explain TK holders' worldviews.

B. THE FRAMEWORK MUST BE HOLISTIC

The TK protection framework must be respectful of TK holders' cosmovisions. A holistic framework 'should not only focus on protecting rights to TK but also rights to associated bio-genetic resources, landscapes, cultural values and customary laws, all of which are vital for sustaining TK.'¹⁰⁴ Such a framework must be anchored on TJS, as they are able to avail protection to the cultural, ecological and self-determination rights of TK holders.

Some of the components of the framework are: First, it must be anchored on customary laws to be apt in protecting the cultural rights of TK holders. Anchoring the TJS framework on customary laws does not mean we do away with the IP regime, but instead the thesis advocates for a collaborative arrangement between TJS and the IP regime. Second, due to the holistic nature of TK, the framework must ensure ecological protection and TJS ought to be used in regulating access to, use and control of natural resources. TJS are not only successful in conservation, but also in restoring and reviving lost TK and ecosystems. Third, the framework must allow communities to assert their right to self-determination, as they are able to use their own institutions to exercise control and determine who can access and use their resources. Reliance on TJS in granting FPIC, developing community bio-cultural protocols, in conflict resolution, maintenance of law and order, and in the implementation of devolved structures in Kenya confirms that a TJS framework can be used to secure TK holders' rights to self-determination.

¹⁰⁴ Krystyna Swiderska *et al*, 'Protecting Community Rights over Traditional Knowledge: Implications of Customary Laws and Practices' (IIED, 2006) <<http://pubs.iied.org/G01253/>> accessed on 6 April 2016.

C. RECOGNITION OF TK HOLDERS AS CUSTODIANS OF TK IN LAW AND POLICY

There is a need for IP laws and policies to be reviewed to recognise and reflect that TK holders are custodians of TK, vested with responsibilities towards the knowledge, nature and past and future generations, on whose behalf they hold TK. This calls for a paradigm shift in the IP regime, so that apart from ownership, custodial rights can be a basis for granting or rejecting the grant of IP rights. Such recognition is important as it can help identify the TK, legitimate beneficiaries, and curb unauthorised access and use of TK without the FPIC of the custodians of TK. Ultimately, this could lead to a reduction in applications for IP rights over TK.

D. RETHINKING CONVENTIONAL NATURAL RESOURCES MANAGEMENT FRAMEWORKS

Conservation efforts have largely failed to integrate existing TJS and do not benefit from TK holders' contribution to environmental governance. There is, therefore, a need to rethink and re-orient conventional management strategies, integrate TK and engage TJS for effective environmental governance. In addition, formal managers must be open to learn about TK and TK holders' perspectives and recognise that TK is a source of insights that can 'synergistically with science or on its own, enhance our understanding of the natural world.'¹⁰⁵

E. BRIDGING THE GAP BETWEEN PROTECTION AND SAFEGUARDING MEASURES USING TJS

Owing to the challenges that TJS are facing, a TJS approach needs to be used in collaboration with the IP regime for it to yield effective protection of TK. A TJS framework offers a convergence point for protection and safeguarding measures and if used in collaboration with the IP framework, can be the basis for granting or denying IP rights as mentioned earlier. This collaboration would require TK custodians to be involved

¹⁰⁵ Natalie Ban *et al*, 'Incorporate Indigenous perspectives for impactful research and effective management' (2018) 2 *Nature Ecology & Evolution* 1680-1683. See also Ongugo (n 58) 23.

in decision-making processes and institutions under the IP regime and *vice versa*. Moreover, such collaboration means that both the applicants for IP rights and IP institutions will be forced to double-check prior art. Further, collaboration ensures TK holders get benefits from their TK since IP institutions and the applicants for IP rights will be dealing with legitimate TK holders. However, collaboration between IP and TJS frameworks requires the IP regimes to recognise the existence and role of TJS in TK governance. The success of this collaboration will require political goodwill, as effective protection of TK using TJS will require states to respect, promote and protect collective rights to culture, property and self-determination, since where protection of those rights is weak, TJS are likely to be less efficacious in governance.

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